If the term « Pediatrics » covers a medical discipline that is concerned with the care of children, then it began with mankind. Moreover, we should keep in mind that this specialty is concerned with the care of the sick child but also that of the healthy one, which includes prevention, hygiene, education. This last term, « education » had in earlier times a much broader meaning than it has now, and we find in the 18th century several treatises entitled « On the Management of Children », « On the Government of Children ». In fact, the history of Pediatrics cannot be undertaken without reference to the History of the Child. The latter has only developed lately and has been centered around the works of the French sociologist Philippe Aries and the American psychoanalysts headed by de Mause.

We shall not, however, delve into details on the sociological context of childhood in the 18th century. Only a few important facts will be delineated.

The feudal society having disappeared, plain people nevertheless lived in very poor conditions. Several kinds of epidemics raged through Europe, droughts were registered especially in the years 1708-12, 1739-41 and 1771-74 [Unger, 1979]. Towns began to grow without measure and poor people lived in very miserable conditions, young children were sent to work very young, or went out begging in the streets. The State did not yet react to his dreadful situation. In fact, it only reacted when there was a noticeable drop in the birth-rate, causing a diminution in the number of young workers (less paid than adults) and of soldiers : this happened during the first half of the 19th century. But private philanthropic societies began their action during the second half of the 18th century. To bring only a few instances : the « Marine Society » for the redemption of young criminals began its career in 1756, the « Female Orphan Asylum » and the « Magdalen Hospital » in 1758. The « Philanthropic Society » was founded in 1788, « for the protection of poor children who have themselves been engaged in criminal practices, that they might learn the happiness and benefit of a home ». [Heywood, 1965.] Only in 1800 an Act of Parliament was issued in England, establishing schools in prisons for young convicts, workshops for destitute boys and training schools for poor girls.

Regarding hospitals and dispensaries, and taking again the example of London, a Foundling Hospital was established in 1739 (where William Cadogan was physician in charge in 1754). In 1769, George Armstrong succeeded in opening a « Dispensary for the Relief of the Infant Poor », but it had to close again in 1781 for lack of founds. [Mc Cleary, 1933]

Another important factor that cannot be disregarded is the dreadful mortality of young children. The death rate in Foundling Asylums was usually over 80 %.
Between 1730 and 1830, the mortality of children under five years of age slowly went down from ab. 75 % to ab. 30 % (based on the London Bills of Mortality). Mercenary wet-nursing and unhealthy feeding habits were amongst the main causes of that terrible situation. But this was generally accepted as a fatality, by the families and the Faculty as well.

Medicine was then still almost purely symptomatic, there was no real nosology. Therefore, no direct anamnesis being available from the children themselves, usual methods of curing composing the ineffective bleeding and purging being usually contra-indicated, the physicians were at a loss. It was commonly admitted that only mothers and (old) women could « understand » the children, and care for them.

There was moreover, underlying the fatalistic approach to children's diseases and mortality, an unconscious eugenic factor : « let the stronger survive. »

If there was nevertheless a turn within the 18th century, it could be located in the years 1761-62. In 1761 appeared the famous « De Sedibus et Causis Morborum » of G.B. Morgagni and the « Inventum Novum » of Leopold Auenbrugger. The first work was celebrated, the second remained nearly unnoticed until Corvisart took it up in 1808. In 1762 appeared « Emile », by J.-J. Rousseau, and the « Dissertation sur l'Education Physique des Enfants » of Balleuxerd. Both were citizens of Geneva. But the first work aroused an enormous interest and initiated a revolution in children’s rearing, whereas the second book, although crowned by the Academy of Sciences of Harlem, and often cited by subsequent authors, rapidly dipped in the deep waters of oblivion.

A Problem of communication

There was obviously in those times a serious lack of confidence between mothers and physicians regarding the treatment of sick infants and children. A few experienced practitioners tried to change this situation, which can be summarized as follows :

1. Physicians were afraid to treat infants, of which they had little experience.
2. Mothers were afraid to call in physicians, and when they finally did so, the case was nearly lost. In fact, they called the physician to share with him the responsibility of the child's death.
3. The practices of common use by mothers and « old women » were sanctioned by time, custom and atavism, and therefore difficult to contradict.

The pioneers of Pediatrics had thus the double task of convincing physicians that they may treat children and convincing mothers that they may trust physicians. This was done through the vehicle of information then in use : the book. Interestingly enough, some of these books were dedicated to physicians, others to families, and a third group to both « unexperienced physicians and intelligent parents ».

We went through quite a number of these works, and studied with special attention the prefaces written by the authors, sometimes by their translators.

Communication through the Preface

The Preface, also called Introduction, Prologue, Foreword, Advertisement, Exordium, Preliminary Discourse, establishes a link between the author and the reader.

In earlier times, the Letter of Dedication had an even more personal cha-
racter, but we think that basically what was said on the dedication could also be applied to the preface [Schottenloher, 1953] : « It gives color, warmth, communication to the book. » And further : « Author and reader become closer to us and also disclose to us their mutual relations. »

We went carefully thought a great number of such prefaces or introductions, and our harvest was very enlightening. But within the framework of this paper, we would like to quote some lines from the works of G. Armstrong (1767) and W. Moss (1781), devoting the rest of our time to the most celebrated author of the last quarter of the 18th century, M. Underwood.

George ARMSTRONG wrote in 1767 « An Account of the Diseases most incident to Children, from the Birth till the Age of Puberty ». The work is apparently written for physicians. The author exclaims [p. 3] : « I know there are some of the physical tribe who are not fond of practising among infants ... Nay, I am told, there are physicians of note here, who make no scruple to assert, that there is nothing to be done for children when they are ill » ... « But, though infants are not capable of expressing their complaints in words, the very symptoms themselves will... speak for them in so plain a manner as to be easily understood » [p. 5] ... « These circumstances I mention, chiefly to convince those parents and others, who, from a false notion that there is little or nothing to be done for infants when they are ill, defer calling in proper assistance till it is too late. » [p. 6] « Their disorders are not so numerous, nor so hard to be accounted for, as one unacquainted with the subject would at first sight imagine. » [p. 8]

William MOSS published in 1781 « An Essay on the Management and Nursing of Children in the earlier periods of infancy... the whole addressed, as well, to the Medical Faculty, as to the Public at large ; and purposely adapted to a Female comprehension... »

The interesting peculiarity of this work is its form of redacting. The general principles appear in usual, large print, whereas there are, interspersed in the text, sometimes in small print, detailed explanations « To the Medical Reader ».

Let us still add the worthy demonstration of the French physician BROUZET (1754). He endeavors « to deliver the medicinal education of children to physicians », as they have 5 advantages : a knowledge of anatomy, of chemistry, experience in the passions of the soul, clinical experience and an habit of examining.

But let us now turn to M. Underwood. A rapid survey of several editions of his treatise will be most enlightening and will close this study.

Michael UNDERWOOD, a typical case


We cite from the preface of the first edition : « The design of this essay is to offer a succinct account of the diseases of children to such practitioners in physic, as may not have had the advantage of great experience in the management of their complaints. The work, however, is by no means intended solely for their use » but also for the parents (p. i-2). The author further states : « It has been generally lamented by writers on these diseases, that this branch of medicine has remained too much uncultivated. One principal cause of so strange a neglect has arisen from (the) idea... that the complaints of infants being imperfectly understood by medical people... it is safer to entrust them to the care of old women and nurses ; who, at least, are not likely to do mischief by violent reme-
dies, though they may sometimes make use of improper and inadequate ones». Such objections, says the author, should be combated « because those who have the greatest interest in the subject... and the sincerest affection for their offspring, have frequently the greatest objections to medical assistance, till it is, oftentimes, too late to employ it with effect. » (pp. 4-5.)

In the fourth edition that appeared in 1797, the text continues as follows: « At least, this has certainly been too much the case, though it is hoped, the prejudice is daily declining. »

Thirteen years had elapsed between the two editions and towards the turn of the century physicians had slowly gained some experience in pediatrics...

The third edition, printed in 1795 (same printer as the first, but 8 vo and 2 volumes, 380 pages), « is addressed to Parents as well as to Physicians ». We may note that the parents are here cited before the physicians. The author explains that « he is constrained to observe... that he has met with practitioners employed among the lower class of people, who need to be instructed nearly in the same mode with Parents. And that in many country places there is no regular practitioner... capable of prescribing so well for many infantile complaints, as intelligent Parents may be instructed to do. » [Preface, p. 12.]

The 1797 edition is entitled « A treatise on the Diseases of Childhood and Management of Infants from the Birth, adapted to Domestic Use (same printer, but again 12 vo, 3 volumes : 377 + 247 + 159 pp.). The author explains: « If the very favourable reception of the former editions by readers not educated to the profession, has conspired to raise so flattering a conjecture, it has, at the same time, induced him to adapt the present exclusively to their use, and particularly to mothers of families... » [page 1] Speaking to the mothers, Underwood undertakes to demonstrate that « The disorders of childhood... are nowise mysterious, nor would ever have been thought so, if they had always been submitted to proper hands, and been as carefully investigated as the diseases of adults. Nor is it otherwise with the diseases of the earliest infancy, of which it may be very safely affirmed, that they are more obvious that it has been generally supposed... and the treatment of most of them, simple and certain. »

In 1797 the popular works of Tissot and Buchan had already been published and it is to be reckoned that the said edition of Underwood’s treatise, « adapted to domestic use », was a kind of response to, or against Buchan. Our author says: « I am aware that all those who esteem medical people to be officious disturbers of nature, have objected to their assistance in this instance, and conclude, that she would do the business much better if left to herself. » Then he quotes Buchan who fiercely opposed giving medicines to children, but chidingly adds: « ... though he (Buchan), perhaps, may not be so much engaged among very young infants, as those whose peculiar province it is to attend them at their birth. » And some lines further: « It is the province of art to superintend nature, and not only to guard against her excesses, but so to watch over her, as to ensure the accomplishment of her intentions, whenever we perfectly comprehend, and can effect them without the risk of doing harm. » (Pages 26-27.)

The edition of 1799 is also interesting. It is divided in 3 volumes. « Volume the First / containing / Every disorder of importance falling under / The more immediate province / of / The Physician. » Then follows « Volume the Second / containing / All the disorders falling under / The Province of / the Surgeon ». The third volume is devoted to milk and breastfeeding: « On the Nature and Properties / of Human Milk / and / the Management / of the Nursery. » [368 + 257 + 197 pp.]

The author again turns to the physicians: « The following account of the diseases of children which now makes its appearance in a somewhat new form, and less exceptionable to professional men, it is hoped may place this branch
of medicine upon a respectable footing, and exhibit a practice as founded and rational as in any other. » [Vol. I, page 1.]

The edition of 1805 [printed for J. Callow, Princes St., Soho — 8vo] aims to be more scientific, to study the « respective causes and symptoms (of the diseases), tending to elucidate their nature, and render their treatment more obvious than has been generally imagined ». The author no more laments — as he did in the first editions — that this branch of medicine has remained « uncultivated », but this is replaced by another « lamentation ». Diseases of children never « kept in pace with the advancement of science : nor have the improvements in the practice of physic in the present century, produced as full and accurate accounts of them, as of the diseases of adults. » (P. 10.)

We shall stop here this enumeration. The next editions : 1811, 1819, 1835 are treatises that have already been marked by the much more elaborate pattern of the 19th century. Another edition appeared in Philadelphia in 1841. A French translation, or rather, adaptation by Eusèbe de Salle with notes by the noted French « pediatrician » Jadelot, appeared in 1823, only a few years before the anatomo-clinical work of Billard which probably marked the real beginning of modern, scientific pediatrics (1828).*

We could try to summarize the main trends of evolution between the first and the 6th edition, which means a period of 20 years (1784-1805), in the following way.

The first editions are directed towards parents and physicians, usually lacking in experience : pediatrics are still « uncultivated ». In fact, intelligent parents can be instructed in the same way as incompetent physicians.

Then the author decides (1797 and 1799) to compile two different versions, one for the practitioners (the surgeon and the physician being addressed separately) and one for the parents. The management of the earliest infancy is specially stressed, and the necessity to train physicians whose « peculiar province » it is to treat children, from their birth. This is a very important statement, as it really assesses the beginning of the specialty. Although this branch of medicine did not « keep in pace » with the advancement of science, it had nevertheless gained, at the beginning of the 19th century, « a respectable footing ».

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Short Bibliography


* It would be said that the innomumus given by Morgagm’s « De Sedibus »... in 1761 on internal medicine, was given by Billard in 1828 on pediatrics.