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# JAN AMOS COMENIUS<sup>1</sup>

(1592-1670) Jean Piaget

Nothing is easier, or more dangerous, than to treat an author of 300 years ago as modern and claim to find in him the origins of contemporary or recent trends of thought. A typical example of the difficulties this kind of interpretation meets with is the controversy about the significance of Francis Bacon's work (and the example is of particular interest here, since Bacon, as we know, was one of Comenius' sources of inspiration and was frequently quoted by him). Some authorities hold Bacon to be one of the precursors of modern experimental science; others find in his empiricism the whole residue of pre-scientific ways of thinking and emphasize how, as a theorist, he missed contact with the real science of his time, that of Galileo. Comenius could likewise be represented either as a precursor of evolutionary theory, genetic psychology, teaching methods based on child psychology, functional education and international education; or as a metaphysician who had no idea of the requirements of experimental psychological or even educational research, and who substituted the discussion of ideas for the analysis of facts. Yet all these extreme judgements would be incorrect.

The real problem is to find in Comenius' writings—our knowledge of which has been so much enriched by the discoveries of the group now working at the Comenius Institute in Prague—not what is comparable with modern trends, to the neglect of the rest, but what makes the vital unity of the thinking of the great Czech specialist in theory and practice; and to compare this with what we know and want today. Either Comenius can have no immediate interest for us at the present time or his interest for us depends on that central core of thought which is to be found in any system and which it should be possible to express in the form of a few simple ideas. In the first part of this introduction, we shall therefore try to discover the dominant ideas in Comenius' thinking; then, in the two succeeding parts, we shall seek to bring out the aspects of the great educationist's work which are still important for us, in the light of these central ideas restated in terms accessible to us.

I

When we go through the mass of Comenius' writings, however, it is extremely difficult to pick out the guiding ideas of the system, which is full of obscurities and, sometimes, apparent contradictions.

In the first place, how are we to account for the fact that a theologian enamoured of metaphysics and imbued with the speculative spirit of the seventeenth century should have concerned himself with education to the point of creating a 'Great Didactic'? There were indeed many educational institutions in which certain special methods had been developed; and these had been described. Ratke and Alsted, for instance, were probably the first to draw Comenius' attention to teaching problems, especially in the field of language instruction. But there was a long way to go before building up a whole philosophy of education and centring a still broader system around it. Thinkers and philosophers, from Montaigne and Rabelais to

Descartes and Leibniz, had likewise made profound remarks about education, but only as corollaries to their main ideas. Not only was Comenius the first to conceive a full-scale science of education but, let it be repeated, he made it the very core of a 'pansophy' which, in his thinking, was to constitute a general philosophic system. How can we explain so original and unusual a statement of problems, in the middle of the seventeenth century?

The spirit in which Comenius sought to write the unfinished work known as the 'General Consultation' was the best proof that the art of teaching was intended to be the core of 'pansophy' itself; it also, incidentally, accounts for the failure of the enterprise. Instead of building up in the abstract that total, indivisible body of knowledge, that universal science that was to be pansophy—the doctrine of the progressive achievement of the 'world of ideas' within the superimposed worlds whose parallel strata form the universe—Comenius was forced, because he was pursuing a didactic as well as a philosophical aim (and this, by the way, is the most interesting aspect of the work), to make simplifications and assimilations which finally proved too much for him. He wished to construct his own system, but he also cherished the ambition of providing a kind of introduction to philosophy for all. Such an undertaking was unique in the seventeenth century. Hence the same problem: how are we to explain this merging of the need for a systematic basis for education with general philosophical speculation?

There is another difficulty. The foreword to *The Great Didactic* contrasts, with calm daring, the a priori method the author intends to follow with the empirical or a posteriori teaching experiments characteristic of the educational work of his predecessors.

We venture to promise a *Great Didactic* ... the whole art of teaching all things to all men, and indeed of teaching them with certainty, so that the result cannot fail to follow... Lastly, we wish to prove all this a priori, that is to say, from the unalterable nature of the matter itself ... that we may lay the foundations of the universal art of founding universal schools.<sup>2</sup>

But this promise of an a priori science of education, an 'enormous' undertaking, as Comenius himself admits, seems to come to nothing when we seek the basis for this science teaching, for example, and find that Comenius is content with the theory of sensation: 'the truth and certainty of science depend more on the witness of the senses than on anything else', or 'Science, then, increases in certainty in proportion as it depends on sensuous perception.<sup>3</sup> There often seems to be some contradiction between the general principles the author proclaims and the quasi-sensualistic empiricism of so many of his formulae. Here again, it must therefore be assumed that there is an original connection between these somewhat irreconcilable statements, and that there is a synthesis linking man with nature so as to show why the educative process is the keystone of this philosophy.

But there is still more to the problem. Education, according to Comenius, is not merely the training of the child at school or in the home; it is a process affecting man's whole life and the countless social adjustments he must make. Society as a whole is considered by Comenius *sub specie educationis*. The great principles of peace and the international organization of education that make him a forerunner of so many modern institutions and trends of thought likewise stem, in his work, from this unique synthesis between nature and man, which we have just suggested as the central element of his speculation and as the explanation of the mystery of an educationist's philosophy in an age when education was a matter either of techniques unsupported by theory or of general observations without any attempt to constitute a science of teaching or education.

The key of these difficulties can be discovered only if we can find more complex basic concepts in Comenius' philosophy than those which are ordinarily taken as sufficient—

concepts whose very pattern is such as to make it possible to restate the central ideas of the system in modern terms. This explains the twofold impression of outmoded form and up-to-date substance which one continually receives when reading the great educationist's works.

In this respect, Comenius' metaphysics lies between scholasticism as inspired by Aristotle and the mechanicalism of the seventeenth century. Everyone can see the kinship between his philosophy and Bacons but, in respect of empiricism, this direct connection should not be overstressed; the main points to be kept in mind are the return to nature and the *instauratio magna*. The Aristotelian language used by Comenius is evident enough; but he constantly tends to replace the immobile hierarchy of forms by the concepts of advance and emergence, and by the idea of parallelism or harmony among the various kingdoms. In other words, he often sounds a neo-Platonic note, and Jan Patocka has quite rightly laid stress on this influence, and on that of Campanella.<sup>4</sup>

This approach to the question does away with some of the difficulties and sheds an unexpected light on the main outlines of the work. The central idea is probably that of nature as a creator of forms, which, being reflected in the human mind, thanks to the parallelism between man and nature, makes the ordering of the educational process automatic. The natural order is the true principle of teaching, but the sequence is dynamic, and the educator can carry out his task only if he remains a tool in nature's hands. Education is thus an integral part of the formative process to which all beings are subject and is only one aspect of that vast development. The descent or 'procession', in which the multiplication of beings consists, is matched by the upward motion at the level of human activity; and this upward motion, which will lead us to the Millennium, merges into one spontaneous development of nature and the educative process. Education is therefore not limited to the action of school and family but is part and parcel of general social life. Human society is an educational society: although this idea was not explicitly stated until the nineteenth century, Comenius' philosophy gave him a glimpse of it. Hence the disconcerting ambition of the 'pansophic' conception—'to teach all things to all men and from all points of view'—and the fundamental union between the educational ideal and the ideal of international organization.

We can thus gain an idea of how Comenius as a metaphysician, and Comenius at grips with the countless practical problems he encountered as a language teacher and organizer of schools, managed to achieve an inner unity, finding it in the elaboration of a philosophy based on education. Comenius' genius lay in grasping the fact that education is one aspect of nature's formative machinery and so integrating the educative process into a system in which this process is indeed the essential axis.

We can see at the same time how the proclamation, at the beginning of *The Great Didactic*, of an a priori science of education can be reconciled with the apparent sensualism of so many passages in that work. Comenius was not a sensualist, though, as we shall see, he possibly failed to make sufficient use of the parallelism between the *ratio* and the *operatio*<sup>5</sup> to emphasize the active character of cognition. In his view, however, sensation creates knowledge in that it provides signals, as it were, that set off the spontaneous activity of the mind and link it up with the spontaneous activity that creates material things. Just as art imitates nature, according to the Aristotelian formula, so sensation (and this is a departure from the views of the peripatetics) makes it possible to re-establish the harmony between the active order of things, which teaches, and the spontaneity of the perceiving subject.

Finally, we can understand why Comenius became the apostle of international collaboration in education itself. No doubt the fratricidal struggles that constantly forced him into tragic exile and ruined his career both as theologian and as educator gave him reasons for his internationalist convictions, just as his experimental work as a teacher provided the starting-point for his thinking on education. But just as his thinking on that subject was

integrated into a conception of the world where education proceeds from the formative action of nature, so his social and international ideas eventually became an integral part of his general doctrine of harmony and advance.

In short, Comenius' system is internally consistent; and the main constituent links of that coherence, though not immediately apparent, account for the major educational principles, applying to social and international as well as to scholastic affairs, which the master continually expounded. Comenius' significance for our time must therefore be sought by reference to the axes of his system; or, in other words, we must try to bring a modern point of view to bear upon the system as such, rather than upon mere individual aspects of it which, if isolated from their context, would give rise to arbitrary interpretations. Despite appearances, Comenius is really closer to us in his conception of man's development as part and parcel of that of nature than in most of the special theses he defends in his *Great Didactic*.

Ш

Except in a few cases, the real difference between Comenius and us is the difference that lies between seventeenth- and twentieth-century ways of thinking. We no longer believe that metaphysics will enable us to understand the development of the child or of man in society, or the interaction between man and nature, to say nothing of the laws of nature. We have put a series of separate sciences in the place of simple speculation, and Comenius' central ideas must be transposed into the context of the present day with due regard to this fundamental change in method. Such a transposition is quite legitimate; in the history of the sciences, ideas have often been presented philosophically before being built up scientifically into a more elaborate structure or subjected to systematic scientific checking. Atomistic concepts, those of conservation, etc., may be cited among countless possible examples.

Notwithstanding this difference in method, Comenius may undoubtedly be considered as one of the precursors of the genetic idea in developmental psychology, and as the founder of a system of progressive instruction adjusted to the stage of development the pupil has reached.

With regard to the first of these two points, Comenius has been interpreted either as a proponent of the theory of innate faculties—mental development being attributed to a mere maturation of preformed structures—or as an empiricist who considers the mind as a receptacle gradually filled by knowledge derived from sensation. This dual interpretation is, in itself, indicative of the author's real position. Like all partisans of spontaneity and activity in the subject, he is accused sometimes of leaning towards preformisin and sometimes of exaggerating the part played by experience. Comenius' concept of the parallelism of man and nature should be closely scrutinized in connection with this particular point. Such parallelism is open to the two objections mentioned above if it is conceived as static, but it is a doctrine of dynamism to the extent that it links together the formative order of the material world and that formative order, inherent in the subject's actions, which, according to Comenius, represents both the law of development and the educative process itself.

With regard to the second point—application to teaching—Comenius works out all the implications of his belief in development. He distinguishes four types of schools for what we should now call the four major periods or stages in education: infancy, childhood, adolescence and youth. And, with really remarkable intuition, he grasps the fact that the same forms of knowledge are necessary at each of the different levels, because they correspond to permanent needs; and that the difference between these levels lies mainly in the way in which the forms of knowledge are re-outlined or restated. In a passage of *The Great Didactic* to which J. Piobetta rightly calls attention in the introduction to his French translation, Comenius presents the

following proposition regarding these successive types of schools, which shows deep psychological understanding:

Though these schools be different, we do not wish them to teach different things, but rather the same things in a different manner. I mean, all things which can make men truly men, and the learned truly learned; they should be taught in consideration of the pupil's age and the standard of his prior preparation, which should always tend gradually upward.

This is a very accurate anticipation of the successive reconstructions of the same kind of knowledge from stage to stage (e.g. from action to simple representation and thence to reflection), according to the system of consecutive development which modern genetic psychology bas enabled us to analyse.

More generally, in the sixth of the 'Principles for Facilitating Teaching and Study', Comenius derives from the idea of spontaneous development the following three rules, which might be written in letters of gold on the door of every modern school—so applicable are they still, and unfortunately so seldom applied:

- 1. If the class instruction be curtailed as much as possible, namely to four hours, and if the same length of time be left for private study.
- 2. If the pupil be forced to memorize as little as possible, that is to say, only the most important things; of the rest they need only grasp the general meaning.
- 3. If everything be arranged to suit the capacity of the pupil, which increases naturally with study and age.<sup>6</sup>

In other words, if the child is really a being in process of spontaneous development, then individual study, independent exercises, and the transformation of capacities with age are possible; the school should therefore take advantage of such possibilities instead of ignoring them on the assumption that ail education can be reduced to external, verbal and mnemonic transmission of adult knowledge through the teacher's words to the pupil's mind. True, in many other passages, Comenius seems to lay stress on receptivity. The role of images and sense data, the metaphor of the funnel into which knowledge is poured, and many other similar texts, appear to contradict these other statements. But if we bear in mind the idea of the parallel between formative nature and the training of man, it is impossible not to regard the above three rules as indicative of a recognition of the role of active development.

If we now go into the details of this theory of education based on spontaneous development, we are struck by the modern sound of a whole series of statements, despite the absence of a clear-cut theory of the relationship between action and thought.

To take this last point first, Comenius' general theory involves a concept of parallelism or corresponding harmony rather than dependence between the cognitive functions or organs (*mens, cerebrum, ratio*) and activities themselves (*manus, operatio, artes*). But as soon as he comes to deal with teaching, he corrects his approach and steadily affirms the primacy of action:

Craftsmen do not hold their apprentices down to theories; they put them, to work without delay so that they may learn to forge metal by forging, to carve by carving, to paint by painting, to leap by leaping. Therefore in schools let the pupils learn to write by writing, to speak by speaking, to sing by singing, to reason by reasoning, etc., so that schools may simply be workshops in which work is done eagerly. Thus, by good practice, all will feel at last the truth of the proverb: *Fabricando fabricamur*.<sup>7</sup>

Comenius goes as far as to defend this principle even in language teaching, stressing particularly that examples must precede rules: as the natural course of development consists in

acting first and only afterwards reflecting on the circumstances of the action, examples cannot be deduced from a rule unless the rule is understood, but understanding of the rule derives from the retroactive organization of examples already utilized in spontaneous practice.<sup>8</sup>

This principle of prior activity is interpreted by Comenius in the broadest sense, in accordance with his doctrine of spontaneity, as calling into play simultaneously needs and interests, or affective motivation, and functional practice as a source of knowledge. In other words, Comenius does not want exercises in a vacuum or mere breaking-in through action, but activity based on interest. P. Bovet, in this connection, quotes several remarkable passages. The first ones among them are interesting for their broad scope: 'Do not undertake any teaching without first arousing the interest of the pupil'. And again: 'Always offer something which will be both agreeable and useful; the pupils' minds will thus be primed and they will come forward eagerly, with ever-ready attention." A third passage is interesting from the point of view of psychology. When a subject of teaching does not meet any clearly determined need, Comenius suggests recourse to the procedure of beginning something and then breaking off in order to create a gap—to start telling a tale or a little story, for instance, and break it off in the middle. What Comenius is using here is not exactly a need, but what the psychologist K. Lewin, who has studied the effect of such interrupted action, has called 'quasi-needs'.

This functional character of the activity or spontaneity in which Comenius believes naturally leads him to take a clear stand with regard to the relationship between practical and formal methods. The question is discussed in an interesting way in connection with the second principle of the 'Necessary Conditions for Teaching and Learning', which is expressed as follows: 'Nature prepares matter before giving it a form.' After a few reflections upon the need for school equipment (books, pictures, specimens, models, etc.) before lessons begin, Comenius takes up the central question of the relations between speech and the knowledge of things. As a former teacher of Latin and other languages he pronounces this decisive verdict:

Languages are learned in schools before the sciences, since the intellect is detained for some years over the study of languages, and only then allowed to proceed to sciences, mathematics, physics, etc. And yet things are essential, words only accidental; things are the body, words but the garment; things are the kernel, words the shells and husk. Both should be prevented to the intellect at the same time, *but* [and the stress is mine] *particularly the things*, since they are as much objects of understanding as are languages.<sup>10</sup>

In other words, behind the Aristotelian language of matter and form, or substance and accident, Comenius reverts to the progressive sequence of structure building; and, as a teacher, he is fully aware of the harm done by that enduring curse of education—verbalism or pseudo-knowledge (*flatus vocis*) associated with mere words, as distinct from the real knowledge created by the action of the pupil upon the objects of his study. Generally speaking, the terms of the second of the 'Principles for Facilitating Teaching and Study' are still more eloquent than those of the other second principle just mentioned: 'Nature', says Comenius, 'prepares the material, before she begins to give it form.' From the educational point of view, this amounts to saying that functionally acquired knowledge ('in any event, young pupils must be imbued with the ardent desire to know and learn') tends spontaneously to become organized; it can therefore be co-ordinated with logical and verbal structures wherever such co-ordination is based upon a sound, 'form-desiring' initial content. Formal instruction that precedes understanding of the content, on the other hand, leads us back to verbalism.

Two of these 'Principles for Facilitating Teaching and Study' deserve special mention because they emphasize what we should now call the genetic aspect, and the functional aspect, of Comenius' ideas on educational psychology. Principle VII is stated as follows: 'Nature imparts stimulus only to fully developed beings who wish to break out of their shell.' Principle VIII: 'Nature helps itself in every possible way.' Comenius draws from these statements the

following two corollaries which once again clearly assert the twofold need for education by degrees in accordance with the different stages of mental development and for a system of teaching that does not reverse the natural sequence of matter and form: 'Now the faculties of the young are forced: (i) if boys are compelled to learn things for which their age and capacity are not yet suited; (ii) if they are made to learn by heart or do things that have not first been thoroughly explained and demonstrated to them.' 12

But the statement which probably gives the clearest indication of the genetic trend in Comenius' ideas on education is Principle I itself: 'Nature awaits the favourable moment.' After recalling that animals reproduce and plants grow according to the seasons, Comenius urges that the favourable moment for exercising the intelligence be seized upon, and that exercises 'all be performed gradually following a fixed rule'. This is again tantamount to stressing what, in modern parlance, would be called the sequence of stages of development.

We all know, however, how misleading such principles may be with regard to the actual practice of teaching. How many schools invoke the ideas of development, interest, spontaneous activity, etc., though, in real fact, the only development is that laid down in the curriculum, the only interests are imposed, and the only activities suggested by adult authority! The true measure of active teaching (a form of education that is perhaps almost as rare today as in the seventeenth century) appears to, be the way in which truth is established. There is no authentic activity so long as the pupil accepts the truth of an assertion merely because it is conveyed from an adult to a child, with all the aura of explicit or implicit authority attached to the teachers words or those of the textbooks; but there is activity when the pupil rediscovers or reconstructs truth by means of external, or internal mental, action consisting in experiment or independent reasoning. This all-important fact appears to me to have been clearly grasped by Comenius. At the last school of which he was head, at Saros Patak in 1650, he was led to reduce his fundamental principles of teaching to three:

- 1. Proceed by stages (Omnia gradatim).
- 2. Examine everything oneself, without submitting to authority [what Comenius called, in the etymological sense of the word, 'autopsy'].
- 3. Act on one's own impulsion: 'autopraxy'. This requires, with reference to all that is presented to the intellect, the memory, the tongue and the hand, that the pupils shall themselves seek, discover, discuss, do and repeat, without slacking, by their own efforts the teachers being left merely with the task of seeing whether what is to be done is done, and done as it should be. 13

Such an ideal of intellectual education is bound to go hand in hand with ideas on moral education, and these will serve as a kind of cross-check to verify to what extent Comenius has value for us today. In an age when the cane was a teaching instrument (it was still recommended by Locke!) and the only school morality was that of obedience, could Comenius, as we do today, extract from the concepts of development and spontaneous activity a form of moral education that would also be an extension of those formative tendencies of nature to which the great educationist constantly refers in the parallel he draws between nature and man?

The touchstone in such a matter will be the question of retributive justice or punishment. And Comenius is radically opposed to corporal punishment:

Indeed, by any application of force we are far more likely to produce a distaste for letters than love for them. Whenever, therefore, we see that a mind is diseased and dislikes study, we should try to remove its indisposition by gentle remedies, but should on no account employ violent ones. The very sun in the heavens gives us a lesson on this point. In early spring, when plants are young and tender, he does not scorch them, but warms and invigorates them by slow degrees.... The gardener proceeds on the same principle, and does not apply the pruning-knife to plants that are immature. In the same way a musician does not strike his lyre a blow with his fist or with a stick, nor does he throw it against the wall, because it produces a discordant sound; but, setting to work on scientific principles, he tunes it and gets it into order. Just such a skilful and sympathetic

treatment is necessary to instil a love of learning into the minds of our pupils, and any other procedure will only convert their idleness into antipathy and their lack of interest into downright stupidity.<sup>14</sup>

But these decisive arguments against corporal punishment are not the only ones put forward by Comenius. His whole chapter on school discipline shows his effort to use positive sanctions (encouragement, emulation, etc.) rather than negative ones. In short, his disciplinary pedagogy shows the same spirit as his philosophy, where the theologian really gives little emphasis to original sin but speaks in constant praise of nature 'in perpetual progress' (cf. the title of Principle VII concerning the soundness of education and the school).

Besides these ideas on sanctions, Comenius' central concept of moral education is again a functional one, illustrating his preference for practice by experience as against compulsion or verbal instruction:

The virtues are learned by constantly doing what is right.... it is by learning that we find out what we ought to learn, and by acting that we learn to act as we should. So then, as boys easily learn to walk by walking, to talk by talking, and to write by writing, in the same way we will learn obedience by obeying, abstinence by abstaining, truth by speaking the truth, and constancy by being constant. But it is necessary that the child be helped by advice and example at the same time.<sup>15</sup>

But he who shows the way is not necessarily an adult. In a curious passage of *the Methodus linguarum novissima*, quoted by P. Bovet, Comenius lays stress on imitation and group games, bringing his systematic mind to outlining the seven characteristic factors of such games. He appears, in this connection, to, have recognized the role of the social relationship set up among players of games, as well as the role of competition and the rules imposed upon players by the game.

After having emphasized that these main concepts of Comenius' theory of education are still very valid today, we must say a few words about his ideas on school organization. This topic will lead us, in the last part of out Introduction, to the social and international aspects of his doctrine.

At a time when education had neither stable institutions nor general programmes of study, Comenius endeavoured both to build up a rational administrative structure and to develop graduated, coherent programmes. All this elaborately detailed planning was dominated by a twofold requirement of unity: horizontal unity in respect of curricula at a given level and vertical unity in the hierarchy of the stages of education.

In the first of these two respects, it is striking that Comenius, in the sphere of science teaching (which does not appear to have been his favourite subject), has a very lively, very modern feeling of the interdependence of the sciences, necessitating co-ordination of the syllabuses:

From this [thoughts on the interaction of the parts of a system] it follows that it is a mistake to teach the several branches of science in detail before a general outline of the whole realm of knowledge has been placed before the student, and that no one should be instructed in such a way as to become proficient in any one branch of knowledge without thoroughly understanding its relation to the rest.<sup>16</sup>

It is also interesting to see the importance Comenius attributes to the principle of the integration of previously acquired knowledge with that acquired later, following a pattern which is now matched even in our concepts of development.

As regards school organization, mention has already been made of the principle of subdivision into different levels corresponding to the various stages in mental development: the nursery school (or 'mother's knee') for infants; the public or national school for children; the grammar school or secondary school for older children; and academies for students. But

another very interesting point about this organization is that Comenius wishes it to be the same for everyone—one school system for all:

all the young of both sexes should be sent to the public schools.... they should first be sent to the Vernacular School. Some writers are of the contrary opinion. Zepper and Alsted would persuade us that only those boys and girls who are destined for manual labour should be sent to the Vernacular Schools, while boys whose parents wish them to receive a higher education should be sent straight to the Latin School.... From this view my whole didactic system forces me to dissent.<sup>17</sup>

But Comenius is not satisfied merely with these general principles. He expresses astonishingly prophetic views on a number of questions. Two examples may be given here.

One of them concerns the education of girls. In this regard, he insists upon complete equality of the sexes, in accordance with his pansophic principle that everything must be taught to everyone:

Nor can any good reason be given why the weaker sex (to give a word of advice on this point in particular) should be altogether excluded from the pursuit of knowledge (whether in Latin or in their mother-tongue).... They are endowed with equal sharpness of mind and capacity for knowledge (often with more than the opposite sex) and they are able to attain the highest positions, since they have often been called by God Himself to rule over nations ... to the study of medicine and of other things which benefit the human race.... Why, therefore, should we admit them to the alphabet, and afterwards drive them away from books?<sup>18</sup>

But if these statements in favour of girls' education are a logical consequence of his system (and that in no way diminishes Comenius' merit in remaining consistent), another corollary is much more surprising for the middle of the seventeenth century. It is his plea for the backward, 'the naturally dull and stupid'. He states that 'this renders more imperative the universal culture of such intellects. The slower and the weaker the disposition of any man, the more he needs assistance.... Nor can any man be found whose intellect is so weak that it cannot be improved by culture.' 19

We thus see how the architecture of a system in which a parallel is established between man and perpetually formative nature inspires not only a functional system of education, but also a conception of the general organization of education. This leads us on to the social and international aspects of the doctrine.

# Ш

An attempt has been made in the foregoing to show how up-to-date are Comenius' ideas on education and, in particular, how modern his methodology. The most surprising, and in many respects the most modern, aspect of his doctrine has been kept till the last—his ideas on education for everyone and for all peoples, and (what is still more astonishing) on the international organization of public education. This side of his work is what is most likely to interest UNESCO, and in some respects Comenius may be regarded as one of that Organization's precursors.

The starting point of the sociological aspect of his educational philosophy is the statement of the universal right to education on a basis of equality. If we bear in mind Comenius' conception of society as an educative society, this is simply a direct corollary of his ideas on man's place in nature. But the corollary is an extremely bold one, when we consider this ideal of democratic education in its seventeenth-century historical context.

If this universal instruction of youth be brought about by the proper means [says Comenius], none will lack the material for thinking and doing good things. All will know how their efforts and actions must be governed, to what limits they must keep, and how each must find his right place.... The children of the rich and the nobles,

or those holding public office, are not alone born to such positions, and should not alone have access to schools, others being excluded as if there were nothing to be hoped from them. The spirit bloweth where and when it will.<sup>20</sup>

In a word, the system of education proposed by Comenius is universal by its very nature; as he says, it is 'pansophic'. It is intended for all men, irrespective of social or economic position, religion, race or nationality. It must be extended to all peoples, however 'underdeveloped', as we say today, they may be; and Comenius would have commended the modern literacy campaigns undertaken for the purposes of fundamental education and social reintegration.

Comenius has sometimes been criticized for neglecting individuality. It would be easy to show that this is not the case; the importance he attributes to spontaneity, to interest, to the pupil's own ability to verify statements, and to 'autopraxy' would be meaningless if there were no respect for each child's individuality and the ways in which it differs from others. But he was mainly concerned about the universal application of his doctrine. In radical opposition to Jesuit education, which, at that time, was designed exclusively for those on the top rungs of the social ladder, Comenius defended his universalistic scheme, and its intensely democratic implications, with his ideas of a single school system and the obligation of the upper classes to see to the education of a nations entire youth. The democratic character of Comenius' reform is not his least title to fame; it explains why he is included among the great forerunners of Soviet education as well as that of other countries.

But the 'pansophic' plan of teaching everything to everyone, and from every point of view, had many other implications, since, from the outset, it was intended to lead to a reeducation of society, an *emendatio rerum humanarum*. To have a method is not enough: the means to apply it must also be found; that is, it must be introduced into a body of legislative provisions designed to ensure its propagation.

Nothing is more moving, in following Comenius' career, than the fact that this eternal exile, eternally a member of a minority group, never tired of drawing up plans for international collaboration: general schemes for universal peace, proposals for collaboration between the Churches, more specialized plans for international societies for erudite research, but, above all, plans for the international organization of public education and the final project for a *Collegium lucis*, which was to be a kind of international ministry of education.

But in order to understand these various points, we must very briefly outline Comenius' wandering life and his countless schemes that were thwarted by events. It would have been rather banal and academic to begin this Introduction with a sketch of Comenius' life (with which everyone is familiar);<sup>21</sup> but it will be well to remind the reader of certain features of it in connection with the study of his successive efforts and undertakings in the international field.

Born on 28 March 1592 at Uherský Brod in Moravia, he was left an orphan at an early age, and his guardians gave so little thought to his education that he was 16 before he could begin his Latin studies at the school in Prerov. His position as an orphan deprived of primary education no doubt did more to make him think about the relationship between school and personal work than a normal school upbringing would have done. With other young men belonging to the community of the Moravian Brethren (the famous Protestant sect), he was later sent to the University of Herborn where he studied Protestant theology, attended Alsted's courses, and became familiar with Ratkes famous memorial on language teaching. He soon began to write a book of the same kind for the Czech public, and also embarked on a Latin-Czech glossary which he continued to perfect over a period of forty years. On his return to Moravia, he became a schoolmaster and later the church pastor at Fulnek; but the insurrection in Bohemia, which marked the beginning of the Thirty Years War, was the start of his misfortunes. He fled from his home, lost his wife and young children, and began to wander from one lordly domain to another, writing works of consolation for his co-religionists and

preaching a resigned withdrawal into the inner life of the mind. Expelled from Bohemia, he took refuge at Leszno in Poland, where the Moravian Brethren had a centre and there, at the town's secondary school, resumed teaching. It was then that he developed his ideas on education, basing himself in particular on Bacon and Campanella, those 'happy restorers of philosophy'. And it was then, too, that he started to grapple with the great problem of his time, that of method. He wrote his *Janua linguarum reserata*, which was extremely successful, and his *The Great Didactic* (originally written in Czech). But in his eyes these works were only stepping-stones to far more important objectives: he aimed at nothing less than a radical reform of human knowledge as well as of education. *The Great Didactic* itself was full of general ideas, but Comenius wished to unite and systematize them in a universal science or 'pansophy' (a term in fairly current use at that time).

This was the beginning of his international vocation, for such a systematization of knowledge, to his mind, was bound up with the co-ordination of universal currents of ideas. Starting from that moment, all his undertakings were accompanied by efforts at co-operation on a larger or smaller scale.

His first objective was the reconciliation of the Churches. Certain English friends, who were also interested in the movement for conciliation, sought to get him away from Leszno and brought his work to the attention of Louis de Geer, a Swedish philanthropist of Dutch origin; they then published Comenius' pansophic programme, without his knowledge, under the title of *Pansophiae prodromus* (a book that attracted the attention of Mersenne and of Descartes himself) and in 1641 invited him to London to help bring about an understanding between King and Parliament and to found a circle for pansophic collaboration.

These attempts failed; yet from them Comenius derived fresh ardour with which to pursue his schemes for reforming human society and learning in general. A choice was open to him between an invitation from Richelieu to found a pansophic college in France, and one from Louis de Geer to reform Swedish schools. He chose the second offer, hoping, no doubt, to obtain Swedish political support for the Bohemian refugees. On the way, he met Descartes at Endegeest, and Jungius and Tassius in Hamburg, and found difficulty in realizing that they hardly shared his views on the forming of an international circle for pansophic research. In Sweden he was well received by court society, but his particular Protestant views were viewed with some dubiety by Lutheran public opinion. He settled at Elbing in East Prussia (which was then Swedish territory) and wrote his *Methodus linguarum novissima*. But this work he regarded as of merely secondary importance, his great problem being, more and more, the reform of human affairs.

After taking part in the Colloquium Charitativum held at Thorn in 1645 with a view to reconciling the Churches, he fell into disgrace with the Swedes (he had foreseen that this would happen but had persisted in his course, which does credit to his character). He also escaped the lures of the Catholic party, which had thought to make use of him, and without having achieved any practical gains, but having acquitted himself with dignity in difficult circumstances, he resumed a scheme for a work on the universal reform of human society by the following means: (a) unification of learning and its spread by an improved school system under the supervision of a kind of international academy; (b) political co-ordination through international institutions aimed at maintaining peace; (c) reconciliation of the Churches in a tolerant form of Christianity. The title of the work, *General Consultation on the Reform of Human Affairs*, shows that his idea was to submit a programme to those taking part in the great negotiations which had aroused and disappointed so many hopes during the seventeenth century.

Promoted to the rank of Bishop of the Moravians, Comenius returned to Leszno. In 1650, however, he went to Saros Patak in Transylvania in the—again ill-starred—hope of

founding a pansophic college. There he wrote the *Orbus sensualium pictus*, the first illustrated textbook, which met with great success. In 1654 he returned to Leszno, which was razed on 25 April 1656 during the Swedish invasion of Poland. In the disaster, Comenius lost his library and many of his manuscripts, including the Latin-Czech glossary on which he had been working since his youth.

After this new misfortune, he went with his family to stay with Laurenz de Geer (the son of his former patron) in Amsterdam. He refused a teaching post but consented to the publication of his complete didactic works. He still sought to complete his *General Consultation*, but had not yet been able to do so when he died at Amsterdam in November 1670.

One of the reasons why this last work was not completed was probably the fact that its philosophical and theological basis was in contradiction with the trends of the time, which were towards the development of individual sciences, particularly mathematical physics. The total, indivisible, knowledge Comenius dreamed of had already been outstripped by the new ideal of emergent modern science. But the main reason for the failure is probably the one given earlier: the conflict between the didactic need to write a philosophy for everyone and the desire to build up pansophy itself.

None the less, this unfinished work is perhaps the one that most clearly shows the deep philosophical, educational and social consistency of Comenius' thought. The then widespread neo-Platonic idea of a 'procession' followed by a 'return' of things to their source takes on a new, and a concrete, significance in Comenius' system, because the return can occur only at the level of human activity, of that artificial world' which he had the considerable merit of interpreting as natural, that is, as participating in the formative mechanisms of nature itself.

Comenius' international projects, therefore, cannot be divorced from his educational ideas or from his philosophy as a whole. Peaceful international organization and the sort of international ministry of education that the *Collegium lucis* was intended to be are not merely the outcome of the dreams with which a man whose tragic life had always prevented him from carrying out his educational intentions consoled himself. As we have seen in running through the stages of his life, Comenius constantly sought, with direct relation to his pansophic ideal, to lay the foundations for that co-operation which was at least as close to his heart as his ideal of teaching. He must, therefore, be regarded as a great forerunner of modern attempts at international collaboration in the field of education, science and culture. It was not incidentally or by accident that he conceived such ideas, fitting in fortuitously with certain modern achievements, but as a consequence of the general conception of his system, which fused nature, human activity and the educational process into a single whole. UNESCO and the International Bureau of Education owe him the respect and gratitude that a great intellectual predecessor deserves.

# IV

As a conclusion, let us consider in what sense we may say that Comenius has a significance for our time.

His modernity does not lie in his methods of demonstration, since he was not master of the science of his time and did not understand the reasons that were bringing his contemporaries to develop separate sciences distinct from philosophy. But, by a paradox that is extremely instructive from the standpoint of the history of science, this metaphysician with his dreams of a complete knowledge of all things contributed, when he wrote his *The Great Didactic* and his specialized treatises, to the creation of a science of education and a theory of

teaching, considered as independent disciplines. This may probably be said to be his main claim to glory, without, as we have seen, underrating his social and international action.

What accounts for the paradox and explains, in general, why Comenius is still so up-to-date despite his antiquated metaphysical apparatus is the fact that, in all the matters he took up, he was able to give an extremely practical significance to the key concepts of his philosophy. His two central ideas were no doubt that of nature as a creator of forms and that of the parallelism between the activity of man and the activity of nature. It matters little, therefore, that he should have been content with global, partly mystical, ideas about nature's forms and those of human organization. By making a more scientific study of the evolution of living beings, child development and social structures, we can rediscover Comenius' great truths, simply enlarging Comenius' framework but not destroying it. Whatever the terms used to describe these facts, it is true: that children develop according to natural laws; that education must take such development into account; that human societies also evolve according to certain laws; and that education is likewise dependent upon social structures. Comenius is thus among the authors who do not need to be corrected or, in reality, contradicted in order to bring them up to date, but merely to be translated and elaborated.

The normative principles set forth by Comenius—his central idea of democratic education and his other basic idea of the need for international organization (in all fields, but especially in education)—far from being weakened by such a transposition, emerge yet sounder and of more present application.

But the supreme merit of the great Czech educationist lies in the fact that he raised a series of new problems. Theories may pass away, but problems endure. They are ceaselessly renewed and diversified and ever retain their initial virtue of guiding and inspiring investigation. In this respect, even inadequate or inaccurate theories have often, in the history of science and technology, been of decisive importance, just because of the new problems they have raised.

From this point of view, it matters little whether the genetic conception of education propounded by Comenius, and his ideas on mental development, were drawn from neo-Platonic theories about the 'return' of beings or derived from some other philosophical source. The important thing is that, by placing this reascension at the level of human activity and in parallel with the formative processes of nature, he created a series of new problems for his century; mental development, the psychological basis of teaching methods, the relationship between school and society, the need to organize or regulate syllabuses and the administrative organization of education, and lastly, the international organization of research and education. To have realized that such problems exist and to have lost no opportunity of drawing attention to their vital importance for the future of mankind is the greatest claim to fame of the celebrated educationist.

#### **Notes**

1. There was already a voluminous literature on Comenius, in many different languages, even before the celebration in 1992 of the quatercentenary of his birth. In 1992 innumerable meetings, seminars, tributes and publications were devoted worldwide to this celebrated pioneer. For the purposes of this essay, it seemed appropriate to go back to the study written about him in 1957 by jean Piaget, the then Director of the International Bureau of Education. This unjustly forgotten study, entitled 'The Significance of John Amos Comenius at the Present Time', appeared as the Introduction to a volume of 'Selections' published by UNESCO in that year (and out of print ever since), marking the three-hundredth anniversary of the publication of *Opera didactica omnia* (1657–1957).

We have taken advantage of the opportunity to add a chronology of Comenius' life and work prepared by Giuliana Limiti of the University of Rome and previously published in

Prospects (Volume 13, No. 1 (45), 1983, pp. 138–43), as well as a select reading list on Comenius chosen by Marcelle Denis of the University of Dijon.

A profile on Jean Piaget himself, written by Alberto Munari of the University of Geneva, will appear in this series.

- 2. J. A. Comenius, *The Great Didactic*, p. 157, London, Adam & Charles Black, 1896.
- 3. Ibid., Chap. XX, p. 337.
- 4. See Jan Patocka, 'Philosophical Basis for Comenian Pedagogy', *in Ceskoslovenska Akademie ved, Pedagogica*, No. 2, 1957, pp. 137-77, in particular, page 145.
- 5. Quoted from P. Bovet, *Jean Amos Comenius: un patriote cosmopolite*, p. 10, Geneva, 1943.
- 6. Comenius, op. cit., Chap. XVII, p. 289.
- 7. Quoted from Bovet, op. cit., p. 23.
- 8. Comenius, op. cit., Chap. XVI, p. 268.
- 9. Bovet, op. cit., pp. 18, 24.
- 10. Comenius, op. cit., Chap. XVI, p. 267.
- 11. Ibid., Chap. XVII, p. 266.
- 12. Ibid., Chap. XVII, pp. 289-90.
- 13. Bovet, op. cit., p. 35.
- 14. Comenius, op. cit., Chap. XXVI, p. 402.
- 15. Ibid., Chap. XXIII, p. 367.
- 16. Ibid., Chap. XVI, p. 274.
- 17. Ibid., Chap. XXIX, p. 418.
- 18. Ibid., Chap. IX, pp. 219-20.
- 19. Ibid., Chap. IX, p. 219.
- 20. Quoted by J. Piobetta in the Introduction to *La Grande Didactique*, p. 26, Paris, Presses Universitaires de France, 1952.
- 21. Comenius outlined the history of his own intellectual development several times, and modern historians have only slightly retouched the portrait he left of himself.

# Chronology of the life and works of Jan Amos Comenius

by Giuliana Limiti

1592

Life Works

Born at Uhersky Brod (Moravia)

1608 Grammar school studies at Prevov.

Started to compile *Thesaurus linguae Bohemicae* [The Treasury of the Bohemian Language], a phraseological and stylistic dictionnary, on which he continued to work for years. The manuscript was lost in the fire at Leszno in 1656.

1610 Studied at the

University of

Herborn; Read

Ratke's De

studiorum

rectificanda

methodo consilium

and was inspired

by it to study the

science of

education.

1612 Continued his

studies at the

University of Heidelberg. Served as teacher 1614 at Prerov. 1616 the church known as the Unitas Fratrum Bohemorum 1618 Outbreak of the Thirty Years War. Served as a teacher and minister at Fulnek (until 1623). 1620 Defeat of the Bohemians at the White Mountain.

Stimulated by his reading of Ratkes work and drawing on his own teaching experience, he wrote Grammaticae facilioris praecepta [Principles of a Simpler Approach to Grammar], the first of his school textbooks (1st ed., Prague, 1616).

Became minister in During the following years he worked on an encyclopedia, Theatrum universitatis rerum [The Theatre of All Things], in the introduction to, which he enumerates the subjects lacking Bohemian culture which he intends to develop. He planned to accompany *Theatrum* by an *Amphitheatrum* and also by *Theatrum* scripturae, which he completed and published later on. During the years the Bohemians were suffering severe reverses, he wrote books on theological and moral subjects, many of which were autobiographical. They included the Labyrint sveta à raj srdce [The Labyrinth of the World and the Paradise of the Heart] which he was to return to in the last years of his life.

3 May. During the 1623 sacking of Fulnek by imperial troops, he lost his family,

his house and his library, which was publicly burned.

First visit to 1626 Holland

1627 While living and hiding in the mountains of Bohemia, he read Bodin's Didactica, which gave a further stimulus to his studies. An imperial edict forced the reformers to go into exile. Comenius fled the country

Started work on *Didaktika ceská* [Bohemian Didactic], the first version of the *Didactica magna*, conceived as part of a collection of writings to be entitled Ráj ceski o Ráj Cirkve [The Bohemian Paradise or Paradise of the Church]. His Navrzeni krátké o obnovení škol o králostí ceském [Brief proposal for the Regeneration of Schools in the Kingdom of Bohemia] (1st ed., Prague, 1849) may have been a first attempt to carry out this project.

## LESZNO PERIOD

1628 3 February. In exile at Leszno, in

Between 1628 and 1633, he wrote the following books on education: Informatorium školy materske [Book of the Nursery-Poland: engaged in school Teachers] (1st ed., Leszno, 1633), which was published

teaching and in writing his first coordinated series of books on education

first in German and later in Latin in *Opera didactica omnia*; which was followed by the series entitled Vernaculae scholae classis sex libelli [Six Booklets for the National School Classes]: Violarium, Rosarium, Viridarium, Labyrinthus, Balsamentum, Paradisus. Next came the Janua linguarum reserata [The Gate of Languages Unlocked] (1st ed., Leszno, 1631), conceived as 'seed-plot of all arts and sciences', which superseded his first texbook on The Simpler Approach to Grammar and was immediatly translated into several languages. Lastly, as an easy introduction to the Janua he wrote Januae linguarum reseratae vestibulum [Vestibule to the Gate of Languages Unlocked]. In the following years, Comenius remained active in the educational field, explaining the use of his manuals for teachers in the towns that adopted them and making plans to improve and expand them. The culmination of this continuous educational activity was the translation into Latin of the Didaktika ceská, as the Didactica magna [The Great Didactic], which was to be the first work in the series of subsequently published in the *Opera didactica omnia [Complete* Didactic Works]. During the same period, the original plan to write a Janua linguarum or to co-operate with other scholars in wrinting a Templum sapientiae [Temple of Wisdom] developed into the project of 'pansophic' research into universal knowledge which resulted in the drafting of *Pansophiae prodromus* [Introduction to Pansophy] (1st ed., London, 1637). This was sent to English friends asking for their private opinions, and was published by them without his knowledge.

1638 He was invited to Sweden to reform the school system. Although he declined the invitation, it encouraged him to translate the Didaktika ceská into Latin with a view to having it distributed throughout Europe.

1639

In reply to the comments received on the *Pansophiae prodronus*, he wrote the *Conatuum pansophicorum dilucidatio* [Explanation of the Endeavours of the Pansophists] (1st ed., London, 1639). In the meantime, he published separatly a number of scientific writings, which formed prt of this pansophic research, including *Physica ad lumen divinum reformanda* [Towards a Reform of Physics in Accordance with Divine Light] (1st ed., Leipzig, 1639).

1641 At Parliament's invitation (23 September), he travelled to England to collaborate in the founding of a college of learned men.

4 February. In a letter (possibly to Ludovic de Geer) he mentioned the idea of a work made up of a *Pansophia* and a *Pampaedia*, his first recorded use of that term.

1642 At Mersenne's suggestion, he was invited to France by Richelieu to reform the school system. On Richelieu's death the project was dropped. July. Meeting with Descartes at Endegeest. August. Comenius travelled to Sweden to discuss school reform with Oxenstierna. He resolved to give up pansophic plans and returned to education.

He wrote Via lucis [The Way of Light] in which he proposed a general reform of cultural and political life. He was prevented from publishing it by the crisis in England, but it was eventually published in Holland (1st ed., Amsterdam, 1668). His Consultationis brevissima delineatio [A Very Brief Descrition of the Consultation] dates from the same period. It was the first real outline of what was to be his great work, De rerum humanarum emendatione consultatio catholica [ A General Consultation concerning the Improvement of Human Affairs]. The plan that Comenius already had in mind was very close to that which he finally adopted, with the *Pampaedia* as the centre of a triad, opened and closed in turn by a two-fold introduction and a twofold conclusion:

# 4. Pampaedia

- 3. Pansophia
- 2. Panaugia
- 1. Panegersia

- 5. Panglottia
- 6. Panorthosia
- 7. Pannuthesia

# ELBLAG (ELBING) PERIOD

1642 17 October. At Elblag, in the Swedish part of Poland.

1644 24 August. Took part in the Coucil of Orlag.

1645 28 August to 20 September: The Colloquium Charitativum of

He started work on the *Methodus linguarum novissima* [Newest Method of Language Instruction] (1st ed., Leszno, 1648) which, like the *Didactica*, was to provide the theoretical basis for a new series of handbooks: Vestibulum latinae linguae/Vorthür der lateinischen Sprache [Vestibule to the Latin Language] (1st ed., Leszno, 1649), a new bilingual, Latin-German version of the preceding Janua linguarum reserata [Grammar of the Gates] with Annotationes super grammaticam novam janualem [Notes on the New Grammar of the Gate], and lastly a Lexicon januale latinogermanicum [The Atrium of Latin Civilization], with its companion works *Grammatica atrialis* [Grammar of the Atrium] Thorum. Comenius and Lexico atriale [Lexicon of the Atrium], remained unpublished. wrote several memoranda for the delegates of the Unitas fratrum

1646 Returned to Sweden for a few days to discuss his pansophic plans..

Summer. 1648 Beginning of his second stay at Leszno. 24 October. Peace of Westhphalia; the Bohemian claims were ignored.

## SAROSPATAK PERIOD

1650 May. At the invitation of Zsigmond Rákóczi, he moved to Sárospatak in third series of books on education.

1654 30 June. Returned for the third time to Leszno.

1655 Dispersal of the sárospatak school on account of a plague epidemic. Comenius lost track of those of his texts that were in the press at that time.

1656 29 April. The fire of Leszno: Comenius lost, inter alia, the manuscript of Thesaurus linguae portion of the

After explaining his projects for a pansophic school in a few short texts, he wrote the Scholae pansophicae classibus septem adornandae delineatio [Plan of a Seven-grade Pansophic School] and this was followed by others brief commentaries. Subsequently, in response to a request for a shorter period of schooling, he drew Hungary, where he up a new proposal in the form of the Schola latina tribus classibus started work on his divisa [The Three-grade Latin School], which introduced the third series of his 'school instruction' handbooks: Eruditionis scholasticae; Pars prima: Vestibulum [School Instruction; Part One: Vestibule], followed in this case too by the necessary practical tools: Rudimenta grammaticae [Rudiments of Grammar], Reportorium vestibulare sive Lexici latini rudimentum [Repertory of the Vestibule or Rudiments of Latin Vocabulary] and the Commonefaction ad praeceptorem [Instructions for Teachers]; Pars secunda: Janua [School Instruction; Part Two: The Gate], again followed by a Lexicon, a Grammatica, a Historiola and Annotationes; Pars tertia: Atrium [School instructions; Part Three: Atrium] accompanied by a *Praefation ad praeceptorem* [Preface for the Teacher], the In latinitatis atrium ingressio [Entrance to the Atrium of Latin Civilization] and the Lexicon latino-latinum, which was published in Amsterdam (1st ed., 1657). There followed the *Continuatio* of his Sàrospatak writings, which included the *Praecepta morum* [Rules of Life], the *Leges* scholae bene ordinate [Rules for a Well-regulated School] and, lastly, two educational works that were to prove successful for several generations; Orbis sensualium pictus [The Visible World in Pictures] (1st ed., Nuremberg, 1658), which is a Lucidarium, or illustrated aid, to accompany the Vestibule and the Porta, and Bohemicae and the Schola ludus [School as Play] (1st ed., Sàrospatak, 1654), which is a dramatized version of the *Porta*. From this period is dated the

Consultatio Catholica that had already been printed.

Artificii legendi et scribendi tirocinium [Elements of the Art of Reading and Writing], which may perhaps be regarded as a preliminary draft for the *Pampaedia*.

#### AMSTERDAM PERIOD

- 1656 August. Final move to Amsterdam.
- 1657 Published his educational writngs in two volumes.
- 1663 imperial parliament at Regensburg.
- 1668 28 May. Comenius was invited to give an account of his pansophic projects to the Royal

During this period, Comenius saw to the publication of the *Opera* didactica omnia [Complete Didactic Works]: Part I, written between 1627 and 1642 (Leszno period), 482pp., Part II, written between 1642 and 1650 (Elblag period), 461pp.;Part III, written between 1650 and 1654 (Sárospatak period), 1,024pp.; Part IV, new writings produced in 1657 (in Amsterdam), 124pp.; with short prefaces, dedications, linking paragraphs and conclusions Convocation to the which, together with the prefaces and autobiographical notes contained in previous writings republished on this occasion, provide material of the highest importance for understanding the development of Comenius' thought. The brief writings in Part IV are as follows: Vita gyrus [Life is a Circle]; Parvulis parvulus [The Child for Children], designed to serve as an Auctarium, i.e. a supplement to the Vestibolo and the Porta; Apologia (a defence of the approach to Latin adopted in the Porta); Ventilabrum Society of London. sapientiae [The Winnowing of Wisdom]; Ex labyrinthis scholasticis exitus [The Way Out of the Educational Labyrinth]; Latium redivido [Latium Reborn]; Typographeum vivum [A Typography for Our Time]; Paradisus juventuti christianae reducendus [The Paradise to be Regained for Christian Youth]; Traditio lampadis [Handing on the Lamp]; Paralipomena didactica [Supplementary Notes to Educational Writings] (1st ed., Amsterdam, 1657). Closely linked to the Opera didactica omnia is the Synopsis methodi linguarum novissimae [Synopsis of the Newest Method of Language Instruction] (1st ed., Amsterdam, 1657), an *informatorium* for school administrators and teachers in Amsterdam. Concurrently with the printing of the *Opera didactica* omnia, Comenius gave the final sections of the De rerum humanarum emendatione consultatio catbolica [A General Consultation concerning the Improvement of Human Affairs] to be printed, intending to present a few advance copies to scholars and people in power.

The printing of a few copies of the following writings was completed in the course of 1656/57: Praefatio ad europaeos [Preface to the Europeans]; *Panegersia* [Universal Awakening] (1st ed., Halle, 1702; Czech translation, 1895); Panaugia [Universal Dawning].

The fate of the other parts was as follows: Pansophia [Universal Knowledge]: twelve pages were printed and the rest remained in manuscript; *Pampaedia* [Universal Education] (Czech translation, 1948; Latin-German: Heidelberg, 1960) remained in manuscript; Panorthosia [Universal Reform] (Czech translation, 1950): nine

chapters and part of the tenth were printed; *Panuthesia* [Universal Admonition], which, written after 1664, was printed but subsequently lost, except for twelve chapters and part of the thirteenth; *Panglottia* [Universal Language Study), preceded by the *Novae harmonicae linguae tentamen primum* [First Attempt to Devise a New Harmonious Language], which was written in 1665 and 1666, remained in manuscript. To these must be added the *Lexicon reale pansophicum* [Universal Scientific Vocabulary]. A complete edition of the whole of the *Consultatio* has been published by the Czechoslovak Academy of Sciences (Prague, 1966).

The remainder of his life was spent reworking and editing his previous writings and in making political and religious appeals for peace and universal reform to several countries - Holland, England, Germany, Poland, Hungary, Bohemia. These writings included the *Theatrum scripturae* [The Theatre of the Sacred Scriptures], planned in his youth as a companion to *Theatrum* universitatis rerum (1st ed., 1661); Lux e tenebris [A Light Shining in the Darkness] (1st ed., 1663), accompanied by a History of Prophecies, including a reprint of the prophesies of Kotter, Drabik and Poniatowska, which he had already had printed in 1657; Labyrint sveta à ráj srdce [The Labyrinth of the World and the Paradise of the Heart] (1st ed., 1663); Clamores Eliae [The Exhortations of Elijah] (1st ed., 1665); Angelus pacis [The Angel of Peace], addressed to the negotiators of the peace between Holland and England (1st ed., 1667); Unum necessarium [The One Thing Necessary (1st ed., 1669).

1670 15 or 25 November. Comenius died in Amsterdam.

# Select reading list

by Marcelle Denis

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Geisler, Heinrich. Comenius und Sprache. Heidelberg, Quelle & Meyer, 1950.
Schaller, Klaus. Die Pampaedia des Johann Amos Comenius. 2nd ed. Heidelberg, 1958. (Veröffentlichungen des Comenius Instituts, Münster, N. 4.)
——. Die Pädagogik des Johann Amos Comenius und die Anfänge des pädagogischen Realismus im 17.Jh. Heidelberg. Heidelberg, 1962.
——. Die politische Pädagogik des J.A. Comenius: Ost-West Pädagogik. Cologne, Deutsche Pestalozzi Gesellschaft, 1971.

— Komenskýs Auseinandersetzung mit dem Cartesianismus—eine neue Dimension der Aktualität seiner pansophischen Pädagogik. Symposium Comenianum, 1986. Prague, Academia, 1989.
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——. Plans of Comenius for his Stay in England. *Acta Comeniana*, XVIL Prague, Archiv Komenského, 1958.

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