

KNOWLEDGE, METHOD AND UPBRINGING IN DESCARTES AND COMENIUS



Forum for Contemporary Issues
in Language and Literature
No. 1/2020

ISSN: 2391-9426
doi.org/10.34739/fci.2020.01.07

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Abstract

This paper examines two methodological proposals presented in the 17th century as a way to enface the so-called knowledge problem. Comenius as well as Descartes, both pay attention to educational problems in a different way; and, most importantly, it must be remembered that theoretical and methodological discussions are not strictly separate from practical ones. In other words, education problems are intrinsically related to epistemological questions and vice versa. For example, there is no methodological or epistemological proposal in Comenius and Descartes which is not related to a way of educating an individual human being. Whatever philosophical construction is presented, it also involves an anthropological construction which is fulfilled in some kind of educational Proposal.

Key words

Comenius, Descartes, education, human nature, knowledge, method

Introduction

Both Descartes and Comenius have a foundational role in Modern Thought. Descartes is recognised as the father of Modern Philosophy, while Comenius often appears as the founder of Pedagogy. José Ortega y Gasset places both authors in the same generation (2012, 316). However, the historiography sets them apart and assigns them different roles. To one of them, the task of grounding the philosophical and scientific method, while to the other the task of developing pedagogy as a science and, consequently, being the propeller of the so-called pedagogical method.

In the present work, we will vindicate both the role of philosopher that undoubtedly corresponds to Comenius and also the impossibility of separating the pedagogical aspects from the methodical question. In other words, the method supposes an ideal of upbringing, in the sense of training and instruction, and therefore has an intrinsic didactic value.

Thus, in section I, I will present the connections between the educational project of Comenius and how this author manifests what J.A. Maravall (2007) has called the "Social Crisis of the Baroque" which, in the case of Comenius, translates into an attempt of a universal reform through knowledge. Not in vain does knowledge aspire to lead the lives of men but, as an analogous comparison to the Baroque culture, is something that constantly deals with certain guidelines. In this way, we highlight the epistemological value of the educational proposal of Comenius that cannot be considered secondary. The controversy surrounding the method (Desan 1987) is a constant in the culture of the Baroque period. The method is already a direction of the spirit because it teaches one to walk in a world that is presented as labyrinthine. Comenius develops an alternative method to the "Discourse on the Method" written by Descartes and not only a pedagogical proposal.

In Section II, however, I reverse the order of priority and point out those aspects of pedagogy, or related to an ideal of upbringing, which appear in the epistemological proposal of Descartes. From a historiographical point of view, we could say that this is an atypical way of analysing Descartes, but it cannot be called irrelevant at all.

The reading of the "Discourse on the Method" is, therefore, that of a methodical proposal for the constitution of knowledge that cannot ignore the formative question (upbringing) of the subject of knowledge. This subject, through the method, is taught to know, to constitute knowledge oriented to a certain purpose: freedom and personal autonomy. Finally, we will present some conclusions in which the contributions of the interpretations expressed in the previous sections are collected.

1. Method, knowledge and education in Comenius' works

In the history of education, Comenius has been widely denominated the founding father of pedagogy. Indeed, "The Great Didactic" ("Didactica Magna" 1657¹) is the founding text of pedagogy for the modern times. In it, we find both the general foundations of education based on a naturalistic proposal and the project of school and curricular organisation in which it is materialised.

Much has been written about these general aspects of "The Great Didactic" and other pedagogical writings of Comenius, such as his methods of learning languages, as is the case of "Janua linguarum" or the "Orbis Pictus", as well as the other great theorisation that he wrote at the end of his life. This is the case of "Pampedia", a famous chapter of the monumental unpublished work "De rerum humanae enmendatione consulttio catholica". However, the questions that make Comenius a brilliant author who transcends the limits of pedagogical science are often left aside. In fact, Comenius'

¹ In this article we will be using the translation of "The Great Didactic" by M.W. Keatinge. The original can be found in Jan Amos Komenský "Opera Omnia" vol XV (1), Academia, Praha, 1986.

pedagogical project is the answer to a double problematic, social and intellectual, to which he wanted to respond from knowledge.

The pedagogical reform of Comenius is no less a social and intellectual reform that has as its background an image of the world in which uncertainty and confusion predominate; in short, an image of the labyrinthine world (Maravall 2007). If we stick to one of his first works “Labyrint světa a ráj srdce” (“The Labyrinth of the World and the Paradise of the Heart”), a literary work published in 1631 and written during his youth², we are presented with a typically Baroque problematic, the world as a labyrinth in which man must situate himself and find an exit. The pilgrim, the protagonist of the novel, is guided by Searchall Ubiquitous throughout the world as if it, the world itself, would be a great scenario. At the end of the trip, however, the pilgrim concludes his journey with a sense of disenchantment and turns his eyes to Christ, the only apparent form of security and salvation.

“The Labyrinth of the World and the Paradise of the Heart” also evidences a clear cognitive interest. In fact, in § 1 of the dedication to the reader we learn that:

Every being, even an irrational one, tends to delight in pleasant and useful things, and to desiring them. Therefore this is naturally particularly the case as regards man, in whom the innate reasoning power has developed that desire for the good and useful; and, indeed, it not only develops it, but induces a man to find more pleasure in a thing the more good, useful, and pleasant it is, and the more heartily to strive for it. Therefore the question arose long ago among learned men, where and in what that summit of good (*summum bonum*) is to be found at which the wishes of man could stop; that is to say, that point which a man having attained it in his mind could and should stop, having no longer anything further to wish for (Comenius 1901, 55).

Knowledge is a necessity; uncertainty generates pain because everyone wants to obtain good and useful things. Knowing how to determine the *summum bonum*, is, therefore, a theoretical objective that becomes eminently practical. Comenius presents a contrast between the search for earthly goods, illusory and ultimately frustrating, and the ultimate goal of man, which is God. The contrast between the impermanence and futility of the world and the certainty and divine glory is evident in the whole work. The later work, “The Labyrinth of the World and the Paradise of the Heart”, will conceptually thematise this important topic. “The Great Didactic” will point out the importance of reforming the school as a means of reforming society. The school is for Comenius the place where the human beings becomes what they should be:

² A second edition of the corrected and enlarged text was published in Amsterdam in 1663. For the present article I use the translation from Count Lützwow.

He spoke wisely who said that schools were the workshops of humanity, since it is undoubtedly through their agency that man really becomes man, that is to say (to refer to our previous analysis): (i.) a rational creature; (ii.) a creature which is lord over all creatures and also over himself; (iii.) a creature which is the delight of his Creator. This will be the case if schools are able to produce men who are wise in mind, prudent in action, and pious in spirit (Comenius 1896, 223).

However, why should a man be formed like this? The school does not undergo a process of reformation if it is not because it has a problem, is doing badly or it can be improved. It is precisely in chapter XI of “The Great Didactic” where Comenius asks “has any school either existed on this plane of perfection or held this goal in view; not to ask if any has ever reached it?” (228), an idea that is in consonance with one of the programmatic texts *par excellence* of Comenius, the “Pansophiæ Prodromus” (1637), written the same year as the “Discourse on the Method” and with a very similar purpose.

The “Pansophiæ Prodromus” addresses the question of knowledge itself, not its institutionalisation or the art of transmitting it. However, the reform of knowledge is undertaken in this book is motivated by a practical interest: knowledge must be reformed. He affirms in section §15 that the studies – understood as the transmission of knowledge – as they are organised cannot lead man to his ultimate end, which is God. In the “Prodromus”, the educational issue is subordinated to the need to reform the knowledge that for Comenius is materialised in the *pansophic* proposal. *Pansophia* is the knowledge of everything that is knowable for the human being and as such, it requires a method (§82), but which? Moreover, how is it different from the educational method?

The method (or pattern) of the constitution of knowledge consists, for Comenius as well as for Descartes, of some rules that it enumerates and that, properly applied, allow one to obtain knowledge. These rules are stated in the “Prodromus” (§83 and ff.) and are those that are summarised below:

- R.1. (§ 83) A precise anatomy of the universe must be carried out, that is, to an exact classification or inventory of what exists.
- R.2. (§84) What exists must be named appropriately and accurately, with mathematical precision.
- R.3. (§85) Theorems and canons must be postulated – together with their relevant proofs – from which to deduce or to which they subject (subdue) the divisions and definitions of things.
- R.4. (§86) All these precepts must be considered clear and univocal by themselves.
- R.5. (§ 87) The axioms of the *pansophy* must be real and practical, not demonstrated a priori, but explicit, since they are printed in the human soul.

R.6. (§88) The *pansophy* does not bring anything new, because everything particular is deduced from the aforementioned general principles.

R.7. (§93) What cannot be demonstrated by appealing to the above principles must be reformulated in a clearer way (Jaume 2012, 177-184).

These rules constitute an *organon* or method of knowledge that Comenius carefully separates from the didactic question. In other words, the *pansophic* method appears here primarily as *ars inveniendi* and, to a lesser extent, as *ars exponiendi*, since to this latter question Comenius responds more explicitly in “The Great Didactic”.

“The Great Didactic” can be considered as a treatise on the educational method. Its main topic deals with the transmission of knowledge, and not the constitution of knowledge. However, strictly epistemological questions are not absent in it. There are some anthropological foundations that justify the possibility of knowledge and, to the extent that a technique in the transmission of knowledge is addressed, it theorises about the nature of knowledge (Schaller, 1992).

Comenius addresses the problematic of the didactic from a naturalistic perspective. The teaching proceeds in the same way as Nature. The duty and the attempt of the didactics are to seek the foundations in which everything and everyone can be taught in an easy, solid and fast way: knowledge is a key issue in the life of man and its acquirement corresponds not so much to a personal decision as a collective enterprise. In Chapter XVII of “The Great Didactic”, Comenius presents the foundations for the ability to teach and learn, in chapter XVIII he points out the foundations of its solidity and, finally, in chapter XIX, the foundations of the abbreviated speed of teaching. Later, Comenius points out the methods of teaching science, arts and languages. If we stick to this tripartition, we will see that the concern of the sciences is the “the news of things” or “the internal knowledge of them” as indicated in section §2 of chapter XX of “The Great Didactic”. Science, for Comenius, has to do with a thorough vision of reality, since the mind is only a mirror that can reflect it. The method of the sciences is, then, the one that allows us to know reality. However, the knowledge of this reality would be sterile if it were not accompanied by its transmission and its manipulation. Hence Comenius also insists on the two methods previously pointed out. The *pansophia* is neither purely contemplative nor a solitary enterprise in that it cannot be carried out in solitude – henceforth the importance of language and the methods of the education of languages in all of Comenius’ works.

Thus, it can be said that in the method of sciences the emphasis is placed on direct experience, on that of the arts, on practice and on the languages in use. Knowledge results from the synergy of these three methods. We learn by observation, but not less by touching and putting words to things. The art of naming things correctly is the art of being able to distinguish and, in short, of knowing what each thing is. Language also makes out of the experience something intersubjective and communicable. “*Orbis sensualium pictus*” (1658), a manual which teaches Latin, begins with a dialogue of

profound epistemological depth that very effectively translates the previous idea: “Magister: Venie, puer, disce sapere! Puer: Quid hoc est, sapere? Magister: Omnia, quae necessaria, rectè intelligere, rectè agere, rectè eloqu” (Comenius, 2012). Knowledge consists of the correct understanding of what it is, doing it correctly, and naming reality with precision.

Each didactic method does not constitute knowledge *per se* but facilitates the ability to learn and the application of this knowledge in a constant process of searching, as outlined in the “Prodromus”. In other words, the methodological proposal of “The Great Didactic” has an eminently didactic nature; it allows one to constitute knowledge from the cradle to the grave and with it, to fulfil the intrinsic purpose of human life.

Comenius’ methodological proposal may be surprising. In “The Great Didactic”, as already mentioned, there seems to be a multiplicity of particular methodological proposals. Such prolixity requires clarification. As can be seen, such a profusion of particular principles and methods seem to blur the clarity of a single method that is both *ars exponendi* and *ars inveniendi*. Nevertheless, it is not going to be Comenius who simplifies this question but, as we will see in the next section, Descartes.

However, considered in its entirety, it can be said that “The Great Didactic” constitutes a single method, the method of teaching that imitates Nature. The didactic method has, therefore, an undoubted gnoseological dimension that, also, is complemented by a certain theory of school organisation. “The Great Didactic” is proposed as an instrument for the reform of knowledge through education.

Comenius separates, at least within rational parameters, the question of the exposition of knowledge and the question of the achievement of knowledge. Both fields are clearly related because the educational purpose cannot be achieved if it is not through the transmission of genuine knowledge. Equally, such purpose requires a certain procedure, a method that is based, no less, on human nature. The didactic has an instrumental value, as well as the *pansophia* because the latter is subordinated to the imperative of salvation. We know its function is to save rather than dominate nature, unlike with Descartes, who will propose a method for the human being to be owner and possessor of nature (Descartes 2006).

Knowledge and education have in Comenius a salvific function in which Nature does not appear as an object of domination or under the metaphor of the machine³, but according to the old conception of nature as an organism. The novelty that Comenius presents lies in how much a reformer and renaissance man he was. There is no argument of authority other than the Scripture in matters of faith. However, the testimony of the senses and the natural disposition that the human being has – according to the guidelines of the Christian-reformist anthropology that Comenius

³ Concerning the concept of Nature in Comenius see Jaromir Červenka (1970). It can be said that Comenius was a critic of the mechanistic conception of Nature.

admits – give us the possibility of knowing, but, as long as the individual knows how to conduct his natural dispositions according to a method.

2. Method, knowledge and training (upbringing) in descartes

Until now, we have examined the relationships between method, knowledge and education in Comenius. As mentioned at the beginning, Comenius was a contemporary of Descartes, who has gone down in history as the greatest methodologist, but with an apparent absence of considerations on education⁴. Even though in Descartes the educational problem does not appear with the force and rigour that it does in Comenius, we will argue that it cannot be said that it does not have a place in his writing and that this place is not necessarily marginal. In the same way, it has been seen that the epistemological problem was not marginal in Comenius either. The idea that we will try to challenge is the classic conception that gives Comenius the paternity of pedagogy and does the same with Descartes and Modern Thought. Something is true in this idea, especially if we stick to how they affected the history of philosophy and the effects they had on its future development. However, if we consider both authors in their concrete historical circumstances, this conception seems to be insufficient.

It does not seem easy to find an idea of education in Descartes. Descartes is not an author who, like Comenius, can be related to the canon of Pedagogy. We do not find didactic proposals in the work of Descartes as we find them in Comenius, even though on many occasions Descartes refers to the education of his time and to the system of knowledge that emanates from educational institutions. Thus the French author is not completely unaware of the educational problems that the Czech author also observed. In this way, it can be stated that although there is no clear and well-defined idea of education in Descartes, the author is aware of its importance as a fundamental role in the instruction and upbringing of each individual. In a way, Descartes also had an anthropological conception of education, and as Compayré says, all philosophy supposes a certain conception of human nature and, therefore, a pedagogical system in the making (1911).

The idea of *purpose* in the education training, upbringing or, what we understand today as educational teleology, is a recurrent topic in the writings of Descartes, especially when Cartesian philosophy is aimed at a certain end that is linked to a certain theory of humanity and its nature: freedom⁵. In this way, in Descartes, we find a response to the question of the *purpose* and *goal* of education, especially when we understand that certain anthropology is presupposed. This last element is

⁴ Both authors actually met (Rood 1970, 124–134).

⁵ In this respect, the observation of P. Guenancia is very interesting, which places the problem of freedom as a great Cartesian problem. The autonomy of the trial would be nothing but a prerequisite to that of personal liberty and autonomy. In effect, Guenancia says, at the beginning of his “Lire Descartes”: “Le fil conducteur de la pensée cartésienne, l’idée d’où tout part et où tout aboutit est celle de la liberté” (2000, 9).

understood as the nature of a human being and the way in which he/she is being brought up.

Facing the already traditional idea of the Cartesian man, a notion that has also been consecrated by historiography, let us pay attention to the circumstance surrounding Descartes as a man of his time. Descartes lived in a moment of deep crisis⁶. On the one hand, we find ourselves with the political situation in Europe, the Thirty Years' War (1618–1648), which, among other causes, echoes the intellectual climate fostered by the Protestant Reformation. The consequence of these two factors is a situation of radical uncertainty and the need to face it with new certainties, not least because, the old ones have entered into crisis and decay. Thus, the idea of a Cartesian man is, above all, the historically situated man who develops a new discourse of self-understanding. In this discourse, the dominant element is the subjective perspective, added to which are some questions that have come back from the past and others that arise from the particular historical circumstance encompassing individual lives.

In this sense, there are many authors who highlight the importance of subjectivity and, moreover, emphasise the analytical aspect of it: distinguishing between *res extensa* and *res cogitans* with the consequently divided image of man. However, there is a pre-reflective moment, the experience, from which Descartes departs, and involves the discovery of the *Ego cogito* in the “Discourse on the Method” and its genuinely philosophical thematisation in the “Meditations on First Philosophy” (1641). In fact, precisely in the latter, we find a notion that must not be overlooked: the man as *unum quid*, a notion that will somehow arise again in the “Passions of the Soul” (1649) and, very insistently, in the correspondence with Elizabeth of Bohemia. It is not, then, the Cartesian subject that is unfolded in its analytic moment, but rather the man as the subject of a purely subjective experience that cannot ignore its corporeality. It is on this man that the formative – or if we want to call it “educational” – reflection of Descartes falls into. At the same time, it is a man that pursues a “vital purpose” – making a reference to the concept of human life as fundamental reality and as a “happening” –

⁶ The aspects of the Baroque crisis have been masterfully addressed by Maravall, J. A. op. cit. From a more philosophical perspective it is interesting to point out the opinions of Toulmin who sees in Descartes a different modernity from the one that begins with the Renaissance and which, among others, has Montaigne as one of its greatest exponents. Toulmin insists on the socio-political context of the moment. Note that the direct attempt to overcome scepticism by Descartes and the attempt to make reform in Comenius are nothing but efforts to overcome a particular situation. In this regard Toulmin points out that: “In this blood-drenched situation, what could good intellectuals do? So long as humane Renaissance values retained their power for Montaigne in the private sphere, or for Henry of Navarra in the public sphere, there was hope that the reasoned discussion of shared experiences among honest individuals might lead to a meeting of minds, or, at least, to a civilized agreement to differ. By 1620, people in oppositions of political power and theological authority in Europe no longer saw Montaigne’s pluralism as a viable intellectual option, any more than Henry’s tolerance was for them a practical option. The humanists’ readiness to live with uncertainty, ambiguity, and differences of opinion had done nothing (in their view) to prevent religious conflict from getting out of hand: ergo (they inferred) it had helped cause the worsening state of affairs. If scepticism let one down, certainty was more urgent. It might not be obvious what one was supposed to be certain about, but *uncertainty* had become *unacceptable*” (1990, 54-55).

that has already been announced to us in the “Discourse on the Method” that clearly influenced the letter-preface appearing on the French edition of “Principles of Philosophy” in 1647.

In the first of these works, the “Discourse on the Method”, narrated in an almost autobiographical form, Descartes, among other things, insists on the purpose of knowledge. Someone simply cannot attain knowledge, either by mere curiosity or speculative desire, while for some “it is possible to attain knowledge which is very useful in life, and that unlike the speculative philosophy that is taught in the schools, it can be turned into a practice by which (...) we could put them to all the uses [the forces of nature] for which they are suited and thus make ourselves as it were the masters and possessors of nature” (Descartes 1982, 51). In the same way, in the aforementioned letter-preface it is insisted that although the study of wisdom is the object of Philosophy, the latter has a purpose that immediately reverts to human well-being “by *Wisdom*, we understand not only prudence in our affairs, but also a perfect knowledge of all the things which man can know for the conduct of his life, the preservation of his health, and the discovery of all the arts” (62).

Descartes uses the adjective *useful* in reference to philosophy. In several places within his work, he insists that philosophy needs to be useful for the individual in this world and this life. Where does this urge to make philosophy useful come from? Perhaps the key is to be found at the beginning of the “Discourse on the Method” because it is in this work that the author insists in a need for the reformation of knowledge, which can only be achieved by reforming the method that allows the individual to conceive of it in the first place. The set of knowledge does not start with the Aristotelian *theorein* – or not at least in its more scholastic sense – but is guided by a clear, practical interest concerned with the domain of nature. Hence, the reform of knowledge that it is carried by the methodological discussion is not less than a reform of the very constitution of knowledge and, with this, it necessarily implies a reform on the way the Cartesian man is brought up: A man who is not content with contemplating the world, but rather desires to possess it and master it for his own benefit.

In a text that did not see the light of day during the author's life time, the famous “Regulae ad directionem ingenii” (“Rules for the Direction of the Natural Intelligence” written probably between 1626 and 1628 and published posthumously in 1684) that undoubtedly influenced the writing of the “A Discourse on the Method”, we find a series of reflections on instruction and upbringing. Descartes points out in that same text that knowledge does not just come for the sake of it. The desire that Aristotle located in all men must be conducted. Consequently, the method must be taught for its correct application and to reach knowledge that goes beyond the limits of Aristotelian contemplation.

The *Rule I* of the “Regulae”, constitutes a programmatic affirmation directed clearly against the concept of method elaborated by Aristotle in *Analitica Posteriora*. Human wisdom, Descartes tells us, “always remains one and the same, however

applied to different subjects (...) one also has to believe that all the sciences are so interconnected that it is much easier to learn them all together than to separate one from the others” (Descartes 1998, 65, 69). Hence, as stated in the title heading *Rule I* “The goal of studies should be the direction of the natural intelligence [spirit]”. We learn, therefore, to direct the spirit of men, to form “solid and true judgement about all the things that occur to it” (69). Learning the method supposes, in the light of what Descartes indicated, an exercise of freedom, because it is a determination of the will, as it is shown by the personal and autobiographical style that appears in the “Discourse of the Method”. However, the relationship with the formative process is ambiguous. On the one hand, there is the need to reevaluate whole areas of knowledge together with the need to propose a method, a task that is assigned to the philosopher, and, on the other hand, the way of instruction and training, a task assigned to the tutor.

The Cartesian man is an autonomous individual, but autonomy appears only in adulthood, not in childhood. When studying, the pupil needs to work hard as indicated by the preceptor, but the adult or, more specifically, the philosopher, is the one who has the responsibility to doubt. Doubting and questioning, is not something that is available to everyone, in fact, as stated in the second part of the “Discourse on the Method”: “Even the decision to rid oneself of all the opinions one has hitherto accepted is not an example which everyone ought to follow” (2006, II, 15). Thus, the autonomy that it manifests, and that seems to embody its ideal of a human being, the autonomy that supposes an investigation guided by the maxim of “to include nothing in my judgements other than that which presented itself to my mind so clearly and distinctly” (17), such as the first of the rules of the method state, contrasts with a conception of a pupil and tutor that is rather negative.

There is no image of education as a process that should favour the critical spirit, nor is there a proposal for how to reform the schools – the latter will appear in “The Great Didactics” by his contemporary Comenius. However, there is an idea about acquiring knowledge through a certain methodological proposal, by which we can claim that there is, at least, some interest in teaching such a method.

The method, then, has an intrinsic pedagogical character, but neither is it institutionalised nor does it become a pedagogical method itself. The method and what its implementation implies, according to Descartes, belong to adulthood, not to childhood. The manifestation of autonomy that characterizes adulthood manifests in the ability to make voluntary decisions, in short, a conscious critical attitude:

And for my part, I am convinced that if I had been taught from my earliest years all the truths which I have since sought to prove, and had found no difficulty in learning them, I might perhaps never have known any others; or at least I would never have acquired the habit and facility which I think I have of always finding new ones, as I proceed to apply myself to search for them (Descartes 2006, VI, 58).

If the method supposes such critical capacity and has personal value, it is because it is applied from the strictest autonomy of a person. Descartes says “my project has

never extended beyond wishing to reform my own thoughts and build on a foundation which is mine alone” (2006, II, 15). Consequently, this is a matter that is only proper to adulthood, because only in adulthood man is the owner of himself and can become autonomous.

The reformation of the school does not appear to be a concern in the work of Descartes, although there are references to school and teaching that seem quite ambivalent. On the one hand, the importance of receiving a body of knowledge is pointed out, while on the other hand, it alludes to its weakness. These are two lines that we find throughout the “Regulae” or in the first chapters of the “Discourse on the Method”. The reformation of knowledge that is illustrated by the metaphor of the city, and that appears at the beginning of the second part of the “Discourse on the Method” is the central concern of Descartes. However, it is clear that there is something contradictory to this idea. It is somewhat paradoxical that this method should not be taught systematically, especially when an affirmation is made about the universal capacity of the *bon sens* that it has to grasp the truth. Why not teach it in schools? Why not encourage the autonomy of free examination from the beginning? If the possibility of a solid body of knowledge that has been received is denied, or the encyclopedic tradition of Alsted or Comenius is rejected (Burke 2000), why not to train the students themselves in the method so that they can constitute the set of firmly established knowledge?

There is a certain element of doubt about the viability of the method. Descartes talks about himself and shows the results that emerge from what he considers an adequate method of building knowledge. With this, the pedagogical conservatism that some may see is only the other side of a prudential maxim about the effects that their own attitude may have on other subjects. The prudent attitude that adds to an environment not always favourable to the reforms as illustrated in the case of Galileo, to which Descartes experienced firsthand (Grayling 2006). Thus, in short, it can be said that the purpose of education in the Cartesian man starts from adulthood itself and assumes the limitation and fallibility of the body of knowledge received during childhood and young age. All this, in the attempt – which I do not necessarily recommend – for seeking a graceful solution to uncertainty, in order to direct reason and seek truth in the sciences (as it is stated in the title of Descartes’ Method) or, following the spirit of the “Principles of Philosophy” or the “Passions of the Soul”, to seek happiness (Guenancia 2000).

Some may want to know everything, but not everything can be known. The will is unlimited, but knowledge and understanding are infinite. The issue of the natural characteristics that the men have to learn is not something that Descartes overlooks. Indeed, in the “Regulae” he addresses the issue, more specifically in *Rule VIII* where he states that “But here one can inquire into nothing more useful, in fact, than into what human knowledge is, and how far it extends” (Descartes 1998, 119). The method presupposes a conception of human nature. Thus, to insist on the need to enumerate,

as indicated in *Rule VII* as in “the Discourse on the Method”, or to point to the imperfection of perception, or to indicate the excessive influence of the will, is only to recognise the fallibility of human faculties and to try to solve them.

As we can see, the Cartesian man wants to know, but with understanding. Not in vain he recognises that for this to happen we need our intellect. However, knowledge can only occur as a whole when coexisting with the imagination, perception or the will. Faced with the image of the Cartesian man previously mentioned (a man divided between knowledge and the world), the practice of knowing cannot but ignore the aforementioned analytic moment. The act of learning involves the man as a whole, as a psychophysical unit. The fatigue, the deceptions of the senses, the weakness of the will or the memory are difficulties that are experienced by all men and Comenius, in his “*Prodromus*”, will make them very present. The man (as a whole, as a complex individual) learns and the method is applied to him. The method assumes, then, pedagogy insofar as it is a way of learning how to think in an orderly fashion and to avoid, as a consequence, the possible sources of error. The student, the learner, the apprentice learns by submitting his will to the guidelines of the method, but the method is not arbitrary. It arises, as already noted, from the consideration of human nature itself and the necessary order that needs to follow to achieve its purpose, knowledge.

Conclusions

Neither the educational question can be subtracted from the reform of knowledge that the epistemological fundamentalism claims, nor can it be presented outside of the considerations about human nature and its upbringing – elements that are evident from the educational reflection. Thus, as it was the intention in the previous examination, both Comenius and Descartes are participants of the problem: the question lays the foundations and provides an outlet to a multifactorial crisis of knowledge. Also, it can be added that the answer to this crisis is through a common element: the need to provide a good and safe method that allows constituting a solid and useful knowledge.

The method, in the philosophical Modernity, is the instrument of knowledge. Whoever has a method is in a position to face error and ignorance. Knowledge, then, comes from the application of a method, whereby knowledge and method can be practically taken as synonyms. The method or the various methodological proposals cannot, as shown in the preceding pages, be removed from the educational question. The method not only provides knowledge but has a pedagogical function, teaches how to use the understanding correctly. Given what can be considered the method’s purpose, this is no other, than knowing and avoiding error. The method, as an epistemological instrument, has value not only because it provides us with knowledge or teaches us to acquire it, but also insofar as its non-application entails error, that is, the opposite of knowledge.

Thus, a theory of knowledge must provide no less than a theory of error to account for those executions that can be considered as instances of knowledge. This is negatively achieved by the method because its non-application leads to error or to find knowledge by chance. This last element is also relevant since where there is a method, there is no place for chance. Both Comenius and Descartes, considering what has already been said, could be considered part of these reflections on knowledge. In fact, this is the thesis that we have tried to defend here. However, although both methods share common elements and face no less the formative problematic, the differences are notorious as has been presented in the previous two sections.

The method in Comenius has a salvific and ultraterrenal function. It is about preparing the way for the next life by reforming its human affairs. The *pansophic* proposal does not separate the human from the divine; everything is the object of the same method. It also uses the school as a place in which to develop it, the school is, as has already been pointed out, “a workshop of humanity”, thus, it has an idea of men according to a determined Christian and reformed anthropology. On the other hand, for Descartes, there is a clear separation between human and divine affairs. Descartes is neither a reformer nor an author that addresses the issue of the Reformation, but a Catholic educated by the Jesuits (Grayling 2006), who submitted his judgment in dogmatic questions to the authority of the Church – not of Scripture. Moreover, the objective of the application of the method, the knowledge, happens in the earthly life, this, facilitating and making the life joyful by means of mastering and dominating nature – even though on this last point it will never be insisted too much. In short, knowledge, for Descartes and unlike Comenius, is an activity that takes place outside the academic sphere or primary education that only blurs the understanding. Knowledge – and the way of obtaining it – is a personal decision for which not all men are trained, the act of thinking for oneself.

As it can be seen, despite the common elements, the differences between Descartes and Comenius are notorious, but the consequences of these differences are not. The Comenian counterpoint allows us to glimpse a modernity that could have been but was not. The Modernity that has triumphed has been the Cartesian one, which has located as the object of knowledge the strategy for mastering and dominating nature and one in which individualism has prevailed. Probably, this was not the Modernity that Descartes wanted, but these have been its effects. A lot could be said about it. To a large extent, a considerable part of the philosophy of the 20th century has been concerned with this revision of modernity and its consequences. The labels *crisis of modernity* or *postmodernity* have already become common. However, there is still a lot to think about and to do with the concept of Modernity and what it implies. Thus, there is no other way than having some kind of *spiritual anamnesis*, to go back to the origin of the disease to try to understand it and find out if it has a remedy or if its outcome will be fatal.

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