Pedagogy – „The Science of Education”
- a speculative analysis of the concept -

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Abstract: I never set out to determine how to put up a pedagogy of science education. I note that historically it had difficulty enough to move away from philosophy (primarily), then move away from the other two sciences: psychology and sociology. However, four or five centuries ago, the evolution of the new "science" had little chance of a rapid and authoritative development, since every science needs a strong labor for conceptual delineation to determine the "zone" that it theorize, to establish principles and methods of analysis of spatial reference. Finally, the pedagogy will need a sufficiently clear distinction from psychology, a science oriented on grasping human knowledge, including the young school apprentices. Moreover, at least in the formative process of human, scientists can build a science, which is not addressed to other scholars. The area of education was mainly theorized by philosophers, doctors, psychologists, sociologists, anthropologists, and, among them, teachers have diminished their ambitions, not having a scientific tradition observant enough. The lack of clear prospects and of edifying successes and failure, the incapacity of pedagogical theories to energize and vitalize the educational beliefs and passions have created a distrust of any credible [1] doctrine's opportunity to resolve the detail and depth of the pedagogic process.

When, finally, the pedagogy has defined its scope of knowledge as opposed to the other human sciences, teachers have begun to
usup their own theoretical system and conceptual arsenal. Accepting various borrowed views, they ignore a crucial fact: an analysis (or experimental explanation) of the educational process requires an abstraction, i.e., a doctrinal conceptualization. They left this to the psychologists and sociologists who have rebuilt the representation space and educational paradigms and models. Therefore, in the "elite teachers, we can find names like JJ Rousseau (writer), J. Piaget (physiologist and psychologist), E. Durkheim (sociology), E. Kay, J. Dewey (psychologists), E. Meumann (psychologist), M. Montes (doctor), H. Maslow, D. Goleman, H. Gardner (psychologists), or our Vaschide N., V. Ghidionescu, D. Tudoran, E. Noveanu, V. Paveatu, N. Margineanu, Ion-Dobridor Negreț, Radu Ion, Ion Al. Dumitru, E. Bonchis (psychologists).

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The emergence of doctrines constructed from the perspective of the social or the psychological was accompanied by the assimilation of a borrowed terminology: curriculum, assessment, capability, management, sinitalitly, leadership training, goal etc. As teachers today we feel the invasion over our field of analysis and activity - that of education - an entire body of concepts, which describe the scientific issues with the support of general education. We are allowed - something that doesn't happen in other sciences - amateurism, but mostly we are allowed the freedom of scientists from other fields of competence to make more representative suggestions and more influential attitudes. I allow myself, in this study, to draw attention to the danger that usurps the confidence in the ability of teachers to dominate with authority the scientific issues of education. In the case of "pedagogy" and "education" not all are masters. As long as we leave others to solve the field of education theoretically, we can not ignore the opinion of some that "pedagogy is not a science." My intention is to draw attention to the scientific responsibility of teachers.

1. **Avatars of the concept.** Pedagogy is in an epistemological difficulty of demarcation, but also in terms of language teaching: "the failures are due to the personalized configuration of information about education, confusion, the ambiguity of certain concepts and definitions, the unauthorized reduction or increase the meanings given to certain concepts, excessive use of verbal cliches or of superconcentrated notions, removed in content and form from the educational need." [2] A key flaw - the authors
identified the quote above - is maintained by the language, by the invention of language, by the strange codes that do not refer clearly enough to the procedural field of education. The same danger is maintained by the "saturation" to use a teaching speech without sufficient informational loading (derived competences, a goal, curriculum, role and actor, evaluation, performance, critical thinking and many others).

On the other hand, there is the tendency to dilute the general epistemology in a teaching pedagogy extended to non-formal education, self-education and adult education. In a broad definition, pedagogy is intersected with didactics, which would make unnecessary the existence of two words to describe the same reality of education [3]. There is even a "generative model for explaining the concept of "science education system" in which the word "pedagogy" hasn't got a place, ignoring the reality that it would represent. In our opinion, the pedagogy is the science of education and didactics is the teaching process. Teaching is a pedagogical science, using the conceptual apparatus of general pedagogy.

The confusion sown by the title The Art and Science of Education (1995) in Cesar Barzea's volume, lead, from its appearance, to reflection and attitudes. Art has its somewhat subjective rigors and Science operates with other demands, totally objective and rational. A copulative 'and' between systematic reflections and aesthetic impressions about the educational phenomenon was only an innocent challenge, which the author himself isolates. General science pedagogy is speculative because it has won "epistemic dignity", by fulfilling the conditions of the configuration logic of science, says C. Cucos [4]:

- it has an object of questioning ("educational phenomenon");
- the type of investigative tools is methodological;
- it has principles and rules as regularities of the domain;
- gathers reflections in consistent theories.

A follower of the error made by some theorists of "jumping from pedagogy to the sciences of education" [5](S. Cristea, C. Stork, etc) is teacher John Negret. The logical arguments justify the status of pedagogy as an objective science, "a prescriptive regulatory scientific discipline", "fully mature" [6]. At the same consensus, M. Bocos and D. Juncan (2008) [7] believe that pedagogy is "integrative science of education, while contemporary pedagogy as the reflection on education, is positioned in an axiological-normative perspective and also has a theoretical, practical, applicative and explanatory character.

One might identify other views of the Romanian educational
literature, a reflection of the European or American ones. Unfortunately, "pedagogy" didn't even consolidate its place among the sciences than the process of clear usurpation of the "teachers" begun, "by adopting a proximate genus instead of logical definitions definition instead of the definite, instead of the specific differences. The tendency to avoid the word is unpleasant (and reality nominated) "pedagogy" from the system of educational sciences, but also to challenge the ability to be a totally speculative science (as in "Philology", "psychology", "sociology" "Anthropology", "Biology"). Pedagogy is the science of education, explaining the educational reality, based on general rules for appropriate integration of the individual in society.

Pedagogy (general) is descriptive and normative, characteristics that distinguish it from teaching, an applied discipline that uses the principles, rules, models and pedagogical paradigms in educational practice. Pedagogy can not be an annex to its seconded sciences (psychology, biology, sociology, anthropology) or diluted in the impersonal array of "educational sciences." The statements above do not exclude the intersections of the human sciences (social and human) and even those of nature, but the status of pedagogy in orchestrating the sciences that concern the fate of man in universe can neither be challenged nor claimed. The former advocates in the preservation of of pedagogy in the autonomous contemporary sciences should be just those who serve the professional and scientific education.

2. Pedagogy and education. The need for a calm examination of educational terminology is urgently required in order to decontaminate its scientific territory from emotive statements, trivial ambiguity, scientific inaccuracies or metaphysical expression. Language denotes a reality and describes experiences; if a field of knowledge, as is that of education, can afford to be theorized in abstractions and conclusions, then the logic of language follows the logic of scientific defining. A thorough analysis of the teaching language should begin with the determination of semantic relationship between the dominant and denominated, namely between education and pedagogy. Even in the texts of rigorous psychologists, persists a negligent use of the word "education" instead of "pedagogy" and vice versa. The confusion derives from a personal preference for a nuanced speech (for others to the pedantry of "modernization" of terminology), ignoring a fundamental logical rigor of perception. Replacing a relationship with a theory on reality and the other way around and of the parareality with reality itself resembles semantic doubt and suspicion. Defining pedagogy as a science of education, science is given the status of being proportional,
logical, verbal and cognitive. In this position, pedagogy can claim the status of science and, therefore, requires a clearly defined body of knowledge that others might intersect (psychology, anthropology and sociology).

3. **The teacher, as a scientist**. As a scientist, the teacher is justified to deliver primary and synthetic sentences about education. They have the appearance of guiding principles and descriptive theories, valid for an amount of realities and analyzed experiences. Education is a social process that engages individuals and communities to improve personal and collective behavior. Education is the training ground and the area of suggestibility for pedagogy. When the teacher is dealing with the current processual issues of education, he remains a descriptor of a social reality, in which language games and have no restrictions. Such a teacher can provide solutions to some of the structural components of education, under the umbrella of applied didactics.

   An authentic teacher designs a speculative theory, general for education, suggesting a paradigm or building a theory. According to the rigors of logic, a teacher can not allow any emotional statements or moralistic preferences or amateurish linguistic inventions or deviations from a logical structure. Starting from the idea that "current education doesn’t satisfy", the teacher will scientifically study the field of education and will generate a theory that would change the relationship between domain components. The validity of the theory would mean that "the new education should satisfy". Didactics waits for paradigmatic solutions from pedagogy.

4. **The difficulties of pedagogy** - as a science of education - is based on the - justified - fear of not intersecting itself with its fellow sciences which it barely managed to put away. Like psychology, philosophy, sociology and anthropology, pedagogy aims at human issues, the human condition. Philosophers have failed to provide a clear projection of the development of man: "human condition defines the interconnection between the psychological structure and the social one." [8] Every man is the result of an ethos, and the educational is colored with its expressive fingerprints. Education serves the collective behavior, transmitting mental and cultural genetics to the new generation. It also suggests and creates facilities for the enrichment (and improving) of genetics. A pedagogical model fits only an education based on its representative ethos, excluding an imported vision, even verified as effective.

   Philosophers have the call "to provide teachers with the configuration of a representative national ethos which the education should reflect! They are intended to identify the profile specificity of the community
(social, economic, cultural, behavioral) whose character and thinking we intend to educate."

School has a general function: to facilitate the integration of young people in the society to which they belong. What happens outside the school, in society, causes a continual chain of learning experiences and development. Societal ethos causes adaptation "pressure" on youth, which are too insistent to be ignored. Therefore, education is a much to complex and individual process to enter an apriorical and apoflegmatică formula. Pedagogy is reflected in a new error: will it be a science of general education or is it a science of institutional education?

5. The systematic history of teaching patterns begins with [9] JA Comenius (1592 - 1670), who designs a paradigm of organizing education as "the arts to teach everyone everything." In this formula we notice the manifestation of the Enlightenment vocation of creating a doctrine valid for all times (Pansophia) and for all communities (panpaideia).

The main ameliorative suggestion to the comenian doctrine is the doctrine of J.J. Rousseau (1712 - 1778), which – in speculative philoshoping - adds a variable: the compliance with "laws" of natural development of the child's life. The purpose of education is to integrate naturally the child in a society (or community) guided by an ethos or a collective psychology. The integration is normative, and the child's natural development is based on its inherited virtues.

The conflict between freedom and the normative in education has not yet found a balance in any pedagogical theory. By indicating how to rebuild a child's life so as to be desirable with the values shared by the community, pedagogy can not discard accusations of manipulation. Through education, we influence the "law" of the child's natural development. Education conscientiously shapes the child's positive developments in terms of an ideal image, designed by the societal ethos. Changing the mentality of the younger generation through cultural and organizational behavior of society is a positive discrimination.

We prepare the speech of the second great reformer of pedagogy, psychologist John Dewey (1859-1952). He says, "economic life underwent three profound revolutions: the intellectual revolution through science; the technical and industrial revolution in the social revolution through democracy." John Dewey shares a pragmatic understanding from a redefinition of "education." He believes that "all education is made through the active participation of the individual to the social conscience of mankind. This process begins, without being aware of it, almost at birth and it continually models the individual's powers, it strengthens its consciousness,
forming his habits, he awakens ideas, feelings and emotions." "Through
demands, the child is stimulated, said J. Dewey in" My Pedagogical Creed'
[10] (1897), to act as a member of a social unit, to release any of his original
habits and to evaluate himself on the basis of the happiness of the members
of the group to which he belongs. "We can not stop with the analysis of
Dewey's creed without selecting one more sentence: "Through the reactions
of others to his work, he (the child) gets to know what they mean in social
terms." Dewey's pedagogical doctrine places education between psychology
(the child's own instincts and abilities) and sociology (social adaptation to the
environment as an "organic union of individuals"). Stimulating your child's
individual strengths and accommodating them to their social equivalents are
congruent attitudes. Therefore, in J. Dewey's opinion, school is not
children's preparation for life, but is the very process of life.

Current pedagogy delays in extending its preoccupations beyond the
theorization of institutional education. Institutionalized education is achieved
through the promotion of political interests. We share the statements of some
ideologues who claim that society has a kind of school that represents its
interests. The school makes up the image and likeness of the community.
When institutional education is too far from the expectations of society,
pedagogy has the legitimacy to intervene. It also provides a paradigm for
normalizing the relationship between school and society. We are in such a
situation. The child's individual satisfaction and the social experiences of the
community do not provide a sufficiently secure existential comfort. Current
pedagogy does not provide sufficiently coherent and structured solutions,
although teaching has the availability to apply procedures for the spiritual
development of the generation in training. The effect of the congruence of
the two sciences is represented by education, in the form of a summary value
that each one treats to young to join the collective spiritual architecture.

6. Normativity and Cultural Value

Any rigorous theory is based on normativity. Pedagogy deals with
norms, principles, causalities, which have their bases on education's
philosophy. The assumed norms watch that the spiritual and biological
evolution of the youngster can recommend him as a harmonious personality,
with a balanced psychologic life and morality structured by society.
Cognitive, esthetical, moral education are fragments of personality. The
relation between this synergist behaviors functions in congruency,
descending dynamically to crystallization of the personality's centre.

On the other hand, culture is the cause, but it should be the aim of
education. Through culture is released the educative process, becoming the
primary aim of this process: „cultural values are causes from the angle of young generations, - which are integrating in the rhythm of culture”. A balanced pedagogical doctrine [11] structures in a coherent manner the capacity (institutional and uninstitutional) of society to let the harmonization of a satisfying individual biophysiology and responsible with social representation. She would be responsible of aspiration for a free assertion of the individual, and of social obligations, norms of good cohabitations required by the values of the group. The balance between the common duties and personal liberty would represent the idea of pedagogical doctrine, able to suggest an educative configuration conform with individual aspirations and with the requirements of a community.

Current era - so complex by the globalization of information (which allows anyone, anyplace to identify or to differentiate) - requires a different type of pedagogical discourse. The teacher doctrine surpasses the didactic condition. Teaching is concerned with the programmatic organization of institutionalized education. The current teacher, through his speculative attitude, will generate an integrated educational system, aimed to create an integral and integrated person. His theory will be that of the unified man, seen as fully developed and complex.

7. The ideational support of a pedagogical project

The "seven years at home", the "school education" and "the professional activity" don’t have a configuration from the point of view of behavior sciences. Education expects teachers to provide a guiding principle, but especially a paradigm (a model that is) by which to rank the actions. If pedagogy wants to remain a science (of education), its dynamics would involve a leap from the descriptive to the project. A pedagogical project is only be a basis for a viable and credible paradigm. A pedagogical project, tepid in a theory, would unify the idea of social welfare with the idea of individual welfare. The suggestions that we now consider to create an organizational model of education would be to:

- identify - for learning - the human resources to change the optics of human happiness in group dynamics;
- determine an ideal personality profile (linked to the project of European figures), which should not miss elements of character development or those derived from normative society;
- global organization - integrated - of educational content from the determination of the relationship between freedom and constraint, science and dogma;
- promote new methods to reconstruct the viability and dynamism of the
educational program;

- design a social development discourse, through which each should take their rightful place according to the personality profile that he displays.

Unfortunately, we no longer have enough time to organize a team capable of thinking such a doctrine. We draw attention to the responsibility of pedagogy (and teachers), designed to help improve the human condition. As a science of education, pedagogy has the opportunity to assert its vocation. Its innocence in training in its aspiration lured by questions diminishes its chance to stay virtuous in the vicinity of other sciences.

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[1] *A theory*, says S. Moscovici, can be described as the complex of connected sentences which classify and explain a complex of phenomena.


[3] „The aim of didactics isn’t exclusively to teach formally (education understood as a process, although it used to be studied the most) *Currently, the sphere of the term „didactics” is very large, instruction and self-instruction in informal settings, as well as the system of adults’ continuous learning*” (M. Ionescu, M. Bocoș, *Op. cit.*, p. 31).


