

Teachers of tomorrow: premises for a teacher training

by Giuseppe BERTAGNA

University of Bergamo (Italy)

Tradition is the preservation of fire, and not the worship of ashes, Gustav Mahler once said talking of the *good and up-to-date education* of musicians. But it would be wise to extend this advise also to a good and up-to-date education of teachers.

However, what does it mean *to be a teacher nowadays* and not, for example, in the last century or even when schooling was born with the modern national states, particularly after the Enlightenment and Napoleon? A clear answer is necessary to avoid misunderstandings. And it must begin, though briefly, with a picture of the current context in which this ancient and ineradicable human *profession* is practiced and will be more and more practiced.

1. Change of scenery

Every historical period has been, is and will be, etymologically, *in the doldrums*. But the *transformations* of the current one are so disruptive to introduce a real break even with more recent past.

Firstly, the globalization process. It is not only and merely a matter of intensity and ease of movement of goods and of *work* on the world market, without boundaries. Above all, the fact is that, since 1980, this phenomenon, then exploded with the arrival of China (2001) and Russia (2012) into the WTO, has meant a rebalancing of global economic powers [1] and, then, in particular, in almost all countries of the world, the reversal of the historical relationship between politics and economy, on the one hand, and between economy and finance, on the other. Nowadays, in fact, in different countries, politics no longer *controls* economy (as it could be until almost the end of the twentieth century); it is rather the contrary. Politics is no longer, though all the reshapings it has experienced until the last century, the Platonic *basilikè téchne* (royal art) [2] for the organization of civil society. Economy, then, has undergone a further inversion of centrality: human, social and professional development is no longer produced by work and its innovative concrete organization, within a personal story, a system of social relations

and a territory that man must make a more and more *habitable* place for himself and for the others (after all, this diagnosis corresponds to the teaching of great classics of economy such as Antonio Genovesi [3], Cesare Beccaria [4], Adam Smith [5], Karl Marx [6]). Richness and economic growth are now determined by finance, abstract money, *the capital* multiplied by a technical, mathematical, computerized, self-referential rigidity, without language, history, place and morality. An impersonal finance free from fidelity to real goods and significant stories of individuals and of a community, but, as it has never happened so far, based on a kind of religious absolutism of the mechanisms required to create money and income from money, to which work and its organization and social distribution are sacrificed. It is no coincidence, in this context, that, between financial derivatives and similar things, the whole world is currently crippled with debts of colossal proportions, dozen times greater than the entire global GDP; and that, after the millennial era when men *worked for a living* and a century (or little more) in which they *lived to work*, we have reached a new era, already recorded in 2007 [7] and since then even increased, in which, consciously or not, man «is working to solve debts of unpronounceable and, in the end, inextinguishable value» [8]. However, these debts could be honored only through an innovative *work* more capable than the current one of uniting, by harmonizing them, productivity and humanity, individual goods and common goods, techno-science and ethics.

A second radical *transformation* of our time affects learning (and work) en-

vironments created by the spread of new information and communication technologies (ICT). On earth, there are many more Sim cards than inhabitants (over 8 billion against seven) [9]; Social Network, Social Content and Social Tool are literally exploded in geometric progression, in the last fifteen years, and unequivocally seem to continue their spread in the coming decades. Particularly, the wider and wider advent of the so-called Grin (Genetics, Robotics, Information Technology, Nanotechnology), with the prospects of global generalization of, by now, not too futuristic practices like telekinesis, teleportation, telepathy and invisibility [10], introduces into production processes, industrial organization and in the social dynamics that make it possible, operating, use and purpose conditions that could not be imagined only a few years ago [11], when, for example, Castells [12] elaborated his analysis on the then incipient *network phenomenon*. In this context, talking about knowledge, a factor has become incontrovertible. In the past, knowledge lied mostly in the personal and relational memory of extraordinary people. It was the period of Homer, of Socrates, the great *old of the mountain or of the city* who shaped the history of the ancient culture. Then, despite the concerns of Plato's *Phaedrus* (274a-275d) for the problems of its reappropriation, knowledge has migrated from the declarations of men in flesh and blood to written books, gradually deposited in more and more extended libraries [13]. In that period, authors were still identifiable (copyright, patents, etc.). And a more or less numerous *élite*, chosen by lineage or merit, could still claim the control of human knowledge and, above all,

the selection and ordering of what could and should enrich it. Nowadays, knowledge is all in the Net, a head separated from its body like Saint Denis [14], that feeds itself exponentially, without an owner and no longer produced specifically by someone, but available to everybody and produced by everyone everywhere, without an established order, access credentials and without a distinction between horizontal and vertical, between certain and true. The thousand-year old metaphor of the tree (of knowledge), with its roots, its trunk and the orderly shape of its branches [15], has finally left its place to a proliferating and labyrinthine rhizome, in an ocean without cardinal points. Similarly, the thousand-year old cogent connection between subjectivity and knowledge, between personal reflection and sedimented objective knowledge seems to have been broken, so that knowledge shows itself, as such, in its computer materiality, as a huge autopoietic body. Therefore, Lyotard's prediction dated 1979 [16] on *radical externalization of knowledge compared to the wise* appears, nowadays, to be overt.

The third *crisis* is the demographic one. The danger of global overpopulation, incompatible with the resources of our planet, is not the main problem. From Malthus to the diagnosis of the Report of the Club of Rome [17] to the numerous contemporary *futurologists* [18], these theories have always been belied by reality. Nowadays, for example, with a world population that has doubled compared to 50 years ago, we find that, on average, life expectancy has increased for everybody [19]; that «if thirty years ago half the population lived on less than a dollar a year,

nowadays it is only a quarter and that, if forty years ago 34% of the population was classified as malnourished, nowadays it is only 17%» [20] (a percentage which, according to a World Bank study [21], has further decreased, in 2014, to 14%). Similarly, according to the Global Health Observatory of the World Health Organization, infant mortality rate has dropped a lot: from 63 to 34 per thousand [22]. Overall, education for everybody has increased as well. And the list could continue. The cultural, social and professional problems created by the current demography, to which we are unprepared because, so far, we have poorly considered their effects, however, are due to the profound changes in structure of the population caused by the combination of three factors: improvement of living conditions, prolongation of life expectancy and falling of birth rate below the replacement rate (2.1 children per woman), especially in some areas of the world interested in very aggressive policies of demographic compression (China, India, Thailand, South Korea). The case of Italy, for example, with its 1.2 children per woman, is not isolated, but represents a trend that, although its law rate is exceeded only by Japan, involves in different ways, not only the whole Europe (one-sixth of the world population in 2000, a tenth in 2050), but, even if with less intensity, also many other countries in the world (Brazil, Iran, Bhutan, El Salvador, Armenia, Qatar, Chile, USA). In Italy, in fact, as an eponym case of the effects of the three phenomena mentioned above, since the Seventies of the last century, a real inversion of the traditional 'age pyramid' of population has begun. Young people from 0 to 19 years

old were 35%; over 65 year olds, 11%. In 2014, young people have dropped to 18%, while over 65 year olds have risen to 23%. In 2050, young people are expected to be 12%, while over 65 year olds, 35%. This means that, if in 1970 there were 6.5 adults, with little more than an old man, against 3.5 young people, in 2050 there will probably be almost 9 adults, but with 3.5 old people, against a little more than a young man. It is the first time in history that we have to deal with a demographic distribution of this nature. It is easy to understand how much it affects the way we think and practice education, culture, work and, above all, intergenerational relationships typical of educational processes. For an educational welfare that intends to be sustainable, the prospect of entrusting not only schools, with less 'professional' though better trained and selected teachers, but also, although under the responsibility and coordination of schools, many other adults involved in professions, as well as over 65 year olds sensitive to the problem of intergenerational integration with the education and training of young people has become a necessary strategy.

The last major epochal transformation is an obvious consequence of the first three. Migration from less rich countries with many young people to richer countries with many old people increases [23]. In this way, not only goods and knowledge, but also people, and everybody's condition become global: the whole world at home, every home as the world. Gradual disappearance of nations as they have been known in the past two centuries. Birth of a basic common language

worldwide, almost imposed by NICT, for pragmatic communication. Permanence of mother tongue to express the deepest meanings of everyone's existence and the quality of *warm* interpersonal relations, which do not concern the ontology of virtual, but of interpersonal reality. In any case, languages, habits, values, mental and relational strategies, ways of producing, different religions that must necessarily coexist and learn to translate each other, if we do not want, as humanity, to share lemmings' fate. That entails, as it can easily be guessed, not only the fall of the walls that separate cultures, ethnicities, languages and religions, but also *high* and *low*, *central* and *peripheral* as regards everyday social, cultural, artistic and professional discourse. Incoherent 'multiculturalism' is almost forced, in order to avoid everybody's collapse, to turn into a real regulative *interculturalism* in which the appreciation of personal, social, linguistic, cultural and professional diversity becomes the condition for identifying new as well as irreplaceable forms of personal identity and common coexistence. And where the traditional and known debate between *communitarians* [24] and *personalists* (Maritain, Ricoeur, Lévinas, but also Sen [25]) must try to find an unexplored as well as indispensable synthesis.

2. «Teachers»: the tradition

In-segnanti (teachers): *those who leave a mark on someone* according to the etymology of the term. They leave a mark, then, in the mind, soul and body of people. However, as Pascal reminded us [26], there is no human being nor thing or situa-

tion that does not leave *marks* reciprocally on things and situations of the world; therefore, if we only consider this act of giving (and receiving) marks, we should conclude that we are all as human beings, for better or for worse, *teachers*. In some respects, that is true. And particularly in the light of the scenarios above outlined. But all this, if true, is also, on the one hand, partial and, on the other hand, too general. To the point of making the definition of 'teacher' too fluid and, therefore, useless. Consequently, it is currently necessary to reconceptualize the term and relaunch its peculiarities on professional and institutional level.

2.1. *The disciplinary custody*

Engels, quoting the Statistical Society of Manchester that, in 1834, produced a *Report on the state of education*, wrote that «neither teachers nor parents seem to consider education as a reason for sending their children to school; young people are sent to school only to be kept under surveillance and be kept away from the road» [27]. *Under surveillance*. And, we might add, punished, in order to become «disciplined». Foucault teaches [28]. Moreover, the stick has been teacher's symbol from the days of Rome [29]. The grammarian Felix was given a golden stick by King Cunipert (678-700). *Sub virga magistri* was the phrase used in the Middle Ages meaning *going to school*. «The complaints of kids returning from school injured or disabled as a result of corporal punishment inflicted by their teachers are uncountable. Even in 1899, when Bosse, Minister of Education of the German Empire, issued new rules to 'pre-

vent abuses about teachers' right to punish corporally' at school, teachers rose up indignantly against such a dangerous innovation» [30].

In short, the relationship between surveillance and authoritarian disciplining of young people, between adults' *kratos* and teaching to children has a long tradition in the field of education and educational institutions. This interpretation of teaching profession, however, definitely finished, as regulatory paradigm, fifty years ago, with the anti-authoritarian confused turn of 1968. But nowadays, and particularly in the future, it becomes impracticable and, above all, intolerable for our conscience and for the new socio-institutional context. It is intolerable because power for power is not truly educational at all. Even if it has characterized and distinguished relations between men and between men and institutions, and often leaves indelible marks, that never heal completely in one's lifetime [31], it is an ethological matter concerning men's training, domestication and enslavement rather than a pedagogical issue. In any case, it is impractical because, thanks to the spread of the new regulation connected to the scenario already described at the beginning of the paper, but already identified by Foucault in his course at the *Collège* in 1974-1975 [32], based on an increasingly universal availability of knowledge and on the multiplication of educational opportunities, even the weakest children can adopt elusive strategies, to escape and for self-defence, or at least alternatives to a school that is still perceived as a place of 'torment' (Vittorino da Feltre discussed it) or a place where students are *ad pistrinum*

damnata tanquam mancipia mentioned, as Comenius said.

2.2. «Teacher education as injection»

A wood engraving of 1600 represents very well another historical dimension of teaching that is currently unacceptable: the funnel of Nuremberg. A teacher is reading a book while another one is pouring a liquid into the funnel, firmly planted on the head of a child sitting in a composed and resigned way. Caption: «the safe and fast funnel of Nuremberg makes heads clear». Almost a repetition of what Plato has already declared impossible. Socrates comes «from the neighbours' porch» where he has stopped to think. Agathon says: «Come here, Socrates, and share my couch. It'll do me good to get close to you - I'll come into contact with whatever piece of wisdom occurred to you out there in the porch. You obviously found what you were looking for, because you wouldn't have given up until you had, so it's yours now'. Socrates sat down and said: 'Wouldn't it be nice if wisdom was like that, Agathon? Imagine if it could flow by contact from someone who had more of it into someone who had less of it! It would be like water flowing along wool from a fuller up into an emptier one [...]» [33]. This metonymy is impossible from any point of view: from the physiological to the cognitive one. Those who intend to conceive teaching as knowledge transfer, almost by contagion, from one head to another through various instruments, maybe even richer, more suitable and technologically updated than a woollen yarn, would fall, particularly in our times, when the volume of knowledge has become enormous and

its quality accidental, at an impasse that would lead them far away from education of person. Moreover, Augustine had already demonstrated the impossibility of matching teaching and learning by transmission, noting that the *marks* that we receive, however strong and big they might be, cannot make us learn anything if we are unaware of *what* they symbolize. He said that we do not learn things simply by receiving a mark. On the contrary, we learn the meanings of words through knowledge and direct experience of things themselves, whose meanings constitute marks. Through *marks*, therefore, teacher can only *exhort* students to seek things by themselves, that is to say that they encourage them to take the initiative in the learning process, because it is in the creative reaction-adaptation of the subject to a context that the criteria of judgment and sense lie [34]. If these conditions are lacking, in the past, in a society very different from ours, and particularly nowadays, as Aristotle already reproached Sophists, teaching can be as *quick as lacking in rigor*, because you do not provide «art, but art's products (...)» [35] to students. Similarly, when filling the head with knowledge, however important and organic it might be for teacher, without a regeneration by the student himself, we are necessarily exposed to the risk of the platonic gardens of Adonis. Here, in summer, seeds were planted *for fun*, they were watered and lighted day and night to grow quickly, but in the end, they soon dissolved because you cannot have *nice and ready plants in eight days*, when you normally have to wait at least *eight months* [36]. Such a culture, in fact, «resembles the tree which peasants erect

when they make a holiday, and which, though covered with branches, flowers, fruit, garlands and crowns, cannot grow or even last, because its ornamentation does not spring from their roots, but it is only hung on. Such a tree bears no fruit, and the branches that are attached to it wither and fall off» [37]. «Any kind of notions, in such an extent we have never thought of before, and set up in unimagined ways, are put within masses reach» wrote an astonished Huizinga in 1935. But he immediately added that «a not elaborated wisdom is an obstacle to reason and bars the way to wisdom». So, «education, in this case, makes undereducated. It is a horrible pun; but, unfortunately, it contains a deeper meaning» [38]. Nowadays, that risk has increased.

2.3. «Education of the citizen»

European modernity has characterized itself through two emergencies: the birth of nations, on the one hand, and the use of the army and school system as fundamental tools for shaping them, on the other hand. The French Revolution and Napoleon represent the historical watershed that makes this strategy visible, almost ostentatious, even though it actually existed even before, but still, in some respects, invisible. Humanism, as is well known, when talking about the education of man, also considered that of the citizen and of the professional. There was neither hierarchy nor separation between these dimensions, but a mutual circularity. Benedetto Cotrugli [39] can be taken as an eponym model of this program. He wrote that a good professional (of any art, any profession) and a good citizen are no-

thing more than the simple expression of *man's* intrinsic qualities, mature outcomes of *paideia*, *humanitas*, and of Terence's *humani nihil a me alienum puto* [40]. Rousseau began to find a first separation within this unitary plexus. Man, who, as showed by his *Emile*, becomes himself with, by and for work, is now something different from citizen. The first is always, in everyone, an «absolute whole». An aim, according to Kant's perspective. An autonomous whole, though relational by definition. On the contrary, in the new context of nation, citizen «is but a fractional unit that is dependent on its denominator» (that is to say, dependent on nation) and *whose value consists in its relation to the whole* which, this time, is paradoxically not man, but *the social organization* [41]. In this sense, a citizen is no longer *the whole man*, an absolute, but he is a French, an Italian, or, as in the classical period, a Roman or a Spartan («the Roman citizen was neither Caius nor Lucio; he was a Roman»; and the same for a citizen of Sparta [42]). He becomes the relative individual (fractional unit) of a whole, the nation, conceived as his reference unit. Rousseau clearly considered that «man is superior to the citizen» [43] and that the whole of the first is not of the same nature of the whole of which the second is the fractional part. Consequently, aiming at the first, is very different from aiming at the second [44]. For this reason, he warned with no uncertainties that «you have to choose between making the man or the citizen», without introducing any compositional 'and' between the two terms [45]. The history of nations, beyond concealments, did not take these rousseauian warnings seriously. And, above

all, through the progressive structuring of mostly centralized, hierarchical and administratively uniform school systems, has followed the path that Rousseau advised to avoid: matching the man with the French, the Italian, the Spanish etc. and aiming at forming the second as it was the same thing as the first one.

To achieve this result, national pedagogy has used especially the spread of a school system organized, particularly in its more mature outcomes, on some Comenius' brilliant insights. Cutting out of the wider and wider sea of existing knowledge and values, a common cultural, moral and civil heritage that is worthy of being taught to new national generations, to make them 'better' and more united. And during development, then, giving «everyone [...] a universal education» [46], nobody excluded. Not only «lazy and idle» students, but even the 'irredeemable' ones [47]. All involved in taking this national heritage thanks to the action of teachers who have been themselves prepared by the nation in the same way [48]. Teachers who use the same textbook («same edition, so that they may be similar page for page and line for line. This is important both for the sake of reference and that the localisation of passages on certain pages may assist the memory» [49]) and teach an entire class of students, so as to overcome the ancient and now uneconomical model of the tutor (a teacher who works with an individual pupil, while his companions do something else) [50]; who refer to the same methodological organization and didactics [51]; who are occupied with «only one object of study at any given time» [52], organizing 'carefully' school

subjects according to a graduated plan, so that «those that come first may prepare the way for and throw light on those that come after», dividing «the time [...] so that each year, each month, each day, and each hour may have its appointed task», dividing «the time and the subjects [...] that nothing may be omitted or perverted» [53]. If a student does not achieve the expected results, he is subjected to a more prolonged exposure of the same things and invited, with «great skill and patience» [54], to do a greater number of individual exercises. A sort of anticipation of full-time teaching, individualization and Mastery Learning. The Bohemian, in truth, had put forward these proposals with the intention of making all schools *officina hominum* [55], *humanitatis officinas* [56]. However, national pedagogy will transform the plural *schools*, expression of civil society and its organizational richness and of people's free initiative, into the singular «school», emanation of the central state. Finally, it legitimizes the idea of school as an administrative, but also *ideological apparatus* of the state [57]. It will introduce the figure of teacher as *employee* and *officer* at the service of the nation, whose task consists in shaping standard *citizens* through a learning organized in 'subjects'; and *subjects* organized into a curriculum; a curriculum within a legal system; an institutionally and organizationally uniform legal system decided by the state; teachers trained, recruited, paid in the same way. However, the scenarios mentioned at the beginning have exhausted to such an extent to dissolve this project, forcing us to re-launch ancient awareness in a new way.

3. «Teachers»: new professional priorities

From Plato to the first pages of Rousseau's *Émile* we can learn that the *being* (what exists) is not always and necessarily good. A real policy should try to put these two plans in contact. History, sociology, geography, economics, biology, chemistry... in other words all sciences, are used to *see* what *exists* and how such a *being* is. However, ethics and pedagogy are concerned, as a matter of principle, about what *exists and whose existence is good*, that is the *should be*. Policy, the real one, should look at both plans in order to connect them: it is interested in what *can be done* in given conditions, but in order not to be reduced to a mere *possibility*; it has, on the one hand, to consider what exists (*the being*) and, on the other hand, to use its *possibility* to realize the *should be* which ethics and pedagogy explore.

If we adopt this epistemological framework for the matter of teachers, in the light of the initial analysis and on the basis of *what would be good to do*, we could find out some perspectives about *what can be done* in the current context. These perspectives can trace not only the premises of a professional profile of teacher, but also of the training required to promote it.

Authoritative character. It is obvious that the teacher of tomorrow will be more and more facing authoritative character rather than authority. *Authoritative character* requires not only knowledge and know-how, but also the fact of being. That is to say, it demands teachers to be an example and testimony of an integrated unity of knowledge and life; of knowledge

and skills, on the one hand, and personal skills, on the other; of the method to look for truth and truth itself; of measurable chronological time whose characteristics can be observed by sciences and the *kairòs*, typical of sense, wisdom and good judgment [58]. Lyotard was right when he found in post-modern society the tendency to deobjectify knowledge, hindering, in this way, *Bildung*, the harmonious and inexhaustible construction of the subject person. However, the results of this objectualizing trend demonstrate how much essential it is to oppose it and rediscover its opposite as a fundamental task in education. Without an integrated and accomplished personality that demonstrates through its example the unity and sense of its different components and experiences, it is impossible, to quote the famous, though forgotten, words of 1967, not to reduce the concept of *Development* to that of *Growth* (economic growth), as globalization has done. And, above all, it is impossible to recognize that only the first one (*Development*) is able to support «the promotion of every man and of the whole man», in its completeness, without separating «the economic from the human» as well as «every man [...] from 'the whole humanity'» [59]. Similarly, it is difficult to understand and to make others to understand that, with NICT, it is no longer a priority to distribute knowledge and know-how, which are nowadays available to everyone, everywhere, but that it is the opposite path which becomes central: demonstrating to be able to select and take knowledge and know-how which make us better, more complete and integrated as subject person within social diversity. From this point of view, it is no longer a greater or lesser availability



of supply of pre-arranged knowledge and know-how that determines, drives, brings order, adapts, decides people's appropriate learning and maturation. Indeed, in these respects, current reality proves the right of those who believed that between the completeness of educational offer and the quality of human maturity of those who enjoyed it, there is neither a deterministic or causal relationship, nor responsibility for teachers and for learners [60]. The enormity of current knowledge and know-how and their organized and systematic preselection are rather an educational medicine than a poison for teachers and learners, only if the focus is moved on the quality of the subject person's demand and if we start from the presence of a tutor/mentor [61], whose personality is already integrated and complete and who can help the subject, through his example, to demand well. Personal completion and integrality are typical of human beings as such, and are after all the peculiarities of teacher as *magister* (magister is more, is better: the Master); therefore, it is impossible to demand them to a category only, in this case to professional teachers. Surely, they have to possess them and they have to be trained and selected rigorously on the basis of these requirements. However, it is unimaginable that examples and testimonies of authoritative character belong exclusively to some special and protected categories. On the contrary, they involve, without monopolies, people with different stories, professions, ages, ethnicities, cultures. In the discovery of the unity of knowledge and life, method for truth search and lived truth, speech and action, *uncontrolled anxiety of the becoming* and *calm result* of the being in which it flows [62], first and last [63], these people reveal

(*apocalýtei*) the final meaning of every existence (*éschaton*) and light it with a passion that lasts and infects as any flame (*ekpýrosis*) [64]. So, beyond the unusual age distribution of the population and the incessant reshuffling of cultures due to migration, authoritative character cannot be missing in teacher profession; moreover, it must be identified and appraised in many other adults and the elderly, who work and live very far from schools, but who are, nevertheless, involved in formal educational processes of new generations.

Personalization. The pedagogical tradition developed within nations, aimed at educating the citizen, has achieved its more democratic and universal results thanks to the individualization program: finding ways and times to give everyone all the knowledge and know-how previously established and recognized as socially relevant. The current historical situation requires, however, a change of paradigm: the passage to the strategy of personalization. With the scenarios mentioned at the beginning of this paper, in fact, common knowledge and know-how that must be shared, cannot be pre-established in an abstract way. On the contrary, they are co-constructed by everyone in freedom and responsibility with the reliable guide of authority figures, that may be professional teachers as well as social and professional actors.

The choice entails, of course, some consequences whose weight should not be ignored at the level of both formal and non-formal education practices and people involved in teaching.

The first consequence is the rediscovery of the centrality of that educational relationship typical of the tutor model. This model corresponds to classical apprenticeship: a master (*mastro*) who works with an *alumnus-apprentice*, while other classmates are doing something else. Survived long after the spread of an organization of teaching based on the Comenian model (a professor who teaches to many students of the same age group at the same time), this model constituted, in fact, the heart of Rousseau's hypothesis. That means, as it can be guessed, a constant elective relationship between educator and student, both in the case of a professional magister and in the case in which the role of *magister* is assigned by the first or recognized by the student to the authoritative personality of a professional or simply of an adult or an elderly man.

The second consequence concerns moving the focus of interest from cultural object to subject person. Cultural object, in fact, neither in all its dimensions of size and importance nor with a logical, epistemological and unchangeable morphology of values, does not pre-exist at all with regard to subject person. It derives, instead, and is structured with those who learn it, in cooperative negotiations with tutor and with nature, classmates, social institutions, the economic world etc., and, of course, with the whole science to which the object belongs. Therefore, there is no equal abstract content for everybody that could be passed down individually, in time and space, not only with the same sense, but also with the same sign. In this framework, the scholastic *quidquid recipitur ad modum recipientis recipitur* becomes

more than a common saying: it asserts itself as a fundamental gnoseological principle and a principle of cognitive psychology. Even the apparently easiest and most banal content of teaching and, even more so, its sense, is, at least in part, different for everyone. Personalization of learnings becomes, therefore, a necessary way, and the fall of every concept of swallowing or objectualizing contents of teaching reveals itself as an incoercible human need even before being a request of scientific theories [65]. Therefore, we must put in brackets society and cultural heritage that it wishes to pass down on to younger generations through school and teachers, in order to start from *Émile*, his experience, his history, the people he interacts with, his *world* which is different from ours and anyone else's and particularly from the *civilized* world, that we would like to instill into him by force, although he cannot ignore it. Putting him in an educational situation means, therefore, assuring him a *preceptor* who, guiding him also towards other *preceptors*, values its originality and uniqueness of being *in the world*, and makes him an active protagonist of his personal growth within the society where he has to live, without being passively subjected to its conditionings.

The third consequence is the educational exaltation of the shift from *communitas* to *societas* [66]. We are born in a family, in a group, in a community rooted in a place that no one can choose and determine. We are all originally involved with the world and with its limitations, then. We are all the product of a network of community relationships in which we are absorbed and that precede us before being able of decla-

ring any personal identity [67]. However, becoming men means turning this natural and community prereflexive thrownness into a wanted, accepted and justified reflexive personal choice. Education, Arendt wrote, is nothing else, in this sense, than the series of acts with which everyone proves to love people and the world he/she is closed to even not by his own choice, and finally «assume responsibility» in first person [68]. In other words, it is the acceptance of our limitations, opportunities, duties. It is the transformation of the *communitas* that ties us and forces us into a larger and larger *societas*, in which we exercise social connection according to our intentionality and *lógos* and, above all, in freedom and responsibility [69].

Alternating school and society, school and work. Rousseau's idea according to which if you become a good man – in the end and at the same time – you also become a good citizen and a good worker, has considerable effects on teaching practices. This is proved by his bitter polemic against books, or better against bookish teaching (*pedantry*); his sharp refusal of separated age groups, disciplines, teaching hours, disciplinary teachers (the «pedants» of theoretical notional learning). That model of teaching, that was already widespread in his time, but later became dominant and finally substantially the only one, is completely disjointed by his critical analysis. There is not only a passage from individualization to personalization and from the standard of class teacher to the personalized preceptor-tutor of a single student. The whole didactic-methodological and organizational teaching setting is changed in its root. The basic concept is that of the

so-called *educational alternation*. *Émile*, in the first book, when he is not a teenager yet and is still facing «sensitive reason», must not only make personal experiences in the natural environment (the forest, the road, the seasons, the crops, the sky ...), in the social environment (life in the house, the country, the fair, the charlatan, the visits to social institutions ...) and in the professional environment (the woodcutter, the farmer, the artisan, the *technician* ...). These experiences seem absolutely *natural*, not formal to him; in reality, they are the result of an accurate organizational knowledge of his tutor that manages to transform opportunities into a governed training system, the *cronos* of the becoming in the calm and spontaneous *kairós* of learning (the famous *negative education*). *Émile* is guided to wonder, thanks to his acute as well as delicate *master*, the *reason* that explains these experiences that appear so *normal* to him. And all that is done by alternating, almost endlessly but in an ordered way, action and reflection, personal and social tasks and their justifications, real problems that affect him closely and reasoned and persuasive solutions to them, projects firstly designed, then executed and finally criticized in their results in order to be experienced again and gradually refined. In this way, it is from the world and the community relationships he has experienced that *Émile* learns disciplines, the fundamental basic skills of reading, writing, counting, drawing, understanding reality underneath appearances and, above all, the competence of judging, with judgments [70] that require the overall maturity which he has reached, in other terms without precociousness and adult statements.

In the last books, then, Émile does not continue learning and maturing through *negative education*, but, this time, through *positive education*. Reason is not only sensitive, but formal, explicit, intentionally shared and discussed with the preceptor, with the artisans and the other various social actors he meets. There is no longer latency for freedom and responsibility, his and others, but a continuous and direct call for them. It is the time of real work, practiced independently, shared with his tutor and the artisans he works for (including the favorite carpenter), in order to improve the products he realizes, to make them more accurate, increasing the efficiency of production and relationship processes. Moreover, this time of work is also intertwined with that of independent life: engagement, travels, theater, engagement in history and surrounding family and social institutions, marriage. *Émile* has become a man and, therefore, has become both a worker and a citizen, without artificial separations and without more or less disguised hierarchies among these components. Educational alternation has been realized in the forms of alternation of work and study, real personal and social life and mature critical thinking. It is easy to understand what didactic-methodological revolution such an approach forces. It gets rid of the paradigm of pedagogy of the nation that we all have come to know. It also seems the only one able to meet the challenges brought by the scenarios described at the beginning of the paper and, above all, to govern and value them, without being overwhelmed by them.

Address of the Author: Giuseppe Bertagna. Department of Human and Social

Sciences. University of Bergamo. Piazzale San Agostino 2. 24129 Bergamo, Italy.

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References

- [1] BRICS (Brasil, India, China, South Africa) are now able to dictate terms (as it was impossible for them just ten years ago) to the IMF, the USA and the EU. By 2020, their combined GDP will exceed the sum of the GDP of the G6 (USA, UK, France, Germany, Italy and Japan) and, by 2050, Russia, China and India will be the first world economies in terms of structures, infrastructure and «human capital».
- [2] PLATO, *Politico* 340a.
- [3] GENOVESI, A. (1824) *Lezioni di commercio o sia di economia civile (1765-1767)* (Milano, Società Tipografica dei Classici Italiani).
- [4] SCOGNAMIGLIO PASINI, C. (2014) *L'arte della ricchezza. Cesare Beccaria economista* (Milano, Mondadori), (where the *Elements of public economics*, written from 1769 and 1791, are summarized starting from the famous beginning in which he declared that «the general purpose and ruler principle of all political economy» is «to stimulate the greatest amount of useful work in the nation» I, § 17 [my translation]).
- [5] SMITH, A. (2006) *La ricchezza delle nazioni* (Torino, Utet).
- [6] MARX, K. (1993) *Per la critica dell'economia politica (1859)*, tr. it. (Roma, Ed. Riuniti); Id. (1974) *Il capitale. Critica dell'economia politica (1867-1883)* (Roma, Ed. Riuniti).
- [7] JONGEN M. (ed.) (2007) *Der göttliche Kapitalismus. Ein Gespräch über Geld, Kunst und Zerstörung*

mit Boris Groys, Jochen Hörisch, Thomas Macho, Peter Sloterdijk und Peter Weibel (München, Wilhelm Fink GmbH & Co. Verlag-KG).

- [8] According to the McKinsey report (2015) conducted on a sample of 47 countries, the whole global debt has increased of 57 trillion dollars from 2007 to 2014, reaching 210 trillion, and it is likely to continue growing (McKinsey Global Institute, *Debt and (not much) deleveraging*, www.mckinsey.com, February 2015).
- [9] Source Gesma.
- [10] KAKU, M. (2008) *Physics of the Impossible: A Scientific Exploration into the World of Phasers, Force Fields, Teleportation, and Time Travel* (New York, Doubleday Publishing).
- [11] Big shots of American enterprise such as General Electric, IBM, Cisco and Intel have promoted the Industrial Internet Consortium (IIC) to create new global models for computerization of production processes. IIC was also immediately subscribed by Dell, Microsoft, Toshiba, Siemens and Bosch. In these companies, employees only place an electronic board on the production line and the work is run by technologies that interact directly with each other, with products and, in real time, with the amount and quality of supply and demand.
- [12] CASTELLS, M. (2008) *La nascita della società della rete* (Milano, Univ. Bocconi), followed by several books on the same phenomenon.
- [13] Fozio read 279 books for his *Library*; Erasmus of Rotterdam had 413 books in his house; John Locke less than 4000; Leibniz, who dreamt of a *petite bibliothèque bien choisie*, did not reach 10000; Voltaire bequeathed 4000 works in 6810 volumes, Leopardi 30.000.
- [14] The image, very representative, is taken from SE-PERES, M. (2013) *Non è un mondo per vecchi* (Torino, Bollati Boringhieri), p. 22 e ss.
- [15] This metaphor is used in Genesis 2,9, it becomes widespread in the Middle Ages, and could be found in F. BACON (*De dignitate et augmentis scientiarum*, 1623) and in R. DESCARTES, *Principia philosophiae* (1644); it is also contained in HEGEL's *Encyclopaedia* (1817) and in COMTE's *The course in positive philosophy* (1830-1842).
- [16] «It is reasonable to think that the multiplication of machines for the processing of information invests and will invest the movement of knowledge as it happened with the development of means of movement for people (transport), and then with those of sounds and images (media). This general transformation does not leave the nature of knowledge untouched. It may circulate in the new channels, and become operational, but only if that knowledge can be translated into amounts of information» (J-F. LYOTARD, *La condizione postmoderna. Rapporto sul sapere* (1979), tr. it., Feltrinelli, Milano 1981, pp. 13-14 [my translation]).
- [17] In 1972, the Massachusetts Institute of Technology, on behalf of the Club of Rome chaired by Aurelio Peccei, published a *Report on development* (Mondadori, Milano 1973). After pages of tables, statistics, models etc., the Report informed the reader that there would be no more silver in 1985, no more tin in 1987, no more zinc in 1990, no more oil in 1992, no more copper and lead in 1993, no more aluminum in 2003 etc. And that, more or less in the second decade of the new century, we would face a demographic collapse due to the depletion of those resources.
- [18] Giovanni Sartori, for example, has foreseen 694 billion people on earth in 2150 [SARTORI, G. &

- MAZZOLENI, G. (2003) *La Terra scoppia. Sovra-ppopolazione e sviluppo* (Milano, Rizzoli)].
- [19] A research published in the journal «Lancet» shows how global life expectancy has increased from about 65 years in 1990 to 71 in 2013; this increase has mainly concerned poor countries and women (17 December 2014, <http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2814%2961682-2/fulltext>).
- [20] KENNY, C. (2010) *Getting Better. Why Global Development Is Succeeding And How We Can Improve the World Even More* (New York, Basic Books).
- [21] <http://www.worldbank.org/en/topic/poverty/overview#3>
- [22] http://www.who.int/gho/child_health/mortality/neonatal_infant_text/en/
- [23] In only about three decades' time, for example, when a newborn today will still be considered *young*, Italy, on the forecast of about 55 million inhabitants, should have about 24 *foreign* citizens.
- [24] «Community describes not just what they [*the members of a society*, editor's note] *have* as fellow citizens but also what they *are*, not a relationship they choose (as in a voluntary association) but an attachment they discover, not merely an attribute but a constituent of their identity» SANDEL, M. J. (1982) *Liberalism and the Limits of Justice*, p. 150 (Cambridge, Cambridge University Press). See also: TÖNNIES, F. (1963) *Comunità e società* (Milano, Ed. di Comunità); MACINTYRE, A. (1988) *Dopo la virtù* (Milano, Feltrinelli); ESPOSITO, R. (1998) *Communitas. Origine e destino della comunità* (Torino, Einaudi); ETZIONI, A. (1993) *The spirit of community. Rights, responsibilities and the communitarian agenda* (New York); FERRARA, A. (ed.) (1992) *Comunitarismo e liberalismo* (Roma, Ed. Riuniti); HOLMES, S. (1996) *Anatomia dell'antiliberalismo* (Milano, Ed. di Comunità); KYMLICKA, W. (1999) *La cittadinanza multiculturale* (Bologna, Il Mulino).
- [25] «There is a significant role of reason in the choice of identity and there are solid foundations to reject the communitarian assumption according to which social identity is a matter of *discovery*, rather than a process incorporating a choice» SEN, A. (2000) *La ragione prima dell'identità, in La ricchezza della ragione* (Bologna, Il Mulino) p. 84 [my translation]; cfr. also RICOEUR, P. (1993) *Sé come un altro* (Milano, Jaca Book); LÉVINAS, E. (1980) *Totalità e infinito. Saggio sull'esteriorità* (Milano, Jaca Book); Id. (1983) *Altrimenti che essere o al di là dell'essenza*, (Milano, Jaca Book).
- [26] «The least movement affects all nature; the whole sea changes because of a rock», *Pensée* no. 505 [my translation].
- [27] ENGELS, F. (1972) *La condizione della classe operaia in Inghilterra* (Roma, Ed. Riuniti), p. 4 [my translation].
- [28] FOUCAULT, M. (1976) *Sorvegliare e punire. Nascita della prigione* (Torino, Einaudi).
- [29] MARZIALE, *Epigrammi* IX, 69.
- [30] CIPOLLA, C. M. (2002) *Istruzione e sviluppo. Il declino dell'analfabetismo nel mondo occidentale* (Bologna, Il Mulino) p. 42 [my translation].
- [31] See GUIDETTI-SERRA, B. (1973) *Il paese dei Celestini* (Torino, Einaudi) or WENSIERSKI, P. (2006) *Schläge im Namen des Herrn. Die verdrängte Geschichte der Heimkinder in der Bundesrepublik* (München, Spiegel-Buchverlag in der Deutschen Verlags-Anstalt). On black pedagogy, see the well-known papers by Alice Miller, but also: GRUS-

CHKA, A. (1988) *Negative Pädagogik. Einführung in die Pädagogik mit Kritischer Theorie* (Wetzlar, Büchse der Pandora) and RUTSCHKY, K. (ed.) (1977) *Schwarze Pädagogik. Quellen zur Naturgeschichte der bürgerlichen Erziehung* (Berlin, Ullstein Verlag).

[32] FOUCAULT, M. (2000) *Gli anormali* (Milano, Feltrinelli). Here Foucault assumed as a result of modernity (pp. 64 et seq. [my translation]) the establishment of a regulatory power «that can work only thanks to an availability of knowledge», that is to say, no longer linked to ignorance, exclusion, repression, suffocation, but precisely to widespread knowledge.

[33] PLATO (1998) *Symposium* (Glasgow, Oxford University Press) 175 d-e, p. 7.

[34] AURELIO AGOSTINO, *De Magistro*, IX, 25-26, 33-47.

[35] ARISTOTLE, *Elenchi sofistici* 34, 184a1-7 [my translation].

[36] PLATO, *Fedro* 271 b-c; 277 e – 278 b

[37] COMENIUS, A. (1907) *The Great Didactic* (1632, but published posthumous in 1675) (London, A. and C. Black) p. 159 (see: <https://archive.org/details/cu31924031053709>).

[38] HUIZINGA, J. (1962) *La crisi della civiltà* (Torino, Einaudi) p. 46 [my translation].

[39] *Della mercatura et del mercante perfetto* (1458) (*Il libro dell'arte di mercatura*, edited by U. Tucci, Ed. Arsenale, Venezia 1990). Parts of this work are quoted in: O. NUCCIO, *Benedetto Cotrugli. Etica e profitto del nobilitato uomo d'affari*, in Id., *Il pensiero economico italiano*, 2° vol., *Le fonti (1450-1750)*. *Dall'umanesimo economico all'economia galileiana*, t. 1, Ed. Gallizzi, Sassari 1991, pp. 277-430.

[40] TERENCE, *Heautontimoroumenos*, 77.

[41] ROUSSEAU, J. J. (1965) *Emilio* (Brescia, La Scuola) I, p. 11 [my translation].

[42] *Ivi*, p. 12 [my translation].

[43] *Ivi*, p. 11 [my translation].

[44] «Give him completely to the State, or leave it to himself; if you divide his hearth, this wound would make him sad» J. J. ROUSSEAU, *Frammenti politici (1754-1760)*, tr. it. in *Scritti politici*, Utet, Torino 1970, pp. 664 [my translation].

[45] ROUSSEAU, J. J. *Emilio... cit.*, I, p. 12 [my translation].

[46] COMENIUS, A. *The Great Didactic, cit.*, chap. X, 1, p. 70.

[47] *Ivi*, chap. XII, 23, p. 90.

[48] *Ivi*, chapp. XXVII-XXXII, pp. 255-294.

[49] *Ivi*, chap. XIX, 35, p. 173.

[50] FOUCAULT, M. *Sorvegliare e punire... cit.*, pp. 156 et seq.

[51] COMENIUS, A. *The Great Didactic, cit.*, § 40-54, pp. 175-182.

[52] *Ivi*, chap. XVI, 32, p. 119.

[53] *Ivi*, chap. XVI, 50, p. 124.

[54] *Ivi*, chap. XII, 23, p. 90.

[55] *Ivi*, chap. XI, 1, p. 76.

[56] *Ivi*, chap. X, 3, p. 71.

- [57] ALTHUSSER, L. (1976) *Sull'ideologia* (Bari, Dedalo); Id. (1981) *Ideologia e apparati ideologici di Stato*, (tr. it. in *Freud e Lacan*) (Roma, Ed. Riuniti).
- [58] «You know how to interpret the appearance of the earth and the sky (*cronos*, editor's note). How is it that you don't know how to interpret this present time (*kairòs*, editor's note)?», said Luke 12, 54.
- [59] POPE PAUL VI, *Populorum progressio*, § 14. This distinction is also used, even if differently motivated, in SEN, A. (1992) *Risorse, valori, sviluppo* (Torino, Bollati Boringhieri); Id. (2001) *Lo sviluppo è libertà. Perché non c'è crescita senza democrazia* (Milano, Mondadori); Id. (1985) *Le disuguaglianze* (Bologna, Il Mulino); Id. (2006) *Scelta, benessere, equità* (Il Mulino, Bologna).
- [60] DAVIDSON, D. (1992) *Essere agenti*, in *Azioni e eventi* (Bologna, Il Mulino) pp. 89-111.
- [61] HILLMAN, J. (1997) *Il codice dell'anima: carattere, vocazione, destino* (Milano, Adelphi).
- [62] HEGEL, C. W. F. (1925) *Scienza della logica* (Bari, Laterza) vol. I, p. 104 [my translation].
- [63] *Ivi*, p. 59.
- [64] PLATO, *VII Letter* 341 c 7.
- [65] Ausubel wrote: «discover what your student already knows and consequently organize your teaching» (AUSUBEL, D. (1983) *Educazione e processi cognitivi: guida psicologica per gli insegnanti* (Milano, Franco Angeli) p. 448 [my translation]).
- [66] MARITAIN, J. (1951) *Man and the State* (Chicago, University of Chicago Press) p. 2. «In the community, social pressure derives from coercion imposing patterns of conduct on man and comes into play in a deterministic mode. In *society*, social pressure derives from law or rational regulations, or from an idea of the common aim; it calls forth personal conscience and liberty, which must obey the law freely» (*ivi*, p. 4).
- [67] On «he/she» preceding «I», see: ESPOSITO, R. (2007) *Terza persona. Politica della vita e filosofia dell'impersonale* (Torino, Einaudi).
- [68] ARENDT, H. *Between Past and Future. Eight Exercises in Political Thought* (New York, The Viking Press) p. 189.
- [69] BERTAGNA, G. (2011) *Dall'educazione alla pedagogia* (Brescia, La Scuola) cap. VI.
- [70] Judgements are considered, as Kant said, as «the faculty of distinguishing whether something does stand under a given rule (*casus datae legis*) or not» (KANT, I. (1998) *Critica della ragion pura* (Milano, Rizzoli), Parte I, libro II, Introduzione: Sul giudizio trascendentale in generale, p. 272 [my translation]).

Summary: Teachers of tomorrow: premises for a teacher training

The main aim of this article is to offer a critical reflection on the need of rethinking the teachers' professional skills and their academic pathway, given the changes and current transformations (*crisis*, in its etymological sense). In fact, a series of changes, transformations, are identified and affect directly the educator's comprehension. Amongst others: the transformation of work bound up with the processes of the economic globalization, and the transformation of the learning environments imbued by the TICs; the population

growth, a demographic transformation with geopolitics relevance, and finally, as a result from the previous ones, the raise in the migratory flows. Under this context, this paper tries to reconceptualize teachers' training and their depiction as professionals from the view of Gustav Mahler in his statement *Tradition is the spreading of fire and not the veneration of ashes*. Thereupon, some categories that help in the teaching update, are proposed and explained; such as authority (as reputation or moral authority, role model and, hence, less so as bare exercise of power), the personalization of education, the importance of home community (society), and, lastly, the alternation within school-society and work-study.

Key Words: Teaching transformation, teachers' training elements, teachers of the future, moral authority, personalization of education.

Resumen:
Los profesores del futuro. Coordenadas para su formación

El objetivo de este trabajo es ofrecer una reflexión acerca de la necesidad de re-pensar la profesionalidad de los docentes y de su itinerario formativo, a la luz los cambios y transformaciones actuales (*cri-*

sis, en sentido etimológico). En efecto, se identifican una serie de cambios, de transformaciones, que afectan directamente a la comprensión del docente, del *enseñante*. Entre otros: la transformación del trabajo vinculada a los procesos de la globalización económica y la transformación de los entornos de aprendizaje imbuidos en las TICs; el aumento de la población, la transformación demográfica con trascendencia geopolítica; y por último, y como confluencia de las dos anteriores, el aumento de los flujos migratorios. En este contexto, el trabajo trata de reconceptualizar la formación de los profesores y de su imagen como profesionales desde el enfoque que era expresado por Gustav Mahler en la frase *la tradición es el mantenimiento del fuego y no la adoración de sus cenizas*. Así, se proponen y se explican algunas categorías que ayudan a la actualización de la docencia hoy, tales como: la autoridad (como prestigio o autoridad moral, ejemplo, y no tanto como mero ejercicio del poder), la personalización de la enseñanza, la trascendencia de la comunidad de origen (a la sociedad) y por último, la alternancia entre escuela y sociedad, trabajo y estudio.

Descriptores: Transformación de la acción docente; elementos de la formación del profesorado; la profesión docente en el futuro; autoridad moral; personalización de la enseñanza.