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A University is imaginative or it is nothing - at least nothing useful.
Alfred North Whitehead

Abstract: *The modern society is a stunning mixture of organizational efficiency, financial accountability, political pragmatism with people overloaded with information, some knowledge, conflicting demands, superficial intercourse, and unnecessary freedoms. The political commixture of poli-culturalism is confusing, the social regulation pragmatism is disappointing, the flood of miscellaneous data and contradictory knowledge is staggering and the individual feels that entire world is taking on him. In these circumstances the nurture of youth personality have become a very fortuitous and integer process whilst, successively, the Church, Government, Family, and School have lost their ethical and social ascendance together with society confidence in guiding the creation of well-developed and self-confident members of society. After more than six centuries of existence, a recent general process of democratization, massive extension, and many marketable adjustments, the formative institution of University should reconsider its situation to see if it can carry its traditional role further, if it has to adjust it, or if it disperses in other upgraded, better fitted and more effective organizations.*

Keywords: *rationality, university, knowledge, teaching, research.*

THE RATIONALITY OF UNIVERSITY

1. What is a University?

At the moment there are more than 10000 universities in the world[1] and their role and function are considered either self-evident – institution for education and research – or, in a narrow humanistic and social researchers groups, they are seen to have "the public role of contributing to the sustainable development (of) human society as a whole through education, scientific research, promotion of culture, art, and sports, medical service, and contribution to local communities."[2]

But neither of these two viewpoints fit with what is observed in real life. In fact, the evidence reveals the opposite: an old-fashioned institution, to a large extent isolated in an elitist ivory tower and developing only sporadic relations with the community and society.[3] Moreover the University's knowledge production remains for the rest of society abstruse and inefficient to a large extent. However, "universities operate on a complex set of mutually sustaining fronts – they research into the most theoretical and intractable

uncertainties of knowledge and yet also seek the practical application of discovery; they test, reinvigorate and carry forward the inherited knowledge of earlier generations; they seek to establish sound principles of reasoning and action which they teach to generations of students. Thus, universities operate on both the short and the long horizon. On the one hand, (…) they work with contemporary problems and they render appropriate the discoveries and understanding that they generate. On the other hand, they forage in realms of abstraction and domains of enquiry that may not appear immediately relevant to others, but have the proven potential to yield great future benefit."[4]

On the other hand, the self-evident sense of universities as schools for research and education with their traditional inertia, rigid structure and intricate organization can't explain their still well-establish position and recognition in a society, driven by economic forces, efficiency, technological development and a compulsory high rate of pragmatism. "Both these functions could be performed at a cheaper rate, apart from these very expensive institutions."[5] The production and popularization of knowledge is more efficient for economic, technical and administrative purposes to be attained segmental on every particular task and aim, and is facilitated by communication technology. As an educational facility, if the University is primarily conceived as offering professional training ground in various domains, but even here its efficiency and quality will soon be under the level of those specialized and focused on punctual tasks trainings offered by growing alternative specialized institutions.[6] So, in order to understand the University's rationale the question should be formulated from a broader perspective, one which conceives the University as one special social and cultural institution that was required at a certain point in the evolution of mankind.

If we look back at history, we noticed that the University, as social and cultural establishment, became an institution of particular case within the more general socio-economical phenomenon of guilds rising from Middle Ages, when "intellectual professionals" around monastic schools started to organize themselves into proper corporations named *universitas scholarum*. They and their students assumed the exclusive right for teaching and the University ceased to be a supporting system of monastic schools and became a self-sufficient socio-cultural structure, a lively climate of cultural ferment. But in order to gain a deeper understanding of what the University is, we have to consider both aspects of human evolution: its social history and its corresponding history of Ideas (or cultural evolution). Any social organization has a cultural structure of ideas underneath which legitimizes it and orients it. As one of the most fundamental and cultural institution, the University could be understood only through its underlying rationality and social utility altogether.

2. The Idea

From the first sparks of consciousness, the human being questioned the world and strived to make sense of what was happening around him/her. Gradually, individual and

accidental observation and explanation was replaced by collectively constructed, negotiated and shared accounts. Any human communities were accompanied by a cultural perspective of the world. The History of Academia[7] starts when the simple *question on Nature* was replaced by *questioning the old way of questioning the Nature* (in its turn, this moment was made possible by the level of self-reflection, the philosophical level of understanding, achieved by human civilization). The "analysis of nature analysis" became the prime object of Academic study. The fact that past knowledge was established as subject of study for itself was the key factor for the development of collective scientific consciousness, which is a requisite for achieving the level of Science.

From that moment on the adventure of academic knowledge evolved continuously, with periods of accumulations and moments of upheavals.[8] The question of knowledge of Nature and history of Nature since Aristotle, the primary topic of Antiquity, was replaced and opposed by the fair enunciation of natural laws by Descartes and Kepler. The later were substituted, in their turn, by the complex and all-embracing Einstein's Theory of Relativity and, after this, by the all-explaining Hawking's Quantum extension. This phenomenon observed in the history of fundamental research is paradigmatic for the development of scientific knowledge within the University.

Another common feature of University setting is the validation of knowledge that exists and matters only after it becomes past and historical and other brains transmitted it. "Our universities have been founded more or less in the spirit of this historical knowledge; not so much, perhaps, in the first beginning of the revival of literature, as in the later time. Their whole scientific organization could be inferred from this separation of knowing from its prototype by historical learning."[9] The objectivity of method surpasses in importance the data collection and the very object of knowledge. From Cartesian ontological methodic doubt to Kantian epistemological transcendentalism and up to the completely dematerialized universe of phenomenology of consciousness, the object of knowledge gradually had dematerialized till it vanished in the imaginary mathematical object world of the magical quantum reality of modern physics. This phantasmagoric conception of knowledge, completely opposed to contemporary, pragmatic, super-realistic and skeptical society, could be cherished only in a special institution able to ensure living conditions and to protect large enough groups of minds, dedicated to the imaginative acquisition of knowledge.[10] An institution which lets them pursue the truth without restraint over their methods of (critical) thinking, individual and collective, and safeguards their mind to lead the knowledge and understanding to higher levels.

However, as the human is an inseparable psycho-organic being and its personality could be only understood by corroborating its organic, social and cultural characteristics, any social institution could be understood by complementing its social structure with its cultural meaning. And if in the human, the organic urges can be opposed to reason commandments,[11] the working principles of the University as autonomous institution could sometimes become opposed to its cultural principles. The academic community has its own preservation impulse and could turn into a dogmatic defender of its own opinion deploying

a fierce censorship instead of free debate. This is true not only, as one would believe, in the humanist, theologian or social disciplines, where we have plenty of cases throughout history, but in natural and medical sciences as well, where the leading academic staff could inquisitorially impose its own historical truth against any other empirical or fact-proven alternative.[12] These facts demonstrate, once again, the difference and relation between the underlying cultural principles and the social condition of the University.

The organization and life of the University was constantly changed under the pressure of social evolution. The last century brought great changes to the social structure and social attitude, in particular the development of technological sciences and their application. As a result, the balance of the traditional University life has profoundly disturbed and education has acquired an increasingly technical character.[13]

3. The Institution

From a social history perspective, the first universities from middle ages were designed to train the clergy, men of science, men of letters, doctors, lawyers, and engineers. In other words, universities were organization for teaching professional training and research (especially theoretical) for the higher classes of society. When the instruction in humanities or arts (philosophy, literature, history or political science) and sciences (mathematics, economics, physics and so on) were not made in private, they were taught in universities and had an elevated historical mission for preparing youths for future positions of power and influence in society. They were relatively isolated from other social strata, producing professional elite and knowledge (by research) along with education (by teaching) for these elites. For a long time, the traditional University proved to be a cradle or, in other cases, an incentive for the highest achievements of human culture. The development of knowledge and technology and the corresponding advancement of human behavior created a new society with different needs to which the secluded traditional University was constrained to adapt. The rising level of general knowledge and professional knowledge opened the universities for the masses, changed their balance, curricula, methods and subject matter approaches and strongly oriented them toward economic and occupational (professional-vocational) areas.

One of the main transformations of modern universities was a consequence of developing technology and industries, the multiplication of technological and applied sciences school with no educational basis or purpose. In the US, for example, the bachelor degree in occupational fields rose, in less than 30 years, from 45% in the 1960s to over 60% in the 1990s and many universities had more than 80% practical degrees.[14]

In this context, the proper place and function of the contemporary University comes out. If education is the major, collective and wide-raging process of socialization for modern humanity, then formal education ensures the unity, communality and mandatory regularity

for any evolved civilization to subsist. The development of technology and the complexity of social relation entail a corresponding development and increasing duration of formal education. Hence, the professionalization of the University seems a natural process brought about by social evolution. But the consequences of this forced alliance between universities and industry, starting from the 1980s in the US and the West and after 1989 in the Central and Eastern Europe, under the label of civic duty of academic knowledge to improve productivity, has already gone too far. Universities diminished their teaching function and transformed it in a sort of professional training, and shifted from a fundamental research to an applied one, while the market demand was to attract corporate and administrative funds. Soon they stared to look more as a sort of business schools concerned mainly with self-financing from taxation, grants and projects and commercialization of academic research.

What seems not to be understood, either by national decision makers or by their managerial staff, is that universities cannot function as business enterprises and compete with economic organizations as industries or corporations. The rights over intellectual propriety are not enough, at the end the crafty strategies and powerful business politics of big corporation will prevail in the economic competition.

However, the University could be, and partially is, integrated organically in the socio-economic system through one of its key feature - the intellectual production. The propeller of the economic growth in modern economy is the intellectual capital and innovative ideas, and not the economic rights, property, production, productive capacity or mechanical innovation. And here lies the proper place of the University as point of agglutination for social intelligence. In order to accomplish and develop this role the decision makers have to "stop encouraging matches between University and Industry for their own sake. Instead, they must focus on strengthening the University's ability to attract the smartest people from around the round - the true wellspring of the knowledge economy."[15]

Another flaw of the argument that the University could manage in the economic competition as any other organization is that it lacks the historical reason of the University endurance. The success of the University alongside the economical progress of society was due precisely to its non-economic structure and goals. Its policy is free production and dissemination of truth by conducting public research, orienting the research toward lasting and nonprofit outcome, publishing freely the results and educating students (free of charge, or subsidized), contrary to capitalist business organization which is based on copyright, propriety, ownership, paid services and so on. As the evidence from scientific literature has already proved, highly skilled people are not only attracted by money, they also have a big mobility and want to work in a stimulating and elevated environment and to be surrounded by smart people. And this is exactly what the University offers as a working enterprise. "The University plays a magnetic role in the attraction of talent, supporting a classic increasing-return phenomenon. Good people attract other good people, and places with lots of good people attract firms who want access to that talent, creating a self-reinforcing cycle of growth."[16]

Beside the change of its orientation from fundamental research toward applied one, another effect of the compulsory marriage with industry and business sectors was the increasing secrecy in academic research, facts which affect the speed and progress of knowledge and contradict the ethical function of University as free enterprise for knowledge dissemination. The increasing submission of the University to the industry and business sector could be noticed in the effects of modern education over the students. While the level and quantity of taught knowledge is on the increase, the students' mind openness and versatility is diminishing. This paradox indicates the action of a subtly complex and concealed phenomenon in education: the hidden curriculum.

4. The hidden curriculum

It is already widely recognized that beyond Enlightenment ideals and beliefs, the mass schooling was much more the result of industrial revolution than the progress of political consciousness.[17] The public elementary school was rather the result of technologic and economic changes and correspondingly requirements of workforce than that knowledge advancement. Hence, the school institution was built more after the factory blueprint and not after that of Academic settings. What was more important for mass-educated people to know was not as much as basic reading, writing, arithmetic and a little bit of history and other subjects, but chiefly punctuality, obedience and repetitive work. It was the industrial progress, not the cultural one, which required workers who appear on time and work on a schedule, who take and obey orders from a superior without questioning, and being able to perform roughly repetitious operations on assembly lines.[18]

Since the industrial age, society has become more complex, the types of occupation more diverse, and therefore the hidden curricula in school have become more flexible. In a synthetic overview on the differences in schoolwork in contrasting social class contexts,[19] Jean Anyon has identified four distinct types of schools corresponding to the social characteristics of pupils' parents: occupation, incomes, social position, and study level. These four types are as follows: *working class schools*, *middle-class school, affluent professional school and executive elite school*. Anyon noticed that each school has its particular general strategy of working in class which emphasizes different skills, aptitudes and abilities, so the "*fifth-graders of different economic backgrounds are already being prepared to occupy particular rungs on the social ladder*." This "hidden curriculum" of schoolwork which acts silently but is more powerful than the "overt" one, is a tacit preparation for relating the pupil to the process of production in a particular way. Differing curricular, pedagogical, and evaluation practices emphasize different cognitive and behavioral skills in each social setting and thus contribute to the development in children of certain potential relationships to physical and symbolic capital, to authority and to the process of work.

In parallel to the educational ideals and aims fostered to a certain extent by overt curriculum, the hidden curriculum produces underneath a subservient workforce, encourages an acceptance of hierarchy, teaches people to be motivated by external rewards, legitimates inequality and justifies privileges, attributes poverty to failure to conform and achieve, and cultivates a myth of meritocracy – i.e., those who do not achieve should blame themselves. The fragmentation of school subjects prepare children for the fragmentation of the workforce.[20] Moreover the pupil is "«schooled» to confuse teaching with learning, grade advancement with education, a diploma with competence."[21] The most important factor of this equation is the general situation of the teacher in modern society.

5. Teaching

Together with the generalization of education, the number of teachers increased, the curricula became more standardized, and teacher training grew more formal and hence their role and status decreased both in class and society. Nevertheless, there is a lot of research evidence[22] which suggests that, except for non-school factors,[23] the teacher is the most important factor for student achievement than any other aspect of schooling.[24] These facts close down on the belief that the training provided by the teacher could be replaced in the future by more interactive, animated, accurate activities held by specialized programs. The essence of education is not the transmission of information: "we teach some by what we say, we teach some more by what we do, but we teach the most by who we are."[25]

The idea of academic teaching is intimately related with knowledge: the conservation of knowledge and ideas; the interpretation of knowledge and ideas; the search for truth; the training of students who will practice and "carry on."[26] The function of the University, unlike any kind of professional training, is the transmission of knowledge *as totality not as parts*. This is possible only by a genuine form of teaching. "The true province of University lectures is to be genetic. This is the real advantage of teaching by living men, that the man does not give mere results, like the writer, but present – in the higher sciences, at least – the mode of reaching these results; and in every case, makes the totality of science arise, as it were, before the eyes of the student."[27] This mode of communicating knowledge is the only one which facilitates the achievement of the complementary primary objective of higher education systems to enable students to "take on the world,"[28] by making them be critical persons. The University is not meant to produce workers, nor even highly skilled employees, but *persons of distinguished talent*, "people who not only possess sophisticated technical knowledge, but who also can make reliable judgments using such knowledge as members of society, and who have a broad education, sensitivity, energy, perseverance, and communication skills that enable them to play a leading role in today's global society. They are also people who are deeply trusted and respected."[29]

Professional training is indeed an activity which could be better accomplished in other types of organizational structures. But, the higher sciences cannot be possessed or attained in the form of technical knowledge by multiplying practical familiarity with the elements and the number of exercises. If this mechanical expedience is indispensable for attaining a prerequisite level of competence and understanding, then promoting a higher level of understanding and competence necessitates a broader perspective which technical and mechanical substance of professional domains activities are unable to provide.

The advantages of this highly complex and cultural institution, which is the University, should be preserved and not reduced to trivial working force training and applied research on demand. The University instead, by its specific nature and properly managed organization, should keep on cultivating highly educated people and contribute to forging a critical and democratic citizenship. It could engage actively with the pressing development needs and challenges of our societies, with the intellectual and cultural life of societies, i.e. to contribute to the intellectual and cultural development of a critical citizenry. However, the accomplishment of this task requires to stay away from an ordinary business perspective and imaginatively and creatively undertake different kinds of rigorous scholarship ("discovery," "integration," "application" and "teaching and learning"[30]) and research (fundamental, applied, strategic, developmental), aims and objects.[31]

A University is a totally different type of social organization than corporations, „it is primarily a centre of cultural life and cultural progress,"[32] in the most general sense of the word. It is committed to seeking, knowing and transmitting the truth above anything else. This task of cultural leadership, which is the full and proper business of a University, can only be fulfilled if the University combines and integrates three main functions: provides for the maintenance and diffusion of culture in the community; arranges for carrying on research in all branches of learning; and undertakes the education of undergraduate students.[33]

And exactly as the critical forms of teaching and learning could not be realized in non-academic settings, so the fundamental research could not be performed except in a safe environment protected from trivial, immediate profit or financial interests. The University has the mission to ensure that the need for knowledge will exert freely and unconstrained by immediate purposes, economic or political pressures or evaluations.

6. Research

The research function "represents the central nervous system of the University organism."[34] The particular knowledge, promoted by the capitalist organization of society, proves sustainable and valuable in the long term only if it fits and is consistent with the general science, otherwise any genial idea will come, sooner or later, to reveal its negative by-effects and become deleterious. "The knowledge of the organic totality of science must

precede the special education for a particular profession."[35] If science is conceived as a mere utility, the University area reduced to an institution for the transmission of knowledge and specialized organization could do this better, cheaper and more conveniently for the public.

The general and complete knowledge – not the knowledge for something as in industry and social life but knowledge for itself (the fundamental knowledge as initial liberal sciences and arts were designed for) requires a different kind of settings than corporate research centers could provide. This means, at the same time, the exploration, creation, multiplication and transmission of knowledge. "To extend the boundaries of human knowledge, and to multiply oneself in generations of students, is the high privilege of the University investigator."[36] Of course, all this means that the old structure of curricula should be modified especially under its peculiar aspect of the appropriation of past knowledge. It should be critically evaluated and synthesized, ceasing to be dogmatic or descriptive, should stop to overcharge the content of courses, and will be used for critical thinking construction, and not only for general culture.

Until now, the University's setting remains solely able to ensure the necessary mentality for collective progress, by combining the demand for objectivity and the impetus for development and evolution, for opening new horizons in knowledge and technical application, and to combine humanistic values with a rational attitude for the sake of Humanness. The knowledge produced within the academic medium was the basis of civilization for the European progress, this favorable environment from medieval to present-day universities allowing the seeds of imagination to insert fresh ideas within the wrought soil of traditional reason and to provide intellectual and material safety condition for growth and dissemination. But all of these were possible because "the management of a University faculty has no analogy to that of a business organization"[37] as the well-known mathematician and philosopher Alfred North Whitehead warned at the beginning of the last century. A faculty is a group of scholars organized to compete, first of all, amongst themselves and stimulate each other to develop in directions felt to be fruitful. The excessive and organizational administrative requirements (personal attendance at stated time on unnumbered formal meetings, participation on conference numbers, scientific papers quantity, project applications, and so on) will stimulate formal mechanisms of coping. Both teachers and students will adapt formally, they will mime and pretend to teach, learn, memorize mechanically and so on. And hence, the activities would lack substance and consistence.

The national policymakers and staff management of universities have to understand that "the modern University system in the great democratic countries will only be successful if the ultimate authorities exercise singular restraint, so as to remember that universities cannot be dealt with according to the rules and policies which apply to the familiar business corporations."[38]

7. What was done

If it looks at the recent history of Euro-Atlantic universities one will notice that the modernization of the University has implied rather a passive adaptation of the academic settings to the needs of the business environment and not, as someone would expected, an active role in changing it and evolving toward a real Knowledge Society.

These measures habitually regard only the promoting University outreach programs as open distance learning, online learning, virtual universities, and corporate universities) for industries and less for communities.[39] An analysis made on the situation of American universities from 1970 onwards shows a flagrant semblance with the present state in Romanian higher education system. This resurgence of technical and practical domains in universities had a big impact on their organization "The growth of occupational-professional education is itself one support for the climate of utilitarianism on campus,"[40] and the adoption by faculties of the professional schools model diminished, up to complete elimination, the art and smaller sciences. It is worth noticing that demand for occupational-professional degrees remained at the same level in the US even in the 1990s when workers had significant growing earnings if they were graduates while liberal art and sciences were transformed in a sort of auxiliary support for those types of curricula.[41]

The Academia (as institutionalized Knowledge), together with Health and Spirituality are fundamental values of Mankind. If they are degraded in conception and as social institutions at the level of an economic organization their natural and positive function would be lost. The University would cease to be a factor of progress. Unfortunately, both the public and most of those involved in academic management and decision makers seem to neglect the historical role and the meaning of University for the evolution of human civilization and envisage only such passive, but long term, deleterious solutions. These sort of solutions includes engagement with industry, commerce and community to promote awareness and innovation of sustainability issues; inclusivity to provide a seamless web of knowledge development; research to provide input of cutting-edge knowledge and contribution for a governance for strategic development, or appropriate networks for communicating, integrating and transferring knowledge in social and economical environment.[42] Such a vision lost the specificity of the University. It forgets that the power and high status of academia stemmed from its non-economic and nonpolitical principles, and that the objectivity of knowledge is ensured by its social integrity just because the University is not a business! "The role of the University in world society may not be measured by rankings and it may not depend completely even on the comprehensiveness of curriculum. Something more fundamental may be a willingness to embrace taking a global perspective for faculty as well as students. Once that exists, we may be entering an era where all that is making our world so interconnected will greatly facilitate preparing truly global citizens."[43] The University as business enterprise is a long-term self-destructive endeavor.

Its value-added product is social (and cultural, for sure), and the solely economic appraisal would subvert its primary function. Instead, the economical embodiment of University bears a strong resemblance to a very complex organization of social economy.[44]

8. How it should be

It becomes clear now that the University, as a cultural prestigious establishment, is an endangered species. Its former glory, status and respect were molded by industrial business transformations into trivial organization with an amalgam of functions. Its fundamental role was lost in the common pursuit for prestige, efficiency and survival. Moreover, its mission is not even to be found in its content of teaching or research, in how it carries them out or how it managed to subsist through them. The mission of the University resides totally elsewhere. "The justification for a University is that it preserves the connection between knowledge and the zest of life, by uniting the young and the old in the imaginative consideration of learning. The University imparts information, but it imparts it imaginatively. At least, this is the function which it should perform for society. A University which fails in this respect has no reason for existence."[45] If it undertook its diverse educational and social purposes as it should, a University must have a commitment "to the spirit of truth,"[46] impossible in the absence of academic freedom and institutional autonomy. This is why the State should protect and support this institution as much as public health services. The richness of a nation lies both in its physical and cultural health and wealth. Instead "universities have a duty to save knowledge when it is threatened" even by providing "safe haven for threatened scholars" and ensure a medium free form censorship.[47]

Modern society needs these secured oases in order to preserve its potential for imagination, to provide a buffer zone, a period free from pragmatism, cynicism, and overstated realism, to ensure a healthy maturation of the youth personality. Many studies have already revealed this mentorship, this formative role of the higher education, which is covered by customary economic, political and pragmatic perspectives on the University. Imagination, in order to develop and be disciplined, needs a sheltered environment where decisions, actions and consequences are not vital or radical as they are in real life. This is true both for teachers and students. "The task of a University is to weld together imagination and experience. The initial discipline of imagination in its period of youthful vigour requires that there be no responsibility for immediate action."[48] The students need this transitory period of completely free thinking in their study domain, not to cope with the dreadful consequences of their potentially wrong intuitions and to have the peace to evaluate the various alternatives, views, perspective, methods unconstrained by the urgency and consequences of their application. "The combination of imagination and learning normally requires some leisure, freedom from restraint, freedom from harassing worry,

some variety of experiences, and the stimulation of other minds diverse in opinion and diverse in equipment."[49]

The University is then the institution which ensures the quality of civilization. It sustains the cultural and communal development by providing through teaching with well-developed persons (good attitude, enhanced values, emotional integrity, skill of thinking and interpersonal skills) and through research with knowledge and innovation. "From higher education benefits its students and the community as a whole. For both it develops what psychologists call affect: attitudes, emotions, motivation, values and interpersonal skills based upon feelings for others. It develops cognition: knowledge, perception and thought. And it develops adaptable occupational skills by the application of cognition and affect."[50] In the past, the University accomplished unproblematically this function, essential for the advancement of civilization, to foster the requisite people of distinguished talent, because it was the institution destined for building the social elite.

The social pressure was toward high commitment and success in promoting truth and excellence equally to the University staff and its subject matters. The psycho-compartmental mechanisms of elevated conduct[51] found in academic settings the most beneficial institutional environment for its plentiful development. In time, the progress of industrial and technological democratization abolishes these conditions and, correspondingly, social demand. Therefore, the University needs to readapt since its function is not naturally performed anymore while its elitist and elevated character diminished/dwindled.

9. The role

There is still something which has remained unchanged and here resides the preservation of the fundamental role of the University: in its unique and marvelous capacity of leveraging distinguished persons. However, this thing could not be done by standardizing teaching, over-specialization, streamlining efficient and effective schooling as educational decision makers seem to believe, and definitely not by transforming universities in professional schools.

Specialized education is a necessity (due the huge volume of knowledge) but it is a trouble, too. Specialization leads both to proficiency and ignorance, depth of particular knowledge and cultural obtuseness. And it is one of the first demands of pragmatic knowledge society. As the first industrialization period requires only halves or parts of a man,[52] the modern technological economy needs, in most of its part, mostly lobotomized persons. The largest part of the concrete activities were replaced by machines, hence the system needs only specialized well-partitioned brains for operating those machines. For many, this fractured, shortened personality fostered by occupational and professional educations is not as much practical, maybe only an ethical problem. The University as a professional school,

which provide specialized one-dimensional training for its students is not only an outdated, but a dangerous enterprise. "Hegemony and a reductionist approach need to be changed. Another dimension, perhaps, is for our educators to think about the implementation of Liberal Arts Education, and cross-disciplinary programs which encourage the integration of various disciplines and focuses on a more broad based learning to achieve a deeper sense of appreciation of what is meant by living as a human, instead of merely a tool of the economy."[53] This necessity of humanistic education is not understood by policymakers as long as the universities that are strong in the "hard" sciences are likely to obtain more and larger governmental grants than universities where strengths are concentrated in the humanities or social sciences."[54]

It has already been proved that humanistic disciplines and sciences have the ability of developing skills in analysis, written and oral communication, critical thinking and broadening the perspective of those who study them together with their cognition, culture and character.[55] They make students more sensitive to different cultures and philosophies; enhance their capacity to appreciate science, literature and the arts; and, overall, expand their capacity for understanding.[56] It is no use to know how to count if you don't know how to interpret and understand what you count. And "at the heart of the liberal arts and fundamental to the humanities—and indeed central to much of scientific thought—is the capacity for interpretation, for making meaning and making sense out of the world around us. (…) Culture is synthetic and total. The pure specialist is the opposite of the man of culture. An association of specialists in different and limited fields of learning is not and cannot be a centre of culture. The University must be designed to encourage and facilitate the interchange of knowledge through which it can become a spiritual whole."[57]

This is the reason why we are talking about the Uni-Versity: not only about multi-disciplinarity or inter-disciplinary, as it is right now at best, but as a trans-disciplinary enterprise. The University establishment was designed in the course of time for this. It has facilities, experts, in the same place and also opportunities to undergone inter- and trans-disciplinary programs, but it has to be free of pressure to produce marketable and commercial results, and moreover, to have the State and community support. Otherwise, as it is the case of the modern multi-disciplinary University, it looks like a fancy Educational Mall where students could study everything but partially and successively. They can choose from various specializations, courses, degrees and construct whatever amalgamate, inconsistent and partially developed personality they complete.

But the twenty first century Higher Education could only be a global critical business,[58] an institution for nurturing not only highly trained employees for a particular domain, but also open-minded and knowledgeable specialized experts in various field able of critical thinking, self-reflection and autonomous action. The present methods that develop the formal "critical thinking industry," "skills development," "disciplinary competences" are just the instrumental counterparts of the substantial critical thinking. But they are easier

and hence extensively cultivated, and come to undermine the fundamental scope of the University that of nourishing self-independent, critical persons. Critical thinking restricted to the deployment of cognitive skills by individuals is inadequate, is "thinking without a critical edge," a sort of "painting-by-numbers."[59] The transformation accomplished by instrumental and specialized learning is only a horizontal development which generates stagnation at individual and social level. Teacher training departments and whole curricula promote rather a sort of instrumental methods for "check list" of cognitive skills, limited to operational competences. The academic teaching and learning should transform not only the students, but change the world further because they are ready to engage with the world through critical thinking. But this could not be made exclusively by specialized, professional and applied education. The liberal disciplines, art and philosophy should be interwoven, and not just formally, within any curricula. What is not understood is that the added value, the windfall of enhancement for the future life brought by liberal arts and philosophical thinking is invaluable and could not be ordinarily assessed.[60] This transversal overall competence empowers students to master their world, to understand and choose knowingly, to set the course of their own life and to enjoy living. No specialized knowledge, competence or skill could ensure an elevated, complete joyful life, precisely because it is a particular perspective of understanding.

Nonetheless, for the success of trans-disciplinary teaching, learning and research, a change is mandatory in our concept of reflexivity from individual (as entire tradition of philosophy had taught!) to a collaborative one. The postmodern and post elite University has a crucial mission, to call into being the Global Brain[61] (the collective consciousness) of knowledge society. I consider, following Barnett, that students of such "critical University" would "be exposed to multiple discourses" (e.g. intellectual, practical, experiential, alternative); they should deal with "wider understandings, questionings, and potential impact of (their) intellectual field" (i.e. incorporate the epistemological and philosophical approach o their discipline). And lastly, a "committed orientation on the part of the student to this form of life" (i.e. the willingness and ability to see its own world from other perspectives, and hence, "the willingness to risk."[62]

10. The future

In the end one question arises: Would the University, democratized and world-widespread by now, be able to keep its superior standards of leveraging distinguished persons from its students or would it decay to ordinary organization of professional and occupational training and funding-oriented applied research centers? In other words, Will the University remain one of the most important driving forces of human civilization advancement or it will change into an auxiliary of social development, as long as Universities have gone

seriously astray from their legitimate course. "In a sociological sense, and having in mind the democratization of higher cultures among large proportions of the naturally able men and women in a large population, it is possible, even probable, that the larger expectations cherished by men of vision on behalf of the liberal college are calculated, if competently implemented, to realize for a democracy what Oxford and Cambridge have meant for an aristocracy."[63]

Unfortunately, as past American experience and present Romanian evidence indicate "any rebirth of the arts and sciences as the center of undergraduate education probably lies well in the future, at a time when the bachelor's degree has become a preparatory degree for a majority of students who are planning to pursue postgraduate training, rather than the mass terminal degree it is today. And even in this distant future it is possible that the arts and sciences will become the preserve of a still smaller number of students and faculty than they are today, if they are further devalued by a society that has turned away from the types of intellectualism they reflect and sustain."[64]

More than that, if the present tendency stays unchanged some authors envisage such a level of degradation of education that the new aspirants to technical, economic or public school administration will not be able, except for an insignificant percent of them, to attend professional preparation on the basis of "broad training in fundamentals" and will limit to ultra-specialized functional training in a specific domain, which will be enough.[65] From here emerge ignorance, narrowing of mind and sensibility, and their natural effects: intolerance, selfishness, racism, hate and a general degradation of society.

If the true role of universities is not recognized, and *the academic community will not struggle to be at the level of such mission*, then Society will not permit the University to produce new knowledge, will limit its influence and power to contribute to its future development, and marginalize its participation in the process of settings its values and goals. In the future, the natural tendency of people for material and intellectual comfort - the advantageous state of ignorance for the policymakers – will lead to the regression of the human civilization in the absence of a counterbalancing institution recognized as trustful, objective and committed to true knowledge and humankind evolution while the Church and Government lose their influential prerogatives on this matter.

Notes

1. 11997 after http://www.webometrics.info/en/world. Other statistics suggests more than 17000.
2. The Japan Association of National Universities, "Enhancing the Functions of National Universities, – Pledge to the People –," Interim report June 22, 2011.
3. This seems to be its inherited condition while first Universities were an exclusive masculine and celibate medium, the relations with communities and productive activities were insignificant.

4. G. Boulton and C. Lucas, *What are Universities For?* (Leuven: League of European Research Universities, 2008).
5. Alfred North Whitehead, "Universities and Their Function," in *The Aims of Education and Other Essays* (New York: Free Press, 1967), 91-101.
6. See for example, the system of private organizations for awarding qualification bodies, which offers a much cheaper, convenient, flexible, and faster way to gain approximate equivalence of academic qualification for many jobs developed in United Kingdom, which has a global (The Commonwealth) recognition.
7. *Academia*, as organization of elevate schooling and intellectual research, is older than *Universitas*.
8. Thomas S. Kuhn. *The Structure of Scientific Revolutions*. (3rd ed. Chicago, IL: University of Chicago Press, 1996).
9. F. W. J. von Schellıng, "Upon the Scientific and Ethical Functions of Universities," trad. Ella S. Morgan, *The Journal of Speculative Philosophy* 11, 2 (1877): 163.
10. Whitehead, "Universities and Their Function."
11. Although this seems to be only a historical preconception, see Antonio R. Damasio. *Descartes' Error* (London: Papermac, 1996).
12. See the supposedly outdated and unproved membrane-pump theory kept by the present academic community as true, at the expense of cellular metabolism in cellular physiology. G. Ling, "History of the membrane (pump) theory of the living cell from its beginning in mid-19th century to its disproof 45 years ago--though still taught worldwide today as established truth," *Physiological chemistry and physics and medical NMR* 39 (1) (2007): 1-67.
13. Drew Gilpin Faust, *The Role of the University in a Changing World* June 30, 2010 (Speech at the Royal Irish Academy, Trinity College, Dublin, 2010).
14. S. Brint, "The Rise of the «Practical Arts»," in *The Future of the City of Intellect: the Changing American University*, ed. S. Brint (Stanford: Stanford University Press, 2002), 231-259.
15. Richard Florida, "The Role of the University: Leveraging Talent, Not Technology," *Issues in Science and Technology,* Summer (1999): 67–73.
16. Florida, "The Role of the University."
17. Ken Robinson, *Changing Education Paradigms* (RSA Action and Research Centre).
18. Alvin Toffler, *The Third Wave* (London: Pan Books Ltd, 1981).
19. Jean Anyon From "Social Class and the Hidden Curriculum of Work,." This essay first appeared in *Journal of Education* 162, 1 (1980).
20. John J. Macionis and Ken Plummer, "Sociology: A Global Introduction," Prentice Hall 3rd edition , S. Bowles and H. Gintis, *Schooling in Capitalist America* (London: Routledge and Kegan Paul, 1976), 131.
21. Iván Illich, *Deschooling society* (Harper & Row, 1971), 1.
22. The Rand Corporation, "Teachers Matter. Understanding Teachers' Impact on Student Achievement," http://www.rand.org/pubs/corporate_pubs/CP693z1-2012-09.html
23. E. g individual characteristics, family, neighborhood experiences which are outside school control.

24. E. g. previous experience of education or scores on licensure examinations. See also The Rand Corporation, "What Teacher Characteristics Affect Student Achievement? Findings from Los Angeles Public Schools"http://www.rand.org/content/dam/rand/pubs/research_briefs/ 2010/ RAND_RB9526.pdf

25. Schelling, "Upon the Scientific and Ethical Functions of Universities," 167.

26. Abraham Flexner, *Universities: American, English, German* (New York: Oxford University Press, 1930), 6.

27. Schelling, "Upon the Scientific and Ethical Functions of Universities," 167.

28. Ron Barnett, *Higher Education: A Critical Business* (Buckingham: Open University Press / SRHE 1997).

29. The Japan Association of National Universities, "Enhancing the Functions of National Universities."

30. Ernest L. Boyer, *Scholarship reconsidered: priorities of the professoriate* (The Carnegie Foundation for the Advancement of Teaching, 1990).

31. Saleem Badat, "The role of higher education in society: valuing higher education," in *HERS-SA Academy*, 13-19 Sept 2009 (University of Cape Town, Graduate School of Business, Cape Town, South Africa, 2009) (Unpublished), url: http://eprints.ru.ac.za/1502/1/badat_hers.pdf.

32. Francis Bolger, "Function of a University," *Red and White* 37, 3 (1946): 96.

33. Bolger, "Function of a University," 96.

34. John M. Coulter, "Our Universities," *Science*, New Series, 43, 1119 (1916): 810-812.

35. F. W. J. von Schelling, "The Absolute Idea of Science," trad. Ella S. Morgan, *The Journal of Speculative Philosophy* 11, 1 (1877): 93.

36. Coulter, "Our Universities," 810-812.

37. Whitehead, "Universities and Their Function."

38. Whitehead, "Universities and Their Function."

39. B. Panduranga Narasimharao, "Knowledge Economy and Knowledge Society—Role of University Outreach Programmes," *India Science Technology & Society* 14 (2009): 119-151.

40. Steven Brint et al., "From the Liberal to the Practical Arts in American Colleges and Universities: Organizational Analysis and Curricular Change," *The Journal of Higher Education* 76, 2(2005): 151-180.

41. Due de diverse meaning assigned along the history by various authors to the concept of "liberal arts /sciences," and "liberal art education," the quality of liberal is used in this article for that sciences or humanistic disciplines (arts) or studies which forms the core of fundamental research (philosophy, literature, and abstract sciences like physics, chemistry, biology etc) oriented primary toward the *development of knowledge* opposed to programs and discipline which form the content of oriented for *occupational fields* of education as engineering, business, public administration, nursing and social work, education etc, close to the meaning of "liberal arts" from Merriam-Webster online dictionary: „college or university studies (as language, philosophy, literature, abstract science) intended to provide chiefly general knowledge and to develop general intellectual capacities (as reason and judgment) as opposed to professional or vocational skills." Merriam-Webster.com, url: http://www.merriam-webster.com (10 September 2013).

42. Ludovico Ciferri, and Patrizia Lombardi, "The Role of University Education in Fostering Sustainable and Responsible Development," "Final Declaration" of "2009 G8 University Summit" Torino, Italy, May 17th-19th (working-paper).
43. Allan E. Goodman, remarks at the "WISE Education Leadership Program The Role of the University in World Society," *Institute of International Education blog*, October 16, 2012, http://www.iie.org/Blog/2012/ October/ University-Roles.
44. Warren J. Samuels, Sylvia J. Samuels, "The University as a Social Economy: Jane Smiley'sMoo," *Forum for Social Economics*, Spring 1997, Volume 26, Issue 2, pp 69-78; see also Bogdan Popoveniuc, "The Quest for Social Economy," *Annals of Philosophy, Social & Human Disciplines*, December 2012, vol. 2, 51-67.
45. Whitehead, "Universities and Their Function."
46. G. Graham, *The Institution of Intellectual Values: Realism and Idealism in Higher Education* (Exeter: Imprint Academic, 2005).
47. Allan E. Goodman, "The Role of the University in World Society," *Institute of International Education blog,* October 16, 2012, http://www.iie.org/Blog/2012/October/University-Roles.
48. Whitehead, "Universities and Their Function."
49. Whitehead, "Universities and Their Function."
50. Donald A. Bligh (ed.), Ian McNay, Harold Thomas, *Understanding Higher Education* (Intellect books, 1999), 7.
51. Norbert Elias, *The Civilizing Process: Sociogenetic and Psychogenetic Investigations* (Wiley, 2000).
52. See the very cynical, but illustrative inventory made by Henry Ford in his biography where in its list of 7,882 different operations required for manufacturing a complete unit of Model T he "found that 670 could be filled by legless men, 2,637 by one-legged men, two by armless men, 715 by one-armed men and 10 by blind men." Henry Ford, *My Life and Work - An Autobiography of Henry Ford* (London: Greenbook Publication, 1981), 72.
53. Jin Kuan Kok and Phaik Kin Cheah, "The Role of the University in Fulfilling Individual Needs and Promoting a Better Society: A Malaysian Students' Perception," *International Journal of Social Science and Humanity* 1, 1 (2011): 12.
54. Joseph W. McGuire et al., "The Efficient Production of «Reputation» by Prestige Research Universities in the United States," *The Journal of Higher Education* 59, 4(1988): 384. In this matter in Romania the situation is disastrous. The first draft of National Research, Development and Innovation Plan for the next 6 years of Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding, intends to eliminate completely any finance line for humanities. What else could be said?
55. H. T. Shapiro, "Cognition, character and culture in undergraduate education: Rhetoric and reality," in *The American University; National treasure or endangered species?*, ed. R.G. Ehrenberg (Ithaca: Cornell University Press, 1997), 58-97.
56. G. Kuh, "How are we doing? Tracking the quality of the undergraduate experience, 1960s to the present," *Review of Higher Education* 22 (1999): 99-120.
57. Bolger, "Function of a University," 96.
58. Barnett, *Higher Education*, 1.

59. Barnett, *Higher Education*, 17.
60. Shannon Rupp, "Be Employable, Study Philosophy," TheTyee.ca, 27 Jun 2013, http://thetyee.ca/Mediacheck/2013/06/27/Study-Philosophy/.
61. F. Heylighen, "Conceptions of a Global Brain: an historical review," in *Evolution: Cosmic, Biological, and Social,* eds. L.E. Grinin, R.L. Carneiro, A.V. Korotayev, F. Spier (Moscow: Uchitel Publishing, 2011), 274-289.
62. See Barnett, *Higher Education*, 167-169.
63. David Snedden, "Functions of the University," *The Journal of Higher Education* 2, 7 (1931): 384-389.
64. Steven Brint et al., "From the Liberal to the Practical Arts."
65. Flexner, *Universities.*

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*** http://www.webometrics.info/en/world.Among those who felt uncomfortable with the two insights, some complained that it is mysterious how we know anything abstract, in particular the abstracta that appear in the truth conditions of the sentences of mathematical languages. The lesson they drew was that they had to meet a challenge. The challenge, of course, was to give an account