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EDUCATION AND GLOBALISATION

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The modernisation of process of Education (BOLOGNA process) demands of Universities to arrive at the formation of students able to research and work in an International context and to face the "change" that globalisation has caused in the **New World Order** and to read the big disorder that confounds today the geopolitical landscape, in other words to be able to analyse and explain the dimension and the nature of Planetary **crises** (political, social, cultural, environmental, economic, organisational, but above all existential).

In this process of University we must keep present the thoughts of Thomas Jefferson that exalt the inseparable relation between scientific alphabetisation and civil participation that today some intellectuals like to considerer as technorealism (<u>www.technorealism.org</u>), a form of reflexion oriented to demolish some clichés among which that technology could resolve all market problems such as inequality and monopoly or that the markets could resolve all technological problems "Technologies are not neutral" or Technology is not knowledge. From here the strong idea that technological comprehension must be an essential component of global citizenship

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The reform of thought must arrive to affirm

the possible reason (Putnam, 1993) that justification

can be of man

REFORM OF EDUCATION

After the 11th of September some aspects of the Planetary system emerged in its seriousness

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- *antinomy between Globalisation/difference
- *scientific rationality is not sufficient to control reality
- *limits of our knowledge
- *end of the teleological conception of history
- *growing difference of spheres of significance



*putting into discussion the consolidated system of values

*emphasis on the difference between the level of the social system and the worth of life

*loss of unitary/common traditions of belief universally shared (good, Homeland, human nature, rationality) that in the past have represented values of sensitive reference to be shared by all. So that today a fundamental problem becomes that of finding a new general base of orientation

*respectful of pluralistic tendencies peculiar of our society without falling into fundamentalism

*able to represent a new horizon of sense on which it should be possible to build social solidarity. This horizon for some sociologists could be given by a renewed interest/attention to the concept of **existence**

All this obliges to re-think

about other international orders

Its realisation depends upon

- *reinforcement of solidarity
- *adoption of democratic social policy
- *redefinition of rules of new world government
- *Affirmation of an economic reflexion (ethic)

in other words to

re-see the logical categories in which has persisted traditional thought

All this could explain the difficulty to arrive in a short time to a reform of education. Much progress has been made in seven years – from the Sorbona Declaration (25.5.1998) to the Bergen Conference (19-20.5.2005) but it is very difficult **to relinquish** theoretical imperialism and to **refute** the *consolidated notion* that the development of Science is realisable only by means of the accumulation of knowledge but every more so by the transformation/adaptation of principles that organize this knowledge (**Khun,1978**) and *the conviction* that reality could exist in a coherent system of ideas and to change the traditional logic characterized by an absence of pervasive/rigid categories with a probabilistic (**Von Neumann,1944**) or dialectic (**Lupasco,1947**) or fuzzy (**Zadeh,2004**) logic.

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PART I

In any case during these 7 years (impact of Bologna process) the same revolutionary ideas have been central in the reflexion on the new process of modernisation of advanced formation.

* **EUROPE** is also becoming the space of development of knowledge. The building of the **European space of education** is an essential instrument to realize a democratic society and to favour a free circulation of citizens

The importance to arrive to an European space of formation forces to realize a similar modality about thinking (open and free), a reciprocity, even if it is very difficult, in the acknowledgement of different points of view and an interconnection between explanation and comprehension.

* **UNIVERSITY** born in Europe has in this period of epochal change many key roles to develop.

*to arrive at a transformation of organising principles of knowledge (Paradigms) seen the crises of certainty in Science (Bachelard,1999 and Popper,1973), to affirm the importance of ideas (Noology Science) to reintroduce the subject whose knowledge in each process of knowledge (reintroduction of subject) that Hegel had suggested fifty years ago!

*to actualise the 3 questions asked by Kant:
what could I know
what must I do
what can I hope for

*to consolidate the cultural social and intellectual dimension by means of the affirmation of two principles, unity in diversity and complexity, having also presented the importance of the revolutionary scientific idea that no method is a method (anything goes of Feyrabend, 1975) and that the human condition is signed by two big in certitudes: cognitive incertitude and historical incertitude and that knowledge is never in harmony.

* to guaranty the evolution and the adaptation of education and research to the necessities and requirements of contemporary society at a moment in which the labour market requests a very qualified preparation. Given the characteristic of the labour market (in which unemployment is the main feature) for the Institutions it is very difficult to provide the most actualised competencies so they prefer to continue to offer the generic, traditional "basic" training with the conviction that at a later date the student will be able to choose their way in conformity with their identity, competencies and aspirations.

But also in this moment the role of University is very important as it could help the student to made face to the different challenges. The duality of the labour force (work involving labour, a physically or mentally wearing activity, and work involving satisfaction, obliges the University to offer cognitive instruments as **a culture** able to face the enlargement of the experiential space and to develop individual skills that could



permit to put the student in the condition to learn to learn. Fundamental characteristics of the new knowledge process are its planetary dimension and its possibility to **reply** to the rapidity and complexity of change that is the affirmation of continuous learning or the affirmation of a spiral process.

Special observation

It is necessary to not forget that the rule of Science has changed between the XVII century and today. In remote times scientists were at the same time philosophers and researchers, and research was sociologically marginal. Today Science has become a strong and powerful Institution at the centre of Society and increasingly controlled by economic and public powers. So we have this interactive process Science Technique Society State

It is known that that neither State, neither Industry, neither capital are ethically oriented: they use the power that scientific research gives them

STUDENTS

Must utilize all opportunities that reform puts at their disposal to develop creativity and that general intelligence as a critical and constructive rationality able to contextualize problems to explain them and find if possible a solution. A very difficult challenge seen that some characteristic of these problems are about trans-national, transversal, essential, multidimensional and global aspects. It is evident that the problems of our times: war, peace, poverty, underdevelopment (moral, intellectual, economic, technological) are all linked to the rise of popular irrational demand for a profound reflexion (over a long period) and the possibility to affirm the culture of hope. This type of culture (a total of the 4 type of cultures: anthropological, humanistic, scientific and of mass could also help obtain the pertinent competences that could favour easy employability at a time in which professions appear and disappear and enterprises have an high risk of volatility in a reality that the sociologist Baumann likes to define as fluid, liquid. Every effort must be made to encourage students to spend a period of study or internship abroad and verify the possibility of having an acknowledgment of this experience by means of the ECTS System. Key words of new training: change, mobility, flexibility

Activating knowledge activating labour

THE BOLOGNA PROCESS

It seems useful to remember that after the Bologna process (18.19.1999) we have taken some ineluctable initiatives addressing the affirmation of an internationally competitive, coherent and compatible European system of education.

*Realisation of an easy to understand & compare system of titles by means of realisation of similar curricula

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*Adoption of a system essentially based on two principal cycles (first level diploma of 3 years and second level degree of two years) both with the possibility to take courses in different national and international Institutions. The new organisation must pay attention to creating competencies oriented also toward education.

*Obtain the title of Master or of Research Doctor in co-tutelage with if possible a particular attention to the international context so as to benefit from diverse experiences.

*Consolidation of the ECTS model system of transfer credits in order to facilitate student mobility.

*Encourage the mobility of the teaching and administrative staff

The importance of this point has been reconfirmed in the following meetings. The Conferences of Prague (May 2001), Berlin (September 2003), Bergen (May 2005) and the Convention of Thessalonica have had as finality also to find the strategies best able to promote the Bologna process and particularly the learning process, innovative teaching, lifelong education and the architecture of new Degrees, especially the joint Degree (currently Croatia, Cyprus and Turkey are part of the Bologna process).

In the last Conference in Bergen the Ministries responsible for higher education have re-confirmed the basic role of Governmental Institutions and see the need to arrive in a short time to an approval of legislative reform of the educational process.

PART II

SCIENTIFIC AND PRACTICAL REASONS OF STARTING THE BOLOGNA PROCESS

At a time in which the Planet has an increasing necessity of a capacity to understand fundamental and global problems, just at this moment, the traditional educational system employed in different countries was unable to provide some key apparatus and paradigms to arrive at analyses taking into consideration disorder, inequality, insecurity, risks that characterize our societies, this seems due to a difficulty to renounce the myths of deterministic logic and Cartesian rationalism that oblige scientists as Prophets to have an unilateral vision of human beings (homo sapiens, faber, economic us, prosaic us) and not accept the strong idea that a human being is also demens, ludens, imaginarius, consumans, poeticus that is the importance of homo **complexus**. This new analphabetism could become a modern form of slavery. Thomas Jefferson liked to say "liberty is the first born daughter of Science and any democracy couldn't survive without an adequate level of education". Overspecialisation has stopped us from seeing the global and the



essential. Overspecialisation has also the fault of separating (to take out) an object from its context and put it in an abstract conceptual sector and has always privileged all that is measurable and formalisable. In other words the traditional educational system chooses the methodology to cut and separate into small pieces the knowledge that vice versa must be in these times always interconnected. So students continue to have an unidimensional approach to reality and are experts able to read human problems only in one dimension by means of principles of reductive paradigms; what is worst their narrow mind they are unable to study and are not interested in anything that it is not possible to reduce to a calculus i.e. passions, emotions, happiness, hopes, beliefs that are the most important elements of human experience.

Our technical industrial civilisation know only calculus and ignore man

Universities until the end of 2000 were unable to give a humanistic culture that could affirm the ineluctable condition of world citizenship. Thus the necessity for Rectors, by means of Conferences and meetings, to try to realize a process of knowledge, capable of educating about a planetary age and able to deal with uncertainty and know its incompleteness.

This objective demanded some interdependent reforms.

The first and most important insists on new modalities of knowledge so as to arrive at reading with a dialogic approach processes and relative and global problems. The consolidated reflexion does not value the importance of multiplicity and interdependence and the necessity to accept the no longer sure destiny of each individual and of all humanity. We cannot forget that in the last ten years we have witnessed the passage from a society with shared rule to a society of individual risks, from a society of continuity and stability to a society of discontinuous change. Today we are assisting in the simultaneous emergence of new problems that oblige adopting another type of reflexion that in any case will not be traced forever.

*process of ideological globalisation (refusal of shared values) that is the cause of cold or warm conflicts

*growing in importance of trans-national political actors (the end of the role of the nation-state)

*crisis of the traditional concept of culture (distinction between we and others) actually is affirming a meta-culture

*new complexity reached on the term of identity (individual or collective) that depends more upon different processes of evolution, interaction and reinterpretation than on territorial radication

*circuit of migration of global dimension, not only permanent but also temporary

*homogenisation and artfulness of habitat

*reduction of human diversity

*centrality of technologies whose development is more and more autonomous, non-controllable and elusive to each instance of regulation. People see the effects but not the root from where an augmentation of our responsibility in the face of the human species, its survival, environment etc. All this has changed the



modality of our operations (Jonas) and put in crisis the fundamental presuppositions of modern ethics, thus the exigency of a planetary ethic

*climatic alteration increasingly modulated by economic, technological and energetic change

*demographic growth

FROM HERE

The necessity of the **second** reform that insists on our modality of thinking on what Edgar Morin like to define as re-learning to learn and of the **third** concerning our modality of teaching (methods, contents, strategies ,finalities) to arrive at a basic similar formation (3+2). The **fourth** is interested in new rules of governance & living together.

But it seems necessary to add **a fifth** that must insist on our capacity to read globalisation in a historical perspective so as to refuse the unilateral and one-dimensional approach that aims to see globalisation only as a process of economic homologation.

HOW A UNIVERSITY COULD REALIZE ALL THESE OBJECTIVES?

It important to have always present that, as Edgar Morin(2001) reminds us, the University has always had as **finality** being able **to reply** to the challenges of the development of science (since the Humboldt reform in 1809) that is to be the centre of problematisation typical of modern European culture and **to carry out** a trans-national mission, and if in presence of the tendency of the nationalistic cultural closure of a modern nation, **to guarantee**, **conserve** (in the significance of protection, preservation and integration) the cultural heredity of knowledge, ideas and values valorising a formation designed to reinforce the attitude toward research.

Today the University disposes of an autonomy that puts it in condition to create by a reform of thinking (a new capacity to organize knowledge) the culture of postmodernity that must be able to connect different planetary problems in presence of a rise in the obsolescence of competencies. This aspect obliges the University to invest strongly in an integrated and multidisciplinary knowledge able to give to individual maps that are reliable for ever changing territories.

Before working on contents, curricula and disciplinary ways of adapting education to the processes that are radically changing the management of human systems, it is indispensable to arrive at a strong reflexion about the new opportunities, new necessities, new relations between individuals and a society of affluence. These modifications have put into discussion:

- *our ideas around the transmission of knowledge
- *the rapport to knowledge
- *the rapport between knowledge
- *the production of knowledge. For this last point it is sufficient to think of the role of the Internet in the realisation of a highly individualised knowledge that puts in discussion the traditional transmission of knowledge.



For all these reasons/requirements the University today is facing some momentous decisions:

*to work to favour the diffusion of new knowledge (new languages, new methods, new narration such as what Lyotard(1981) calls scientific reflexion)

*to achieve the ambitious objective to realize homogenous curricula (similarly for disciplinary itineraries) but always with attention/respect to the difference of reality in which each student lives. An interdisciplinary context is essential **to educate to a planetary citizenship.** This finality is today considered the fundamental future mission of University.

*to try to see again the pre-constituted division of work between the world of higher educational and the working world. Until the reform it was foreseen that the University must provide to a map of knowledge and of the working world which should conduct a person to choose & explore particular territories on the basis of guidelines suggested by the acquired maps. The University must offer to the students not simply eyes to understand theoretically but for learning to learn evolutively, not an easy finality as it is very difficult to re-think the architecture of knowledge, to transform in real time, in function of numerous stimuli coming from different spheres, the strategies of research and to arrive to an epistemological revolution. The epistemological challenge must be accepted if we want the formative tasks of the University to rise to the level of the times: the labour market demands a form of individual at the same time an up-to-date specialist in their profession but also open to the various experiences and languages, in other words able in different and distant moments of their professional career to re-invent their own knowledge, their own competencies and even their job.

It appears evident in all this change that there is a new centrality of the individual, even if until some years ago the University had only been an instrument of training for WORK or part of a formative experience.

Actually this finality is not the most important, as today to study is one of the different experiences/opportunities, and sometimes not the most important in their existence, and it was not possible for the Institution to choose and offer consequently the most useful formation to the students, as none prepared **to face** a labour market which had become very diversified, complex and specialised or **to work** in a reality in continuous change in which it is strategic to realize the community of planetary and common destiny by means of the affirmation of principles of solidarity and **to control** the cognitive opportunities of its students.

So it preferred to adopt a defensive attitude and continue to provide generic competencies and to guaranty a theoretical /basic /acritical /standardized formation in conviction that afterward each student could choose their way in conformity with their knowledge, aspirations and identity. Institutions **had undervalued** the importance to put students in conditions to choose the modalities of their participation to the construction of a global community, participation that demands an enlargement of contexts,

of instruments, of information that are the basis of the traditional national citizenship and **had neglected** the necessity to reinforce the creative potentialities and make the experience of others the privileged instrument for the discovery of their own specific vocations *ego alter as alter ego*

By means of some international programme of formation such as Erasmus Mundo it has been possible to put students in conditions to read the real characteristics of reality, to recognize the consequences of globalisation, to take conscience of the affirmation/co-division of principles such as that of tolerance, democracy, liberty and in consequence of the necessity to actualise the argumentative categories and many important things that do not exist in a way just traced for all, "the way is made by going".

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