THE NEW PARADIGM OF HIGHER EDUCATION IN THE KNOWLEDGE SOCIETY

S. Ivan

Sorin Ivan¹
„Titu Maiorescu” University, Bucharest, Romania

Abstract: The Bologna Process brings major changes in European higher education, regarding the philosophy of education and scientific research, the mission of universities in the Knowledge Society, the structure and objectives of academic studies. It is the reform of the very concept of education, a new paradigm of academic education and scientific research. It includes such elements as: emphasis from teaching to learning, student-centred education, creativity and innovation, education focused on outcomes, system of transferable credits, easily readable and comparable degrees, mobility for students and didactic staff, quality assurance, European dimensions in higher education, the internalization and globalization of education, new approaches as inter- and transdisciplinarity, education as a free experience of mind, open access, inclusive and responsive universities, diversity, multiculturalism etc. By some of its most significant elements, the new paradigm expresses the tendency of returning to the classic university model, of recovering, in essential data, the “old” philosophy, rather than a radical dissociation of it. The Bologna reform is built, in its main elements, on the Bologna University and some other famous Europe’s universities classic models. It is not a separation, but the valorization of the European academic tradition. It is also a symbolic appeal of the European Union to its roots in a glorious academic past, with powerful and living models, while facing the challenging future.

Keywords: paradigm, Knowledge Society, reform, institutional mission, open access, innovation, creativity.

The current changes and developments at European and global level aspire to reshape the world in the spirit of globalization. The New Europe, whose core is formed by the European Union, is facing an unprecedented challenge today: competition, in all areas and at all levels, with the world powers, but also with emerging countries,

¹ Director, Department of Communication, Foreign Languages and Public Relations Titu Maiorescu University
Director, The Education Tribune

Copyright © 2004-2011 by ”Aurel Vlaicu” University Press
especially in Asia, which come with a great human and economic potential. Education plays a vital role in this fierce competition, since education is the basis of knowledge. A simple truth, known since ancient times, and available more than ever today, knowledge is power. Any area of economy and every sector of public and private life is powered by human intelligence, enriched by knowledge power. The leaders in the areas of education, knowledge and research have a fundamental role to play on the contemporary world scene. Starting from these simple, but extremely challenging, premises, the EU leaders concluded that, in order to be globally competitive, Europe must build a knowledge-based society and economy. The university has the fundamental contribution in this genesis, as an elite institution of education, research, training and development. The current era, a time of rapid developments and changes, requires new forms and educational models. The Bologna Reform has proposed a major change in the design, structure and content of university education, towards certain finality: creating the European Higher Education Area (EHEA) and of the European Research Area (ERA), forming together the European Knowledge Area (EKA), the space of the knowledge-based society and economy.

**University and the building of Europe**

By its genesis, the university is a European institution. The first universities in the world, in the full meaning of the term "university", developed during a brilliant academic tradition, were born in Europe: Bologna (1088), Oxford (1167), Paris (1170), Vicenza (1204), Palencia (1208), Cambridge (1209), Arezzo (1215), Padua (1222), etc. If the university is the creation of Europe, Europe as a space of civilization, culture, spiritual and material values is, in turn, the creation of the university, as the elite institution of education. Along with the political and religious power, the university has always played, especially in Western Europe, a key role. European universities have become prestigious schools of knowledge and education in fundamental areas, real power centers of science. The whole development of Europe over the centuries to modern and postmodern era is closely linked to universities and their mission. In today's times, in the context of globalization, the mission of university is again an essential one. Globalization means fierce competition in the economic and financial areas, but also in knowledge. At the same time, knowledge represents
the very purpose of two fundamental processes for the personal and social development: education and scientific research. University is the laboratory in which education and research must be developed to the highest standards of performance and competitiveness. Europe is aware that, in order to participate in the global competition, to remain what it was, the cradle of civilization and the vanguard of the progress of humanity, it must become a global force in knowledge. Medieval and modern Europe was built by the force of knowledge that the great politicians, scientists and artists have acquired in universities. By university, they came into universality. The new Europe is being built today, in an unprecedented planetary competition, on the university foundation. To meet the challenges of the time, to answer the requirements of the today's world, Europe needs a modern university, an institution that would foster education and research in the service of knowledge at the highest global standards. The European University of the 3rd millennium is the product of a process of profound reform, built on a new educational philosophy and on the reformation of the very concept of education. The process is meant to determine the transformation of the current university, to redefine its mission, structure and content in the knowledge society and to reshape the European higher education whole system. The new metamorphosis is a work of great difficulty, since the battle is on the institutional level, but also psychological, an unprecedented challenge to the higher education. It is a battle with tradition, a glorious academic tradition, with established mentalities strongly linked to a consecrated model, associated with excellence and the prestige of knowledge. The process has started for more than a decade. It is interesting to see how the new university will be and what remains available of the old model of classical university and of its education paradigm. Are we witnessing the separation from a prestigious model which built Europe of knowledge, civilization, culture, science and arts or, on the contrary, the return to the classical paradigm of academic education and the recovery of a philosophy that seemed buried in the ashes of history?

**The classical university model**

To understand the evolution of the university in time up to the shaping of the contemporary model, we must have an essential picture of the initial model. Knowing it in its fundamental dimensions, we will better understand the metamorphosis of the today's university into the
tomorrow’s university by the higher education reforming process that participates in the building of the New Europe.

The first three universities in Europe and worldwide, since the university was born on the old continent, are Bologna, Paris and Oxford. They are the universities of "first generation" and form two academic models. The Bologna model - "universitas magistrorum et scholarium" – promoted the university made up by students, in which they were favored: students chose their own teachers and the rector out of themselves too, they exercised control over teachers in teaching and payment issues. Out of the "Bologna model", the "Paris model", "universitas magistrorum", was born: a university of teachers, divided into several faculties, in which students would have the status of university members only. On the ground of the Paris University philosophy, Oxford and Cambridge universities were founded. In fact, this is the model which formed the foundation of European universities over the years until today.

The second generation university is called "universitas ex privilegio ". Some universities have been established by royal decree, by the decision of a local authority or other official act of government: Salamanca, Naples, Toulouse, Prague, Vienna, Heidelberg, Cologne. Universities in Spain and Portugal were established by royal prerogatives and have been linked to a cathedral or other religious authority, supported by their city. Thus the universities of Huesca, Zaragoza, Alcala, Coimbra, Lisbon, or the University of Salamanca, called "mother of liberal arts and of all virtues, were founded by the monarch.

In the universities of Europe, the study, conferences, debates were in Latin, and not in local languages. In all universities the same subjects were studied, the four traditional branches of knowledge: philosophy, theology, law, medicine and also the liberal arts ("artes liberales"). The titles obtained from one of them were recognized in all European universities. Such recognition made it possible for students from any country in Europe to study in any university. Those who obtained a Ph.D. or "licentia ubique docendi" had the right to teach at any university. In the fifteenth century, the structuring in faculties of the universities, experienced the first time in Paris, has expanded in Europe. Thus, there took place the evolution from the encyclopedic model of knowledge to the specialization paradigm. The process gave birth to four specialized schools on the four key areas: medicine, theology,
philosophy and law, schools known as "facultates", separated from one another. To achieve the status of "studium generale", the university was not obliged to include all four faculties. It was enough for it to have at least one of them, along with the faculty of arts, which had a mandatory status in the university structure. The faculty of Arts was the school of the seven liberal arts, divided into "trivium" (grammar, rhetoric, logic) and "quadrivium" (arithmetic, geometry, music, astronomy), i.e. in philological, philosophical and scientific subjects.

An essential property of the classical university is the open access to the various branches of knowledge, practiced to meet the needs and requirements of an open society and a mobile population. The principle of open access would refer both to the students’ registration and to the teachers’ selection. The application of the principle, however, used to have limitations: the open access in universities regarded only men. Women have been accepted universities beginning with the nineteenth century only. Another characteristic of universities, expressing the philosophy that underpinned this institution in the medieval Europe, was mobility, "peregrinatio academica". Student mobility contributed to the establishment of new universities and to the making of an academic culture in Europe. The practice of mobility became a habit, a pilgrimage from one university to another, from which students got their diplomas. Both diplomas and doctorates obtained elsewhere were recognized at the university of origin. "Peregrinatio academica" was a European-wide phenomenon, involving tens of thousands of students and reached the climax in the sixteenth century. Later, with the change of the students’ aims in their education process, the pilgrimage turned into an educational trip or in the "Grand Tour", which would not require long studies at any university any longer. The Grand Tour tradition has grown over time and involved universities and academies in Germany, France, Italy, Spain, England and Holland. For example, between 1500 and 1700, at least 20,000 German students studied in Italy.

It should be noted that medieval universities formed the space in which the cultural, ethical, civil values were grown, which, together with the Christian ones, established the foundation of medieval Europe and supported the European civilization to develop during ages until now.
From the Bologna University to the Bologna Process

An important step in reforming higher education in Europe is the Sorbonne Declaration (May 25, 1998) on "harmonization of European higher education system architecture", signed by ministers of education from France, Italy, Britain and Germany. The Declaration is built on several fundamental elements: the recognition of the "positive potential" of the existence of a European area of higher education; the "progressive harmonization" of the general framework of the course of study cycles and of the granting of diplomas by "strengthening the existing experience of united diplomas, of the pilot initiatives and dialogue" initiated by the Lisbon Convention; encouraging mobility of students, academics and researchers by the full use of the increasing support given by the European Union. Declaration calls the European states to participate in creating a European area of higher education, in which "national identities and common interests can interact and strengthen each other for the benefit of Europe, of its students, and more generally of its citizens."

The cornerstone of the higher education reform in Europe is the Bologna Declaration, signed on June 19, 1999 by 29 European education ministers. In the text of the Declaration, there are key passages as: “A Europe of Knowledge is now widely recognized as an irreplaceable factor for social and human growth and as an indispensable component to consolidate and enrich the European citizenship, capable of giving its citizens the necessary competencies to face the challenges of the new millennium, together with an awareness of shared values and belonging to a common social and cultural space.”; “We must in particular look at the objective of increasing the international competitiveness of the European system of higher education. The vitality and efficiency of any civilization can be measured by the appeal that its culture has for other countries. We need to ensure that the European higher education system acquires a world-wide degree of attraction equal to our extraordinary cultural and scientific traditions.” The Declaration formulates, on the ground of the general principles of the Sorbonne Declaration, a set of objectives “of primary relevance in order to establish the European area of higher education and to promote the European system of higher education world-wide.”

The objectives to be achieved in the first decade of the third millennium are the following: adoption of a system of degrees “readable
and comparable”, the implementation of the Diploma supplement; the adoption of a learning system based on two main cycles: undergraduate and graduate – master and/or doctorate degree; establishment of a system of transferable credits (e.g. ECTS) as a means to extend the mobility of students; promotion of mobility for students, with access to study and training opportunities and to related services, for teachers, researchers and administrative staff, with the recognition and valorisation of periods spent in a European context researching, teaching and training, without prejudicing their statutory rights; promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies; promotion of the necessary European dimensions in higher education, particularly with regards to curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research. The statement adds that achieving these objectives will be made, by “taking full respect of the diversity of cultures, languages, national education systems and of University autonomy”, in order to consolidate the European Higher Education Area.

To reflect the developments, directions and trends in the Bologna Process, we will refer to three of the reform policy documents developed by the European University Association (EUA): EUA Lisbon Declaration (2007), EUA Prague Declaration (2009) and EUA Aarhus Declaration (2011).

The Lisbon Declaration (adopted by the EUA Council in April 13, 2007), “Europe’s Universities beyond 2010: Diversity with a Common Purpose”, highlights the ways in which European universities can play a greater role in the development of the 21st century society. The Declaration is built on several basic development directions of the reform: Building the European Higher Education Area, The Internationalisation of the European Higher Education Area, Promoting Research and Innovation, Quality, Autonomy and funding. In this context, the document highlights a number of elements of major importance in the evolution of the reform, on the ground of the Bologna philosophy: Strong Universities for Europe, Universities and the Knowledge Society, A diversified university system, The fundamental importance of university autonomy, Universities and an inclusive society, A stronger student focus, ECTS (European Credit Transfer System), Creating a supportive learning environment, Increasing the employability of graduates, Lifelong learning, The Internationalisation
of the European Higher Education Area and the “Bologna Trademark”, Institutional strategies for internationalization, Promoting Research and Innovation, Linking higher education and research, Embedding high quality doctoral programmes in universities, Developing institutional strategies for research, Promoting innovation capacity, University-enterprise collaboration, Cost accounting of research activities, More flexible legal and regulatory conditions, Open Access, Quality processes and institutional mission, The link to external accountability, The European dimension of quality, Autonomy and funding, Increasing and diversifying funding streams, Private contributions to higher education. All these elements are summarized in a conclusion that expresses the purpose of the whole process of reform of European higher education: Strong Universities for Europe. In this chapter, the Lisbon Declaration states that "Europe’s universities are a major force in shaping the Europe of Knowledge." But they need the resources to fulfill their mission "not just well, but with excellence and in a way which allows them to compete with the higher education systems of other continents". Because, says the statement, "Not just Europe, but the whole world, is becoming a <Knowledge Society>". Universities live “exciting times” since their mission in the Knowledge Society is to “contribute to innovation through teaching and learning, research and knowledge transfer.” In this way, universities have a crucial role: “to shape Europe’s future” in the globalizing world.

The Prague Declaration (2009), “European Universities — Looking forward with confidence”, is structured in two main parts: I. Message to political leaders — combat the global economic and financial crisis through investment in higher education and research and II.10 success factors for European universities in the next decade. The first part includes a series of principles and action directions: Universities — crucial for the future of Europe (“through knowledge creation and by fostering innovation, critical thinking, tolerance and open minds we prepare citizens for their role in society and the economy and respond to their expectations by providing opportunities for individual development and personal growth. Through research-based education at all levels we provide the high-level skills and innovative thinking our modern societies need and on which future economic, social and cultural development depends. We strive for the long-term in addition to assuming new tasks and providing solutions to current problems.”); Universities — motors for economic recovery (“by
striving for excellence in teaching, research and innovation, by offering opportunities to diverse groups of learners, and by providing the optimal creative environment for the talented young researchers that Europe needs, universities are increasingly central to future growth and to the consolidation of Europe’s knowledge society. With our reservoir of highly trained and flexible citizens able to respond to changing labour markets and with the research skills needed to make Europe more creative and innovative, and thus ultimately more competitive, we are well placed to find answers to the global challenges of the 21st century.

Higher education and research needs a European stimulus package; A European stimulus package through higher education and research. In this context, EUA makes the following recommendations: Investing in the present generation of young researchers; Tapping unused potential; Upgrading universities’ facilities and campus infrastructure. The second part comprises 10 requirements for the success of the universities in the next decade. For inclusive and responsive universities pursuing their primary tasks of teaching and research: 1. Widening opportunities for participation in and successful completion of higher education; 2. Improving researcher careers; 3. Providing relevant and innovative study programmes; 4. Developing distinctive institutional research profiles. For strong and flexible universities pursuing excellence in their different missions: 5. Shaping, reinforcing, and implementing autonomy; 6. Increasing and diversifying income; 7. Enhancing quality and improving transparency; 8. Promoting internationalization; 9. Increasing and improving the quality of mobility; 10. Developing partnerships.

The EUA Aarhus Declaration 2011, “Investing Today in Talent for Tomorrow”, is also structured into two parts: I. Combatting the global economic and financial crisis through investment in higher education and research and II. Investing today in talent for tomorrow. The first part emphasizes some axiomatic ideas regarding the status and mission of universities in the third millennium and identifies a number of priorities: Reiterating EUA’s 2009 appeal to political leaders and decision makers: 1. Universities - crucial for the future of Europe; 2. Universities - motors for economic recovery; The changed context 2011: Meeting the challenges of the EU 2020 agenda: 3. Universities – central to the success of the EU2020 agenda; 4. Universities – addressing complex problems that need innovative solutions; 5. Universities - smart people for smart growth requires long-term
commitment.; 6. Universities – need financial sustainability to be able to keep investing in their future academic and research activities, 7. Universities - European commitment and added value. The second part
Investing today in talent for tomorrow contains an action agenda for universities, structured into three sections: Continued commitment to
the strengthening of autonomy and specific institutional profiles: 1. Widening access and increasing capacity to respond to the needs of
more diverse student populations; 2. Developing distinctive research
portfolios: 3. Ensuring that university staff and students identify with
the university and its specific mission; Clear institutional strategies
that promote talent from an early stage: 4. Strengthening the links
between teaching and research from an early stage and building research
capacity from the undergraduate level; 5. Building attractive and
transparent career structures, tracks and opportunities for all staff as
well as appropriate and supportive working environments; 6. Placing a
special focus on doctoral education and training and prioritising the
development of career opportunities for early stage researchers; 7.
Developing and promoting the circulation of talent in order to enhance
research capacity and bring new knowledge developed through contact
with different cultures and ways of thinking; Crosscutting policies
underpinning talent development: 8. Strong leadership is required; 9. A
clear internationalisation strategy; 10. An overall commitment to a
quality culture and to transparency; 11. Understanding the importance of
partnerships.

A new educational paradigm

All these transformations, which have a complex ideological and
administrative framework and evolve under the generic name of
"Bologna Process", involve not only formal changes, but also the
substance and the background of the higher education. It is a new
philosophy, a new vision, towards well-defined finalities, the
reformation of the very concept of education. They form the conceptual
foundation of the whole process, on which the Bologna reform is built.
In this context, it is important to see which the main elements of the
new educational paradigm are, constituting the active principle of
reshaping European higher education.

A major transformation in the educational philosophy of the
higher education today is moving the emphasis from teaching to
learning. The didactic process should no longer have in its core the
professor, in the position of an intangible master with absolute scientific authority. The "magister dixit" policy lives its twilight today. The "ex cathedra" lecture also ceases to be the professor's demonstration of scholarship and erudition, in a narcissistic type of academic exercise, devoid of practical purpose. The teaching process in the new vision is student-centered, aiming to deliver knowledge, to form abilities and competencies to the students in order to qualify them in their specialty areas and integrate the graduates into the labour market. In terms of the today conceptual metamorphosis, teaching is based on student involvement, on creative collaboration and emulation, in a kind of intellectual synergy dedicated to the knowledge enhancement and critical valorisation. A major challenge of the new philosophy is to transform teaching and learning in a pragmatic process based on proven results. The purpose of the act of teaching is not the teaching itself, in virtue of an "academic" tradition wrongly understood, but learning, through its results. The fundamental stake of the higher education today is the quality of learning and training, by the academic education and scientific research processes, in view of forming competent, qualified and competitive human resources for the labour market.

In the teaching-learning area developments, the multiplication of the informational sources, the rise of global information and communication technology should be taken into account, as a phenomenon that opens doors to a practically unlimited virtual library, a Library of Alexandria to the power of "n", launching an unprecedented challenge to the knowledge process.

Today's university education focuses on quality of education and not quantity. Assuring quality in the academic education by universities is one of the key principles of European higher education reform. To this end, universities must generate a "quality culture", i.e. a program to enforce and develop the quality of the education act, based on administrative, technological, and epistemological procedures and, of course, on qualified human resources, defined by competence and professionalism.

The "quality culture" also comprises two instruments, which today play a special role in European higher education reform: creativity and innovation. Creativity as an attribute of intelligence fosters innovation, it generates ideas and solutions in the complex process of knowledge. Under today's global competition in academic education and scientific research, creativity, innovation, ability to discover
The new paradigm of higher education in the Knowledge Society

constitute key elements that differentiate institutions among each other and rank them on the performance scale. In the new paradigm of education, creativity and innovation, expressing the openness of intellect to knowledge, are challenges addressed both to the academic staff and to the students in the teaching and learning process. They develop due to the acceptance of risks, sometimes inherent in such circumstances, an attitude which belongs also to the "quality culture".

The quality of education and learning is assessed in terms of results. To make the teaching and learning act efficient, to open horizons in the academic education and scientific research in terms of innovation and creativity and in view of the linkage of higher education with the labour market, essential strategy changes should occur in the educational process. The new model involves complex inter-and transdisciplinary approaches, in a holistic, fundamental vision, considering the knowledge process from an integrative perspective.

All these elements, quality, creativity, innovation, refer not only to the academic education, but also to the scientific research, both fundamental areas of the university. In these circumstances, the third millennium university aims to be an institution of excellence and performance in education and scientific research, globally competitive in a globalized world.

In the spirit of the Bologna Process, mobility of students and didactic staff, experience exchanges, diversification of the knowledge sources and of the training methods represent other defining elements of the higher education metamorphosis.

The third millennium university, in the context of internationalization and globalization of education, is an institution open to diversity and multiculturalism, which anyone can access. This metamorphosis gave birth to the phrase "Open University", which has become lately the concept of a new philosophy and approach in higher education.

University which is built today for the future is a strong institution, defined by quality, performance, responsibility and autonomy, the core of the European space, which generates fundamental changes and developments, a factor of progress towards the knowledge-based society and economy.
The University of the Future versus the Classic University? Antagonic or Complementary paradigms?

Between the first European universities, of Bologna, Paris and Oxford, and the third millennium university stretch nine centuries of history and evolution. Over time, the university has gone through several metamorphoses imposed by the nature and requirements of societies and historical epochs.

In modern times, especially in the twentieth century, higher education has evolved from holistic approaches of knowledge, on the basis of a comprehensive gnosiology, to strict specializations, to the epistemological isolation of the knowledge branches and subjects, customizing the original meaning of the concept and institution "university".

In the Eastern part of Europe, hit by the scourge of totalitarian ideology, history isolated the university as an institution, cutting its bridges to the West and the world, transforming it into a regional entity, lack of communication, a closed space.

The opening that defines today's European society and globalization determine a new metamorphosis of the university and requires a new educational model. But what is this transformation expressing and how new is "new model"? Analyzing the elements of the institutional reform in European higher education and the new educational paradigm, we find a tendency to return to the classic model of the university, to recover, in essential aspects, the "old" paradigm, and not a radical dissociation, in the spirit of a future launching multiple and complex challenge to us.

Europe, in its various historical situations, was deeply influenced by the educational model generated in the first universities and perpetuated afterwards. The Knowledge society towards which the new Europe is heading constitutes the product of the university, a new and old institution at the same time, adapted to the current requirements. An open university, free, integrated in the European Higher Education Area, a part, in turn, of the international and global circuit.

The Bologna model of higher education reform is built, in its essential elements, on the classic model of the University of Bologna and on the others which followed. It is a symbolic return to the past, but a past always present by the power of a perennial model, looking into the future, that is coming, in every second, impetuously to us.
Bibliography:

Sanz, Nuria, Bergan, Sjur (Eds.) – (2006), *The heritage of European universities* (second edition), Council of Europe Publishing
EUAs Contribution to the Bologna ministerial meeting, London 2007,
The Lisbon Declaration, Executive summary of the Trends V Report,
Creativity in Higher Education, Report on the EUA Creativity Project
Managing the university community: Exploring good practice, EUA
Case Studies 2007
EUA: *The Lisbon Declaration*, Brussels, 2007
EUA: *The Prague Declaration*, Brussels, 2009
EUA: *The Aarhus Declaration*, Brussels, 2011