

Creation of the European Space for Higher Education

Introduction

Culture and European culture

Education at all levels, starting from the pre-primary school to university level is the reflection of culture. In other words, culture is the cornerstone as well as the environment of education, which is the means by which our culture is passed on and innovated. But what do we mean by “culture”? In all my investigations, the best and most comprehensive definition that I have found and finally adopted is the one proposed by Denis de Rougemont. He said that our cultural heritage consists of an ensemble of religion, philosophy and arts. Political organisation, moral or ethical views, judgements, the principles of democracy, of citizenship, languages, music, our culture is all these human creations but it is also mathematics, science and, to an increasing extent in today’s world, it is technology.¹ In fact, this definition corresponds to Ancient Greek culture, which was characterized by its impetus, its search for truth and expansion beyond its geographical frontiers; but also by its openness to other cultures, its capacity to assimilate some of their contributions. This quest for knowledge and capacity to innovate is one of the most precious legacies, which Ancient Greece passed on to Europe.

In general terms, Rougemont’s definition can be applied to Ancient Greece as well as to present-day Europe. A closer and more detailed investigation highlights some major differences, for example the geographical dimension, industrialization and economic development, exposure to scientific discoveries, advanced technologies and the process of accelerated innovations, ever increasing specializations in various disciplines and a diminished capacity to apprehend

¹ D. de Rougemont, *Œuvres complètes III : Ecrits sur l’Europe*, vol.I, Paris, édition de la Différence, 1994, p.368.

globally all these elements and trends. Progress has however been accomplished regarding recognition of persons respect of the individual, a concept inherited from stoicism and Christianity, which resulted in the abolishment of slavery and the introduction of human rights. Another distinct feature is the change which has occurred over centuries to the structure and functioning of democracy when we consider its present-day form in our highly complex societies. Evolution and revolutions have brought about many changes but the initial concept was created at the time of Pericles. All these examples should be studied systematically but our debt to Greece is incommensurable. To conclude on this point, I would like to stress the fact that the harmony of ancient culture still appears as the grail we strive for in today's complex and fragmented world, faced with many challenges and threats such as climate change and pollution produced by constant development and our efforts to master nature.

European integration is today's answer to the divisions and conflicts which originated from the emergence of the Nation-State. This movement embraces the principle of sharing sovereignty and the creation of an economic space without frontiers: free movement of goods, people, investments and services, and as a result, strengthening *de facto* solidarity, “*solidarité de fait*” referred to by Jean Monnet. The emergence of the knowledge society and of the space for higher education corresponds to the main objectives of the European Union.

Among various obstacles to a more integrated European Union, the economic crisis poses a real threat. It shows that the movement towards integration is not irreversible. The spill-over could become the spill-down. The emergence of nationalist, populist and extremist movements and ignorance and narrow-mindedness (national or local) were and still are the main obstacle to a union of peoples in Europe.

Education is the best antidote to these traditional and new obstacles. Education at all levels, from pre-school age, through secondary school up until higher education, all these steps of progressive learning from basic to top-level education constitute the main task of universities in Europe: to train qualified, competent, European-minded teachers who have internalized their multiple loyalties at a local, regional, national and European level.

In this way, we will contribute to shaping the modern citizens of Europe, who will be well-educated and trained in different disciplines, well-informed and knowledgeable. University as a later step in learning is supposed to teach students to maximize their knowledge, but also to teach them a sense of respect for other citizens, and to develop motivation and awareness of their contribution to society and to Europe. The process of cooperation between universities in Europe, which were part of nation-building, is based on the *magna carta* principles and on the concept of university networks, European research projects and exchanges of teachers and students.

Bologna defined common rules and harmonious university teaching, duration and evaluation. On this basis, Erasmus introduced mobility of students and professors which, as we remember, already existed in the Middle Ages. A good example was the University of Paris, where the most eminent professors were not French. The criteria for selection were their qualifications and their personality. Free movement at this time was also to the benefit of painters, architects, as well as scientists and philosophers.

A change occurred with the emergence of the nation and national identities, which introduced frontiers and limited the circulation of students and teachers in Europe. Paradoxically, this was specifically the case in France but also in some respect in Germany, England, Italy and Greece. In these countries, the priority

was given to local professors. With the creation of the European Union those protected spaces – with some exceptions as in the case of Switzerland – were becoming more open. In fact, a consequence of general free movement within the European Union is the process towards integral liberalization of the movement of professors, teachers, researchers and students. Today the EU aims to create a knowledge society. At present, the competition in the global world of learning is a strong incentive for the realisation of the European University Space. The European Knowledge Society represents a valuable asset in the light of the competition with United States, Russia and emerging powers such as India and Brazil.

Building the European University Space

The general aim is to create, step by step, a European University Space based on free movement of ideas, research and innovation. To illustrate this process I will refer to some concrete examples.

1. **Magna Carta Universitatum**, subscribed to in Bologna in 1988 by rectors of European universities, which defined the fundamental principles; considering that the future of mankind depends largely on cultural, scientific and technical development, and that this is built up in centres of culture, knowledge and research as represented by true universities. They must also serve society as a whole by providing considerable investment in continuing education as well as by offering future generations education and training to respect the great harmonies of their natural environment and of life itself. At the same time, Magna Carta defined fundamental principles such as for example the independence of teaching and research, which must be inseparable. It stresses that freedom in research and training is the fundamental principle of

university life, and this fundamental requirement must be respected. The importance of rejecting intolerance through dialogue, and I might add, through dynamic cooperation between teachers and students. A university is the trustee of the European humanist tradition; its constant concern is to attain universal knowledge; to fulfil its vocation it transcends geographical and political frontiers, and affirms the vital need for diversity in order to know and influence each other. If I may add to these principles, I would propose that we insist on the necessity of an interdisciplinary approach and the establishment of networks of research and innovation throughout the whole European University Space.

2. Similarly, the **Bologna declaration** established the system of credits in order to facilitate student exchanges. Their mobility was supported by the existence of Erasmus scholarships for students and fellowships for professors. The Erasmus programme for mobility and exchange is one of the most successful projects of the European Commission. As illustrated by the film “L’Auberge espagnole”, it provides the best opportunity for students to learn different languages and to experience the diversity of cultural environments and different mentalities. In the 2010-2012 academic year 231’410 students went to another country to study or to train.
3. **Research and development.**

At the same time, the European Commission has been implementing framework programmes since 1984. These framework programmes have enabled the creation of huge networks of researchers connecting universities, polytechnic schools and research institutes. As explained on the website of the EU Commission: “The Seventh Framework Programme for research and technological development (FP7) is the European Union’s main instrument for funding research in Europe. FP7, which applies to the years 2007-2013, is the natural successor to the Sixth Framework Programme (FP6), and is the result of years of consultation with the scientific community, research and policy making institutions, and other interested parties. Since their launch in 1984, the Framework Programmes have played a lead role in multi-

disciplinary research and cooperative activities in Europe and beyond. FP7 continues that task, and is both larger and more comprehensive than earlier Framework Programmes. Running from 2007 to 2013, the programme has a budget of 53.2 billion euros over its seven-year lifespan, the largest funding allocation yet for such programmes”². The priorities in FP7 are contained within several specific programmes:

- The Cooperation Programme which includes the following themes: health; food, agriculture and fisheries, and biotechnology; information and communications technologies; nanosciences, nanotechnologies, materials and new production technologies; energy; environment (including climate change); transport (including aeronautics); socio-economic sciences and the humanities; space and security.
- The Ideas Programme is the first time an EU Framework research programme has funded pure, investigative research at the frontiers of science and technology, independently of thematic priorities.
- The People Programme: it provides significant support for research mobility and career development, both for researchers inside the European Union and externally. The programme includes activities such as initial researcher training, support for lifelong training and development via trans-national European fellowships and other actions, and industry/academia partnerships.
- The Capacities Programme: embraces six specific knowledge areas, including Research Infra- structures, Research for the benefit of SMEs, Regions of Knowledge, Research Potential, Science in Society and International Cooperation activities.
- Nuclear Research: is divided in two parts. The first one aims to develop the knowledge base on nuclear fusion, and to realise the experimental ITER fusion reactor. ITER is set to be the biggest research project on Earth. The second one covers nuclear safety, waste management for nuclear fission facilities, and radiation protection.

4. European Institute of Innovation and Technology (EIT)

² http://ec.europa.eu/research/fp7/pdf/fp7-brochure_en.pdf

The EIT was created in 2008 at the personal initiative of President Barroso who promoted the idea in February 2005. It took three years of consultation between a group of Nobel prize winners whose findings were conveyed to the President of the EU Commission. After defining the conceptual framework of the institute, it took a long time to convince governments of its merits and to overcome the resistance of universities. During this process, it was essential to explain that the EIT had an innovative and regional aim, namely to establish quicker links between the results of research and their conversion into concrete application.

Inspired by the experience of MIT and of CERN, it proposed establishing a European “knowledge-triangle” of research³, education and technology transfer by providing a world-class model for teaching and research partnerships between academia and business. This ambitious project was progressively reduced to a more modest EIT supported by a small administrative unit (40 members) and by a huge network. The year after its creation, the Institute launched its three innovation clusters – the Knowledge and Innovation Communities (KICs) – focusing on climate change, energy and information technology. The KICs are being touted as Europe’s “innovation factories”. They aim at building bridges between students, researchers and entrepreneurs in order to close the “knowledge triangle” and bring innovations to the real world of business. Their main tasks are:

- address long-term challenges in the themes and identify and tackle new opportunities for innovation in Europe;
- transfer higher education, research and innovation activities to the business context and commercial and societal applications (stimulating innovation particularly in start-ups and supporting SMEs);

³ « Vassiliou defends funding boost for EU’s fledgling innovation factory », Euractiv.

- attract, keep and work with partner organizations and top-class talent from around the world;
- develop entrepreneurial people and bring them to business;
- address learning innovation-driven research;
- set up new schemes of innovation-focused education through EIT-branded master, doctorate and post-doctorate education⁴.

The activity of a KIC must involve at least three independent partner organisations. The partners must be established in at least three different EU Member States and must include at least one higher education partner and one private company. KICs are characterised by geographically dispersed people who are brought together for significant periods to work in centres where individuals from different cultures, countries and organisations (industry, academia, research etc.) are co-located in significant parts of the innovation chain known as co-location centres. At present, in order to develop the activities of the EIT and the KICs, the European Commission has called for a three billion euro budget.

5. Erasmus Mundus Programme

This programme is Ms Viviane Reding's baby, who at that time was Commissioner for Education and Culture. The aim of the project is to offer joint doctorates supported by fellowships with a view to attracting the most promising talents from Europe but also from outside. The programme covers many fields from engineering and science (mathematics and computing) to health and welfare, humanities and arts, social sciences, business and law. It is a very successful and innovative programme. For example during the academic year 2011-2012, a total of 34'700 scholarships were awarded to Master students and 3'335 to PhD students. These doctoral-level training and

⁴ « The European Institute of Innovation and Technology. Call for Proposals EIT-KICS-2009–Knowledge and Innovation Communities ».

research programmes offer fellowships covering up to three years of doctoral activities. After having provided scholarships for undergraduate and master students, the Erasmus mundus offers the opportunity to complete a doctorate at the highest level.

6. Jean Monnet Programme

The Jean Monnet Programme is one of the oldest European Programmes, which has been integrated into the broader Lifelong Learning Programme since 2007. The first Jean Monnet Chair was paradoxically awarded to Swiss Professor Henry Rieben, author of a thesis on the European Coal and Steel Community in 1957 at the University of Lausanne. It was in the Vaud Canton in Switzerland that Henry Rieben developed a huge network of subscribers to the journals of the Jean Monnet Foundation. He informed and recruited many supporters of the European project in cities and even villages in remote parts of Switzerland. Until his death, he was teaching on the subject of European integration and acting as Chairman of the Jean Monnet Foundation, which he created in collaboration with the University. The Foundation is still very active and it hosts all the manuscripts of and documents on Jean Monnet. As curious as it may seem, Henri Rieben became a good friend of Jean Monnet and obtained from him all his intellectual heritage.

Today the Jean Monnet Programme relies on a network of teachers and researchers on European history, politics, economics and law. There are approximately 2'000 Jean Monnet Chairs around the world with an expected growth of +150 Chairs per year. It is important to mention that every year the Jean Monnet Programme organises a Congress convening all the Chairs, in the presence of the President of the Commission and various Commissioners and European officials. These are forums providing the opportunity for an exchange of ideas and experiences between European high officials and

academics. The Foundation also selects and finances projects which are supported by the “Education Audio-Visual Executive Agency”. The Jean Monnet Programme as a large group and network of teachers and researchers has become a worldwide influential institution.

Closing remarks

The first obvious statement is that all these actions of the European Commission, which are not very well known to European citizens, have a common objective, which is to enhance the quality and the quantity of research and to stimulate and support teaching activities in the European University Space. But they also aim to offer new opportunities for growth and jobs in Europe by promoting a high quality of research and teaching. The link which the European Institute of Innovation and Technology builds between the output of the research and business community is connected directly with the aims of the European Union and with the Europe 2020 Plan. This is the guarantee of the complementarity and mutual support of different programmes and actions of the European Commission.

European cultural cooperation and activities appear as an “echo” of the Ancient Greek model of culture. At that time, Athens provided an admirable example of the cohabitation of philosophers, mathematicians and geometers with writers and teachers, without forgetting musicians. According to accounts by Jean Philopon and John Philoponus, both neoplatonist philosophers who lived during the VIth century AD and confirmed by John Tzetzes, a Byzantine poet from XII century AD, the following words were engraved at the entrance to Plato’s Academy: “Let no one ignorant of geometry enter”. This proves the interest that Plato had in geometry and arithmetic. In his “Republic”, Socrates says

“...arithmetic is a kind of knowledge in which the best natures should be trained, and which must not be given up”. Speaking about geometry, which is useful for military purposes and specifically for constructions, he concludes that knowledge is a science in itself and that the knowledge which geometry aims to achieve is the knowledge of the eternal; adding that geometry will draw the soul towards the truth and create the spirit of philosophy.

The knowledge of these two basic sciences permitted Greek architects to build the amphitheatre at Epidauros with exceptional acoustics and the Parthenon using the marble sculptures of Phidias, which as a major symbol of our culture deserves to be reunited. This is the aim of the International Association for the Reunification of the Parthenon Sculptures. These extraordinary monuments were built in an exceptional cultural environment. Athens, the city where democracy was invented, is an example of the role of liberty, commerce and economy in relation to the creation of arts and temples. In my view, the Athens of Pericles represents a global cultural model, reproduced later by Italian cities like Pisa, Bologna or Florence. As in Ancient Greece, these cities were confronted with rivalry and wars and the necessity to form alliances. Faced with the external enemy, the Greek Amphictyons were not united enough to survive. This provided a historic lesson for the European Union, which replaced a fragmented Europe with a movement towards United Europe.

And now, to end this brief presentation, I wish to return to the subject of the present crisis in Europe and to tell you that I am convinced that it is our duty to maintain Greece in the Eurozone. The exit of Greece will be the beginning of the end of our European dream. Therefore, we have to prove our solidarity with Greece as with Portugal, Spain and Italy, in order to develop and consolidate a core area, which is represented by the Eurozone. But we also have to help Greece to utilize more efficiently its human resources and its exceptional environment. In

this way, the European Union will pay its debt to the Greeks for the fundamental and irreplaceable contribution Ancient Greece made to European culture.