

Higher education: from « unclear technologies » to human resources management techniques

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Even though a consensus has not emerged on the proper concept of a university, many sociologists have for a long time based their research on the work published in the 1970s, in which universities were regarded as organisations that operate in a particular way. They were approximated to “organised anarchies” (Cohen et al., 1972) or to “loosely coupled systems” (Weick, 1976 ; Orton and Weick, 1990) which were considered host to “unclear technologies” (Cohen and March, 1974). This article call into question these concepts and confront them with the evolution of the piloting way of contemporary establishments of higher education.

This chapter is divided in five parts. The first briefly recalls in broad terms the impulses shaping the interventions of international organisations in the higher education systems in Europe. The second and the third parts concern the different instruments (such as ECTS and diploma supplement) developed by international organisations and their integration in an apparatus (in Foucault’s sense) of standardization of higher education. The fourth analyses the effects of these instruments and of the apparatus on academic profession and inscribes the article in the whole of works (see for example Derouet and Normand, 2011; Evans and Nixon, 2015; Lucas, 2014; Normand, 2015) examining the nature and extent of the changes experienced by the academic in their teaching profession in recent years. The fifth studies how these instruments (and notably the learning outcomes approach) transform each segment of the university and generate a deep interdependence between all of them.

From the promotion of mobility to the normative intervention of international organisations in establishments of higher education

Since the 1950s, different initiatives have been taken by various international organisations, in particular the Council of Europe and UNESCO, each one at its own degree, to facilitate the movement of higher education students and staffⁱⁱ. These initiatives did not give rise to the request for mobility. Instead, they were intended to provide a first framework to allow for the mobility of university staff and students and to further foster the development of an academic exchange network. These initiatives, thus, supported and accompanied a structural movement towards greater mobility, exchange, and collaboration between higher education establishments, researchers and students. In 1987, the European Commission started the Erasmus project, which benefited only a very small proportion of students. Some commentators take the view that the Erasmus programme has not really democratised student mobility (Ballatore, 2010). However, Papatsiba (2006) provides us with another interpretation. Based on the analysis of official texts, emanating, in particular, from the European Commission, she shows that support for student mobility was a means used by the European Commission to stimulate the convergence of European systems of higher education :

“Without disregarding the tension between popularity and limited impact of EU mobility programmes, I argue that promoting student mobility was not an act of a limited ambition, but on the contrary, an initiative aiming at the foundation of a

system of higher education institutions at a European level.” (Papatsiba, 2006: p.93)

The Erasmus programme, thus, reinforced a structural movement that already existed. It strongly contributed to promoting the idea of mobility and to its integration into the strategies of distinctionⁱⁱⁱ of higher education students in European countries. In doing that, it changed the perception of Europeans towards higher education. Furthermore, it prepared the cultural ground for the reforms adopted by all the systems of higher education following the launch of the Bologna Process in 1999. The Bologna Process started at the Sorbonne in 1998. Not surprisingly, the arguments made in the Joint Sorbonne Declaration remained focused on the promotion of mobility :

“Universities were born in Europe, some three-quarters of a millennium ago. [...] In those times, students and academics would freely circulate and rapidly disseminate knowledge throughout the continent. Nowadays, too many of our students still graduate without having had the benefit of a study period outside of national boundaries.”

The main objective of the Sorbonne Declaration was, thus, the promotion of mobility. In order to realise this goal, it was necessary to take technical measures, such as the use of credits and semesters, or improvements in the transparency and comparability of programmes. These technical measures were not put forward for their intrinsic value; they were justified only by their possible contribution to achieving the goal of supporting the mobility that they served. We see that the reasoning of the authors of the Sorbonne Declaration is in line with the programmes of the European Commission to support mobility. The European Commission had no mandate to intervene in the functioning of higher education establishments; its only authorised act was to support mobility. The *Memorandum on Higher Education in the European Commission* (European Commission, 1991), which announced the intervention of the European Commission in higher education, reflects this understanding. The competence of the European Union as regards education was first recognised by the Treaty of Maastricht of 1992. In this text, the European Union’s competence was, however, restricted by the principle of subsidiarity, which necessarily limited the capacity of the European authorities to intervene in higher education.

Nevertheless, after the false start at the Sorbonne in 1998, the project to create a European higher education area took shape in Bologna in 1999. With regard to its objectives, the promotion of mobility was relegated in importance and the primary focus shifted to the imposition of technical measures. The promotion of mobility was, of course, recalled in the Bologna Declaration, but it was subordinated to the adoption of technical measures, which were to “adopt a system of easily readable and comparable degrees”, to “enhance transparency” and to reinforce the “co-operation in quality assurance”. In other words, starting from 1999, the realisation of these technical measures became the ultimate goal. The Bologna Process was then integrated into the Lisbon strategy – which envisaged construction of a European knowledge-based society^{iv} – and became an essential axis in this strategy (Croché and Charlier, 2009).

The subsuming of the Bologna Process into the Lisbon strategy reinvigorated the commitment to the attainment of the technical measures. Indeed, the project to ensure the comparability of academic degrees ceased to be used solely for improving mobility between establishments of higher education; it also became essential to stimulating the

economy. From that point on, the sole challenge was the development of technical means to accurately measure students' learning. On the one hand, it was of paramount importance that increased mobility would enable students expand their educational profile and contribute to a European professional elite. This required that they would move only between establishments having comparable academic levels. On the other hand, it was imperative to accurately measure the professional skills of candidates dispersed across the vast territories comprising the countries participating in the Bologna Process. This process was integral to providing high calibre candidates to companies, which, benefiting from the contributions of such candidates, would achieve profit maximisation. In 2010, the proclamation of the European higher education area was accompanied, *inter alia*, by a review of the Bologna Process' objectives. In contrast with the 1999 declaration, it was emphasised that the main aim of the Bologna Process was to make the European higher education systems more comparable, more compatible and more coherent.

“As the main objective of the Bologna Process since its inception in 1999, the EHEA was meant to ensure more comparable, compatible and coherent systems of higher education in Europe. Between 1999 - 2010, all the efforts of the Bologna Process members were targeted to creating the European Higher Education Area, that became reality with the Budapest-Vienna Declaration of March, 2010.”^v

This trajectory of the discourse on the objectives of the Bologna Process mirrored the evolution of the policies implemented by the Bologna Process piloting group, particularly by the European Commission. Starting with the Berlin Summit in 2005, normative instruments of organisation of higher education were proposed and adopted. This initiative was taken with the full agreement of state representatives. A fresh instrument was adopted during each summit of the Ministers of Higher Education from the European higher education area. Thus, having regard to the democratic process of their adoption, the instruments are cloaked with an undeniable legitimacy.

Multiple and inter-connected instruments in European higher education

By their very nature, some of these instruments appear not very constraining and, further, seem to bind only the establishments which adopt them. This is, for example, the case with respect to the labels “Diploma supplement” (DS)^{vi} and “ECTS”^{vii}, that have existed since 2003 and 2004, respectively, and are “honorary distinctions”^{viii} granted by the European Commission “to higher education institutions which show that they are implementing ECTS and/or the DS correctly” (European Commission, 2014: p.3).

Although they appear not to be very constraining, these instruments – in particular, the ECTS label – contribute both to the reinforcement of constraints which weigh on the establishments and to the control which can be exerted on their functioning. The quantitative data suggest that the impact of the ECTS label is very weak, almost negligible. Indeed, only 91 establishments were granted it between 2009 and 2013^{ix}, a mere 11.4 per cent of the 850 universities from the 47 countries which are affiliated to European University Association^x or – and this comparison is more relevant – 1.5 per cent of the 6.400^{xi} recognised establishments of higher education in the European higher education area.

Table: Number of universities having received the label ECTS from 2009 to 2013, by country

Turkey	31	Slovak Republic	3
Czech Republic	12	Lithuania	2
Belgium	6	Norway	2
Portugal	6	the Netherlands	2
Austria	5	Sweden	2
Italy	5	Germany	1
Finland	4	Bulgaria	1
Poland	4	Denmark	1
Cyprus	3	Latvia	1

Source: authors' computation, based on the Erasmus + 2015 tables, pp. 40-55

The analysis of the list of countries whose universities received the ECTS label since its creation has some surprises. The number of universities that received the ECTS label in Turkey (31 out of 139) and in the Czech Republic (12 out of 73) contrasts with the ratio identified in the majority of the other countries. The four signatory countries to the Sorbonne declaration (Germany, France, Italy, the United Kingdom) – which preceded the Bologna Process – showed little interest in being granted this label, whereas, in 1998, these four countries counted for more than 50 per cent of European higher education students. No university in the United Kingdom and France was granted this label, whereas only five Italian establishments (out of 219) and only one German establishment (out of 355) received it. This observation highlights the highly differentiated relationships that the countries of the European higher education area maintain with the regulations or recommendations emanating from the Bologna Process. In the large countries, with a strong university tradition, conformism is rare. This is not the case for the countries located at the periphery of the European higher education area, or for those of small size, which intend to weigh on the orientations of the European higher education system. In these countries, conformism constitutes a rational strategy^{xii}. The empirical observations supporting this contribution should be interpreted in light of the fact that the evolutions recorded in various “small countries” were stimulated by factors from which no country of the European higher education area has escaped. That being said, the reaction of these small countries may be interpreted as being marked by a concern for overconformity which had not been observed in any of the large countries.

It should be added that not all the establishments which obtained the label ECTS seemed overly eager to preserve it. Prestigious universities, some of which hosted summits of the Ministers of Higher Education in connection with the creation of the European higher education area, did not file an application to renew their ECTS label. This occurred, for example, in the case of the Universities of Aarhus (Denmark), Bologna (Italy), Leuven (Belgium), and the technical universities of Karadeniz (Turkey) and Lisbon (Portugal).

That being said, even if, objectively, there has been no massive movement of the universities towards the ECTS label, and, even if, in the large countries with a strong university tradition, the interest in this label seems very weak, the creation of the ECTS label was not without value for the European authorities. In the application request that

universities submit for the label, they offer information that the European Commission would have difficulty in obtaining by other means. This information relates of course to the purposes for which the establishments intend to use the ECTS label, but it has, in fact, a much broader application. The European authorities do not attempt to conceal this fact. In fact, they have publically announced that the requests introduced by the universities are not examined only from the angle of ECTS label use:

“DS Label applications have [...] also shown that the concept of ‘learning outcomes’ is applied in various ways, and that the question of student workload is tackled in different ways when designing programmes and curricula. These important issues will be part of the new ECTS User’s Guide [...] The ECTS User’s Guide should help all institutions and academics to meet the challenge of applying ECTS, and particularly of ensuring a learning outcomes based approach at every stage of the design, delivery and assessment of an education programme” (European Commission, 2014 : p.5).

Whether or not it was conceived with this intention, it appears that the ECTS label constitutes a very effective means both of obtaining information on the universities’ internal policies and practices and of testing the effectiveness of the tools promoted by the European authorities to pilot higher education. It is undeniable that the implementation of this label necessarily implies the standardisation of study structures, which is made explicit by the European Commission as well in the quotation above and in the definition it gives. The ECTS label is accorded only to establishments that “correctly” apply the ECTS system. The goal of standardisation was, in fact, the impulse for the creation of the label. Starting in 2003, the report on *Les avancées de l’espace européen de l’enseignement supérieur* suggested that “The introduction of the label ECTS will lead to a clear qualitative improvement in the uses of ECTS” (Reichert and Tauch, 2003: p.12).

Increasingly precise instruments integrated into an apparatus of standardisation of higher education

In order to update and specify the contents of the ECTS Users’ Guide, the group in charge, set up by the European Commission, held various consultations. The Guide was then adopted by Ministers for Higher Education of the European higher education area during the ministerial conference at Erevan, on 14 and 15 May 2015. “It is therefore the official Guide for the use of ECTS” (European Commission, 2015: p.7). This adoption does not automatically give it binding force but it, nonetheless, enjoys total legitimacy in all the countries of the European higher education area. A short section of this guide is entitled “ECTS and quality assurance”. It opens with a sentence which takes for granted that the ECTS contributes to improving the quality of higher education and that the implementation of the ECTS must be the object of an evaluation. “This section outlines how the ECTS contributes to quality enhancement in HEIs [Higher Education Institutions] and gives examples for the evaluation of ECTS implementation.” (European Commission, 2015: p.50). No demonstration however comes to back up these two assertions. However, once again, the European authorities will point out that the ECTS must be used appropriately so that it improves the quality of higher education: “Good practice in using ECTS will help institutions improve the quality of their programmes and their learning mobility offer” (*idem*: p.51). The Guide specifies how to evaluate the use of the ECTS.

“ECTS use should be quality assured through appropriate evaluation processes (e.g. monitoring, internal and external quality reviews and students’ feedback) and continuous quality enhancement. In evaluating the effectiveness of a programme (including the learning outcomes, workload and assessment methods) a number of measures will be used. These may include high dropout or failure rates or longer completion times. A programme can be considered effective when its goals are attained in due time, that is to say when students achieve the defined learning outcomes, accumulate the required credits and obtain the qualification as planned in the programme.” (European Commission, 2015: p.51)

It is no longer a question of awarding honours to the establishments which use the ECTS in an adequate way. It is now a question of integrating the evaluation of the ECTS use into the establishments’ quality control procedures. The consequences are very different. An establishment can do perfectly well without the ECTS label; the low number of those which have acquired it attests to its expendability. Nevertheless, an establishment runs undeniable risks of isolation if the quality assessment of the educational programmes which it offers is poor.

The implementation of quality control instruments in higher education establishments has been progressive (Croché, 2009; Saarinen, 2005)^{xiii}. All these instruments appear inter-connected today; they mutually reinforce each other to form a European higher education apparatus. Two of the essential parts of this apparatus are the *Standards and Guidelines for Quality Assurance in the European Higher Education Area*^{xiv} (ESG) and the *European Quality Assurance Register for Higher Education* (EQAR). The ESG establish the standard, whereas the EQAR sanctions the institutions which do not follow the standard. The ESG were published for the first time in 2005 by the European Association for Quality Insurance in Higher Education (ENQA), created pursuant to a proposal of the European Commission in 1998. They defines the various aspects of their functioning and delineates the criteria higher education establishments must comply with if they seek to adhere to a quality enhancement perspective. It also regulates the quality assurance agencies for higher education. These agencies are included in the *European Quality Assurance Register for Higher Education* (EQAR) only if they scrupulously conform to the regulations set forth in the ESG. “In order to appear on the register, the applications should be evaluated on the basis of substantial compliance with the ESG, evidenced through an independent review process endorsed by national authorities”^{xv}.

Thus, the European higher education apparatus appears perfectly integrated. In each country of the European higher education area, all the establishments which seek to profit from the Erasmus programme are required to be evaluated by a quality assurance agency, recognised by the EQAR. In the knowledge that all the prestigious establishments tend to validate their image of excellence by the quality of the international exchanges which they establish, one can easily deduce that, for an average establishment, the cost of being excluded from the exchange system is extremely high.

The power of the apparatus is due to the fact that prescriptive messages are sent to all the facets of the organization and of management of the higher education establishments. Even if they appear independent from one another, and even if they possibly emanate from different sources, they tend to converge on their reformulated definition of the role of higher education. In this new definition, the emancipation of the

individual and the group holds a less important place than their contribution to economic prosperity and social cohesion. For example, Parker (2011) considers that contemporary accounting and accountability techniques in use in different countries aim to modify the identity and the role of the academic community. According to Scott (2003), accounting systems are among the most important conventions which connect institutionally defined belief systems to technical activities. None of the implemented instruments is, thus, neutral, even those which appear strictly technical. Each instrument contributes to produce an image of the role that higher education should play in contemporary society.

Based on a lexicometric analysis of the European Commission's official texts related to higher education, Cusso (2006) concluded, as early as 2006, that the Bologna Process and the European Commission were working to implement a standardised quality assurance system and to promote a managerial functioning in higher education. The evolutionary process which has taken place since that date largely confirms this analysis.

The apparatus reaches the heart of the teaching profession and acquires a new legitimacy

Listing the entire range of instruments set up to standardise higher education in all facets of its functioning would probably be a somewhat taxing task and would serve little useful purpose. We are interested here only in those instruments related to the organisation and the practice of higher education, and do not, therefore, intend to treat of those related to the management^{xvi} of the actual educational establishments. One of the common characteristics of such instruments is that they were presented as trivial, a fact that contributed to hide their potential for change. The majority of them did indeed involve reforms which could be regarded as strictly cosmetic. Let us take two examples. The passage on the architecture of studies according to the "3-5-8" model frequently failed to produce any change as regards the exercise of the academic work^{xvii}. This new configuration of studies would however require that the first cycle ("3") provide graduates with marketable skills. Moreover, its framework defines the doctoral thesis as an applied exercise that can be accomplished in three years; this vision reformed the manner in which the doctoral thesis was perceived – as a product of one's long line of thought. These two requirements are frequently neglected; but this does not mean that the potential for change of the "3-5-8" architecture is definitively neutralised. Likewise, in many establishments, the conversion to the ECTS system did not have any effect on academic practices and it was mainly mechanical. A certain number of lecture courses was transformed into an ECTS equivalent. However, conceiving and organising teaching in the manner envisaged by ECTS would necessitate a major transformation of practices. For example, it would imply a strong reduction in the activities dedicated to the transfer of knowledge. In this case, as in the case of the "3-5-8" framework, observing that the requirements related to the ECTS are often bypassed leads us to the conclusion that the instruments' potential for change is negated.

The potential for change of these various instruments can appear only if favorable circumstances allow it, and if actors, therefore, choose to activate them. Illustrations are provided by A. Gorga and M. Souto Lopez. Gorga (2011) highlights in her research the structural factors that encouraged the Swiss and the Romanian authorities to create

quality assurance and quality control procedures in higher education. Souto Lopez (2015) shows how the challenges addressed to universities regarding the rate of failure of their students contributed to legitimating multiple teaching experiments. The context studied was French-speaking Belgium where the level of public funding for each establishment is directly determined by its market share, and where the scientific field is structured by its own logic. The commitment of the French-speaking universities in Belgium to overconform to applications of the learning outcomes model can be read only as a consequence of the conjunction of two distinct elements. On the one hand, an incentive was provided to establishments by the European authorities to organise their teaching according to defined learning outcomes. On the other hand, a particular restructuring of power in the university led decision makers to give the necessary authority and means to technicians to impose this logic on the establishments.

Among all the standardisation instruments of higher education, learning outcomes undoubtedly have the highest potential for transformation of the university teaching profession. The definition of learning outcomes is given for the first time in the European prescriptive texts, in particular, in the ECTS Users' Guide 2004. The learning outcomes are, thus, defined as: “statements of what a learner is expected to know, understand and/or be able to demonstrate after a completion of a process of learning” (European Commission, 2004: p.44)^{xviii}. This explicit presentation of the results that the learner can expect at the end of his or her personal learning pathway is common in countries where the financing of studies is either totally or partially provided by the students. However, defining learning outcomes goes against all traditions in countries where this financing is provided by the community. Today, in countries where the volume of public funding of education depends directly on the market share of each establishment, the learning outcomes model is applied on a voluntary basis.

Souto Lopez (2015) presents a history on the introduction of learning outcomes to the piloting system of the European higher education area's establishments. He shows that the learning outcomes' potential of control as regards the effectiveness of the professors' work was suggested starting with the European texts of 2005 and the report “A Framework for Qualifications of the European Higher Education Area” published by the Bologna Working Group on Qualifications Framework (BWGQF). In order to produce this report, the BWGQF based itself, *inter alia*, on the report of the conference “Using Learning Outcomes”, that took place in Edinburgh between the 1st and 2nd of July 2004 (Adam, 2004). Three expected effects of the learning outcomes were highlighted at the conference: at the international level, they could support the recognition of qualifications; at the national level, they were useful within the framework of the quality assurance mechanisms; at the local level, they made it possible to identify the best adapted teaching practices and methods. It goes without saying that this identification of the “good practices” goes hand in hand with measures intended to both support such practices and to discourage less effective practices.

The potential for the influence of learning outcomes on professors' practices will be achieved only if standardised measurements are carried out on a scale sufficient to facilitate reliable comparisons. The project “Assessing Higher Education Learning Outcomes” (AHELO) of the OECD was launched at this end in 2010. This project was an answer to a request addressed by the Ministers of Education from the OECD countries at a meeting in Athens in 2006. In January 2008, assembled at an informal meeting in Tokyo, the Ministers specified their request and encouraged the OECD to set

up one “PISA for the superior” (OECD, 2008). A feasibility study, focused on the studies of economics and civil engineering, was completed in 2012 in 17 countries. The next objective is to carry out tests in other sectors in all the OECD countries in 2016 (OECD, 2014).

The *modus operandi* here is very similar here to that used in the PISA investigation or to the open method of coordination. Data are made public and accessible by national decision makers. They allow for a swift comparison of the performance of various systems, which encourages the persons in charge of the least efficient systems to adopt measures to improve their output. If it is still too early to affirm that the AHELO project will achieve a dynamic of this kind, based on the observation of the effects produced by PISA, one may assume this will occur.

While providing means for controlling and conducting the educational activity of professors, the Bologna Process was subject to reinterpretation. In September 2014, the Bologna Process’ follow-up group (BFUG) gathered in Rome and adopted the “The Bologna Process Revisited: The Future of the European Higher Education Area”. This document preceded the ministerial conference which took place in May 2015 in Yerevan (Armenia). In this new document, one can read:

“the construction of the EHEA [European Higher Education Area] is a supranational endeavor resulting from a jointly developed common vision [...] the governing bodies of the process must ensure that it maintains its supranational nature and at the same times generates sufficient added value for each country to be willing to continue to be committed to it.” (BFUG, 2015: p.4)

Since its inception, it was the first time that the Bologna process was described as a supranational enterprise. One may recall that one of the objectives of the Sorbonne summit in 1998 was to prevent any supranational influence on higher education. The Bologna summit had not, however, disavowed international inputs. The calibre of the members of the BFUG, among which was the European Commission, dispels the assumption of an act of thoughtlessness. Mayrgündter (2015) highlights the current trend to develop an “intergovernmental supranationalism” in Europe. However, the document adopted by the BFUG does not evoke the intergovernmental character of the process. It underlines instead its “supranational nature”, a pronouncement that does not appear to have caused any adverse reaction in countries that are members of the European higher education area^{xix}.

The willingness to put an end to the organised anarchy by means of HE instruments

After this brief examination of some standardisation instruments of higher education, let us return to the theories presented in the introduction. According to these theories, universities are seen as “organised anarchies” or “loosely coupled systems”, in which one can find “unclear technologies”. The efforts both of the European Commission and the OECD seem to aim at correcting the characteristics of the university that these concepts underline. For Friedberg and Musselin (1989), an organised anarchy is the product of rational strategies used by professors to avoid any quantitative evaluation of the research and teaching activities at the university. Thus, anarchy is only presumed and it does not concern all aspects of university work. The question of the coexistence of both supposed organisational anarchy and the rationality of scientific work can be answered by Thompson (1967). He shows that organisations search at the same time for

rationality and indetermination: the technical core constitutes a closed system, where uncertainty is excluded, whereas the institutional level maintains openness, thus giving the appearance of anarchy. The concept of “loosely coupled system” makes it possible to explain this double nature. Both rationality and indetermination are necessary for the effective performance of the organisation – here the university. The only possible manner in which to preserve rationality and indetermination at the same time is by locating them at different places and by preventing cross-contamination.

The research carried out, which is summed up in the underlined statements above, mentioned that the organisation is not homogeneous and the actors involved seek to preserve the heterogeneity of the segments that constitute it. The decoupling dimension is also addressed by Meyer and Rowan (1977: p.58). They consider that educational establishments must try to reconcile incompatibilities between institutional and technical pressures. They do this by decoupling the formal structures from activities in order to maintain the “ceremonial conformity”. Decoupling is “a logout deliberated between the organisational structures which reinforce legitimacy and the organisational practices which are regarded by the organisation as being most efficient”.

In the universities, the rationality core is easy to identify and is designed around research and administration methods of scientific proof. Meanwhile, the sources of uncertainty are diverse and each one of them is likely to cause or maintain the strategies of segmentation or decoupling. They relate to the political and societal expectations as regards the university, the labour market’s reaction to graduates’ skills, the effectiveness of the used teaching methods, the relevance of the research protocols, etc.

The outcomes-based model in higher education highlights both the learning outcomes and the incentives provided to researchers to focus their work on concrete applications; it seeks to generate each one of these uncertainties by an explicit procedure. The project assumes the distinction between teaching and research activities and also the clarification by control indicators of the effectiveness of both types of activities. With regard to teaching activities, piloting by learning outcomes seeks to provide to decision makers and operators the means for measuring teaching efficiency.

“Measures of learning outcomes also hold important promises for higher education faculties and leaders in providing evidence-based diagnosis tools on the strengths and weaknesses of their courses and programmes to be used as part of their quality improvement efforts.” (Tremblay et al., 2012 : p.56)

It is not sure that the project’s promises carried through the learning outcomes could be held. The learning outcomes aim to create a consistency between the objectives of teaching, the evaluations, and the teaching methods. In short, it is an instrument that seeks to make the teaching result more predictable and even more programmable (see Legendre, 2012 ; Brancalone and O’Brien, 2011). It does this by proposing a specific managing system of uncertainty that defines the manner in which the learner will react to the stimuli which are presented to him. On the one hand, the instrument – here the learning outcomes – is underlined by the recognition of what is obvious. The obvious, in this case, is the fact that it is up to each student to develop his competences. On the other hand, it provides means for measuring the effectiveness of the various methods used to lead the student to the Intended Learning Outcomes (Biggs and Tang, 2007). The unpredictable character of the learner’s reactions ceases, thus, to be a factor of

uncertainty. It becomes simply one of the variables that the learning outcomes have the authority to manage.

The learning outcomes can also contribute to disarm the argument of the irreducibility of the teacher's work, put forward, in particular, by authors denouncing "academic capitalism". "Learning, and research require reflection, engagement, collaboration, trial-and-error, processing, practice; all of which take time" (Walker, 2009: p.68). Higher education ceases to be one of those "professions with prudential practice", defined by Champy (2009) as professions where it is impossible to precisely envisage the result of the actions initiated. In this case, the choice of whom does not imply the application of an unquestionable scientific framework. The choice results then from the professional's conviction, and from his approval of the risk, which is a risk in respect of which he may be held to account.

All the instruments presented above were created in order to divest the universities of the characteristics that led some analysts to approximate such establishments to organised anarchies, with weak interdependence, using unclear technologies. Such instruments lead to extreme specialisation of tasks, which, thereby, triggers changes in collegial management. Management is entrusted to managers who may be strangers to the university world. The organisation of education is delegated to technicians of applied pedagogy, who may come from private offices of engineering^{xx} (see Kalpazidou-Schmidt and Langberg, 2007). Research is entrusted to specialised researchers, assisted by professionals in the drafting of file requests for funding. Teaching becomes the responsibility of professors specialised in pedagogic animation, surrounded by technicians who guide them^{xxi}. In this way, each segment of the organisation utilises those technologies considered to be the most efficient by the professionals of that particular segment. Each one is, thus, controlled in the most rational way. The question of interdependence then arises in renewed terms: the specialisation of tasks and techniques reduces the interferences between the segments, but generates a deep interdependence between all the segments and activities conducted within the same segment.

To conclude, given the increasing competitiveness and greater geo-political significance of higher education and research, under the pressure of international organisations (such as the European Commission and the OECD) and the instruments they adopted, the apparatus of standardization of European higher education attain from now on both the universities management and the professions, including the work of academics who benefited from a great autonomy in teaching.

ⁱ The authors would like to thank Oana Panait and Miguel Souto Lopez for their comments and discussions that helped to improve this paper

ⁱⁱ See the description of these initiatives in Croché 2010.

ⁱⁱⁱ We use here the concept in the sense of Bourdieu (1979). For Bourdieu, the different choices people make are all distinctions that is, choices made in opposition to those made by other "classes".

^{iv} Cf. http://ue.eu.int/ueDocs/cms_Data/docs/pressData/fr/ec/00100-rl.f0.htm

^v See the European higher education area website <http://www.ehea.info/#>

^{vi} The Diploma Supplement (DS) is a document accompanying a higher education diploma, providing a standardised description of the nature, level, context, content (for example mobility of the student) and status of the studies completed by her/his holder. This document is produced by the higher education institutions according to standards agreed by the European Commission.

^{vii} The ECTS (European Credit Transfer and Accumulation System) is a system designed to make it easier for students to move between different countries members of the Bologna Process. Since they are based on the learning achievements and workload of a course, a student can transfer their ECTS credits from one university to another so they are added up to contribute to an individual's degree programme or training. One academic year corresponds to 60 ECTS credits that are equivalent to 1500–1800 hours of study in all countries.

^{viii} http://ec.europa.eu/education/ects/ects_en.htm

^{ix} The number given at page 3 in Erasmus+ (2015: p.3) is 97. The number given at page 39 is 91 (Erasmus+, 2015: p.39). The last number corresponds to the tables of the pages 40-55.

^x <http://www.eua.be/eua-membership-and-services/Home.aspx>

^{xi} These are the authors' computations, based on the national data provided in Eurydice (2010). France's data were corrected and were established to 527 using the data of Campus France (<http://www.canada.campusfrance.org/fr/faq/quels-sont-les-etablissements-d%E2%80%99enseignement-superieur-en-france>). The number of establishments retained in the Eurydice source, namely 4.343 establishments, integrates various initiatives, which do not have the same equivalent in other countries.

^{xii} Another illustration of this phenomenon could be observed after the summit of the Sorbonne of 25 May 1998. All the European countries were invited to sign the declaration, which was signed in the Sorbonne only by the Ministers of Higher Education of Germany, France, Italy and the United Kingdom. Only Bulgaria, Romania, the German-speaking Community of Belgium, the Dutch-speaking Community of Belgium, Switzerland, Denmark and the Czech Republic agreed to sign during the following months, from July 1998 to May 1999.

^{xiii} For a history of the way in which the European Commission set up the instruments of higher education quality control, see Croché 2009 and Saarinen 2005.

^{xiv} http://www.enqa.eu/wp-content/uploads/2013/06/ESG_3edition-2.pdf

^{xv} London Communiqué, 18 may 2007, *Towards the European Higher Education Area: responding to challenges in a globalised world*, p.4.

^{xvi} The changes in this matter were also considerable. See, for example, Degn and Sorensen 2015.

^{xvii} Cf. beyond, part four of this paper. It will be necessary to expect the installation of instruments such as the mechanisms of quality assurance and the learning outcomes so that changes of the academic work appear gradually in some countries (see Souto Lopez, 2015).

^{xviii} The definition hardly varied through time, the ECTS Users' Guide of 2015 defines them as “statements of what the individual knows, understands and is able to do on completion of a learning process” (European Commission, 2015: p.72).

^{xix} Since the beginnings of the Bologna Process, the European Commission continued the work which it had started a few decades before while trying, by soft methods, to orient the policies of higher education of the countries of the European Union, then of large Europe (Croché, 2010). It firstly integrated the Bologna Process in 2001, obtained after the right to vote in the follow-up group of the Bologna Process, as well as the states. The reference to “supranational nature” attests that a step moreover is taken and that the states do not seem reticent any more with the intervention of the European Commission in the orientation of their national policies.

^{xx} In certain countries (as in the Scandinavian countries), the private is engaged in the organisation of higher education teaching. This commitment concerns today until the production of the knowledge to transmit and the manners of transmitting the knowledge (see Kalapazidou-Schmidt and Langberg 2007).

^{xxi} As far as we know, few countries are engaged in the specialization of the four spheres presented above. However, examples of commitments to carry out radical reforms in one or the other spheres are easy to find. The countries undergoing these reforms are then presented by the pilots of the Bologna Process as examples of good practices which must inspire all the others.

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