DIVERSITY AND CONVERGENCE IN HIGHER EDUCATION: 
an analysis of Tuning European Union and Tuning Latin America 
international cooperation programmes

LAYLA JORGE TEIXEIRA CESAR

Master’s thesis submitted in partial fulfilment of the requirements for the degree of Masters of Science, MSc. Presented at the Department for Continuing Education Research and Educational Management, Danube University Krems, Austria on the 7th of July, 2015

Supervisor: Sheila Slaughter, Louise McBee Professor of Higher Education at the University of Georgia, USA
The present research focussed on how the adoption of common frameworks for curriculum redesign impacts the processes of higher education differentiation and the preservation of cultural diversity. Such debate was based on the experiences of implementation of the international cooperation programmes Tuning Higher Education Structures in Europe (Tuning EU) and Tuning Latin America (Tuning LA). The programmes were analysed drawing on the perspectives of their creators and directors.

Tuning was originally conceived in the European Union, in the year 2000. Its project is linked to the cultural and economic integration aims promoted by the Bologna Process and the Lisbon Strategy, concerning the higher education sector. Over time, Tuning has developed into an approach to evaluate quality, enhance learning mobility, and redesign curriculum, based on the common implementation of a competence-based education framework in 1st, 2nd and 3rd levels degree programmes.

Tuning Latin America was the first attempt at internationalisation developed by Tuning in the replication of its model, in 2004. The programme has now spread to other thirteen regions and countries around the world. Given its international dimension, Tuning claims to value and protect cultural diversity among participant institutions. Considering that cultural diversity and institutional differentiation are deeply intertwined, the main research question posed by the present study was: do data reveal elements indicating that the programmatic and procedural redesign proposed by Tuning affect institutional differentiation?

The possible results foreseen were: positive impact, if Tuning would contribute to the increase of institutional differentiation; negative impact, if Tuning would contribute to the decrease of institutional differentiation; or neutral impact, if there were not identified any elements pointing to a significant relation between the implementation of Tuning and the development of institutional differentiation.

These possible results were verified utilising a qualitative approach. The methodology adopted was situational analysis and the method was integrative mapping. The primary data consisted of eighteen interviews with the creators and directors of Tuning EU and Tuning LA and one external specialist invited by Tuning to evaluate Tuning LA progress. The secondary data consisted of seven of Tuning's main publications regarding Tuning EU and Tuning LA experiences. In addition to those sources, the researcher observed Tuning's office in the European Union for two months, between May and June, 2014, and attended the Brazilian Tuning conference, in August 2014.

The data were analysed with the support of two main concepts: academic capitalism, when discussing the economic elements involved; and coloniality, when referring to the specificities of the relation between the European Union and Latin America. The results indicate that Tuning offered benefits to Latin America when it served as a tool to promote communication among countries in the region. Nevertheless, according to data, Tuning has presented an overall negative effect, as it contributed to the decrease of institutional differentiation. Tuning was shown to add to the convergence of programmatic and procedural institutional aspects, which could endanger cultural diversity. The conclusions point to the need for developing alternatives for enhancing learning mobility without contributing to the structural standardisation of higher education.

**Key words:** higher education differentiation; international cooperation; cultural diversity.
I, MSc Layla Cesar, born the 4th of January, 1990 in Brasília, Brazil, hereby declare,

1. that I have written my Master Thesis myself, have not used other sources than the ones stated and moreover have not used any illegal tools or unfair means,

2. that I have not publicized my Master Thesis in my domestic or any foreign country in any form to this date and/or have not used it as an exam paper,

3. that, in case my Master Thesis concerns my employer or any other external cooperation partner, I have fully informed them about title, form and content of the Master Thesis and have his/her permission to include the data and information in my written work.
ATTENTION:

The exclusion of utilization of the Masters Thesis may be applied for to the Director of Studies (the officer responsible for the administration and enforcement of study law). A maximum of 5 years can be applied for, based on substantiated grounds that the student’s legal or economic interests are endangered if it would be published immediately.

The approval document of the accepted exclusion of utilization must be included in the bound and electronic versions of the final Masters Thesis instead of this page.

The application should be made with enough time to allow processing and return of the official document from the Director of Studies (minimum 2 months).
In November, 2013, the Intercultural University of Nationalities and Indigenous Peoples Amawtay Wasi (Universidad Intercultural de Nacionalidades y Pueblos Indígenas Amawtay Wasi), in Ecuador, failed the assessment of the National Council for Evaluation, Accreditation and Quality Assurance of Higher Education (Consejo de Evaluación, Acreditación y Aseguramiento de la Calidad de la Educación Superior – CEAACES)\(^1\).

In spite of its innovative model, strongly connected to local culture and unique in the defence of indigenous movements, the university scored only 26.9 out of 100 points in the scale created by CEAACES, and was therefore denied the right to offer legally recognized diplomas for its educational activities. All of its students were transferred to other accredited higher education institutions.

The representative of CEEACES responsible for the evaluation said that “educational quality” is a concept that belongs to all peoples and nationalities and can-not be abandoned.

The coordination of Amawtay Wasi University replied that “educational quality” does not belong to CEEACES and it is a western concept, extraneous to institutional diversity.

In face of such diversity, and considering all resources are limited, is it ever possible to define a common denominator, able to gather all institutions under a common higher education framework?

If not, who sets the limits for exclusion?

This dissertation is dedicated to Amawtay Wasi University and to all others that join them in the effort for a diverse education.

I express here my gratitude to the European Commission for funding my research, through its Education, Audiovisual and Cultural Agency (EACEA) and the Erasmus Mundus Master Courses (EMMCs) action.

To MARIHE programme for having offered me the opportunity of this course, with particular reference to Prof. Attila Pausits, Prof. Jussi Kivistö, Astrid Kurzmann, Florian Reisky and Maria Ranta.

To professor Sheila Slaughter, for generously supervising my work and for her enthusiasm for higher education that so much inspired me.

To all of Tuning programme's creators and directors I have interviewed, and who I can not name here in order to preserve their anonymity. They were all extremely receptive to my inquiries and I respect and admire their will to improve higher education in the world.

To Deusto International Tuning Academy, where I have worked for two months in 2014 and was warmly welcomed by all the staff members.

To all my fellow MARIHE-2 companions, who have walked this path with me, with particular reference to Rebecca Maxwell Stuart, Natalie Nestorowicz, Vesna Holubek, Mikhail Balyasin and Haftu Hindeya. Their kindness and their interest in higher education have been a great motivation to me.
Table of contents

Introduction 8

1. Contextualisation and description of Tuning 9
   1.1. Tuning: organisational structure 10
   1.2. Tuning: quality enhancement goal 11
   1.3. Tuning: internationalisation dimension 12
   1.4. Tuning: consultation process 14
   1.5. Tuning Latin America 15
2. Research focus and objectives 15
3. Relevance and previous literature on the research object 16

Methodology 21

1. Research design 24
2. Validity 27

Literature review 28

1. Academic capitalism 28
2. Coloniality 30
3. Competence-based education 33
4. Globalisation and internationalisation of higher education 35
5. Differentiation and diversity in higher education 37
6. Cultural diversity and higher education 41

Research Question 46

Data Analysis and results 47

1. Description of Tuning programme 47
   1.1. Tuning's aims and philosophy 47
   1.2. Tuning's methodology 50
2. Situational map 51
3. Social worlds/arenas map 58
4. Positional maps 69
5. Project map 79

Results 83
Conclusion 85

Practical consequences of the thesis 88

Limitations and further studies 89

References 90

Appendix A – Lists of generic competences Tuning EU and Tuning LA 93

Appendix B – Examples of meta-profiles and Future Landscapes for Tuning LA 96
  ● Example 1: Agronomy 97
  ● Example 2: Civil engineering 98
List of tables

Table 1 – Situational map 52
Table 2 – Social worlds/arenas map 58

List of figures

Figure 1 – Situational map 57
Figure 2 -Social worlds/arenas map 68
Figure 3 – Positional map on coloniality and sovereignty 70
Figure 4 – Positional map on competitiveness and cooperation 73
Figure 5 – Positional map on institutional differentiation 75
Figure 6 – Project map 79

List of abbreviations

AHELO – Assessment of Higher Education Learning Outcomes
CBE – Competence-based education
CLAR – Latin American Reference Credit system
DITA – Deusto International Tuning Academy
ECES-UEALC – Common Space of Higher Education of the European Union, Latin America and the Caribbean
FQ-EHEA – Framework for Qualifications of the European Higher Education Area
JQI – Joint Quality Initiative
NTCs – National Tuning Centres
OECD – Organisation for Economic Co-operation and Development
TuCAHEA – Tuning Central Asia
T-MEDA – Tuning Middle East and North Africa
INTRODUCTION

The primary focus of this thesis was to debate how the adoption of common frameworks for curriculum redesign impacts the processes of higher education differentiation, taking the preservation of cultural diversity into consideration. The case analysed was that of Tuning programme and its variants, Tuning European Union and Tuning Latin America.

Behind this inquiry there is a sense of social justice. The main premise assumed here is that preserving cultural diversity is fundamental for guaranteeing different social groups have their rights met. It was also assumed as a premise that cultural diversity can only be expressed in higher education in a heterogeneous system, where different institutional types are allowed to exist in a horizontal way.

Tuning programme proposes competence-based education as a common framework to harmonise higher education, enhancing learning mobility. It aims at redesigning curricula, focusing on an outcomes-based, student-centred and competence-based learning. This implies changes and adaptations of teaching and learning methods, as well as the development of common quality assurance frameworks to guarantee the comparability of the implemented curricula. While pursuing change, Tuning affirms to value and respect cultural diversity. The structural changes proposed by Tuning, however, could push institutions to sameness, decreasing a higher education system's heterogeneity. Verifying this relation was the main concern of the present thesis. The goal was to identify if the elements presented by data revealed indications that the programmatic and procedural redesign proposed by Tuning could affect institutional differentiation.

This was accomplished utilising a qualitative approach. The methodology adopted was situational analysis and the method was integrative mapping. The primary data consisted of eighteen interviews with the creators and directors of Tuning EU and Tuning LA and one external specialist invited by Tuning to evaluate Tuning LA progress. The secondary data consisted of seven of Tuning's main publications regarding Tuning EU and Tuning LA experiences. Additionally to those sources, I have myself spent two months working at Deusto International Tuning Academy, in Bilbao, in May and June 2014, and attended the Brazilian Tuning conference, in August 2014.

The two main concepts that supported data analysis were: academic capitalism, when discussing the economic elements involved; and coloniality, when referring to the specificities of the relation between the European Union and Latin America. A literature review was also conducted on the
topics of competence-based education, globalisation and internationalisation of higher education, differentiation and diversity of higher education and cultural diversity.

The results indicated that Tuning promoted benefits to Latin America when it served as a tool for enhancing communication among countries in the region. However, data elements revealed a negative impact of Tuning on higher education differentiation, contributing to its decrease. That means institutional formats would converge to sameness, increasing vertical diversity and decreasing horizontal diversity. Tuning's ideological dimension and the ambiguity of its discourses were also highlighted in the results.

The findings of the present research point to the need of developing alternatives for enhancing learning mobility without contributing to the structural standardisation of higher education.

1. CONTEXTUALISATION AND DESCRIPTION OF TUNING

It is by now a familiar discourse that the so called “Western world” has developed into a “knowledge society” (Vught, 2007). At this stage, prosperity and welfare largely depend on the ability to create and apply forms of knowledge that are considered useful and can be converted into economic growth. Under the pressure of global markets, nation states aim at increasing the economic potential of their higher education systems.

In Europe, the ascendancy of the market over higher education was consolidated by the political choices of the European Union. In 1998, France, Germany, the UK and Italy signed the Sorbonne declaration, expressing their desire to create a common frame of reference for a new European Higher Education Area. The main goals of this common area were student and staff mobility, and the promotion of qualifications regarding the job market².

Next, the Bologna Declaration of 1999 confirmed such aims and expanded it to another 30 countries, which have expressed their commitment to enhancing the competitiveness of the European Higher Education Area. Two main aspects were emphasized, characterising a neoliberal way of governing: (a) that the provision of the measures included in the declaration represented a voluntary harmonisation process, and (b) that there was a need for greater independence and autonomy of all higher education institutions, so they could more freely compete without external regulations.

Finally, the European Council declared in the Lisbon Summit, in March 2000, its intention of making the European Union the most dynamic and competitive knowledge economy in the world by 2010, able to compete with new emerging economies (Vught, 2007; Archibugi & Coco, 2004).

Such was the regional context which led to the creation of Tuning in the year 2000, with moral and financial support from the European Commission. The programme feeds back into the Bologna process as it subsidises the development of the Framework for Qualifications of the European Higher Education Area (FQ-EHEA), along with the Joint Quality Initiative (JQI). From the beginning, Tuning has been considered complementary to the JQI. While JQI focusses on the comparability of cycles in general terms, Tuning seeks to describe degree programmes at the level of subject areas.

### 1.1. TUNING: ORGANISATIONAL STRUCTURE

The programme's coordination is centred at Tuning Academy, with head offices at the University of Deusto (Spain) and the University of Groningen (The Netherlands). Tuning Academy defines itself as “an international higher education and research centre for the development and enhancement of the quality of learning, teaching and assessment in higher education, focussing on competences for intellectual development, employability and citizenship in a global context”.

Tuning programme was developed by the Academy as an approach to evaluate quality, enhance learning mobility, and redesign curricula based on the common implementation of a competence-based education framework, in 1st, 2nd and 3rd levels degree programmes.

The Academy describes Tuning in a three-way definition: as a project, as a network of communities

---


of learners, and as a methodology:\(^5\):

- As a **project**, Tuning is defined as “focussed on an intercultural system for developing outcomes-based, student-centred and competence-based learning”;

- As a **network of communities of learners**, Tuning is defined as an “international and intercultural” group of academic experts, that work in an organised system according to regional needs, respecting each others autonomy at institutional, country and regional levels;

- As a **methodology**, Tuning has “clearly designed steps”, but “a dynamic perspective that allows for adaptation to different contexts”. Its main objective is “to build compatible and comparable descriptions of degrees that are relevant to society and that are intensively focused on maintaining and improving quality”. It “calls for the process to value and preserve diversity coming from the traditions of each country. These requirements demand a collaborative methodology, based on a consensus being developed by experts from backgrounds as varied as possible. These experts are expected to have the capacity to understand the negotiable and non-negotiable geographical realities as much as they must understand essential elements of the discipline and the degrees themselves. The Tuning methodology has four lines of work which help to organize discussion in specific subject areas: (a) identifying relevant generic and subject specific competences and elaborating a meta-profile for the subject area; (b) exploring how a mutually agreed cumulative credit system can facilitate student mobility; (c) exchanging good practices in approaches and techniques in teaching, learning and assessment; and finally (d) exploring how quality assurance frameworks can be used at programme level to enhance student learning”.

### 1.2. TUNING: QUALITY ENHANCEMENT GOAL

The shift of paradigm to the student centred, competence-based and learning outcomes oriented approach adopted by the Tuning implies changes regarding teaching, learning and assessment methods. It is therefore fundamental for Tuning to assess the impact it produces and verify if it is achieving its goal of quality enhancement.

Tuning's quality assurance frameworks were tested through Tuning-AHELO in 2009. AHELO is the acronym for Assessment of Higher Education Learning Outcomes. It was launched as a feasibility study...
study by the Organisation for Economic Co-operation and Development (OECD). According to the OECD, AHELO is a “ground-breaking initiative to assess Learning Outcomes on an international scale by creating measures that would be valid for all cultures and languages”.

The assignment given to the Tuning Association by the OECD-AHELO project was to define a conceptual framework of expected/desired learning outcomes following Tuning's approach. The two areas selected for testing were Engineering and Economics, in the context of Tuning EU. It was expected that this experience would subsidize the development of an improved quality assurance system in the near future.

Tuning experimented with self-assessment models in Latin America. A survey with representatives from the 18 participant countries and National Tuning Centres was organised to evaluate the development of the programme.

Also in Latin America, four external higher education experts were invited, in 2012 and 2014. Their evaluations were incorporated to improve further developments of the programme. One of these experts was interviewed for the present research.

1.3. TUNING: INTERNATIONALISATION DIMENSION

With regard to the internationalisation of Tuning beyond the European Union, the Academy justifies that:

“Although Tuning was developed as a project to meet the concrete needs of a region and was never intended to be broader in scope, many regions found an important value in adopting and adapting it to their contexts and needs. Its strength lies in the fact that while the methodology is a useful tool, the aims and objectives of projects are authentic to particular regions. It has developed further into a powerful instrument of understanding and cooperation between regions across the world; it is a way of reaching global consensus beginning from the institution, the country and the region. In this context, the different regions of the world feel drawn to become part of the project or to launch parallel processes of searching for recognition, identifying relevance and building quality in higher education, starting from the needs and choices of their students, academic staff, employers, social organizations and diverse relevant groups”

The first project, Tuning Educational Structures in Europe – Tuning EU, was founded in December 2000, and by the time this research was started, it gathered 165 universities in 32 countries, working on nine subject areas. It was financially supported by the European Commission from the year 2000 to 2009. There were four editions: Tuning Higher Education Structures in Europe I, II and III and Tuning IV – Curricular Reform Taking Shape.

Tuning Latin America – Tuning LA, the first version of the programme outside Europe, was founded in October 2004. By the time of this research, it gathered 200 universities, coordinated by 18 National Tuning Centres. It formally involves 33 countries, and works with 15 subject areas. It was financially supported by the European Union in three official editions of the project: Tuning Latin America I, from 2004 to 2007; Tuning Latin America II, from 2006 to 2008; and Tuning Latin America III, from 2011 to 2014.

After Latin America, Tuning has gained other 13 versions, in the following regions and countries: Tuning Africa, Tuning Australia, Tuning Canada, Tuning Central Asia (TuCAHEA), Tuning China, Tuning EU-USA, Tuning Georgia, Tuning India, Tuning Kyrgyzstan, Tuning Lithuania, Tuning Middle East and North Africa (T-MEDA), Tuning Russia and Tuning Thailand.

In all versions of the programme it is expected that, once the financial support provided by the European Commission is finished, the structures built by Tuning will be perpetuated by the participant universities.

The two main goals of Tuning's expansion are the intra-regional integration and the inter-regional integration of higher education systems. These processes should lead to harmonisation and not homogenisation of systems, as the programme's motto is the “tuning of educational structures and programmes on the basis of diversity and autonomy” (González, J.; Wagenaar, R. (eds.). 2008. Universities' contribution to the Bologna Process: An introduction. Page 13).
The possibility of establishing such a clear difference between harmonising and homogenising practices lies at the core of the present research, which investigates from data if there are elements indicating that the programmatic and procedural redesign proposed by Tuning affect institutional differentiation.

### 1.4. TUNING: CONSULTATION PROCESSES

Competences, as defined by Tuning, represent a dynamic combination of cognitive and meta-cognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, and ethical values. They are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of study), while others are generic (common to any degree course).

It is normally the case that competences are developed in an integrated and cyclical manner throughout a programme. To make levels of learning comparable the Tuning subject area groups have developed cycle (or level) descriptors which are also expressed in terms of competences.

The first lists of generic and specific competences involved in Tuning EU were elaborated by the group of directors of the programme and representatives of the subject areas from the participant universities.

Once generated the pre-designed lists were submitted to consultation with the stakeholders connected to the participant universities and the region where Tuning was being implemented. Four main stakeholder groups were consulted: faculty, graduates, students and potential employers identified by the participant institutions.

The consultations were organised through cluster sampling. They were made available as on-line surveys, face-to-face consultations and postal questionnaires. The stakeholders were asked to judge the competences on their relevance for the professional profile and their level of achievement, and then rank the five most important ones. The stakeholders also had the chance to add any extra competences they would find appropriate. The outcome of this consultation process was presented as the final set of reference competences.

The same process was conducted in Latin America. Tuning EU's lists were used as references, but the elaboration of the lists and the consultation process were organised from scratch. The lists
generated in Tuning EU and Tuning LA turned out to be highly similar. In what concerns generic competences, for example, Tuning EU presented 30 competences, and Tuning LA, 27. Out of those, 23 were almost identical. Two competences from the European list were regrouped and redefined as one competence in the Latin American list. And only three new generic competences were added by Latin America, regarding social, environmental and cultural responsibility. Five competences from Tuning EU's original list have no perfect match in Tuning LA's list. They mainly regard entrepreneurial skills. The coincidence between the two lists was debated in greater detail in the analysis section of this thesis. The lists of generic competences can be found in the appendices to this work.

1.5. TUNING LATIN AMERICA

Three are the main achievements related specifically to Tuning Latin America:

1. The creation of a Latin American Reference Credit system (CLAR). CLAR aims at expanding mobility and comparability in the region, which has no integrated credit system yet.

2. The conceptualisation of meta-profiles. Meta-profiles are representations of the different combinations of competences that lend identity to the subject area. They are mental constructions that categorise, structure and organise components, illustrating their inter-relations (Beneitone, P.; González, J.; Wagenaar, R., 2014). It is the ideal of what a given professional profile should be. Examples of meta-profiles for subject specific areas can be found in the appendices of this work.

3. The “Future Landscapes”. This is a mode of analysis designed to keep the meta-profiles updated. Based on in depth interviews, the Future Landscapes approach refers to research on social needs and political, economic and cultural changes. The idea is to evaluate a society's general scenario and predict the development of a professional area, estimating the changes in careers and its relation to the competences presently defined. That way, professional demands could be anticipated and added to curricula. By the time students had graduated, they would be more suited to the new market. Examples of Future Landscapes for subject specific areas can be found in the appendices of this work.

The meta-profiles and the future landscapes were first developed in the context of Tuning LA and then integrated to other projects, including Tuning EU.
2. RESEARCH FOCUS AND OBJECTIVES

The present research focussed on Tuning EU and Tuning LA international cooperation programmes. The objective was to debate how the adoption of common frameworks for curriculum redesign impacts on the processes of higher education differentiation, taking the preservation of cultural diversity into consideration.

For the definition of higher education differentiation, two types of institutional diversity were considered in the present analysis: programmatic and procedural diversity. They regard the degree level, area, comprehensiveness, mission and emphasis of programmes, as well as the differences in the ways that teaching, research and services are provided. Other institutional diversity typologies were defined in the literature review section of this thesis.

The implementation of Tuning occurs at the level of departments and sets of programmes. This analysis, however, argues that the effects of such implementation may reshape the entirety of the systems, as the overall distribution of resources could be affected. No individual institutions were analysed. The interviewees were linked to Tuning either at project level – in the case of Tuning's creators and coordinators in the EU – or at national level – in the case of the directors of Latin American National Tuning Centres.

Based on the interviews, as well as on the documents published by Tuning and on my experience and observation at Tuning Academy in Bilbao, the research approach was to identify elements indicating that the programmatic and procedural redesign proposed by Tuning could affect institutional differentiation. The possible results were: positive impact, if Tuning would promote the increase of institutional differentiation; negative impact, if Tuning would promote the decrease of institutional differentiation; or neutral impact, if there were not identified elements pointing to a significant relation between the implementation of Tuning and the development of institutional differentiation.

It is relevant to emphasize this is not a comparative study between the European Union and Latin America. What is under analysis is Tuning programme as a whole, understood from the perspective of these two experiences of implementation. The inclusion of a second region out of the EU adds to the research for it magnifies the intercultural dimension. This way, the tension between differentiation and the preservation of cultural diversity becomes more visible.

Latin America was preferred to other regions for two reasons: 1) it was the first international
attempt at implementing Tuning outside the EU, and therefore, the oldest and most consolidated one; and 2) for the context of symbolic dependence that involves the two regions. This last aspect could be found in the cooperation between the EU and many other regions, for the EU is a dominant actor in higher education at global scale. However, the historical colonial background that unites the EU and Latin America makes this dimension more evident.

3. RELEVANCE AND PREVIOUS LITERATURE ON THE RESEARCH OBJECT

The present research adds to previous studies on Tuning for it is the first to be based on primary data collected in the form of interviews with so many of the programme's creators and coordinators. It also presents an international scope, as it reaches both the EU and the Latin American centres. More than a critical description, this study offers a perspective on the speech of the actors that embody the programme.

This is relevant because, once consolidated, higher education policies often assume an autonomous form, and the people that foster it become invisible. It is the case with the process of globalisation, for example, which is often seen as an inevitable trend, when in fact it is sustained by the everyday actions of individuals that choose to support it.

Tuning programme is by now well consolidated, and several other studies have been conducted to analyse it. A compilation of articles that evaluate and support Tuning's experience is organised by Tuning Journal for Higher Education, and can be found at http://www.tuningjournal.org/.

A more critical perspective can be found in the works of Karseth and Solbrekke (forthcoming), Rasco (2008; 2010), Tomusk (2007), Aboites (2010), and Eiró and Catani (2011), the last two papers focussing specifically on Tuning Latin America. All of these studies were based on document analysis of Tuning's published materials and offer a significant contribution to understanding Tuning programme and its international dimension. Most of their findings were confirmed by this research. They were briefly summarised here, as follows:

- **Karseth and Solbrekke**

Karseth and Solbrekke (forthcoming) analyse the formation of the European Higher Education Area through European policy texts and its impact on curricular design. They conclude that pedagogy can never be understood as isolated from the overall policy. The implications of regional curriculum
policy such as the EU’s, the authors affirm, influence both national policies and the daily learning and teaching activities in higher education institutions.

Such influence occurs regardless of the fact that adherence to the Bologna Process is voluntary. What Karseth and Solbrekke stress is that the recommendations produced by the EU’s policies regarding higher education are legitimising forces. They coerce participation, as no countries or actors wish to be politically isolated.

The current trend identified by the authors is curriculum redesign focussing on employability. This trend derives from policies, such as Bologna, which encourage a more systematic dialogue between higher education institutions and employers in order to boost economic growth. The new curricula, Karseth and Solbrekke affirm, promote the earning of competencies and skills that are needed in today's and tomorrow’s economy. The downside of such change is that curricula start drifting away from longer term needs of society to meet more immediate market needs. Another downside identified by the authors is that universities become more involved in instrumental goals and educational outcomes, and knowledge ceases to be an end in itself; rather, it is valued for its marketable use.

Karseth and Solbrekke find Tuning an important follow up to the learning outcomes approach. They illustrate the project's contradictions and point out that, on one side, Tuning claims it does not intend on being prescriptive and emphasizes the preservation of diversity and autonomy. On the other, Tuning focusses on learning outcomes oriented to professional profiles, so not all types of knowledge are equally privileged.

Another central contradiction pointed out by the authors is that whereas the programme claims to maintain national and institutional autonomy and diversity, it is based on a checklist of references to competences for curriculum evaluation focussing on the educational process, outcome, and the means and facilities required for the programme delivery. Moreover, Tuning highlights that institutions should be responsive to the interests and needs of external stakeholders, whilst it sets potential local employers as the main external stakeholders for its consultation processes.

Tuning's position seems to critique the traditional disciplinary-based curriculum (Karseth and Solbrekke, forthcoming). However, when doing so, it does not create the possibility for curriculum diversity. Instead, it establishes another educational paradigm, of a competence-based education focussing on learning outcomes and on serving labour market demands.
• Rasco

Rasco (2008) refers to Tuning programme – as well as any to higher education policies in the EU – as processes of contamination. Once introduced, the ideas and trends proposed by such policies and programmes tend to be internalized and reproduced by actors and institutions as their ordinary routine. The traces that lead back to their origins are then blurred.

The author makes a careful analysis of Tuning programme's published documents, with the support of a literature review on competence-based education. From that he concludes that the strength of the competences approach is related to its political and neoliberal power, as it reinforces the commoditisation of education at system and institutional level.

Rasco (2010) defines Tuning as a translator of knowledge into financial capital, as it alters the form of curricula to better serve professional profiles. Tuning also defines ideal competences that would better suit the market now and in a close future. Working as this translating device, Tuning connects the objectives of the European Higher Education Area and the Bologna Process with those of the Lisbon Strategy.

• Tomusk

Tomusk (2007) highlights the international context that gives origin to the Bologna Process and Tuning programme. European countries are responding to the United States' dominance in higher education, as well as to the emergence of competitive higher education actors, specially in Asia. Bologna and Tuning would offer more than a way to develop international activities and bilateral agreements among institutions, as European countries also aim at the export of educational products and services to a global market.

The Bologna Process, the author affirms, was promoted as a brand. It advertises the empty promise of sharing top quality standards of higher education among the signatory countries. A secondary focus on the social dimension of higher education, says Tomusk, was used as a safety valve, meant to deviate the attention from the economic purposes behind the project. It is evident that a social dimension is significant, but its debate within the framework of Bologna can not change the material structures around which the process is organised.

Surprisingly, the higher education market designed by this process does not have the characteristics of a free market, Tomusk indicates. The more it is homogenised and reduced to common
denominators, the more easily dominant actors or institutions will control the market, as they set the quality standards.

What Tuning programme does, for the author, is contribute to such standardisation. It fragments curricula to pieces of competences, allowing it to be more easily traded. It also promotes a permanent consumption, as it facilitates the implementation of lifelong learning programmes. The trade-off is negative, Tomusk concludes: even if the agenda is economically successful, there will be a loss of intellectual integrity and diversity.

- **Aboites**

Aboites (2010) analyses the specific case of Tuning Latin America. For the author, this international cooperation action represents an extension of the Bologna Process over the region. He identifies five main problematic issues of Tuning Latin America:

1. It copies the original European model without significant change;
2. It makes way to a greater influence of market over universities;
3. Its lists of competences, very similar in the EU and in Latin America, reveal the predominance of an ideal form of knowledge, disregarding cultural diversity in both regions;
4. Its pedagogical approach fragments the formation of students;
5. It impacts negatively on the identity of students and academics in Latin America as central actors of change in higher education, as this new paradigm is external.

For Aboites, it is not possible to organise an educational model disconnected from political views. Tuning, therefore, could not possibly be a politically neutral tool. Nevertheless, it becomes even more politically biased for the small number of actors consulted could not be representative of the Latin America context. Tuning justifies that proportion by affirming it acts at institutional level. Institutions, however, are not isolated and relate to others in the region, as well as welcome future students that had no influence on such decisions.

- **Eiró and Catani**

Eiró and Catani (2011) focus on Tuning Latin America on their analysis. The authors understand that the Bologna Process promotes the convergence of higher education among the signatory
countries. Its agreement defines the need for a curricular reform that aligns education and labour market needs. One of the tools to operate such reform is Tuning project, and Bologna's objectives are extended to Latin America when the region adheres to Tuning.

Based on document analysis, the authors conclude that Tuning focusses on learning outcomes aiming at serving the productive sector. In Latin America, the programme is characterised by the formation of students for the labour market, more than by the unification of the region.
The methodological framework adopted as a guide for this research was situational analysis, as proposed by Adele Clarke (2005). Situational analysis is a postmodern derivation of the grounded theory initially developed by Glaser and Strauss in the late 1960's.

Situational analysis and grounded theory share an epistemological and ontological root, as they are both nourished by the theoretical tradition of symbolic interactionism. Simply put, this involves the commitment to representing those we study in their own terms and through their own perspectives.

What sets the main difference between the two frameworks is Clarke's addition to the traditional grounded theory, replacing its undergirding concept of action-centred “basic social process” by the concept of situation-centred “social worlds/arenas/negotiations”. Such change from an individual to a systemic perspective allows a better understanding of the flows of power that constitute a situation of analysis.

In Clarke's approach, it becomes clearer that there is no politically neutral situation. Any object of analysis will suffer the permanent influence of its environment. Just as well, the researchers' perspective could not possibly be neutral, as they do not privilege from an objective or external position of analysis. Researchers are always immersed in a situation themselves, and any results they find are relative to their positions in social worlds.

Another divergence regards the sources of data. While grounded theory has a more traditional focus on ethnography and interview studies, situational analysis is open to a greater diversity of data sources, including different types of discourses in order to better capture the increasingly complex and diverse aspects of the researched topic.

These shifts bring into evidence what Clarke identifies as the five biggest flaws or areas of recalcitrance in grounded theory (Clarke, 2005: 12):

1. **A lack of reflexivity about research processes and products, including the pretence that the researcher can and should be invisible.** To Clarke, the very act of research means that one can not escape from being involved in the situation they are studying;

2. **Oversimplifications such as emphases on commonalities and strains towards coherence.** This would lead to the creation of a monolithic “other”, while contradictions and incoherences in our data would be hidden or denied, eliminating the possibility of different
readings for the situation studied;

3. **Oversimplifications such as singular rather than multiple social processes as characteristic of a particular phenomenon or situation.** Electing one main processes and tagging all other as “subprocesses” and, once again, erasing different perspectives;

4. **Interpretations of data variation as “negative cases”**. Grounded theory still dealt with data within the paradigm of normalcy *versus* deviance, treating inconsistencies as outliers. For Clarke, social research should not produce a binary structure, but allow contradictory elements to co-exist.

5. **The search for “purity” and “objectivity”**, when postmodernism brings us the notion that knowledges and knowledge production are situated and non-innocent.

To correct or minimize these flaws, Clarke elaborates strategies that could push grounded theory around the postmodern turn. The first of those would be to acknowledge the situatedness of all knowledge producers and, therefore, the simultaneous “truths” of multiple knowledges.

In the specific case of the present research, such approach becomes fundamental, as higher education institutions are *par excellence* a place for the production of knowledge. Preserving higher education institutional and curricular diversity, for example, means understanding that a single form of knowledge can not be granted universal or dominant status, for all different forms should be able to co-exist.

Such change in perspective enlightens the differences and heterogeneities of the situation studied. Situational analysis holds partiality as one of its basic principles. It does not intend to produce universal or generalizable results, rather staying true to complexity. Claiming universality is considered to be naïve, at best, or a hegemonic strategy to silence other perspectives, at worst.

Another strategy elaborated by Clarke is that the situation of the researched phenomenon should be used as the very site of analytic grounding. This approach includes the use of an integrated theoretical framework, built in the making of the research, rather than in the pursuit of formal theory.

To allow the empirical construction of the situation of inquiry, Clarke's situational analysis offers three main cartographic approaches:

1. **“Situational maps** that lay out the major human, nonhuman, discursive, and other elements in the research situation of inquiry and provoke analysis of relations among them;
2. **Social worlds/arenas maps** that lay out collective actors, key nonhuman elements, and the arena(s) of commitment and discourse within which they are engaged in ongoing negotiations – meso-level interpretations of the situation; and

3. **Positional maps**, that lay out the major positions taken, and *not* taken, in the data vis-à-vis particular axes of difference, concern, and controversy around issues in the situation of inquiry” (Clarke, 2005: xxii)

These maps are intended as analytic exercises to elucidate the connections among the key elements, materialities, discourses, structures and conditions that characterize the situation of inquiry. They are built upon multiple kinds of data and forms of discourse.

Inspired by the philosopher Michel Foucault, Clarke proposes we should turn to discourses to expand the domains of social life. In the Foucaultian analytics of power, language ceases to be a neutral medium for the transmission and reception of knowledge to become the key ingredient in the very constitution of knowledge.

In that sense, critical discourse analysis examines the structure of spoken and written texts with attention to politically and ideologically salient features which constitute and reproduce power relations without often being evident to participants (Clarke, 2005:150).

Clarke embraces the Foucaultian perspective in situational analysis, except for Foucault's focus on the major discourses related to the situation of interest. Instead, Clarke lays her focus on the marginalized discourses turning “up the volume on lesser but still present discourses” (Clarke, 2005:175).

The author also defines four main foci of discourse analysis: form, discursive interaction, subject and the situation of production. This last one, which guides the analysis of the present research, refers to the production of power/knowledge, ideologies and control through discourses. The goal is to identify how discourses are produced, by whom, with what resources and under what conditions.

The situational analysis method is best applied to multi-site or multi-scape situations. In the case of this research, it fits what Clarke, following Appadurai (1996:33-35, Clarke, 2005:165), identifies as the “ideoscape”, the multiple concatenations of images and ideologies, usually having to do directly with politics, including the ideologies of states, of movements seeking to capture state power. In our case here, it refers to the political dispute for hegemony in the field of higher education.
1. RESEARCH DESIGN

In a situational analysis approach, there are no research questions defined beforehand. What mainly
distinguishes this and grounded theory in general from other conventional research methodologies
is that it does not begin with a theory, from which hypothesis are deduct and set out to test. Both
research question and theoretical framework are data driven, that is, they are not externally imposed
by the researcher, but emerge from the situation itself.

At the beginning of the study, a broad research problem is stated, based on an initial perspective of
the researcher over the situation and supported by general literature. Then data collection, analysis
and literature review feed into each other to refine the research scope. The result is that the theory
which emerges from this process is completely tailored to the research object. The emerging theory
must be developed to the point of saturation, when all elements that appeared as research problems
in the situation have been met by theoretical analysis, and the collection and analysis of new data do
not add to the concepts and categories developed.

Among the analytical methods offered by situational analysis, the one adopted here was that of
integrative mapping and analysis. It consisted of two basic steps. First, grounded theory coding
and analytic memoing were done using all the different data sources together. Codes were generated
in/through all of the materials, sifted and coalesced into categories.

Next, all three kinds of maps and analytic memos based on them were drafted, using all materials
simultaneously. The maps generated referred to the varied data sources as constituting a whole
situation. To conclude the analysis section, all maps were summarised into a single project map.

In the present research, both primary and secondary sources of data were in use. The collection
process can be described as follows:

1) Primary data: interviews and observation/participation

Between May and August, 2014, I carried a series of semi-structured interviews with central actors
both at Tuning EU and Tuning LA programmes.

Tuning EU is the responsibility of Deusto International Tuning Academy (DITA) and International
Tuning Academy Groeningen. As both Tuning Academies are represented by rather small teams, no

---

11 The alternative to this would be the comparative mapping and analysis, where different sources of data are coded
and memoed separately, after what the results are compared. That is interesting when the focus is on contrasting
different forms of discourses. For example, visual versus historical data.
sampling was needed. All director's were contacted. Other members of Tuning and external consultants were contacted as well, preferably those who had any previous experience with Tuning LA.

In what concerns Tuning LA’s actors, all 18 directors of the National Tuning Centres in Latin America were contacted, but only 7 replied. Two of the creators of Tuning LA project were also interviewed.

For the final analysis, 18 out of 21 interviews were considered:

- 8 with the European Union counterpart, including Tuning's creators, as well as other members of Tuning Academy and external consultants invited to cooperate with Tuning project;
- 9 with Tuning LA creators and directors and the Latin American coordinators of the National Tuning Centres, namely from the following countries: Brazil, Chile, Colombia, Costa Rica, Cuba, El Salvador and Paraguay;
- 1 external specialist invited by Tuning to evaluate Tuning Latin America.

The interviewees gave their verbal consent for voice recording, and their anonymity shall be preserved. They are not responsible for any of the results published here and, therefore, they will not be identified throughout the text.

Interviews were carried in English, Spanish and Portuguese. Coding and analysis were organised in the original languages, so that the meanings of the discourses were more accurate. Only when transcribing quotes to the final text of this thesis I have translated Spanish and Portuguese to English.

In addition to data collection through interviews, there were two moments of observation and participation. The first one, with the European counterpart, happened during my internship at Deusto International Tuning Academy in Bilbao, for six weeks, between May and June, 2014. The second refers to the two-days meeting promoted by the Brazilian National Tuning Centre in August, 2014, in Brasilia, where I have participated as a listener. The purpose of the meeting was to debate the results of Tuning LA in Brazil so far, gathering the representatives of the subject areas from all universities involved with the project in the country.
2) Secondary data

I have consulted twice the main documents published by Tuning Academy on both Tuning EU and Tuning LA. I treated this documents as support material before I started the interviews and was immersed in the observation/participation contexts. Once the primary data collection was done and the analysis had started, I got back to Tuning's documents as data sources, and these documents were also analysed and coded. When quoting any pieces of information from Tuning's published materials, these will be referenced.

All documents were published through and retrieved from the Tuning Academy's website (www.tuningacademy.org). The documents analysed were the following:

- **Tuning EU**


- **Tuning LA**


2. VALIDITY

The notion of validity is traditionally connected to a positivist perspective, according to which “truth” and “knowledge” are claimed as external, objective realities. Situational analysis, grounded theory, or any derivations of symbolic interactionism, on the contrary, are based on the premise that “truth” and “knowledge” are socially constructed, and exist only in relation to the viewer.

In the positivist theory, two researchers presented with the same “object” would try to replicate the same experiment, and their validity would be confirmed if the results were close to identical. In symbolic interactionism, the results presented by different researchers could be fairly distinct, as they speak from different positions in the field.

In the present research, for example, the findings confirmed many of the results indicated by previous analyses of Tuning, as mentioned in the Introduction section. That might indicate there is a consistency either in terms of the object – meaning some of Tuning's characteristics are recurrent – or in terms of the researchers – meaning me and these others that have analysed Tuning before me are aligned in our political perspectives.

When it comes to internal validity, Strauss and Corbin (1998, Gasson, 2003) suggested this could be replaced by the idea of internal consistency. The concern is to whether all parts of the emerging theory fit with each other and how they appear to explain data.

In what concerns external validity or generalizability, Gasson (2003) suggested this could be replaced by the idea of transferability. This must arise through identifying similarities in factors that are part of the theoretical model, that are consistent between different contexts for which the theory fits. It is relevant to emphasize, however, that symbolic interactionism does not have the same pretension of generalizing its results, as positivist traditions might do.

The most significant aspect of the quality of a symbolic interactionist approach is its transparency. It is important that the researcher demonstrate self-awareness of its position in the field. Moreover, all assumptions and frameworks must be made explicit, and the process of analysis should be described in detail. Data should be presented in a transparent way so that the reader can confirm the generated theories are actually grounded in the data. Hopefully this level of detail was achieved in the Analysis section of this thesis.
The literature review is a fundamental dimension of situational analysis. It is not organised beforehand, as a general background from which one identifies a research question and deducts hypotheses. It is rather a permanent resource, present in all phases of the research, that feeds into the analysis and dialogues with the theoretical framework emerging from the analysed situation.

The theoretical references that resourced the present research were summarised here in six main topics. The first two discussed the concepts of *academic capitalism* and *coloniality*. Both were briefly described according to their authors' definitions. The four following topics introduced the notions adopted here for: *competence based education*; *globalisation and internationalisation of higher education*; *differentiation and diversity in higher education*; and *cultural diversity and higher education*.

Throughout the literature review and on the analysis section of this thesis, I have highlighted how these theoretical references feed into the research and into the formation of categories relating to the analysis of Tuning.

1. ACADEMIC CAPITALISM

For the objectives of the present research, the notion of academic capitalism was adopted here as elaborated by Sheila Slaughter and Larry Leslie in their book *Academic capitalism: Politics, policies and the entrepreneurial university* (1997). Academic capitalism, according to the authors, refers to market and marketlike behaviours on the part of universities and the academic community.

These behaviours might be expressed, among others, in the form of:

- For-profit activities on the part of the institutions;
- Institutional and faculty competition for moneys;
- Focus on research for marketable products, a perspective on teaching as human capital formation;
- The organisation of the relations among higher education institutions and systems in a marketlike logic. This can be identified, for example, in the formation of higher education areas as conglomerates, and the adoption of seals of quality and rankings of efficiency.
In the case of Tuning, the expressions of a marketlike behaviour become evident as the project intends to create common higher education areas, based on shared competence-based education frameworks. The next step would be adopting common quality standards, so that diplomas would become not only comparable but also valid in different parts of the globe, therefore integrating labour markets.

Slaughter and Leslie (1997) trace the process of marketization of higher education back in time and identify that, at the beginning of the industrial revolution and through the first half of the twentieth century, professionals from all areas, including scholars, were still able to protect themselves from the market discipline by positioning themselves between capital and labour. They developed a tacit social contract with the community at large, in which they received monopolies of practice in return for disinterestedly serving the public good. They did not seek to maximize profits, but were guided by ideals of service and altruism. In return, they were exempted from competition, but still received adequate compensation. The interaction with the market was mediated by professional associations and by the law, and anyone not professionally certified was legally prevented from offering a wide variety of professional services.

In the 1970s and 1980s, however, markets became global, partiality in response to the increasing economic competition from Pacific Rim countries. Multinational conglomerates began to dominate the world economy. Those corporations that were established in industrialised countries sought to compensate the lost shares of world markets to the Pacific Rim by investing in new technology, so they would remain competitive globally. Corporations turned then to research universities for science-based products and processes to market in global economy.

This new context of globalisation of political economy destabilised the conventional western patterns of university professional work. Professors, like other professionals, gradually became more involved in the market. During the 1980s, Slaughter and Leslie claim, faculty and universities were incorporated to the market, and professional work began to be patterned more like work in the for-profit sector. That increased the tendency for universities to be treated more like all other organisations, as well as professionals to be treated more like all other workers.

The integration of universities to the market expressed an important change in the way institutions provided services, reorganising teaching and education around the notion of human capital. Human capital can be defined as the knowledge and skills possessed by workers that may be converted into financial capital, contributing to economic growth. As pointed out by Slaughter and Leslie,
universities are repositories of the most scarce and valuable human capital that nations possess, vested in the academic staff. Knowledge and skills in such logic were turned into currencies, making diplomas susceptible to being ranked according to their market value.

Currently, as it was until the first half of the twentieth century, scholars still have the monopolies of practice of many professions, protected by the legal value of diplomas. The difference is that they are not exempted from competition any more. After universities were integrated to the market, diplomas became objects of consumption, able to be ranked in terms of its potential conversion into financial capital. Institutions lost, therefore, much of their curricular autonomy, as the contents of a diploma should be tuned with market demands.

As markets expand, it is sameness and not uniqueness that is stimulated. Local and unique aspects of curricula that express cultural diversity loose room to common frameworks that could be more easily traded and compared. In Tuning, that is the case, for example, with competences that are specific to a region. As they have no possibility of equivalence in other regions, they are seen as particularities that should be preserved in the name of cultural diversity, but do not add to the programme's objectives of enhancing mobility.

It becomes evident that such marketlike practices may be connected to a decrease in institutional differentiation, instead of an increase, as could be expected according to the ideals of a free competition market. As Vught (2007) points out, that is so because in higher education systems the price mechanism works imperfectly. As institutions are usually heavily subsidised, both by public funding and private gifts, and the distribution of such resources is unequal within the system, the relation between supply and demand becomes distorted.

Therefore, increasing consumer sovereignty does not automatically lead to an increase of responsiveness to societal needs and to more diversity in a higher education system. Rather, in the competition for funding sources, the behaviour of higher education institutions is conditioned by the competition for institutional reputation, subordinating distinct institutions to common assessment criteria and stimulating them to replicate the practices of leading institutional models. This process, Vught adds, is self-reinforcing, as the wealth-inequalities and differences in reputation tend to increase, resulting in the establishment and strengthening of hierarchies in higher education.

2. COLONIALITY

The concepts of coloniality and colonialism are linked, but they do not fully coincide in meaning.
Colonialism refers to a structure of domination and exploitation, where the control of political authority, productive resources and workforce of a population is detained by another of a different identity. Colonialism does not necessarily imply racist relations of power, as coloniality does. Colonialism is older in history than coloniality, but the latter has proven to be deeper and more long lasting than the former (Quijano, 2007).

The term coloniality and its meanings were employed in this research as defined by Anibal Quijano, mainly in his text *Colonialidad del poder y clasificacion social* (2007). According to the author, coloniality is one of the constitutive elements of a global pattern of capitalism. It is based on the imposition of a work, gender and racial classification that justifies domination as a given condition and operates in all dimensions of social interaction.

Its origins trace back to the constitution of America, when the emerging capitalist power became global and placed its centres on what came to be Europe. As Quijano explains, *capital*, as a social relation based on the mercantilisation of the workforce, was probably born around the XI and XII centuries, and it is therefore anterior to the constitution of America. Before America, however, capital was not structurally articulated to other forms of organisation and control of labour and workforce, nor it was predominant over them. These other forms of organisation that were articulated with capital were mainly: servitude, slavery, and the production of commodities to a global market. Such forms were morally based on the principle of eurocentrism. Only with the constitution of America and eurocentrism has capital become consolidated as a system and obtained global predominance.

Eurocentrism has three fundamental elements:

- The articulation between *dualism* (non-European *versus* European; pre-capital *versus* capital; primitive *versus* civilised; traditional *versus* modern) and a linear, unidirectional evolutionism, that ranges from a state of nature to the modern European society;
- The naturalisation of cultural differences among human groups through its racial categorisation;
- The distorted relocation of time, in such a way that the non-European is presented as past. It refers to the establishment of modernity as a dominant temporality.

One of modernity's main characteristics is that the knowledge production patterns that it legitimises as real are those which serve better the cognitive needs of capitalism: measurements, quantification, objectification, and opposition between civilization and nature. All other forms of knowledge are disregarded, considered non-*rational* or anachronistic, following the dualist paradigm. All of these
intellectual operations are clearly interdependent and could not have developed without coloniality.

For Quijano, the eurocentrism that results from the process of coloniality is not a perspective exclusive to Europeans or to dominant actors in the capitalist system. It is shared by all those who were educated under its hegemony. Thus it does not correspond to geographical borders. Since the XVIII century, and especially with the Enlightenment, eurocentrism was consolidated through the mythological idea that Europe, as a geocultural identity, preceded the formation of capitalism and modernity, and was therefore anterior to all modern identities, rooted in ancient a-historical times. Based on this myth, it was possible to justify any European achievements as naturally the most developed ones in this linear, unidirectional scale of progress. We were led to believe in eurocentrism as a totality, where the whole has predominance over the parts. Anything that will not fit it is seen as a particularity, a secondary variation of the whole.

This notion of totality – and subsequent marginalisation of anything that will not fit in it – is fundamental for the present research, as Tuning proposes to connect different institutions and higher education systems through a common and universal framework of competences. As a downside, local elements that would not find correspondence with competences in other parts of the globe could be relegated to the role of mere particularities, with great local but no universal value.

Through eurocentrism, coloniality has naturalised the experiences, identities and historical relationships of power and dominance, producing a geocultural distribution of capitalism. This contributed to shaping the international division of labour. Individual or collective actors are oriented to perform activities that may range from a dominant position, such as the production of high technology, to a subaltern position, such as the supply of raw materials for industry. In what concerns the production of knowledge, such division may range from the production of theory – a valid interpretation of reality – and the supply of data as subsidy to theory.

Coloniality has spread out to all different parts of the world that had established any kinds of social relations through the logics of capitalism or modernity. In the specific case of Latin America, Quijano identifies a historical-structural dependence, for the symbolic aspects of eurocentric domination constitute the very identity of Latin America. Every action taken in Latin America that reinforces the objectifying logics of modernity or the expansion of the capitalist system will contribute to the perpetuation of such dependence. In the present research, this issue was taken into consideration to help identify whether Tuning was understood as contributing to reinforce such logics.

The resistance and critique of coloniality was always present in Latin America. Only after the 2\textsuperscript{nd}
World War, however, has there been systematic review of the totality of the eurocentric perspective (Quijano, 2007). Currently, it is not any longer enough to debate the inclusion of marginalised populations without questioning its terms. Social and economic integration must not have the side effect of neutralizing or eliminating cultural diversity. No groups marginalized by eurocentrism should have to give up their own epistemological views in exchange for integration. It is fundamental to think of alternatives where cultural differences are not seen as obstacles to integration and dialogue, especially in the face of an increasing globalisation process.

3. COMPETENCE-BASED EDUCATION

The idea of competence-based education as a student-centred approach, aimed at creating measurable parameters and increasing curriculum transparency, dates back to the 1960s (Brown, 1994). Recently, it has re-emerged as an influence on curricula redesign in higher education.

Karseth and Solbrekke (forthcoming) searched the documents that consolidated the European Higher Education Area and verified that learning outcomes were not mentioned in the original Bologna Declaration from 1999 nor in the Prague Communiqué of 2001. However, since the Berlin Communiqué 2003, they have appeared regularly. The authors interpreted this as a “strong move” in higher education from focussing on input factors towards focussing on outcomes at the end of the learning process. Tuning programme is an important element of this transition, as learning outcomes and competences are at the programme's core.

Wim Kouwenhoven (2009) presented a minimalistic definition of “competences”, referring to it as “the ability to perform a task up to a standard”. For the author, the lack of a generally accepted operational definition hampers a more complex enunciation of the term. What Kouwenhoven considered to be of general agreement is that competence-based education is a way to conceptualise the relation between education and the world of work.

The main characteristic that forms the archetype of competence-based curricula is the predominance of the professionalising dimension. Curricula development in competence-based education is based on the elaboration of professional profiles and the identification of competences. What determines domain-specific knowledge and skills is not a disciplinary body of knowledge, but the understanding of what makes a competent professional. For Kouwenhoven, this logic implies that the designing and developing of curricula are organised “backwards”, as the professional practice starts to define academic profiles, and not the other way around.

34
The danger of such proposal to the protection of cultural diversity is evident: those pieces of knowledge that do not meet a function in the labour market are discarded or not prioritised in the elaboration of curricula. In the best scenario, such pieces would be preserved as local particularities, serving the demands of the “social dimension” that is promoted to counterbalance the negative effects of the liaison to the market.

Chyung et al. (2006) presented an ideal methodology for building competence-based curricula in six steps:

1. Organise an alumni survey to check strong and weak points in the curricula in what regards the transfer of competences;
2. Form a committee of experts to establish professional standards and curriculum benchmarking;
3. Identify how departmental goals fit to the results from the two first steps and make the political choice to adhere to change if necessary;
4. Generate a list of competences;
5. Redesign courses, so that course objectives, the competences that apply to that course and the graded course assignments are all aligned;
6. Perform a program evaluation to measure the effectiveness of the curriculum in helping the students achieve the established competences.

Tuning's methodology and competence-based approach present many similarities to the model presented by Chyung et al. The main relevant difference was that Tuning' survey (step number one) included also academics, current students and potential employers. Another important difference was that the program evaluation (step number six) is still a project for the future, perfecting what was tried with Tuning-AHELO.

The OECD (2009), in the text of Tuning-AHELO project, describes the move of focus from the input to the output factors, as higher education institutions choose to adopt a competence-based approach:

“At present Higher Education institutions, encompassing research universities, universities of applied sciences (polytechnic schools) as well as colleges, are undergoing a transformation process. The traditional 'staff-centred' and 'knowledge-oriented' approach is slowly giving way to degree programmes which take the student as the centre of the teaching and learning process. In practice this implies that, besides
knowledge acquisition, more attention is given to the application of subject-specific skills as well as to general academic skills. The aim is to make students as competent as is feasible in a given time frame for their future role in society, by differentiating the educational offer and by making optimum use of the interests and capabilities of the students. In these programmes the focus is on competence development and the achievement of so-called intended, expected or desired Learning Outcomes of the learning process.”

Competence-based education is therefore a student-centred approach focused on the efficiency of students as future workforce. It is aligned both with academic capitalism, as it reflects a market oriented logic, and colonialism, as it tends to reproduce only those types of knowledge that present market value.

4. GLOBALISATION AND INTERNATIONALISATION OF HIGHER EDUCATION

For Jane Knight and de Wit (1997), globalisation and internationalisation are very different processes, yet dynamically linked to each other. Globalisation is defined by the authors as “the flow of technology, economy, knowledge, people, values, ideas, across borders”. It “affects each country in a different way due to a nation's individual history, traditions, culture and priority. Internationalisation, on its turn, is defined by Knight and de Wit as “one of the ways a country responds to the impact of globalisation, yet at the same time respects the individuality of a nation”.

Whilst globalisation can be thought of as a catalyst, internationalisation is a proactive response. The key element of internationalisation, for Knight and de Wit, is the notion of between or among nations and cultural identities. “A country's unique history, indigenous culture(s), resources, priorities, etc., shape its response to a relationship with other countries. Thus national identity and culture is key to internationalisation”.

Knight and de Wit recognize that the homogenisation of culture is often cited as a critical concern or effect of globalisation, with greater risk for smaller or developing nations. Internationalisation, for the authors, however, would not run the same risk, as it respects and perhaps even strengthens local, regional and national priorities and cultures.

Knight and de Wit affirm that internationalisation is not a geographically based concept, and it is

not oriented to countries or nation states, but it also includes different cultural groups within a country. For the authors, it is challenging to find a definition of internationalisation that is appropriate and sensitive to higher education systems in a wide variety of countries and cultures. Their concept is oriented to the institutional level, and attempts to build on the universality of the functions of a higher education institution. One of these universal functions is the competence approach, closely related to an outcomes approach, where quality is thought of in terms of the development of new skills, knowledge, attitudes and values in students, faculty and staff. That is the approach promoted through Tuning programme.

In the competence approach to internationalisation, Knight and de Wit affirm, the emphasis is placed on the human element of the academic community. The internationalised curricula and programmes are not an end unto themselves, but a means towards developing the appropriate competences to make students, staff and faculty more interculturally skilled. The growing interest in the competence approach, for the authors, results from the increasing orientation of higher education towards the demands and concerns of the labour market and of an increasingly international economy.

The same demands could lead to the pursuit of international quality standards. For Knight and de Wit, this is an increasingly controversial issue, for the excessive emphasis on internationally recognised standards can result in uniformity and homogeneity, decreasing institutional differentiation.

In practice, it is really hard to find a situation where internationalisation occurs without the contamination of globalisation. The Bologna Process, for example, is expected to be an action of internationalisation, and not globalisation, as national and cultural individualities are assumed to be preserved. Nevertheless, as pointed out by the report of the German Council of Sciences and Humanities (DE Wissenschaftsrat, 2010)\(^\text{13}\), it affects national differentiation processes. In Germany, the report exemplifies, an increasing internationalisation was seen side by side with a Europeanisation of higher education institutions, producing sameness. International influences that start gaining force as supranational actors become greater providers of financial resources, as does the European Union.

In Tuning's case, the programme seems to focus on internationalisation, since it intends to promote a global network, involving an immense variety of countries and cultures, and centring its actions in individual institutions. This strategy, nevertheless, does not free the programme from the

---

\(^{13}\) Full text available at: [http://www.wissenschaftsrat.de/download/archiv/10387-10_engl.pdf](http://www.wissenschaftsrat.de/download/archiv/10387-10_engl.pdf) accessed on the 31st of March 2015.

37
responsibility over its globalising effects, that may impact the whole of the cultural group where each institution is based.

5. DIFFERENTIATION AND DIVERSITY IN HIGHER EDUCATION

Drawing on an organisational theory perspective, differentiation refers to the dynamic process of producing diversity, while diversity indicates the static variety of entities within a given system in a specific point in time. For Vught (2007), differentiation can occur through the splitting of existing entities into new ones or by the coming into existence of completely new entities. Institutional differentiation refers only to the increase in horizontal diversity, as it relates to the heterogeneity of a system. It implies its opposite, dedifferentiation, which refers to the decrease in the emergence of new entities or the decrease in a system's heterogeneity.

Regarding its levels, diversity can be defined as external, when it refers to differences between higher education institutions, or internal, when it refers to differences within higher education institutions (Birnbaum, 1983; Vught, 2007). External diversity is not insensitive to the fact that institutions are not homogeneous units. The general status of diversity of an institution or system is connected to the behaviour of subunits such as departments, study programmes or disciplines.

The implementation of Tuning, for example, occurs at departmental level, since the programme focusses on specific subject areas. Its effects, however, can reach both internal and external levels, as they contribute to shaping the institution as a whole.

Regarding its dimensions, diversity can be defined in two main types: vertical, when referring to attributes such as quality and excellence; or horizontal, when referring to institutional profile (Teichler, 2004). Vertical diversity presumes sameness and comparability, as the use of common frameworks allows institutions or units to be classified in common rankings. The greater the horizontal diversity, the more heterogeneous institutions or units are, making the establishment of common criteria for quality assessment more complex.

The increase in horizontal diversity should not hinder assessment. On such issues, Van Vught (2007) indicates the need to develop different ranking instruments in which different forms of institutional performance could be compared. Conventional inter-institutional comparisons – such as Times Higher Education Supplement or the Shangai Jiao Tong University ranking, as the author exemplifies – increase vertical diversity, as they stimulate a competition for institutional reputation and create hierarchies, favouring traditional academic performance. This leads to an increase of
mimicking behaviour, as the highly reputed institutions are imitated, and hence to more homogeneity.

In the present analysis, the tension between horizontal and vertical types of diversity was taken into consideration. Data were used to understand if Tuning's attempt to promote curricula comparability through competence-based education potentially culminating in the decrease of horizontal diversity and consequent increase of vertical diversity.

Reichert (2009) presents a compiled list of possible forms diversity may assume in higher education, as proposed by Birbaum, Fairweather and Meek:

- **System diversity** is linked to the diversity of mission, student clientele, size, source of control (public and private) and regulatory conditions;
- **Structural diversity** refers to institutional differences resulting from historical and legal foundations;
- **Programmatic diversity** indicates degree level, degree area, comprehensiveness, mission and emphasis of programmes by title, content, approach to learning, specification of student requirements, locus of control for decisions about curricula and quality;
- **Procedural diversity** regards the different ways of providing teaching, research and services, including both instructional and research practices
- **Reputational diversity** refers to the effects of media and policy attention to indicators such as international rankings;
- **Constitutional diversity** concerns the different groups that constitute the institutions, e.g. students, faculty and administrators;
- **Values and climate diversity** refers to the different aspects of the social environment and institutional culture;
- **Diversity of funding sources** regards the choices of funding sources that may exert influence on the institutional profile;
- **Organisation diversity** indicates the diverse forms of governance and organisational cultures which characterise institutions.

This, however, is just an ideal typification from an organisational perspective. It does not take into consideration broader social forces, such as the influence of markets or coloniality. In this framework, all different forms of diversity are connected and mutually affect one another. They vary in internal and external aspects, and in their degree of horizontality or verticality. In the present
analysis, special attention was given to programmatic and procedural diversity. Possible connections to other forms of diversity were also debated in the analysis of the results.

Another important focus of attention was given to identifying the drivers of differentiation. On this topic, Reichert (2009) has conducted a detailed empirical research within an international comparative perspective of European countries\textsuperscript{14}. Among the main drivers listed by him were international developments such as the globalisation of particular sectors of academic research markets. For the author, external developments may exert considerable influence on a higher education system's structures. For example, international policy developments may affect national higher education structures, often resulting in convergence. It is possible that external developments may also trigger new institutional choices and contribute to promoting diversification. That, however, was not witnessed as frequently in Reichert's research.

In the European case, Reichert affirms, studies were conducted on the effects of Bologna reforms, but did not make clear whether the curricular reforms or other related Bologna national implementations have brought convergence or diversification regarding programme definition, student clienteles, target groups for higher education or institutional profile. The only effect noted was that of convergence between institutional types.

An equally relevant finding of Reichert in this same study was the high impact of quality assurance standards on diversity. Besides the convergence with respect to quality assurance processes, the recommendations that arise from evaluations may contain assumptions about mission emphases or programme orientation which could promote convergence at institutional or programme levels.

For Dimaggio and Powell (1983; Vught, 2007), differentiation is related to the amount of resources available in a system. If there is scarcity, universities might tend to isomorphism. They will mimic the behaviours of the successful models, that concentrate most of the resources. Isomorphism may also derive from the pressures applied by other organisations on which universities are dependent (such as governmental policies and laws), and from professionalisation, as formal professional training produces a certain similarity in professional background, and professional associations encourage similarity.

In the case of Tuning, there is an imbalance in the distribution of resources in Europe and Latin America, the first region generally concentrating more economic resources on higher education. Within Latin America, there is also a noticeable disparity of resources among countries. The present research tried to identify whether such inequalities were considered by the participants in describing

\textsuperscript{14} Namely: England, France, Norway, Slovakia and Switzerland.
their perspectives of the programme. The same applies to the pressures from external organisations, as the participation in the programme could be aligned with national or international pressures.

In what concerns isomorphism caused by professionalisation, it was verified by document analysis and the participant's speeches that Tuning had a significant effect. As mobility increases and diplomas gain wider validity, labour markets also become more integrated, and professional associations could benefit from this, encouraging curricular similarity and establishing common standards for the legal practice of a profession.

Isomorphism and convergence may also generate diversity, but in a vertical dimension. This means institutions will have similar behaviours but will be ranked or assessed based on common quality standards. The pursuit of a single model of excellence results in the unequal distribution of resources, according to performance ideals. That replicates social-structural inequalities, preserving or increasing social stratification and neglecting the demands of marginalised groups. Vertical diversity is, therefore, opposed to cultural diversity, which can only flourish in a horizontal distribution of resources.

Vertical and horizontal diversity are two ends of a same grading scale. They refer to the mechanisms of distribution of resources. If resources are distributed unevenly and competition pushes institutions to sameness, we are closer to developing vertical diversity. If mechanisms of even distribution of resources are organised, e.g. more diversified rankings and state regulation, then hierarchy and competition are reduced and horizontal diversity can be increased.

Vught (2007) refers to two key arguments in favour of horizontal diversity. The first is that increasing horizontal diversity is an important strategy to meet students' needs. A more horizontally diversified system may offer more opportunities of access to students with different educational backgrounds, and each student should have the chance to find an educational environment in which chances for success are realistic.

The second argument is that a horizontally diverse system ensures the needs of different groups in society to have their own identity and their own political legitimation. In less horizontally diversified system, the needs of specific groups may remain unaddressed.

Cultural diversity is only addressed when horizontal diversity is being promoted, as it is opposed to converging institutional models. Even if the convergence happens in terms of structure, content is also being affected, for structures are not neutral, but connected to a cultural perspective. In what relates to Tuning, this research observed from data analysis whether programmatic and procedural
diversity were perceived to be converging, leading to a decrease in horizontal diversity and, therefore, negatively affecting cultural diversity.

6. CULTURAL DIVERSITY AND HIGHER EDUCATION

A culture is not monolithic or homogeneously represented by each and all individuals in a given group or society (Wagner, 2010). It is also not an impermeable unit, but a rather dynamic one, in permanent exchange with others. Taking this idea to its extreme, one could say that the minimal unit for culture is the individual, as each person represents a singular perspective of a symbolic universe. This, however, would mean minimizing the commonalities that allow us to distinguish groups or societies that share common symbolic universes.

For Durkheim (2000) such commonalities refer to the frameworks of distribution, classification and hierarchization of people and objects that provide individual experiences with categories and concepts. These categories and concepts establish a principle of order and allow individuals to transcend and give meaning to their immediate and amorphous sensations.

As Eric Wolf (2005) describes it, cultures are not integrated and organised totalities, but merely cultural sets of ideas and practices that are enacted by human actors under certain circumstances. As circumstances vary, they allow culture to be in permanent reconstruction by individual and collective actors.

When enacting these cultural sets, an individual internalizes its frameworks, to the point they become their absolute reality. A culture only becomes visible when it is contrasted or conflicted with another. That is when its artificiality is more evident, as all cultures are permanent inventions (Wagner, 2010).

Samoff and Carrol (2007) illustrate that process when referring to the transfer of policies and resources to Africa, specially from the World Bank. With foreign funding, the authors say, came ideas and values, advice and directives on how education systems ought to be managed and targeted. Those imported understandings were internalized and institutionalized, to the point they were no longer seen as foreign imports, but the apparently unexceptional everyday routines of universities, research institutes, and indeed informed discourse.

For Wolf (2005), each mode of production of the material life entails essential distinctions among individuals. The social compositions generated by such distinctions constitute the ground for
building ideologies. The formation of cultural systems occurs in the fields of ideological options from which groups can select their own. The process of such choice is not only cognitive, as it also involves power. To maintain their ideological hegemony, dominant groups must transmit their message to an increasing number of instrumental domains, at the same time that they restrict the capacity of subalternised groups to offer viable alternatives.

The development of hegemonic patterns, therefore, is not the victory of a cognitive logic or of an aesthetic impulse. It is the development of redundancy, the continuous repetition in varied forms of the same basic propositions that build a dominant principle of order. When redundancy fails, the deficit in fabricating an ideology can be compensated with strength. Strength can be manifested in terms of social coercion, violence, or marginalisation. The power of the formation of cultural systems lies on the fact that its traces fade in history, and subjects can hardly tell where their ideological choices come from (Wolf, 2005).

That process explains the formation of capitalism as a mode of production. Coloniality was the violent, coercive and marginalising tool used to constitute and impose the system, as it spread the ideology of eurocentrism. Material domination was justified by a presumed cognitive superiority, as eurocentrism developed an ideal of rationality. Knowledge-based economy, globalisation and academic capitalism were modern tools elaborated to guarantee the survival of the capitalist mode of production.

But how are these ideologies expressed in terms of higher education policies?

Novoa (2002) refers to the making of such policies as “planetspeaking discourses”. They are build in a way of reasoning that seems to have no structural roots, no social locations and no origin, but they are assumed as the legitimate way to speak. Subjects are free to choose, but there is only one paradigm on offer. The choice is restricted to adhering to it or not, and it comes with consequences. If subjects choose not to adhere, they will be marginalised. If they choose to do so, they will be promised a prosperous future.

Fejes (2006) adds to Novoa and emphasizes that there is currently a neoliberal form of governmentality emerging from Europe. It integrates new geographic spaces and populations not by overt coercion or legislation. Instead, governing is organised through harmonised regulations, codes and standards. The emphasis is on constructing self-regulative governing where the subjects are to govern themselves.

Without direct coercion, nations, universities and citizens adapt to this processes through the
creation of discourses of “truth” (Fejes, 2006). Such discourses are often ambiguous and constructed on parallel narratives. Standardisation/homogenisation and respect for differences/heterogeneity are narratives which are presented simultaneously, and accommodate different interests. This increases the flexibility of institutions in aligning with capitalism as an ideological option.

Another powerful narrative that lies at the centre of the discourses on higher education in Europe is the idea of a constantly changing future. New social needs are being constantly generated and they should be anticipated and served. Of course not all actors are equally legitimate in identifying what these coming needs are. These are signalled by the market and validated through conventional academic research, organised by prestigious institutions, voices of “truth”. Assigning the responsibility over anticipating social needs to higher education is also on the interest of such universities, as they become the guardians of the future (Fejes, 2006).

These narratives of power tend to perpetuate in time. Once created and made valuable to a group or to an alliance of groups, academic forms tend to persist and become autonomous. It means new generations of individuals will fill in inherited institutional forms with low levels of critique, as they were not confronted with alternatives. Out of successive historical periods, additional forms are created or abandoned, making differentiation an accumulation of historical deposits (Clarke, 1983; Vught, 2007).

The Bologna process and its derivations, such as Tuning programme, are an example of higher education policy discourses that incorporate all of these analytical elements and are being perpetuated. Both take the idea of knowledge-based society for granted, meaning knowledge becomes a central element of competition among countries and regions. Comparability, quality assurance and mobility are market-oriented elements of discourse which aim at increasing employability – now assumed as a right for citizenship. The adoption of such pattern is assumed to improve communication, integration and mobility, among other aspects. Those that would not adhere to the project would be left out of its possible benefits, and the marginalisation generated in that process would potentially be long lasting.

Tuning affirms that heterogeneity is to be preserved. Diversity, however, is restricted to content. The form – teaching and learning methods, quality assurance frameworks, and competence-based curricula – should be standardised to facilitate the flows of people and information among universities and labour markets.

It is intriguing what the advantages for “peripheral” countries on agreeing with such policies are.
Explaining this sort of behaviour, Gramsci (1992) affirmed that the apparently “spontaneous” consent given by the great masses to the general direction imposed on social life by dominant groups is actually historically caused by the prestige which the dominant groups enjoy, due to their position and function in the world of production.

That is a fundamental aspect to understand the “voluntary” adhesion of different regions in the world to Tuning's project. Such adhesion is not more than the formation of consent, granting legitimacy to eurocentric institutions. Especially in Latin America, the dimension of coloniality adds to the formation of such consent.

This apparent contradiction also points to the fact that universities were never horizontal spaces in terms of cultural diversity. As Altbach (2009) affirms, almost all the contemporary universities, regardless of their location, are European in structure, organisation and concept. Such trend means that for most of the so called 'developing' countries, higher education institutions are not linked to indigenous cultures and, in many cases, were imposed by colonial rulers (Altbach, 2009).

With regard to the specific case of Latin America, Daniel Mato (2009) adds to such reflection by affirming that higher education institutions in the region have traditionally reproduced values, interests, means of production and use of knowledge that are outlandish. Such practices lead it to subordinated roles in the international division of intellectual labour.

For that reason and due to social and economic stratification, universities were traditionally reserved for the elites. Dominant groups have been granted privileged access and presented greater performance in higher education. That occurs as a consequence of the individual accumulated inequalities in the educational process that starts with schooling. It also occurs because the discourses employed to educate and evaluate students – in terms of content and teaching methods, as well as institutional culture – reflect the discourses of the elite. This is a fundamental aspect to consider in Tuning's case when analysing who are the actors that take part in the formal consultation processes, as they are all in privileged positions.

It is relevant to emphasize that the eurocentric and elitist character of universities does not condemn such institutions. For its central position in society, universities hold an enormous potential for redistributing financial, cultural and social forms of capital. If that potential is organised in a horizontal way, it may have an effect of decreasing social inequalities and increasing political participation in society. Through eliminating the hegemony of the elite discourses that are employed in higher education institutions, it might become possible to renovate the institution from its interior.
Pierre Bourdieu (2007) explains that all discourses or cultural forms, through the economic and social conditions which they presuppose, are bound up with systems of dispositions that are characteristic of different classes and class fractions, becoming markers of class. Michael Apple (1993) adds to that by affirming that education is deeply implicated in the politics of culture. The curriculum, for Apple, is never simply a neutral assemblage of knowledge, but it is always part of a selective tradition, or, a group's vision of what legitimate knowledge is. It is the product of cultural, political, and economic conflicts.

In the case of Tuning, such aspect of the politics of culture can be identified in the lists of competences that result in great similarity, in spite of being developed in very different parts of the world. The similarities are real, but it is fundamental to understand they were artificially created, or, that they result from the spread of dominant ideas rather than from the spontaneous resemblance of cultures among each other.

The difficulty in finding consistent alternatives to the hegemonic patterns relates to the unequal distribution of resources among distinct cultural identities. The alternatives exist, but they were neglected the necessary material and immaterial resources to develop.

The current state of internationalisation of economy and means of communication multiplies the possibilities of cultural conflict, contact and exchange, making cultural differences more visible than ever before. It is a challenge to answer the increasing demands for cultural diversity in higher education.

Because culture is dynamic, such diversity can only be achieved by integrating marginalised actors as part of the higher education system not as students or consumers, but as producers, as teachers, as staff, and all possible forms of collaborators. As Paulo Freire (1987) has affirmed, a new pedagogy has to be created with the oppressed, and not for them.
In situation analysis, identifying the research question is part of the analytical process. No question is defined beforehand along with its group of hypotheses. Instead, a general research problem is posed, based on a general literature review and on an initial perspective of the researcher over the situation. The research question must emerge from the data, as the research priorities are defined by the situation itself, and not imposed by the researcher.

In the present research, based on the processes of literature review and data analysis, the research question identified was the following:

Do data reveal elements indicating that the programmatic and procedural redesign proposed by Tuning could affect institutional differentiation?

The possible results foresaw were: *positive impact*, if Tuning would contribute to the increase of institutional differentiation; *negative impact*, if Tuning would contribute to the decrease of institutional differentiation; or *neutral impact*, if there were not identified elements pointing to a significant relation between the implementation of Tuning and the development of institutional differentiation.
DATA ANALYSIS AND RESULTS

The approach to situational analysis adopted in the present research was integrative mapping. It consisted of two basic steps. First, grounded theory coding and analytic memoing were done using all the different data sources together. Codes were generated in/through all of the materials, sifted and coalesced into categories. Next, situational, social worlds/arenas and positional maps were drafted, and the three perspectives were synthesized in the form of a final project map.

It is relevant to emphasize that these maps are just ideal representations and show one possible perspective on the data collected. Reality is much more complex. Still, they might be useful to give an idea of the flows of interactions organised around Tuning.

All extracts from books are referenced. Interview quotes were identified as connected to Tuning EU directors, Tuning LA directors (also referring to National Centres coordinators), or the invited external expert. As Clarke (2005) argues, individuals or groups commonly hold multiple and contradictory positions on a same issue. The objective here, therefore, was not to contrast the positions of interviewees from the EU and Latin America, but to present their overall perception on Tuning. It is significant to mention, nevertheless, that both Tuning EU and Tuning LA groups were very much in tune in their speeches. That should not come as a surprise when considering that higher education systems in Latin America always received great influence from European models.

The present section starts with a critical reading on the descriptions of Tuning programme provided by data. Following it, the analysis of the generated maps. Full extracts of the books and interview quotes were transcribed in this section, as it seemed relevant to offer a view on the perspectives that constitute Tuning. The programme, after all, only exists as such because it is daily enacted by individuals.

1. DESCRIPTION OF TUNING PROGRAMME

Two main topics have emerged from data, concerning the perceptions on Tuning programme: a general description of the project's aims and philosophy, and its methodology.

1.1. TUNING'S AIMS AND PHILOSOPHY

One of the most frequent descriptions of Tuning was its definition as a “language”. That means
Tuning would work merely as a vocabulary, promoting dialogue while preserving institutional diversity. The depiction of Tuning as a neutral tool was evident throughout the interviews, as the following quotes show:

“Competences are just guidelines, they name competences but they do not name levels and they do not name the implementation. (...) [Tuning] does not say 'this is the list'. The university has to translate them into their own programmes and have to ask themselves which seem now the most realistic ones in relation to what we hear from the outside world. (...). Then you find tun at your learning outcomes, not so much in your competences, because your competences are quite open.” (Tuning EU director)

“We think that tuning is a very flexible model. It can regionally be adapted, it can nationally be adapted, and it can be adapted by every university. (...) you have a reference, but we always have said you can deviate from that reference (...). Every student should actually have its own profile to be unique, and uniqueness we still think that is an important feature of Tuning.” (Tuning EU director)

Such apparent neutrality seems to me like a contradiction in the programme's own terms. There are three important issues implied in the above quotes that reveal so.

The first is that they ignore the existing pressure for comparability and sameness. There are flows of power connecting institutions, countries and regions. Higher education systems are in unequal positions in the dispute for resources. One of the drivers of commonality is the notion that if an institution mimics the models and procedures of its most prestigious competitors, it will share this prestige and attract more resources. Dimaggio and Powell (1983; Vught, 2007) define this process as isomorphism. Isomorphism does not result in the democratization of resources in a vertical system, where the distribution of resources is not linked only to institutional structures but as well to the prestige and dominance accumulated through historical processes. That alone is enough to guarantee no common framework could ever be established in a neutral way. In this sense, the analogy of Tuning as a language becomes more accurate if we understand that any language involves relations of power, since some actors have a stronger influence in defining its terms than others.

The second issue is that it affirms uniqueness and flexibility are being preserved because competences are 'open'. However, learning outcomes are still required to be 'tuned'. It seems to imply that educational processes could differ among each other, but their results should remain comparable. That contradicts the idea of diversity, as it was stated in the following interview quote:
“I mean, we are talking about great comparabilities, and that always blurs diversity. But if you are in a country (...) and the educational system is very mainstream and leaves minorities out, how do you capture that? In the end, you have to go one step further and generate comparability and there is always something you lose, right? When you compare, you lose specificity, right?” (Tuning EU director)

Finally, the third issue is the idea of competence-based education itself as a role model. That was never questioned, neither in the books nor speeches of Tuning's directors. Competence-based education was just taken for granted, as if it was a tool with no political implications in its uses.

Tuning, nevertheless, acknowledges that the origin of the notion of competences is connected to the market:

“because the language of competences comes from outside academia, it might be considered more suitable for exchange and dialogue with groups that are not directly involved in academic life (...). New programmes must be guided by academic and professional profiles. These profiles may be expressed in terms of competences and must respond to social demands, encouraging employment and service to society.” (Reflections on and outlook for higher education in Latin America: Final report – Tuning Latin America project 2004-2007. Page 35).

The only consulted group that is not “directly involved in academic life” are the employers. The other three were students, graduates and faculty. No other representatives of civil society and its social demands are included in the formal consultation processes.

This conception goes hand in hand with the speeches of the interviewees, as it was exemplified in this interview quote:

“If you standardize the university formation, then I will teach or start a masters elsewhere and we will be speaking the same language. (...) It is economic interaction that is being favoured (...) and in a European context that is very interesting, since in Europe we have integrated the financial markets” (Tuning EU director)

Employability is in fact at the centre of the proposal, as well as the direct connection between life quality and income:

“If you ask a university what are its guarantees of success (...) the first thing it will tell you is the percentage of students that find jobs. (...) This is a goal everywhere”. (Tuning
EU director

“in the end everybody wants to be employed. (...) everybody gets education to get a better life. I think it is as simple as that. So we can talk about social dimension but the social does not give you bread and wine. (...) my driver is that people should have a decent life”. (Tuning EU director)

“what we are trying to establish is that people from this poorer regions have better chances for a decent employability and a decent income”. (In regards to the expansion of the programme – Tuning EU director).

Social responsibility appears as an element to counter-balance the potentially negative effects of the direct connection between students' formation and the labour market:

“It is necessary to enhance students’ awareness and social commitment so that they will place their capacities and competences at the service of others, rather than using them merely for their own benefit or at the service of the power-hungry corporations competing in an increasingly merciless globalised free market”. (Competence-Based Learning: a proposal for the assessment of generic competences. Page 31)

But social responsibility is still secondary in relation to employability:

“Yes, about competences... the employers look very much for the more technical competences, for what they need, so these prevail... But I see other demands are also considered”. (Tuning LA director)

1.2. TUNING'S METHODOLOGY

In what refers to methodological aspects, it seems to me that there are two significant flaws in Tuning's consultation processes. The first refers to the fact that the lists of competences were preliminarily generated by the groups of specialists that coordinate the programme and each of the subject areas.

It is not the quality of the work of the referred specialists that is under judgement here. The issue is that the use of semi-structured questionnaires limits very much the potential of a collective elaboration of the final list, endangering the diversity of the results. There are no round tables, for example, with different representatives from civil society that could add to the process of definition of competences. It is, therefore, likely that the developed competences will reflect the dominant
higher education models and ideals supported by the specialists. That could be one of the reasons why, in the end of the consultation process, the lists of competences from Tuning EU and Tuning LA were so similar.

This concern was expressed on the interviews more than once, for example in this quote:

“You do make a public consultation, ask teachers, students, etc., 'what do you think?'. But of course, they are asked about things that are already defined. That is, you tell them 'look, these are competences, these are the learning outcomes, value them'. (...) The answers are open, but the questions are closed”. (Tuning EU director)

The second flaw in Tuning's consultation process is that there was no empirical assessment of the competences. Students and graduates in the participant universities were not tested before elaborating the lists of competences to verify which were the actual competences being taught. Nor were there any empirical assessments relating the competences to local practices in the labour market, apart from the opinions of the consulted potential employers.

Two evaluation models were tried in Tuning-AHELO project, for the areas of Engineering and Economics in Tuning EU, but they did not add to the process of elaborating the lists of competences. Instead, they focussed on testing the competences that had been already previously defined as ideal in both areas.

This lack of assessment implies that the lists of competences are ideal models of higher education, much more connected to the shared ideologies held by the specialists coordinating Tuning than to the actual practices of participant universities or even the actual practices of the local labour markets, that could not be fully covered by the consulted samples. This certainly decreases the possibilities that the cultural and institutional diversity of a region could be properly represented.

2. SITUATIONAL MAP

In this first map, the locus of analysis was the situation. The goal was to descriptively lay out the most relevant human and non-human, symbolic and discursive elements involving Tuning programme.

According to Clarke (2005), when drafting a situational map, one should take into account collective and individual actors and elements; implicated silent actors and elements; political and economic elements; sociocultural and symbolic elements; spatial elements; and all other issues or
elements considered of relevance in the research situation.

The guiding questions for producing a situational map are broad, such as: Who and what are in this situation? Who and what matters in this situation? What elements make a difference in this situation?

Once the map is drafted, it offers the possibility for relational analysis. That is, placing a given element on the centre of the map and observing how it relates to others.

The following table presents the situational map organised by categories. The elements were chosen based on data analysis and supported by literature. Next, the categories were described in detail, and a relational analysis map was drafted.

<table>
<thead>
<tr>
<th>Individual human actors/elements</th>
<th>Collective human actors/elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuning EU's directors</td>
<td>European Commission</td>
</tr>
<tr>
<td>Tuning LA's directors</td>
<td>Tuning programme</td>
</tr>
<tr>
<td>National Tuning Centre's directors</td>
<td>Tuning EU</td>
</tr>
<tr>
<td>Main stakeholders consulted (students, graduates, employers and academics)</td>
<td>Tuning LA</td>
</tr>
<tr>
<td></td>
<td>National Tuning Centres (NTCs)</td>
</tr>
<tr>
<td></td>
<td>Participant universities</td>
</tr>
<tr>
<td></td>
<td>Consulted national governments in Latin America</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-human elements</th>
<th>Implicated silent actors/elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricula</td>
<td>Marginalised groups that do not have access to higher education</td>
</tr>
<tr>
<td>Universities' infrastructure</td>
<td>Future students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discursive constructions</th>
<th>Political/economic elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour market demands placed at the centre of higher education</td>
<td>Bologna Process</td>
</tr>
<tr>
<td>Competence-based education (CBE) assumed as the ideal model for higher education</td>
<td>Lisbon Strategy</td>
</tr>
<tr>
<td></td>
<td>Economic disparities between regions</td>
</tr>
<tr>
<td></td>
<td>Economic disparities within regions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spatial elements</th>
<th>Sociocultural/symbolic elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The formation of higher education areas per region, in the European Union and Latin America</td>
<td>Cultural diversity</td>
</tr>
<tr>
<td></td>
<td>Institutional diversity</td>
</tr>
</tbody>
</table>

Table 1 – Situational map
Individual human actors/elements

Tuning EU's directors; Tuning LA's directors; National Tuning Centre's directors: All of Tuning's and NTCs' directors both from the EU and Latin America were considered as key actors in the programme. This is specially relevant as this research presented Tuning under the perspective of some of them. Seventeen of the programme's directors were interviewed. The books used as secondary data were also authored by Tuning's directors in both regions.

Main stakeholders consulted: The main stakeholders consulted in the EU and Latin America were also seen as fundamental human actors, as they have direct influence on the frameworks of competences that constitute Tuning.

Collective human actors/elements

European Commission; Tuning programme; Tuning EU; Tuning LA: The European Commission is clearly a central collective actor for it supports Tuning programme morally and financially both in the EU and in Latin America. Tuning programme and its derivations, Tuning EU and Tuning LA, were also seen as units.

National Tuning Centres (NTCs); Participant universities; Consulted national governments in Latin America: National Tuning Centres, as units, coordinated the programme in each participant country in Latin America, mediating the relation between the universities and the government when necessary. The participant universities accounted here as collectivities. Although the programme's implementation occurs at department level, Tuning registers the whole of the institution as collaborators. Last, in Tuning LA, national government's representatives were consulted in the process of elaborating the project.

Non-human elements

Curricula: The curriculum is at the centre of Tuning. The programme is defined as a tool for curriculum redesign, based on the common implementation of a competence-based education framework. The possibility of preserving curricula diversity in the face of such common frameworks was a key element for the present research.

Infrastructure: The universities' infrastructure is another relevant element, as Tuning defines as a premise in its project that sufficient structural and technical facilities and provisions must be
available for the delivery of the degree programme. This is a relevant aspect as there are great differences in resources among the participant universities in different countries, probably resulting in different standards of infrastructural accomplishment.

*Implicated silent actors/elements*

**Marginalised actors:** Looking specially at the Latin American case, where the regional distribution of higher education is highly unequal, it is relevant to emphasize the silent presence of marginalised actors. As Tuning reinforces hegemonic patterns of higher education, it might contribute to the aggravation of marginalisation. This was highlighted in different opportunities, for example in the following quotes:

“What happens is that, due to it being an academic project, it refers only to those that are inside academia. It is hard, for example, to involve someone that has no formation in Medicine to speak to you about Medicine”. (Tuning LA director)

And

“It is about how you apply future perspectives, right? If these competences reflect or not what will be needed in the future. And we can only verify that with the employers that employ people; with the academics that teach; and with the students that are taking the degree. It is very hard to ask anyone out of that scope. (...) In Latin America we suffer daily with social exclusion. But it is such a serious level that people will no even reach the minimum levels of knowledge required to correctly value if these competences are necessary or not. The only thing that is done [by Tuning] is from a social ethics perspective”. (Tuning LA director)

It is a rather conventional perspective on higher education, where external actors can or can not dialogue with academic knowledge. Instead, institutions could ask what is there to learn from such actors.

**Future students:** Future students should also be remembered as actors that are not directly connected to Tuning's situational framework, but will most certainly be affected by it, as it shapes higher education offer.
Discursive constructions

**Labour market and Competence-based education:** Two were the main discursive constructions identified in mapping Tuning's situation. The first refers to the assumption that meeting the demands placed by the labour market is at the centre of higher education's functions. The second is the assumption that competence-based education is the best model for developing higher education now and in the future.

Kouwenhouven (2009) makes the connection between competences and the labour market very clear. For the author, competence-based education is a way to conceptualise the relation between education and the world of work. In this model, it is the professional practice that defines academic profiles, not the other way around.

Knight and de Wit (1997) present a similar perspective when affirming that the growing interest in the competence approach results from the increasing orientation of higher education towards the demands and concerns of the labour market and of an increasingly international economy.

The risks such proposals bring to horizontal institutional diversification are evident, as those pieces of knowledge that do not meet a function in the labour market are discarded or not prioritised in the elaboration of curricula. In the best scenario, such pieces would be preserved as local particularities, serving the demands of the “social dimension” that is promoted to counterbalance the negative effects of the liaison to the market.

**Political/economic elements**

**Bologna Process and Lisbon Strategy:** The Bologna Process and the Lisbon Strategy figured in this situational map as iconic documents that synthesize the political and economic objectives of the European Union and the European Commission in supporting Tuning programme.

**Economic disparities within and between regions:** The economic disparities within and between Latin America and the European Union are also central elements. Differences in resources affect the higher education offer. Tuning acknowledges this issue and implies there is a common standard for assessing the quality of the available resources. It affirms that:

“A pre-condition for delivering a programme is the availability of resources. **The quality of these resources directly affects the quality of the programme.** Resources include the availability and quality of academic staff, supporting staff and, in the case
of workplace learning, the workplace supervisors. The environmental conditions and facilities available for teaching and research are also relevant. Both require permanent monitoring and improvement”. (González, J.; Wagenaar, R. (eds.). 2008. Universities' contribution to the Bologna Process: An introduction. Page 122)

Moreover, in the case of poorer countries in Latin America, it was registered more than once in the data that the lack of own resources led the participants to adhere to Tuning programme.

**Spatial elements**

**European Union and Latin America as higher education areas**: Consolidating the European Union and Latin America as higher education areas is among the goals of Tuning programme. In the case of the EU, the process of integration is very advanced. In the case of Latin America, however, there is not yet a common framework for higher education mobility or recognition in the region.

The formation of higher education areas which adopt common seals of quality and common rankings of efficiency is one of the characteristics of the marketlike behaviours conceptualised by Slaughter and Leslie (1997) as “academic capitalism”.

**Sociocultural/symbolic elements**

**Cultural and institutional diversity**: Both Latin America and the EU are very heterogeneous regions and hold high levels of cultural and institutional diversity. These two forms of diversity are deeply intertwined and constitute central aspects to take into account in the implementation of Tuning. They were also key elements for this research, as the research question refers to the impact of Tuning programme on institutional diversity.

One of the possible relational analyses based on the situational map can be exemplified by placing Tuning programme at the centre and observing how it relates to other actors or elements, as shown in figure 1.
Figure 1 – Situational map
3. SOCIAL WORLDS/ARENAS MAP

Social worlds/arenas maps in situational analysis are a meso-level analytic framework (Clarke, 2005). It is the level of social/symbolic interaction, portraying the arena(s) of commitment and discourse within which individuals are engaged in ongoing negotiations.

The maps lay out collective actors, key non-human elements, social identities, universes of discourses, shared ideologies, situations, and any other structures that are simultaneously creators and created through individual action.

Tuning programme was identified in this research as a main arena of analysis, where social worlds exert their influence. In a global scale, it is as a segment of the broader higher education arena.

The following table presents the elements that constituted this social worlds/arenas map, organised by categories. The elements were chosen based on data analysis and supported by literature. Next, the categories were described in detail, and a social worlds/arenas map was drafted.

<table>
<thead>
<tr>
<th>Discourses</th>
<th>Universes of discourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence-based education paradigm</td>
<td>Regional social demands</td>
</tr>
<tr>
<td>The assumed universality of quality</td>
<td>Local cultures</td>
</tr>
<tr>
<td>Other educational paradigms</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Identities</th>
<th>Shared ideologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject areas</td>
<td>Globalisation</td>
</tr>
<tr>
<td>Professional groups</td>
<td>Global markets</td>
</tr>
<tr>
<td></td>
<td>Contemporaneity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Situation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 – Social worlds/arenas map

Discourses

Competence-based education paradigm: the key element of Tuning programme, competence-
based education seems to be assumed by the participants as a new paradigm to be implemented. Throughout data, the acceptance of a competence-based education framework is taken for granted. It is also connected to Tuning's goal of enhancing employability. The student-centred and professionally oriented approach should substitute the conventional staff-centred and discipline-based curricula.

As it has been repeated in different ways in the interviews:

“It is not just a change by competences. It demands much more. It is a change in mentality! So to change mentality we have to capacitate professors, begin a new dynamic with students, from day one”. (Tuning LA director)

Or just as well in Tuning's books:

“The only reliable way to compare pieces of learning and study programmes offered by (higher) education institutions is to look at learning outcomes/competences”. (González, J.; Wagenaar, R. (eds.). 2008. Universities’ contribution to the Bologna Process: An introduction. Page 79)

One of the reasons why competence-based education appears as a paradigm might be its ideological roots. For Quijano (2007), one of the main characteristics of the global pattern of capitalism is that the knowledge production forms that it legitimises as real are those which serve best the cognitive needs of this economic system. Tuning exemplifies this in its unquestioned acceptance to a framework which aims at serving the market through the design of professional profiles.

**Other educational paradigms**: left out of Tuning arena are all other possible educational paradigms that do not fit the presumed universal implementation of Tuning. Not only staff-centred and discipline-based approaches are denied but also any other forms not based on credit systems or competences oriented.

**The assumed universality of quality**: Competences alone are not enough to guarantee comparability, so quality was one of the dimensions included in Tuning’s project. The problematic issue involving it is that it implies the adoption of common criteria for assessment. That could clearly harm institutions that diverge from hegemonic patterns. The aim at internationalising quality frameworks was repeatedly expressed throughout data, as it can be exemplified in the extract
“The most important external way to check whether the applied mix [of competences] is the ideal one is by regular quality assurance and accreditation. (...) quality evaluation schemes are developed to check whether the actual learning outcomes are of the intended level and whether they are actually met by the content of the programme. At present, these are mainly organised on a national level, but it may be expected that quality assurance and accreditation will be internationalised in the near future.” (González, J.; Wagenaar, R. (eds.). 2008. Universities' contribution to the Bologna Process: An introduction. Page 79)

Universes of discourse

Regional social demands: Regional social demands are a core point to the development of qualification profiles for Tuning. In Tuning's Responsible University Social Innovation project, it states that:

“the relationship with the context dimension refers to the bonds universities, based on their substantive functions, establish with the rest of society via institutions (cultural, social, financial, education) and communities”. (Villa, A. (ed). 2014. Tuning Latin America - RUSI: An assessment model for responsible university social innovation (summarised version). Page 41)

The regional demands taken into consideration, however, are those presented by the participant universities. On one hand, this gives the institutions full autonomy to work on the project. On the other, it may reproduce structural inequalities.

This apparent contradiction also points to the fact that universities were never horizontal spaces in terms of cultural diversity. As Altbach (2009) affirms, almost all the contemporary universities, regardless of their location, are European in structure, organisation and concept. Such trend means that for most of the so called 'developing' countries, higher education institutions are not integrally linked to indigenous cultures and, in many cases, were imposed by colonial rulers (Altbach, 2009).

With regard to the specific case of Latin America, Daniel Mato (2009) adds to such reflection by affirming that higher education institutions in the region have traditionally reproduced values, interests, means of production and use of knowledge that are foreign. Such practices lead to
subordinated roles in the international division of intellectual labour.

For that reason and due to social and economic stratification, universities were traditionally reserved for the elites. Dominant groups have been granted privileged access and presented greater performance in higher education. That occurs as a consequence of the individual accumulated inequalities in the educational process that starts with schooling. It also occurs because the discourses employed to educate and evaluate students – in terms of content and teaching methods, as well as institutional culture – reflect the discourses of the elite.

**Local cultures**: in the same direction of regional demands, local cultures are expected to play a key role in the development of qualification frameworks for each subject area. In its project, Tuning affirms that:

“*universities, as promoters of academic knowledge and the education of a region’s human capital, connect intellectual production with popular wisdom, and issues that have an impact on the public, with the purpose of causing an influence on political, economic, environmental and cultural affairs*” (Villa, A. (ed). 2014. Tuning Latin America - RUSI: *An assessment model for responsible university social innovation* (summarised version). Page 41)

Again, however, this mediation with local culture is organised by the participant universities. That is, any bodies of knowledge that were marginalised by these universities will remain left out.

Both the aspects of 'regional social demands' and 'local cultures' are especially relevant considering that, clearly in Latin America, the participant universities aimed at were bigger, traditional and highly prestigious institutions. That is, dominant institutions in local higher education scenarios. In Latin America the participant universities were pointed by local governments and the programme's local coordination.

The way some directors see the criteria for choosing the participant universities was made clear throughout the interviews, as exemplified in the following quotes:

*“When we started tuning in 2000 the idea was that if you can not get the top universities on board you can forget the whole thing. If they do not bite you'll never make this change. So you have to start at the top. And if they make the switch the others will follow.”* (Tuning EU director)
“There were criteria. We chose regional distribution, and stuck to those programmes better evaluated nationally. (...) It is a vicious cycle, for sure. In the country, those who produce well get incentives, and those who do not get no incentives. So the good are better each time, and the others... But this is the model that currently works better. You must agree that when you have to find representatives for an international project, there is no other possible criteria. Not a single country has another criteria different from going for the centres that are in the best position to take advantage from the programme and later multiply its results. (...) And we were also looking for groups that already had some tradition in research...” (Tuning LA director)

“We never had any kind of decision on the selection [of participant universities]. What we asked for was a justification for the choice, and we have also suggested that the selection procedures would fill certain criteria. Sometimes we succeeded, others we did not. [The criteria] was that there was diversity, that there was representativeness of the higher education system as a whole. (...) But we are not controlling it. It is a mere suggestion. Governments are governments.” (Tuning LA director)

**Identities**

**Subject areas:** Tuning programme aims at implementing competence-based frameworks organised per subject areas. That is the reason why it acts at department level, rather than at institution level. The participants, representatives of each subject area, feel connected to each other through these knowledge networks. There is a sense of shared social identities in each subject area. Moreover, there is a sense that the space of academia is neutral to economic, political or cultural differences:

“when the subject area groups are formed, like in Psychology or Engineering (...), no one differentiates the rich from the poor. Everyone has exactly the same voice because the debate is purely academic”. (Tuning EU director)

**Professional groups:** a similar process applies to professional groups, as they are seen as universally valid. The shared identities of professional groups are believed to apply equally anywhere in the globe. Under that perspective, doctors, for example, should always have the same core abilities, regardless of their origins. That is a social identity that gains power when used as an argument for justifying curricula convergence. It can be exemplified by this interview quote:

63
“I believe degrees have their common bases and their specificities. What makes a doctor become a doctor, and a historian become a historian, I really believe is beyond countries and cultures”. (Tuning EU director)

It is important to notice that the similarities among subject areas and professional groups are real. What must be criticised is that such similarities are not spontaneous, but artificially created through historical processes – such as the development of a higher education system in Latin America deriving from European models or, more recently, the spread of international rankings.

Tuning adds to the streams of convergence, concentrating resources on sameness and leaving less room for diversity of knowledge forms and professional profiles. A good illustration of how Tuning perceives itself to be adding to this process is seen in this interview passage:

“This similarities [among curricula] have always existed. The thing is that they are occult. Not explicit. (...) What Tuning does is bring to the surface aspects that were not recognised before, for they were hidden behind knowledge and content”. (Tuning LA director)

The ambiguity of this process is that, inside the logic of academic capitalism (Slaughter and Leslie, 1997), not all professionals are equally interested in preserving diversity. In fact, the harmonisation of curricula and professional profiles is on the interest of dominant professional groups, that would consolidate their monopoly over their professions. Once again higher education institutions would serve as a vehicle to protect professional groups from free competition by monopolising the legitimacy of diplomas.

**Shared ideologies**

**Globalisation**: Tuning takes the phenomenon of globalisation for granted and uses it as a key argument to support the expansion of its project. The creation of regional and later global higher education areas would be a natural response to globalisation, as it has stated in its books:

“... it is also important to mention the global scale of human activity, now more intense and widespread than ever before. Within the area of higher education, it is not uncommon for universities to share degree courses, study programmes and curricula with other universities, and offer twin degrees, or to have mobility programmes for teachers and students and joint research projects. It is reasonable, therefore, to
imagine that globalisation will transform academic offerings, research programmes and particularly assessment and accreditation. In other words, firm steps are being taken towards the globalisation of higher education.” Beneitone, P.; Esquetini, C.; González, J.; Maletá, M.; Siufi, G.; Wagenaar, R. (eds.). 2007. Reflections on and outlook for higher education in Latin America: Final report – Tuning Latin America project 2004-2007. Page 23)

Knight and de Wit (1997) treat internationalisation and globalisation as different concepts, at institutional level. At system level, however, I believe internationalisation can not simply occur free from the contamination effects of globalisation. Relationships among different cultures will always present symbolic power imbalances. Even if the rules for internationalisation are developed by and within a cultural unit, internationalisation practices could not possibly happen in complete disregard of such inequalities. Moreover, cultural units are not homogeneous themselves, and internationalisation practices might contribute to increasing internal stratification processes.

Tuning, for example, promotes the development of a global higher education network. That way, even though its actions are based on individual institutions, it affects the entirety of systems. For Knight and de Wit, this pursuit of international standards can result in uniformity and homogeneity, decreasing institutional differentiation.

**Global market:** the idea of a serving a common labour market was a key argument for promoting the convergence of professional profiles. Tuning aims at enhancing mobility through diploma recognition and guaranteeing professionals would have the same core abilities around the globe. The belief behind it is that competences would naturally converge, because economy would have universal principals. As it has been made clear on interview:

“... they [Tuning LA directors] came up more or less with the same list. With a number of different competences that were added and some were taken out. And also we discovered the same in other parts of the world. In the end you come with more or less the same lists, so that seems to be fixed, it seems what the world seems to want, because let's face it: economics in Latin America is not much different from economics in Russia, or in China.. in the end there are some rules that have to be followed, and there are some theories that have to be known”. (Tuning EU director)
That is a clear expression of academic capitalism, as defined by Slaughter and Leslie (1997). As markets expand, it is sameness and not uniqueness that is stimulated. That means institutional diversification would grow increasingly vertical.

**Contemporaneity:** tuning project aims not only at harmonising curricula in the present but also at identifying the future demands of the market and work in order to design appropriate curricula – as in its meta-profiles. This is not a prediction, but rather a creation of the future. Curricula and professional profiles are being shaped through this sort of initiative, and this notion of contemporaneity is directly linked to the market. What is considered to be “old” is that which is not compatible with the dominant modes of economic production. That can be exemplified by the following extracts:

“Sooner or later all universities that do not wish to fall behind and out of the running must incorporate these new trends and see that their schools become centres of proven quality and innovation. (...) It is difficult, if not impossible, to incorporate the new model without changing old structures and the attitudes of all concerned”. (Villa, A.; Poblete, M. 2008. Competence-Based Learning: a proposal for the assessment of generic competences. Page 36)

“Everything is changing so fast not only in industrialized countries, but also in other countries (…) What has become clear to us is that changes are going so rapidly that if we do not line up with what is happening in society we are actually learning techniques which you can not use in practice any more, and what employers tell us is that they focus on the same elements that we have focussed. They tell us 'try to build internship placements to line already with what is happening in the real world. Focus on team work, cooperation, because that's what is happening in the real life’” (Tuning EU director)

“We are a very open country, economically, so we rely on international competitiveness to move forward. This evidently requires a higher education system that is modern, and to be modern (…) it has to follow the rules of knowledge for the XXI century” (Tuning LA director)

“We are very interested in this kind of participation, obviously. We can not stay behind in a society that is based in the production of knowledge. (...) Stay frozen or delayed
These three elements of shared ideologies – Globalisation, Global markets and a notion of Contemporaneity – are only a reality for those who share capitalism as a common system of trade, and even among those, they are not equally distributed. Inside a same region or country, there are areas that are more impacted by globalisation than others. In the same sense, not all professional activities are connected to global markets. Finally, contemporaneity is no more than the imposition of a linear temporality, that relegates cultural diversity to anachronism.

The following passages synthesize very well how these ideologies were represented in the project. They imply that there is a world-system, centred in Europe, for there are peripheral countries. Moreover, European countries would set the standards for successful experiences in higher education, making development a linear path. Finally, it highlights capitalist interests are at the core of every action related to the project. What makes evident that an ideology is in place is that the subjects can not recognize where these capitalist driving forces are coming from:

“(...) is to walk the opposite direction” (Tuning LA director)

“(...) It seems to me that Chile, as a country, has developed more, is stronger and I would say, more intelligent. They have taken advantage of the fact that the World Bank has this credits to be exclusively dedicated to the development of higher education. (...) And this is prospering. There are already universities that have experiences comparable or superior to the European ones. On the other hand, there are other countries whose behaviours... Maybe they want it, but could not find such an effective formula as this of the special credits (...) Cuba, Venezuela... it is an area that focus more on developing themselves, without asking for ‘advice’. I am not saying that is better or worse... But it is very different. And in such an important area as Latin America, that could be compared to China, but China is a unit, and Latin America is not. So it will never be so strong to make an impact on the rest of first world countries, as China is actually making. Now, that will happen for example with Africa, because Africa will never be a unit – well, we will see that – and with Latin America it seems like there are more possibilities, because there is language unit, common issues... but in the end, I think that behind all this are economic interests, that are stronger; and deep down we do not know who controls these interests.” (Tuning EU director)

“One could say that the economic interests are above educational interests. Education
really has to be the engine of change, of renovation, but we also have to be realistic and see that the economic interest is very strong, as well as the interests of those that control the economic interests” (Tuning EU director)

Situation

**Funding**: money flows appeared throughout data as a fundamental factor for the success of Tuning. Being sponsored by the European Commission, the programme had a special advantage over poorer countries. As long as its frameworks of competence-based education were applied, Tuning proposed to finance curricular reform and promote regional integration, processes such countries would not have been able to afford otherwise. This condition was highlighted in a great number of interviews, as shown in the following quotes:

“[the programme] is very interesting, because the costs for making this without a scheme like Tuning are too high. It is impossible for a country like, let us say, Guatemala or Costa Rica. It is unthinkable” (Tuning EU director)

“Why could Tuning reach everywhere? Well, an explanation is that the European Community invested a lot of money, you know. It's millions and millions of Euros” (Tuning LA director)

“In what regards the integration of Latin America, a project here would have been fantastic, but there was no funding for that... Then the European Union provided it, and all of us went for it” (Tuning LA director)

A graphic representation of the social worlds/arenas map, synthesizing the above elements, can be seen in the following figure:
Figure 2 - Social worlds/arenas map

Tuning programme arena

- Shared notion of globalisation
- Shared notion of a global market
- Shared notion of contemporaneity
- Funding flows
- Tuning EU
- Tuning LA
- Subject areas
- Professional groups
- Competence-based education paradigm
- Quality
- Regional social demands
- Local cultures
- Other educational paradigms

Broader higher education arena
4. POSITIONAL MAPS

Positional maps lay out most of the positions taken in the data on major discursive issues therein. These type of maps are analytic tools applied to the discursive materials gathered. The positions represented are not associated with individual or collective actors specifically. They rather refer to positions in discourses.

Three main discursive issues emerged from data: the sovereignty of Tuning Latin America; the balance between competitiveness and cooperation among participant countries; and the effects of Tuning on institutional diversification.

Each of these issues was explored in detail, and the different positions are presented here along with reference book extracts and interview quotes for illustration.

The sovereignty of Tuning Latin America

The dimension of coloniality (Quijano, 2007) in the relation between Europe and Latin America is a central issue to take into account when debating the integration of the two regions through higher education agreements.

Coloniality is related to Tuning in multiple ways. It could, for example, be one of the reasons why Latin American scholars would have adhered to the project in the first place, as coloniality indicates an inclination to mimic dominant models. Such models are appropriated by the dominated part till they are seen as their own. In that sense, Tuning could be strengthening symbolic dependence bonds, even if its participants are unaware of it.

Adding to the explanation of this sort of behaviour, Gramsci (1992) affirmed that the apparently “spontaneous” consent given by the great masses to the general direction imposed on social life by dominant groups is actually historically caused by the prestige which the dominant groups enjoy, due to their position and function in the world of production.

That is a fundamental aspect to understand the “voluntary” adhesion of different regions in the world to Tuning's project. Such adhesion is no more than the formation of consent, granting legitimacy to eurocentric institutions.

This process is evidenced by the way Tuning Latin America was created. The region would have spontaneously asked for it, an act that freed the European Commission from political responsibility – although not entirely. This was registered, among other opportunities, in the following quote:
“How did the project get to Latin America? It is interesting, because we asked for it ourselves. (...) In 2002 there was a meeting for the committee of the Common Space of Higher Education of the European Union, Latin America and the Caribbean (ECES-UEALC) (...) and at this meeting one of the topics in the agenda was the presentation of Tuning project's results. (...) The Latin American countries that were there have asked 'why don't we develop a similar experience?’. (...) and asked the European Union to support an initiative similar to what was being done in Europe. That is when the same coordinators of the European project, in the universities of Deusto and Groningen, with the help of a few Latin Americans that were doing their internship in Deusto, have drawn the project Tuning Latin America. (...) We saw in it a methodology that we could follow in Latin America to serve our own realities and our own issues” (Tuning LA director)

There was no consensus over the issue of coloniality among the interviewees. When asked about the topic, Tuning’s directors from both regions presented a varied range of perspectives. Three positions were most frequent, opposing coloniality (often referred to as colonialism or neocolonialism) to regional, national and institutional sovereignty, as highlighted in the following map:

Figure 3 – Positional map on coloniality and sovereignty
Position 1:

For some interviewees, coloniality can be recognised in the essence of the programme, and the importation of European agendas by Latin America:

> "Maybe neocolonialism is present in the very image of what the programme represents. That is, a language that emerges from the needs of a European context, and that is assumed or shared by other contexts that maybe do not even have such needs. So maybe there is like the exporting of a theme, or a neocolonialism regarding the necessity to debate certain themes. Besides it (...) I think it maybe has also to do with the tradition of the Latin American university. In most countries it is noticeably a European model” (Tuning LA director)

> "On this neocolonial issue, I do not think there is contamination. Well, of course, institutions are worried.... (...) we [in Latin America] have this cultural position, that we are a bit... inferior” (Tuning LA director)

Position 2:

Other interviewees acknowledge coloniality as a phenomenon in the relation between Latin America and Europe, but do not see it as integrating Tuning or as harming the sovereignty of the involved parts. The main reason was that academia and politics were seen as two completely different spheres:

> "[this issue] of neocolonialism appears very frequently, specially in Latin America. By chance we are Spanish, right? There is a lot of history behind us that weighs over our relations, and they made it very clear, at ministry level and everything. But when the subject area groups are formed (...) then nobody differentiates the rich and the poor. All have the exact same voice, because the debate is strictly academic” (Tuning EU director)

Even though the individuals that constitute the academia come themselves from politicized environments, 'internal reflection' would be enough to overcome coloniality:

> "Sure, it is true. If we understand that the Latin American universities where these professionals come from are contaminated with a mercantilist and neoliberal language, then yes, of course. But till where are we going back in history to try to purify this? It is not up to us... Well, it is up to us, as Tuning, but what can be made to avoid it? We are
thinking inside our boxes ourselves... I do not see a way to avoid this, more than internal reflection.” (Tuning EU director)

Position 3:

The majority of the interviewees, however, deny the existence or the effects of coloniality, with greater emphasis among Latin American directors:

“There was not the slightest possibility of a neocolonialist vision” (Tuning LA director)

“We benefited a lot [from Tuning], without it harming in any way our sovereignty” (Tuning LA director)

“In our case there were no implications in that direction. We that have participated in the project from its beginning know that Europe discovered in Latin America a creative approach to education that has contributed to the original format of Tuning” (Tuning LA director)

Competitiveness and cooperation

What were the benefits for the European Commission and Tuning coordination to finance and orient the international expansion of the programme? And what were the benefits for Latin America to adhere to Tuning?

The opinions of the interviewees were divided concerning this issue. Three main positions could be identified: the focus on competitiveness; a balance between competitiveness and cooperation; and the focus on cooperation.
Figure 4 – Positional map on competitiveness and cooperation

Position 1:
The interviewees who focused on competitiveness as the main driver for the expansion of Tuning presented a perspective based on economic arguments. Not only would the expansion of Tuning mean a greater offer of international labour force for the EU, it would also create and consolidate markets for goods and services for the EU in Latin America. Interviewees have also referred to Tuning as a strategic instrument for disputing the hegemony over Latin America with the United States of America:

“Why are peripheral countries interesting to first world countries? Because they have certain resources that they lack... that are already over or are going to be over soon in the first world. The interest is pure and simple economic. That is, there is no altruism or anything like it.” (Tuning EU director)

“I think Europe is interested that other regions have compatibility of studies exactly because they want to expand the capacity of the European system. That means that more foreign students would come to their universities, which have already saturated their local offer. That made the European universities open themselves to new markets. And these new markets are developed more easily if there is recognition among Latin
“America, and China, and Africa...” (Tuning LA director)

“I believe there is one key aspect which is that Europe wants to have influence over Latin America, or else the United States will. (...) If education follows more or less parallel systems, in interchangeable patterns (...) that is a big boost to the expansion of the system. (...) On the other hand, it is also an economic matter, because if Europe has this influence it will also have certain benefits, that could be in other fields, let us say, not directly connected to education, but that derive from it”(Tuning EU director)

Position 2:

The interviewees have also indicated the possibility of expanding the programme and maintaining a balance between competitiveness and cooperation among the participant countries:

“I do not think cooperation is naive, in any dimension. So it is about the way a region receives the proposal. It can see it as an opportunity in terms of financing, to forward actions that it could not undertake on its own. (...) it is not the case that people on the other side [of the agreement] are doing it out of passion, but they are doing it exactly to make systems more comparable. Knowing and evaluating the interests of the counterparts, that are not dangers, but situations, one can see how it can benefit from the process.” (Tuning LA director)

Position 3:

The interviewees that focused on cooperation have argued in terms of a multicultural perspective for Tuning expansion:

“You see, I believe that there is a reality we are becoming increasingly aware of, which is the fact that the world is interdependent. So the strategy of competitiveness is part of Bologna, of course, but the view of Europe is a multilateral view. It is to say: there should no be one country or region dominating – even if that was Europe. Throughout history, we have already made too many mistakes, in the past, to understand this is unfruitful. It is not sustainable. What is sustainable is when we all win, when all regions progress, when we are all in agreement on what is good for all of us. So Europe' strategy is to create many regions, and that all could have a strategy for progressing, for improving” (Tuning EU director)

“The idea particularly in higher education is that if you cooperate you bring people
over and you bring ideas to other countries, if cooperation is facilitated. But also you build life long relations, and building relations, improving relationships of course is for Europe one of its drivers” (Tuning EU director)

“In our case, the interest was the socialisation of ideas, the participation in international collaboration networks, the learning of new experiences as well as the spread of our own. One thing is to participate in Tuning, and another is to implement its methodology. I think each country has to make its own creative implementation of general ideas” (Tuning LA director)

The effects of Tuning on institutional differentiation

The ways in which Tuning programme could affect differentiation (at times, also referred to as “diversification” throughout the data) were interpreted in varied forms by the interviewees. Three positions were identified as central, in the relation between institutional differentiation and the implementation of the common frameworks of competence-based education proposed by Tuning:

<table>
<thead>
<tr>
<th>Position 1: Tuning has a positive effect on differentiation</th>
<th>Position 2: Tuning has a neutral effect on differentiation</th>
<th>Position 3: Tuning has a negative effect on differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Implementation of common frameworks

Figure 5 – Positional map on institutional differentiation

Position 1:

In relation to how the implementation of a common competence-based framework relates to
institutional differentiation, interviewees have pointed specialisation as a positive effect:

“To me it seems that it [Tuning] helps universities to find what would be their great specialty. For example X\textsuperscript{15} institution has participated here. They realised that out of the specific competences, the 54 that refer to Medicine, there are 9 in which they focus more than any others. In fact, all doctors in the country go there to study those competences for one semester. So it is good that it is organised by competences. (...) This is one example, but it happens to all universities (...) each finds what it does better. Because they have the best scholars, or the best researches...” (Tuning LA director)

Position 2:

For some interviewees, the project had no effect on institutional differentiation:

“No, in my opinion it does not affect institutional diversification at all. (...) [competences] are only references, but there is nothing prescriptive about the results that are presented to the academic community. That means each institution must have the capacity to analyse this results and choose from it what serves them better. And not making it identical, but adapting it to their institutional educational project, to their mission. (...) In no way the final result leads to homogenisation” (Tuning LA director)

Other interviewees have considered that the effects on differentiation are related to the level of implementation of the programme:

“No necessarily [would Tuning affect differentiation] (...) you can have universities that have implemented the full project and it is not well implemented. And you have universities that have implemented it to a single degree and it is perfect. It depends.” (Tuning LA director)

Position 3:

A negative effect of Tuning on institutional diversity was understood by the interviewees as a denial of diversity. The programme would be designed to serve only a hegemonic format of higher education:

“[Tuning] is a system for internal equivalence that allows institutions to keep their own organisational formats, because it is more a system for the translation of equivalences. The problem is what is the interest of institutions in joining such system. (...) Tuning is

\textsuperscript{15} Real name preserved for guaranteeing anonymity.
at the moment working with more conventional higher education institutions. That is, public and private universities already recognised and accredited. If we would think of Tuning as an instrument to make way for a translation system for emerging institutions, I think the way of working would have to be revised. But in its present form, Tuning was not designed to be applied to intercultural universities” (Invited external expert)

In itself, it is not a flaw not to focus on intercultural or any marginal models of higher education. It has to be understood though that this is a political option and it has consequences for the overall system. Resources are limited, and privileging hegemonic formats of higher education could increase the marginalisation of alternative models.

Tuning, however, does not seem to assume its share of responsibility in this process of professional standardisation and commoditisation of knowledge:

“we are imputing to the project faults that it is not to be blamed for. Transnationalisation obeys other dynamics. It obeys the dynamics of the World Trade Organisation, that has defined education as a tradable good. This project has nothing to do with such decision. And if Tuning did not exist, the mercantilisation of higher education would still go on”. (Tuning LA director)

In fact, it places the responsibility for making such political choices in the hands of the institutions, as if the discourse were neutral:

“One can not be alienated from globalisation or internationalisation of higher education. The issue is how certain institutions take advantage of it to generate resources, open off shore campi, sell diplomas... and others utilise it to improve the quality of what they do, to be more inclusive (...) That has to do with the politics each university can assume or wish to assume in regards to internationalisation. Tuning can be 'used' for strategies of mercantilisation of education and selling diplomas and saying 'well, we have a diploma issued by Tuning that gives us legitimacy'. But that is a problem that is beyond our capacity: (...) The uses and misuses made by the institutions have to do with institutional responsibilities” (Tuning LA director)

Even though Tuning is financed and supported by governments, it is evident that it does not create mercantilisation alone. One can not deny, though, that it adds to the commoditisation of higher education, as it fragments curricula in smaller, standardized bits, more easily traded and consumed. The project is one of the possible forms that mercantilisation may assume.
5. PROJECT MAP:

As represented on the project map below, capitalism is the mode of material production that offers the epistemological ground for the development of the ideologies that are hegemonic in this scenario. Coloniality, intertwined with capitalism in its origin, is a central element to understand the voluntary adhesion of Latin America to the project. The legitimacy of the European discourses has been propagated for centuries. Moreover, it is the rational eurocentric discourse that shapes the ideas of future and contemporaneity. The meta-profiles proposed by Tuning are the ultimate form of controlling and designing the future.

Figure 6 – Project map
When buying Tuning as a final product, one gets to reinforce all dimensions that are anterior to it. It will always draw back to its roots, adding to the flows of capitalism, coloniality, knowledge economy, globalisation, and academic capitalism. Whether it is fully or partially implemented, or even adapted to local circumstances, what Tuning offers is more than a framework for curricula redesign: it offers a discourse on higher education. Tuning is one of the instrumental domains through which dominant capitalist groups transmit their message and maintain ideological hegemony. It is an expression of what Wolf (2005) called the development of redundancy, as one of the various forms of continuous repetition of the basic propositions that build a dominant principle of order.

The individuals and groups that produce policy discourses, i.e., Tuning's creators and directors, have no personal intentions of restricting any subjects' freedom. But they are aware that their proposals will have consequences for other subjects, either they adhere to it or not. Moreover, there are underlying values that are assumed to guide the subjects' choices. According to Tuning's logic, increasing student's mobility and employability, for example, should be above institutional freedom when deciding the goals for educational programmes. Organising curricula through competence-based education and designing comparable professional profiles should be shared goals. All students should deserve a “better life”, and in the capitalist ideology, that is necessarily connected to the market.

It is never enough to emphasize that, in itself, there is nothing essentially “wrong” in connecting higher education and financial markets. It is a political option. When assuming it, however, one must be aware it will have consequences, as it adds strength to a system of structural exclusion and marginalisation. This exclusion is perpetrated both at symbolic level – for the dominant models hold the legitimacy in the production of knowledge – and at financial level – as resources are limited in the higher education arena, and the dominant models tend to concentrate them. This subtle threat posed by the programme is clearly stated by Tuning, as those institutions that choose not to adhere to it would “fall behind and out of the running” (Villa, A.; Poblete, M. 2008. Competence-Based Learning: a proposal for the assessment of generic competences. Page 36).

There are parallel discourses involving standardisation and diversity. Tuning's very own motto refers to the protection of diversity and autonomy. That would go hand in hand with curricula harmonisation. Procedural and programmatic dimensions should converge so that institutions present comparable results, increasing transparency and mobility.
The notion that such a great structural redesign would not affect diversity ignores the fact that structure and content are two sides of a same epistemological unit. Knowledge itself and its forms of transmission are directly linked. Not every content could be transmitted within a competence-based framework, and that is where true curricular diversity lies. That is not a concern for Tuning since not all contents result equally important. Greater value is placed on those forms of knowledge which lead to professionalisation.

The interviewees have emphasized that there were significant contributions from Tuning LA to Tuning programme's overall structure. That, however, does not change the flows of power involved, nor the origin of Tuning's ideals. As defined by Quijano (2007), “eurocentrism” is not a perspective exclusive to Europeans or to dominant actors in the capitalist system. It is shared by all those who were educated under its hegemony. Any current contributions or even the continuation of the programme in Latin America once the official project is over and funding is suspended will just perpetuate an eurocentric rationality.

The same applies to the rare cases of exception, as it was the competence “ubuntu” in Tuning Africa. Ubuntu means the “respect for the well-being and dignity of others” (Hahn & Teferra, 2013). The inclusion of this principle among other formal competences was referred to by the interviewees as an indicator of how cultural diversity was being preserved. That is, however, a mere particularity, a secondary variation of the whole, which has no structural importance. The great majority of competences are still aiming at the comparability of professional profiles. Besides, we are still referring to the adaptation of local contents to the educational structures proposed by the programme, where ubuntu is merely another competence, instead of the complex expression of a population's worldview.

Of course there are also benefits for the “peripheral” regions involved. That is, after all, what makes discourses so ambiguous. Tuning Latin America's publication has summarised the main benefits of the programme for the region:

“In some countries, the impact has been nationwide, and in others it has been essentially institutional. It also had an effect on a broader Latin American scale, in countries which were not included from the outset of the project.

— The Tuning Latin America project has been a catalyst, creating motivation, expectations, interests, opportunities and hope.

— It has provided basic and accessible knowledge that is easy to understand, related to the methodologies, tools, instruments, for implementing a competence-based
— The Tuning Latin America project fostered and galvanised existing projects, accompanying processes of curriculum reform that were already underway.

— One essential aspect was the inclusion of the opinions of the various agents, such as students, employers, graduates and academics.

— It fostered intra and extra-disciplinary discussion, on a national scale and throughout Latin America.

— It allowed closer rapprochement between countries, offering an opportunity for inter-relationship and joint reflection.


Even if these practices do present a positive dimension, it is fundamental to understand that, in terms of cultural diversity, such benefits do not break the dominant paradigms. They are not emancipatory actions. Instead, they reinforce the dependence of the higher education systems that receive such benefits in relation to the dominant frameworks. If on one hand a country or region gains in mobility, on the other, this mobility is only valid for the forms of knowledge that are considered legitimate within the broader higher education network that assumes competence-based education as a paradigm.

The same applies to the contributions to the original project that are made by other regional versions of Tuning. Tuning LA has added to Tuning programme with the conceptualisation of meta-profiles, with the idea of future landscapes and with the inclusion of students as stakeholders, not present in the very first version of Tuning EU. Just because they were produced outside of Europe, however, it does not mean such contributions break the dominant eurocentric paradigm.

If an analogy is possible, a similar process can be observed in the African influence on modern art. Cubism has profited very much from the aesthetic appropriation of African sculptures and masks. The pieces of art generated, however, were exhibited and commercialised in “western” networks. “African art” did not become modern, it was (and perhaps still is) considered folkloric and anachronistic.
Do data reveal elements indicating that the programmatic and procedural redesign proposed by Tuning could affect institutional differentiation?

Elements revealed by data indicate that Tuning had an overall negative effect, contributing to the decrease of institutional differentiation. Institutional differentiation refers to the production of diversity within a system. Institutional diversity can be defined in two main types: vertical, when referring to attributes such as quality and excellence; or horizontal, when referring to institutional profiles (Teichler, 2004). Vertical diversity presumes sameness and comparability, and the use of common frameworks that allows institutions or units to be classified in common rankings. Horizontal diversity is its opposite: the greater the horizontal diversity, the more heterogeneous a system is, making the establishment of common criteria for quality assessment of institutions or units more complex. Tuning promotes vertical while reducing horizontal diversity.

The two main forms of diversity affected by Tuning are programmatic and procedural diversity, as these regard the degree level, area, comprehensiveness, mission and emphasis of programmes, as well as the differences in the ways that teaching, research and services are provided. All areas that are redesigned by Tuning's methodology. The decrease in horizontal diversity promoted by Tuning directly affects cultural diversity, as this is only addressed in a horizontal environment.

Tuning's discourses are ambiguous because the project proposes homogeneity of form (teaching and learning methods, quality assurance frameworks, and competence-based curricula) but heterogeneity of content (expressed in the different lists of competences). As Fejes (2006) emphasizes, the discourses of homogeneity and heterogeneity can be seen as persuasive techniques to accommodate the interests of different groups. Such discourses are part of the narratives that promises both a prosperous future through comparability, at the same time as it promises the preservation of singularity for the different nations or cultures. It hides the fact, however, that not all forms of knowledge will fit a competence-based framework, leading to an exclusionary result.

Another central issue regarding Tuning is that it contributes to strengthening and reproducing the structural inequalities of the higher education systems where it is implemented. That happens at international, regional and local levels.

At international level, Tuning appears as an eurocentric model, connected to a neoliberal market, aiming at designing professional profiles and shaping economy's future. Any alternative economic
forms are disregarded, and the dependence between “centre” and “peripheries” is kept.

At regional level, in the specific case of Latin America, the effect is the perpetuation of vicious cycles of inequality. Resources are unequally distributed within the region, and the richer higher education systems will keep their advantage, as they are already aligned with the market principles that orient Tuning.

Finally, at local level, the reproduction of structural inequalities is most evident. Marginalised groups are increasingly neglected by the higher education system, as they have no room for contributing to Tuning's model. The design of curricula aiming at competences reinforces a market oriented logic and also has implications for local culture. As Apple (1993) affirms, the curriculum is never simply a neutral assemblage of knowledge, but it is always part of a selective tradition, or, a group's vision of what legitimate knowledge is. It is the product of cultural, political, and economic conflicts.

Tuning promoted benefits to Latin America when it served as a tool for enhancing communication among countries in the region. Some of these countries would not have had the needed resources to establish such contacts otherwise. Such benefits, nevertheless, do not seem enough to me to make up for the potential loss in diversity that the diffusing of Tuning's ideals can bring.
CONCLUSION

The focus of the present research was on Tuning EU and Tuning LA international cooperation programmes. The objective was to debate how the adoption of common frameworks for curriculum redesign impacts the processes of higher education differentiation, taking the preservation of cultural diversity into consideration.

The research approach was to identify elements from the data indicating that the programmatic and procedural redesign proposed by Tuning could affect institutional differentiation. The primary data consisted of eighteen interviews with the creators and directors of Tuning EU and Tuning LA and one external specialist invited by Tuning to evaluate Tuning LA progress. The secondary data consisted of seven of Tuning's main publications regarding Tuning EU and Tuning LA experiences. Additionally to those sources, I have myself spent two months working at Deusto International Tuning Academy, in Bilbao, in May and June 2014, and attended the Brazilian Tuning conference, in August 2014.

The methodological framework adopted was situational analysis. It consisted of three cartographic approaches (situational, social worlds/arenas and positional maps) intended as analytic exercises to elucidate the connections among the data's key elements. A project map at the end of the analysis presented the elements that connected the first three maps.

Three were the main findings of this thesis:

1. **The negative impact of Tuning on higher education differentiation**: The results identified that there were elements from the data indicating that Tuning had an overall negative effect on the processes of higher education differentiation, contributing to its decrease. That means institutional formats would converge to sameness, increasing vertical diversity and decreasing horizontal diversity. Hierarchies among institutions would become more evident, as they would become liable to be evaluated and classified by common standards and rankings. The effect of such processes on cultural diversity is negative, as the resources are concentrated on dominant higher education models, and marginal or new institutional formats are neglected and suppressed. Only those formats that better adapted to Tuning's ideological background would be favoured by the programme. That implies Tuning would contribute to strengthening and reproducing structural inequalities of the higher education systems where it was implemented.
2. **The highlighting of Tuning's ideological dimension**: The discourses of Tuning's representatives, through their interviews and published materials, revealed many silences and ambiguities that evidenced the programme's ideological dimension. “Economic interests” were understood to be guiding subjects' choices, but interviewees did “not know who controls these interests”. Professions were assumed to have a universal core, although no one could explain how such similarities were created in the first place. Competence-based education, mobility and employability, were taken for granted as solutions to our “globalised” era demands. For me, the fact that the arguments that justify the project are forces people could not name, reveals that these are moral and ideological options, rather than elements of “truth”. The relevance in identifying the programme's historical and ideological roots is that its artificiality is evidenced. When understood as social creations, the development of competence-based frameworks and the alignment of higher education with the market loose their characteristic of inevitable fate and become a political option. No one will “fall out and behind of the running”, as Tuning expressed in its books, because it becomes clear that many and diverse paths are possible.

3. **The ambiguity of Tuning's discourses**: Tuning is built on ambiguous discourses, parallel narratives that align standardisation and homogeneity with heterogeneity and the preservation of cultural diversity. This ambiguity has currently developed into an element of the neoliberal form of governmentality that emerges in Europe (Fejes, 2006). This type of discourse is useful because it accommodates different interests, integrating geographic spaces and populations not by overt coercion or rigid legislations, but by harmonised regulations, codes and standards. The emphasis of the neoliberal approach is on constructing self-regulative governing where the subjects are to govern themselves. Subjects are free to choose, but there is only one paradigm in offer. The choice is then reduced to adhering to it or not. This dualism is a central characteristic of coloniality and the eurocentric perspective (Quijano, 2007), and it is organised based on the promise of a prosperous future.

The control over the future is a powerful narrative that lies at the centre of coloniality and permeates the discourses on higher education in Europe. New social needs are being constantly generated and they should be anticipated and met. Of course not all actors are equally legitimate in identifying what are these coming needs. These are signalled by the market and validated through conventional academic research, organised by prestigious institutions, voices of “truth”. Assigning the responsibility over anticipating social needs to higher education is also on the interest of such universities, as they become the guardians of the future (Fejes, 2006). As traditional universities are
favoured, the biggest – and most silenced – resistance to a project as Tuning stands outside academy, not within it.

It is clear that, in many ways, higher education is held responsible for students' employability. Tuning, however, exceeds that role and intends to control the future of students in the labour market. It assumes that the potential employers that participate on the consultation process today will remain as the main ones. Or yet, it tries to identify future scenarios through its meta-profiles. Such actions, as I see it, do not refer to predicting the future, but to limiting it, controlling it to guarantee that those who are currently favoured by the market will keep on being favoured, which is of course on the interest of the professional groups that participate in the consultation processes.

The issue of funding is central in this equation. As stated in many interviews, money flows were a determining factor for the success of Tuning. Being sponsored by the European Commission, the programme had a special advantage over poorer countries. As long as its frameworks of competence-based education were applied, Tuning proposed to finance curricular reform and promote regional integration, processes such countries would not have been able to afford otherwise.

Not only this material asymmetry hinders the possibility of national and institutional autonomy, it also evidences that the control over academia drifts away from nation states or universities themselves. Who moves to the centre of control of higher education are the European Union's bureaucrats and experts, as EU's agencies are in position to define the procedures and quality standards that condition funding. This brings consequences to the development of professions, and to the development of universities as places of critique and identity formation by the self, as these are now subordinated to the market ideologues of EU's bureaucrats.

Tuning's real impact on the higher education systems and institutions where it was implemented was never properly measured and researched. I do not want to attribute to it a disproportionate power to Tuning in changing the world around it. What must be clear is that the programme offers more than a methodology, it diffuses an ideology of higher education. Tuning is not an isolated project: it is one of the expressions of the consolidation of the relation between higher education and capitalist markets, and it adds to the streams of hierarchy and power that are anterior to it.

It is not possible to identify at this point if Tuning will provoke a dramatic change in the higher education scenario, but it is possible to predict it will not break any paradigms of exclusion set by dominant higher education models.
PRACTICAL CONSEQUENCES OF THE THESIS

To me, the most evident consequence of this work is to shed light on the need of developing alternatives for enhancing learning mobility and the recognition of studies without contributing to the structural standardisation of higher education.

Mobility, in itself, is a very positive aspect of education and it can bring great benefits to students and to society in general. It is fundamental, however, that it is organised taking intercultural diversity into consideration.

Student mobility, both degree and short term mobility, were already a reality before Tuning or credit systems. These are believed to increase the efficiency in the recognition of studies, but that comes with the downside of implementing common frameworks, procedures and quality standards, decreasing institutional differentiation.

It is possible – and necessary – to develop a system for studies recognition that does not imply the need for common frameworks. That seems to me a possibility for breaking with the eurocentric paradigm and the vicious cycles of exclusion in higher education.

In Latin America, IESALC-UNESCO's Project on Cultural Diversity and Interculturality in Higher Education\(^\text{16}\) is focused on documenting and analysing the experiences of higher education institutions that are committed to meeting the needs, demands and goals for higher education among indigenous and afro-descendant communities. It is a powerful record of the diversity of higher education in the region. The project also demonstrates that comparability of diplomas is a secondary issue: the priority should be stimulating diversity. That way we are one step closer to guaranteeing different social groups would have their rights met.

It is never enough to emphasize that even if an institution does not adhere to standardising actions, it will feel the effects of it, as it is part of a system. As mentioned on the dedication note of this thesis, the Intercultural University of Nationalities and Indigenous Populations Amawtay Wasi (Universidad Intercultural de Nacionalidades y Pueblos Indígenas Amawtay Wasi), in Ecuador, registered as a relevant experience by IESALC-UNESCO’s project, has suffered the consequences of the standardisation of higher education, as it was closed for not meeting presumed quality standards.

LIMITATIONS AND FURTHER STUDIES

Given the dimensions of the present work, it was not possible to describe the economic and social conditions of the countries that constitute Latin America and the European Union. Both regions are significantly heterogeneous and, as previously mentioned, material, social and cultural differences have great impact on the development of higher education systems. A more in depth study would be necessary to highlight the specific national contexts.

For the same reason, it was only possible to reach Tuning's creators and directors, both in the EU and in Latin America. The ideal scenario, however, would be to include representatives from all specific subject areas, and evaluate if there is a difference in perspective according to each subject.

Finally, there is one big gap regarding Tuning that leaves room for further studies: an empirical evaluation of the effective implementation of Tuning has not been done yet. Research at the institutional or departmental level is necessary to measure the real impact of the programme on those spheres. There is also no empirical evaluation of students performance, to verify if the teaching of competences is actually producing a change in terms of learning outcomes, of mobility and labour market success.
REFERENCES


Tomusk, V. (2007). The end of Europe and the last intellectual. Fine-tuning of knowledge work in


Documents:

- **OECD:**
  


- **Tuning EU:**
  


- **Tuning LA:**
  


APPENDIX A – LISTS OF GENERIC COMPETENCES
TUNING EU AND TUNING LA

93
# Lists of Generic Competences

<table>
<thead>
<tr>
<th>Tuning EU</th>
<th>Tuning LA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity for analysis and synthesis.</td>
<td>Capacity for abstraction, analysis, and synthesis.</td>
</tr>
<tr>
<td>Capacity for applying knowledge in practice.</td>
<td>Ability to apply knowledge in practice.</td>
</tr>
<tr>
<td>Capacity for organisation and planning.</td>
<td>Ability to organise and plan time.</td>
</tr>
<tr>
<td>Grounding in basic knowledge of the profession.</td>
<td>Knowledge regarding the area of study and related professions.</td>
</tr>
<tr>
<td>Basic general knowledge.</td>
<td></td>
</tr>
<tr>
<td>Oral and written communication in your native language.</td>
<td>Capacity for oral and written communication.</td>
</tr>
<tr>
<td>Knowledge of a second language.</td>
<td>Ability to communicate in a second language.</td>
</tr>
<tr>
<td>Elementary computing skills.</td>
<td>Ability to use information and communication technology.</td>
</tr>
<tr>
<td>Research skills.</td>
<td>Capacity for investigation.</td>
</tr>
<tr>
<td>Capacity to learn.</td>
<td>Ability to learn and update learning.</td>
</tr>
<tr>
<td>Information management skills (ability to retrieve and analyse information from different sources).</td>
<td>Ability to search for, process, and analyse information from a variety of sources.</td>
</tr>
<tr>
<td>Capacity to adapt to new situations.</td>
<td>Ability to react to new situations.</td>
</tr>
<tr>
<td>Capacity for generating new ideas (creativity).</td>
<td>Creative skills.</td>
</tr>
<tr>
<td>Problem solving.</td>
<td>Ability to identify, pose, and solve problems.</td>
</tr>
<tr>
<td>Decision-making.</td>
<td>Ability to make decisions.</td>
</tr>
<tr>
<td>Teamwork.</td>
<td>Ability to work as part of a team.</td>
</tr>
<tr>
<td>Interpersonal skills.</td>
<td>Interpersonal skills.</td>
</tr>
<tr>
<td>Leadership.</td>
<td>Ability to motivate and work towards common goals.</td>
</tr>
<tr>
<td>Appreciation of diversity and multiculturality.</td>
<td>Value and respect for diversity and multiculturality.</td>
</tr>
<tr>
<td>Ability to work in an international context.</td>
<td>Ability to work in international contexts.</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Ability to work autonomously.</td>
<td>Ability to work autonomously.</td>
</tr>
<tr>
<td>Project design and management.</td>
<td>Ability to formulate and manage projects.</td>
</tr>
<tr>
<td>Ethical commitment.</td>
<td>Ethical commitment.</td>
</tr>
<tr>
<td>Concern for quality.</td>
<td>Commitment to quality.</td>
</tr>
<tr>
<td><em>Ability to work in an interdisciplinary team.</em></td>
<td><em>Commitment to look after the environment.</em></td>
</tr>
<tr>
<td><em>Ability to communicate with experts in other fields.</em></td>
<td><em>Commitment to socio-cultural environment.</em></td>
</tr>
<tr>
<td><em>Understanding of cultures and customs of other countries.</em></td>
<td><em>Social responsibility and commitment to citizenship.</em></td>
</tr>
<tr>
<td><em>Initiative and entrepreneurial spirit.</em></td>
<td></td>
</tr>
<tr>
<td><em>Will to succeed.</em></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B – EXAMPLES OF META-PROFILES AND FUTURE LANDSCAPES FOR TUNING LA
Latin American meta-profile for the Agricultural Engineer

“The Agricultural Engineer who graduates from a Latin American university will be capable of:

1. Understanding, dealing with and transforming production in agricultural and fishing systems in order to contribute towards social well being and sustainable development.
2. Embarking on, managing and assessing agricultural and fishing and natural systems attached to humanistic and environmental ethics, focusing on their benefit to society.
3. Acting flexibly and critically under different conditions of agricultural and fishing systems, and in the conservation and use of natural resources.
4. Becoming involved in processes aimed at defining public policies that contribute towards the development of agriculture and fishing.
5. Contributing towards the generation and passing on of knowledge in the field of agrarian science.
6. Working with groups from different cultures, on different socioeconomic levels and in national and International environments.
7. Promoting the transformation and commercialisation of agricultural and fishing products that entail the development of value added at source.”

Future scenarios for the Area of Agronomy and the Agricultural Engineering Profession in Latin America

“The opinions emerging from the interviews showed that the general perception is to:

- Continue training Agricultural Engineers.
- Orientate training of the Agricultural Engineer towards:
  1. Agribusiness, fair markets and sustainable agrarian policies.
  2. Biotechnology.
  3. Intercultural communication and sustainable development.
  4. Infrastructure logistics and services for commercialisation of agriculture and fishing.
  5. Effect of climate change on agricultural and fishing production.
  6. Effect of climate change and sustainability of natural resources.
  7. Food safety.
  8. Precision agriculture.
  11. Ethics.
With regard to the competences required in the education of the Agricultural Engineer, the opinion of those interviewed led to the following general attributes being defined:

a) Solid scientific training in order to analyse and interpret problems regarding ecological, social and economic sustainability by putting forward relevant solutions.

b) Proactive attitude towards embarking on, managing and assessing agricultural and fishing and natural systems attached to humanistic and environmental ethics, focusing on their benefit to society.

c) Ability to intervene in processes aimed at defining public policies that may contribute towards sustainable development.

d) Ability to become involved in processes aimed at defining public policies that may contribute towards sustainable development.

e) Capacity for interdisciplinary and intercultural communication on different socio-economic levels.

f) Proactive attitude towards promoting the transformation and commercialisation of products that may contribute towards sustainable development.

g) Ability to use available technology to improve the efficiency of productive systems."


<table>
<thead>
<tr>
<th>Dimension</th>
<th>Competences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Abstraction, analysis and synthesis. Represents graphically. Applies knowledge of basic science and civil engineering science. Devises, analyses, plans and designs civil engineering work. Builds, supervises, inspects and assesses civil engineering work. Operates, maintains and renovates civil engineering work. Identifies, considers and deals with problems. Assesses and prevents risks associated with the design and construction of building work. Identifies, assesses and implements the most suitable technologies for their context. Handles and manages the impact of disasters on engineering work.</td>
</tr>
<tr>
<td>Social</td>
<td>Acts ethically. Proposes solutions that may contribute towards sustainable development.</td>
</tr>
<tr>
<td>Technological and international</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Is committed to quality.</td>
<td></td>
</tr>
<tr>
<td>Uses quality control techniques in civil engineering materials and services.</td>
<td></td>
</tr>
<tr>
<td>Has the ability to use information and communications technologies.</td>
<td></td>
</tr>
<tr>
<td>Uses information technologies, software and tools for civil engineering.</td>
<td></td>
</tr>
<tr>
<td>Formulates and administers projects.</td>
<td></td>
</tr>
<tr>
<td>Plans and schedules engineering work and services.</td>
<td></td>
</tr>
<tr>
<td>Handles and interprets field information.</td>
<td></td>
</tr>
<tr>
<td>Communicates in a second language.</td>
<td></td>
</tr>
<tr>
<td>Has the ability to work within international contexts.</td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td></td>
</tr>
<tr>
<td>Takes decisions.</td>
<td></td>
</tr>
<tr>
<td>Manages and supervises people.</td>
<td></td>
</tr>
<tr>
<td>Suitably administers materials and teams.</td>
<td></td>
</tr>
<tr>
<td>Understands and associates legal, economic and financial concepts with civil engineering work.</td>
<td></td>
</tr>
<tr>
<td>Works as part of a team. Interacts with inter- and multidisciplinary groups and provides comprehensive civil engineering solutions.</td>
<td></td>
</tr>
<tr>
<td>Communicates orally and in writing. Innovates and undertake business ventures.</td>
<td></td>
</tr>
</tbody>
</table>

**Future scenarios for the Civil Engineer in Latin America**

“2.1.2. Discussion of the Characterisation of future scenarios

It is envisaged that countries traditionally belonging to the Third World will form regional blocks for the rational use and exploitation of their natural and energy – water, land, forests, food, flora and fauna in general. This means helping to strengthen societies in the countries within such blocks.

The biotechnology industry, the construction industry, the construction material industry, the agricultural and fishing industry, the tourist industry, the pharmaceutical industry, the food industry, medical services, computer services, communications and other sectors that contribute to social development will have reached a level of development capable of meeting most of the population’s needs, to compete internationally and with a marked influence on other countries, especially within the region.

This growth process will be closely linked to information technologies, automation and communication, the scope of which is difficult to predict in these areas. Nonetheless, this is expected to be impressive, as in less than 50 years things have moved on from black and white TV to components that possess a thousand times more technology and data storage capacity than the most powerful computer of that era. It is true to say that the use of these technologies will evidence a permanent, marked increase in efficiency, productivity and saving. This technological development will make far more information available and communication facilities will need to help optimise processes in the area of Civil Engineering, meaning it is possible that the profession of civil engineer as such will die out and specialist degree courses will emerge.
With regard to construction, the trend is towards more resistant materials that comply with more restricted weighting coefficients with a view to creating more daring structures and designs. This can be seen in developed countries in huge modern constructions. In developing countries, the alternative would involve searching for solutions using local and recycled materials in order to deal with social problems.

It is expected that urbanisation will accelerate worldwide, involving mainly an adult population. This will reduce productive strength and make it necessary to increase productivity, and the resulting metropolises may lack the infrastructure to meet all needs, giving rise to urban mobility problems.

As a result, robotics will also develop a major presence in production processes and in people’s lives. Employment in its current form will cease to exist and each individual will need to manage their own work that will be mainly carried out from home. New types of job will need to be created that enable those being absorbed by machines to be replaced – otherwise, there will be a major job deficit.

The basic problems facing mankind will continue to be housing, food and water, and countries will be concerned with how to maintain retired people. There will be a very great need for energy and this will give rise to conflicts in society. Water will be more used in generating energy than for human consumption.

2.1.3. Approaches and professions that can be envisaged in each future scenario

Future situation facing civil engineering

Engineering in general will face broad-ranging, huge opportunities to contribute to development and welfare in future scenarios, whatever they may be. Traditional engineering degree courses will mainly continue to exist, but adapted to new paradigms.

Within this new context, the engineer will be an interdisciplinary, transdisciplinary and multidisciplinary professional par excellence who will interact with a range of other professions, in several cases not only joining forces and working with them, but also absorbing them into their work method. For instance, in the area of medicine, the biomedical engineer will be a professional who assumes leadership and control over medicine and a doctor will be their closest collaborator.

For some years now the emergence of new types of material has been noted owing to nano-scale work that is enabling these materials to become stronger and more resistant. Nanotechnology will incorporate knowledge of other sciences such as biotechnology, cognoscience and information and communications technologies, i.e. the integration of knowledge that until just a few years ago seemed incompatible.

Likely future scenario

Civil engineering in its specialist areas of road, hydraulic, building, environmental and geotechnical engineering, among others, will be much in evidence in future scenarios. To take this scenario into consideration, one can start from the assumption that civil engineering will remain both firmly-established and consolidated. Therefore, differences between today’s civil engineers and those of the future will be noted in major changes to professional approaches and new profiles adapted to
new features that will pinpoint problems to be dealt with and they will have a great capacity to adapt their disciplinary knowhow when involved in such work. The civil engineer will therefore be a multidisciplinary professional who will need to interact with professionals from other areas.

This scenario is characterised by the need for an increase in the number of civil engineers who hold a more holistic view of urban scenarios. Population growth will have a direct impact on civil engineering, as there will be less space for building and the possibility of creating vertical types of property developments will therefore need to be envisaged (cities). This means large buildings that will house all services deemed essential for life such as housing, health, education, recreation and employment (which will give rise to the study and research of new calculation methods, new materials and building technology as well as a study of greater situations involving risk). Within this new scenario, civil engineers will need to be able to deal with risk of damage to infrastructures owing to climatic phenomena or of some other type, and also include home automation in their designs.

On the other hand, the future need for an increase in productivity and industrialisation will enable civil engineering to approach production engineering and other related professions. Civil engineering will also be strategic in dealing with demands for energy, drinking water, clean air, handling of waste, transport and environmental protection. Thus, demands from the population and governmental bodies will mean that civil engineers should have a command of the technologies required for physical, chemical and biological treatment in the different media.

The civil engineer will need to evidence major skills in the use of software and cutting edge technology. Thus, they will need to have a greater command of computer tools in order to develop studies about territory for better management of space, and therefore will interact more with software and systems engineers.

2.1.4. Competences that will be required by these professional approaches

To navigate through and tackle different disciplinary areas, the engineer will need above all to have a solid education in basic sciences and engineering sciences. Apart from mathematics, physics and chemistry, they will need a foundation in biology. While the 20th century has been the century of physics and chemistry, the 21st century is expected to be the century of biology. On the other hand, the best way of facing an uncertain future is estimated to be via a solid foundation in values, as it is expected that ethics, for example, will predominate over the economy in the 21st century.

Future engineers will also need to develop the capacity for innovation as far as possible, based on the successful application of science in dealing with real problems.

Lastly, in a scenario of total globalisation, future engineers will need to have highly-developed skills in order to cope within international contexts.

We can summarise by stating that, apart from the basic competences required to exercise their profession, the main competences required of engineers of the future will be:

- Ability to use modern engineering techniques and tools.
- Adaptation of knowledge of several disciplines and incorporation of this data into projects.
- Ability to manage projects, people, business and costs, among others.
- Ability to work while taking sustainable development and the environment into consideration.
• Capacity in terms of communication, planning and industrialisation.
• Ability to understand the impact of engineering projects within global and social contexts.
• Ethical commitment, social responsibility and citizenship.
• Ability to adapt swiftly to new processes and technologies.
• Ability to develop within an aggressive, multidisciplinary, dynamic and greatly-changing environment.
• Capacity for innovation, creativity and entrepreneurship.

2.1.5. Other relevant comments about the future

Future scenarios depend, in accordance with that stated in the first questions, on political and cultural factors, and professions are linked as agents of change in such a process or perhaps as agents who are resistant to it, by upholding the traditional and liberal values attached to their profession.

It is foreseen that the civil engineer will take on an increasingly predominant role in society, drawing activities and professions which are currently unrelated to the field of engineering closer to it. The engineer by nature creates or seeks certainty and, faced with such an uncertain and volatile scenario, engineering may come to represent the solution or society’s weapon to help face and/or deal with situations involving crises or catastrophes, or to achieve the type of harmonious development sought and desired by mankind.

Production processes related to the mining of raw materials or the handling of water, as we are doing today, will need to be pursued in such a way as to ensure they are sustainable and in harmony with nature. This will involve re-defining mankind’s priorities and, consequently, achieving an improvement in the quality of life for everyone.”