Typologies and Classification

Institional Profiles: Towards a Typology of Higher Education Institutions in Europe

by Jeroen BARTELESE and Frans VAN VUGHT

The European higher education landscape is highly diverse. In terms of its size, the European Higher Education Area is comparable to that of the US higher education system. There are 3,300 higher education establishments in the European Union and approximately 4,000 in Europe as a whole (EC, 2003). At the same time, however, it is far more complex as it is primarily organised at national and regional levels, each with their own legislative conditions, cultural and historical frames, and a vast array of different languages in which the various forms, types and missions of higher education institutions may be expressed. These institutions contribute to many different needs of the emerging knowledge societies. A team of researchers is currently carrying out a research project that aims to explore the value of designing a typology of higher education institutions in Europe. The starting point of this research project is the assumption that the strength of the European higher education system lies in the diversity of its higher education institutions. This article reflects the results of their work up until now.

In this article we argue that a better understanding of the various types of institutions, their different missions, characteristics and provisions, will support mobility, inter-institutional cooperation and the recognition of degrees - hence the international competitiveness and attractiveness of European higher education. The creation of a typology of higher education institutions would be a promising instrument to enhance this understanding. It should reveal the institutional profiles of Europe’s rich higher education landscape, while respecting the diversities and characteristics of these institutions.

Rationale for a typology

It is often argued that diversity in higher education should be conserved and even increased. The EC paper on the Role of Universities in the Europe of Knowledge (2003) states that: “European universities have for long modelled themselves along the lines of some major models, particularly the ideal model of the university envisaged nearly two centuries ago by Alexander von Humboldt, in his reform of the German university, which sets research at the heart of the university and indeed makes it the basis of teaching. Today the trend is away from these models and towards greater differentiation” (p. 5-6). In the EC Communication on Higher Education (EC, 2005) the need for greater differentiation is stressed even more strongly as insufficient differentiation is a bottleneck both for including a wider range of learners and for achieving world class excellence (p. 3-4). In terms of governance arrangements and regulatory frameworks, diversity is as important as autonomy in order to achieve wider access and higher quality (p. 7).

From various countries, which are known to have a “unified” system (e.g. the UK and Australia) it is indeed reported that a lack of differentiation between institutions lead to negative effects such as mission convergence and institutional isomorphism (Van Vught, 1996), which is often quoted as a justification for new reforms (Scott, 2004; Douglas, 2004; Moses, 2004). This is leading to a new search for effective forms of diversity, including a renewed focus on the teaching mission of higher education institutions, as is for instance expressed in the UK White Paper on Higher Education (DfES, 2004) and the Higher Education Review Process in Australia (DEST, 2004). And from the USA, known for a strongly diversified system, a strong plea is heard for diversity with respect to the various dimensions and missions of higher education institutions, research and other (Douglas, 2004). This diversity should consequently be taken systematically into account by any comparison or classification of institutions (Lombardi, 2000; Shedd & Wellman, 2001).

The growing consensus with respect to the principle and value of diversity is a solid basis for further policy development in the European Higher Education and Research Areas. But in order to make diversity useful it needs to be understood. Therefore, a logical next step for Europe with respect to transparency measures is the development of a typology of higher education institutions. Such a typology will allow individual institutions to more effectively design their own missions and profiles, while at the same time offering the various stakeholders greater transparency.

A stakeholders perspective

A better understanding of the various types of higher education institutions, their mission and provisions, will support the European aim of increasing student mobility, inter-institutional and university-industry cooperation, the recognition of degrees and hence the international competitiveness of European higher education. Consequently, the development of a typology of higher education institutions in Europe is directly linked to the aims of the Bologna process and the Lisbon strategy. We argue that a typology must contribute to the needs of different stakeholders:

• Transparency for students

Basic information about the type of programmes offered by an institution can be derived from its position in the typology. Students can identify categories of institutions and relate this information to their preferences and abilities.

• Transparency for business & industry and other organisations

For business and industry, as well as for other organisations, a typology will reveal which

continued on page 10
types of institutions are of particular interest for them. Mutual partnerships and stronger relationships are created more easily.

- Facilitate consortia formation between institutions

A typology facilitates the identification of potential partner institutions. Within a typology segment, institutions can more easily associate and create consortia in which mobility, benchmarking, joint degrees may thrive.

- Enhance system transparency

Through a typology, institutions of higher education will be stimulated to clarify their missions and choose appropriate profiles. As a result the overall higher education system will become transparent and policy instruments can be better targeted. For example, mobility and granting programmes could be targeted to specific groups of institutions in the light of their comparative disadvantage or contribution to Europe’s social or economic needs.

- A basis for diversified policy approaches

Policy makers in governmental and other contexts will benefit from a deeper insight into institutional diversity. National, but even more so, European policies for higher education cannot be based on “a one type fits all” approach. Instead, policies need to be attuned to the existing diversity in such a way that it can be made to work most effectively.

- A methodological and analytical tool for research

Researchers, analysts and other experts will be facilitated in their policy analysis, international comparative studies, and also institutional benchmarking, by more insight into institutional diversity in both a methodological and analytical way.

Methodological considerations

Classifying is an activity inextricably related to the human pursuit to create order out of chaos, to increase transparency in complex systems, to grasp the diversity within such systems and – consequently – to improve our understanding of phenomena and systems and to support effective communication. Classifications have proven their usefulness in all areas of human life, even in those areas where the uniqueness of each individual or element of the system is recognised. Perhaps the classification of animals and plants is most appealing to our imagination. The path-breaking work of Linnaeus formed the basis for a better understanding of the differences and similarities between species of animals and plants. Whereas Linnaeus’ work lacked a precise theoretical understanding of the evolutionary mechanisms underpinning the differences and communalities, Mendel’s work on heredity added much to a better insight in evolutionary processes. Present-day technologies (focusing on the precise analysis of genetic materials) allow us to fully understand the mapping of animal (including humans!) and plant kingdoms.

In the field of higher education, researchers as well as other stakeholders are attempting to understand higher education systems by developing typologies of institutions. From a review of the literature on higher education typologies, we derive five issues that need to be clearly defined before a typology can be designed. These are:

- What kind of typology?

It is important to make a distinction between a priori typologies and a posteriori typologies. There is a conceptual difference between the arrangements of governments to demarcate types of higher education institutions (polytechnics, hogescholen, Fachhochschulen, Ammattikorkeakoulu) and efforts of analysts to categorise different types of institutions on the basis of similarities and differences. In the framework of this project, higher education institutions will be classified on the basis of objective data about the ‘behaviour’ of institutions. This implies that our classification is of a ‘posteriori’ type.

- What type of characteristics are used to categorise?

It must be clear which characteristics are taken into account to categorise institutions. As we employ a multi-actor perspective, different characteristics are relevant for classifying higher education institutions in Europe. Hence, we pursue a ‘multiple’ classification approach, which allows institutions to be categorised on various dimensions.

- Hierarchical or not?

Typologies can be constructed hierarchically or not. The concept “hierarchy” has two meanings here. It either can be interpreted in terms of the structure of the classification (tree-like, with general types at the top and branches indicating subtypes; cf. the five kingdoms in nature) or in terms of the outcomes (does the emergent classification imply a rank order of institutions). In the typology that we are developing, there is no hierarchy between dimensions, nor between the categories within a dimension. It must however be noted that any attempt to classify elements cannot prevent hierarchy-related interpretations.

- Reliability of the data

It is important to decide which types of data are relevant for a classification. Classifications can be based on subjective judgements (of peers, students, etc.) or on more or less objective data. It is important to define the criteria upon which institutions are classified clearly and to be keen on the reliability of the data.

- Who is eligible to be incorporated?

Only accredited and/or nationally recognised institutions of higher education are eligible to be incorporated in the classification. Every eligible institution may be assigned to a category within a dimension, each institution can only occupy a single category within each dimension.

The components of a typology

The heart of the typology of higher education institutions will be the various characteristics upon which differences and similarities of institutions are mapped. Each characteristic highlights a different aspect of the profile of the institutions included. In this way, the typology will in fact be made up of a number of parallel ‘schemes’, each based on a different characteristic. This multi-scheme typology acknowledges that institutions can be grouped and compared in a variety of ways.

The typology of higher education institutions must be based on the principle that the diversity of higher education institutions be reflected on relevant characteristics, while at the same time respecting parsimony. The relevance of characteristics is in the eye of the behol-
der, it depends on the subjective interests of higher education institutions and stakeholders. Hence, our approach to selecting schemes is heuristic. Through an iterative process long-lists of dimensions were discussed with experts, stakeholders and higher education researchers. At this stage, we have generated a number of schemes that provide, on the one hand, ample opportunities for institutions to profile themselves in very diverse ways and, on the other hand, provide different stakeholders relevant information on higher education institutions in Europe.

At this point in the research project, we are proposing four groups of schemes: on education (1), on research and innovation (2) on student and staff profiles (3) and on institutions (4). In the tables below these schemes are briefly described.

### Way forward

We believe that the viability of this typology will strongly depend on the involvement of higher education institutions and stakeholders. In close collaboration with these actors, we will further explore the relevance of the proposed schemes. In the years to come, a selected number of schemes will be operationalised by developing criteria for each scheme upon which institutions can be differentiated. Furthermore the availability of reliably data sets will be explored and the scheme will be tested extensively. A large number of (associations of) higher education institutions, stakeholders and interest groups are involved in these steps.

If the design of a higher education institution typology proves viable, it will be important to carefully organise the ownership and coordination of the typology. At this stage, we suggest that an independent organisation be founded or designated that will be responsible for the implementation in Europe. This organisation must operate in a trustworthy manner by being transparent in its structure and procedures.

---

### Table 1: Schemes on education

<table>
<thead>
<tr>
<th>Types of degrees offered.</th>
<th>This scheme provides information on the degrees offered at institutions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of subjects offered.</td>
<td>In this scheme institutions are listed on the basis of the range of subjects offered.</td>
</tr>
<tr>
<td>Orientation of degrees.</td>
<td>This scheme reflects the academic or professional orientation of the institution.</td>
</tr>
<tr>
<td>European educational profile.</td>
<td>This scheme reflects an institution’s engagement in European higher education programmes.</td>
</tr>
</tbody>
</table>

### Table 2: Schemes on research and innovation

<table>
<thead>
<tr>
<th>Research intensiveness.</th>
<th>This scheme reveals an institution’s commitment to scientific research.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation driven research.</td>
<td>The extent to which an institution is engaged in socio-economic exploitation of its research</td>
</tr>
<tr>
<td>European research profile.</td>
<td>This scheme reflects an institution’s engagement in European research programmes.</td>
</tr>
</tbody>
</table>

### Table 3: Schemes on student and staff profile:

<table>
<thead>
<tr>
<th>International orientation.</th>
<th>This scheme provides information on an institution’s commitment attracting international students and employing international staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement in life long learning.</td>
<td>This scheme reflects institution’s commitments to the learning of all age groups</td>
</tr>
</tbody>
</table>

### Table 4: Institutional schemes

<table>
<thead>
<tr>
<th>Size.</th>
<th>This scheme categorises institutions according to their overall size in terms of student enrolment and staff numbers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of delivery.</td>
<td>This scheme lists institutions on the basis of the mode of delivery of educational programmes.</td>
</tr>
<tr>
<td>Community services.</td>
<td>This scheme reflects an institution’s commitment to not-for-profit activities in the community or society.</td>
</tr>
<tr>
<td>Public/private character.</td>
<td>This scheme groups institutions on the basis of their public/private funding base.</td>
</tr>
<tr>
<td>Legal status.</td>
<td>This scheme reflects the legal status of a higher education institutions.</td>
</tr>
</tbody>
</table>

* Researcher, Center for Higher Education Policy Studies (CHEPS), University of Twente, The Netherlands

** EUA Board member, Former President and Rector Emeritus, University of Twente, The Netherlands (bohmert@nuhr-er.eu)

This project has been funded with support from the European Commission.

The content of this article does not necessarily reflect the views of organizations to which the authors are affiliated to, nor can these organizations and the Commission be held responsible for any use which may be made of the information contained herein.