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LANDSCAPE EDUCATION: NEW OPPORTUNITIES FOR TEACHING AND RESEARCH IN EUROPE. POTENTIALS OF THE LE:NOTRE ERASMUS NETWORK FOR LANDSCAPE ARCHITECTURE EDUCATION IN EUROPE

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L'INSEGNAMENTO DELL'ARCHITETTURA DEL PAESAGGIO: NUOVE OPPORTUNITÀ PER LA DIDATTICA E LA RICERCA IN EUROPA. LE POTENZIALITÀ DELLA RETE *LE:NOTRE ERASMUS*

Traduzione di Antonella Valentini**

Summary

In 2002, Eclas (the European Council of Landscape Architecture Schools) started the first Thematic Network Project in Landscape Architecture. Many databases on specialist literature, academic journals, European environmental policies, web links, landscape designs and so on, have been established. The LE:NOTRE thematic network meets the characteristics of a Community of Practice, a network of practitioners who share the same domain of interest. Learning in a CoP means a not traditional way of education, based on the contribution of all users and a lifelong learning. To develop this concept, some pilot courses have been organized in form of collaborative seminars whose participants, coming from different European universities, meet in a virtual room hosted by Le:Notre. A new concept of learning through communication and interaction in collaborative virtual environments is bore.

Key-words

Landscape Education, Le:Notre Project, Thematic Network for Landscape Architecture.

Abstract

Nel 2002 l'Eclas (Consiglio Europeo delle Scuole di Architettura del Paesaggio) ha dato l'avvio al primo progetto di Rete Tematica di Architettura del Paesaggio attraverso il quale sono state costruite una serie di banche dati in tema di paesaggio. La rete tematica di Le:Notre assume le caratteristiche di una "Community of Practice", rete di utenti che condividono lo stesso dominio di interesse. Imparare all'interno di una CoP presuppone un modo di apprendimento diverso da quello tradizionale, basato sul contributo di tutti gli utenti e in modo continuo. Per sviluppare questo tipo di educazione sono stati organizzati corsi pilota nella forma di seminari interattivi i cui partecipanti, provenienti da differenti università europee, si incontrano nella piattaforma virtuale di Le:Notre. Un nuovo concetto di apprendimento attraverso la comunicazione e l'interazione in ambienti virtuali si consolida.

Parole chiave

Insegnamento di architettura del paesaggio, Progetto Le:Notre, Rete Tematica per l'Architettura del Paesaggio.

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LANDSCAPE ARCHITECTURE: A STRANGE AND DIVERSE DISCIPLINE

Landscape architecture is definitely the trouble child of academic classification: it is not a fine art, it is not a technology, it is not a natural science and it is not a humanistic discipline. Is it not curious that the discipline has developed so widely without having a precise disciplinary footing? But one can also put it positively.

Landscape architecture is an integrative discipline bridging *old-fashioned* gaps between the humanities and technology. However, being integrative by nature also means taking the difficult way. For a landscape architect it is hard work to be heard and understood.

This heterogeneity becomes very obvious on the European level. Landscape education can be found at art academies and architectural departments, at universities of technology, agronomy and forestry, as well as at universities of professional education. Some courses were established already in the first decades of the 20th century, such as in Norway, Germany and Portugal, whilst others have only recently been developed.

Consequently, educational programmes are varying a lot in terms of contents, length, pedagogies and learning objectives despite the profound synchronising effects of the Bologna Process¹. However, diversity is also a potential, if effective communication and interaction are established and practiced.

Looking at the professional side the contrasts seem even sharper. Although landscape architecture is now widely being recognised as a profession, the number of independent landscape architecture offices is still very unbalanced in Europe. Nevertheless, there is an equal need for this expertise given the fact that almost eighty percent of Europe's population lives in urban and peri-urban areas. This results not only in an unbalanced awareness of landscape architecture in society but also in a strong inequality concerning graduates' chances to enter the profession adequately.

There is not a one-size-fits-all solution at hand to improve the situation. However, some important steps have been taken in recent years. The Council of Europe enforced the European Landscape Convention².

One of its most important achievements is an agreed, common definition of landscape: "Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". Furthermore, the definition of the scope of the convention is decisive: "This Convention applies to the entire territory of the Parties and covers natural, rural, urban and peri-urban areas (...) It concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes"³.

This inclusion of urban and peri-urban areas into this definition was urgently needed and it gives a forward-looking character to this document.

The second principal achievement of the convention is that landscape is identified as an issue for society as a whole, which should bring landscape from the conservationalists' ivory tower back on the political agendas. At least it is hoped that this will occur: the Council of Europe has no executive power for controlling the implementation of the convention. The final responsibility remains with the national authorities.

STARTING A THEMATIC NETWORK FOR LANDSCAPE ARCHITECTURE

The European Landscape Convention gives an excellent background for the activities of Eclas, the European Council of Landscape Architecture Schools⁴. Only recently established

¹ The Bologna Process is based on the so-called Bologna Declaration. It is an intergovernmental European reform process aimed at establishing the European Higher Education Area (EHEA) by 2010. For more information you may visit the official website 2007 – 2009: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/² See the Council of Europe's website for more information:

http://www.coe.int/t/e/Cultural_Co-operation/Environment/Landscape/

³ www.coe.int/t/e/cultural_co%2Doperation/environment/landscape/presentation/9_Text/index.asp#TopOfPage ⁴ http://www.eclas.org, for more information on the concept and activities of Eclas.

as a legal institution, Eclas aims to foster exchange and collaboration in European landscape architecture education. In 2002, Eclas started the first Thematic Network Project in Landscape Architecture with significant financial support of the European Union's Erasmus programme.

The network project has taken "an important initial step in documenting the current state of the art, seeking common ground and building bridges between the various parts of the discipline and the varied traditions which have developed in very different European contexts over the past decades. A detailed survey of institutions, degree programmes, their component course units and the teachers and researchers involved was carried out using a specially designed web site⁵.

This has been developed to provide an interactive range of communication tools aimed at supporting the development of a coherent and open European academic community. A sophisticated glossary database has been set up, which now contains a wide range of terms and definitions in over thirty languages. Other databases established so far cover specialist literature, academic journals, relevant aspects of European environmental policy, web links and landscape design case studies, and provide common resources for all members, which it is planned to develop further. The close and growing involvement of the Network in the Tuning Project⁶ has also provided a structured basis for the discussion of the definition of generic and subject specific competences for the discipline. The number of participating institutions in the Le:Notre Project has increased successively, from seventy three higher education institutions in the first to one hundred and one in the current proposal"⁷.

COMMUNITIES OF PRACTICE AND LIFELONG LEARNING

The Le:Notre thematic network meets the characteristics of a Community of Practice. Communities of Practice, or CoPs in short, are networks of practitioners who share the same domain of interest. The members of a CoP vary in their level of expertise and type of specialisms. In Le:Notre one may find students, academic assistants, lecturers and professors, each with his or her individual specialisation. Members may also have different roles and relationships in the community. The sum of relationships, mutual trust and awareness is called *social capital*⁸.

The principal idea of Le:Notre is to develop and *accumulate* social capital beyond national and institutional boundaries on a European level. Current developments in the community aim to include also landscape architecture professionals and experts working for public institutions⁹. In doing so, the network has the potential of bridging existing knowledge gaps between education, professional practice and the public sector. At the same time, it is thanks to the tremendous developments in information and communication technology that communities of practice are getting more interactive, efficient and thus more important as a social, educational and subject-specific resource.

Another important aspect inherent in the network is the idea of lifelong learning. Everybody concerned with landscape architecture should be able to join the network and profit from its resources at any stage of his or her professional life. This is hoped to coincide with a new future role of universities: instead of their current concentration on the first academic education they are expected to develop stepwise into lifelong learning partners. The

⁵ The project website is accessible under http://www.le-notre.org. New members are registered via the contact persons of member universities and partner institutions.

⁶ The tuning project aims at harmonizing educational structures and contents of studies in Europe. For more information: http://www.tuning.unideusto.org/tuningeu/

⁷ Quoting from www.le-notre.org

⁸ FISCHER GERHARD, ROHDE MARKUS, VOLKER WULF, *Community-based learning: The core competency of residential, research-based universities,* "International Journal of Computer-Supported Collaborative Learning", 2, 2007, pagg. 9-40.

⁹ The European Urban Landscape Partnership has become a sub-project of Eclas/Le:Notre. For more information please visit http://www.urban-landscape.net/

European Union has repeatedly promoted this important shift because it is regarded as absolutely necessary for keeping and enriching people's professional competences and thus secure their employability.

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Figures 1 e 2. Le:Notre web site database. The Glossary, which now contains a wide range of terms and definitions in over thirty languages and Literature references.

USER-GENERATED CONTENT AND THE NATURE OF COMMUNITY KNOWLEDGE

So what does learning in a Community of Practice mean? This is of course very far away from instructed course units with a teacher in the front and a group of students in the back, listening to the "wise man or woman on the stage"¹⁰.

The philosophy of Le:Notre is that any domain knowledge is of relevance, irrespective of the country or the person it originates from. However, a minimum level of quality control is required. The basic instrument for quality assurance is the premise that registered people have to be actively involved in landscape architecture education or professional practice. This is proved by their employment, engagement or enrolment in the respective institutions. Therefore, the basic task of Le:Notre is not to develop contents but to structure them in a meaningful and user-friendly way.

This is mainly achieved by means of interactive databases. These have been developed for course units, literature, images, design projects, links, journals and more. The contents vary but the principle is always the same: any member can add records to the database originating from his or her specialism and these entries can be searched and used afterwards by everyone. The more individuals add content, the more they will profit from the community resource. A very good example is the images database. The motivation for its development resulted from the perceived difficulty in finding relevant images for landscape architecture lectures. This is particularly true for representations of recently developed projects, plants, materials and details.

The idea of this database is to share relevant images and to annotate them with metadata so that they can be searched by location, theme etc. and used for academic purposed. The principle is similar to popular public photo communities on the internet. But apart from the formal benefits of a shared resource this database also makes people meet through images. People get in touch by means of the shared image, even if they do not communicate directly. This effect illustrates the Le:Notre principle of community-based learning which gives each

¹⁰ Please consider the Olcos roadmap for more information about open educational practices: GUNTRAM GESER (editor), *Open Educational Practices and Resources; OLCOS Roadmap 2012*, 2007. The report is downloadable under http://www.olcos.org

individual an expert role. Individual expertise gains more value as soon as more interactions and requests take place and people are continuously being identified by others through this specified knowledge. This is where *social capital* starts to develop and accumulate. But it only works when people are willing to share and communicate.

BUT DO WE REALLY UNDERSTAND EACH OTHER?

Le:Notre is now in its second project cycle running until October 2009. The databases contain about 22.265¹¹ entries in different subject domains. However, a more effective mapping of the concepts in the domain is considered as one of the most important future tasks. If one tries to forecast the development of the internet taking into account how it has developed in the last ten years it seems to be clear that too less data will not be the problem. The opposite will be, or is already the case. Therefore, the interest will focus much more on how to access this information.

For landscape architecture, the question is: how to find relevant information for domainspecific topics easily and comprehensively? Even if they are existing in a different language? Even within a domain specific community there are a lot of semantic gaps. These misconceptions are not only existing between the various national terminologies for landscape architecture but also within the profession itself.

From this perspective it seems that the classical method of ontology development could become a part of the solution. The word ontology comes from the Greek *ontos* (being) plus *logos* (word). In classical philosophy it described an aspect of metaphysics concerned with the nature and relation of being. The related strategy is mainly to provide category systems representing a certain vision of the world. This aspect of modelling reality was adopted by computer sciences in order to classify and interrelate large amount of data for knowledge management purposes¹².

Ontologies support the exchange of domain specific information significantly. Building a shared ontology for the domain of landscape architecture bears the potential of bridging conceptual gaps within the profession, in particular between the languages. Even if there will never be a concept definition agreed by everybody the process of drafting it could enhance a fruitful reflection and clarification process across national and institutional boundaries. This will further help to define the points where landscape architecture meets its neighbouring disciplines.

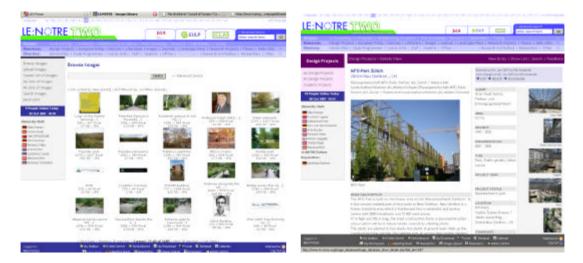
It might be argued that this is too much a top-down process resulting in inflexible structures without ambiguity. But computer scientists are much less rigid with concept definitions than domain experts, such as landscape architecture academics in this case, tend to be. In computer science ontologies are regarded as living structures: "Communities and practices will change norms, conceptualizations and terminologies in complex and sociologically subtle ways. We should not be surprised or attempt to resist these reformulations"¹³.

But in addition to the conceptual benefits the actual potential of the ontology lies in its translation into a machine-interpretable language, such as OWL (Web Ontology Language). If search engines or other computer agents apply these underlying concepts during the search they actually look through the eyes of the expert at the available contents on the internet – of course a little bit faster than any living expert could do it! Consequently, the chances to identify relevant information will be significantly higher than they are today. This concept is understood as the semantic web, a web consisting of an interpretable information infrastructure, which is now emerging stepwise.

¹¹ Status on the 2nd of October 2007.

¹² KARIN K. BREITMAN, MARCO ANTONIO CASANOVA, WALTER TRUSZKOWSKI, Semantic Web Concepts, Technologies and Applications, Nasa Monographs in Systems and Software Engineering, Springer, 2007. For deeper insights into ontologies and the semantic web.

¹³ NIGEL SHADBOLT, WENDY HALL, TIM BERNERS-LEE, The Semantic Web Revisited, IEEE publications, May/June 2006.



Figures 3 e 4. Searching in Le:Notre web site images and projects.

WHAT NEEDS TO BE DONE?

It remains to be hoped that the European landscape architecture academic community is open enough for a new concept of learning through communication and interaction in collaborative virtual environments.

One attempt might be to bring the Le:Notre environment closer to the actual educational activities. Therefore, pilot courses are being organised since last spring in the form of collaborative seminars. The participants of these teaching events come from different European universities and locations, therefore they depend on a virtual information platform which will be integrated in the Le:Notre website.

The seminar activities feed directly into the databases in the form of design project reports, images, links and literature reference, which can thus be reused later on. In order to bridge the communication gap effectively the group meets synchronously in a virtual meeting room which is also hosted by the Le:Notre project.¹⁴ The system allows for synchronous presentations with very intuitive communication and interaction of the participants. The seminars will be evaluated and documented on the website. It is expected that more consortia of European landscape architecture schools will follow this example building on the expertise gained in the pilot projects.

The educational benefits are manifold: students gain important media, communication and intercultural competences and they also learn to consider landscape architecture from different national perspectives. In the course described here students are asked to elaborate a joint essay on specific landscape architecture topics in international small groups. But this is only one of many educational scenarios. What should be reminded is that community learning in virtual collaborative environments has the potential for changing learning cultures and didactical concepts.

Learning can take place across institutional and national boundaries. Artefacts such as project results, images and collaborative essays can stay in the community and remain accessible as a potential resource for future learning activities. Again: *social capital* is accumulated. These activities will take place in completely new contexts even beyond classical university education.

¹⁴ This highly interactive virtual meeting room has been developted by the German Fraunhofer Institut. More information can be found under http://www.vitero.de

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Figure 1-4: http://www.le-notre.org

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