

European architectural education in motion

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Invited Paper

Looking closely at the ongoing transformations of architectural education in Europe, several issues are popping up.

Think of how architecture and architectural education are coping with the changing concepts of time and space, with the emergence of placelessness, of mobility and virtuality. Think of the important question: what is the knowledge base of architecture and how we can (through this) reinforce the competence and social / professional position of an architect? What about the scientific base(ment) of architecture (that as a whole escapes the pure scientific debate)? Think of the shifts in the design studio in this digital era and subsequently the need for an interactive digital portfolio. How do schools of architecture cope with the given of lifelong learning? How do we see the issue of identity of schools in a changing European context imposing a unifying Ba-Ms system on all higher education? What about the unique focus on the education of the architect-practitioner as the only aim of schools of architecture?

Many subjects, but too much to deal with within the scope of one text. Therefore we decided to focus on two of these, the latter two, which appeared to be of common interest between the editors and the author.

Profiles of schools

The transformation of higher education in Europe initiated by the Bologna declaration is definitely the most significant change in Higher Education since Charles the Great. As a part of its ambition to create peacefully a real EU, the European higher education area (EHEA) will be a reality by the year 2010. The major ambitions of this transformation process are 'with full respect of the diversity in cultures, languages, national education systems and university autonomy...':

- adoption of a system of easy readable and comparable degrees
- adoption of a system essentially based on 2 cycles , undergraduate and graduate.

Access to the second cycle shall require successful completion of the first cycle studies,

Lasting a minimum of three years. The degree awarded after the first cycle shall also be relevant to the European labor market as an appropriate level of qualification. The second cycle should lead to the master and/or doctoral degree as in many European countries.

- establishment of a system of credits - such as in the ECTS system
- promotion of mobility of students and staff ⁽¹⁾

This sets the overall framework for education. In reality however not all recommendations are implemented to the same extent and in the same way in the different countries and disciplines.

Indeed, doctors in medicine obtained the right not to have a vocational Bachelor degree. As far as concerning architecture the schools of architecture also have declared in their Chania statement (2001) ⁽²⁾ that the Bachelor degree would not be a professional degree, but would lead to the Master's degree in architecture, and give access to the profession of an architect. So far education.

Independently from this new development in education, EU is now finalizing a new EU-Directive on services in the Internal Market (the so-called SIM Directive) that will regulate the provision of services and the right of establishment in an EU host country. This relates to the mutual recognition of diplomas which was regulated for architects by the 1985 Architects Directive (85/384/EEC) and its Advisory Committee. From 20 October 2005 on, after the extension of EU in May 2005 to 25 member states, this issue is regulated by a new, unique and general Qualifications Directive (Directive 2005/36/EC of the European Parliament and of the Council on the Recognition of Professional Qualifications). This is 'a framework directive' covering more than 400 professions. Member states have two years, it means till 20 October 2007, to incorporate this new Directive into their national legislation. This new directive, as well as it was the case for the 1985 Architects Directive, states that the formal education of an architect requires a minimum 4 years duration.

There is definitely a dichotomy between the 3+2 track agreement of Bologna and this 4 years in the EU-regulation. Needless to repeat that the architectural educational community is advocating 5 years as a minimum, and this is completely in line with the position of ACE (architects council of Europe) ⁽³⁾, UIA and UNESCO ⁽⁴⁾. In many countries the whole higher education, and hence the schools of architecture have already moved to the 3+2 system.

Some colleagues fear that this 'unification' means 'equalization'. Schools will have to be accredited again and as far as architectural education is concerned, the Heads of Schools of Architecture have underlined their willingness to keep the identity and diversity of their schools beyond the Ba-Ms transformation. According to what is known today, this accreditation will remain the legal competence of the national governments who will regularly report on this subject on the EU level.

The schools of Architecture have underlined the importance of diversity and identity in education, as illustrated by the conference on diversity recently held in Bucarest ⁽⁵⁾. UNESCO too has cultural identity high on the agenda ⁽⁶⁾.

More surprisingly, cultural identity and diversity is also a major ambition of the Bologna process. One may expect more similarities between Bachelor degrees in architecture, the Masters degree definitely will show full differentiation. Schools should not give up their specificity, their specific approach. On the contrary, schools will have to strengthen their specificity and advertise their specific 'color' in order to attract students from abroad interested in their profiles. Students now can shift schools easily after the Bachelor degree.

Diversity operates on several levels. Firstly, a school of architecture adheres to a type of education and will stay faithful to its roots : artistic (Beaux-Arts) type, Bauhaus type, polytechnic (University – Fachhochschule), crafts oriented.

Secondly one school differs from the other by its teachers: Master classes, invited jury members, "big shots" (having been taught by...as a didactic tool). Although programs look alike, teaching can be very different. Thirdly, a school differs from others by its 'rare' knowledge, mostly at the Master's level and/or the postgraduate level. Specialized postgraduate programs exist all over Europe in graduate schools, locally or transnational, just to name but a few: seismic design, computational architecture, conservation, urban and spatial planning, real estate (management), European culture, virtual architecture, ..

Some schools are known for their specificity, others still have to come up for/or advertise their specificity and assets. The EAAE guide of schools of European schools of architecture ⁽⁷⁾ can be of help.

(http://www.eaae.be/eaaienieuw/documents.php?show=publications&type=e_guide)

The third edition of this guide will be published in the spring of 2006 and will include hyperlinks to the website of the schools. These websites are unequalled sources of information: many show not only the course topics, but even the full course material. See, for example, the CAAD website of the K.U. Leuven (<http://caad.asro.kuleuven.be>) or the site for the construction course in Barcelona (<http://tecno.upc.es/c1>).

From the education of an architect to the education in architecture

Our postindustrial society is characterized by an explosion of knowledge and hence a growing number of specialists. This creates for the schools of architecture the dilemma between generality and specialization as well as a permanent tension between the legal limitations on the length of studies and the impossibility "to contain it all in one head".

Traditionally a school of architecture was preparing for the profession of an self-employed architect, being legally reliable for his or her projects, and the whole legislation including the European level, pertains to this professional situation. This is obvious in schools having a period of apprenticeship integrated in their program before graduating as a preparation for the profession of an architect.

Today however, looking closer at what happens in many schools of architecture, we see the appearance of options, colors, elective courses, graduation based on a (written) thesis work - or- a final year project,

different diplomas some of which are even not diplomas of architecture. They prepare for many different professional situations: builder, project leader, safety coordinator, technical expert, legal expert, managerial roles, creative..., decision makers, critical questioning, architect designer legally accountable, real estate, specialized in urban design, in building technology, costing, briefing, computer architecture, virtual architect, website designers, computer system management, developers of software, building management and maintenance, space planning,...

One extreme sees architecture as a kind of cultural studies: learning to know about society through its built environment. This is a model mostly found in Italy: only a few of the students are prepared to act as an architect-designer.

Many schools have been (forced to) differentiate and offer a wider palette of courses and subjects. What is offered mainly depends on the internal market (what is needed), on the educational situation in a country (how many schools are there and of what type?), on the specialization of the staff as linked to the history of a school, on the size of the school (a school with 3000 students better allows for alternative profiles than a school of 400).

Specialization creates a new kind of problems: who can practice as an architect and who cannot? Take as an example the relationship between a diploma in architecture and a diploma of urbanism: nowadays some studies in urbanism are also studies in architecture and fit in a 5 years architecture education trajectory, others are not and do not allow the graduates to practice as an architect (like in the Netherlands). A similar issue concerns conservation: can it be integrated in an architecture curriculum or should it be taught as a postgraduate study? The Bachelor-Masters structure is almost predestinated to specialization in the Masters level. The question now becomes: who still will get a diploma of an architect? Decisions in the future will most probably still be ruled by the eleven points from Art 3 of the 1985 Architects Directive, which are for architecture listed in the new Qualifications Directive. Who will advise the EU Commission, after the abolishment of the Advisory Committees on October 20, 2007 is not yet settled.

Preparing for many of this new roles can quite easily be incorporated in schools of architecture, because of the power of the design approach and the designerly way of thinking, an attitude that appears to be useful in many different professional situations.

Whereas engineering education strongly emphasizes scientific, analytical, mathematical and computational reasoning, the education of an architect adopts a creative, synthetic and global approach. Architectural education teaches how to cope with wicked problems. It is characterized by a strong emphasis on critical thinking, positive and constructive reasoning and rationality, creative and reflective thought. It creates an attitude of considering wholeness, inclusion and globalization versus reduction, exclusion and locality. Coping with the ever faster changes in knowledge and tools, schools will have to prepare for lifelong learning and thus anyhow have to focus on how to think, how to learn, rather than on what to teach now. They will have to offer permanent education. The offer can be local, national, European wide or even worldwide making use of the information technology. E-learning initiatives will create new opportunities.

The variety of subjects and diplomas within a school, a country as well as on the European level, will soon or later result in a redefinition of the minimum requirements for an architect's education. The first question will be: what is the content of a Bachelor in architectural education? Today all new programs are subjected to a process of accreditation. This accreditation will be organized on the national level and fine-tuned on the European level; it first will be done for the Bachelor degree, later on probably also for the Master's degree.

- (1) <http://www.bologna-berlin2003.de>
- (2) Neuckermans, H., Chania Statement in: EAAE News Sheet, no 61, 2001, pp. 1,2.
- (3) ACE – Architects' council of Europe - (info@ace-cae.org)
- (4) UIA/UNESCO Charter for Architectural Education, 1996.
- (5) Diversity – Ion Mincu University of Architecture, International Conference, Bucharest, October 2005.
- (6) UNESCO – UNESCO Universal Declaration of Cultural Diversity – art.1 , Paris, Unesco,2002.
- (7) VAN DUIN, L., EAAE Guide of European schools of Architecture – EAAE, Leuven, 2003.