

Chapter 4

Emerging Challenges for the Content of Architectural Studies

This Chapter attempts to map all different aspects of the content of the contemporary architectural studies in Europe, emerging from our debates in the past three years. This mapping reveals the spectrum of views on the main characteristics that the reformed curricula should have, on the fundamental strategies for the contribution of the different subject areas shaping architectural studies, on the set of competences the graduates must have and the pedagogic paths through which those should be ensured in order for the new profiles of the architect to be formed. With a clearer picture of these records and the new information about the new European framework (i.e. the new qualifications Directive), we will be able to position ourselves and our schools on a European map, on a type of matrix which could help us find more compatible collaborators for more fruitful associations, more creative exchanges and more efficient protection and affirmation of our school's identity.

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A Critical Reading of the ENHSA Thematic Network Debates on the Content of Architectural Studies

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Introductory Remarks

In the program my colleague David Porter and I are presented as people "that have been strongly involved in education, but have not been to Hania consistently during the last seven meetings".

I have been wondering about this term "consistently". It seems to refer to some inconsistent and maybe dubious behaviour while being here. That might of course be the case for many of you. For my part I can assure you that I have not been here at all. I have been on the list of participants quite a few times but have consistently not made my way to Crete, the result being that the Oslo School of Architecture over the years has acquired a portfolio of cheap and non-refundable airplane tickets.

The notion is that in not having been here, and having knowledge of the discussions of the forum from the written material, I might (quote) "have a clearer view and therefore could offer better insights by making a synthesis of what has happened in the last three years in relation to the topics we have debated".

Therefore I have tried to do a critical reading of the texts, and in attempting not to obscure my reading I have even deliberately not talked very much to friends who have actually taken part in the event, probably very consistently, for more or less eight years.

Reading of Debates

My empirical material then is comprised of the three books in the series of *Transactions on Architectural Education*:

"Towards a Common European Higher Architectural Education Area" (2002)

"Shaping the European Higher Architectural Education Area" (2003)

"Shaping Architectural Curricula for the European Higher Education Area" (2004)

In addition to this I have read with interest the recent *Writings in architectural education* (Transaction no. 26) where the winning essays from the competition were published. And they are interesting because somehow they try to open up the next discussion – after all the fuzziness surrounding the Bologna Declaration is settled and the main principles are put into action.

The three reports seem very generous in reporting and the titles of the books from the last three rectors meetings are more or less the same and revolve around the Hania Dec-

laration from 2001, where EAAE sort of agrees on the Bologna principles of the Bologna declaration and starts to discuss how to put it into action. Of course the EAAE and the body of schools in different national settings, not to mention the specific schools, did not have much choice. These were political decisions made at an extremely high level and which dealt with the university system in Europe as a whole. And of course the intentions behind Bologna are excellent if we understand them as compatibility between schools, options for free exchange of students and transparency in curriculum.

I can remind you that the meeting in 2002 sort of launched the discussion as to what Bologna means in terms of education in architecture, and the topic really was met with resistance. The themes in the discussion have also been more or less the same throughout the course of these years:

Curriculum

Relation between education/professional bodies

Exchange and mobility

Academic assessment

The outcomes of the discussions in working groups of these themes were presented in 2003. For me the most interesting material coming out of these groups was the statistics that were done. I remember Per Olaf Fjeld coming back from Hania and with some relief telling me that the Oslo School of Architecture is not a particularly small school, but that it is rather of a typical European size, and I was also surprised to hear that our school was one of the few with an established school of research education in the field of architecture.

But my main reading of these statistics relates to the big differences between the schools, and the different institutional settings of schools, and my feeling is that we both as a system and as singular schools are very sensitive to changes both in general university policies and to internal institutional changes.

My reading is that the historical system of European schools of architecture might be a very good system, but that it will probably not be sustainable and will go through profound changes in the years to come. And this process has started in many countries.

The transaction from 2004 is more a presentation from different schools as to their structure and how they compose their curriculum and a discussion of different themes within architectural education.

Status

On page 85 in the 2004 transaction James Horan says that he wants "substance to the debate" and of course this is what is needed to move forward. My feeling is that the Bologna discussion is terminated at least in this forum: the structural principles have been put into action, and the Hania declaration more or less fulfilled. And then the real trouble starts, because we have to go deeper and raise far more difficult questions.

The process has circled around the question of harmonizing education. What do we have in common? Maybe a more interesting discussion between schools of architecture at the moment would address differences in self-understanding, profiles and curriculum.

Curriculum, Curricula

A really post-modern reading of the Hania meetings could get a lot of analytical material out of how the term curriculum is used in the texts. Sometimes the intention is "A European Curriculum (in the singular) for Architecture", sometimes the term is "the new European Curricula for Architecture", and sometimes only "European Curricula for Architecture".

Curriculum – curricula

Curriculum – curricula

Here is the big difference.

Are we talking about:

A minimum standard

A common part of the curricula

or (which is probably of the greatest current interest at the bachelor level) Common standards?

I will try to provoke a little by asking how this can be possible within a discipline of architecture that does not even agree upon what architecture is.

There are at least three or four understandings of the concept and these different interpretations have consequences for the views on education:

- Firstly: Architecture can basically be seen as one of the arts. I refer here to Baumgarten's definitions of spheres of art back in 1750, where he reluctantly included architecture as one of the arts, meaning that just a small portion of our landscapes and buildings are architecture or interesting for the field of architecture. A building qualifies as architecture through its quality.
- Secondly: Architecture is understood as what architects do. This gives the professional approach a focus. A building made by an architect is architecture. This is both the common understanding within fields like ethnology and art history, and of course it must be the understanding of schools focusing on the education of professionals for the building industry.
- Thirdly: architecture can be seen mainly as an academic discipline within the humanities.
- Fourthly: within urbanism a definition of architecture limited to buildings and environments of a specific quality is of little use. "The architecture of the city" when used to refer to a central ideological document within this field, means the city understood as physical form. At the same time, architecture is a scientific discipline in the study of the environment understood as physical form (social understanding).

In many schools these understandings do coexist, even in the professional minds of quite a few of us. Some schools, like my own, have a tendency to take all of these understandings

into account and end up with a curriculum that wants to be everything. And we need to make priorities related to our own future profile. We have a history of having been a "different" school and we very much want to continue as a "different" school.

Generally, one could ask what kinds of forces that are at work in the interaction between the harmonisation and differentiation of schools of architecture. The Bologna process, the urge for standards and claims from national and academic assessment probably lead towards harmonisation. But a number of strong forces are leading in a different direction:

- The national and international competition between our institutions that make it necessary to be clearly profiled is the way market forces work in this field.
- The hybridization of education; the boundaries between design and architecture are becoming more and more unclear also in educational institutions. The same really goes for architecture and the arts, and architecture and landscape architecture.
- New ways of educating architects, the "digital" world providing quite a new framework, and also a lot of private schools popping up, either because they really want to do things differently, or because it is even possible (and I really cannot believe it) to make a profit out of the education of architects.
- A very open situation as to the role of the architect in future production of the environment, that is, in the way architects work in society and in building production. This surely makes it difficult to set up relevant standards.
- And a very important factor is the changes in economic systems for funding education also in our fields, which strike in a very intricate and often random way.

Further

I must confess that seen in the perspective I have tried to present here, I do not really see the need for harmonisation of the content of curricula. Bologna has given us a common structure to be filled with a variety of contents.

But of course there is another side to this. During my preparations this morning I remembered the study from 1995 (I think) of education in Architecture and Town Planning in the Netherlands compared to other European programs of education in the field. The study unveiled a wide range of approaches and divergent expectations, each of course reflecting the cultural history of each country and the local role of the architect in building and planning. A world comparison had probably stressed the same fact. But another just as interesting discovery coming out of the study was that the students' diplomas did not show the same differences. They in a way proved the existence of a universal culture of architecture, and even (as we all have known to be in existence for quite some time) a universal normative system for the discipline of architecture. Of course, we must add that the ten years following this study have seen lot of talented attempts to break out the box of the normative system.

In the introduction to the publication of the competition on writings in architectural education this spring, Per Olaf Fjeld states, "Architectural education in both Europe and North America has no common goal or direction apart from a very simplistic or basic understanding of what architectural education should entail. Three of the four prize-winning

essays have much in common because they can be seen as attempts to define common directions."

Frank Weiner's winning essay, also published in the News sheet, is in my view of course brilliant but very traditional, urging a return to phenomenological approaches "enabling our students to get closer to the feeling of beauty and its pleasure" and to the traditional ways of teaching, integrating criticism, history, theory, the horizons of philosophy and literature and the horizons of sensibility into the context of the educational studio – in the way the old masters did and thus recovering a lost horizon.

Thomas McQuillan's second prize essay deals with the question of strategy to meet a situation that is fundamentally changed. His argumentation is very closely linked to the traditional values of the university system: The University always needs to be on top of the situation in understanding social and technological transformation, doing the investigations, the experiments and the innovation. Then the university has to sustain an academic and critical tradition. As a third need, the university has to put up with some resistance. In our field maybe the most important task of defence is related to the relative autonomy of architecture.

I will conclude then by saying that we have two interesting perspectives:

- The inevitable further development of differences in the field of education in architecture, which we should accept and even acclaim.
- And the entire discussion of the fundamental values inherent to the traditions of architectural education.

There might of course be a next move.

Repositioning of Didactic and Cultural Projects within a European Prospective

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The Proposal

The huge amount of work produced during the past Hania meetings between 2002 and 2004 now allows us to reflect in a more complete way on the transformations that are underway in Europe regarding the training of architects. The material produced at the past meeting also allows us to question what could be the possible evolution that could arise from a series of shared objectives, whilst also highlighting important diversities that have come to light during this period of diagnosis.

We will therefore address some themes that have already been discussed in the preceding sessions of Enhsa asking ourselves a series of questions at the base of some problems that have arisen. Questions that may help us more clearly improve and outline different training experiences, their potential development and agreement between countries.

It seems to us that, at the moment, we should address with a certain priority two questions in particular:

- a. *What idea of "architect" is at the base of the different didactic and cultural projects of the different European schools?*
- b. *How can we reinforce the identity and role of the architect in such a way as to respect those roots and tradition from the school of origin, yet at the same time, create an architect open to a truly European culture?*

The intention of these reflections, as is quite often outlined at the ENHSA meetings, does not presume to enforce the position of each individual school towards a common European Higher Education Area. Rather, by the creation of some *prospective orientation maps*, these considerations can help us outline a series of similarities and differences useful when considering interschool networks. Networks that must be developed with the objective of "fine tuning" each school's training programme.

Thus we will not address here, in any great deal, the principal characteristics that we believe curricula should have or regarding subject areas, or the ideal educational path.

We will however attempt to highlight, a few key profiles (or characteristics) regarding the concept of *architect*, ideas implicit in the different didactical and cultural projects that have come to the forefront at past meetings. The objective being to create a framework of references within which each school can identify itself and therefore similarities or divergence with the other European institutions.

These profiles (expressed in terms of the aptitude or ability prefigured for an architect's formation) will be compared using two particular cultural directions inherent in the behaviour of each school: Firstly, one that privileges the "auto referentiality" of a disciplinary tradition, that looks within itself and its history for values on which to base its evolution. Secondly a school that prefers an *outward projection* alimending a continual remoulding process of its contents and its disciplinary orders, even with the risk of weakening the traditional recognition of the figure of the architect.

To clarify this issue we will refer in general to the training of "architects", as known within the European community, as consisting in a single training cycle, with both the 3+2 curriculum, in line with the "Bologna Agreement" together with model 5 that tenaciously remains in many European schools.

Firstly, however, it is opportune to highlight some trends emerging within the transformation processes that are underway in the European Higher Architectural Education Area, in an attempt to better ingrain the interpretations that are proposed in these essays.

A look at the changes underway

Parallel to the debate that arose after the last Hania meetings, the scenario within the schools continued evolving and today the confrontation "post bologna" is stronger than ever, both within each school and at an EU level.

To simplify the panorama in which we have directed our considerations below, we will refer to the architect as outlined within the EU, that is, an architect as a professional. This definition thus omits two other types of architectural education, or training methods, as mentioned in the 2002 meeting: the architect as an academic professional - Bachelor+ Master of Art or Science) or the architect as a scientific researcher and designer - Bachelor + Master of Art or Science + PhD) (Doevendans, Verbeke, Petric, Hania 2002).

Considering however the various national and local situations and types, a trend seems to emerge, oriented towards that outlined within the EAAE Hania Statement of 2001. This consists in a diploma in architecture that allows access to the profession after at least five years of study and 300 ECTS.

Almost always, a group of common subjects must be respected, the minimum requirement for approval as a valid system in the European community – a sort of *core curriculum*. Along with this a sequence of coherent and progressive didactic programmes are arranged. These can be both annual or by semester and lead to the formation of a "general architect" or towards specialist figures that remain however the product of a training process compatible with EU requirements.

The discussion regarding the structure of the curriculum that should be adopted is under great scrutiny: the preference towards the *triennial sequence* - bachelor, biennial-master (a programme subdivided into two different cycles (3+2 years or 180 ECTS +120 ECTS credit points with the first level that can or can not give access to some kind of profession) follows the Anglo-Saxon model. Or, on the other hand the single cycle - a 5 year integrated unbroken programme more similar to the academic traditions of Mediterranean Europe.

Quite a few schools prefer to maintain the five year cycle or are returning to this model. This tendency is becoming ever more common, perhaps due to the increasing difficul-

ties that have arisen in the introductory phase of the Bologna model in countries such as France, Spain, Greece and Italy.

However, the strong tensions that these two alternatives provoke, even within each school (that is, the choice between either the 3+2 cycle or the 5 year single option) are not so important, particularly in the light of the tuning of the formative content required for the European community. It may also occur, as is happening at the moment in Italy, that the formative system creating an EU architect accepts both versions, even within the same school, and at present we find we are offering a great variety of degree majors with a common nucleus and yet different qualifications at the end of the final biennial cycle.

In all cases however the triennial cycle tends to model its compulsory formative contents within a united vision as expressed by the teaching staff of each school, within a model that is above all "*offer driving*". Instead the final biennial opens itself towards a multiplicity of professional profiles, with a variety of optional courses that allow great elasticity with respect to demand ("*demand driving*" model).

If, within the panorama of EU degrees we include all those intermediate formative courses organised by architectural schools, the selection on offer is incredibly rich and varied, and there is also a multiplicity of degree courses that appear as a result of the various applications of the Bologna model.

We are in fact witnessing, in many countries, a real explosion in the quantity of formative offers and this, in the most successful of cases, creates a situation that permits a more complete response to an increasingly fragmented and complex cultural and employment situation. This regards, in particular, the current job market where only the smallest and almost irrelevant number of degree getters will eventually undertake a professional role as real architect-designers (Bridge, 2002). On the contrary, in the worst scenario this proliferation of formative offers generates worrying double ups and incompatible waste, which is a real problem when considering the increasing scarcity of resources destined to research and university.

Instead of taking into greater depth these proliferating dynamics and their consequences in terms of professional occupation (acknowledging that an EU validated diploma cannot be less the 5 years in duration and 300 ECTS) perhaps we should once again ask ourselves what the real effects of the "Bologna model" have been as regards the contents of architectural teaching.

The potential of the Bologna model, and also its unmistakable risks, were discussed at length during the preceding meeting. If in fact the *flexibility and modularisation* of subjects and their calendars appear an obligatory path towards the creation of a European Higher Architectural Educational Area, the impact of these changes can also be destabilizing and hinder actual formative offerings. This has already been mentioned in the last instructor report Hania 2002-2003, by Bridge among others.

In Italy's case (most probably however these valuations can be extended to other locations) many subjects have become disjointed, proliferating an incredible quantity of formative dimensions that are quite often reductive and not integrated among themselves. Also the freedom given to the students to compose a variety of partial segments in his or her curriculum is weakening an already abnormal formative process, that of becoming an architect - a formation that has never been able to combine in a particularly convincing way the historic-artistic side with the technical - scientific side necessary for a

complete formative process.

Well aware of this difficulty, Gustavo Giovannoni, an important influence on European architectural culture in the 1920's, outlined a duplicate formative path, characterised by different combinations of the two educational traditions but with access to the same professional competences. On one hand an architect deriving from a mostly humanistic culture; from the beaux arts, yet with significant support given from scientific disciplines within the neo-instituted schools of architecture.

On the other hand an engineer (building) that was oriented, on the contrary, almost completely towards technical arts with an often summary cognition of architectural history and culture, having been formed within engineering faculties with which he shared the scientific implementation of knowledge.

These two complimentary formative methods, different paths for preparing a professional figure that must work on and in the Italian city and territory has been only recently recomposed. Said re-composition is the result of the reform of didactic schemes provoked by the "Bologna model". Regardless the different formative and professional styles of the two schools, architecture and engineering still prevail and it is not necessarily said that this is a problem.

It is a problem however, the grafting of strategies of flexibility regarding content within the study programme for an EU architect. The risk, as already mentioned, is to increase the weaknesses that emerge at the intersection of these two different inherited rationalities thus increasing a certain type of disorientation. A situation that comes from the absence of a clear formative "core" and that risks producing a professional figure without a solid disciplinary root.

ENHSA assumptions

The reflections and material resulting from ENHSA have allowed us to better understand the complexity of the questions proposed above. Starting from the "Bologna Agreement" with the objective to create new educative spaces for European architecture, ENHSA has confronted, in a systematic and transparent way, themes once left to the extemporaneity of individual work or to opaque and bureaucratic commissions instituted by the European Community with the task of evaluating the curriculum of each individual school.

Interesting, yet often little known, realities have emerged from ENHSA, for example the diffusion of the **centrality of the design project** frequent in all the European schools, independent of their type i.e. academically or professionally oriented, indeed between 40-50% of all courses are Design Studios and Project Based Learning-Modules (Doevendans et al., Hania 2002).

The above situation supports those who continue to maintain that design constitutes the heart of the education and professional formation of an architect and it is exactly this point that differentiates the profession of an architect from other sciences. It is also important to note that design and its role in the production of knowledge goes way beyond mere technical ability and banal practical skill - so often the sole activity of design studio subjects.

Comparing the results of the last meetings quite clearly a few convergences regarding the formative contents of the European architect have emerged. For example, whilst

accepting on the whole a new European Curriculum structured according to the Bachelor-Master-PhD model difficulty has arisen regarding the exact content of the triennial course (equivalent to a bachelor) that some countries such as Italy allow as a type of first initial and limited preparation for the profession.

In this situation it has been preferred, quite intelligently, to concentrate attention on higher education. These include masters and doctorates, not intended to impose prefigured model but rather to favour the construction of European networks tuned towards a set of formative profiles for EU architects and researchers offering similar and compatible courses.

The lack of possibility to offer limited answers to those existing tensions between generalisation and specialisation of curriculum, together with bias regarding professional or scientific orientation, have also come to light. The recognition of these different factors, along with those relative to the bias favouring artistic or technical practice in the formation of an architect has created an interesting reference framework on which to base the curriculum offered by different schools.

The above can be addressed using the matrix theme proposed by Orbasli and Worthington (Hania 2002 and 2003). Within this matrix two main directions have been identified: the first is an academic-generalist profile and the second a technical specialist. Along with the different curriculum combinations resulting from these profiles, a more specific focus on the implementation of programmes that start from architectural theory and design and follow through to practical work experience has also been highlighted.

This scheme, very useful when creating a complete picture of the major part of the curriculum offered in Europe to date, does not however give satisfactory attention to the role that research is playing within the formative experience, under the form of "research by design", or that similar to scientific methods. This role of research remains an unresolved problem that the Enhsa debate has not yet been able to completely address. Moreover the latest views within the European Community see it as one of the most innovative themes and of absolute priority, this together with other crucial issues such as the relationship between education and society (Deodato, Hania 2004).

Some problematic profiles

The assumptions matured within the ENHSA debate can be taken into greater depth (in our opinion) under two problematic profiles that will allow us to focus within a comparative prospective on the specific field of identification of the different European schools. The first profile alludes to the way in which we understand *capacity* that is the "competences" as foreseen in the formation of an architect. The second regards the role that research and innovation can play in the construction of didactic programmes.

Capacitating

The programmes that are offered within our schools are generally oriented towards the articulation of formative objectives by way of a progression of acquisition of ability that step by step students achieve, up until they mature and become an architect active in a professional or technical and scientific field. Usually, ability or capacity is considered acquired when a student has a certain control over those theoretical, technical or oper-

ative instruments required for the correct realisation of works that are commissioned from him/her. The objective is that of the progressive acquisition of complete individual autonomy to ensure a total technical and social fulfilment of the role that as an architect he or she will eventually carry out..

This, in our opinion, can become a problem as it extends educational responsibility beyond that of matured technical performance and moreover assumes a prospective of "capacitating" as recently used in social sciences. Effectively Schon notes well that "architectural design is not simply a matter of solving problems. It is a question, first of all, of finding what the problems actually are. Architectural students need to educate themselves to a new competence when they don't yet know what it is they need to learn". Broadbent also has a similar view "So, unlike other kind of students, they must therefore take a plunge into doing before they know what to do"

But with this current debate as a back drop, it is worth now considering the increasing perplexity as to the *quality of the didactic results* that are resulting from the "Bologna model" reform. Often students that are excessively oriented towards practical work from studio and laboratory subjects, assignment and project deadlines lose critical reflection. A type of critical ability that assumes, by its nature, a certain logic of fallibility and allows one to question the real sense of a specific intervention regardless of scale.

At the same time often design presentations leave to one side the important notions of context, summarising this into a minimum quantity of morphological and functional data. Nevertheless, we are well aware that, very often a well resolved and considered design project is the child of a thorough and thought-out critical interpretation of the overall context in which it must be situated.

It is therefore preferable for a student's formation to include, not only learning processes regarding the acquisition of technical design knowledge, but also processes that stimulate a students to develop the skill to autonomously critically evaluate their work.

In this sense the notion of "capacitating" as used in social sciences is useful. "Capacitating" expresses at the same time the tendency to develop the autonomy of a subject; that is of *capacity building* and the tendency of growth in the level of liberty and aptitude towards an auto realisation of the actor. This concept is implicit to the notion of capability as theorised by Amartya Sen. Furthermore it is a formative process with a recursive character that stimulates autonomy and the innovative ability of a subject (C.Donolo, *L'intelligenza delle istituzioni*, Feltrinelli, 1997). Above all it is this central concept that perhaps best defines the complexity and problematic formation of an architect, a figure that even more than an engineer must simultaneously address so many different technical, social and ethical responsibilities.

This way of considering "capability" nears us to those themes addressed at the 2002 meeting, in particular where this concept was identified as "an ability to frame problems and define knowledge requirements, to critically assess the validity of knowledge and its relevance to practical context..... In short, there is a shift of emphasis from knowledge acquisition to knowledge management" (Gibbons e Nowotny, quoted in Doevendans, Verbeke, Petric, Hania 2002)

Innovation

The above considerations bring us almost inevitably to the subject of research and the

role that research plays, or more specifically an *aptitude for innovation*, that has been observed often in the Enhsa debates and is increasingly a characteristic of the most advanced schools. This theme has also been outlined as an important aspect in the new European guidelines referred to in *thematic networks* (Deodato, Hania 2004).

The positive benefits of an effective convergence between research and didactics are well known and Enhsa has often occupied itself with this crucial theme. Here, we will just attempt to briefly underline the fact that it is "*not only*" didactics that benefit from this convergence, if through architecture it is brought on to measure itself with those process of real spatial mutation and with t demands from institutions and society. In reality this closeness favours an inter-institutional co evolutionary process, from which institutions external to the faculty and the enterprise system can take advantage.

As regards content, there is no doubt that the introduction of research to the formation of an architect greatly modifies the relationship between the different subject areas through the entire formation of the curriculum. This is the case above all during the last two years, when innovation becomes closely entwined with future professional perspectives.

In the light of those experiences conducted so far, a hypothesis that seems plausible could be; a triennial base (bachelor) as a moment in which students above all acquire "innovation" as it were, interpreting this through the different learning traditions as they are confronted (in particular Architectural Design, History and Theory, Construction and Urban Design).

In the successive biennial period (Master), operative experimentation of this innovation should be promoted, in such a way as to attempt to create a more integrated and relative approach to prefigured research themes.

Upon conclusion, the final cycle, that of a doctorate (PhD) where students should actively contribute to the generation of innovation, reformulating cognitive frameworks and practices in the sector whilst contextualising as a result of the learning method employed.

Horizontal maps

Reference to profiles of *capacitating and innovation* within the different formative programmes allows us to outline a series of Horizontal maps, within which each school, with respect to other national and European academic structures, should identify their specific position.

This operation of self identification is useful, only for the way in which it allows for greater exchange and convergence between different schools. So that we can accelerate the creation of shared platforms and dialogue between schools that intend to progressively harmonise their formative offers within the framework of capacitating and innovation mentioned above). Otherwise the taxonomical value of the map is only relative, as we are actually able to adopt other methods of classification just as effective and related each time to the specific interpretational key believed most opportune.

Map 1: Capacitating

This map constitutes an evolution of the Focus matrix of the Architectural Curriculum as

introduced by Orbasli and Worthington, and borrowed from the introductory essay of the 2003 meeting (Doevendans, van Bronswijk, Hania 2003). The new matrix is obtained reformulating the original categories of the *Academic Approach/Vocational Approach* and from the profile *Artistic Generalist/ Technical Specialist*, substituting these with other categories that in our opinion better reflect the "capacitating" contents of the profile curriculum from the different schools.

The new categories that we propose are: reflective/ contextual knowledge versus technical knowledge; *self referential- disciplinary approach* versus *etero referencial – Cross-disciplinary*.

	Self referential – disciplinary approach	Etero referencial – Cross-disciplinary approach
Reflective/contextual knowledge		
Technical knowledge		

With reflective/ contextual knowledge we refer explicitly to a product that is the fruit of "capacitating" as defined in the previous paragraph. This category, outlined to counter balance technical knowledge, seems less immediate than the artistic-generalist approach-technical specialist approach (well used by Orbasli – Worthington) regarding the major part of architectural schools in Europe. This category's relevance is closely related to those, not only descriptive objectives of confrontation, but also enables a critical interpretation of the formative content (within the light of a set idea of "architect").

With this vision in mind, instead of insisting on a traditional but perhaps equivocal interpretation able to forge a clear distinction between architect and artist, engineer and technical expert, it appears more useful to refer to those diversities related to the formative content of architectural schools. Such diversities emerge when reflective and careful design is privileged (by this we mean design and project as a means of giving new cultural order to things) *instead of mere technical performance (project design as a technical solution to a given problem)*. We are however well aware that the presence and/or combination of the two are fundamental factors in the successful formation of an architect.

Again too, the second group *self referential/disciplinary approach* versus *eteroreferencial/ cross -disciplinary –* are reformulated categories that were introduced by Orbasli-Worthington (academic-vocational) to outline two different methods for the comprehension of a schools formative content, or the formative content of an architect: the first a self centred approach, finds its reference points within its own disciplinary field, as a source of privileged values (*an architect that places at the centre of his or her reflection the rapport between history and theory, used as an interpretive strategy for design and work they produces*).

The second is oriented towards the exterior, looking for validation through an exchange with other ways and reasons, an approach that adopts a trans-disciplinary logic a little like that which a professional attempts to adopt (an architecture called on to give attention to forms of rationality, that it then adopts to be then enable to mediate the many

moments of a project, proposing strategies that should consent a shared evaluation of the projects general effects.)

Even in this case we must look at and beyond common thought. It cannot necessarily be said that an academic approach privileges a self-referential approach, even if this is a common opinion. On the contrary, in the last few years it has become more frequent that it is actually the university itself that offers an effective system of integration with the outside world, perhaps under the influence of policies that generate greater competitiveness within the economic and social system related to EU financing of programmes.

Map 2: aptitude for innovation

The second matrix, more specific with regard to innovation in didactic programmes, extends its field of application beyond the Focus Matrix of Orbasli-Worthington. It has been observed that *research has a strong influence on architectural education, as too does the tendency of schools to denote the meaning of research which makes this into an important aspect of the curriculum* (Doevendans, van Bronswijk, Hania 2003).

But instead of taking into consideration "research issues" and their orientation towards *humanities, social studies, and applied sciences* that even so would demonstrate an interesting cross section of the different European architectural schools, it seems more useful, in this phase to refer to that content relevant to the theme of innovation, an approach that we aim to adopt and that relates to both the form of a project's design and those strategies and *instruments of intervention*. This double polarity regarding content is relative to the *orientation* that prevails in research, towards questions mostly from within the discipline itself. Alternatively it can be applied to *processes of change* in contexts where, thanks to their specific nature, trans-disciplinary approaches are solicited.

In such a way the different forms of the project can be explored through its architecture, an architecture employed to measure itself above all with the works that it produces, privileging the role of theory and history and prevalently referring to the specific contexts mutational processes that for their very nature tend to solicit trans-disciplinary approaches.

The same reasoning can be applied to strategies of intervention, conceived depending on whether they privilege paradigms from within the discipline or rather these processes are put on trial in the light of those mutation processes regarding contemporary space.

	Orientation of the discipline	Orientation towards processes
Form of the project		
Strategies of intervention		

The resulting matrix permits us to situate a variety of different positions regarding European schools. In particular, it enables us to gather a series of rare convergences between those schools that apply research themes that may even be quite different but with a similar approach, or on the contrary, allowing us to outline the differences between schools that confront common themes but with a profoundly different method.

Final comments

To bring our considerations to a conclusion, we should return to the possible prospective orientation maps for European schools and to our two initial questions:

What idea of "architect" is at the base of the different didactic and cultural projects from different European schools?

How can we reinforce the identity and figure of the architect in such a way as to respect those roots and tradition from the school of origin yet at the same time create an architect open to a truly European culture?

We believe that the idea of "architect", implicit to the various didactic projects can be usefully rebuilt beginning with two important profiles that are prefigured during the formative process: in the first place **capacitation**, that is the ability to carry out reflective design, characterised by both critical and contextual knowledge together with technical skills - an ability to manage questions inherent to the discipline itself as with the variety of situations resulting from the continual dialogue with the many actors part of the transformation process. Secondly **attitude towards innovation**, an approach that continually examines different designs, forms and strategies of intervention and questions their significance regarding the culture of the disciplinary field in which they are born - a continual questioning with respect to the complexity of those processes related to the transformation of an area.

Within these definitions it is possible to outline an initial map of different European architectural schools, highlighting their differing abilities in cultivating specific characteristics in relation to the traditions of their countries or the particular cultural area from which they derive.

As we have affirmed quite often, we are dealing with a work prospective that intends to reinforce the cultural difference of schools, and that attempts to highlight the peculiarities and competences of the formative offer within a network of European universities. For example, we could argue, that Italian schools should quite usefully consolidate their scientific and didactic offer on studies regarding the critical conservation of architectural and landscape patrimony, the English on social planning, the German regarding technological innovation and energy saving, the Dutch on housing and new construction materials, the Spanish regarding institutional and public spaces, and so forth ...depending on the specific roots of each respective research culture.

Obviously these affirmations are of exemplified value, and do not intend in any way to *over simplify* a much more complex and articulated identification processes; the fruit of both the individual history of each school and there eradication within their social and cultural contexts, but also for their programmatic intentionality for the future. We mentioned these examples just to give an idea of the differing positions that can be found within the Higher European Educational Area, in the search for an efficacious representation of the differences that exist or are that could be foreseen for the future.

More specifically, from these reflections, it becomes useful to take in hand another orientation map: that of university interdisciplinary and thematic networks. A map made up of networks intended as instruments. Instruments for the assistance in the cohesion between European schools, and as above outlined, of the possible qualifications con-

verging from the formative and research offerings.

However, not only as a description of a state of *being* but an international projection of the schools towards communal didactic programmes, the map of the network should give attention to three fundamental aspects: *itinerancy*, considered as the most adapt instrument to promote integration, instruction, cultural exchange and the greater proneness of institutions involved at all levels, the Single theme, as a method to augment the efficiency of a research project and to make the evaluation of the acquired results more easily obtainable; an open approach to the discipline. An approach that enables us to reflect on the evolution that architectural disciplines have had *in the last few years and to discuss their subsequent implications with respect to those shared cultural traditions of the European school when compared to the American, oriental, Asiatic or Australian one.*

In Italy there are certain schools that are orienting themselves in this direction; Turin, Rome, Milan, Venice and Ferrara are among those most active in the experimentation of such assets, and that give incentive to that international cooperation aimed at a repositioning of the European perspective. Even our faculty of architecture in Pescara (a school with about 2000 students and 90 professors full time) is attempting to re calibrate its formative offer to create an EU architect with ways that tend to better root themselves in the Italian architectural culture, and in particular in their attention to the history and quality of the landscapes in the specific contexts of intervention.

Actually Pescara is very strongly involved in the construction of four European thematic networks, with differing roles;

Firstly, *ArchTen*, is a network that aims to the collaboration of ten different architectural schools (Oporto, Gratz, Lubiana, Zagabria, ...) regarding shared research hypothesis on which academic relationships and exchanges are based in relatively traditional ways.

Another two networks also regard post graduate formation. These are two international, interdisciplinary and thematic Doctorate programmes. One has Pescara as its leader and the other was founded by the Luav of Venezia, but they function in an analogue way.

They are both doctorates that organise their triennial research programmes along a single theme. International seminars are held in the different institutional locations and include the evaluation of the researches in course and other activities such as lessons, exhibition and guided excursions (as complementary instruments for the PhD students and the hosting universities). The individual researches are organised with itinerant seminars hosted in turn by each participating university and locally by a direct interaction between PhD student and tutor.

In particular the European architectural and urban studies doctorate entitled (Quality of Design) puts together the Facoltà di Architettura di Barcellona, Lisbona, Pescara (head), Venezia and the engineering faculty of Cosenza (Italy) in a programme with a central theme entitled "the quality of design" (in particular, in its first cycle *the quality of design (architectural project) of infrastructurals*).

The second doctorate programme; The international doctorate in architecture, urban studies and history, *VdH* (Villard de Honnecourt), is an institution organised by 12 different universities: Venezia luav (head), Roma 3, Camerino, Chieti-Pescara, Palermo, Napoli "Federico II", Paris Belleville, Politecnica di Madrid, Eesti Kunstiakadeemia di Tallin, TU Delft, EPFL Lausanne e Technische Universität di Stoccarda. The theme of the first triennial cycle is "European identity" in territorial, historical, architectural and social terms.

In the end *Villard*, which is the last network that (at the moment) the faculty of architecture of Pescara is directly involved in. Villard involves the formation of under graduate students, Villard is an itinerant seminar of architectural and urban design that includes students from 10 architectural schools in Italy (Venezia Iuav, Roma Tre, Camerino, Chieti-Pescara, Palermo, Napoli "Federico II", Genova, Parma, Milano Leonardo, Milano Bovisa) together with the schools of Zagabria (Croatia), Patrasso (Greece) and Beirut (Libano). Within the year students develop a design based on a concrete project theme proposed in turn by each faculty. The itinerant seminar represents an important occasion for the cultural growth of the participating students, able to confront themselves with different architectural schools. During its six years of existence more than 700 students have completed the Villard seminar and around 100 of them now have a degree in architecture, almost all with a high level of exit evaluation.

We realise however that these temporary maps and the experiences that are occurring within each school (even if they are useful in shedding light on different cultural identities) are still limited when we must clearly outline the idea of the architect that we are attempting to form; a truly *European* architect. An architect that is not only the result of differing existing cultures but is also characterised by a specific Europeanism - an added quality, in addition to that of each existing national tradition.

We like to imagine a future that is ever more European, a future in which architects have been prepared to measure themselves with a vast array of contemporary conditions.

That is, architects as interpreters of time and above all as explorers capable of revealing exciting potential. Architects that are detectives of space, to cite Jorgos Simeoforidis a great anticipator of integrations between those cultural traditions of European architectural schools prematurely passed away.

Architects that are able to use considerate reflexive design as a method with which to elaborate their transformation of existing spaces.

Architects that confide in their disciplinary knowledge but are also able to open up and expose themselves to continual confrontation with society and institutions, which decide the contexts in which the architect must operate and that have the full right to judge the outcomes and results of the architects work, within a new political framework with intrinsic evidence-based policy and practice.

Architects that are directed towards a truly European culture, before even that of a local one.

Architects able to creatively contribute to the functional, figurative, symbolic and quality of the inhabited space around them. Architects that are also sensitive enough to follow the "rights of text " so as not to impose egotistical affirmations of their individuality through design.

Architects that are in a certain way "humble", that is careful of sustainability and of the feasibility evaluation of their proposals and therefore able to support a continual confrontation with their clients by way of pertinent and agreeable discussion.

At the same time however architects that are ambitious and that feel capable to positively contribute to innovation, professionals that play a role in the choices and strategies of intervention in the cities and to the landscape in relation to which they are called to work.

Architects able to accept the growing complications of a society that is increasingly fragmented and oligarchic.

A responsible architect ethically and technically prepared to carry out his or her role rooted in its disciplinary traditions but maintaining at the same time, attention to those mutational processes of space and ways of life of the inhabitants.

And in conclusion, the profile of a truly European architect accredited as a designer that is able to cope creatively with the most sensitive contexts adding an even greater value of our landscapes already so modelled by its history.

It is to this figure of architect that we like to refer to when we imagine the future of architectural schools within the European Higher Educational Area in formation. Knowledgeable that quite luckily it is actually due to the richness and unpredictability of the processes in act that will perhaps bring on a series of new profiles, even more interesting than those that we have here evoked.

Discussion

Chaired by

Per Olaf Fjeld, Oslo, Norway

Per Olaf Fjeld, Oslo, Norway

Whether we like it or not we have a base that we have worked on for the past three years, and this session is focused on how we are going to use it. And we have been given a clear position related to that in what Ellefsen said and in what Mosè implied. The line of differences that we thought in the beginning, three years ago, and we had very much in common seems to be very clear. If we accept that, as Ellefsen stated, it is the idea of the profile, in other words identity, then what type of identity we are researching. But the identity itself, if he is right, is going to be transformed. In other words, have we the capacity to transform through the future in different ways? The relationship, then, between the identity on one hand and the profile on the other, and the transformation that will go on, is, I think, a critical issue. At the same time it was stated that the Bologna declaration was more or less passé, that we are not able to get anything more out of it, and that if we were to try to we do not know where to start. Many schools have taken a clear stand related to this. So, moving on now to the discussion: you know the base material and you have heard the new material that is going to carry this discussion forward in a fruitful way. So, please let us begin.

Peter Gabrijeljic, Ljubljana, Slovenia

I know that Bologna is over, but nevertheless I organized a meeting of the Central European schools in Ljubljana on that theme and whether to keep the five years as a single programme or to divide it into 3+2. And there are some schools in Germany and in Austria that decided to keep the five-year programme and the title of University Diploma Engineer of Architecture. Why? Because it is more like a Master of Architecture, except that with a Master of Architecture you do not know if the school offers any technical training. The title of engineer is very important in the division of labour, because in countries like Austria, Germany and Slovenia, if you are an engineer you are responsible for the full project – you are project manager, in fact. It is a question of money, of responsibility, of duties. But, in the existing system, you lose these possibilities if your title is only that of an architect.

I know that the best argument for 3+2 or 4+1 is flexibility and student mobility, but even today I think they have to change after three years on the base of the curricula. Now, because I am trying to keep the five years programme in my school, my question is whether there is any danger of my students not being allowed to change school after three years, if there is no Bachelor degree recognized?

Per Olaf Fjeld, Oslo, Norway

Would you like to respond to that Karl Otto?

Karl Otto Ellefsen, Oslo, Norway

Not directly. What I mean by saying that discussion of the Bologna declaration is finished, is that there has been a transformation in most schools as to how they manage the structure of the curriculum. I must add that in our school we deliberately do give a Bachelor's degree, but ours is in a way a 3+2 system. As I see it, that is fully possible within the Bologna declaration. So that is the way we do it, and it is one way of keeping the characteristics of our own school. I think that there are a lot of ways of adapting to the Bologna process or to the Bologna declaration. And I think that the basics of 5 or 5½ years, as we still have, or of a 3+2 system, are no longer a problem. It is not a problem or a dimension that deserves the gravity we give it. It is not a problem big enough to occupy the minds of a hundred heads of schools of architecture or a hundred deans of architectural schools for days on end. This is what I am saying. We have finished with it. It is not a problem any more, that is my view. We should not discuss it anymore. There are many ways we could discuss this, many meetings and if we go back to the school there are always things that come up, but you know this is a finished race. Nothing more to discuss.

Per Olaf Fjeld, Oslo, Norway

Mosè Ricci, would you like to make a remark?

Mosè Ricci, Pescara, Italy

Yes. I have no clear opinion about whether 3+2 is better than 5 years; for me 3+2 could work. But in Italy we had this problem of multiplication of courses with the 3+2, and these differences among the formative offers I would say do not fascinate the students, who still prefer to be in the 5-year model. They want to be sure to be able to practice as architects. And so what is happening now is that many schools are keeping both systems, or returning to the 5-year model while also keeping the 3+2, and this is generating a lot of confusion in formative offers and in students too.

Loughlin Kealy, Dublin, Ireland

I just want to say something that might try to connect the conversation this afternoon with the conversation this morning, because I think there are links that we need to look at. And just for the sake of argument, if we say that we accept the Bologna structure, then that argument is over, and I think that the question then immediately turns around to a question of competences and what that means in relation to architectural practice. To my simple mind, that means that the custodians to the gateway of architectural practice are the professional bodies. And I would like to hear what the representatives of the professional bodies have to say in relation to this, because earlier this morning we heard some of the positions being stated. The first of these was, I think, a lack of ambition on the part of the profession to get involved in education, except as a partner in some enterprise. And second was an appeal from Jim Horan for the profession to take responsibility for the education of architects at a certain point. So I just simply want to say that there are certain consequences that follow from how one formulates Bologna as applied to professional education.

Karl Otto Ellefsen, Oslo, Norway

I agree. This is a very interesting discussion, but I think it is difficult to imagine a situation where we go back to some kind of standardised scheme for developing students that can go directly into practice. Maybe some schools will do this, but not most of us. I also agree with you that in the end this means that the professional body will test our students.

Mosè Ricci, Pescara, Italy

What happens in Italy is that as soon as we entered into the 3+2 system the professional association created a sort of junior architect. This means an architect with a 3-year Bachelor's degree, who can make small projects. But nobody really understands what this means. What is a small project? I would say small in complexity. And this is another element of confusion in our situation, because in a way this recognizes the ability of a lower professional diploma to be competitive in the profession alongside the title of architect or engineer. We already had this problem with 'geometers', who in Italy can also design houses and small parts of a town, but now 'geometers' can go to architectural school and get a Bachelor's degree and compete directly with architects. This is another problem that the Bologna agreement has generated, and I hope we will find a solution; but in Italy the professional body, the college of architects, is very aggressive. It is way ahead of the university in this sense. They really want these junior architects to be able to sign projects and enter the professional world.

Dimitris Kotsakis, Thessaloniki, Greece

Over the last seven years this problem has been solved for us. By us I mean the EAAE, the ACE, the UIA. All architects and all universities have in all ways agreed on one thing, namely, that if we are talking about architecture then we cannot have studies that last less than five years. Now if you want to give a degree in between just do it; but do not let us talk about it, because this is not an architectural degree, and is therefore not our business. This is not a question that has anything to do with universities or with architecture; it is a question of politics. So, there is no 3+2 question in this room and there has not been for the past seven years. I want to make this point clear. Now, if we want to raise the question from the beginning we must have good reasons to do so. That is one point.

The second point is in response to the question of what the meaning of architecture is. In other words, is architecture the 6th art or the 9th science? I can give you a list of the 5 arts and the 8 sciences if you wish. After eight years of discussions I am in a position to say that there is no meaningful answer to this question about the meaning of architecture. Twenty years ago, in 1980, the Council of Europe listed four areas where this question could be asked. It called these areas architecture, town planning, landscape design and conservation. Twenty years later, in this room, I have counted sixteen areas, and we have discussed them all. Now the areas are multiplying, so whatever architecture used to be, now after a dust storm it is just dust.

It seems that there is no profession and there is no university education, but that is not so. The profession is there and university education is there; the question is, how do we start integrating again these millions of dust particles into viable, conceivable, meaningful, whatever you like, areas of professional practice and university education? That

is the only question before us, how we integrate them? How many examples can we give of this integration? For eight years now some of us have been trying hard to press this issue. How many examples can we cite? Two? One? Three? Certainly it is not one, because integration has to be putting things together. Certainly it is not ten. Shall we integrate all these into a big free design thing, starting from industrial design and going to urban design? That is a possibility. Shall we integrate, in a comprehensive architecture, design, structure, construction, planning and conservation? That is another viable perspective. I can think of these two, but there could be more. Why do we not start asking schools what their answers to these questions are, how they think we can relate to each other so as better to explore the answers, and how we can benefit from them? That is my problem. This discussion keeps going back again and again to issues that have been solved. There is no reason to it anymore. That is my second point.

Per Olaf Fjeld, Oslo, Norway

Yes. The meaning of architecture is a broad question. What is architecture? We all know how broad a question it is, it is not a locked discussion and it is certainly not locked vocabulary either. It is a question, then, of how we filter that vocabulary into an energy that carries us forward.

Adrian Joyce, Architects' Council of Europe (ACE)

I feel I must reply to Loughlin Kealy's intervention, on behalf of the profession. First of all, I am very surprised to hear the opinion expressed that the Bologna process is over. I think that is going too far. Certainly from the point of view of the profession it is not over by a long way. It seems to me, having read the various declarations and communiqués of the ministers, that the Bologna process is looking for three -ity's: compatibility, employability and mobility; and that the division between the Bachelor's and Master's, the 3+2 structure, is to allow two principal things to happen. One, to allow comparability between the content of courses across all university disciplines, not just architecture, so that students can then move and be mobile between different countries so that when they build on their Bachelor's with their Master's degree they have a coherent qualification at the end. And we have asked questions within the Architects' Council of Europe about this objective of the Bologna process, taking, for example, the case of a student who does three years in Ireland, say, and then completes his studies with another two years in Italy. For architecture, where we all agree that five years is the minimum duration of studies, does that mean that such a student is fully competent to practice in both Italy and Ireland at the end of the five years? Loughlin also said that the profession has no declared ambition in relation to content. I do not think that that is what I said this morning. I said we do not want to interfere or impose the view of the profession; and it may be a semantic one, but there is a difference between the two points of view. But as the legitimate player on the business side, to use the language of our Norwegian colleague this morning, we have a point of view in terms of what the output should be from a school.

Secondly, we accept the challenge of your president, James Horan, that architectural education is a life-long process and this is why we are currently putting so much effort into life-long learning. Our debates are leading us towards defining the concept of the European architect, by which we mean those persons who will practice in architecture,

who will build, who will pursue real projects. In that sense I anticipate that we will be looking more closely at the training period that you have debated in the past as well; and I suspect that we may be looking for an acceptance, as the UIA accord on professionalism sets down that a training period after university, after the five years, is essential before registration or license to practice can be granted.

So from our point of view the Bologna process is far from over, and we expressed the concern this morning around what a person with a three-year qualification is competent to do; and that is a debate that must be undertaken. And we have a second concern, namely, that within architecture there may be an inadequate linkage between the Master's cycle and the Bachelor's cycle, or the 3-year part and the 2-year part, in the Bologna process. Which qualification is it that is going to be listed in the Qualifications Directive? There is a dichotomy here: the Qualifications Directive says that a qualification must have a four year minimum duration, yet a Master's cycle is a two year programme, so can a Master's title be listed? So there is a great deal more to do and to debate about the Bologna process, and it greatly affects the content of architectural studies and how you, under the Bologna process, can develop comparability across Europe in the two cycles. Thank you.

Per Olaf Fjeld, Oslo, Norway

Well, that was a very clear view on what is left and what is not left for us to do. It seems that there are many things that are not debated here, or that never filter down from the profession to the schools; and if we are going to be part of that discussion again, that information has to come down in a very precise way.

Karl Otto Ellefsen, Oslo, Norway

Of course the Bologna declaration will be followed by other declarations. I am in no doubt about that. But I feel that what you are saying is representative of the view that we are going for a European curriculum in architecture. I know why you are saying that, and of course it is possible to mean it, but I believe that it is a very limited view of European architectural education. And I do not in the long run think it is the best solution for the profession either. I think the profession, in its relation to the educational institution, must also take into account the complexity of the issue. And I also feel that you do not know how you will be working in ten years time. You know there is a sort of openness to this that you have to open up for, and of course there is a discussion as to qualification and what we are going to do, but I what I really think is that the Bologna process as a structure for university education in the whole of Europe is terminated, and I see it as a successful project.

Inger Lise Syversen, Oslo, Norway

For a period in what I call my former life I was the political advisor to the Nordic ministers of higher education and research, and I had the pleasure and frustration of being present when the Sorbonne Declaration was designed, and afterwards I sat in the working group together with the European Union and the European Council when we sketched out what became the Bologna declaration. And we all knew that the reason for the

Bologna Declaration was that the ministers and the governments of the European countries, not only of the European Union but of the whole of Europe, wanted to create this pattern of higher education so that it could accommodate those that wanted to quit higher education after three years. They wanted to design a university structure to streamline for the labour market, which is no hidden dimension anymore.

As I see it, we, the schools of architecture, being a part of the making of professions, as we could call them, escaped the 3+2 system, even though we have it in our education system – three years of basic education and then an added two more years – but we managed to escape the Bachelor's degree and go straight to the five years and the Masters. And while I cannot agree that the Bologna process is over, those of you who think that they have fulfilled all the expectations of the Bologna Declaration can go straight into the next Lisbon convention where the recognition of qualifications is the next political headline. And then, Karl Otto Ellefsen and Mosè Ricci, I wondered, do the papers that you read give some proposals for the way forward within architectural education in this area now?

Mosè Ricci, Pescara, Italy

I think there is a problem with the idea of a core programme in Europe. This is probably the next step that the European schools of architecture have to deal with, I mean, deciding what the core elements of a programme are that every school must develop to design a formative path. But it can be evaluated in each country in Europe. And I think that this core could be the role of the design studios in the single programme. I think that the core must take into consideration the context of studies. I do not know how to translate it in technical or practical terms and how to refer the designs to you to different contexts in different situations, but we should also probably improve the network organization of schools as a growth strategy for schools of architecture. We should make resources available and fund the whole programme of thematic networks among the schools of architecture in Europe, all those organizations that allow students to go around in different countries to have different formative experiences in the different schools. One example of such a network that I know of is one of twenty-five PhD students from six European countries, who are funded by the European Community. It is a doctoral level thematic course on European identity, and each student works on his particular view of European identity, and we meet three times a year in a different school to review the students' work, to listen to lectures and then to visit the city. And I think this exchange is really part of the formation of a European culture of an architect.

Halldor Gislason, Oslo, Norway

I was wondering about these challenges you are talking about and I agree very strongly with Karl Otto that architectural education is changing greatly, and I think actually that the schools of architecture will change more in the next ten years than they have in the past ten years. And one of the things that the Bologna declaration has done is to implement the ECTS point system that actually supports 'shopping-bag' education, and I think that that is actually a much more fundamental issue for us to address. Now, basically most schools are worried about funding. I think there are two ways in which schools seem to be going: one is to develop a strong faculty, i.e. increasing research, because there is

possibly more money there and because the governments want to cut down their education budgets and the schools have to try to generate funds from somewhere else. My opinion is that this is creating a big problem, because we are trying to imitate the scientific way of education. This was discussed here two or three years ago; and there is actually a major epistemological problem in the scientific conferences on design that I have been to recently, because the papers are so incredibly silly and boring. And I think that this is not something that we should be imitating.

Now, the other way is the 'shopping bag' system, i.e. networking schools, which may lead to a kind of outsourcing. So I am wondering whether, with all this exchanging, which I totally support, it will in the end be easier for us to do, say, 1/3 of our education in China, in the same way that we produce clothes and stuff, and we will then need a Mandelson to stop it coming in to Europe. We have to look at our local positions, and that is really the fundamental part of the Hania declaration, that schools should be allowed to stay local, and that is where I see the other challenge. If we are going to the 'shopping bag' system like the business universities, that I think is when we really degrade education. So I am seeing these as poles, and I am saying these are the challenges that we are going to be facing.

Karl Otto Ellefsen, Oslo, Norway

No, I think it is important to introduce the questions that you introduce, related to the possibility of sort of shopping for courses. I know that it has happened in many countries and, like you I know it from the signs. Probably we both feel that we have some kind of knowledge of what is happening in the field of design and we feel that the same thing will happen in architecture.

Herman Neuckermans, Leuven, Belgium

I would like to respond to something that has been said in the discussion, or rather two things. First, is the fact that in Italy you have junior architects after three years who are competent for small things. Intellectually I cannot get into that argument. Big things are composed of a number of small things, and I cannot see any difference in the architecture of the small and the architecture of the big. Maybe professional experience, but that is another story. So I think that it is a really, really wrong position. Maybe Italy objects to our position, and maybe in all the texts that were mentioned by Dimitri we should not say five years but fix a number of credits, but that is a subsidiary question.

The other thing I wanted to comment on is the fear of the unique curriculum in Europe. I do not know if you read the newsheet, but Mac Popescu, who unfortunately could not be here, is organizing a workshop-conference in Bucharest at the end of October on diversity. In looking at that subject and thinking that maybe I could contribute, I went to the text – I do not know how many people have actually read the text – of the Bologna declaration, which reads: "The adoption of the system of easy, readable and comparable degrees of our institution competences, and taking full respect of the diversity of cultures, languages, national education systems and university autonomy, to consolidate the European Area of Higher Education."

Maybe I am naïve, but as it is stated there is no intention, in the declaration at least, to put the same sauce over everybody. Then there is the meaning of the 3+2 system, and

whether you go for the 3-years or not, and we, as heads of schools, must decide what our position is. Nevertheless after three years there are rumours that there is something in the air that sounds like accreditation. If European accreditation comes it will probably come first for the Bachelor's degree and we know that it will first be organized nationally and then co-ordinated centrally, but it will not happen by some central authority coming to your schools and saying that you have to do this or your school is not good.

Karl Otto Ellefsen, Oslo, Norway

What else could they say, in the Bologna declaration? They had to say that. But I do not think that in this audience or in the EAAE the notion of a single European curriculum has very much support. But this might be something to discuss in the years to come and it will probably come from the professional organization, related to an international building market. For now, I would just like to say that this is not a big threat. We are going for diversity and things will be extremely different, and the schools will be extremely different, and there will be a wide range of new schools coming from quite different positions. That is my point. I am not really very worried about a European curriculum.

Loughlin Kealy, Dublin, Ireland

Just a quick follow-up comment. To some extent it follows immediately after the last contribution from the top table. I am inclined to agree. I have no fear whatever of a loss of diversity, at least not in my lifetime, I suspect, and I have every intention of living as long as I can. However, I think there is another issue, and obviously there are complexities involved in these things, there are complexities of funding that people face, etc., and professions are different, there are different dynamics in different countries, we know that already. I would simply say that the implication for all of this is very clear and that it puts a huge responsibility back on to schools of architecture to be very clear about what their mission is. So actually you should take a position that will describe it as clearly and as transparently as possible and get on with your business. And I think that sometimes it is possible for us to stand back and look at the uncertainty and the apparent chaos and not take a position for fear of making the wrong choice. And I just say that I think that you have to take your courage in your hands and that you should try to be as clear as you can about what it is you are trying to do. That is all I wanted to say, no big statements about it.

Adalberto Del Bo, Milan, Italy

First, I greatly appreciate that a representative from ACE is here with us today. That is very important. I think this is a great improvement for the schools, for the architects and for everybody who has interest in architecture.

Second, I am very glad to hear this story of how many years are needed to become an architect. Five years is good and if everyone has decided to do it this way, that is because we know it is right. Somebody today spoke about the fact that the faculties of the Fachhochschule had four years and I remember that here last year someone spoke of seven semesters to become an architect in Fachhochschule, so 3½ years could be right. If we choose five years as the period of time needed for academic studies, the period in which

we can teach our students architecture from Knossos to the present, it is very important that the other period should be a period of practice as you said. It would be good if Europe also decided how long the practical training period should be, because this is important too. At the moment it differs widely from country to country. So this could be an interesting and concrete contribution and it could open a great discussion between academic studies and the architecture profession.

The other thing I would like to say is that Italy was the first to apply the Bologna process, five years ago; and at point 11, if you have the text before you can see there is a phrase that speaks about access to the labour market for the students finishing their third year. Bologna said that it is necessary to find a place in the labour market for these people and for old architects too, if we decide to introduce the 3+2 system. Italy was also the first to introduce this point, this law that says what the architect can do. This point is contradictory and ends up saying nothing at all. Since 2001 many of us have tried to understand exactly what it means, which is very difficult because it says in the same breath that you can do something and that you cannot do anything.

Otherwise the architecture labour market needs to have an intermediate figure. And I think that another important task at this moment is to work on these problems, because this figure must be a European figure. So we must build an intermediate figure, a collaborator on the project, so that these people can go to work like everyone else in all Europe.

Christian Huetz, Regensburg, Germany

I must just correct something that you said. I am a representative of a German Fachhochschule, and what you said about the 3½ years is inaccurate. I do not know where you got it from, but we know that the system is 3+2, we know that an architect should study for five years and we know that someone who has completed only three years of study will not become an architect. I do not know where you got that from.

Per Olaf Fjeld, Oslo, Norway

I do not think that there is anyone else in the audience who would like to speak, so we will hear the final remarks from the panel. I will start with Karl Otto.

Karl Otto Ellefsen, Oslo, Norway

I do not think there is anything else I would like to say. I have spoken quite a lot during the discussion and I do not have any final remarks really. I would just repeat the point that we will be even more different in ten years time.

Mosè Ricci, Pescara, Italy

My last point is just to specify that I am not a supporter of the return to the 5-year programme and I agree with what you said before totally, but I was just representing the situation that exists in Italy. We were probably the first country to assume this method, and the processes are like that. There are some big problems with the professional associations, and also another problem that I would like to mention here, and that I think we

should debate, is that students take much longer to complete 3+2 than 5 years. To be graduated at the third year is very difficult for our students in more or less all Italian schools. We graduate a very small percentage of students at the third year, under 10% or something, and then 50% are graduated at the fourth year, and the rest after the fourth or fifth and so on. And this is worse than the previous situation. So these are problems of the system and they can probably be handled in a European context, learning from each other's experience.

Per Olaf Fjeld, Oslo, Norway

Thank you all for your participation. It was almost a political discussion and we almost got to problem-solving in the end. We will certainly come back to it. Thank you.