



Socrates

enh^{sa} european network
of heads of schools of architecture



EUROPEAN ASSOCIATION FOR ARCHITECTURAL EDUCATION

8th meeting of heads of
European schools of architecture

EAEE Transactions on architectural education no 27

presentPositions (in)forming futureChallenges:

editors Constantin Spiridonidis
Maria Voyatzaki

synthesis of and directions towards
the European Higher Architectural
Education Area

Present Positions (in)forming Future Challenges

Synthesis of and Directions

towards the European Higher Architectural Education Area

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was under the auspices of the School of Architecture, Aristotle University of Thessaloniki



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**Present Positions (in)forming Future Challenges
Synthesis of and Directions towards the European Higher Architectural Education Area
Transactions on Architectural Education No 27**

Editors

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Dr. Maria Voyatzaki

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Despite the attempt to transcribe with accuracy the debates from the workshop, the editors wish to apologise in advance for any inaccuracies of the interventions of individuals that could be attributed to the quality of recording.

List of contents

Acknowledgements	ix
Preface	x

Chapter 1

Keynote addresses

Keynote address by Professor Marcos Novak	N-1
Keynote address by Professor Tassos Kotsiopoulos	K-1
Keynote address by Professor Juhani Pallasmaa	P-1

Chapter 2

Emerging Challenges for the European Network of Heads of Schools of Architecture

Maryline Fiaschi

Present Achievements and Future Challenges of Socrates Thematic Networks	3
--------------------------------------------------------------------------------	---

Herman Neuckermans

EAAE 30 years/ AEEA 30 ans. - Facts and Figures	7
-------------------------------------------------------	---

Constantin Spiridonidis, Maria Voyatzaki

The ENHSA Thematic Network and its events during the academic year 2004-2005	14
------------------------------------------------------------------------------------	----

Jean-François Mabardi

Report on Workshop on Architectural and Urban Design Education	17
----------------------------------------------------------------------	----

Pia Bille, Uffe Lentz, Brett Patching, Jane Willumsgaard

Report on ENHSA Student Workshop at Hania Crete, Greece	19
---------------------------------------------------------------	----

Chapter 3

Emerging Challenges for the Profiles of an Architect

Introduction	23
--------------------	----

James Horan

Chairman's Introduction	25
-------------------------------	----

Jean-Paul Scalabre

Emerging Challenges for the Profiles of an Architect	26
------------------------------------------------------------	----

Discussion

Coordination by James Horan	34
------------------------------------------	----

Chapter 4

Emerging Challenges for the Content of Architectural Studies

Introduction	45
Karl Otto Ellefsen	
A Critical Reading of the ENHSA Thematic Network Debates on the Content of Architectural Studies	47
Alberto Clementi, Mosè Ricci	
Repositioning of Didactic and Cultural Projects within a European Prospective	52
Discussion	
Coordination by Per Olaf Fjeld	65

Chapter 5

Emerging Challenges for the System of Architectural Studies

Introduction	75
Christopher Cross	
Emerging Challenges for the System of Architectural Studies	77
David Porter	
Some Uncomfortable Things Concerning Attractiveness and Competitiveness	84
Discussion	
Coordinated by Loughlin Kealy	91

Chapter 6

Emerging Challenges for the Research and Innovation in Architecture

Introduction	107
Chris Younès	
Paradoxes des Challenges de la Formation en Architecture	109
Discussion	
Coordinated by Constantin Spiridonidis	115
Myriam Olivier	
Les Grands Ateliers: un espace original et unique de formation et de recherche pour la construction	121

Chapter 7

Emerging Challenges for Collective Actions in Architectural Education

Introduction 131

Closing Debate

Coordinated by **Constantin Spiridonidis, James Horan, Per Olaf Fjeld**..... 133

To the memory of Professor Fernando Távora..... 148

Appendix

James Horan

The EAAE President's Farewell Address 151

Per Olaf Fjeld

The EAAE President's Inaugural Address 155

Adrian Joyce

Access to the Practice of the Profession 159

Directive 2005/36/EC of the European Parliament
and of the Council of 7 September 2005
on the recognition of professional qualifications 165

Communiqué of the Conference of European Ministers
Responsible for Higher Education, Bergen 169

List of Participants 175

Acknowledgements

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We would also like to express our sincere thanks to the President of the Centre for Mediterranean Architecture Aris Papadoyanakis, Vice-Mayor of Hania and its Art Director Dimitris Antonakakis, who have kept our moral high with their understanding and warmth throughout the event.

In the organization of the programme of the event, Lawrence Johnston, Loughlin Kealy, Johan Verbeke, Juhani Katainen, Joaquim Braizinha, Mac Popescu, Kees Doevendans, Roger Liberloo, Stefano Musso and Gunnar Parelus were resourceful and inspirational partners. For that, we are deeply thankful.

Sincere thanks also go to the EAAE Secretary, Lu Scholl and to the ENHSA Secretary Laura Koniordou for all their help on the preparation for the event.

We would like to thank the invited keynote lecturers and readers who prepared and presented intriguing interventions, pertinent to the themes of the Meeting.

The organization of this event would be a much more difficult task without the moral and financial support of our School of Architecture, Aristotle University of Thessaloniki and its ex Head, Zoi Karamanou, and its new Head Nikos Kalogirou, whom we deeply thank.

Special thanks go to Miss Laura Koniordou and to Mrs Janet Koniordou for their hard work in transcribing and transforming the spoken content into formal and comprehensive text.

Special thanks also go to the architect Manos Zaroukas for his work on the design of the cover of the volume and to graphic designer Dimitris Apostolidis for the page layout of the volume.

Last but not least, we thank all the participants of this event not only for their faith in our efforts but also for their lively presence, constructive comments, participation in fruitful debates, and determination without which the materialization of our effort would be impossible.

Constantin Spiridonidis

Maria Voyatzaki

Preface

Present Positions (in)forming Future Challenges: Synthesis of and Directions towards the European Higher Architectural Education Area

Constantin SPIRIDONIDIS
Thessaloniki, Greece, ENHSA Project Coordinator

How is my school positioned in the changing educational environment in Europe? Where will it stand in the new political environment dominated by the demand for quality, excellence, mobility, innovation and research? How can my school become better and more competitive in the new European Higher Architectural Education Area? Do the learning outcomes and competences of the graduates of my school correspond to the contemporary understanding of the profile of the architect in the European labor market? What do the other schools do? Which strategies do they adopt? Which priorities do they set for their future? Which initiatives do they undertake in order to assure a healthy survival in the growing competition, the increasing globalization, the rising centralization and the reduced funds for education?

This is the framework of the topics for the Eight Meeting of Heads of Schools of Architecture in Europe. For seven consecutive years the Heads of Schools in Hania have generated a broader milieu for the support of Schools of Architecture by offering a valuable and credible 'observatory' that surveyed the tendencies and dynamics of architectural education in Europe. At all previous Meetings we attempted to record the convergence and divergence that exist among schools in relation to the general principles, values and priorities in the education of the architect; to map the strategies adopted by schools of architecture for the organization of architectural studies with the perspective to shape the contemporary European profile of architectural education; to scrutinize the structure of architectural curricula in Europe and to circumscribe the competences and the learning outcomes of their graduates; to observe the differences in the evaluation and assessment methods adopted by the schools; to inspect the contemporary profile of the architect and to examine how the education offered by the schools will be able to create it.

This extensive amassment of information and data urges for a creative synthesis so that we will be in a position to discover where our schools are placed in relation to the new European Higher Architectural Education Area. We need this synthesis to see where we are, where we are going, what we have to do and what we need to do for our future in the competitive environment of architectural education in Europe. This time it is imperative to arrive, each one of us, at coherent conclusions, which will significantly support the decision making of the Head's of Schools of Architecture.

The Meeting attempts this synthesis by concentrating upon the following four major axes: sessions of debate and dialogue. The profile(s) of the Architect, the Content of Studies in Architecture, the System of Studies in Architecture and finally the research and innova-

tion in Architectural Education. Eminent Professors and personalities involved in architectural education were invited to present in each Session their syntheses based on their reading of the past three years published (see www.enhsa.net) proceedings.

The First Chapter of this volume includes the keynote lectures delivered by the honorary guests of the Eighth Meeting of Heads, Professors Marcos Novak, Tassos Kotsiopoulos and Juhani Pallasmaa.

In the Second Chapter we try to make a short presentation of the events organised by our Thematic Network during the academic year 2004-2005.

The Third Chapter attempts a synthesis of all past discussions on the contemporary profile(s) of the architect, their spread in the European area, the new conditions of professional practice and the labor market, the epistemological, legal and institutional background from which those profiles are emerging, the forms of collaboration schools have to redefine with the professional bodies, in local national and international level (for example the Architects' Council of Europe). This synthesis will try to reveal the tendencies and the dynamics related to the recent developments in the profession of the architect, the particularities that characterize each region in Europe, and to discuss possible initiatives for the future in order to protect and preserve principles and values that the academic and the professional world would attribute to the profile of the European architect.

The Fourth 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 (for example 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.

In the Fifth Chapter the system of studies will be the focal point. In the last year many aspects of the advantages and disadvantages of the different systems applied in architectural studies in Europe have been expressed. Political, epistemological, philosophical and scientific arguments have been presented revealing polyphony of ideas, concepts and references. With the imperative demand to go ahead, we now need a clearer picture of the different approaches and their background. We need a better understanding of the others in order to better understand ourselves, our preferences, our fundamental educational strategies which will structure the contents of architectural studies and will ensure the expected profiles of the European Architect.

Research and innovation are two of the keywords of the contemporary debate on architectural education. We tried to record the research engagement of our schools and we are presently trying to map the innovation around Europe. It is high time to anticipate a more coherent research strategy for our schools. The improvement of our research record can be achieved only after a coherent strategy, grounded upon a set of competences for the profile of the contemporary researcher in architecture. How can we assure those competences? Through which structures of the system and of content of studies? How the collaboration between us can improve our research activities. Which kind of initiatives our Network should take in order to support the architectural research production in Europe? These are the questions which the Sixth Chapter deals with.

In the Seventh Chapter is a synthesis of the discussions and suggestions made during the previous days with the ambition to be drawn useful and constructive conclusions, as well as to generate a framework of agreements on the various themes and on collective ways forward.

This volume will reach the majority of the European Schools of Architecture. We hope that it will contribute to the clarification of the minor and the major questions that Schools of Architecture are dealing with in the perspective of the creation of the European Higher Architectural Area.

Chapter 1

Keynote Addresses

Prof. Tassos Kotsiopoulos

School of Architecture, Aristotle University of Thessaloniki, Greece

Presentation of the Honorary Guest by Constantin Spiridonidis

I would like to present the second keynote speaker of this meeting, Professor Tassos Kotsiopoulos. I have to confess that I am very proud and happy to have the opportunity to present our colleague from the Aristotle University of Thessaloniki, School of Architecture. It is very difficult to introduce a colleague whom you have known for many years, so I would just like to touch on some points of his life so that you will have some idea of his profile.

Why we consider that it is very interesting to have Prof. Kotsiopoulos make presentation today in this framework of discussion is that he has a very interesting and very rich articulation of two profiles which normally are completely separate: the profile of an academic and the profile of an architect – an architect practitioner who has a lot of architectural work behind him.

Tassos Kotsiopoulos graduated from Aristotle University of Thessaloniki, School of Architecture, and was awarded a PhD in participatory architecture. This was his first step towards the academia. After a few years he continued with post-doctoral studies in Edinburgh, and he got another PhD on university campus design. He returned to our school and he got tenure based on his thesis on theories of architecture. For three successive mandates, he was the Head of the School of Architecture of the Aristotle University of Thessaloniki.

Tassos Kotsiopoulos is one of the most eminent architects in Greece. He has designed an enormous number of buildings. He was awarded the first prize by the Hellenic Institute of Architects for the year 2002, he was awarded the first prize in the international competition of Mediterranean Architecture, his work was presented in international exhibitions for Contemporary Hellenic Architecture in Frankfurt, and his works appear in the Architectural World Atlas, which as you know has the 1000 most outstanding buildings in the world. He was responsible for the master plans of the following university campuses in Greece: the university campus of the University of Thessaloniki, the University of Epirus, the University of Thessaly, the University of Thrace, and the Technical University of Crete, part of which is here in Hania. In all of these master plans, a number of buildings were created by his design team, including some at the Technical University of Crete.

We strongly believe that this combination of academic integrity and high quality architectural activity is something that is very special, and this is why I am really very happy to present Tassos Kotsiopoulos to the participants of the 8th Meeting of Heads. Thank you very much, Tassos, for accepting our invitation.

From the Beginning to the Beginning

A selection of buildings and projects from the '70s to the present

Professor Tassos KOTSIPOULOS
School of Architecture, Aristotle University of Thessaloniki, Greece

Introduction

Everyone, who practises and/or teaches architecture, has an experience concerning his influence by the dominant systems of architectural thought in the last 35 years.

My experience starts from two small vacation houses of the '70s, dealing mainly with items, which remain crucial until today, such as the sculptural identity of external boundaries or the geometrical shape of the building.

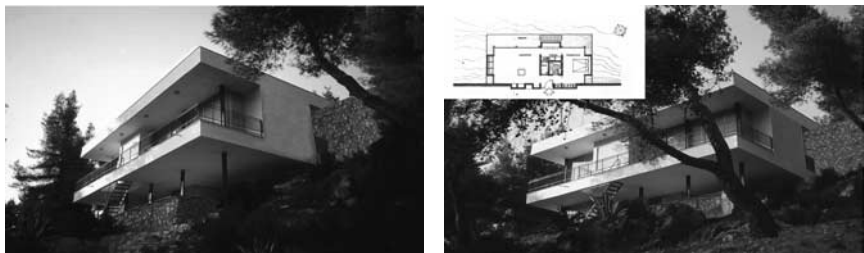
It goes through the period of rejections of the '80s, still keeping in touch with the fundamental problems of geometry and spatial organization. Emphasis should be applied to the period of the '90s, which, for the office, has been characterized by the design of large buildings in Greece and especially those included in the master plan of the Aristotle University. Those projects dealt predominantly with reshaping urban boundaries and designing a series of underground structures, which caused unexpected reverses to the idea of a boundary.

Finally, it leads nowadays to the architecture of filters and simplicity, in an era that promises a fascinating future for building industry. I understand that this future is to be based on arguments which advocate the bio-climatic performance of a building, arguments that – fortunately enough – some times are close to reality, although in some cases simply denote mainly a tendency to oversimplify the geometry of a building and to deal with architecture predominantly as sculpture.

1. Modernity

1.1. House 1 in Chalkidiki

A. Kotsiopoulos, 60m², construction -1972



1.2. House 2 in Chalkidiki

A. Kotsiopoulos, 140m², construction -1972

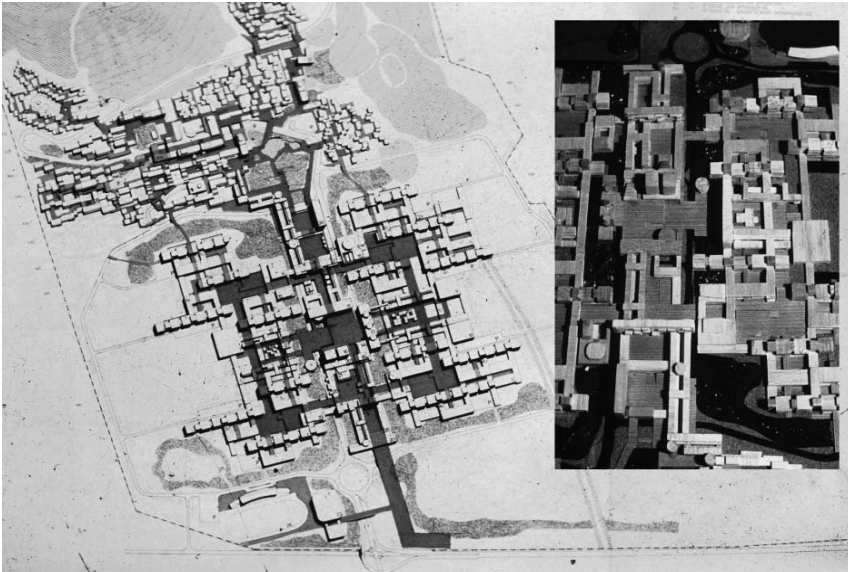


These two small vacation houses follow the idea of a very simple and more or less symmetrical plan and of a compact white volume on steel columns, with a particular interest in the sculptural pattern of the voids - balconies and openings. They are different as regards their relation with the site - very intense slope in the one case and flat in the other - resulting in two different versions of the same principle

1.3. University of Ioannina, Greece

Master plan of the university campus at Dourouti

I. Triantafillidis, A. Kotsiopoulos, K. Antoniou, F. Kaissef, P. Mimidis, A. Samouilidou, E. Tsoulouvis, 1975.



This master plan was completed in 1976, and dealt with the academic planning, the schedule of accommodation and the spatial organization of a new University of 13,000 students and staff in the suburbs of Ioannina, the capital of Epirus, in Greece.

The master plan was the result of a thorough investigation of the examples of new campus design in the '60s and '70s. The idea was the typical of a new town of more than

500.000 sq. m., on a site larger than the city of Ioannina itself (350 Ha), including a linear central area, a 3-axis development of the academic buildings, a network of linear supplementary uses, such as main lecture theatres and student studios, and a student village for 3.000 inhabitants.

The project aimed at (a) importing urban functions and population inside the campus, (b) emphasizing the central zone, (c) overlapping different functions even inside the areas of academic facilities, (d) creating intermediate spaces to facilitate relations between user groups, and (e) using an open system of development to allow future growth.

2. Post

2.1. House 1 in Thessaloniki Old Town

D. Daki, A. Kotsiopoulos, D. Nikolaou, E. Spartsis, 260 m², construction -1986



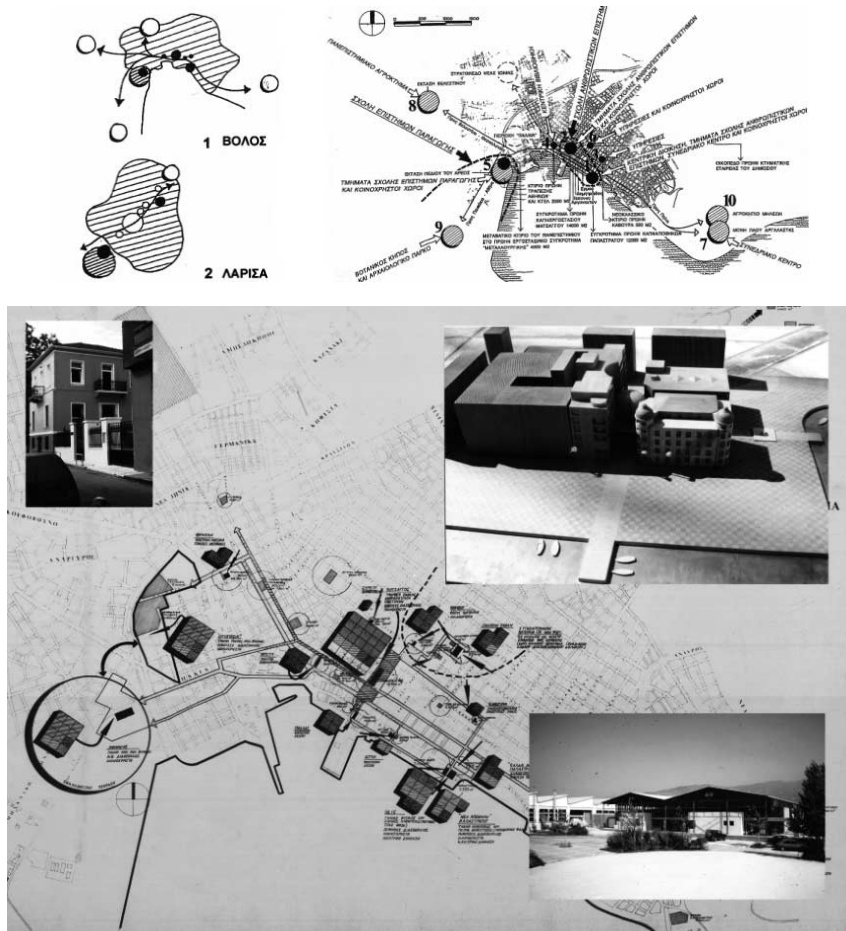
This four storen building for the permanent residence of a typical Greek family follows only partly the very strict regulation for new buildings in the Thessaloniki Old Town area.

The attempt was to reproduce not the superficial characteristics of Ano Poli traditional buildings but some of their structural principles, such as their scale and, in the specific case, the rather rare double cantilever – the so called 'shahnishi' – which is found in a nearby building of the 19th century on the same street.

The idea of a column as a central organizing element has caused a difficult discussion with the city authorities, before getting the permission to build the house. The drawing mode, using colours and shadows, typical of the '80s, has to be also noticed.

2.2. University of Thessaly, Greece, *General master plan of Volos and Larissa networks*

A. Kotsiopoulos in collaboration with the Academic Board of the University, President P. Lazaridis, 1985



As opposed to the case of Ioannina, that is the typical new-town pattern, the master plan of the new University of Thessaly promoted the idea of urban renewal and rehabilitation of existing tobacco warehouses and other large industrial buildings of the period of 1920 till 1950 in Volos. The purpose was to create urban areas, in which university functions, population, and architectural 'gestures' against the old buildings, become dominant and characterize distinctive parts of the urban tissue. The university network contained also small campuses in the perimeter of the city intended to house Schools with heavy laboratories.

The desired goal aiming at a clear influence zone for each large pole of a university urban network, remained mostly a dream in a more or less unexpected development of the Volos urban tissue.

The three initial poles of the University network, which have been organized during the first ten years of the university function, are:

- a. the Kavouras neoclassical residence settling the first administration of the University
- b. the Papastratos tobacco warehouse complex, a well known trademark of the city

of Voles on a dominant place of the sea-side quay, with a very interesting transformation project by M. Chryssomallidis, L. Spania, P. Tzonos, G. Heupel, X. Heupel et al.

- c. the Paparrigas machine factory and warehouse which will presented soon afterwards

2.3. Transitional building of the University of Thessaly - rehabilitation of the warehouse of the Paparrigas machine factory at Volos

K. Adamakis, E. Galli, D. Nikolaou, D. Philippitzis, consultant A. Kotsiopoulos, 4.000 m², construction - 1988

Selected by the Hellenic Institute of Architecture and the Deutsches Architektur Museum among the 130 most important buildings of the 20th century in Greece and included in the respective exhibition and Catalogue

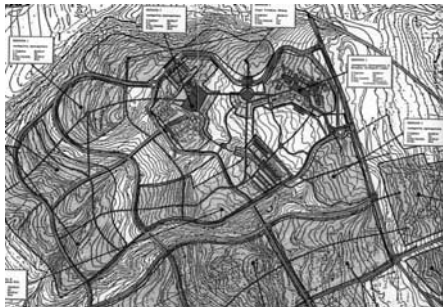


Although it has been characterized by some critics as a typical post-modernist approach, the transformation of that void warehouse to a university building was much more a matter of spatial organization – that is the creation of a new building into the old – rather than a matter of façades' decoration.

The building is currently housing the new School of Architecture of the University of Thessaly.

2.4. Technical University of Crete, Chania, Greece Master plan of the Akrotiri University Campus

A. Kotsiopoulos, A. Lagopoulos, P. Tzonos, M. Papanikolaou, I. Sakellaridou, G. Synefakis, M. Vagionaki, S. Economakis, M. Tzimopoulou, 1991



The Technical University of Crete started its development from the historical centre of the city of Chania and moved later to a 300 Ha campus at Akrotiti 10 km from the city.

As opposed to both the case of Ioannina - the typical new-town pattern - and that of the new University of Thessaly - the idea of urban renewal and rehabilitation of existing buildings -, the master plan of the Technical University of Crete at the Akrotiri campus was based on the idea of autonomous 'islands', like villages (such as the first kernel of the campus designed by the S. and D. Antonakakis 'Studio 66' office) or cloisters (such as the first building of the School of Mineral Resources on the other side of the site). The so-called 'islands' are planned to enable the fast development of an urban atmosphere in each 'island' and, most of all, and to allow their designers to follow architectural patterns and time-schedules not necessarily related to each other.

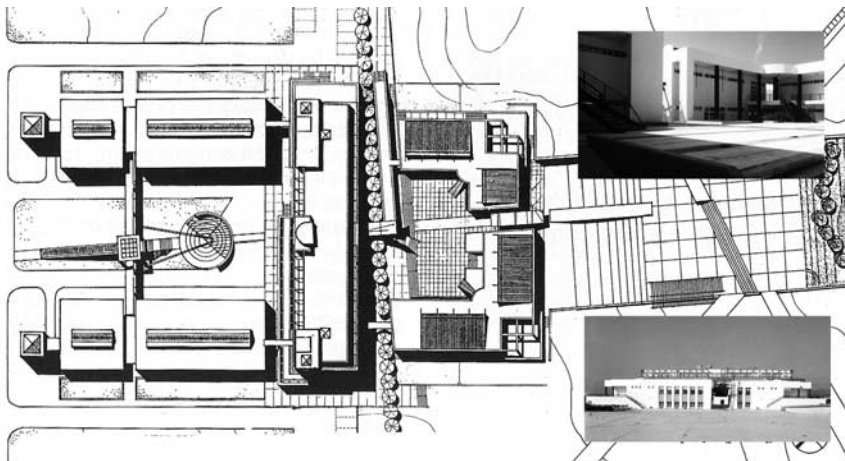
Following the above Master Plan, the first two academic "islands" have been already developed combined with the first housing complex and other supplementary buildings across the main pedestrian axes of the campus.

The experiment proved to be flexible in terms of a peaceful coexistence among different architectural principles and realistic in terms of time schedule, featuring a third acceptable type of campus design beyond the autonomous city and the urban network.

2.5. School of Mineral Resources building complex at the Technical University of Crete, Chania, Greece

A. Kotsiopoulos, N. Arvanitopoulou, D. Daki, G. Horozoglou, V. Karalazos, E. Spartsis, in collaboration with H. Bougadellis and Associates in the construction drawings (phase I), and A. Bobou-Arachovitou, G. Arachovitis, E. Paikou (phase ii)

12.000 m², construction -1996

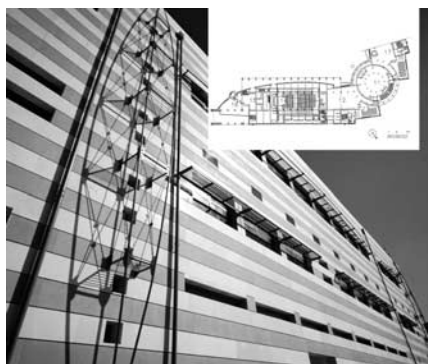
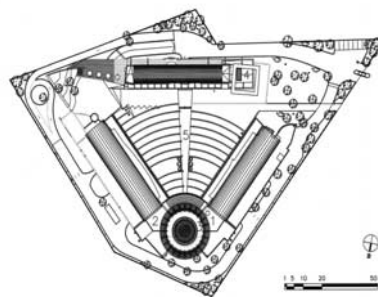


The School of Mineral Resources building complex is a structural part of the whole idea of the autonomous 'islands' in the Akrotiri campus. It follows the type of a cloister with successive courtyards, different in spatial character - depending on their predominant function - as well as in architectural idioms. In fact the second phase of the building was dealt with rather as a project concerned with the extension of an existing building, than

a second phase of a whole. The arcades and the central brick building played a crucial role in connecting the two parts and in signifying the differences in the character of the three yards: the first of the laboratories the second of the lecture rooms and the third the basic meeting place of the island as a whole.

2.6. Building complex for the Biomedical Research Foundation of the Academy of Athens

A. Kotsiopoulos with (a) N. Arvanitopoulou, D. Daki, G. Horozoglou, V. Karalazos, E. Spartsi, (b) M. Papanikolaou, I. Sakellariidou, (c) Ph. Lambrinos, A. Economidou, (d) E. Zoumboulidou, A. Panou, consultants D. Demiri, S. Hatzikokkoli
26.000 m², construction -2002



The Foundation is comprised of Research Centers (Basic Research, Experimental Surgery, Clinical Research, Cancer and Autoimmune Diseases, Transplantation, Preventive Medicine, and Environmental Health) and other facilities (animal house, auditorium, library, administration, recreation, garage, etc.) with a total built area of 26,000 sq.m.

This large complex follows – as in the case of the Akrotiri campus building - the type of a cloister with strong external barriers and an internal triangle court with arcades. The exterior wall of the complex is characterized by its sandstone surface and the small openings, as opposed to the interior, which is marked by the large arcades of white marble. There is a series of architectural manipulations in that complex, concerned mainly with the particular identity of each main part of the building complex, that is the library, the entrance and administration tower, and the three research wings as well as with the variety of the materials used, which make it the most expressionistic of all the buildings presented here.

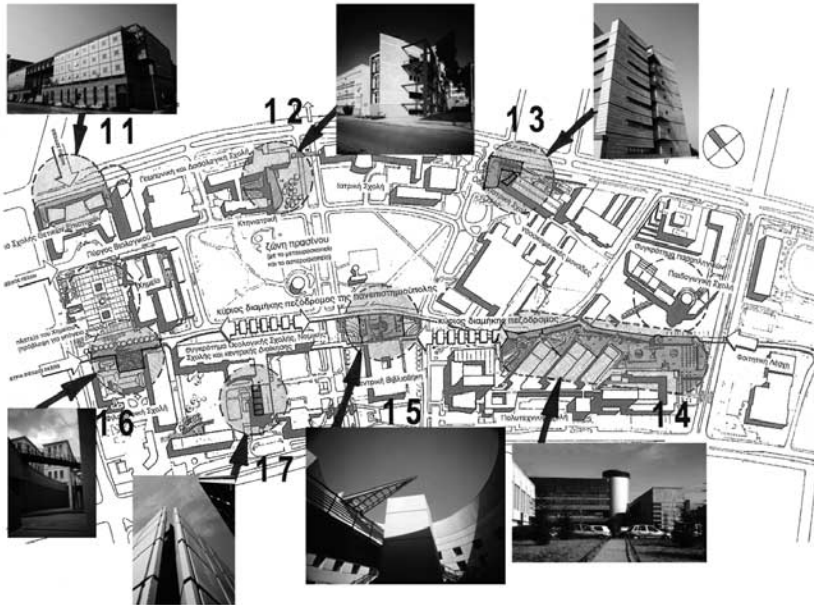
3. Urban boundaries and underground

3.1. Aristotle University of Thessaloniki

New master plan of the main campus

A. Kotsiopoulos, G. Kontaxakis, P. Panagiotopoulos, 1990

in collaboration with a group of architects and planners, coordinated by the University authorities



The Aristotle University of Thessaloniki was founded in 1926 and is currently the largest Greek University with a population of more than 70,000 students and staff.

The main target of the new Master Plan was to fulfil a series of urgent requirements and, at the same time, to enrich the urban character of the campus. The two basic 'gestures' of this plan were:

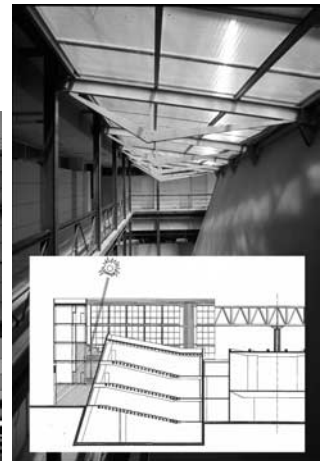
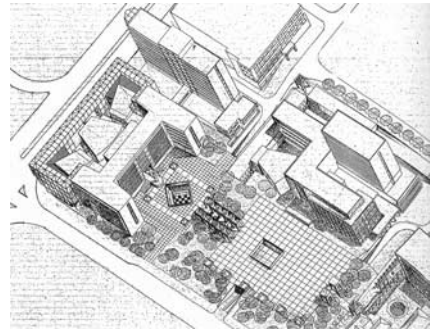
- (a) to design a sequence of underground or on-a-slope buildings along the main pedestrian axis, without creating new built mass, and
- (b) to design new urban 'façades' on the north side, by transforming the existing buildings, which were either orientated towards the interior of the campus, or simply designed without taking into account the shape of their open space.

3.2. Extension of the Faculty of Sciences, Aristotle University of Thessaloniki

A. Kotsiopoulos, N. Arvanitopoulou, D. Daki, G. Horozoglou, E. Spartsis, in collaboration with H. Bougadelis and Associates in the construction drawings phase.

Initial building by P. Karadinos and M. Doris.

5.000 m², construction 1994-1996



The extension of the Faculty of Sciences is a 5-store linear u-shape steel structure of a total length of circa 200 meters, with an average width of only 7 meters, with a total area of 5.000 sq. m., built on a virtually non-existent site, around the back side of the original building complex, designed by Patroklos Karantinos in the '50s.

The Karantinos building – a modernist, yet fully symmetrical, complex of a central main part, two side wings, and a large amphitheatre on the back side – was clearly orientated towards the Chemeion Square, design to become the centre of campus life. Later two other amphitheatres, desined by the architect M. Doris, were added symmetrically making the backside of the complex more hostile to the already growing surrounding city.

new entrances, making the emergency exits of the amphitheatres main entrances to them and to exploit the space between the old and the new building by creating new foyers and large common spaces for the new building, with natural lighting from above.

3.3. New building for the School of Veterinary Sciences, Aristotle University of Thessaloniki

A. Kotsiopoulos, K. Spiridonidis, M. Marinou, G. Psomadakis 4.000 m², construction -1999



The existing building of the School of Veterinary Science, by E. Kakouris, was completed in 1970. The new laboratory wing, designed as part of the new campus master plan, contributes to the formation of a new façade of the complex towards one of the main axes of the campus and transforms the function and character of the internal courtyard. This courtyard, including the new library and refectory buildings, is designed to become the core of faculty and student life.

3.4. New building for the School of Dentistry and the Mandalideion Research Centre, Aristotle University of Thessaloniki

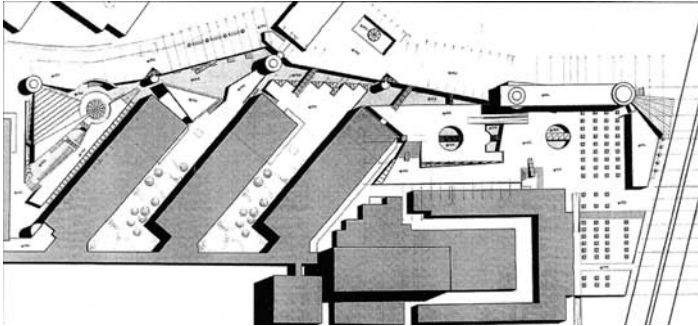
A. Kotsiopoulos, D. Demiri, T. Papadopoulou, M. Marinou,
2.500 m², construction –2002



The existing building of the School of Dentistry was built after the project by Desyllas, Kontargyris, Kyriakidis, Lampakis, and Loukakis (first prize of an architectural competition concerning also the buildings of Psychiatry and Neurology). The project for the "Madalideion" Research Center follows the general pattern of the new master plan of creating new façades and entrances to the buildings situated at the north side of the campus. The research center consists of a thin tower defined by a curved sandstone façade built close to the west side of the existing School tower, as well as by an underground auditorium and convention center around a courtyard.

3.5. Extension of the building complex of the Faculty of Engineering, Aristotle University of Thessaloniki

A.Kotsiopoulos, N. Kalogirou, M. Dousi, A. Paka, D. Chatzisavva, O. Chatzopoulou E. Zoumboulidou, A. Panou with (in construction drawings) D. Tentokalis & V. Pappas)
25.000 m², construction 2000-



The existing building of the Faculty of Engineering of the Aristotle University of Thessaloniki is a complex consisting of the first building designed by Karadinou, Liapis, and Skroubelos in 1957 and numerous additions built between 1970 and 1985.

The extension, based on the new campus master plan, refers to a large (25,000 sq.m.), linear, mainly on the slope and partially underground building, invisible from the north, the terrace of which forms the eastern part of the main campus walkway.

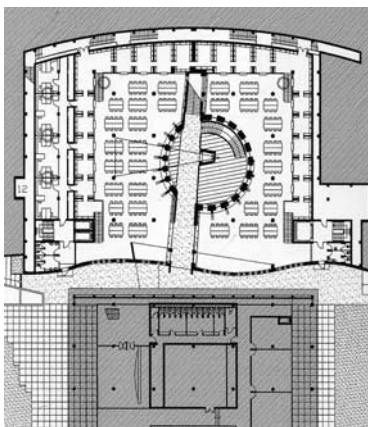
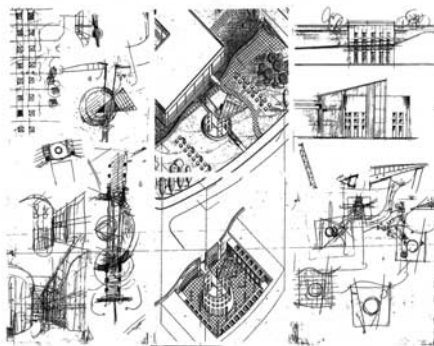
The new complex consists of lecture theatres, auditoria, staff offices, and laboratories, and practically reverses the function of the existing building by opening its initially 'blind' north side.

3.6. New building for the Main Library, Aristotle University of Thessaloniki

A. Kotsiopoulos, M. Papanikolaou, I. Sakellariidou, collaborator A. Economidou, 4,500 m², construction -1999)

Selected by the Hellenic Institute of Architecture and the Deutsches Architektur Museum among the 130 most important buildings of the 20th century in Greece and included in the exhibition and Catalogue

First prize of the Hellenic Institute of Architecture "Architecture 2000", as the best public building in Greece of the period 1995-1999.



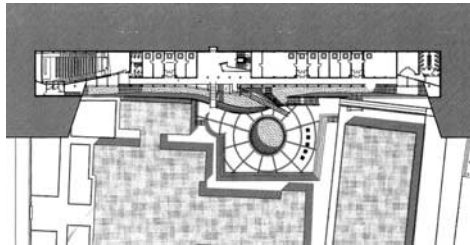
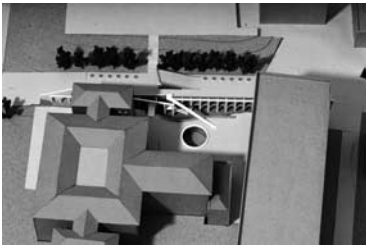
The project provided for the construction of an exclusively underground wing on the north-east side of the existing Main Library (designed by Papaioannou and Fines in 1960).

The composition is deployed symmetrically around a cylindrical atrium intersected by the main access route to the interior of the library and a pedestrian walkway running laterally to the old building.

The curving outer wall of the new building and the elevation of the old structure combine to create another pedestrian walkway, which is part of the general system of movement around the campus.

3.7. New building for the Faculty of Humanities, Aristotle University of Thessaloniki

A. Kotsiopoulos, N. Arvanitopoulou, D. Daki, V. Karalazos, G. Horozoglou, E. Spartsis,
3.000 m², construction -1999



This project, together with that of the main library, were the first to introduce and to negotiate the idea of an underground building in the Aristotle University main campus. The project dealt with the construction of a new building on the slope north east of the historic building of the University designed by V. Poselli in 1887. It consists of two parts. The first part is completely underground and is situated under the new main courtyard of the faculty, which previously has been a parking lot. It is deployed around a cylindrical

atrium – an other version of the atrium designed for the main library, I presented before – and houses the library of the Faculty. The curved outer brick-wall of this library also connotes the curved wall of the main library and creates a common landmark along the main walkway across the campus. The second part is a semi-underground wing on a slope towards the 'Chemeion' (Chemistry Building) Square, the traditional centre of campus life and the main connection of the campus with the surrounding urban tissue. This part is characterized by an open arcade, orientated to the south, and houses lecture rooms and staff offices. The two parts and the walkway between them are connected with three metal bridges, which play a crucial role in forming the architectural character of the building complex.

4. Filters

4.1. Five metal cubes: an extension to the main administration building, Aristotle University of Thessaloniki

A. Kotsiopoulos and partners: A. Kotsiopoulos, E. Zoumboulidou, A. Panou
(preliminary phase: A. Kotsiopoulos with M. Papanikolaou & I. Sakellariou)
500 m², construction -2000



tion building designed by Papaioannou and Fines in 1960. The five small buildings house additional administration offices of the University and are covered by a thin transparent metal "skin", which allows transparency from the inside to the outside and improves the energy behaviour of the buildings.

Different versions of the idea of a transparent skin, carrying improved climatic characteristics, are to be found in all the five projects of the last years to be presented here, and which could be characterized by some kind of 'return to a new version of simplicity'.

4.2. House 2 in Thessaloniki Old Town

A. Kotsiopoulos and partners: A. Kotsiopoulos, E. Chalkiopolou
360 m², construction -1998

Included in 'The Phaidon Atlas of Contemporary World Architecture', 2004



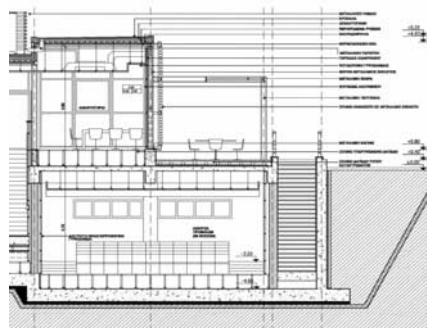
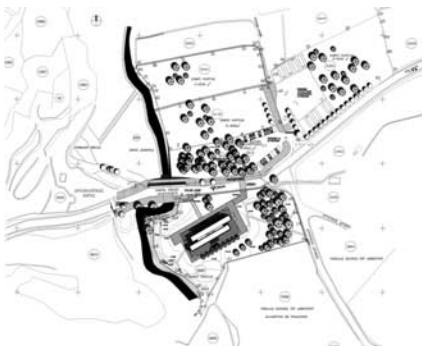


This house, built on a sloping 130 sq.m. site, close to Saint David's Church in Thessaloniki Old Town, is developed on three levels plus basement, covering a total of 350 sq.m. It consists of three units:

- a) the "base", containing the basement with the storage and boiler-rooms and the ground floor with the library, the study room, a small courtyard and the entrance with the garage,
- b) the main front volume of the building covered with semi-transparent wooden shutters and containing part of the two upper floors of the house, with the living and dining rooms as well as the master bedroom and the main balcony on the second floor,
- c) the northern part of the house, which functions as a background and consists of the guestroom and kitchen on the first floor and the children bedroom with its balcony on the second floor as well as of the auxiliary spaces on all floors.

4.3. Cultural and Recreation Centre at the site of the School of Aristotle in Naoussa (donation Ch. Lanaras)

A. Kotsiopoulos and partners: A. Kotsiopoulos, E. Zoumboulidou, A. Panou
collaborators: G. Grevenaris, Th. Kouvaki, E. Chalkiopolou,
civil engineers : I. Lavasas, P. Zervas, G. Nikolaidis,
electromechanical engineers: G. Lagos, K. Sarropoulos,
1000 m², construction 2005-





This small cultural and recreation centre, situated close to an important – yet almost unknown – archaeological site of northern Greece, was designed so that to guarantee a good view to the site, being at the same time almost invisible from that.

The building houses an auditorium with supplementary spaces in the basement and a small museum and a restaurant in the ground floor, with a large outdoor restaurant space with a steel pergola facing the archaeological site.

The building has a unified external skin of aluminium windows and of wooden semi-transparent shutters, which contribute to the invisibility of the built mass, a requirement strongly imposed to the designers by the Archeological Service, after long negotiations on the final placement of the building.

4.4. New office building for the "Alumil" aluminium company Kilkis industrial area, Greece

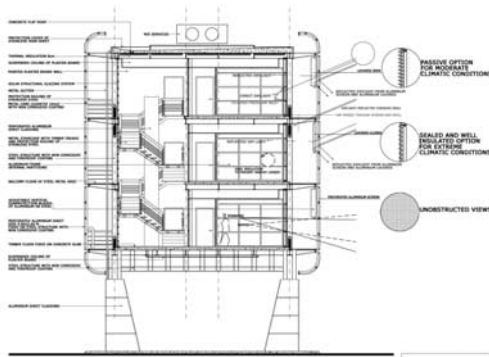
A. Kotsiopoulos and partners: A. Kotsiopoulos, E. Zoumboulidou, A. Panou
collaborators: St. Zerefos, E. Chalkiopolou
bioclimatic design consultant: V. Kouvaki
Ch. Baniotopoulos, I. Lavasas, P. Zervas, G. Nikolaidis, civil engineers
G. Lagos, K. Sarropoulos, electromechanical engineers
3.000 m², construction 2004-

Prize of the Mediterranean International Competition sponsored by U.I.A. (2003) for buildings with sustainable aluminium facades.





NEW HEADQUARTERS OF A LARGE INDUSTRIAL COMPANY



This new headquarters building for one of the largest industries of northern Greece is an addition to an existing office complex and is situated in the entrance of a large open space, being intensely used by the industry's main lorry traffic, carrying raw material for the factory units. For that reason, combined with the very high seismic risk (zone 3, the worst in Greece), the building follows the pattern of a bridge and of a light structure with maximum uniformity of openings and use of aluminium.

The building consists of a linear volume on steel columns protected by a composite skin. The parts of that skin are the following from the outside to the inside:

- a) a continuous vertical 'curtain' of perforated aluminium screen at the end of the balconies
- b) a system of adjustable sun protection blades of aluminium, as a filter against the sun radiation from east and west
- c) a continuous horizontal stainless steel grid on the balcony in the full perimeter of each floor, functioning as a filter against the sun radiation from the south
- d) a double structural glazing window system (the so called 'solar structural glazing'), with internal natural ventilation
- e) a system of horizontal movable internal louvers of perforated aluminium.

Although in such a steel and glass building one expects to find results similar to those of high energy consuming buildings, the proposed design has managed to achieve at least

40% less energy consumption for space air-conditioning than in a usual full glass office building, 30% less than an office building that follows the local regulations for its building envelope and 15% less than a fully insulated brick building with a small glazing ratio.

In collaboration with the company and the Aristotle University, a research programme on the possibilities of automation and smart behaviour of such a composite skin is under development. The Programme is sponsored by the Greek Secretariat of Research and Technology.

5. From the beginning to the beginning

I believe that present architecture is unavoidably looking for its roots in the Modern Movement, without rejecting the experience of the period of its dispute and rejection. Architects seem to adopt an almost radical minimalism as a tribute to the Moderns while, at the same time, they continue to de-construct, to investigate new organic forms through the unlimited representational possibilities of computers, and to adopt amphisemy and refraction as systems superimposed to the always durable Modern cells.

Although, in that sense, original modernism cannot be repeated, and although present modernism looks more like a style than a revolutionary approach to architecture, I think that the deeper message of modernity is still valid. What expresses modernity today has probably to deal with the new freedom of abandoning the traditional limitations of architecture, starting from the new representational possibilities of computer aided design, from the vast variety of the available building materials, and from a closer relation to the building industry.

Do all these new facts impose crucial questions about the future of architecture? Are we in an epoch, when architectural practice, as a sequence of logical acts, which we know very well and which we have accepted for at least the second half of the 20th century, reaches the threshold of disorder? Although we must - and love to - put such questions, we cannot really answer them. Unfortunately, we are part of the game.

A. Kotsiopoulos



(photo by W. Dechau, Oct. 2004)

Anastassios M. Kotsiopoulos (born 1946, Dipl. Arch. A.U.Th.1970, Dr. Eng. A.U.Th. 1976, Ph. D. University of Edinburgh 1980, Reader A.U.Th. 1982) is Professor at the School of Architecture, Aristotle University of Thessaloniki, where he teaches Architectural Design and Theory of Architecture. He practises architecture since 1971 and runs the architectural practice 'A.M. Kotsiopoulos and partners' in Thessaloniki, Greece since 1984 (Ph. Etairias 13, 54621 Thessaloniki, Greece, kotsiop@otenet.gr). Under construction – to open in January 2006 - is the new office in Athens (Amyklon 7, Chalandri, 15231 Athens, Greece). From 1985 until 1995, partners of the practice have been the architects D. Nikolaou, C. Pantazidis, D. Daki, E. Spatsi, N. Arvanitopoulou, G. Horozoglou and V. Karalazos, whether in some projects there was collaboration with M. Papanikolaou and I. Sakellariidou and other architectural offices. The current partners – after 1996 - of 'A.M. Kotsiopoulos and partners' are A.M. Kotsiopoulos, dipl. arch. (A.U.Th.), dr. engen. (A.U.Th.), Ph. D. (Edinburgh), Prof. A.U.Th., E. Zoumboulidou, dipl. arch. (A.U.Th.), M.A. (A.A. London), and A. Panou, dipl. arch. (A.U.Th.), M.Sc. (Bartlett, U.C.London). The collaborators are: E. Chalkiopolou, dipl. arch. (A.U.Th.), G. Grevenaris, dipl. arch. (A.U.Th.), A. Piatidou, dipl. arch. (A.U.Th.), A. Telios, dipl. arch. (A.U.Th.), M. Arch. (Bartlett, U.C.London), and St. Zerefos, B.A. (Plymouth), M.Arch II (UCLA), dr. arch. (A.U.Th.). The practice's projects include the master plans for six Greek universities and a series of public and private buildings. Most of them have been published in architectural magazines and have been presented in several exhibitions in Greece and abroad. Two of these buildings have been selected by the Hellenic Institute of Architecture and the Deutsches Architektur Museum among the 130 most important buildings of the 20th century in Greece. The underground extension of the Aristotle University Main Library (architects: A.M. Kotsiopoulos, M. Papanikolaou, I. Sakellariidou, 1999) has been awarded, by an international jury, the first prize of the Hellenic Institute of Architecture "Architecture 2000", as the best public building in Greece of the period 1995-1999. Also, the new headquarters building for the aluminium company "Alumil" (architects: A.M. Kotsiopoulos, A. Panou, E. Zoumboulidou, 2003) has been awarded, also by an international jury, one of the three equal prizes of the Mediterranean International Competition sponsored by U.I.A. (2003) for buildings with sustainable aluminium facades. Finally, one of the houses (Ano Poli) was included in the recently published "Phaidon Atlas of Architecture" presenting the best 1000 buildings all over the world for the last 5 years. A. M. Kotsiopoulos has been elected three times Chairman of the School of Architecture, Aristotle University of Thessaloniki, has been Vice-President of the Thessaloniki Master Plan Organization, Vice-Chairman of the new School of Architecture at Chania, Crete, and member, for seven years, of the Senatus of the University of Thessaly. He is currently member of the Technical Board of the Academy of Athens, and member of the Board of the Hellenic Culture Organization in Athens.

Chapter 3

Emerging Challenges for the Profiles of an Architect

The Third Chapter attempts a synthesis of all past discussions on the contemporary profile(s) of the architect, their spread in the European Area, the new conditions of professional practice and the labor market, the epistemological, legal and institutional background from which those profiles are emerging, the forms of collaboration schools have to redefine with the professional bodies, in local national and international level (i.e. Architects' Council of Europe). This synthesis will try to reveal the tendencies and the dynamics related to the recent developments in the profession of the architect, the particularities that characterize each region in Europe, and to discuss possible initiatives for the future in order to protect and preserve principles and values that the academic and the professional world would attribute to the profile of the European architect.

Introductory Synthesis by

Jean-Paul Scalabre, Architects' Council of Europe (ACE), Paris, France

Chaired by

James Horan, Dublin, Ireland

James Horan, Dublin, Ireland

To begin the first session I would just like very briefly to remind you of the relationship between the EAAE and the ACE (the Architects' Council of Europe) that we have been talking about here for the past two years, initially as a possibility and now, since our 7th Meeting in Hania last year, as a fact. The joint working party between the EAAE and the ACE has been set up and has had two initial meetings. I do not intend to dwell on this now because I intend to make it part of my President's Address on Tuesday, however the important thing is that we have two representatives of the ACE here this morning. Jean-Paul Scalabre, who represents their educational section, is going to give us a presentation, but before that I would like to introduce Adrian Joyce, who is the permanent Senior Advisor to the ACE in Brussels, and who will give you a little background and will introduce Jean-Paul.

Adrian Joyce, Architects' Council of Europe (ACE), Brussels, Belgium

For the Architects' Council of Europe this invitation marks a significant moment in our political life, and we are very grateful for the invitation we received from the EAAE and ENHSA to be here with you today. I am going to present an apology first: our President Marie-Hélène Lucas would dearly like to have been able to be here herself for this first formal encounter between the two associations, but her calendar did not permit her to travel at this time. For those of you who do not know the ACE is the professional representative organization of the architectural profession. The secretariat is based in Brussels and it was founded in 1990 on the shoulders of a previously existing liaison committee, which coincidentally and happily was founded in 1970. So representation at the European level for the profession has existed for the same number of years as the EAAE. The member organizations are the representative and regulatory bodies for the profession of all 25 European Union members, the three candidate countries and Norway and Switzerland. As such, we represent 450,000 practising architects and our main functions are twofold. One is to act as a kind of lobby for the EU institutions towards the European Commission, towards the Parliament and towards the Council of Ministers. The second is to bring together the member organizations in a network similar to your own where we can develop common ideas and make propositions and take positions on how the profession reacts to legislative developments at the European level. We have a number of working groups that deal with these subjects, and it is a great pleasure for me that Jean-Paul Scalabre, the chairman of our working group on education, was able to travel with us and be here today to deliver a paper following his reading of the proceedings of the past three years of your debates on the profile of the architect.

So without further introduction I hand over to Jean-Paul, who will tell you more about his own function in ACE and about his own background.

Emerging Challenges for the Profiles of an Architect

Jean-Paul SCALABRE

Architects' Council of Europe (ACE), Paris, France

Introduction

First of all I would like to thank the EAAE and the ENHSA for the invitation to speak to you today and to present apologies from the ACE President, Marie H       Lucas for not being able to attend the meeting despite her strong wish to be here. As a representative of the ACE I am very pleased to be here and I hope to contribute meaningfully to the debate on this important question.

I am a French architect. I studied architecture in Paris at l' Unit   p  dagogique n   8 in the seventies, under the direction of a great teacher, Bernard Huet whom I consider as my master. I live in Paris where I have a liberal professional practice. My main fields of activity are social housing and urban studies. I am also, as architect, an adviser for the French Ministry of Culture and for the Ministry of Equipment. I am a board member of the French "Syndicat de l'Architecture" that is a professional organisation and a Member of the ACE.

What is the ACE? The Architects' Council of Europe is an organisation, based in Brussels, whose Membership consists of the professional representative organisations of all twenty five European Union (EU) Member States and the three Accession States as well as Switzerland and Norway. As such it is an organisation that represents, through its Member organisations, the interests of over 450.000 Architects from Europe. The ACE was founded in 1990 following the coming together of two earlier representative organisations, and it has two main functions. One is to act as a kind of lobby near the EU institutions especially the European Commission in order to defend and promote architecture and architects. The second is to gather all its Member Organisations together by developing common ideas and propositions on professional issues.

My function in the ACE is to animate, as Chairman, the Work Group on Education. This group has been working on the following main topics:

1. Evolution of the Architects Directive (85/384/EC) into the new framework directive on the Recognition of Professional Qualifications.
2. The reform induced by the Bologna Process.
3. Professional practice and the training period that should, in the view of the ACE, complement the academic formation.
4. Relationship and cooperation with the EAAE, which has currently been established in the formation of the Joint Working Party between the two organisations.
5. Development of a European label regarding Continuing Professional Development (CPD).

Relationship between the Schools and the Profession

If we seek to fully understand the question of the new face of professional profile we have to examine the relationship between the place for education and the place for practice, between schools and what we can define as the profession.

The papers of previous meetings indicate that much debate on this topic has taken place within the ENHSA and the EAAE. About this important question I think it would be useful to have a retrospective look at the evolution of the profile of an architect from the XVII Century to the XX Century. We will find that the relationship between schools and the profession have been ever changing and problematic. It can easily be understood if we consider that it was and it is still is a question of symbolic power and therefore a crucial matter for access to prestigious commissions. On the professional side, it was the King of France that ordered the establishment of the Academies by the professions in order to define standards of harmony and beauty in the main arts. The *école des Beaux Arts* created later had to follow the same classical taste. The school became the temple of tradition and had the tendency to violently reject any attempt at change or renovation. You will surely remember the Viollet le Duc case. This architect, who reinvented gothic architecture from a rationalist point of view, arrived at the *école des Beaux Arts* after his nomination by French Empress Eugénie. He had to face such a violent Bronca that he was compelled to resign and to create *l'Ecole Spéciale d'Architecture*.

But from another point of view, if we look to the creation of the Bauhaus School in the nineteen thirties we will see that it was sometimes the schools that took the lead. It was imagined by Walter Gropius and his colleagues as a complete new arts and craft school that had the mission to develop a new approach to design in relation with the development of industry while, in the same movement, putting into practice the new aesthetic emerging from the avant-garde (De Stijl, Futurism, Dada, Constructivism etc.). The Bauhaus was the crucible of a new approach to design, especially in architecture that had a fundamental impact on the practice of architecture.

The May 1968 events in France seemed to be a revolution and I think that it was the case regarding architectural education. In Europe, the old academic system coming from the beaux-arts tradition began to disintegrate. New approaches to pedagogy and content appeared. Renovation came from the schools. It was the time when a new generation of architects looking to the reality of profession, tried to develop a critical point of view in order to find new values for architecture. Some years later, when this new generation of architects and of young teachers arrived into practice, the professional landscape began to change.

To resume this short summary we can say that relationships between schools and the profession varied a lot over time. During some period great personalities or groups of professionals had the main influence (remember that Le Corbusier was never a teacher), at other times, the schools had the main part in evolutions. There are, as always, some exceptions to this dichotomy, for example Louis Kahn who was a great professor and a great professional too.

I would like to come now to the current relationship between schools and the profession. The current situation of architecture, as I see it, can be interpreted as the generalisation of eclecticism, a constellation of attitudes and styles defended by a few architects fighting each other to be recognised in the great and changing world-wide consumption of

forms and images. But, as we say in French "the tree must not hide the forest" and the architectural professional practice happens to be more and more uncertain and difficult in a highly specialised and fragmented production systems. When the situation is so unstable, mistrust increases. The paradox is that every part of society asks for higher quality while practice of architecture is becoming harder, more complex and underpaid.

Schools may be frightened by a possible intrusion in their courses of the professional bodies asking for effectiveness and trying to restrict their freedom. The profession has the temptation to criticize a lack of realism in the school's curricula and a non-suitability of education to what is supposed to be the needs of the profession. On the one hand Schools seem to be destabilized by the frenetic movement of society; they loose their references and do not know what kind of future has to be proposed to the students. In addition, the architectural profession often seems to adopt a defensive position based on the fact that it faces the competition of non-architects in its own field of competence. For all these reasons it seems to me of great strategic importance to find the way to a new alliance between schools and the profession in order to built together a future for architecture and the architectural profession in Europe. We all need audacity and courage to go beyond fear and mistrust. The condition for that cooperation is mutual respect of each other's prerogatives.

We all understand why it is so important to think at the European level. It is there that new regulations are produced; it is there that common actions have to be developed. From that point of view the latest development in relations between the ACE and the EAAE, expressed in the creation of our Joint Working Party is extremely positive. We reinforce this partnership especially in the search for good management of our input into the implementation i of the new qualifications directive. Its compatibility with the application of the Bologna process requirements has to be assessed. Other important topics have to be covered, including professional training and its corollary – the licensing procedure, collaboration for a European CPD label and the definition of the professional skills required to be attained at the bachelor degree.

The Bologna Process

This topic has occupied much of the time of the EAAE in recent years and has had a profound impact on universities across Europe. The profession has, maybe, been slow to wake up to the potential impact of this process. The ACE position on the Bologna Process is complimentary to the position of the EAAE and its shares the fundamental stance that the qualifications that give entry to the profession must be at least five-years full-time at third level.

The profession is concerned about the potential that the process will lead to the creation of a two-tier profession arising from the creation of a two cycle pattern by the Bologna process in university courses. The positive aspect is that it will support mobility of persons in Europe but the danger is to end up with a fuzzy definition of what is a bachelor degree in architecture permits the holder to do. This concern has, however, to be balanced against the need for assistance in architects' offices from qualified persons who are not fully qualified architects.

The profession is concerned at the possibility that a weakened and devalued profession will result from the process with persons holding bachelor degrees claiming that they

are competent to provide architectural services. This brings us to the heart of the topic in this session – the profiles of the architect.

ACE Work on the Profile of an Architect

The ACE has, in the recent past (2003), considered the profile of the architect in some depth. It had a Taskforce on the subject, Chaired by Claude Bucher (France), and it has published a reference document that is available on its website at www.ace-cae.org. The reflection at that time did not take account of the Bologna Process and the impact that it might have.

The profile of an architect is understood to mean what are the services (or competencies) that a fully qualified architect can deliver to his client. The reference document of the ACE starts by outlining the facts that bear on the profile of the architect (in fact on the profile of any professional) stating that external factors force a constant evolution in the profile. This seems to be acutely felt within the architectural profession and seems to be a factor that is provoking significant change at the current time.

The paper then outlines the 6 basic competencies that the architect must possess:

- Creativity especially in his design ability at different scale, his control of form and space.
- Capacity for synthesis in formalisation of social, cultural and political needs and requirements.
- Knowledge of cultural theoretical and technical history of architecture and urban design.
- Mediation and arbitrage between the different actors
- Capacity to lead and coordinate a team of specialists into a complex process of design and building
- Knowledge of codes of conduct and expression of ethic attitude and behaviour

It is interesting to see that this list does not contradict the list of competencies and skills that was discussed in Chania in 2004, although that list was longer. It brings to mind the 11 fundamental skills and aptitudes that are listed in the architect's section of the Qualifications Directive (and previously in Article 3 of the Architects Directive) and which have remained unchanged since they were first devised in the early 1980's. The Advisory Committee to the Architects Directive reviewed the list in the mid-1990's and concluded that there was no need to revise or change the list either now or at any time to come. I cannot resist taking the pleasure of reminding you of those fundamentals:

1. An ability to create architectural designs that satisfy both aesthetic and technical requirements.
2. An adequate knowledge of the history and theories of architecture and the related arts, technologies and human sciences.
3. A knowledge of the fine arts as an influence on the quality of architectural design.
4. An adequate knowledge of urban design, planning and the skills involved in the planning process.

5. An understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale.
6. An understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take account of social factors.
7. An understanding of the methods of investigation and preparation of the brief for a design project.
8. An understanding of the structural design, constructional and engineering problems associated with building design.
9. An adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate.
10. The necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations.
11. An adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.

The ACE paper goes on to identify the main fields of intervention of the architect comparing the traditional role of the architect as master of the full process to the emerging current complexity of regulations that means there is increasing specialisation in the profession. It recognises that it is unrealistic to expect that a single individual can be adequately informed of all matters that affect all types and scales of project that is built today.

The paper also discusses the fact that several competencies are being transferred to newer professions. It highlights three cases:

- Town-planning
- Client counselling and assistance
- Project management

The paper then sets down a number of new fields of practice that the Taskforce noted are being taken up by architects. These are grouped into a number of categories and there was some controversy about the grouping during discussions in the ACE. The Taskforce defended its paper saying that it was not proposing these new functions or "types" of architects to the ACE. Rather it was simply reporting on what it had found in the market place.

Those categories were:

- Architect-programmer
- Architect-town planner
- Architect-landscaper
- Architect- legal expert

- Architect-client assistant
- Architect-general contractor
- Architect-use management
- Architect-teacher
- Architect-building project manager

There are a number of other fields in which architects are employed and where their skills are valued, but they are outside the construction sector and so were not included in the ACE paper.

The ACE argues, in its policy work on the role of architecture in society, that there is a need to assure a wider understanding of architecture in the public and that a valuable way for this to happen is that persons qualified as architects do not pursue architecture as a career, but that they work in other fields such as politics, teaching, manufacturing, business consultancy etc.... Therefore the ACE generally welcomes the diversity of roles that are open to architects at the present time.

Emerging Challenges for the Profiles of an Architect

I would like "d'entrée de jeu", as we say in French, to ask a question regarding the definition of who is an architect. Is there a contradiction between the high and complete level of competency expressed by the lists we just read and the necessity expressed of an acute specialisation? It seems to me very rare to find both in the same person. To clarify the discussion I propose a parallel with the film director. He is not supposed to be an all-knowing person, but his specific ability is to put into a coherent shape all the material given to him by all the specialists. To realise this task, he has to work with a small but essential number of tools such as acting direction, photography, sound and film editing. I think that this parallel between the architect's work and the director's work is more productive to enlighten the profile of an architect than the parallel with the conductor of an orchestra. The maestro is supposed to know all the score by heart and the musicians of the orchestra are supposed to play exactly in the way he wants. In architecture this kind of situation may happen but is quite unusual. We all know by experiencing it that a project is a permanent fight and negotiation in order to develop and realise the design intentions. If the architect has a strong and sensitive architectural culture, he may succeed in the constant effort to make his project come to reality.

My statement is that there is a core that identifies architect's practice. This core is his knowledge of architectural design and his ability to maintain the quality of this design from the initial intention all along the building process. If we lose that idea and change the architect into a project manager or into a simple specialist of façade aesthetics we lose our identity as architects. That situation could explain the permanent difficulty for architecture to simply exist in day-to-day society and the fact that it is generally confined to particular prestigious programmes. We must assume the necessity of diversity and, at the same time, keep our identity as architects, it is a great challenge but it is vital for the sake of architecture as a social and cultural value of our common civilisation.

Returning to the central topic of the session, we can see that a fresh period of reflection

on the emerging profile of the architect is needed and that it would be useful to carry out this reflection in conjunction with the work of the ENHSA and the EAAE. Topics that need to be addressed include:

- What should the profile of a holder of a bachelor degree be and what kind of job is such a person supposed to be able to assume professionally? Is this person to be named architect, or shall we use another appellation such as assistant in architecture?
- Can we expect a deep evolution in the profile of the architect over the coming period of time (say 10-15 years)?
- What are the external factors that may prompt some changes to the profile of the architect?
- To what extent can (should) the profession and the schools respectively seek to influence the evolution of the profile?

We, in the ACE, do not have the answers to these questions, but we are aware of the urgency to deal with them.

Gleaning information from the proceedings of the previous meetings in Chania, it is clear that you have been addressing many of these questions in a more or less direct way, but with more of an eye for the educator's point of view. The ACE, conscious of the changing conditions of professional practice where the trust of the public in the professions has waned significantly and where the political powers have been attacking the traditional regulatory basis of the professions, has examined the question from a different angle. It is seeking to find how the profession can, from within and through active approaches, face up to challenges being presented by society.

In this respect much emphasis is being placed on the effects of de-regulation and on the possible benefits of the new approach to lawmaking known as co-regulation. The ACE argues that it is not de-regulation that is required to protect the public interest, but better regulation.

Another question deserving of attention is the question of diversity in the profile of the architect due to cultural or national differences within Europe. The ACE firmly believes that the diversity that exists within the profession is one of its great strengths and it has defended the non-harmonised approach to the education of architects since its foundation in 1990 and in its earlier forms at the time of the writing of the Architects Directive. It is therefore not advocating harmonisation. From my personal point of view, I would like to point out the fact that emphasizing diversity we forget the unity of European culture. The Italian architect Vittorio Gregotti wrote an interesting book on this topic (*Identità e crisi dell'architettura europea*, Einaudi 1999). He presents European culture as an archipelago made of different islands forming a whole. This is evident for those who look at European towns, European patrimony and European landscapes. This unity, emerging from diversity, is important to maintain in the cultural general entropy coming from globalisation. Enhancing diversity and leaving out unity may be a fault in this context..

From the papers that you have published, it can be seen that much discussion on harmonisation has taken place. The ACE has recently, due to the pressure of emerging legislation, begun to consider the concept of the "European" architect. It has not yet devel-

oped a clear picture of what this concept will involve, but it has made several observations on the current diversity in Europe (many of which were made in Lawrence Johnston's paper on the relationships between architectural education, internship and competence to practice):

- In some countries a licence to practice is granted to persons immediately after they graduate from third level education.
- Many countries require a period of practical experience to supplement the educational period before a person can practice.
- In some countries the title of architect is protected while the functions are not, in some countries both are protected and in some countries none are protected.

It is interesting to note that the ACE does not detect a direct relationship between these various situations and the quality of the built environment in the various countries but this is not a reason for jumping to the conclusion.

Conclusions

Speaking of conclusion I must admit arriving at the end of my intervention that it is very difficult to make a decent conclusion I am aware of the fact that we are faced with complexity and that professional profile of the architect is a great question that each generation asks at its turn. I will be satisfied with some short statements.

- The architect's profile must remain anchored to its original identity regardless of the increasing diversification and specialisation.
- It is the moment for a new partnership between European schools of architecture and the professional's bodies and associations to promote a European conception of the role of architects in society.
- We must stay aware of the fragility of our modern tradition regarding architectural art and practice, then defend and promote it by strengthening our school and professional associations.
- Let us keep in mind that we must think as European

Discussion

Chaired by

James Horan, Dublin, Ireland

James Horan, Dublin, Ireland

Thank you very much, Jean-Paul, for that very interesting and stimulating paper. Before I open up the discussion to the floor I would just like to make an observation. It was quite intriguing to hear in Jean-Paul's paper that the discussions which have been taking place in the ACE have almost an exact parallel to the discussions that we have been engaged in here over the past few years, and I think again that it is a very important celebration that we have come together to bring a greater sense of broadness while at the same time bringing a greater sense of focus to the issues that concern us all. I would now like to invite anyone who would like to make a comment, ask a question or add anything to the discussion, to do so.

Jordi Querol, Barcelona, Spain

I beg your pardon for taking the first word here, because I am not a director of a school. I am here in Crete as an artiste invitado for tonight, but I am also an architect and I teach at l'Escola Tècnica Superior d'Arquitectura La Salle in Barcelona. I think I am entitled to take the microphone because my CV begins in 1938, which I think represents enough time spent travelling around the world and gathering experience to be of interest to you. I have spent many years working for the government of Catalunya, I have taught architecture and now I work freelance with my son who is also an architect. I mention this because my office is a very small one, a very European office of just five persons, four architects and one technician, all but myself very young, one of whom is my son. So I know what is happening with young architects today. Because I think that, when we are in a forum of directors of schools, we should be talking more about what kind of architect we teachers, who are responsible, should be producing in order to provide the sort of architect that the market needs. If we act arrogantly – without of course intending to be arrogant – and produce intellectuals or professionals that the market simply disregards, then we are on the wrong track.

What kind of architect are we producing in our schools? Mostly, we are producing the kind of architect who, upon graduation can build an airport, a skyscraper, a city, a five-star hotel, any sort of big project, but does not know how to build a small house. I have seen this in Barcelona. They simply do not know. They do not even know where to start, where to put the air-conditioning, where to put the switches, what kind of walls they should design, what kind of windows, and how to put the windows in the walls. This is the sort of thing our young and very talented architects do not know how to do; and do you know what happens? Judging from what the young architects that are working with me in Barcelona say, the market is well aware of this. This is horrible, because the market is very clever: the market is as clever as the water that comes through an improperly designed

roof is horrible, and will go to another professional.

I am going to finish my intervention by telling you, the directors of Europe's schools of architecture, that we are still following the pattern of five years leading up to a grand project and then we finish off by putting the flowers on the right, or the flowers on the left. I am saying this metaphorically, of course. But the project, as the main focus of our training, from the first day to the last, has for too long been the way we do things. This is what is recommended, this is what we said in Barcelona in 1994, this is what the UIA says, this is what every book we read says, and this is why we are producing the sort of architects we are.

Here in Crete, because I am an independent architect, and because I am in touch with young architects in Barcelona, I am asking you to revise that philosophy. I do not mean that we should make a complete about-face, but simply begin to move a few degrees in a different direction. Which direction? The direction of more history of art: the architect must know what has gone before. We need more history of art in our schools, more construction, more installations, so that we continue to follow the line of the project as the main theme, but without neglecting these other things. These young architects, they finish their studies with a wonderful illusion, with a feeling that they are very gifted, but all they want to do is to do something astonishing, to win a prize, to become a Jean Nouvel in one year. And they are at risk of losing the market to the engineers and other technicians, who are there and are ready to do the things that the market knows we cannot do.

Jean-Paul Scalabre, Architects' Council of Europe (ACE), Paris, France

Just a point after Jordi's intervention. I think that there has always been a tension between art and construction in the practice and teaching of architecture. This tension is constitutive to the identity of architecture. I will just like to remind you of the Vitruvian triptych: commodity, solidity and beauty. So the problem is to keep the balance, to keep this tension at the right level. Perhaps we may criticise the actual situation, but I think this tension is the life of our art. I just wanted to make a small statement to complement your analysis.

Halldor Gislason, Oslo, Norway

I think that we must make absolutely sure that the schools of architecture never lose their critical position in society, because the designer is actually located between businesses and society. We are the interface between business and society, and we have to take that responsibility very seriously. And the schools of architecture have to support that, because if the professional body controls education, and especially the validation of the programmes, the critical position gets lost.

Ramon Sastre, Barcelona, Spain

We often, as Jean-Paul did, compare the profession of the architect to something else, to a conductor of an orchestra or the director of a film; but sometimes the difficulty is in defining who the other people are. If architecture is the film, who is the editor, who is the photographer? Are they other architects, or engineers? Who are these others? Because

that is the question. I understand that the architect is a generalist and is on top of some things, but sometimes it is not clear who is below. Often, I think, it is other architects or the same architects, which makes it difficult, because then you do not have a triangle with an apex, but just some things working together. This is what I want to ask you: who are you saying is below the director in the film?

Jean-Paul Scalabre, Architects' Council of Europe (ACE), Paris, France

Perhaps there is a misunderstanding, because I did not want to say that the architect is at the edge of the triangle. That is not my position. I think that the architect is part of the building process, he works within the economy. The architect is an actor, and there is no triangle. There is the financial-political power – the architect has always existed in relation to the man with money or political power. This is the main relation, because if you do not have this relation you do not build at all, and the analogy with the director is simply a comparison, and as the French say "comparaison n'est pas raison", so you must not generalize too much.

What I wanted to say was that the architect is not the maestro; he is more like a director, involved in a process. And he is an important part of the process because he had the conception; he has the responsibility, which is very important, because he is the only one to take the responsibility even if his client does not want him to assume the formal conception of a building. And sometimes the client does not want the architect to do that, he only wants the architect to respond to the market, to make money, and the architect must respond to this task and assume the artistic challenge of his work in the specific conditions. And we all know that this is something very difficult. So what I wanted to say is that the architect is like a director, involved, like in Hollywood or in television, in one part of the process, but with his own responsibility, his own identity as the man who had the conception; Not only the façade but the whole conception, and to assume that in the building process the initial conception will be respected.

One of the big dangers is the fact that, in France, for example, but in other countries as well, architects have a commission to design the initial design and then they have no control over the actual building. But if they are out of the rest of the process then they lose their culture, their constructional culture, and they lose a lot of power of control. So this is a real danger. But I would like to say that in my opinion architecture is not a demiurge, he is not the big maestro, he is part of a system.

James Horan, Dublin, Ireland

A point crossed my mind as I heard this discussion developing. Sometimes as educators we may be inclined to think that the profession of architecture is a relatively straightforward business, insofar as that many of our students end up as professional architects, while at the same time some of our students decide to pursue careers in slightly different directions; and consequently within schools of architecture we have this dilemma, if you like, or at least this debate about the nature of architectural education and whether it is exclusively about preparing people for the profession of architecture. It may be preparing people to be architects, which is a slightly broader possibility. However, just to take the argument one step further, the profession also has a similar, or at least a parallel, but not identical dilemma, which is precisely what Jean-Paul was referring to: when

the professional architect is engaged to carry out a project for a client, there is also the dilemma of trying to fulfil his responsibility to society as a changer of the landscape and at the same time to give value to the man who is employing him. So there is an interesting kind of parallel discussion that might develop out of that.

David Porter, Glasgow, Scotland

I am from the Mackintosh School of Architecture in Glasgow. My contribution is really by way of a comment and a question, and it is a rather practical one about the EU Directive. Several months ago the Heads of the Schools of Architecture in the United Kingdom met in Bucharest; and after a great deal of free-ranging discussion rather like the one we have just had, we came to the conclusion that the EU Directive and its 11 points were actually rather sound and that one might actually return to this document that is now twenty years old. And there were two reservations in this. One is the notion of the years of study, because it talks about four years minimum full-time study and certainly in the UK we do not know what full time study means anymore, and certainly our students do not. Because if they are full-time they are working part-time somewhere else to be able to survive, so what we were thinking of is a minor modification, which would replace the notion of years of full-time study with that of credits, or hours of study over a period. So, where the directive to be amended, that would be a part of it.

In terms of content and after twenty years it still looks pretty good. It does not mention sustainability, however, and there are some aspects about the relationship of study to research; but these are rather small questions and our question really was the long-term status of that Directive within Europe, because there have been rumours that it was being revised and none of us at that conference really knew whether it was. There have also been rumours that it was going to be quietly dropped and would disappear. And so I have made a couple of suggestions of areas that might be looked at if it needs to be revised, but really my bigger concern is the long-term status of the EU Directive on architecture.

James Horan, Dublin, Ireland

David, I am going to ask Adrian Joyce to answer that question, because he is probably the person in the best position to reply.

Adrian Joyce, Architects' Council of Europe (ACE), Brussels, Belgium

Yes, there has been a lot of debate and confusion around the future life of the Architects Directive, and it has been a central matter of concern to the Architects Council of Europe for the past three years as it went through the co-decision process in the European Parliament. What has happened is that, at the request of the Council, the European Commission has proposed to abolish all sectoral directives and to incorporate their requirements into a single new Directive known as the Recognition of Professional Qualifications Directive. This has happened, the Architects Directive is practically dead in the water in the sense that the Council and Parliament completed the whole co-decision process in May of this year and we are only waiting for translations into all 21 official languages before it comes into force. We expected publication in the official journal in July but it

has not happened and our latest information is that it would be some time in September. Once the Qualifications Directive is published, the Architects Directive lapses ten days later. It will be gone.

Told like that it is an alarming situation, but in our three-year fight we in the ACE have lobbied hard to ensure that the Commission stick to their word. Their objective was to rationalize the procedures for recognition of professional qualifications and in so doing to maintain exactly the provision in the previous and existing Directives. Their first draft did not do that and the ACE has lobbied hard and has won the battle to ensure that the Architects Directive's main provisions are preserved in the new Directive. And I can report definitively to you that that has happened. Therefore we do not need to be concerned about the main lines to do with the eleven skills and aptitudes with the minimum duration of studies but I would like to comment further on that. We do have one concern and that is that the Advisory Committee which we had previously, that brought together the profession, the schools and the national governments, is also abolished by the introduction of the Professional Qualifications Directive.

This is the point and I will emphasize it more on Tuesday when I speak to you again; this is the point that gives real urgency to the need for collaboration between schools and the profession. The new Directive only has a committee of national officials and that committee has the power to establish expert groups to advise it and we in ACE and through the Joint Working Party with the EAAE have sought to establish the credibility of our Joint Working Party as the place where properly mandated experts can sit in that expert group to ensure that the provisions of the Directive are maintained into the future, in the long term. We recently had a meeting with the Commission officials and we are confident that we will have a real voice in the long-term management of these aspects of the Directive.

To come back, David, to the two points you made, the four-year statement in my view is a hangover from the situation that occurred in 1985, and the Commission was itself ready to put forward in this qualifications directive a statement that the minimum duration would be five years. It was willing but it did not do it, and it did not do it because it feared that the Council or the national governments would not accept it; and so they decided not to make such a controversial issue at this time. We are conscious that in fact it was to reflect the German situation of the Fachhochschule, that in Germany, in effect are now all of five years duration. So revision to that Directive and to that particular item may happen in some future time, but at this moment the matter is not going to be reopened.

Your second point was to do with sustainability not being mentioned among the 11 criteria, nor research. I think it is a question of interpretation. And I also think that in the list, and I know you do not have the benefit of having it in front of you, you have item No 9 "an adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with the internal conditions of comfort and protection against the climate", which is only one aspect of sustainability, but it is a major one, and I think that you could look at the eleven and say "yes, it's there". And then you could have a debate about whether we should be bringing it more to the fore.

So this was a rather long-winded answer to your question; but, James, if I may profit by having the microphone, may I say that I was very sensitive to the intervention of your Norwegian colleague Dori, who intimated – and maybe you did not pick it up – that maybe the professional bodies want to tell you as Heads of Schools how to educate students.

Please do not take that home with you: we do not wish to do that. We wish to have an informed debate and dialogue between the schools as independent bodies, with their own ethical duties and responsibilities, as Dori said, and on our side we are a profession with the dichotomy of satisfying society's needs by delivering quality of life to the citizens of Europe while fulfilling our clients' requirements. So on both sides of the fence there are very sensitive issues and difficult matters to overcome, but we need to sit down together and debate these issues and look at this interface. You could say that we in the professional representative bodies are the business of architecture and that you are the educators in architecture, and we need to debate this interface; and I am looking forward to that debate taking place – well I hope it will be permanent – but certainly intensely over the next three to five years.

James Horan, Dublin, Ireland

As you can see I think that we are at a very, very important time and the initiative that established the Joint Working Party between the EAAE and the ACE could not have happened at a better time in many ways, and if it had not happened now we might have missed the opportunity of being in any way involved in the future of how Europe sees its architects.

Peter Gabrijelcic, Ljubljana, Slovenia

I am Dean of the Faculty of Architecture in Ljubljana. For me the main problem is that we are losing or have just lost our power on the level of urban design. There are a number of reasons for this, but the main reason is perhaps that while we were all educated under the formula of 'less is more', we are living today in a society that is less like a light, clean forest of pine trees but more like a rainforest, teeming with millions of species; A very complex world. And one that we do not understand: it is a new position and we are unable to react to it. We view the present situation as a crisis.

This is good, because if you have the feeling of a crisis you are aware that something is wrong in your understanding of life in your philosophical approach and that you may have to change your epistemological tools. Now to me, the urban designer – because I am involved in different stages and different levels of professional work: I am a planner, a designer, an architect and a Dean –, it seems that we have really lost the power on the level of urbanism because the old traditional town plans do not work anymore. We exchanged them for spatial planning systems, which finish with land use, and then we come directly to the architects' project on the site. But there is no longer anyone who is responsible, who has the power to manage such complex processes. And that is the problem: we have to develop not just architects but architect-urbanists or architect-urban designers, and we are losing that idea, because the urban designer today is more or less a negotiator between different interests, but after all he still has to have the feeling of a designer.

Because the temporary administrators who are in some way changing our position in our cities are not aware of the fact that the first duty of the mayor is to care about the future of the town and of the town landscapes, and they do not have enough background in the professional skills. I do not know how it is in your countries, but the position of town architect no longer exists. A town architect is not just a person: he is a profes-

sional who cares for the public interest and cares about form and ambience. We no longer talk about ambience, instead we talk about how there is no longer any contextualism and so on. I do not believe in it. Somewhere yes. The town architecture does not mean public architecture; it means that you have added new elements, unexpected, but with some knowledge; and somebody should be responsible for that. So we should create this intermediate position which is not a planner and is more than an architect, because its duties are so much more complex. This is what I am trying to uphold, and maybe the schools are the only environments today that are able to recognize these needs and to make politicians and society aware of them, because a good environment simply belongs to the people, like medicine or education. Thank you.

Jean-Paul Scalabre, Architects' Council of Europe (ACE), Paris, France

I think that you are right when you say that there is a feeling of crisis and that architects have lost their power in urban design; but I just wanted to say that the modern functionalist attitudes that are our tradition made no distinction between architecture and town-planning and urban design. Look at Le Corbusier or Josep Lluís Sert or others: there was no distinction, it was the same discipline. It worked for a time, but now it has failed. It was connected with an idea of progress, of modernity, and I think that in the current conjuncture there is a lack of doctrine. So I am turning to the schools, because I think we are at the same point we were at in the 70s, debating the relation between the old and the new, the separation of functions that was one of the dogmas of the modern movement – and we can see the collateral effects of that doctrine – our relation to landscape, which is a cultural value that is being progressively destroyed by modernity, and our relation with the new values that society has constructed, such as ecology and sustainable development. Everyone talks about these values, but in the reality of the process of how a town or a new modern city is produced, these values are completely rejected. So I think you are right, it is a fundamental problem.

Adrian Joyce, Architects' Council of Europe (ACE), Brussels, Belgium

Yes, the Architects Council of Europe has been very aware of these crises that are affecting the profession, and last year we published a book called *Architecture and Quality of Life* – I have a couple of examples with me – and that carried twenty one key messages for the 21st century from our organization, of which I have fliers and you are welcome to take them. Among the 21 recommendations or key messages we brought is one that I think has a parallel to the problems you have raised about the architect-urbanists and so on. We stated that as society at large and citizens in particular are both the clients and users of the results of our architectural services, it is imperative that public policies at all levels should strive to create an ethos within society that values quality in buildings and in public places.

Moreover it is important that awareness and the capacity to understand architectural values should be instilled as early as possible in the educational process, starting in kindergarten and continuing through all stages of formal education. That may seem to be an abstract answer to your question, but we are convinced that if there was a greater appreciation of architectural values in society at large the problems you have spoken about, where mayors and administrators are not open or able to communicate on these

crucially important issues, would at least be significantly diluted if not disappear entirely. So it is more that just a need to have architect-urbanists: we need a more informed society who can make more informed demands of our profession if we are to have quality in the built environment.

Dimitris Kotsakis, Thessaloniki, Greece

I have been here since the beginning of these meetings and I now find myself in a difficult position because, as this discussion develops, I feel that I am out of context, since we are now again beginning to discuss the very things that we have been discussing for the past eight years, without taking into consideration that we have been discussing them for eight years now.

We are discussing them as if they are new issues. So to get myself out of this difficult position I will not make a speech, but will just remind you of four points that have been very deeply debated and discussed. And these four points are not related to the present discussion but to the context of this discussion, because this morning we had an introductory session, with no discussion, and certain things have been left over. For example, are we talking in the context of the EU and the Socrates programme? No, we are not. I will start, then, with the four points, not talking about them but just mentioning them. The first is that this is a meeting of the Heads of Schools of Architecture in Europe, not in the European Union. This year, especially, it is very important to stress the point that Europe is not the European Union. Europe has at least two big countries that are not in the European Union – Russia and Turkey – and that are represented here. And this is not a minor point; it is a deep cultural point. In the past we had great trouble with this problem, great trouble indeed, and we must be very conscious of this. This is an issue that I feel very strongly about.

The second point is that we are not in the framework of the Bologna Process. In our statement, the Hania Statement, it was said that the framework is the Magna Carta Universitatum (the Bologna Declaration of the universities of 1988), then the joint declaration of European Ministers (very neat: the declaration of the universities of '88, of the ministers of '99, numbers are magical), the Salamanca Convention of European Higher Education Institutions and the Student – we have forgotten all about them – Gutenberg Declaration. So our context is the Universities, the Ministers, the Students. Then two years ago we said that that is not enough, that we have to include the profession so as to make the context complete. So it is not just the Ministers and the Bologna Process, it is that and it is beyond that. And dates and years are very important here. We started our own meetings in 1998 and the Ministers meeting was in 1999. Do not forget that. We – and I am talking here about the Meeting of Heads of Schools of Architecture of Europe, that is important – are one year ahead of them.

The next point is that when we are discussing architecture as a profession and the education of architects, we must remember that this is not just an abstraction: the question is the education of the architect in the University. Not the University in the strict statutory sense, the legal sense, but the university as a principle. By that I mean the university as a place where teaching and research are inseparable. The university as a place: whether the institution is a university or a free academy is not the point. The point is that we are talking about institutions that integrate teaching with research and that take a stance that is independent of all political authority and economic power. That was the decla-

ration of '88. An independent of political authority and economic power does not mean independent of society, on the contrary it means that these universities, these schools we are representing, have a direct relation to society. And they take the full direct responsibility for that. They do not refer the responsibility to ministers or to business. The responsibility is directly to society. That is why it was important for us to finish this framework by including the profession.

Now that is the context. For the past eight years we have been discussing two questions. One is what happened to the profession and the other is what happened to the university. My final conclusion from these eight years is that we are now at a historical turning point. That is not just a figure of speech. It is something that we have to explore in depth. We start from the beginning as if we had nothing behind us. But we do have something behind us. And what we have behind us is traditions, inherited traditions, not actual living. We have to take these traditions and make a new world out of them. So that is not just one year of discussions, the eighth year of discussions. It is the second or the third year now that we are in this predicament, or in this creative moment, whichever way you choose to look at it, and we are starting from the beginning again.

So that is how I see things, and why I said in the beginning that I find myself in an awkward position. If this is it, then we must find some way, perhaps create a committee, to go back to all these things, and take the new information that comes in from the profession and see how we are orientated in relation to that. We cannot go on like this. This is a turning point. We cannot just go on for the third or the fourth year of vague discussions. We have to raise the issues, and the issues are not "what are we going to do?", the issues are the right questions and the framework. That is my proposal.

Adrian Joyce, Architects' Council of Europe (ACE), Brussels, Belgium

Dimitri, it is always good to be reminded of the context, and I would just like to say that the Architects' Council of Europe is very conscious that the Meeting of Heads is more than the EU, but the Architects' Council of Europe is consciously EU because we are a politically motivated organization or a policy motivated organization and our main interlocutors are the EU institutions, and to be credible in the face of those institutions we must be truly representative but just at the EU level. It is a useful piece of information about the nature of our organization.

Arza Churchman, Haifa, Israel

I am Arza Churchman from the Technion in Haifa, Israel, and I have two semi-apologies. Number one, I have never been here before, so I found what you just said very interesting but I cannot relate to it, and number two, I am a small country that is not part of the European Union. But I want to make a few comments.

Number one, I feel that it is very important that we recognize that no one architect can do everything and can be capable of doing everything. You were talking about things that are missing in the students. It is impossible in five years, in seven years, in ten years, to educate people who can be experts in every single aspect of the architects' or the planners' or the landscape architects' work. And one of the issues that we are trying to deal with – and we have no solution, I do not know if anyone has a solution – is whether students should specialize in some particular aspect or whether we should give them a

basic infrastructure that allows them to specialize afterwards, when they go into practice.

Another aspect - and it is one of the things that was included in the Directive (and I am sorry that it has been done away with because I thought it was very good) - is the process in which decisions are taken and the extent to which the users are part of that process. One of the aspects of this process is sustainability. The problem of including sustainability is that while the word itself is in fashion now it probably will not be in ten years time, but its basic principle should always be in fashion and the essence of sustainability is not just the environmental aspect but the fact that the process integrates the economic, social and environmental issues in an historical and future-oriented frame. And these are the kinds of things that should continue to exist even when the word goes out of fashion. But one aspect that also requires an element of sustainability that is built in, but that does not necessarily come out in the definitions, is that of user participation. And when you talk about that new principle of quality, architectural quality, my question is who defines whether it is quality or not quality? And one of the aspects of the value of user participation is that the users should be part of the definition of whether something is a quality design or not.

Christopher Cross, Standing Conference of Heads of Schools of Architecture (SCHOSA), London, United Kingdom

Just a brief comment relating to what Jean-Paul said. I am concerned about the kind European double standard that has developed, because on the one hand we talk about harmonizing educational programmes and shared competences, and we want to share in educational programmes and have harmonization and have mobility so that students can move between different countries, but on the other hand we have different practice systems and different requirements for registration in different countries, and so forth. Now, Jean-Paul, you were saying that it is difficult to see how architecture directly reflects this. But in the longer term there is a protectionism in Europe, and if we want our students to be European, to think across borders and to be able to move across the different countries, then practice needs to do that as well. Many practices do find ways of doing this, but it is against difficulties, and I would have thought that the Architects' Council of Europe would be discussing this, because there is a limit to what you can do in the schools. Thank you.

Halldor Gislason, Oslo, Norway

I just want to remind you of the results we got about three years ago from a very good questionnaire we did here about the relationship between research, practice and education. What emerged was that the architecture schools have a very high percentage of professionals teaching, so actually the relationship between practice and education is incredibly strong in our field. It may be an informal arrangement, but about half of those teaching architecture are actually professional practising architects, and so we have professionals working directly with the students. The question is, how formal do we have to make this informal relationship? Are the teachers in the schools going to be working less as architects? I do not think so, because the architectural field is becoming much less stable, as you said, and therefore the links between research, the profession and

education are more unstable now than they were, say, thirty years ago. Should we make this relationship so formal that it becomes like an old marriage? I think that the relationship might be very good, but there might be some Euro-technical issues involved, and therefore I agree with Dimitris' comment about Europe.

James Horan, Dublin, Ireland

I am going to bring this session to a close now; but, before I do, there are just a few final points that should perhaps be made. Lawrence Johnston passed me a little note just to remind me, when Jean-Paul was talking about the question as to whether the new BArchs or the BSCArchs would be allowed to practice architecture, that in the Hania Statement of 1999-2000 the Heads of Schools clearly said that in fact there was no possibility of somebody with a degree earned after three years of architectural education being entitled to practise and to carry on professional activities.

Just to finalize, I am conscious of the fact that, as Dimitri rightly mentioned, we do discuss the same things from time to time, and that we have been discussing some of these things for a number of years now. I suppose it is important to remember that here in the room today we have quite a number of people who are here for the first time. In fact, from what I see from the list, there are perhaps more newcomers at this meeting than ever before. Maybe the final point to make, since Ms. Churchman has raised it, has to do with the ability of the schools of architecture to deal with everything that architects are expected to know and be competent in, even in a five year period. As I said last year in my President's Address, I personally believe that architectural education is a fifty-year process, and if it is a fifty-year process we are all still students of architecture, and therefore the profession has just the same level of responsibility to continue the architectural education process as we have to start it.

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.

Introductory Synthesis by

Prof. Karl Otto Ellefsen, Rector in Oslo School of Architecture, Oslo, Norway

Prof. Alberto Clementi and **Prof. Mosè Ricci**, University di Chieti-Pescara, Italy

Chaired by

Per Olaf Fjeld, Oslo, Norway

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

Karl Otto ELLEFSEN

Rector in Oslo School of Architecture, Oslo, Norway

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

Alberto CLEMENTI and Mosè RICCI

University di Chieti-Pescara, Italy

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* alimentering 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 re-composed. 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, architectonical 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 Gabrijelcic, 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 newssheet, 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.

Chapter 6

Emerging Challenges for the Research and Innovation in Architecture

Research and innovation are two of the keywords of the contemporary debate on architectural education. We tried to record the research engagement of our schools and we are presently trying to map the innovation around Europe. It is high time to anticipate a more coherent research strategy for our schools. The improvement of our research record can be achieved only after a coherent strategy, grounded upon a set of competences for the profile of the contemporary researcher in architecture. How can we assure those competences? Through which structures of the system and of content of studies? How the collaboration between us can improve our research activities. Which kind of initiatives our Network should take in order to support the architectural research production in Europe?

Introductory Synthesis by

Chris Younès, Ecole d'Architecture de Clermont-Ferrand, France

Presentation of the Innovative Education Program of Grands Ateliers de l'Isle d'Abeau, France, by

Myriam Olivier, Director of the Grands Ateliers

Chaired by

Constantin Spiridonidis, Thessaloniki, Greece

Paradoxes des Challenges de la Formation en Architecture

Chris YOUNES*

Ecole d'Architecture de Clermont-Ferrand,
France

Merci pour cette invitation à participer à la réflexion menée dans le réseau européen des directeurs des écoles d'architecture autour de la formation en architecture dans l'espace européen. Mais la tâche est difficile. Lors d'une première participation, il y a quelques années, à Hania, en tant que chargée de la formation et de la recherche à l'école d'architecture de Clermont-Ferrand, j'avais apprécié les débats ouverts et fructueux qui s'étaient déroulés. A la lecture des trois ouvrages qui relatent les conférences et les discussions du réseau, j'ai retrouvé cette volonté de construire un espace d'échanges dans le respect des cultures et des sensibilités de chacun, ce qui est le levain d'une coopération comme de la formation.

Je ne me risquerais pas à synthétiser les informations et les points de vue exprimés, étant donné leur large spectre. Je propose plutôt le regard transversal que ces travaux m'ont suggéré en mettant en évidence sept challenges, souvent paradoxaux, qui peuvent être dégagés dans les stratégies d'adaptation au changement présentées suite à la déclaration de Bologne.

Le challenge de la diversité et du commun

Un large consensus se dégage autour d'une posture à la fois pragmatique et

Paradoxes of the Challenges of Education in Architecture

Chris YOUNES

School of Architecture, Clermont-Ferrand,
France

Thank you for this invitation to participate in this difficult reflexion carried out within the European Network of Heads of Schools of Architecture about studies in architecture in the European Higher Education Area. Few years ago, I had the chance to come to Hania as a research and study coordinator of Clermont-Ferrand school of architecture and had appreciated the open and profitable debates which took place. While reading the three reports of the conferences and the discussions of the network, I found the existing will to build an exchange area while respecting different cultures and the sensitivities of each person, I would not go far and summarize the information and the expressed points of view, given their broad spectrum. Rather then, I will propose a transversal point of view that felt from these discussions by highlighting seven paradoxical challenges, which can be released in the strategies of "adaptation to the changes" presented following the Bologna process.

Challenge of the diversity and common basis

A broad consensus emerges around a pragmatic and responsible attitude to wel-

responsable pour accueillir un monde en devenir sans renoncer à l'orienter. L'importance accordée à la reconnaissance des diversités comme bien commun est un leitmotiv. Ainsi que l'expression de la volonté de préserver ces diversités tout en établissant des liens entre elles si l'on veut permettre la circulation des étudiants, des enseignants, de la connaissance. A contrario, est exprimé à plusieurs reprises, chaque année, le parti de se prévenir contre la standardisation, la normalisation, la simplification, l'enfermement dans un système clos, la réduction du nombre d'années d'études.

La formulation selon laquelle la différence serait la base commune, un bien commun précieux, est particulièrement significative de ce positionnement. Mais la diversité pourrait se transformer en une multiplicité cacophonique néfaste. Le mythe de Babel nous rappelle à quel point la construction de la maison des hommes est difficile car elle est toujours menacée d'incompréhensions mutuelles et de dispersion. En conséquence, l'organisation de la mobilité physique et mentale par un minimum de dispositifs communs lui étant favorables est identifiée. Le découpage de l'enseignement en semestres et en modules ainsi que le système de validation commun des ECTS sont largement plébiscités même si leur mise en pratique s'avère difficile. Mais s'il s'agit bien d'organiser une offre de formation qui laisse des marges de manœuvre aux étudiants dans la gestion de leur cursus, cela ne signifie pas pourtant de les laisser faire librement leur marché, ce qui accentuerait l'émiettement de la formation ainsi que la compétition sauvage, allant à l'encontre des objectifs visés.

Le challenge de l'uni et multi-versité

Deux modèles de référence sont sous-jacents aux évolutions et révolutions de l'U-

come a becoming world without giving up directing it. The importance attached to the recognition of diversities as common good is a leitmotiv. As well as the expression of the will to preserve these diversities while establishing links between them to allow the exchange of students, teachers, and knowledge. Each year, on the contrary, is expressed on several occasions, the party to avoid the standardization, the normalization, the simplification, and also the reduction of the numbers of years of studies below 5 years.

The expression: "the differences are the common base" is particularly significant of this positioning. But diversity could be transformed into a harmful harsh multiplicity. The myth of Babel recalls us to which point the construction of the house of the men is difficult because it is always threatened with mutual incomprehension and dispersion.

Consequently, the organization of physical and mental mobility by a minimum of favourable common rules is identified. The division of teaching in semesters and modules as well as the common system of validation of the European credits (ECTS) is desired even if their practical application proves to be difficult. It is about organizing an educational proposal which offers a manoeuvre room to the students in the management of their studies. However, that does not mean to let them do whatever they want, which would accentuate the break-up of the education as well as a fierce competition, which would go against the targeted aims.

Challenge of the uni and multiversity

Two models of reference influence the evolutions and revolutions of the University. On

niversité. D'une part, le modèle de la connaissance utile, de la professionnalisation, d'autre part celui de la longue et double tradition des humanités et de la science. Les débats reflètent l'oscillation entre une formation générale de portée intellectuelle et morale et une formation spécialisée. Par le terme de "multiversité", selon une des formulations de Kerr en 1963, alors président de Berkeley et leader d'une nouvelle conception de l'université américaine, il était souligné que l'université ne pouvait plus prétendre à l'unité du savoir mais qu'elle devait privilégier l'ouverture sur la cité et sur les spécialisations professionnalisantes. Dans la formation en architecture, cette tendance l'emporte sans que soit annulée l'importance des humanités, pour transmettre les trésors de la culture universelle et pour favoriser un esprit critique et une distance réflexive dans un champ de formation qui ne peut ignorer ses facettes esthétiques et éthiques.

Le challenge d'inventer des articulations entre théories et pratiques, entre écoles et mondes professionnels

Un autre fort point de convergences est celui des articulations à inventer entre des domaines qui se sont souvent repoussés. L'accumulation de savoirs ou le repli disciplinaire, pas plus que le repli sur l'atelier, ne semblent plus aller de soi. À l'ère de l'autonomie des universités, il s'agit au contraire d'élaborer de nouvelles perspectives pédagogiques en articulant le penser et le faire, le savoir et l'action, les lieux de formation et les mondes professionnels, sans confondre leurs caractéristiques propres et sans établir des relations de domination ou de soumission entre ces différents secteurs. Les débats mettent en évidence que ces articulations conduisent à dépasser le modèle d'application de la théorie à la pratique ou leur simple juxtaposition, voire leur accumulation. Cela ne signifie pas non plus une indifférenciation

one hand, the model of useful knowledge and the professionalism. On the other hand, that of the long tradition of the humanities and science. The debates reflect the oscillation between a general education of intellectual and ethic level and a specialized education. The "multiversity" according to Kerr (1963), then president of Berkeley and leader of a new vision of the American university, means that the university could not claim any more the unit of the knowledge but it should take into account the society and the professional specializations. In architectural education, this tendency carries it out, without cancelling the importance of the general culture to transmit and to support a critical spirit and a reflexive distance in a field of studies which cannot be unaware of its aesthetic and ethical facets.

Challenge to invent articulations between theories and practices, schools and professional world

Another strong point of convergences is that of the articulations to be invented between fields which often were opposed. The accumulation of knowledge or the education by studio is not sufficient. On the contrary, it is a question of elaborating new teaching scenarios, which articulate the thinking and the doing, the knowledge and the action, the places of studies and the professional world, without confusing their proper characteristics nor to establish dominant or submissive relations between these various sectors. The debates highlight that these articulations result in exceeding the model of application of the theory to the practice or their simple juxtaposition, to link theory and practice. For that, the boundaries between the disciplines, the schools of higher education and the society are to be recon-

des démarches mais plutôt des fécondations croisées. Pour cela, les frontières entre les disciplines ainsi qu'entre les écoles d'enseignement supérieur et la société sont à réenvisager afin de traiter la complexité, élargir la compréhension du monde et la compétence à le transformer. De grands chercheurs et penseurs comme Deleuze, Michel Serres, Edgar Morin, ont mis avec d'autres l'accent sur l'importance des systèmes de relais, des interceptions, des croisements pour renforcer un nouvel esprit scientifique.

Le challenge de ménager l'enseignement du projet comme interface critique

Dans le contexte de changement, voire de mutations, contribuant à une décomposition et recomposition des métiers et professions en architecture comme des dispositifs d'enseignement, la formation par le projet constitue une spécificité rare, fragile et variée, que les formations soient plutôt académique versus professionnelle, ou plutôt artistique versus technique. Le projet constitue une ressource et une interface critique en ce que différents plans y sont impliqués, mêlant et entrelaçant l'implicite et l'explicite, les données objectives et la subjectivité, la distanciation et l'engagement, le rationnel et le sensible, les échelles problématiques et dimensionnelles (S. M. L .XL).

Le challenge de relier l'enseignement et la recherche

Le chantier des doctorats en architecture est une ressource précieuse à développer, et ce d'autant plus que toutes les écoles d'architecture ont à affronter un vaste programme, celui d'établir des agencements soutenables (sustainable) entre nature et culture, à une période de possibilités technologiques croissantes de transformations des milieux, mais également caractérisée

sidered in order to treat the complexity, to widen the comprehension of the world and the competency to transform it. Famous researchers and thinkers like Deleuze, Michel Serres, Edgar Morin and many others, stressed the importance of the communication systems, the interceptions, and the links in the reinforcement of a new scientific spirit.

The challenge to take care of the teaching of the design like a critical interface for education and research

In the context of change, even of mutations contributing to the decomposition and re-composition of the professions in architecture like structures of education, the studies by design constitute a rare, a fragile and a varied specificity, if the studies are rather academic versus professional, or artistic versus technical (typology of the schools by Orbashi and Worthington). The project constitutes a resource and a critical interface in what various plans are implied mixing and connecting the implicit and the explicit, the objective data and the subjectivity, the distance and the engagement, the rational and the sensitive, the problematic and the dimensional scales (S. M. L .XL).

The challenge to connect teaching and research

The field of the doctorates in architecture has to be developed, especially as all the schools of architecture have to face a huge field which is to establish sustainable connexions between nature and culture at a moment where the increasing technological have the possibilities of transforming the ecosystem taking into consideration the fragility of mankind.

par la forte prise de conscience de la fragilité du vivant.

Le challenge de la difficile évaluation

La question de l'évaluation a été le terrain de l'expression de divergences. Elle est perçue soit comme une menace de contrôle, de sanction, de normalisation, soit comme une ressource formative précieuse puisqu'elle contribue à réguler la formation en termes d'explicitation et d'ajustements des objectifs, des méthodes, en termes de communication des résultats obtenus comme en termes de délibérations entre les différents acteurs. Cette controverse n'est pas propre à l'architecture. Elle est bien connue des chercheurs qui travaillent dans le champ de l'évaluation alors même que cette pratique qui s'est déjà largement développée dans le monde anglo-saxon s'étend et s'impose dans la construction de l'espace européen de la connaissance comme une orientation incontournable en ce qu'elle permet de rendre compte, de rendre des comptes et d'optimiser la qualité. L'évaluation remet en cause une certaine tradition de liberté académique et une certaine conception de l'enseignement qui situait l'apprentissage du côté de l'apprenant seulement et imposait comme règle de qualité de l'enseignement celle de l'adéquation des énoncés à l'état des connaissances.

Le challenge du questionnement informé

La diversité des modes d'enseignement, comme la difficulté à en identifier avec précision les contenus, désigne la difficulté des écoles à déterminer une vision du futur. Au moment où les enjeux de l'urbain, du paysage, de l'environnement, sont devenus indissociables de la chose architecturale, une voie commune nous est indiquée : la responsabilité de maintenir l'enseignement de l'architecture moins comme réponse

The challenge of the difficult evaluation

The question of the evaluation was in particular a subject of divergences. It is perceived either like a threat (control, sanction, standardization), either as an important information resource since it contributes to regulate the education in term of explanation and adjustments of the objectives, the methods, and the communications of the results. This controversy is not specific to architecture. It is well-known to researchers who work in the field of the evaluation, while at the same time this practice is already largely developed in the Anglo-Saxon world and is imposed as an essential tool in different organisations and countries since it makes it possible to report and to optimize the quality. The evaluation is a challenge which calls into question a certain tradition of academic freedom and a certain concept of the teaching which located learning on the side of only students or of the adequation of contents with knowledge.

The Challenge of the responsibility and of being open minded

The diversity of the methods of education as well as the difficulty to identify their contents mean the difficulty to have a vision for the future at the time when the urban, the landscape, and the environment became a part of architecture. A common way is indicated to us: the responsibility to maintain the education of architecture less as an answer but as an open question

que comme questionnement ouvert autour de ce que Hannah Arendt appelle la construction d'un monde commun à hériter et à renouveler, car l'architecture comme l'humain échappent à toute définition définitive.

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Discussion

Chaired by

Constantin Spiridonidis, Thessaloniki, Greece

Hilde Heynen, Leuven, Belgium

Thank you very much for this contribution, I think it was a very good outline of the difficult challenges that arise in this respect. I just wanted to share with you the memory of a conference we had a couple of months ago in Brussels, called the Unthinkable Doctorate, at which Dr. Younes also gave a much appreciated paper, where a lot of these same issues came up, and it seems that the main underlying question there, as I remember, was the clash between traditions: on the one hand, the tradition of doing design and on the other, the tradition in the universities of doing research according to an academic system and set of expectations. Maybe one of the big differences there is what you called the difference between "implicit expectations" and "explicit expectations" in the assessment of research. These expectations tend to be very explicit, whereas in design assessment you can less easily list the kind of things that a good design should have. So we talked about this; of course we did not reach any kind of resolution – one doesn't really expect to from such conferences – but I do think that this difference in tradition and intellectual background between designer cultures and research cultures is something that we need to address. I for one am totally convinced that these differences can be bridged, or can at least be made to interact with one another in a very productive way, and that this is what we should aim at if we are – and I assume that this is the case in many countries – under pressure to do more research, to have more academically recognizable output in terms of publications (this is what I see happening in Belgium and the UK and Holland). I do think that it is worthwhile to put an effort into that direction and to try to make this interaction work on a much higher level, much better level than is the case at present.

Jean Paul Scalabre, Architects' Council of Europe (ACE)

I would like to say that I completely agree with the way Chris approached the problem, but just to have some commentary I think we must have a historical review of the end of the political utopias and the end of the architectural utopias. The modern movement was a way to have a common world among architects, and I think that we lost it more than thirty years ago. It is quite difficult to construct something when the wall of Berlin is destroyed, you know? One way of thinking together is to focus on our common heritage, our common European heritage, our common culture, and the necessity of inventing a future. It is not, as I see it, possible to invent the future if we are not conscious of the heritage that we have to share and to maintain. And there are some tools available. I can see two that are characteristic of the European culture: one is the use of reason – a non-scientific but rationalist attitude which is very different from the scientific one – and the other is the invention and development of democracy. I think that in all truth these are the only two tools available. So that is the fact. It is not the moment for new utopias, it is

the moment to make a point.

Per Olaf Fjeld, Oslo, Norway

Thank you for a very interesting construct, Dr. Younes. I would like to read your paper very carefully. There was something you said related to the challenge over mentality that I find very provocative and challenging in many different ways. You spoke of the challenge over mentality between the educator and the profession: I take that to mean that they will never meet. In other words, the profession goes on, the profession wants to go on and it has its own responsibility in doing that. Education goes on in the way that it is supposed to go on; in other words, educators have responsibilities of their own. The challenge, then, is exactly what you said: the challenge of making this leap and creating a dialogue between the two. In other words, it is not necessarily within the idea of the organization, but it is within the mentality of the way we read it, and then the instruments we are able to produce to make that reading come through. I find that very interesting.

Arza Churchman, Haifa, Israel

I want to make two comments. First, I think that we have to recognize that the tradition in research has changed. There is a new language in terms of what research is and how one conducts it and whether there is such a thing as an objective position or an objective researcher; and I think that a new approach in research makes it easier to do research in architecture, because then you do not have to twist elements of architecture into something that it does not really fit into, which is an advantage.

I want to argue as an outsider against the fact that there is a common culture in Europe. I think this is not true. There is a male culture and female culture, there is a rich culture and a poor culture and there is a Catholic and Protestant and Jewish and Moslem and whatever other culture you want, so there are certain things that are common to at least some of those groups, I guess, but I think that it is very important to recognize that this diversity exists and that you cannot deny it or pretend it is not there, just as you cannot pretend that the world is an objective world, or that it can be translated or reduced to the one simple variable that we are studying. It does not work that way. I come from the field of environmental psychology and one of the things that we emphasize is the contextual nature of everything, and that contextual nature is or should be very much part of architectural practice. And that is part of the link between architectural practice and the kinds of research that one can do now.

Dimitris Kotsakis, Thessaloniki, Greece

Those are some very interesting questions, very interesting indeed; but we cannot discuss them. It is not because we do not have the paper; it is because it is difficult. We have been trying to discuss this sort of thing for so many years now that it is very difficult to discuss it in abstract terms. We need to put it in a concrete context. If I go into all these things, like diversity and a common basis, what concrete discussion can we have on that? Your second point was what is the university? Not uni-multi-versity, but what is the university. Theory and practice, or in Greek praxis, teaching and research, evaluation. The only thing I can comment on is the last question, the question of responsibility, which

you ended by saying 'not answers, but questions' or "open questions". That was the first thing said eight years ago, the very first thing. I have a good memory.

Chris Younes, Clermont-Ferrand, France

That is why the network has such a long life.

Dimitris Kotsakis, Thessaloniki, Greece

True. But now I must remember my response to it. My response was that we cannot work with only two words – questions and answers; we need three words, and the first is the Greek word *aporia*. Maybe you are not familiar with the word. It means a desire to do something without questions and without answers. Pure desire, that's *aporia*. Then comes the question, which is a control, a bad thing, a strong thing, because it controls the desire and it directs the answer. And then we have the answer, which takes us back to the desire, but not the desire to do things, rather a desire in doing things. So my answer to your question would be: Not questions, but *aporias* and answers.

Stefano Musso, Genova, Italy

It is difficult to make any other observation about what Chris said, because the ladies that preceded me said a lot of interesting things, as did Dimitri. Chris answered you in a very perceptive way. This is why we are here again, because the play, the game between questions and answers can never be stopped. It is the nature of man. You recall the philosophical basis, the fundamental question "What man he is? What is man?". And if I may make a suggestion, I think that all future discussions could be helped if, in every activity we do not separate thinking and doing, because it is not possible to separate these things. I think it is no longer possible to use a dialectical or oppositional model of thinking. There is another model, which is the cognitive one. This involves putting together a game between question, answer, feedback, control and evaluation; but that means that this attitude must also be present in the teaching. We cannot separate them. I am a teacher, but I am also a professional and a researcher. Why are we always asking the same questions: what is research, what is teaching, where does one stop and others begin? Perhaps, we have to do different things at different times. But this means that we are obliged, that it is our responsibility, to explain to our students that it is not possible to divide the world in this way.

There are these three questions, how, what and why; but the fundamental one is why, namely, for what reasons we make or think something and for what goals we are making or thinking or designing. I think that in accepting differences – because differences exist, they are the salt of life – we must also accept that we will never be able to stop these kinds of discussions. It is against human nature. We have to accept, but we also have to point out the reasons for which we meet, we think, we make, we draw, we explain, we make calculations, and what our objectives are. Only in this way can we put all our activities– thinking, doing – to the best use, starting from the convention. I mean in my opinion it is not possible or at least it is not useful to separate thinking from doing. You do not do anything without thinking and you can think anything without doing, or at least it is not useful to think without hoping that it will be able to change the quality of life. Phi-

losophy is not thinking for thinking; the great lesson of the ancient Greeks is that love of knowledge is not for knowledge itself, it is essential for the development and advancement of human nature; and architecture is the only activity, the only part of human life that no one can escape, for everyone is obliged in some way to interact with architecture.

I think that after eight years of discussion, this attempt to use a critical review of the three last volumes of the proceedings could be a useful new starting point for our future discussions if we accept that there are some problems that cannot be solved in a homogeneous way. We have to accept that some schools will continue to use the five-year curriculum without dividing it into 3+2 or whatever, but that is not important. The important thing is to have good information, good communication, to know each other better; but the really important thing is that in the future we can show how we follow these intentions through, explaining to ourselves, to our students and to our colleagues why we do what we do, for what reasons and for what goals, using the various materials that architecture commonly uses, in the different scales – because scale is very important, of course.

Constantin Spiridonidis, Thessaloniki, Greece

To remain open is certainly one of the most interesting pre-suppositions for a school of architecture and generally for an educational system. I have to ask myself if this openness is always present in our research, our activities and our innovation plans. I have a feeling that schools of architecture are resistant to the new things that happen around them. Innovation normally appears outside the schools, architectural avant-garde is produced mainly outside the schools, and the new ideas that come from outside do not very often find fruitful ground in which to develop. In our schools we are not very friendly towards new things and often, we can follow very strong polemics to keep the doors and the windows closed in order not to let these 'strange' things that happen outside appear inside the school. When we are speaking about research and innovation, what exactly are we talking about? I mean, how is it related to what happens in society regarding architecture? I am afraid that our schools only accept innovations that are already legitimised within the social and cultural framework of the environment where the school exists, that is to say, when innovations have already lost their innovative character. There is an issue of how we will become or how we will remain open. So I would just like to have Chris's answer to that if possible, and I am sure that she has a lot to say.

Chris Younes, Clermont-Ferrand, France

It is difficult for me to express myself in English, but I will try to go ahead with this, because I think that now we are really in a new world. It was said that a lot of people are turning to the philosophy of the enlightenment because the eighteenth century was the age of reason, and there is a kind of will, a desire, a belief that reason can be create an alliance between men. Even if it is not easy to be reasonable. But that is not all they have given us: their thinking was directed towards solving problems, towards inventing solutions to problems like ours today with the ecosystems, the scale of the planet. We need science, but we also need to advance science through practice. So that is why I think it is important, and why in my lab we work a lot with books but we try to work with projects too, because we can invent in practice as we do in the lab. And what is a pity is that we do

not have enough exchanges to generate new problematics; and as you said there is, I think, a new tradition, a new way in research, in all kinds of research, which is the belief that it is possible and necessary to mix objectivity with subjectivity. This is a big change. I think – but I am in love with schools of architecture, because I am in love with architecture – that in schools of architecture, in spite of all our defects and our passions, etc., we have invented a kind of education that is very interesting because it is very open. When you go into another kind of education it is more limited, you do not have so many subjects. You have to be in technical science, basic science, aesthetics, ethics, and so on, and it is impossible to avoid any of them. I think it is very interesting to see, in our tradition, how we can use this tradition to be able to exist in the big market, because of course we have to be competitive.

One big problem is that we are too isolated. That is why, when I came five years ago to Hania, when I was in charge of research and teaching in my school, I found the will and the desire to listen, and not to fight first; and I find the same thing again today, and I think that that is very, very important. It is not exactly the same in the schools, perhaps. They are not so open-minded as we try to be in this kind of network, and while I know it is not easy I think that it is absolutely necessary. And what we have to do is to try, together, to find some way of interconnecting. We need to have discussion; this isolation needs to be lost. And maybe the time has come, because the big discussion today is that of university versus multiversity. There is a big gap between these two positions, and the schools of architecture may help in this economy of challenges, in this economy of knowledge, because it is impossible to separate them. Any school that tries to separate them will not succeed because we need to link them. C'est que nous avons hérité de la tradition de l'enseignement de la architecture.

Julian Keppl, Bratislava, Slovakia

I must say that I very much liked what Chris spoke about invention, and I am now going to explain why by means of one question: in architecture we know of many inventions, but do you know of any discovery?

Dimitris Kotsakis, Thessaloniki, Greece

Just a short answer to the question of what is research. I know two answers; the answer of the merchant and the answer of the creator (I do not say the producer). The merchant says: "research is the production of innovation. I can throw it in the market and make money out of it". The creator says: "research is the quest for truth and there are three kinds of truth, theoretical truth, moral truth and aesthetic truth".

Richard Foquè, Antwerp, Belgium

Maybe I will add another definition of research. I was listening very carefully, Chris, and I think that it has everything to do with this field of tension between nature and culture. And I am reminded of a little essay by Herbert Simon, in which he calls design "the science of the artificial". It is a very nice definition, and reflecting on that you could say that the traditional scientific approach to research tries to answer the question of how the world is, whereas design, I think, tries to answer the question of how the world could be.

And I think that might also be another way to approach what research could be.

Dimitris Kotsakis, Thessaloniki, Greece

The point is that there is always a mistake about truth. The truth is not finding what there is, otherwise there would be no moral or aesthetic truth, it would be only theoretical truth, yes?

Chris Younes, Clermont-Ferrand, France

Yes.

Constantine Spiridonidis, Thessaloniki, Greece

Thank you very much for this discussion. Thank you very much for this interesting intervention, Chris, and again, thank you very much for accepting to undertake this difficult task.

The idea of closing this session with the presentation of Les Grands Ateliers was based on the fact that this laboratory, if one could call it that, is a unique place in Europe, where innovative teaching takes place with regard to construction materials and new tendencies in this domain. Les Grands Ateliers l'Isle d'Abeau is a member of our network, a member of our association, and Myriam Olivier, who is the director of Les Grands Ateliers, will present to you the programme of their innovative teaching approaches. Please welcome Myriam Olivier.

Les Grands Ateliers: un espace original et unique de formation et de recherche pour la construction

Myriam OLIVIER

Directrice Les Grands Ateliers, l'Isle d'Abeau, FRANCE

Résumé

Les Grands Ateliers, Groupement d'Intérêt Public, ouverts depuis 2002, ont été créés par 11 établissements d'enseignement supérieur et un centre de recherche, le CSTB*. Ils sont soutenus par le Ministère de la Culture et de la Communication et par le Ministère de l'Équipement, ainsi que par les industriels fabricants de matériaux de construction (bétons et ciments, matières plastiques, aciers, bois). Ils ont pour mission de réunir en un même lieu des artistes, des architectes et des ingénieurs, pour, ensemble, concevoir, élaborer et réaliser des modules de formation, des travaux de recherche et des opérations de diffusion de leurs savoirs et savoir-faire dans le domaine des matériaux, des objets d'art et de design, de la construction et de la qualité des espaces habités.

Le concept des Grands Ateliers est basé sur deux approches complémentaires :

- l'une physique, représentée par le bâtiment situé à Villefontaine, où se réalisent les activités enrichies grâce à la mixité culturelle (architecture, art, ingénierie, design, industrie) et où la manipulation des matières et des structures de taille réelle permettent la confrontation du comportement physique avec les théories et les modèles numériques,
- l'autre plus virtuelle, dans laquelle les Grands Ateliers sont le centre d'un réseau permettant la mise en relation des mondes professionnels et de l'enseignement, et ceux des artistes, des architectes et des ingénieurs, pour la réalisation de projets transversaux.

Grâce à leurs installations uniques, les Grands Ateliers ont permis, depuis leur ouverture, à plus de 6000 étudiants, français et européens, de découvrir le monde de la construction au travers d'approches pédagogiques inédites dans les écoles. D'autres activités, ouvertes également aux professionnels et au grand public, y sont organisées, telles que les semaines thématiques ('les bétons' en 2003, 'le bois et les fibres végétales' en 2004, et 'les aciers' en préparation), des conférences internationales, des expérimentations de structures, des réalisations d'œuvres d'artistes et des ateliers d'été. Toutes ces activités ont pour but de faire mieux se connaître entre eux les acteurs de la construction, et de mieux appréhender les savoirs nécessaires à chacune de ces cultures constructives.

L'ensemble des activités qui se déroulent aux Grands Ateliers se retrouve sur le site Internet www.lesgrandsateliers.fr.

Concept des Grands Ateliers

Les Grands Ateliers, ont pour mission de réunir en un même lieu des artistes, des architectes et des ingénieurs, pour, ensemble, concevoir, élaborer et réaliser des modules de formation, des travaux de recherche et des opérations de diffusion de leurs savoirs et savoir-faire dans le domaine des matériaux, de la construction, de l'art et du design, et de la qualité des espaces habités.

Les Grands Ateliers sont ouverts aux étudiants et aux enseignants et chercheurs des écoles d'art, d'architecture et d'ingénieurs de la France entière, ainsi qu'aux professionnels de la construction.

Les activités et les recherches que les étudiants issus des écoles membres mènent sur place participent à leur formation technique, théorique ou professionnelle et s'inscrivent de manière complémentaire à leurs activités pédagogiques régulières.

Les Grands Ateliers sont un Groupement d'Intérêt Public créé par 11 établissements d'enseignement supérieur et 1 centre de recherche, et soutenus par les Ministères de la Culture et de l'Équipement, ainsi que par les industriels fabricants de matériaux de construction.

Le concept des Grands Ateliers est basé sur deux approches complémentaires:

- L'une physique, représentée par le bâtiment situé à Villefontaine, dans lequel s'organisent des activités dont la plus-value est apportée par la mixité culturelle (architecture, art, ingénierie, design, industrie) et par la manipulation de matières et des structures qui abordent la création technologique et à la qualité de la transmission des connaissances. Les activités de formation et de recherche qui se déroulent aux Grands Ateliers sont conçues avec et par les enseignants et cher-

Concept of Les Grands Ateliers

Les Grands Ateliers have a mission of gathering, in a same space, artists, architects and engineers in order to, together, conceive, elaborate and realise training modules, research works and diffusion operations of their knowledge and know-how in the field of materials, construction, art and design, and quality of inhabited spaces.

Les Grands Ateliers are open to students and professors and to searchers in art, architecture and engineer schools from the entire France and from Europe, and to the construction professionals.

The training and research activities students from member schools lead on place participate in their technical, theoretical or professional curricula and fit in a complementary way into their regular educational activities.

Les Grands Ateliers, a 'Groupement d'Intérêt Public', were created by 11 establishments of higher education and one research centre, and are supported par the Ministry of Culture and Equipment as well as by the industrial manufacturers of construction materials.

The concept of Les Grands Ateliers is based on two complementary approaches:

- One, physical, represented by its building in Villefontaine, inside which are organised activities whose profit is brought by cultural mixity (architecture, art, engineering, design, industry), by manipulation of materials and structures which tackle technological creation, and by the quality of transmission of knowledge. The teachers and searchers of the member schools conceive the research and training activities that take place in Les Grands, in close collaboration with the industrials of

cheurs des écoles membres, en collaboration étroite avec les industriels du milieu des matériaux de construction. Elles s'inscrivent en complémentarité et en prolongement des programmes pédagogiques des écoles partenaires. Les Grands Ateliers permettent la conception d'autres modes d'enseignement comme l'expérimentation en grande taille, la formation des formateurs et des professionnels, la recherche à but technologique et la formation par la recherche, les travaux et séminaires en groupes inter-écoles, ou encore les travaux personnels d'étudiants encadrés par des personnalités extérieures à leurs écoles.

- L'autre plus virtuelle, dans laquelle les Grands Ateliers sont le « hub » d'un réseau permettant la mise en relation des mondes professionnels et de celui de l'enseignement, et des cultures des artistes, des architectes et des ingénieurs. Les Grands Ateliers sont un espace de rencontre et de connexion entre ces univers où il devient possible de construire des partenariats pour élaborer des projets sur des thématiques de société qui nécessitent des approches interculturelles. Les Grands Ateliers permettent et suscitent l'échange des idées afin d'avoir une meilleure connaissance et compréhension des autres intervenants de la construction.

L'innovation pédagogique et technologique est placée au cœur des réflexions des Grands Ateliers ce qui permet

- d'élaborer de nouvelles activités de formation et de projets aux interfaces des cultures constructives, souvent trop étanches, de l'art, de l'architecture et de l'ingénierie, enrichissant ainsi les propres cursus de formation et de recherche des écoles,

construction material circles. They fit in complement and extension of the educational programs of the partner schools. Les Grands Ateliers allow the conception of other modes of teaching such as experimentation in large size, training for trainers, research with a technological goal and formation by research, works and seminars in inter-school groups, or personal works of students trained by personalities that are external to their schools.

- The second, more virtual, where Les Grands Ateliers are the 'hub' of a network allowing the creation of relations between the professionals and educational worlds and the artists', the architects' and the engineers' cultures. Les Grands Ateliers are a meeting and connection point where it becomes possible to construct partnerships in order to elaborate project based on social thematic that need intercultural approaches. Les Grands Ateliers allow and arouse the exchange of ideas in order to have better knowledge and comprehension of the other contributors in construction.

Technical and educational innovation is placed in the centre of reflections of Les Grands Ateliers, which allows:

- To elaborate new training activities and projects at the interface of the constructive cultures, most of the time too withdrawn, of art, architecture and engineering, enriching by this way the proper educational and research degree courses of schools,

- de donner à leurs étudiants la possibilité de manipuler les matériaux et de construire des objets et structures en vraie grandeur et de grande taille, ce qui était peu fréquent dans la plupart des établissements faute de moyens en espaces approprié et en matériels,
 - de développer des actions pluridisciplinaires de recherche, réunissant chercheurs et professionnels autour de thématiques transversales,
 - d'organiser des rencontres et des échanges de vues entre milieux de l'enseignement et le monde professionnel en vue de monter des projets interdisciplinaires, sources d'innovation et de création en construction.
- To give to their students the opportunity to manipulate materials and manufacture full scale and large size objects and structures, what was rare in most of the establishments due to the lack of means in appropriate spaces and materials,
 - To develop multi-disciplinary research actions, gathering searchers and professionals around cross thematic,
 - To organise meetings and exchanges of views between the circles of teaching and the professional world, in order to build up inter-disciplinary projects, sources of innovation and creation in construction.

L'ensemble des activités qui se déroulent aux Grands Ateliers est présenté sur le site Internet www.lesgrandsateliers.fr

The programme of activities held in Les Grands Ateliers is given on the website www.lesgrandsateliers.fr

Un Large Eventail D'activités

Ouverts depuis janvier 2002, les Grands Ateliers ont déjà accueilli près de 6000 étudiants de l'enseignement supérieur et plus de 3000 visiteurs dans les manifestations de CSTI.

Les activités de formation réalisées aux Grands Ateliers sont conçues spécialement pour apporter aux étudiants des savoirs difficilement transmissibles dans leurs établissements. De plus, les Grands Ateliers permettent le montage d'actions originales de recherche et d'innovation, et de diffusion de savoirs, grâce à leurs moyens et capacités.

La formation supérieure

Les Grands Ateliers donne la possibilité aux établissements d'enseignement supérieur de concevoir et réaliser des formations selon une pédagogie totalement inno-

A Large Range of Activities

Open since January 2002, Les Grands Ateliers have already welcomed nearly 6000 students of superior education and more than 3000 visitors during the exhibition on scientific culture.

The training activities realised at Les Grands Ateliers are specially conceived to bring the students knowledge transmitted with difficulty in their establishments. Moreover, due to their means and capacities, Les Grands Ateliers allow the assembly of original actions of research and innovation, as well as of diffusion of knowledge.

Higher education

Les Grands Ateliers give the possibility to higher education institutions to conceive and realise trainings according to a very new education, linking project to con-

vante, reliant le projet à la construction, et mêlant l'acte de conception intellectualisé à celui de la création par la manipulation.

Ces unités d'enseignement sont totalement intégrés aux programmes des établissements, et couvrent des thématiques très variées, par exemple :

- matériaux, matière et performances, matériaux et usage, matériaux art et architecture,
- structures, systèmes constructifs, technologies de construction,
- espace habité : perception, organisations spatiales, qualité esthétique et sensible, ambiances sonores, lumineuses, confort,

Des actions de formation permanente sont régulièrement organisées en direction des enseignants et des professionnels, notamment sur la connaissance des matériaux (bois, nouveaux bétons, matières plastiques) et sur les risques majeurs naturels (initiées sur les problèmes sismiques).



Figure 1. construction en blocs de pierre Ecole d'Architecture de Paris-Malaquais

Les activités de formation montées aux Grands Ateliers peuvent en général être classées dans l'un des 3 grands domaines suivants:

struction, and combining the intellectualised conception act to the one of creation by manipulation.

These teaching units are totally integrated to the establishments' programs, and cover varied thematic, for example:

- Materials, substance and performance, materials and use, materials art and architecture,
- Structures, constructive system, construction technologies,
- Inhabited spaces: perception, spatial organisations, sensitive and aesthetic quality, resonant and lighting atmospheres, comfort.

Continuing education is regularly organised for the teachers and professionals, notably on the knowledge of materials (wood, new concretes, plastics) and on major natural risks (initiated on seismic problems).



Figure 2. « Mobilier urbain en béton » Ecole d'Architecture de Clermont-Ferrand et INSA de Lyon

The educational activities implemented in the Grands Ateliers can, in general, be classified in one of the following domains:

- matériaux et comportement des structures,
- construction et espaces,
- ambiances.

Elles permettent de développer plusieurs types de savoirs et de compétences chez les étudiants:

- savoirs professionnels, tels que l'appréhension de l'espace, le passage du modèle au réel, la compréhension des phénomènes physiques liés à la matière, capacités d'usage des objets et espaces créés,
- formation personnelle : préfiguration du chantier, découverte des autres cultures,
- innovation pédagogique : expérimentation, délocalisation, capitalisation, valorisation, ...

Les activités d'expérimentation et de création/innovation

Les Grands Ateliers peuvent accueillir des étudiants ou des artistes en « résidence » pour leur permettre d'expérimenter et d'approfondir un thème de travail dans le cadre de stages, de mémoire de 2e ou 3e cycle, d'un diplôme de fin d'études, d'une formation de 3ème cycle ou d'une thèse. Les Grands Ateliers peuvent également mettre en réseau et constituer des équipes inter-disciplinaires entre artistes, étudiants et chercheurs, industriels et professionnels, dans le cadre de recherches, d'expérimentations, de réalisation d'œuvres artistiques ou de prototypes.

Les Grands Ateliers donnent aussi l'occasion aux concepteurs de concrétiser et de tester la faisabilité de projets tels que ceux qui sont conçus pour des concours ou avant réalisation sur site réel. Des prototypes ont ainsi été réalisés avec les lauréats des concours Art Nomade et de Mini-

- material and behaviour of structures,
- building and space,
- ambiances.

They make it possible to develop different type of knowledge and competencies for the students:

- professional knowledge, such as understanding and grasp of space, going from the model to reality, understanding physical phenomena linked to matter, usability of objects and spaces,
- personal education : experimentation of site work, discovery of different cultures,
- pedagogical innovation : experimentation, relocation, recording, value adding, ...

Activities of experimentation and creation/innovation

Les Grands Ateliers can welcome students or artists in 'residence' to give them the possibility of experimenting and deepening a work theme within the scopes of stages, second or third year reports, end of study diplomas, PhD formations, or thesis. Les Grands Ateliers can also create networks and inter-disciplinary teams between artists, students and researchers, industrials and professionals, in order to conduct research actions, experimentations or realisation of artistic works or prototypes.

Les Grands Ateliers give also the chance to conceive and test the realisation of projects as those that are thought of for competitions or before realising them on real sites. Prototypes have been realised this way with the prize-winners of the competitions Art Nomade and Minimaousse, or with architecture agency (cardboard frame and smelting works for

maousse, ou avec des ateliers d'architecture (ossatures carton et fonderie pour l'architecte Shigueru Ban).



Figure 3. Construction d'un prototype de toiture autoportante en Béton Fibré Ultra Hautes Performances

architect Shigueru Ban).



Figure 4 : « Mini maousse » réalisation des prototypes des lauréats du concours organisé avec l'I'IFA

Les ateliers d'été accueillent de nombreux étudiants qui collaborent à la réalisation d'expositions (semaine bétons 2003, semaine Bois et Fibres végétales 2004, semaine métaux 2005), ou qui participent à des Master Class comme celle de l'installation de l'artiste (Aki Kuroda, Biennale d'Art contemporain de Lyon 2005).

Summer workshops welcome numerous students who collaborate on the realization of expositions (week Concrete 2003, week Wood and vegetal Fibres 2004, week Metals 2005), or who participate to some Master Class such as the installation of artists (Aki Kuroda, contemporary Art Biennale of Lyon 2005).

Les actions de valorisation et diffusion

Les Grands Ateliers, espace unique d'innovation pédagogique et technologique, mettent en place les outils et les moyens de capitalisation et de diffusion de ces savoirs et expériences réalisées sur son site. Ces actions prennent des formes multiples et sont complémentaires, notamment:

- le projet GA-média, en service en septembre 2005, et lancé avec l'aide de la région Rhône-Alpes, a pour but de mettre à disposition par internet à l'ensemble de la communauté enseignante, des données d'origines et de format divers à partir d'un même moteur de recherche, www.ga-media.org

Valorisation and diffusion

Les Grands Ateliers, sole space of educational and technological innovation, set up the tools and means of building up and diffusing its knowledge and experience realised on its site. These actions take various forms and are complementary, notably:

- The GA-media project, into service in September 2005, and launched with the help of the Rhone-Alpes region, which has the goal of putting at disposal on internet to the whole of the teaching community data of various origin and format from a sole browser, www.ga-media.org

- l'accompagnement pédagogique des activités innovantes de formation,
 - la publication de livres et l'édition de cahiers au service de l'enseignement,
 - l'organisation de séminaires, rencontres, colloques internationaux,
 - l'organisation de manifestations et d'évènements : semaines thématiques qui déclinent expositions, ateliers, conférences, visites (Grains d'Isère, semaines « le matériau dans tous ses états » - bétons, bois et fibres végétales, métaux), installations d'artistes, ...
- The educational accompaniment of innovating activities of formation,
 - The publishing of books and the edition of documents in the service of teaching,
 - The organisation of seminars, meetings, international conferences,
 - The organisation of manifestations and events: thematic weeks composed of expositions, workshops, conferences, visits (Grains d'Isère, weeks 'materials in all states' – concretes, woods and vegetal fibers, metals), installation of artists, ...



Figure 5. Exposition sur « les bétons »



Figure 6 : Découverte de la construction en terre

Richard Foquère, Antwerp, Belgium

How do you run it financially?

Myriam Olivier, Lyons, France

The building itself was built by the French Government and the Rhone-Alpes Region, and now we are sort of independent, which means that the people who come pay for the use of the place and the materials. We also have some places for students who want to stay for a few days; just a ten minute walk away are rooms for the students and the professors, and schools or industrial groups who want to come rent a place. This is just a written agreement we have between the two institutions. It could be for one day or one week, and it could be for half the place. Usually I prefer to rent half the place, so that I can have different groups working at the same time, because it is so interesting to have them meet and talk together. If you rent half the space it would cost, with the studio and the workshop and the machines and everything, something like 3000_ per week, which is not extraordinary. Imagine trying to rent just a room like this one for a week. And we organise everything and buy in advance the material you need, and we can arrange contacts for you with other professors, other schools, industrial people and so on.

I forgot to tell you exactly where it is. It is very easy to get there. It is twenty kilometres east of Lyons, and very close to the TGV station from the Lyons-St.Exupery Airport. We can accommodate up to sixty students.

Appendix

The EAAE President's Farewell Address

James HORAN

This year EAAE celebrates 30 years since its formation. Looking around the room this morning at the 8th meeting of the Heads of Schools in Chania I get a sense of both stability and vitality in our association. This year's meeting of the Heads of Schools, to a great extent, deals with reflection on the work we have been doing to clearly establish the platform on which we stand, thus allowing us to prepare the appropriate strategy and make the correct decisions about the future.

Therefore, in this my final address as your President I feel that it is appropriate to identify for you what the Council of EAAE have been doing during the two years of my Presidency but more particularly during the last year since our meeting in Chania in 2004.

The Council has taken a professional approach to the way it has done its business and carried out its work. Numerous Policy Documents have been prepared to assist in clear decision making processes, and to provide the necessary information on the reasons behind Council decisions for those who will come after. The meetings of Council have been carefully recorded, and a rigorous method of communication between the office of the Secretariat in Leuven in Belgium and the office of the President in Dublin has helped in the smooth running of the work of EAAE. This would not have been possible without the dedicated support of the Secretaries in both of these areas. The Council and I owe a deep debt of gratitude to Lou Schol in Leuven and Patricia O'Callaghan in Dublin.

No association can function unless it is funded. The financial structures of EAAE are therefore critical to its activities. In particular, it is essential to find and identify the funding necessary for its various projects. A decision was made to raise the Membership fee, a decision not taken lightly, the Council being aware of the financial constraints which affect many Schools. However, I am happy to report that the increase in membership fee has not resulted in the loss of a single Member School and has been partly responsible for placing the EAAE on a sounder on-going financial footing.

The preparation of the annual budget, the tracking of finances and the general task of keeping the house in order has been the responsibility of our Treasurer, Herman Neuckermans. Herman, as you know, Past-President of EAAE, has dedicated an enormous amount of time over many years to the work of the Association and today we owe him our thanks and gratitude.

Irrespective of how carefully the work is planned, or how diligently it is financially managed, an Association such as EAAE can only function if it can fully engage in communication with its members and to the larger world outside. The various types and methods of communication within EAAE have been central to its activities. Our communication network consists of many different strands.

The News Sheet is probably the single most important communication instrument that the Association possesses. It has grown from a single folded page to a substantial publication. Not only has it grown in size, but also in content. The quality of the articles and

in particular the quality of the interviews with prominent Architects have identified the News Sheet as serious publication carried out with rigour and diligence. This year it has been further enhanced by a new design giving it a new look appropriate to its time. The raising of the News Sheet to this new level has been the work of Anne Elisabeth Toft who has brought professionalism and academic rigour to her work. For this we owe her our extreme gratitude and further extend that gratitude to Peter Kjaer and the School of Architecture at Aarhus who has provided continuous support for her activities.

If the News Sheet is the printed arm of the EAAE then the Website is the electronic one. Since joining the Council in 2004, Ramon Sastre of Universitat Politècnica de Catalunya Barcelona has taken responsibility for redesigning and redeveloping the EAAE's website. You will have seen in Herman Neuckerman's presentation describing the 30 years of EAAE that the new images of the website are indeed impressive. In conjunction with the web master in Leuven, Ramon is now beginning the task to up-load all this information and arrange for the new website to go live. The new website will allow those who access it to not only obtain the information from EAAE's database but it will provide links to the websites of individual School Members. For all this work Ramon we thank you.

The parallel document to the website is the hard copy of the EAAE's Guide to the Schools of Architecture of Europe. Two editions of this guide have already been prepared by Leen Van Duin of the Technical University of Delft. The third edition is currently in preparation. This document has been of exceptional value for both Schools and the students within them, particularly those embarking on Exchanges under the Erasmus and Socrates programmes. It is intended that the third edition of the Guide will further enhance and reinforce the relationship between the electronic and the printed documents of EAAE.

From the point of view of the Heads of Schools, the most important strand of communication and contact is epitomised by this meeting here in Chania. This is the eighth time that the Heads of Schools of Europe have come together. This year however, has been more significant than usual because the meeting of the Heads of Schools has been preceded by a workshop for Teachers of Architecture and by a workshop for Students of Architecture. These three events occurring in immediate succession here in Chania clearly demonstrate that EAAE is operating at all levels within Architectural Education and that the Thematic Networks which underpin these meetings have been one of the great successes of the Association. Constantin Spiridonidis and Maria Voyatazaki have been central to this initiative. Dinos and Maria have probably dedicated more time and energy to the work of EAAE than all its other members put together. They have been tireless in preparing the work of the Thematic Networks, the various workshops located across Europe and ensuring that the endeavours of these workshops are duly published, becoming yet a further strand of the communication process.

In the midst of all of this work they have managed to share the human side of their existence with us in a manner that I believe is quite unique. Two years ago, we participated in their wedding, here in Chania, and this year we are being privileged by being invited to join them in celebrating the Christening of their son Alexandros. It is difficult to express the level of thanks that is really due to Dinos and Maria and describe the very special place they hold in the Association and in our hearts.

The EAAE also wishes to express its thanks to the Aristotle University of Thessaloniki who have provided continuous support for the work of Dinos and Maria.

themes and new ideas explored, and the boundaries of knowledge and experience expanded. Each year the Association endeavours to host and support a number of Conferences. This year we have had Conferences in Leuven, Delft and Antwerp, and a fourth is planned for Bucharest in October. The Rise of the Heterotopia Conference in Leuven Belgium was organised by Hilde Heynen. Hilde also attended the joint EAAE/ARCC Conference on Research in Dublin and provided a critique on this event. The Conference on the European City was organised jointly by TU Delft, the School of Leen Van Duin, and the Henry Van de Velde Institute in Antwerp, the School of Richard Foque. The Proceedings of this Conference have already been published. In October of this year a Conference entitled Diversity will be hosted by the School of Emil Popescu in Bucharest.

By now the EAAE has developed a tradition of awarding prizes for architectural endeavours at both student and teacher level. The EAAE/AG2R Student Competition to design a living environment for the elderly was organised by Emil Popescu of the University of Architecture in Bucharest. This competition attracted entries from all over Europe and this year has seen the publication of the competition winners. Emil is now in the process of negotiating a further student prize with the support of the Lafarge Cement Group.

We thank Mac for his work in this area and wish him success in his continuing endeavours.

Perhaps the most significant prize in the history of EAAE has been the prize for New Writings in Architectural Education. Sponsored by Velux in Denmark and organised by Ebbe Harder at the School of Architecture at the Royal Danish Academy of Fine Arts in Copenhagen. This prize has already produced two significant publications, prepared at the highest level. The EAAE is happy to announce that the prize for New Writings in Architectural Education will continue this year and we look forward with anticipation in the sure knowledge that the entries will be of a similar high standard and calibre to those two competitions that have already taken place. Ebbe Harder's work in association with this project has been exemplary and he can be truly identified as a great ambassador of the European Association for Architectural Education.

As referred to in the beginning, the eighth meeting of the Heads of European Schools of Architecture is exemplified by the level of maturity that has been reached within the Association. The discussions at this event have been among some of the best I have heard. The meeting has covered attitudes from academic to practical, from philosophical to politician, from pragmatic to professional and if the wonderful piano playing of Jordi Querol could somehow be contrasted with the attempts at Greek dancing in the Kriti Bar, from the sublime to the ridiculous. We thank Jordi Querol for his superb recital.

At our meeting here in Chania last year you gave approval for our Association to engage in discussions around topics of mutual benefit with the ACE, the Architects' Council of Europe. Earlier this year two separate meetings between the representatives of EAAE and the ACE took place. These meetings were both beneficial and crucial. They have served to highlight the value that such a relationship can bring. The ACE represents more than 450,000 Architects across more than 45 different professional institutes, all of whom have an interest in the quality of both architectural education and the quality of the practising professional architect. This is particularly relevant at the moment as the new Qualifications Directive is poised to replace the former Sectoral Directives including the Directive on the Education and Training of Architects.

The Section of the European Commission dealing with the new Professional Directives

expressed great interest in the Joint Working Party being established between the ACE and the EAAE. At the second meeting in Brussels, the Head of the Division and two representatives of the Commission attended the meeting with a view to explaining the significance and protocol surrounding the new professional directive. As a result of these meetings both the representatives of the ACE and the representatives of EAAE believe that there is a strong possibility that the Joint Working Party will be drawn upon by the Commission to provide the necessary expert advice when it comes to matters dealing with recognition of Schools and Professional qualifications.

In their presentations, both Jean Paul Scalabre, the ACE's representative on matters educational, and Adrian Joyce, the Senior Advisor to the ACE in Brussels, have articulately expressed the value they place upon this Joint Working Party and the relationship between the two associations. We have every intention of continuing the work of the Joint Working Party and making the expertise possessed by its members available to the European Commission when such expertise is required.

On the completion of my Presidency it is my intention to continue to act as a member of the Joint Working Party and to take the relationship between the ACE and the EAAE as a personal project.

Moving into a new year and under the guidance of a new President the Council of EAAE have asked Stefano Musso of the School of Architecture at Genoa in Italy to become a Project Leader. Stefano who has a wide range of interests in the field of architectural education has agreed to develop an outlook towards the role of architectural conservation within EAAE, and to develop a greater link with the Italian Schools. We welcome Stefano into this position.

During these past two years it has been a specific pleasure for me to serve you as your President and to work at the task of assisting the EAAE to grow and become evermore significant in the European arena. There is one Member of Council however, without whose help and support, my task of President would have been much more difficult. I refer of course to our Vice-President, shortly to become your new President, Per Olaf Fjeld of the School of Architecture at Oslo in Norway. As a member of Council and as Vice-President of EAAE Per Olaf has brought a sense of stability and wisdom to our meetings. His depth of consideration and his clarity of thought have played a central role in the maturing process to which I have referred. He is a teacher of great experience. I am reminded of the time, this time last year, when I served on a Jury with Glenn Murcutt, John Pawson, Craig Dykers, Ahmet Gulgonen and Ole Bauman for the Student Competition, 'The Light of Tomorrow'. Having examined 287 student entries and at the end of three days having unanimously arrived at the winner, you can imagine my satisfaction and delight to discover that the winning student had come from the University of Oslo and was taught by Per Olaf Fjeld.

There is no doubt in my mind that moving onto the next level the leadership of the Association will be in good hands and I invite you now to clap your hands in support of your new President, Per Olaf Fjeld.

I thank you all for your enormous support during the past two years.

James F HORAN DipArch FRIAI MIDI RIBA Arb

The EAAE President's Inaugural Address

Per Olaf FJELD

Dear EAAE members and friends,

Deep inside each of us there is a kind of internal value system that periodically calls for our attention. It is an energy that emerges from a strange mixture of sentiment, conviction and impressions that we can neither dismiss nor sidestep for easier and more direct thoughts.

I believe that architecture is an important anchoring factor in the constant but ever-changing relationship between person and space. But ... like everything else, architecture has to be nurtured and recharged for this interaction to occur. At the moment, I can think of no other place than schools of architecture where this search and discussion remain a focal point. It is with this in mind that I take on the position you have given me. I am moved and honored to serve as your new president.

This position includes a great deal of responsibility, but it is also a strong challenge when considering how to further strengthen this organization and guide it forward in a direction that will both in the long and short run strengthen architectural education and thereby the quality of architecture. The EAAE can be seen as a large laboratory, a mental testing ground for all our activities, a platform for discussing the relationship between culture and architecture, architecture and place, and how schools and the profession have an important task in promoting these discussions.

We must continue to create a forum for important topics; we must create a forum that is willing to anticipate future pressures, transformations, and situations that will affect European schools and their curricula. We need to address impending changes in architectural education, but we also need room for reflection. We have to understand the student.

To be part of creatively and productively running an organization like the EAAE is first and foremost teamwork. Everyone here is part of this team, and we invite you to participate.

In this sense, I would like to express my appreciation to the council and the various project leaders that I have been so lucky to work with for several years. It has been a fruitful cooperation and at the same time a challenging and interesting one.

Thank you, Anne Elisabeth Toft, for your steadfast pursuance of a certain type of perfection. You have kept me focused until a job was truly finished.

Maria Voyatzaki, for your wisdom, concern and effortless inclusion of all.

Ramon Sastre, for your tendency to not say much, but the capacity for getting things done.

Hilde Heynen, for raising the quality of our discussions.

And the three presidents under whom I have served in different ways:

Constantin Spiridonidis, for your great energy and ability to make things happen. To me, you will always be synonymous with Chania and the meeting, but also a symbol of the EAAE in its effort to learn and to move forward.

Herman Neuckermans, for your great ability to be passionate about even the smallest things and for your unique interest in almost everything that goes on.

And then James Horan, thank you for your gift of bringing people together in a way that makes everyone feel welcome. You seem to position us, to charm us into doing our best. It has been a pleasure to work with you as your vice-president.

Thank you for all our interesting discussions, your constant optimism, and professional and human depth. We have had fun, and we have worked as a team.

And then:

A special thanks to Ebbe Harder who introduced me to this organization. Your efforts and work have been one of the pillars of the EAAE, but it is your friendship that I value the most.

And to the whole Assembly: in what way are we to continue our work? Where do we go from here?

I see the EAAE operating within a set of 4 concerns.

They all overlap each other in different ways and together they generate a sequence.

Communication

The EAAE has a strong social value in that it is a platform for communication. The EAAE as an association should aspire to a collaborative energy. The importance of initiatives taken to bring us together should never be underestimated. Yes, schools are different, regions are different, but what brings us together is a belief in the importance of architectural education in the development of our physical world. Our differences are an asset, and we must use this resource, not waste it. The EAAE should play a strong social role in a coherent effort to bring groups of interests together. The thematic network serves as a great example of this.

Political Role

Institutions of architectural education need a voice that filters through to the political decisionmaking institutions of Europe. We must be able to communicate needs and changes within education to the political arena and not least bring back adequate information about which programs and issues politicians are considering. As of now, it is only the EAAE that has the position and organizational ability to make this connection. No one else can promote architectural education.

The EAAE cannot make decisions since we have no influence in that sense. We should never have the right to interfere with the decision making of the individual school, but together we can represent a voice: we can reach a consensus on some issues. To be invisible is to take a big chance. We need to be more demonstrative in our relationship to the political and professional institutions of Europe, and our collaboration with the Architects' Council of Europe will be of great importance in the years ahead. This new

team and its agenda will require our attention and our concentration, as we have to set an agenda and a direction.

An Initiator Role

The EAAE as a promoter of many different activities will hopefully inspire both educators and students to play a more active role within the EAAE. The association has already quite a strong production unit with many different activities. The publications resulting from these activities are impressive and reach far beyond the participants. I think it is a great future challenge to transform this information that is now our base into other challenges: to provoke new questions. In other words, we should avoid repeating the base content, but rather use it as a new starting platform for work in new areas that will sharpen our institutional role, both on an individual level and towards the profession and the society as a whole.

The challenge is now to activate this material base and thus generate another type of discussion, a content geared towards invention and inspiration, and at the same time continue to express a social and cultural consciousness.

The initiator role of the EAAE should not be an isolated activity. Our material, the events and their results should not remain within the institution, but rather the opposite. We need to constantly test our work and take the chance that it will survive and make a difference.

Critical Role

We need to play an actively constructive and critical role in both the professional side of architecture and in those political institutions that directly affect education policies. We need to play an accessible and beneficial role inside our own schools. We have a social responsibility to encourage our educators and students.

I feel that the EAAE needs to project its potential and existing content with greater clarity. We need to engage far more European schools in our activities; thus the EAAE will truly become an association of European schools. We should give the archive of all the work done over the years more attention and communicate to our members the importance of this material. It should be visible at many different levels, and in this sense the Web will be very important, and it needs to be accessible.

How are we able to further challenge our diversity and common base?

How can we challenge our attitudes so that we are able to tackle the changes ahead of us?

It is not just a question of program to find the perfect system, but more a question of our capacity to read the world.

We have to have a vision or some sort of passion. In order for us to reach this level of intensity, however, we must also appreciate even the smallest discoveries and inventions in our architectural discourse. Some of them are already embedded in our new base.

Do we have the capacity to see them?

How clearly are we able to read our everyday situation and our relationship with others,

appreciate things, but in the end are the containers of great importance?

This is more and more a challenge of concentration;

a creative act.

Thank you.

Access to the Practice of the Profession

EAAE General Assembly - September 6th 2005

Presentation by Adrian JOYCE, Senior Adviser of the ACE

Co-operation between the ACE and the EAAE

Introduction

The Architects' Council of Europe (ACE) is particularly pleased to be invited to address, for the first time, the General Assembly of the EAAE. The ACE President, Marie-Hélène Lucas, sends her apologies and best wishes to you all and she trusts that this will be a fruitful General Assembly. It is therefore on her behalf and on behalf of the Executive Board of the ACE that I will address you now on the topic of the Joint Working Party between our two Organisations which is the result of the desire of our Organisations to work more closely together.

The ACE

The ACE is the European Representative Organisation for the architectural profession. It was founded in 1990 and it currently has 42 Member Organisations drawn from all 25 EU Member States, most Accession States, Norway and Switzerland. These Organisations represent both the Professional and Regulatory Bodies in all these countries. As such the ACE represents, through its Member Organisations, about 450,000 practicing architects across Europe. One of the main objectives of the ACE is to lobby EU Institutions and to track legislation and policy developments within the EU. In so doing it constantly strives to ensure that the interest and the specific point of view of the architectural profession is taken into account.

The Structure of the ACE

The main decision making body of the ACE is its General Assembly consisting of the nominated Delegates of its Member Organisations. The Executive Board of the ACE oversees the co-ordination of policy documents and the work of the Work Groups of the ACE. It consists of 11 Members, 6 of whom are elected, including the President, and 5 of whom sit on the Board by rotation. The Work Groups of the ACE, in which the main policy development work occurs, is organised in 3 thematic pillars as follows:

- Access to the Practice of Architecture
- Practice of Architecture and Trade in Architectural Services
- The Role of Architecture in Society

At the present time, there are 10 Work Groups active within the 3 thematic pillars although the Work Groups evolve depending on emerging issues. The whole working structure of

the ACE is supported by a small permanent Secretariat based in Brussels where a significant number of the meetings of the ACE take place.

Strategic Objectives of the ACE

The ACE has recently undergone a re-structuring with the adoption of new Statutes. It has, at the same time, adopted strategic objectives around which it will focus its work in the next 3 to 5 year period. These strategic objectives are:

- to ensure that Architecture and Architectural Policies become fully integrated at EU and national levels having regard to all its economic, social and culture dimensions.
- To obtain that Architects are recognised as key players in the shaping of a quality living environment and that adequate account is taken of the specific features of architectural services.
- To facilitate the enshrinement of the cultural and social role of architecture in the minds of policy makers and citizens starting at the earliest level of education.

From these strategic objectives flow the main aims of the ACE. At the present time, these aims can be summarised as being the promotion of architecture in Europe, the maintenance and sustainability of the quality of architecture, the fostering of the cross border co-operation in the profession, the promotion of quality in architectural practice and working to ensure high standards of qualifications throughout life. These strategic objectives and aims form the framework within which the ACE identifies its priorities for action.

Current priorities of the ACE

Given that the ACE keeps a close watch on the emerging legislative and policy proposals of the EU Institutions, it will be no surprise that the main current priorities track those current developments that are occurring at EU level. Principal among these are the following:

- The proposed Directive on Services in the Internal market which will significantly impact on the way architectural services are provided in the EU.
- Competition issues which are being pursued by the EU Commission at the present time and which include issues such as advertising, forms of practice, access to professions and the whole question of remuneration for service providers.
- The implementation of the recently adopted Directive on the Recognition of Professional Qualifications which will see the abolition of the Architects Directive.
- The thematic strategy on the Urban Environment and the Role of Architects in ensuring that the EU moves towards more sustainable and integrated approaches to the Urban Environment in which the majority of EU citizens live, work and play.
- The struggle to ensure that Architecture becomes a cornerstone of all policy developments in society as quality architecture has a fundamental mental impact on well being.
- The implementation of the new Public Procurement rules for public works to ensure

that architectural aspects are properly taken into account.

- Trade in Services and Globalisation principally expressed through the ACE work in profession to profession mutual recognition agreements with trading partners outside of the EU.

The ACE keeps its priorities under constant review and, from time to time, revises them in line with the evolution of legislation and policy within the European Union.

External relations with the ACE

Naturally the ACE does not act alone in achieving its aims and priorities. In fact, it maintains a vibrant and intensive relationship with many external bodies so as to maintain the presence of architects and their interest in the minds of a diverse group of organisations. Principal among these external relations are the relationships with the main EU Institutions being the EU Commission, the European Parliament, the European Economic and Social Affairs Committee, the European Council and the Committee of the Regions. The ACE also stimulates its own Membership to ensure that the message of the ACE reaches national, regional and local administrations. Within the architectural profession itself the ACE maintains relationships with the International Union of Architects (UIA) and with professional bodies in many parts of the world through its bilateral mutual recognition negotiations.

Within the European Construction Sector the ACE is active in the European Construction Forum, the European Council for Construction Research Development and Innovation and the European Construction Technology Platform. In this way the concerns of the profession are expressed to all the main actors in the Construction Sector. The ACE also maintains relations with other sister organisations in the design professions such as the European Council for Town Planning, The European Council for Interior Architects and the European Federation of Landscape Architects. Finally the ACE maintains contact with the other liberal professions organisations so as to compare notes on matters of common interest that affect the liberal professions in a specific way.

Current evolutions at EU level

In setting the context for the collaboration between the ACE and the EAAE it is important to underline that current EU actions are putting significant pressure on the profession. Not only is the architectural profession and the other liberal professions losing credibility in the eyes of consumers, the European Commission is bringing pressure to bear by emphasising the regulatory rules which it feels have an impact on Competition Policy. Linked to these commercial pressures are the current changes in the way in which professional qualifications are recognised and the way in which the European higher education area is involving through the Bologna Process. Underlying several of these evolutions is the commercial and official pressure to ensure that the delivery of Architectural Services is carried out in a demonstrated high quality way. At the same time a number of important EU Directives are in the process of being implemented by the Member States. To mention just a view there is the new Directives on Public Procurement Procedures, the Directive on the Energy Performance of buildings, the Directive on Strategic Environmental

Impact Assessment and the ongoing implementation of the Construction Products Directive. In this complex field it is clear that close cooperation between the two main sections of the Architectural profession is a desirable matter.

Common concerns

The evolution outline above has prompted the ACE and the EAAE to define matters of common concern to the two organisations. These are the implementation of the Qualifications Directive, Access to the profession with emphasis on the training period after third level qualification, lifelong learning through the development of coherent and appropriate continuing professional development programmes, the Bologna Process and the Profile of the Architect in a changing market. It is the view of the ACE that these matters have a significant bearing on the reputation and the future of the profession and that if they are not addressed that reputation will be put at risk.

The ACE has carried out a study on the professional profile of the Architect which highlighted a trend towards specialisation at the present time. This study demonstrated that new functions are emerging which will have an impact on the education needs of the profession. Finally with the abolition of the Architects Directive the Advisory Committee on which both the Schools and the Profession are well represented will no longer exist in its current composition. There is therefore a need for the Profession and the Schools to establish a credible ongoing co-operation so that the EU Commission can turn to our organisations on all matters relating the implementation of the Qualifications Directive.

Joint Working Party

Following on earlier less fruitful contacts between our two organisations the ACE Assembly and the EAAE Assembly both approved the establishment of a Joint Working Party in 2004. The organisations agreed that the Joint Working Party would address the common concerns outline above and seek to find meaningful ways by which co-operation between the two organisations would appropriately address these concerns. There have been two meetings of the Joint Working Party to date which I will return to in a few moments.

The ACE has established a panel of 8 nominees for the Membership of the Joint Working Party. There are :

- Marie-Hélène Lucas, Luxembourg, President of the ACE 2005,
- Jean-Paul Scalabre, France, Chairman of the Work Group on Education,
- Bente Beedholm, Denmark,
- Dalibor Borak, the Czech Republic,
- Fabian Llisteri Monfort, Spain,
- Lucciano Lazzari, Italy,
- Constantin Kleffel, Germany,
- Adrian Joyce, Senior Adviser of the ACE, in Brussels.

For its part, the EAAE has nominated a panel of 6 members who are :

- James Horan, from Ireland, EAAE President in 2004/2005,
- Per Olaf Fjeld, EAAE Vice-President, EAAE President in 2006/2007,
- Herman Neuckermans, Belgium,
- Peter Kjaer , Denmark,
- Maria Voyatzaki, Greece
- Ramon Sastre, Spain

From these panels it is expected that 4 persons from each organisation would attend each meeting. In the case of the ACE, the General Assembly of the ACE has approved the panel appointed by the Executive Board and as such this panel is therefore mandated to represent the point of view of the profession in the work of the Joint Working Party and in any actions that derive from that work. It is important, in the eyes of the ACE, that the EAAE panel is similarly mandated by its General Assembly.

Meetings to date

The first meeting of the Joint Working Parting took place on the 5th of March 2005. There were 8 participants and the meeting had an exploratory character in which each organisation, its objectives, aims and priorities were presented. The discussions that took place led to an agreement on the issues of common concerns as outlined above and to a decision that there was a need to priorities action on the forth coming Qualifications Directive.

In line with this agreement a second meeting was organised for the 20th of May 2005 at which 3 Commission Officials were present and which addressed the single issue of the Qualifications Directive. At the second meeting the Joint Working Party in junction with the Commission Officials mapped the potential future implementation of the Directive with emphasis on the probable consultation process in which Representatives of the schools and the profession will be involved. The notes of that meeting are available to be viewed on the website of the ACE and the diagram of the consultation procedure agreed at that meeting is reproduced below. This second meeting of the Joint Working Party significantly helped it to achieve the kind of credibility that the ACE believes the Joint Working Party must have into the future. That is to say the Commission have agreed that the Joint Working Party could become the appropriate body from which experts can be nominated in order to take part in Advisory work in the event of future Qualifications being challenged by Member States. The meeting therefore underlined the importance of the work of the Joint Working Party and the need to ensure that those present in the panels for the Joint Working Party are properly mandated by their respective organisations.

The future

The third meeting of the Joint Working Party is scheduled for the 28th of October 2005 by which time it is expected that the Qualifications Directive will have come into force.

The ACE is firmly committed to the Joint Working Party and the agreed agenda that has been worked out in the first two meetings. The ACE believes that the Joint Working Party should become a permanent co-operation between the ACE and the EAAE particularly given that it will provide experts to the Commission to represent the profession and the schools in the work of implementing the provisions of the new Qualifications Directive.

Thank you for your attention.

I invite you to follow the work of the Joint Working Party and to make comments or suggestions as to how the co-operation between our two organisations can be secured and guaranteed into the future.

Thank you.

**Directive 2005/36/EC of the European Parliament
and of the Council
of 7 September 2005
on the recognition of professional qualifications**

30.9.2005 Official Journal of the European Union L 255/47

Section 8

Architect

Article 46

Training of architects

1. Training as an architect shall comprise a total of at least four years of full-time study or six years of study, at least three years of which on a full-time basis, at a university or comparable teaching institution. The training must lead to successful completion of a university-level examination.

That training, which must be of university level, and of which architecture is the principal component, must maintain a balance between theoretical and practical aspects of architectural training and guarantee the acquisition of the following knowledge and skills:

- (a) ability to create architectural designs that satisfy both aesthetic and technical requirements;
- (b) adequate knowledge of the history and theories of architecture and the related arts, technologies and human sciences;
- (c) knowledge of the fine arts as an influence on the quality of architectural design;
- (d) adequate knowledge of urban design, planning and the skills involved in the planning process;
- (e) understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale;
- (f) understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take account of social factors;
- (g) understanding of the methods of investigation and preparation of the brief for a design project;

- (h) understanding of the structural design, constructional and engineering problems associated with building design;
- (i) adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate;
- (j) the necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations;
- (k) adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.

2. The knowledge and skills listed in paragraph 1 may be amended in accordance with the procedure referred to in Article 58(2) with a view to adapting them to scientific and technical progress.

Such updates must not entail, for any Member State, any amendment of existing legislative principles relating to the structure of professions as regards training and the conditions of access by natural persons.

Article 47

Derogations from the conditions for the training of architects

1. By way of derogation from Article 46, the following shall also be recognised as satisfying Article 21: training existing as of 5 August 1985, provided by 'Fachhochschulen' in the Federal Republic of Germany over a period of three years, satisfying the requirements referred to in Article 46 and giving access to the activities referred to in Article 48 in that Member State under the professional title of 'architect', in so far as the training was followed by a four-year period of professional experience in the Federal Republic of Germany, as attested by a certificate issued by the professional association in whose roll the name of the architect wishing to benefit from the provisions of this Directive appears.

The professional association must first ascertain that the work performed by the architect concerned in the field of architecture represents convincing application of the full range of knowledge and skills listed in Article 46(1). That certificate shall be awarded in line with the same procedure as that applying to registration in the professional association's roll.

2. By way of derogation from Article 46, the following shall also be recognised as satisfying Article 21: training as part of social betterment schemes or part-time university studies which satisfies the requirements referred to in Article 46, as attested by an examination in architecture passed by a person who has been working for seven years or more in the field of architecture under the supervision of an architect or architectural bureau. The examination must be of university level and be equivalent to the final examination referred to in Article 46(1), first subparagraph.

*Article 48***Pursuit of the professional activities of architects**

1. For the purposes of this Directive, the professional activities of an architect are the activities regularly carried out under the professional title of 'architect'.

2. Nationals of a Member State who are authorised to use that title pursuant to a law which gives the competent authority of a Member State the power to award that title to Member States nationals who are especially distinguished by the quality of their work in the field of architecture shall be deemed to satisfy the conditions required for the pursuit of the activities of an architect, under the professional title of 'architect'. The architectural nature of the activities of the persons concerned shall be attested by a certificate awarded by their home Member State.

*Article 49***Acquired rights specific to architects**

1. Each Member State shall accept evidence of formal qualifications as an architect listed in Annex VI, point 6, awarded by the other Member States, and attesting a course of training which began no later than the reference academic year referred to in that Annex, even if they do not satisfy the minimum requirements laid down in Article 46, and shall, for the purposes of access to and pursuit of the professional activities of an architect, give such evidence the same effect on its territory as evidence of formal qualifications as an architect which it itself issues.

Under these circumstances, certificates issued by the competent authorities of the Federal Republic of Germany attesting that evidence of formal qualifications issued on or after 8 May 1945 by the competent authorities of the German Democratic Republic is equivalent to such evidence listed in that Annex, shall be recognised.

2. Without prejudice to paragraph 1, every Member State shall recognise the following evidence of formal qualifications and shall, for the purposes of access to and pursuit of the professional activities of an architect performed, give them the same effect on its territory as evidence of formal qualifications which it itself issues: certificates issued to nationals of Member States by the Member States which have enacted rules governing the access to and pursuit of the activities of an architect as of the following dates:

- (a) 1 January 1995 for Austria, Finland and Sweden;
- (b) 1 May 2004 for the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia;
- (c) 5 August 1987 for the other Member States.

The certificates referred to in paragraph 1 shall certify that the holder was authorised,

no later than the respective date, to use the professional title of architect, and that he has been effectively engaged, in the context of those rules, in the activities in question for at least three consecutive years during the five years preceding the award of the certificate.

The European Higher Education Area - Achieving the Goals

Communiqué of the Conference of
European Ministers Responsible for Higher Education,
Bergen, 19-20 May 2005

We, Ministers responsible for higher education in the participating countries of the Bologna Process, have met for a mid-term review and for setting goals and priorities towards 2010. At this conference, we have welcomed Armenia, Azerbaijan, Georgia, Moldova and Ukraine as new participating countries in the Bologna Process. We all share the common understanding of the principles, objectives and commitments of the Process as expressed in the Bologna Declaration and in the subsequent communiqués from the Ministerial Conferences in Prague and Berlin. We confirm our commitment to coordinating our policies through the Bologna Process to establish the European Higher Education Area (EHEA) by 2010, and we commit ourselves to assisting the new participating countries to implement the goals of the Process.

I. Partnership

We underline the central role of higher education institutions, their staff and students as partners in the Bologna Process. Their role in the implementation of the Process becomes all the more important now that the necessary legislative reforms are largely in place, and we encourage them to continue and intensify their efforts to establish the EHEA. We welcome the clear commitment of higher education institutions across Europe to the Process, and we recognise that time is needed to optimise the impact of structural change on curricula and thus to ensure the introduction of the innovative teaching and learning processes that Europe needs.

We welcome the support of organisations representing business and the social partners and look forward to intensified cooperation in reaching the goals of the Bologna Process. We further welcome the contributions of the international institutions and organisations that are partners to the Process.

II. Taking stock

We take note of the significant progress made towards our goals, as set out in the General Report 2003-2005 from the Follow-up Group, in EUA's *Trends IV* report, and in ESIB's report *Bologna with Student Eyes*.

At our meeting in Berlin, we asked the Follow-up Group for a mid-term stocktaking, focusing on three priorities – the degree system, quality assurance and the recognition of degrees and periods of study. From the stocktaking report we note that substantial

progress has been made in these three priority areas. It will be important to ensure that progress is consistent across all participating countries. We therefore see a need for greater sharing of expertise to build capacity at both institutional and governmental level.

The degree system

We note with satisfaction that the two-cycle degree system is being implemented on a large scale, with more than half of the students being enrolled in it in most countries. However, there are still some obstacles to access between cycles. Furthermore, there is a need for greater dialogue, involving Governments, institutions and social partners, to increase the employability of graduates with bachelor qualifications, including in appropriate posts within the public service.

We adopt the overarching framework for qualifications in the EHEA, comprising three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the first and second cycles. We commit ourselves to elaborating national frameworks for qualifications compatible with the overarching framework for qualifications in the EHEA by 2010, and to having started work on this by 2007. We ask the Follow-up Group to report on the implementation and further development of the overarching framework.

We underline the importance of ensuring complementarity between the overarching framework for the EHEA and the proposed broader framework for qualifications for life-long learning encompassing general education as well as vocational education and training as now being developed within the European Union as well as among participating countries. We ask the European Commission fully to consult all parties to the Bologna Process as work progresses.

Quality assurance

Almost all countries have made provision for a quality assurance system based on the criteria set out in the Berlin Communiqué and with a high degree of cooperation and networking. However, there is still progress to be made, in particular as regards student involvement and international cooperation. Furthermore, we urge higher education institutions to continue their efforts to enhance the quality of their activities through the systematic introduction of internal mechanisms and their direct correlation to external quality assurance.

We adopt the standards and guidelines for quality assurance in the European Higher Education Area as proposed by ENQA. We commit ourselves to introducing the proposed model for peer review of quality assurance agencies on a national basis, while respecting the commonly accepted guidelines and criteria. We welcome the principle of a European register of quality assurance agencies based on national review. We ask that the practicalities of implementation be further developed by ENQA in cooperation with EUA, EURASHE and ESIB with a report back to us through the Follow-up Group. We underline the importance of cooperation between nationally recognised agencies with a view to enhancing the mutual recognition of accreditation or quality assurance decisions.

Recognition of degrees and study periods

We note that 36 of the 45 participating countries have now ratified the Lisbon Recognition Convention. We urge those that have not already done so to ratify the Convention without delay. We commit ourselves to ensuring the full implementation of its principles, and to incorporating them in national legislation as appropriate. We call on all participating countries to address recognition problems identified by the ENIC/NARIC networks. We will draw up national action plans to improve the quality of the process associated with the recognition of foreign qualifications. These plans will form part of each country's national report for the next Ministerial Conference. We express support for the subsidiary texts to the Lisbon Recognition Convention and call upon all national authorities and other stakeholders to recognise joint degrees awarded in two or more countries in the EHEA.

We see the development of national and European frameworks for qualifications as an opportunity to further embed lifelong learning in higher education. We will work with higher education institutions and others to improve recognition of prior learning including, where possible, non-formal and informal learning for access to, and as elements in, higher education programmes.

III. Further challenges and priorities

Higher education and research

We underline the importance of higher education in further enhancing research and the importance of research in underpinning higher education for the economic and cultural development of our societies and for social cohesion. We note that the efforts to introduce structural change and improve the quality of teaching should not detract from the effort to strengthen research and innovation. We therefore emphasise the importance of research and research training in maintaining and improving the quality of and enhancing the competitiveness and attractiveness of the EHEA. With a view to achieving better results we recognise the need to improve the synergy between the higher education sector and other research sectors throughout our respective countries and between the EHEA and the European Research Area.

To achieve these objectives, doctoral level qualifications need to be fully aligned with the EHEA overarching framework for qualifications using the outcomes-based approach. The core component of doctoral training is the advancement of knowledge through original research. Considering the need for structured doctoral programmes and the need for transparent supervision and assessment, we note that the normal workload of the third cycle in most countries would correspond to 3-4 years full time. We urge universities to ensure that their doctoral programmes promote interdisciplinary training and the development of transferable skills, thus meeting the needs of the wider employment market. We need to achieve an overall increase in the numbers of doctoral candidates taking up research careers within the EHEA. We consider participants in third cycle programmes both as students and as early stage researchers. We charge the Bologna Follow-up Group with inviting the European University Association, together with other interested partners, to prepare a report under the responsibility of the Follow-up Group on the further development of the basic principles for doctoral programmes, to be presented to Ministers in 2007. Overregulation of doctoral programmes must be avoided.

The social dimension

The social dimension of the Bologna Process is a constituent part of the EHEA and a necessary condition for the attractiveness and competitiveness of the EHEA. We therefore renew our commitment to making quality higher education equally accessible to all, and stress the need for appropriate conditions for students so that they can complete their studies without obstacles related to their social and economic background. The social dimension includes measures taken by governments to help students, especially from socially disadvantaged groups, in financial and economic aspects and to provide them with guidance and counselling services with a view to widening access.

Mobility

We recognise that mobility of students and staff among all participating countries remains one of the key objectives of the Bologna Process. Aware of the many remaining challenges to be overcome, we reconfirm our commitment to facilitate the portability of grants and loans where appropriate through joint action, with a view to making mobility within the EHEA a reality. We shall intensify our efforts to lift obstacles to mobility by facilitating the delivery of visa and work permits and by encouraging participation in mobility programmes. We urge institutions and students to make full use of mobility programmes, advocating full recognition of study periods abroad within such programmes.

The attractiveness of the EHEA and cooperation with other parts of the world

The European Higher Education Area must be open and should be attractive to other parts of the world. Our contribution to achieving education for all should be based on the principle of sustainable development and be in accordance with the ongoing international work on developing guidelines for quality provision of cross-border higher education. We reiterate that in international academic cooperation, academic values should prevail.

We see the European Higher Education Area as a partner of higher education systems in other regions of the world, stimulating balanced student and staff exchange and cooperation between higher education institutions. We underline the importance of intercultural understanding and respect. We look forward to enhancing the understanding of the Bologna Process in other continents by sharing our experiences of reform processes with neighbouring regions. We stress the need for dialogue on issues of mutual interest. We see the need to identify partner regions and intensify the exchange of ideas and experiences with those regions. We ask the Follow-up Group to elaborate and agree on a strategy for the external dimension.

IV. Taking stock on progress for 2007

We charge the Follow-up Group with continuing and widening the stocktaking process and reporting in time for the next Ministerial Conference. We expect stocktaking to be based on the appropriate methodology and to continue in the fields of the degree system, quality assurance and recognition of degrees and study periods, and by 2007 we

will have largely completed the implementation of these three intermediate priorities.

In particular, we shall look for progress in:

- implementation of the standards and guidelines for quality assurance as proposed in the ENQA report;
- implementation of the national frameworks for qualifications;
- the awarding and recognition of joint degrees, including at the doctorate level;
- creating opportunities for flexible learning paths in higher education, including procedures for the recognition of prior learning.

We also charge the Follow-up Group with presenting comparable data on the mobility of staff and students as well as on the social and economic situation of students in participating countries as a basis for future stocktaking and reporting in time for the next Ministerial Conference. The future stocktaking will have to take into account the social dimension as defined above.

V. Preparing for 2010

Building on the achievements so far in the Bologna Process, we wish to establish a European Higher Education Area based on the principles of quality and transparency. We must cherish our rich heritage and cultural diversity in contributing to a knowledge-based society. We commit ourselves to upholding the principle of public responsibility for higher education in the context of complex modern societies. As higher education is situated at the crossroads of research, education and innovation, it is also the key to Europe's competitiveness. As we move closer to 2010, we undertake to ensure that higher education institutions enjoy the necessary autonomy to implement the agreed reforms, and we recognise the need for sustainable funding of institutions.

The European Higher Education Area is structured around three cycles, where each level has the function of preparing the student for the labour market, for further competence building and for active citizenship. The overarching framework for qualifications, the agreed set of European standards and guidelines for quality assurance and the recognition of degrees and periods of study are also key characteristics of the structure of the EHEA.

We endorse the follow-up structure set up in Berlin, with the inclusion of the Education International (EI) Pan-European Structure, the European Association for Quality Assurance in Higher Education (ENQA), and the Union of Industrial and Employers' Confederations of Europe (UNICE) as new consultative members of the Follow-up Group.

As the Bologna Process leads to the establishment of the EHEA, we have to consider the appropriate arrangements needed to support the continuing development beyond 2010, and we ask the Follow-up Group to explore these issues.

We will hold the next Ministerial Conference in London in 2007.

45 countries participate in the Bologna Process and are members of the Follow-up Group: Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium (Flemish Community and French Community), Bosnia

and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, the Holy See, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, Serbia and Montenegro, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, "the former Yugoslav Republic of Macedonia", Turkey, Ukraine and the United Kingdom. In addition, the European Commission is a voting member of the Follow-up Group.

The Council of Europe, the National Unions of Students in Europe (ESIB), the Education International (EI) Pan-European Structure, the European Association for Quality Assurance in Higher Education (ENQA), the European University Association (EUA), the European Association of Institutions in Higher Education (EURASHE), the European Centre for Higher Education (UNESCO-CEPES) and the Union of Industrial and Employers' Confederations of Europe (UNICE) are consultative members of the Follow-up Group.

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