

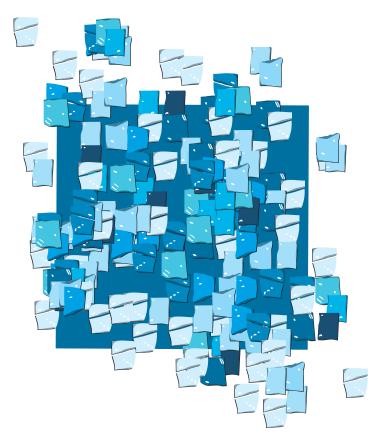
ENHSA European Network of Heads of Schools of Architecture



CMA Centre for Mediterranean Architecture

Transactions on Architectural Education no 13

Towards a Common European Higher Architectural Education Area



Editors Constantin Spiridonidis Maria Voyatzaki

Acknowledgements

We would like to take the opportunity to thank the Council and the staff of the Centre for Mediterranean Architecture for the organizational support and stamina they demonstrated at such a demanding task. More specifically, we would like to express our sincere thanks to CMA Art Director Dimitris Antonakakis, who has kept our moral high with his immense understanding and warmth throughout the event. Our gratitude should also be expressed for the Mayor of the City of Hania, Giorgos Tzanakakis, who was the infinite source of possibilities for the richness of the event.

In the organization of the programme of the event, Richard Foque, Head of Henry van de Velde Institute of Architectural Sciences, was a resourceful and inspirational partner, and with the endless energy and hard work of his colleague Koenraad Van Cleempoel from the same institution, both made an enormous contribution to the event. For that, we are deeply thankful.

We feel obliged to express our thanks to the Council of the EAAE that has trusted us to carry out this mission. Sincere thanks also go to the EAAE Secretary, Lu Scholl for all her help on the preparation for, and realisation of the event.

Our sincere thanks and gratitude are also expressed to the keynote speakers of the Meeting, Emeritus Professor Dimitris Fatouros, the architects Suzana and Dimitris Antokakis, and the architect Dan Hanganu, who honoured us with their presence and with their stimulating speeches invigorated the debates of the Meeting.

We would like to thank the participants who prepared and presented intriguing interventions, pertinent to the themes of the sessions. Many thanks go to Wim Schaefer from Eindhoven School of Architecture, for the materialization of his initiative to organize the exhibition and provide us with the posters that are included in this volume.

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 Head, Zoi Karamanou, whom we deeply thank.

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

Constantin Spiridonidis Maria Voyatzaki

Preface

Towards a Common European Higher Architectural Education Area

Constantin SPIRIDONIDIS Thessaloniki, Greece, EAAE/ENHSA Project Coordinator

In the last decade a great number of Schools of Architecture in Europe reconsidered and reformed the structure of their curricula. In the context of these reforms, a radical re-allocation of teaching time took place, a number of new subject areas were added, the importance of some other subject areas was diminished, and new forms of specialization were introduced to architectural education. These changes could be attributed to a general tendency, which becomes increasingly apparent in the last few years, of an overall re-definition of the profile of the architect in contemporary society, but also of the educational strategies that will ensure this profile. The reforms were dictated by a number of factors, three of which appear to be the most crucial:

The first factor concerns changes in architectural practice. The rapid changes in the social and financial dynamics of the past few years had a great impact on the environment in which architectural interventions occur both in the private as well as the public domain. New types of work organization, new construction materials and methods, new tools and media put, through professional bodies, pressure on Schools of Architecture, for a new synthesis of a general as well as a specialized education.

The second factor concerns the new attestations and views on architecture. In any given point in time, architecture is perceived through the particularities that characterize the cultural, social and economic context in which this architecture emerges. In the contemporary epoch of information technology, speed, image, networks, and of the personalization of new tools for design and representation, the way in which we comprehend, feel and contemplate architecture changes radically. Contemporary *avant garde* architecture is accompanied by a different phenomenon which gradually dominates and therefore influences greatly the broader domain of architectural thinking. Publications and the mass media, pressurize Schools of Architecture to encapsulate the new values and principles of *avant garde* architecture and to adjust accordingly their curricula.

Finally, the third factor concerns the new EU policies towards a cohesive European area of higher education. Exchange Programmes, interdisciplinary collaborations, instructions and agreements towards comparability and alignment of the content, the teaching time and the degrees awarded by the Schools, function as catalysts to the initiatives taken by Schools to redefine the system and content of the education they offer.

These factors motivated changes that stimulated, in turn, a vivid mobility of ideas and views on architectural education. Every country encountered this dynamic through its social, cultural, economic and institutional particularities; some with optimism, perceiving it as the streamlined liberation from already worn out educational practices, some with

scepticism, looking at it as an adaptation procedure, and, therefore, as a commitment to the unfamiliar and imposed decision. A large number of conferences, seminars, debates, articles with positions and juxtapositions, and proposals on pertinent subjects took place in every country, shaping, that way, a dynamic with multiple influences on the physiognomy and the content of architectural education. At the same time, a number of new questions and issues were articulated, to which Schools of Architecture are invited to offer innovative insights by suggesting new programmes and pedagogic practices, as well as new administrative initiatives and policies.

These reforms are materialised while two entirely opposed objectives are present. The one is the preservation of the identity of the characteristics of each School, which derive from its history and the particularities of the country it belongs. The other is the indemnity of the European physiognomy of a School, which was investigated primarily in article 3 of the pertinent Directive in 1985. The encapsulation of the philosophy of the Directive was the key to this European dimension of a new curriculum.

It is intriguing to note that Schools encountered these reforms in a relatively introverted manner. Little was communicated about the problems that accompanied these reforms and the ways in which each country solved them¹. Thus, although the effort lied in the alignment of the overall time of studies to five years (3850-4100 teaching hours) and the equation, to a great extent, of a great number of subject areas to be taught as suggested by the Directive, the new programmes did not always ensure the presupposition for the comparability of degrees awarded. Hence, for instance, it is difficult to consider equal two Diplomas in Architecture, when the teaching of construction takes up 25% of the teaching time available in the one, as opposed to the marginal 6% case of another, within the same overall teaching time available by both of them.

This dynamic of reforms is nowadays bolder as new political initiatives towards the European convergence become more coherent, while at the same time their influence becomes important also to the non-EU countries. While the 1984 Directive primarily concerned the content of studies, the Bologna Agreement concerns the system of studies. In this context, the main issue which concerns, at present, Schools of Architecture in Europe, is the definition of the contemporary profile(s)/model(s) of Architectural Education in Europe, to which the Schools of Architecture must adapt their curricula. This issue is split into three questions: Which are the possible scenarios of the structuring and allocation of teaching time? Which are the subject areas that must comprise the content of studies and how is time allocated to them? Which teaching methods will best serve these subject areas and make good and effective use of teaching time. The debate on the contemporary model(s) of Architectural Education in Europe must have two interrelated aspects. The academic aspect, which investigates the academic content of Architectural Education, and a managerial aspect which attempts to ensure the conditions for this content to become fruitful and constructive operational architectural knowledge.

¹ What, for example, was the focus of questions and problems encountered (and continue to be encountered) by the French reform? What was the Italian reform confronted with? How did Italy and the Netherlands encounter the two recent drastic reforms (from 4 to 5 years of study in the Netherlands, the overall reform of the system of studies Italy had to implement and then adapted for the Bologna agreement)? Why didn't the Stansfield Smith Report go any further than its articulation, in the United Kingdom? In what directions are the Scandinavian countries, Germany and Spain moving? In what way will Schools of Architecture from Eastern European countries be incorporated in the educational environment of Europe?

In September 1998, the European Association for Architectural Education (EAAE) took the initiative to organise the First Meeting of Heads and Curriculum Coordinators of Schools of Architecture in Europe in Hania Greece. This Meeting has been hosted by the Center for Mediterranean Architecture. The first synthesis of national reports on Architectural education of sixteen countries in Europe was presented to the Meeting, the output of which was already an item for discussion in the Meeting's agenda. These reports were compiled and coordinated by the EAAE and the Polytecnico di Milano, and funded by Socrates, under Thematic Networks 1995-96. The Programme aimed at diagnosing the problems encountered by Schools of Architecture, and at defining evaluation methods and criteria whereupon evaluation can happen. The First Meeting turned out to be particularly fruitful and as a result three more Meetings took place in the same location and with the same hosts after the unanimous decision of the participants to continue, ever since.

These four Meetings of Heads and Programme Coordinators of European Schools of Architecture formed a continuous milieu for dialogue and exchange. Some of the points of these discussions could be summarized. One of them is the fact that the interest increases with the same rate that points that need clarification appear, with regard to the type and the extent to which this new institutional framework invites schools of architecture to introduce changes. Another point is that schools of architecture in Europe stress out the necessity for a systematic and analytical dialogue between them in order to allow for the tendencies to surface and the constraints that are imposed by the local social, cultural and legal contexts to become known. The third point is that schools of architecture in Europe become increasingly aware of the need to confront and see their future together and to proceed to the restructuring of their curricula with the highest degree of convergence in mind and agreements in operation. The fourth point is that there is a strong demand of schools for more systematic and analytical information collection and dissemination on architectural education in Europe.

Various agreements have been made from the debates between schools in the last four years into the framework of the four previous Meetings in Hania. The most important of these are:

- That the European Credit Transfer System (ECTS) is of vital importance for the
 development of student mobility, the organization of ECTS credits and the flexibility of
 programs of studies, necessary for the preservation of cultural and pedagogic polyphony
 which is considered a very important characteristic of the architectural education in
 Europe.
- The studies that lead to the Diploma in Architecture, which in turn ensures access to the profession of the architect should last at least five years and correspond to 300 ECTS credits which leads to education at Masters level.
- The pursuit of a comparable and flexible set of skills enables every school of architecture
 to decide and organize its studies either in an inseparable programme of studies or
 to break it in two cycles (3+2 years or 180 and 120 ECTS credits respectively) the first
 of which alone cannot allow access to the profession of the architect.
- The development of a European system of 'academic' evaluation and quality assurance
 of programmes of studies in the framework of the academic community is particularly
 important. A system which should be adapted to the needs of architectural education
 and would respect its existing pluralism.

At the last Meeting, the participants came to the consensus that these Meetings have to go beyond their initial character, which due to financial constraints and insecurity alongside its exploratory nature (it acted as a pilot where the necessity of such meetings would be tested) which was to offer the possibility for communication and exchange of ideas, but to assert for a more essential impact on architectural education in Europe. In other words, to encompass a number of activities and initiatives which, under the existing policies for convergence, would support Schools of Architecture to shape and implement a contemporary European Architectural Education. The ENHSA Project constitutes an elaborated development of this decision.

According to this Project, Heads and Academic Program Coordinators coordinate a series of academic activities undertaken by the appropriate teaching staff. This way, it is expected that the contribution of each School will be more substantial and effective and the impact of the Network output more direct. The focal point of the EAAE/ENHSA Project is Architectural Education. The aim is to support Schools of Architecture in Europe in their effort to follow creatively the dynamics of the European convergence, to define the contemporary profile(s) of Architectural Education in Europe, and to develop initiatives for the respective adaptations of their curricula. For the fulfilment of this aim, the Project will pursue:

- The collection, processing and dissemination of data and information, which will support the decision-making processes on the restructuring of the curricula.
- The elaboration of proposals regarding the adequate teaching time and the content of studies of specific subject areas, such as design, theory and history, architectural technology and urban design.
- The propping of the coherence of Schools of Architecture for better academic cooperation and more effective management of academic issues in the perspective of reforms
- The collection and dissemination of new educational practices and pedagogic methods.
- The cooperation with other International organizations (UIA, ACE, ECAADE, EU Advisory Committee on Education and Training in the Field of Architecture) and professional bodies for the creation of positions and political aims related to Architectural Education in Europe.

This volume consists of the interventions and debates which took place during the Fifth Meeting of Heads and Academic Program Coordinators in the framework of the ENHSA Project at Hania, Crete from 4 to 7 September 2002. It is structured in six chapters which include the interventions and the debates between the participants. Between the chapters the reader can find the texts of the interventions of the keynote speakers who honoured the Meeting with their presence. The appendix of the volume includes texts such as declarations, directives, agreements and other relevant documents which facilitate the discussion on the creation of a common area in Higher Architectural Education.

The limited time for the preparation of the volume in combination with the technical problems to the sound and image recording which, unfortunately, almost always appear

during the organisation of big scale events like this one, together with the multilingual audience, had as a result the transcription of the debates and the quality of the written version of the oral discourses not to be to the standards we would have wished to achieve. We apologise for this and hope that our next collective efforts will use the experience gained by this publication to ameliorate the quality of the deliverables.

This volume is offered to the participants of the Meeting in September 2002, to all those involved in the decision making process of the structure and organization of school curricula, and more generally to all those who are genuinely interested and really care about the future and the quality of architectural education. It is offered as a work document and at the same time as an invitation to this collective effort started at Hania in 1998 to create the conditions for a fruitful collaboration in order to support the construction of the European Area of the Higher Education in Architecture.

Constantin Spiridonidis
Charged from the EAAE Council to coordinate the ENHSA Project

Welcome Speeches

Dimitris Antonakakis

Architect, Greece, Art Director of the Centre for Mediterranean Architecture

It is a honor for the Center for Mediterranean Architecture and for the city of Hania also that you decided to organize your fifth meeting again in Hania. For me personally it is also a great pleasure to welcome you in this very old new building, which is our permanent home and which last year was as you remember, a ruin. I truly believe that we would not have been here now if our collaboration had not made us credible towards the local authorities, the Ministry of Culture as well as the public of Hania. Your presence here in Hania for five years gave us the possibility to press the bureaucratic mechanism in order to move the whole program faster. I believe that the constant and good relation between the schools of architecture with the city, which hosts them, will give only good results. Our Center is perhaps a good example of this relation. Before finishing this short greeting I must say that you have to consider the Center for Mediterranean Architecture as a place of friends and we will be happy for every future collaboration. Mr. EAAE President and honorable participants of this Meeting, I really thank you for your collaboration, your presence and your help all these five years. The Centre for Mediterranean Architecture is thankful for that. Thank you.

Constantin Spiridonidis

Aristotle University of Thessaloniki, Greece, EAAE/ENHSA Project Coordinator

This is the time from my part to say hello to friends. To friends from this city, real friends after a five years' old established friendship, which becomes more and more profound and essential. To friends and colleagues who are coming from all countries of Europe, most of them every year the last four years to discuss issues related to architecture education and to exchange our love and interests on teaching and educating architects. The city of Hania is the city of architectural education and this nomination is increasingly formalized since every output of the debates that we produce during these meetings, has always the stamp of the Hania as a result of the Hania Meeting. I'm really very glad to be in this building hosted by the Center for the Mediterranean Architecture. I'm sure that most of you who participated in the previous meetings will always remember the other building and its atmosphere. But this renewal of the building that hosts us. coincides with a kind of renewal in our Metina, as you already know, from now on it is framed by the European Union. The fifth Meeting of Heads of Schools of Architecture is now one of the actions of the EAAE/ENHSA Project which is financed by the Socrates Thematic Networks Program. The fact that this Meeting is developed under the auspices of the European Commission, gives to this Meeting a kind of institutional framework and mark. I would like to wish you a very pleasant stay in Hania and fruitful participation in this Meeting.

Georgios Tzanakakis

The Mayor of the City of Hania, Greece

I would like to thank all the participants of this Meeting. If it is a great honor for the city of Hania the fact that for the fifth year this Meeting takes place in our city. For the Mayor of the city is great pleasure and very very big honor the fact that as we promised last vear the Meeting of Heads of European Schools of Architecture will take place in this marvelous building. I hope that the other building as well-the old one we already knowwill be restored and will be used accordingly. These buildings give a very significant content to the work of such a kind of meetings related to architecture. Our invitation is to consider to establish on a permanent basis the Meeting of Heads in this city and to create the necessary infrastructure in order to have the possibility to organize those events in the future exclusively in Hania. I will not speak particularly about the subjects of the creation of the common European area of higher education and more specifically on higher education in architecture. We will have the opportunity to discuss this in the near future. I would like to thank this time first the European Union, the European Commission which supports hugely this event, professor Spiridonidis, who is the heart of this event, Professor Voyatzaki and my collaborators Dimitris Antonakakis and the Council of the Center for Mediterranean Architecture and especially our keynote speaker Professor Dimitris Fatouros, who honors this Meeting with his presence. Last but not least I would like to thank one-by-one the participants because I believe that as we gave them a part of our heart we believe that our love will always remain in their hearts every time they come and, I am sure, they will come back in the city. Thank you very much.

Georgios Katsanevakis

The Prefect of Hania County

Bienvenue à tous. I welcome you in the city of Hania. One could ask oneself how it's possible in a city like Hania to have a so well-organized Center for Mediterranean Architecture and in the same time not to have a School of Architecture. Sometimes the opposites yield better results; we have in this city Dimitris Antonakakis, who is the inspiring person and the founder of this Institution, the Center for Mediterranean Architecture. With his efforts it will become possible to create a kind of architectural consciousness in this city, which is the basic presupposition for the creation of a School of Architecture. In that framework the new School of Architecture will be not a typical School of Architecture but maybe a School, which will focus on the restoration of old buildings since the area of Hania, for those who have already visited it, is full of such architectural paradigms. Subsequently, the new School of Architecture should not be a typical one like all the other schools of Architecture in the country but a rather special one focusing on something which is missing in this environment and which is a School oriented towards the restoration and the conservation of the cultural heritage.

I wish you all to have by the end of this meeting a kind of enrichment of the idea of freedom of architectural thinking and the presupposition for an architectural production respectful of the culture, of the site, of the place and of the tradition. Welcome again to the city of Hania and I wish that the Mayor of the city after some years would be able to make you honorary citizens of the city.

Herman Neuckermans

Catholic University of Leuven ,Belgium

President of the European Association for Architectural Education (EAAE)

Good evening to every one of you. The proof that I studied Greek some fourteen years ago, could be that I can say «καλησπέρα». It's my pleasure as the President of the European Association for Architecture Education to welcome you on this 5th edition of the Meeting of Heads of Schools of Architecture. I feel at the same time a little bit like your host and like your guest. I feel like your host because we as Association have initiated and organize this event, but at the same time I feel as your quest because all this work has been done here in Greece, in Crete, On behalf of the EAAE Council and probably on behalf of the participants, members of our Association or not. I have to thank the local authorities, the Mayor, the Prefect, who all contributed to this event. I would like to thank the Center for Mediterranean Architecture and of course in his capacity of the initiator and coordinator of the ENHSA Network, I would like to thank Constantin Spiridonidis for all the intellectual material and financial help in making this event come true. At first, when I came here this year I couldn't believe what I saw because this building indeed last year was merely a ruin and I don't know how you managed to transform it in a few months time into this, I would say, exemplar or exemplary case of old building with new functions converted into a historical valuable building. I would like to congratulate all those who contributed to this realization. I don't know if I have to say something about our Association because I think most of you know us, but I shall say few words for those who don't. We are a nonprofit making organization aiming at improving the quality of architectural education in Europe. We were founded in 1975 we have more or less 150 schools members, we have several activities amonast which is this one. We have conferences and workshop organized by the participants, by the members schools and we publish their proceedings as well as a news sheet. We initiated from this year on and you will hear more about that in our general assembly on Friday the Velux EAAE prize on writings on education in architecture, which is a significant amount of money for those who compete. For those who like to know more about us, you can find us by e-mail on eaae@eaae.be or on our website which I will have the occasion to show you on transparency later on, which is http://www.eaae.be. I wish you a fruitful meeting and above all many inspiring contacts with your colleagues and I would say enjoy your stay in Hania. I will also take the opportunity to try and say a few words in French because maybe you don't know but our Association is bilingual.

Je souhaite la bienvenue à tous les participants en tant que Président de l'Association Européenne pour l'enseignement de l'architecture et je me sens en même temps votre hôte et votre invité. Votre hôte parce que nous sommes en fait organisateurs de cet événement et votre invité parce que comme je le dis en anglais tout le travail dans le cadre de cet événement a été fait ici sur place. C'est pour ça que je voudrais remercier tous les instances qui ont contribué à la réalisation de cet événement et tout en particulier les autorités locales, les bourgmestres, le Maire et le Préfet et puis aussi le CAM-le Centre pour l'Architecture Méditerranéenne- et tout en particulier Constantin Spiridonidis, qui est le moteur initiateur du projet ENHSA qui co-sponsorise et qui organise cet événement.

Je disais aussi qu'en entrant l'immeuble ici je ne le reconnaissais pas parce que nous avions l'habitude de faire la réunion de la Neoria, ici l'année passé c'était encore une ruine et apparemment en quelques mois ça était transformé, cet immeuble a été transformé à ce que je considère quand même un bon exemple de comment il faut

introduire une fonction nouvelle dans un bâti historique important. Je crois que c'est très important. Alors, je voudrais dire que je vous souhaite une réunion très fructueuse, beaucoup de contacts parmi les collègues et un bon séjour à Hania. Merci.

Summary

The mission of this Fifth Meeting of Heads of Schools of Architecture was to further anchor architectural education within the European Higher Education Area. The fact that, for the first time, this meeting was organised with financial support of EU provided a more official and institutional status. This support is channelled through ENHSA or 'European Network of Heads of Schools of Architecture', a division of EAAE (European Association of Architectural Education). Its activities also include the creation of a website as platform for communication; the formation of thematic sub-networks and research into matters related to architectural training. The annual meeting of heads of schools of architecture is its first and most important action.

This meeting was a logical follow-up of last year's edition on 'Bologna', which was concluded with a joined "Hania Statement 2001 - Regarding Architectural Education in the European Higher Education Area". The announcement that this Statement was adopted among the 'opinion papers' for the EU Berlin summit 2003 was an encouraging opening, and underlined the credibility of our work

The unanimous conclusion of last year was not repeated, but, as it turned out, the character of this meeting was more pivotal and oriented towards the future role of EAAE and its Annual Heads' Meeting. This Meeting's rather 'introvert' character is a sign that the so-called European Higher Education Area is starting to become reality for architectural education. Indeed, the reflective mood was caused by the recognition and identification of the many obstacles ahead. The most pressing ones - as identified by the organisers - were the subjects of the four sessions structuring the meeting: (1) Curricula of Architectural Education; (2) Exchange and Collaboration between Schools; (3) The relationship between Education and the Professional Context; and (4) Quality Assurance & Academic Assessment.

It soon became apparent that the many nuances and openings to related problems, which were addressed by the introductory panel, consequent plenary session and occasional workshops, were too vast to be dealt with in one Head's Meeting. As a consequence the proposed methodology was to create working groups tackling the most important subjects. Appointed by EAAE Council, these groups will work during the academic year and their reports will constitute the backbone for the next Head's Meeting. The following five subjects were short-listed: (1) Profession & Education; (2) Assessment; (3) Curriculum BA-MA-PhD; (4) Exchange & Mobility & (5) Doctorates.

By concluding it is necessary to mention two subjects that floated as red lines through the various sessions of the meeting, as well as the more informal discussions during coffee breaks and dinners. Firstly the repeated plead for discussing the matter of PhD's in architecture, and, related, the pressing issue of research and in particular 'Research by Design': how can we articulate the scientific status of architecture? Secondly there was the cry for clear information about one another on matters of curriculum, profile, strategy and assessment (ENHSA's questionnaires and website will possibly provide solutions).

Koenraad Van Cleempoel, (Antwerp, Belgium)
November 2002

Report on the

Fifth Meeting of Heads of School of Architecture in Europe

Koenraad VAN CLEEMPOEL Antwerp, Belgium, Secretary of the Meeting

Welcome & Opening

The opening of the conference is heralded with welcoming words of the following persons: The host, or director of the Center for Mediterranean Architecture who is proud of his newly restored premises and invites EAAE for future collaboration; Constantin Spiridonidis, organizer of the Hania meeting refers to this city as becoming a European Center for Architectural Education. He also states that because of EU involvement, these meetings start to gain an institutional status.

The mayor of the city is honored by this fifth EAAE conference in his city, and hopes that we found a permanent basis. He also thanks EU for sponsoring the event. The Prefect of the County of Hania announces the foundation of an architectural school specializing in conservation and restoration. The president of EAAE, Herman Neuckermans, feels like a host, but guest at the same time, because all preparatory work has been done in Greece.

Keynote lecture by Professor Dimitris Fatouros

Constantin Spiridonidis introduces the keynote lecturer, Emeritus Professor Dimitris Fatouros, former rector of the University of Thessaloniki, and former Minister of Education. The title of his lecture, "Who cares?" refers to the apparent indifference with respect to architectural education as encountered both on the level of official dealing with education, as well as colleague architects.

Prof. Fatouros supports the "Hania Statement 2001", where heads of European Schools of Architecture unanimously stated that an education leading to entry to architectural profession should take at least 5 years of full-time study. It is a clear reaction against the "compact intentions of bureaucratics", a trend which worries the speaker. In order to achieve the goals of "Hania Statement 2001", and to train the best possible architects we have to set out "axioms". so that we do not loose ourselves in details.

Essential in this debate is the challenge to identify and to describe the scientific character of the studio; the place where design is taught. Design is the most important component of architectural education, and yet the most difficult one to translate into a scientific vocabulary. Research into the domain of design, and a scientific approach in the studio work is conditional for securing the discipline

Prof. Fatouros admits, however, that he attempted to do this for the last 20 year without success. He tried to concentrate on conceptual thinking and link it to science; e.g. why a line is drawn like this and not a little bit different. Being not isolated, the speaker refers to the existing trends during 1960-70, mostly by Italians, that focused on "scientific design".

This critical thinking about processes that generate concepts seems absent in the present arena of architectural theory, the speaker fears.

So what can be identified as scientific about studio work? Fatouros draws a comparison with surgeons, who also operate in studio-like environments. For him studio's are bodies of knowledge that operate through their interactive character.

Also scientific, but equally difficult to grasp, is the process of 'problem solving thinking'. About this, he is also pessimistic, as it tends to disappear in many practices, which are lacking a certain methodology.

Concluding Prof. Fatouros invites us to counter this trend by poring our decisions and ideas into official documents, in order to persuade decision makers who seem no to care. We also have to take care of our own community as many architects are only concerned about jobs, rather than concentrating on education.

Introduction to the Conference

The Conference Organizer, Constantin Spiridonidis, welcomes a record number of 115 participants. This year, for the first time, the Hania Meeting is framed in the ENHSA-project, or "European Network of Heads of Schools of Architecture'.

Starting with some history, Spiridonidis explains how Hania started five years ago as a platform to create dialogue between the heads on common issues. Financing was partly done through sponsorship by architecture-related industries. As a consequence, one sessions of the three day programme was always occupied by the sponsors. So, in order to operate more freely, and gain space in the programme, we looked for alternative finance. EU presented such an opportunity, but to become eligible it was necessary to frame it in a larger network, which was to become ENHSA. Its mission is the gathering, analysis and distribution of information for the Heads of Schools of Architecture in order to help their decision-making.

The proposal included 4 concrete projects:

- 1. The Hania Meeting for the coming three years
- 2. Creation of a website as a channel of communication.
- 3. Thematic sub-networks around the disciplines of :
 Construction / History & Theory / Urban Design / Architectural Design
- 4. Research in the field of Architecture.

This year information was collected on three subjects: Radiography of the curriculum / Evaluation processes / Relation between Education & Profession

The European Union accepted the ENHSA proposal, and, consequently, this Hania Meeting is the first to be funded independently from private sponsors.

The programme coordinator of this conference, Richard Foqué, equally welcomes the audience, and starts of by informing us about the afterlife of "Hania Statement 2002". He brings back to mind the main points:

1. Architecture takes five years of study or 300 ECTS

- 2. Bachelor cannot give access to profession
- 3. EAAE supports ECTS system as key to mobility, exchange, modularity & flexibility
- 4. EAAE will participate in the process of quality assessment and accreditation

Foqué then refers to the political dimensions of this "Statement", as it is listed as a 'Bologna Position Paper' among the 'Main Documents' on the official website of the forthcoming Berlin 2003 summit of the European Ministers of Education. It is thus becoming obvious to EAAE that such "Statements" are an instrument to influence on decision-makers. For Foqué this is a good enough incentive to conclude this Hania meeting with a follow-up Statement.

The Mission of this Meeting, Foqué continues, is to work and think together about the following four subjects:

- 1. A European Curriculum for Architectural Education
- 2. Exchange, Mobility and Collaboration between Schools in Europe
- 3. Relationship between Education and Profession
- 4. Quality Assurance and Academic Assessment

In order to obtain maximum results, he proposes an open meeting to stimulate discussion and confrontation of opinions in order to generate ideas and propositions. As a result, hopefully, there might be agreement on the formulation of common standpoints on these issues. It is to be understood that these items form the cornerstones for the creation of a Common Higher Education Space in Architecture

In terms of organization and structure of the conference, each a chairman and/or panel introduce the session, followed by plenary discussion and occasionally workshops. Albeit similar in concept to former meetings, new to this meeting is the task of the workshops. Each workshop should present a report with the agenda of the working group. The idea is that these working groups are formed during this conference and continue to work after the meeting in order to prepare the following Heads Meeting. There should be a working group for each session, addressing the following matters:

- State the context regarding the subject
- Define the problem area to be covered
- Formulate questions to be answered
- Propose methodology
- Establish Mission Statement
- Suggest candidates for collaboration

Foqué concludes by wishing all participants a fruitful and enjoyable conference.

Session 1

Curricula for Architectural Education in the Common European Higher Space

Presentation

This first session is paneled by Kees Doevendans (Eindhoven, The Netherlands), Alan Bridges (Glasgow, UK) and Johan Verbeecke (Brussels, Belgium).

Doevendans introduces their joined paper "A European Curriculum in Architecture?", which repeats the essentials of the Bologna concept, as well as the existing differentiation in European curricula. The question thus arises whether or not there should be 'core' elements in all curricula. As a source for comparing the different curricula he consulted the Worthingon report and the results of the ENHSA questionnaire on curricula.

It becomes immediately apparent that differentiation in curricula depends on the typology of the school: either focusing on design (architectural schools) or technical matters (engineers). The structure of the curriculum also depends on an orientation towards generalization or specialization. An important advantage of Bologna is the ambition of more flexible curricula, modularized (or deconstructed?) through ECTS and making a distinction between the 'Offer-driven' Bachelor and the 'Demand-driven' Master. But the speaker warns that deconstruction of the curriculum may lead to a potential loss of identity. On the other hand, however, joined courses on master's level as well as a much more regulated student mobility help to 'save' or articulate one identity.

Not highlighted enough, according to Doevendans, is the PhD strategy. Architectural research is underdeveloped, and PhDs are not integrated in European curricula. There is an obvious opportunity for ENHSA and EAAE to stimulate the creation of a European PhD-network and research programmes. Inevitably, the speaker enters the same domains as Prof. Fatouros did during the open lecture: What are the criteria for design related research? What are the different types of Architectural Research? Surely, here are possibilities and opportunities for EAAE and ENHSA.

Along the same lines is the problem of architectural research: we must describe the scientific criteria of our discipline, which may possibly lead to 're-thinking' the studio work. There are different types of research in architecture, but the already mentioned concept of 'research by design' seems the one that concerns us most.

Doevendans also suggests to EAAE to be pro-active in relation to Quality Control and Accreditation. An internationally consistent system of quality control seems necessary and the 'peer review' method the most appropriate.

As conclusion, emphasis is put on: (1) the core qualifications of Bachelor & Master; (2) possible common subjects in the architectural curriculum; (3) curricula & profile of the school; (4) the scientific aspect of the discipline & the position of the PhD

Bridges and Verbeecke present the educational system at their respective schools, but Bridges broadens the discussion by addressing the subject of balancing education and profession: if one realizes that only 5% of the graduates becomes professional designers, it is necessary to define what can be taught in order not to disappoint the other 95%. For his school, this situation created new opportunities which are also featured on the enclosed print-out of the slides.

Plenary Discussion

During the plenary sessions, the subject of the discussion swings between issues dealing with the problem of the period & structure of the curriculum, and its contents.

Period/Structure

We all agree on the BA/MA structure, and the fact that architectural training should take at least 5 years. The profile of the five-year training is equally clear: the formation of

architects. But various participants raise the problem of profile and identity of the Bachelors: 'what shall we learn these people, what can a 3-year person do after leaving the system?'. No questions are provided, apart from Dutch participants who stress the independent status of education with respect to the profession; students will find their own way and we should give them as much conceptual baggage as possible, because that is something the profession will not learn them.

Also on the subject of the three-year programme is the concern about funding. There exists a trend to believe that national governments will take advantage of the short diplomas recognized by the profession (Bachelors), in order to cease funding on long-term diplomas (Masters). This sinister aspect of Bologna should not create fear and confusion, as long as there are clear guaranties.

A consistent and coherent implementation of the ECTS system is repeatedly mentioned to be very important, not in the least because mobility (see also the following session) may encourage academic competition. Along these lines, participants from Delft mention that their Master course is taught in English from this year onwards. The concept of academic networks and joined Masters -instead of a unified curriculum- is brought up again by Kees Doevendans.

Contents

Distilling from the discussion, there are three issues: the question of a 'common curriculum'; the relationship with the profession and the subject of research.

The president of EAAE refers to the Hania Statement 2001, which guarantees the diversity of existing programs. But, he argues, there might still be room for 'core' elements. There is opposition, as this may equally undermine the precious diversity and variety.

On the relationship between education and profession; the two opposite views are voiced by the UK and the Netherlands. In the first the professional organization RIBA influences considerably the contents of the curriculum, whereas Dutch participants stress the independent status of education, especially with relation to the profession.

Finally research; like in the opening lecture, there is again the notion of frustration when it comes to the scientific status of design. Are we able to integrate design into the scientific bibliography? Guido Morbelli states that if we want to compete with other scientific disciplines, we have to explain the specific character of design processes. And then, off course, how can we consolidate this 'scientific' knowledge into the curriculum?

Many participants express the wish, and need, to have clear information from one another. It seems absolutely necessary to have a comprehensive survey of the different curricula of the different schools of architecture in Europe. Questionnaire n° 2, which was circulated before the event, would provide that sort of information. It is clear that a discussion on a 'European Curriculum?' would benefit a great deal from such a chart of European curricula.

Keynote lecture by Architects Suzanne and Dimitris Antonakakis

Entitled "Thoughts on Architecture: the Defined and the Interminable", the speakers presented their theoretical ideas underlying their architectural work of their studio 'Atelier 66'. The point of departure is the tension between the interminable and the defined void. In order to ease the abstract discussion about these spatial relationships and the creative

process, they seek for parallels in literature, in particular the six American lectures of Italo Calvino written in 1985. Calvino distils six points that define directions for the process creating literature: (1) Lightness; (2) Quickness; (3) Exactitude; (4) Visibility; (5) Multiplicity & (6) Consistency.

The speakers mirror this to architecture and interpret the notions as follows: (1) Lightness; (2) Speed; (3) Precision; (4) Envision-Visibility; (5) Complexity & (6) Coherence.

There is a particular emphasis on the final notion; lightness. The buildings of 'Atelier 66' are characterized by a search for the diffusion and the impregnation of the built form with tiny pieces of infinite sky as well as adjacent or distant landscape. These aims are difficult to realize because of several obstacles, such as construction defaults or the attitude of the commissioner, they humbly admit. But some of their blocks of flats (e.g. Benaki Street & Doxapatri Street) show that, despite limiting conditions, it is still possible to realize certain intentions.

Another theoretical reflection is on the notion of 'exactitude' or 'precision', where Calvino refers to his obsession to limit the spectrum of his themes into smaller spectra, and consequently, his passion for details. The speakers recognize this search and link it to their time as apprentice of James Speyer (who, in his turn, studied with Mies Van der Rohe) who stressed the importance of moderation and measure that determines with precision the proportions. In this education they also discovered the 'applied discourse' measures, spaces and volumes.

The various allusions to literature and poetry are clearly reflected in the very elegant and pure architectural vocabulary of 'Atelier 66' as shown through several projects, including the university of Hania, museums, hotels and private residences. They show the integer and honest quest for an intellectual and integrated architecture.

Session 2

Exchange and Collaboration between Schools of Architecture in the European Higher Education Space

Presentation

Chaired by James Horan, the introduction panel further consisted of Michèle Michel (Bordeaux, France), Koenraad Van Cleempoel (Antwerp, Belgium), Alan Bridges (Glasgow, UK) and Christian Huetz (Regensburg, Germany).

In a joined presentation Michel and Van Cleempoel witness from their experiences as international programme coordinators. They first explain on terminology: institutional mobility vs. free mobility and long-term mobility vs. short-term mobility. In a section called 'main issues' they state that (1) mobility is necessary both for students and members of staff for developing a wider system of intellectual reference; (2) that the confrontation with different cultures, social and educational contexts enriches personal and cultural development; and (3) that we move from a national to a European space.

Their evaluation continues in seeing that most disadvantages of the exchange system seem to be voiced by the staff, and that most advantages are experienced by the students. As advantages they shortlist: (1) the mutual benefit of living in a different cultural and academic environment; (2) a fresh input of contents and methods, both on the level

of students and staff; (3) a better understanding of the position of ones own school within the international context; (4) the creation of networks; (5) a generation of more mature & international orientated students; (6) the improvement of linguistic skills; (7) the confrontation with new approaches towards architectural education; (8) the development of a more critical sense & a wider system of personal references. As disadvantages they immediately put (1) the different interpretations of the ECTS-system by the different schools; (2) the difficulty in understanding each others programmes and academic system; (3) language barriers; (4) the incompatibility of the academic calendar; (5) different systems of assessment & marking; (6) the difficulties with the 'Learning Agreement' and the transmission of transcripts of confirmed results; (7) a lack of confidence in the programme of the host school, and the existence of a situation of second assessments and juries; (8) it creates a gateway and escape route for weaker students; (9) problems in positioning incoming students at the right level; and (10) possible financial difficulties of some students.

Alan Bridges further elaborates on the problem of ECTS, as well as on the fact that some of his students haven't even traveled to the nearest big city in their own country, and are then confronted with a totally different situation. Christian picks up the point on finance: is Erasmus really democratic? He still sees that students with limited economic means are discouraged to participate as living abroad always turns out to be more expensive.

There are also some final observations: (1) that there is an increased demands from students, especially from EU countries; (2) the notion of national & trans-national 'Diploma shopping'; (3) the mobility is sometimes encouraged by the existing differences between the entry requirement of the different schools; (4) that Erasmus students sometimes become 'academic emigrants' when they decide to stay on in their host university; (5) the possibility that schools can offer modules on the international education market; and finally (6) that mobility may stimulate the competition between school.

As conclusion, the panel presents several suggestions: (1) to come to a general implementation of the ECTS value and structure; (2) to come to a unified ranking system; (3) to come to more comparable & transparent curricula; (4) and to have more confidence in the partnership. The chairman expresses his strong opinion that mobility and exchange are exceptionally important, and that its advantages are much more important than the disadvantages.

(there is no plenary discussion)

Keynote lecture by Architect Dan Hanganu

With certain irony Mr. Hanganu opens his presentation how he experienced his childhood and architectural training during the communist regime in Rumania, his home town. His stay in Paris during 1968, and his departure soon afterwards to Canada and the USA was definitive. Nevertheless, this evening he would like to show us that his buildings still carry a certain 'Memory' of that personal past. By that he means that architectural is always 'conditioned' by nationalistic elements settled in ones genes. Also, according to Mr. Hanganu, there is discrepancy between what you see and what you intend.

What follows is an overview of the last fifteen years of his work with particular emphasis on the most recent projects. His Montreal-based practice, founded in 1978, realized the Laurier Design Centre, the Abbey Church of St. Benoit du Lac, the Theatre du Nouveau

Monde in Montreal, and more recently the Pavilion de Design at University of Quebec at Montreal and the Law Library at McGill University. In 1992, Mr. Hanganu received the Governor General's Award for the Pointe-a-Calliere Museum of Archeology and the prestigious Prix Paul-Emile Borduas. His final project for the evening is the headquarters of the Cirque du Soleil.

During the overview of his buildings Mr. Hanganu elaborates on various subjects: the tension between masonry and metal, the notion of transparency in larger buildings (e.g. the monastery of St Benoit), and his observation that Architecture in the USA becomes increasingly meaningless, and solely focuses on financial implication. Also, he finds, as building materials become increasingly elegant and sophisticated, the design of buildings' exterior seem to move in an opposite direction.

Session 3

The European Higher Education Space in Architecture and the Professional and Institutional Context

This session is completely taken in by the presentation of the results of a research carried out by Lawrence Johnston (Belfast, UK) and Koenraad Van Cleempoel (Antwerp, Belgium) on the subject of 'The Relationships between Architectural Education, Internship and Competence to Practice'. ARB, or Architectural Registration Board (London) commissioned the research. The main focus was to chart the existing variety within EU for the entry condition to the bodies regulating the practice of architecture. An excel database with basic, but systematic and consistent information on all architectural schools of the EU was also composed. During the presentation, Johnston focused on the different routes to Academic Qualifications in architecture, but mostly on the entry conditions that permit architectural candidates to practice as an architect. Different entry conditions, such as internship or additional examinations are surveyed and the difference between official regulating bodies (such as national orders) and private institutions (such as RIBA) is also explained.

The content of this study is still property of ARB, but publication is envisaged.

Session 4

Quality Assurance and Academic Assessment of Ecucational Programmes in Architecture in the European Higher Education Space

Presentation

This session is introduced by Katia Baltzaki (Greece), who presented a preliminary evaluation of the results of the questionnaire 'Concerning the Implementation of Self-Assessment Procedures in European Schools of Architecture'. The speaker brings back to memory the Hania Statement 2001, where it says that to EAAE is willing to participate in quality assurance and assessment systems, as well as the need to respect the existing diversity in European schools of architecture.

The questionnaire was composed in order to survey considerations, decisions or

implementations of self-assessment procedures. Because the collection and analysis of completed questionnaires is still in process, a conclusive presentation of results is not yet possible. From the answers given so far, however, it already seems as if a majority of schools have already implemented, or intend to implement self-assessment procedures. Those with implementation apply self-assessment procedures to all their activities. The motivation to start self-assessment is sometimes related to funding decisions or faculty's policies, but usually it is imposed from the national educational systems. The conception that self-assessment forms the key to a more elevated status is universal. Methods of self-assessment vary considerably and it also seems as if a common context is absent.

The speaker concludes by stating there are still lots of empty questionnaires on the web. As this is the only medium to chart the existing situation, a collaboration of all participants is necessary.

Plenary Discussion

The discussion is introduced by Herman Neuckermans (Louvain, Belgium). He wonders why so few participants responded to the questionnaire in self-assessment that was circulated two months before the conference. Speaking from personal experience as a member of an assessment board, Neuckermans, immediately focuses on the problem of assessing the design studio, which is, nevertheless a core discipline of our curriculum. A colleague from Germany replies that in his country a recently established bureau assists schools of architecture in preparing a self-assessment report. This information will soon be put on the ENSHA website. Alan Bridges (Glasgow, UK) explains that the UK has a well-developed scheme for such purposes; 'Architect Benchmark Scheme', which is equally available on the web.

Constantin Spiridonidis wonders how we can collect data on different methods in different schools and countries, and suggest that we use the already mentioned questionnaire.

From Germany we hear that assessment is organized by the state, but there are differences between the Länder. Andreas Wagner (Karlsruhe, Germany) explains how is evolved, in a system where three universities assess one another, among colleagues, under the supervision of ETH in Zurich. Richard Foqué (Antwerp, Belgium) stresses the importance of national accreditation, which will become the result of assessment. Soon, Foqué believes, this will become a matter of common interest and concern and EAAE should take position in this international debate.

Juhani Katainen (Tampere, Finland) also has experience as an evaluator in Gratz, and he urges for prudence on the side of the evaluators as they are always bound to their culture, and will consequently project this their exercise. He also refers to the UIA charter on the matter of assessment.

Marvin Malecha (Raleigh, USA) explains how USA seems obsessed with self-assessment, and has, over the years, distilled 5 different types of assessment:

- 1. Accreditation
- 2. What the faculty senate does in relation to the curriculum
- 3. The competition among universities (referring to the Lombardi report titled 'The Top American Research Universities')
- 4. Peer review
- 5. Public surveys on ranking (can be done by journalists)

Malecha has the impression, after hearing this discussion on different methods and suggestions, that people in Europe do not make these distinctions.

Session 5

Plenary Session: Conclusions and Proposals for Future Actions and Initiatives

The Meeting's programme coordinator, Richard Foqué, explains how interwoven the four sessions are. He invites the audience to think together on to proceed from here, as we should try to come to concrete results.

The conference organizer, Constantin Spiridonidis, is of the opinion that the exchange of ideas of the past days has been fruitful, but the time is ripe to start working in a different fashion. This has been the fifth conference of its kind and so far the methodology never changed. We should, therefore, now define the mission of these meetings. He strongly believes that it should remain a platform where people meet who care about architectural education, and who wish to participate in order to receive information and raise points of discussion. The first motivation to apply for EU funding was just that: to establish architectural education within the European Higher Education Area. In order to create the necessary transparency for achieving this, it is our task set out a consistent methodology. The concept of working groups as explained at the outset of this conference seems therefore the appropriate method

The question is put to the participants. Dimitris Kotsakis (Thessaloniki, Greece) stresses the importance of framing the workshops in the right context, which would be:

- 1. ENHSA is part of EAAE
- 2. members of ENHSA are school representatives
- 3. Mission of ENHSA is (1) Dialogue and (2) Coordination

He suggests the creation of three working groups around (1) Assessment, (2) Curriculum & (3) System. There are two types of Assessment: by others (state accreditation / professional accreditation / market itself or ranking); or through self-assessment (internal accreditation / peer review / civic and public responsibility). The group on Curriculum should map both the professional and the university requirements). The working group on System looks into mobility & ECTS.

Herman Neuckermans (Louvain, Belgium) agrees with the concept of working groups, but suggests focusing down on two issues: Course description and ECTS.

Karel Weeber (Delft, The Netherlands) suggests that the working groups are not only constructed around existing subjects, but that they should also reflect on the topics for next year's conference. Constantin Spiridonidis repeats the proposed methodology whereby these groups distill issues from the aforementioned sessions, in order to feed next year's programme, which will, consequently, differ in subject from this version.

Matteo Robiglio (Torino, Italy) also believes in the working groups, but gives the advice to maintain transparency between the groups. Allegorically, he states that EAAE should not only chart information, but that we should also navigate with these maps. Therefore, he asks about the status and power of EAAE. Its president, H. Neuckermans, replies that EAAE can only voice and distribute opinions, but has no legal power. Just like ACE, its

professional counterpart, it can participate in debates and acts as a lobby group.

James Horan (Dublin, Ireland) focuses again on the methodology of the working groups. In order to proceed from here, he suggests that all participants write down their name and personal interest. From this list working groups are composed. This list is transcribed as an appendix. It results in five groups: (1) profession & education; (2) assessment; (3) Curriculum; (4) Exchange & Mobility; (5) Doctorates. Horan suggests not to go into an 'adhoc' grouping right now, but the council will set up the methodology and composition of the groups. He thus asks for the authority, and trust in the council.

Constantin Spiridonidis wonders if it would be worthwhile to create a coordinating committee for this purpose, as the council may not be the appropriate body for such matters. In a reaction, James Horan, believes that too many committees may lead to fragmentation. Furthermore, at the end of the day the council is responsible anyway. Neuckermans (ibid.) and Juhani Katainen (Tampere, Finland) agree by stating that the Council should take up its responsibility on these matters. Horan gives a nuance by saying that the council has no intention to impose anything, but that there is need to advance a coherent methodology and a consistent framework.

Richard Foqué sees the apparent opposite opinions of Spiridonidis and Horan, but suggests that the Council, eventually, delegates the preparation of Hania to an executive committee. He also believes that EAAE should behave professionally vis-à-vis its members.

The president of EAAE, Herman Neuckermans, concludes this meeting by thanking Maria Voyatzaki and Constantin Spiridonidis again for organizing this meeting. Laud applause echoes the president's gratitude and recognition.

Keynote Speech by Dimitris Fatouros, Emeritus Professor

Presentation of the honorary guest by Constantin Spiridonidis

The fact that the Fifth Meeting of Heads of European Schools of Architecture takes place framed by this exhibition of the Greek Architecture of the 20th Century made us to think that it is a good idea to invite as keynote lecturers in this Meeting architects and professors of architecture from Greece. This is the case for this first keynote speech of Emeritus Professor of Aristotle University of Thessaloniki. School of Architecture Dimitris Fatouros. You know very well that it is always difficult to present a keynote speaker. You have to condense in few lines a huge work, a very particular personality and a great offer to the domain. I felt this difficulty many times in the framework of the Hania Meetings. In this case, where I have to present my professor, the difficulty becomes even bigger and the problem is that I do not have only to condense a great personality, a very distinguished architect and an inspiring teacher but I have also to condense a personal experience, a personal life, if you want, for many years as a student and after as colleague in the same school. So, I find it very difficult to start speaking about him for all those reasons. On the other hand as professor, as my professor, he forbade me from saving a lot of words about him. I will be a little bit iconoclastic in this moment because I cannot avoid to say that for a lot of architects in Greece Dimitris Fatouros is somethina like a leader. a guide, a reference point, a kind of security, a kind of feeling of democracy, a kind of feeling of freedom, a kind of feeling of love for architecture. For all those reasons, which are invested by strong sentiments, and I would like him and you to forgive me for this strong sentimental approach, we invited him to be the first speaker of this event. So, I'm very alad to invite my teacher to speak. The person who was one of the main founders of our School. The Professor who was for years one of the leaders of the School, the leader of a lot of us. The teacher, who taught us about democracy, about architecture, about being socially aware. The former Rector of our University, the former Minister of Education the personality which represents a big part of Greek architecture. I'm really very proud to invite Dimitris Fatouros to give his lecture entitled 'Who cares?'

Who Cares?

Dimitris A. FATOUROS Emeritus Professor of Aristotle University of Thessaloniki, School of Architecture

Let me start saying to you «καλώς ἡρθατε», soyez le bien venue, welcome. I want to say many thanks to Constantin Spiridonidis for all his good words for me. These good words are probably the result of the fact that I'm now running my 50th year from the date, the year, I graduated from the Athens School of Architecture. I got my degree in Architecture in 1952, only that.

Cher Président des Ecoles d'Architecture de l'Europe, Monsieur le Coordinateur du Network des Présidents des Ecoles d'Architecture de l'Europe, je vous remercie de votre invitation et je suis vraiment très heureux. Elle serait très importante si ma présentation était bilingue. Mais ce n'est pas le cas, c'est seulement jusqu'a ce moment que je parle en français.

Well, thank you, the Association of the European Schools, the Network and the Center for Mediterranean Architecture for this invitation. It is a good luck indeed the coincidence of this Conference with a new building, a new environment of architectural optimism. There is an optimism in the continuation of the space of the lecture hall to the sea outside.

This period following the instructions and the intentions of the European Union for architectural education is a difficult period indeed for architecture. Let me remind to all of us a comparison. The way of the Ecole des Beaux-Arts in Paris, the strong point of architecture for a long period, with a length of studies for at least seven or eight years with the three years proposed for today, and this is not an archeological commentary.

First of all I support and I emphasize the propositions of your previous meeting, the 4th Meeting, that is: five years or three plus two or four plus one. But I'm not optimist. I don't feel it will be easy to overcome the strong and compact intentions of the bureaucrats. From this point starts my question "who cares?". Who cares if architects get their degree with five, six, three plus two, plus and plus everything else? Who really cares from the bureaucrats, from the banking people, from the politicians even from a big majority of our colleagues?

I' Il try only to discuss which strategy will be the best in order to achieve any scheme following your proposition. It is first of all important to establish some main <u>axioms</u>. We cannot start with the details, with the curriculum, with the subdivision of the architectural curriculum etc. We need to clarify and to fight for main targets. It will be very useful to establish a few, very few and very clear-cut axioms between us as well as between the Schools of Architecture and between various personalities in the world of architecture. We need a clear common ground of discussion.

First clarification: Far from any vocational attitude

There is to a certain extent a tendency for a character of vocational education underlying many propositions of the European Union concerning the reform of higher education,. For the questions of architecture it is sure that any hint for vocational education is a

negative one. The education of the architect, an open one with a large spectrum of knowledge and the need for longue durée procedures for crucial sides for its curriculum is entirely outside from a vocational attitude.

Second clarification: The axiom of the studio

There is no objection and there is no doubt that our job is a complicated one and it gets more and more complicated and sophisticated because of the huge significance and the huge involvement not only of technology but as well of the new questions concerning the human condition. So there is no hesitation that a strong technological education is needed including the typical one on construction etc and the relatively new one on environmental conditions concerning the level of comfort, sound, light, humidity, etc. etc, and on the other hand crucial cultural, anthropological issues and the questions related with creative processes and mental attitude.

In this direction in order to cope with the multiplicities of the architect's endeavor comes up at least for the time being the <u>first axiom</u>: We need <u>studios</u>.

The studio, the atelier, helps a continuous creative repetition. We need to make sure that through personal work and continuous research the architect is trying to understand some very important relationships in order to clarify a double orientation of the quality of space expressed for example by Corbusier. Namely, on one hand what the person of "machine à habiter", Corbu, asked from the early twenties and on the other hand what the same person, Corbu, emphasized in 1946 insisting for the necessity of the "espace" indicible"1. The person so much accused even for an anti-human approach because of his statement on the "machine à habiter" in his text of 1946 later on emphasized that the main difficulty of architecture is how to find out "I' espace indicible", "the ineffable space" that is not the directly and explicitly described quality of the space. This approach gives the point toward an approach for the research and understanding of an ineffable system or what in other words we may call it implicit system. This is not metaphysics it is a description of a level of understanding and analysis of a yet not well clarified discipline of the complexities, relationships, priorities etc. etc involved in the quality of space. What a studio produces is the way to approach the ineffable that is what lies outside the conventional technical approaches of the coefficients, construction, comfort, light, humidity, aeometry etc.

We need for the time being much more to learn on the core of the design fields in order to be able to teach without much personal involvement in the studio architecture. We need all the experimentation coming up from the drawing table of the studio. The period of repetition, of experimentation, of empirical approach is necessary. It would be very important if sometimes through well-developed research on the scientific approaches and the understanding of the whole architectural design we will be able to teach architecture without any moment of studio. There is good literature on this effort but for the time being it looks very far the day to erase the studio education.

At least from the 60s there is creative research on design principles, on the relationships between environmental conditions, and visual conditions about typical but crucial design decisions, about the movement, the geometries and the perceptual factors. What is

Le Corbusier, "L' espace indicible", Architecture d'Aujourd'hui, 1946, Numero hors série, Avril.

important is that despite the fact that from this period a lot of conferences, periodicals and scientific journals, published material on design principles related with environmental factors etc. etc, nobody or almost nobody in his own professional activity, even in his teaching, is using these and only these design theories for the final acts of the design approach.

It seems that the thoughtful architect does not use research done in the various architectural theories. If you look at the main architectural periodicals, the old <u>Architectural Design</u>, <u>Architecture a' Aujourd'hui</u>, <u>A.J.</u>, <u>Baukunst</u> etc, etc, you will see that there is no more than one per cent or one per thousand bibliographical dedications and architectural literature oriented to scientific research. It is only within a very small field of specialists that this kind of research is appreciated.

An autobiographical note will emphasize what I am trying to explain. I was very enthusiastic in the late '60s that through the scientific and typical experimental approaches it will be easy to put down the old stuff of studio work. It was a catastrophe. It was not possible to produce a final architectural object. I tried for years and years to concentrate on the design itself, on the problem solving involved in the concept of a project and to elaborate, establish and finish the design with only the stuff of the scientific architectural research. Not only a lot of the necessary notions and approaches needed for an architectural project did not existed but also for almost the 100 per cent of the students it was very boring. I repeat once more, I don't want to be misunderstood. Technology is absolutely necessary but it is not enough as well as the various techniques for the environmental conditions in order to comprehend and use many organizing relationships, it were not and it is not possible to achieve the final design "product", the total work with the existing research. So, we need this method of studio for sure. But as well apart of this may be, the studio procedures will stay forever a necessary tool.

The creative studio is a part, an absolutely necessary part, of the teaching methods and this takes time, needs a lot of time and let me emphasize that studio work needs as well reading and scientific knowledge in conjunction. This conjunction needs much more time than a typical non-studio or simply studio work. Studio is not necessary only for architects. In medicine the surgeon's insistence on specific knowledge is a studio work as well as in various degrees the chemistry lab-work, the writing etc.

Third clarification: The longue durée of the studio

Now more than twenty years ago the studio work is needed because with the machines of the computing facilities the architect is relatively alone in coping with the architectural questions. The studio, the atelier is a micro seminar's continuous situation, with micro discussions of two to three people working together, questioning each other, trying to use the same words, trying to think and design various interrelationships within the same moment. The interactive character of the studio is needed in order to keep in mind all the diversities and the diversity of the opposite view expressed at the same time by all the collaborating micro-team of the drawing table during the problem solving procedures.

It is important to remind that very few things are expressed in the architects' presentations and publications from the very crucial problem-solving phase of the architectural project. This shows that architectural presentations are more descriptive than problem solving oriented. The presentations by slides or by computing facilities they are often using

geometrical or visual information without any continuous and systematic problem solving approach.

The need to combine personal involvement, scientific approach, technological knowledge and the long duration for the appropriation of various not well established methods, organizing principles, and so on, leads to the studio axiom. Which means that it is not possible in two, three, even four years to establish an architect's curriculum. This is why I support the propositions for at least five-years degree. I know that there are opposite views but these objections are not related with a real architectural education. Even where a degree comes after a short period the architect gets his knowledge in the professional studios of John, Eleni, Jean, Gert etc. etc. So, I consider of main priority to incorporate studio in the main corpus, in the main curriculum of architects. As a result the five years are the minimum that we may accept.

Fourth clarification: The sub-divisions of the degrees: The axioms of the negative side.

<u>The second axiom</u>: Within this way of thinking it is not possible to divide the degree of five years in "small" sub-degrees of three or four years. These subdivisions establish and accept an architect of a secondary level that finally means a non-architect, a pseudo-architect with obvious dangers for the environmental conditions. The case of a diploma of three years is leading to ridicule situations such as "small" professional activities, for instance one or two storeys houses etc. etc.

<u>The third axiom</u>: The degree of a period of three years cannot have any connotation with the word architect or architecture. We have to be careful about the words.

<u>The forth axiom</u>: It is necessary to push the things up to the argument that since for the physicians, in medicine, the long length of studies is absolutely crucial the same is true for the architect. Could we accept in medicine after the third year a first degree for the surgery of one leg for instance? These arguments must be presented clearly in any official document.

Fifth clarification: Who cares?

And the final point. Dear colleagues, who cares about all this discussion? I started this presentation with the same question. Nobody from the decision makers cares. They face it as a problem of discussion between artists or between rivals or between antagonists and so on. Nobody cares from the decision makers about our question. So, we have to persuade the decision makers, the politicians, the bureaucrats, the bankers, the administrators, everybody. We have also to take care of our community a good maybe majority of our colleagues who they think with the same way. So, it is necessary to open a campaign of persuasion or better to try to persuade, to stimulate, our colleagues in all directions as well within the star system. Calatrava, Foster, Nouvel, Siza, Piano and many others. Their public view is necessary.

Thank you and good luck.

Chapter 1

Opening of the Fifth Meeting of Heads of European Schools of Architecture

From the debates in the past Meetings of Heads it became apparent that the perspective of the creation of a common European Area for Higher Education reveals four basic and stronaly linked questions to which schools of architecture are invited to respond and with their responses to structure their political choices: The structure and the contents of the curriculum, the mobility and the exchanges, the evaluation of the academic programme and the relation of architectural studies with the profession. The Fifth Meeting of Heads will discuss these questions again but in separate sessions this time, aiming at recording systematically the trends and dynamics which have been formed to date, opening up the discussion on what is possible to be done or what should not be done in the light of the creation of a Common European Area in Architectural Education. These questions constitute the broader context, which is seeking for more specific issues that will organize and lead the discussion and the actions to be taken in the near future.

EAAE Hania Meeting: Past and Future The Heads' Meeting in the Framework of the ENHSA Project

Constantin SPIRIDONIDIS Thessaloniki, Greece, EAAE-ENHSA Project Coordinator

Dear colleagues and friends I would like to welcome you again in the Fifth Meeting of Heads of European Schools of Architecture. I am delighted to report that this year we have many more participants than the other years, we are about 110 participants, representing a big number of schools of almost all European countries. So, this is always a sign, which encourages us to continue this effort and to proceed, and try to organize this event better and better.

This year as I told you yesterday, the event is framed by a kind of new condition, which is its introduction to the Socrates Thematic Network Program and it is partially financed by the European Commission. I would like to start this presentation by explaining to you what this project is about, how it's started and which kind of new conditions and frameworks it creates in this Meeting. I would like to start from the history of those Meetings. As most of you remember because there are people, who are in Hania for the fifth time, we started those meetings as a kind of investigation of the possibility to establish a dialogue between the Heads of Schools of Architecture. The question at the time was: Can these people speak with one another? Do they have common issues, common questions and is this dialogue fruitful to them? The experience shows that there is a ground for discussion and debate and the proof is that most participants come again and again to this meeting considering that they have to gain from it.

After the Heads Meeting in 2000 with Herman Neuckermans we decided that it would be probably a good idea to make an application to the European Union in order to get funding from the Programs related to Education. With Maria Voyatzaki from Aristotle University of Thessaloniki, we started to work on this proposal. We had to adapt ourselves to the constraints of the Socrates Thematic Network Program that is to say to submit a proposal for a complex project with articulated actions and objectives.

So, we submitted the application inviting as partners the participating schools in the 3rd Meeting of Heads from the twenty nine eligible European Countries, according to the regulations of the Socrates Program. Since it was necessary to have at least one school from each eligible Country, we had to invite in addition some more Institutions which were not present in that Meeting, like the schools of Architecture of Malta and Budapest. The EAAE, initiator of this effort, presented in this application as one of its partners. The European Commission agreed with this proposal and the European Network of Heads of School of Architecture approved as a project, which has as main objective to support the participating schools in their effort to be adapted, involved or incorporated in the new European Area for Higher Education that European policies try to develop in Europe.

The development of this project and the incorporation of the Heads Meeting as well as of a part of EAAE academic activities in its framework, raise a practical, operational,

political and moral problem, that of the unintended discrimination between the members of the EAAE especially for those members who belong to the non eligible countries. All of us are frustrated about that. The EAAE, as a global European Association of Schools of Architecture will undertake all the necessary initiatives and measures to eradicate this difficulty.

I would like to make a short presentation of the project in order to give you an idea of what it is about. My ambition of this introduction, which I consider necessary and I apologize that I steal a part of the time of the discussion, is that after this presentation there will be no questions or ambiguities as to what this project is about and what we have to do in its framework. As I told you previously, the main objective of this project is to offer a support to schools of Architecture in Europe in the process of their integration into the new common European Higher Education Area. The main question in the structuring of the Project was how someone could establish a number of activities which will create information, generate knowledge, select and elaborate data and bring them in this Meeting in order to enrich the horizon of knowledge of the persons who have the responsibility of the management of academic issues in a school. The main expectation is that through this information, those persons will have a better decision making process. The project is structured around four parallel axes or actions.

The first action is this event. We put this action as one of the first main actions of the project. Every year we will have a meeting of people, who have the responsibility of the decision making of the academic issues in the school or their representatives and this meeting will be the management and the coordination of the activities of the project.

The second action will be the creation of a website, which will become the channel of communication. You can reach it in the address www.enhsa.org. but I would like to show you now what we have prepared.

The third action is the thematic sub-networks. That was an idea of Herman Neuckermans' to create sub networks of specialized teaching areas. When we prepared this project it was just after his new presidency and we gareed with him to incorporate this idea in the application. We started in this proposal with four thematic areas, four sub networks: a) the construction b) the history and theory c) the urban design and d) architectural design. The idea of the sub- networks in this project was that the Heads of Schools of Architecture coordinate and introduce activities, which are mainly oriented towards the teachers of these specific areas in order to discuss and to develop innovative teaching approaches on this particular subject area. What we expected from that as an output to have a kind of description or registration or categorization maybe of different approaches of the teaching of those subject areas. We tried to move on that. Herman Neuckermans, organized a workshop on the theory and history sub network related to the conservation of historical monuments. Maria Voyatzaki, organized in Greece, in Thessaloniki, a similar workshop on the construction, of the teaching of construction in Schools of Architecture. Similar efforts have been done in the architectural and urban design sub-networks. We are discussing about the possibility to develop something on the research in architecture education depending on the funding that we will have for next year that will probably create a fifth sub network.

The fourth action is the research. The idea of this action was the following: We have the sub networks, which generate information about the teaching process, we have the Heads' Meeting, which is based on discussion and exchange on the management of

academic issues and these are the two big pillars of this project. There are two other actions: the one is the website, which gives information about both of them and the research is the mechanism, which collects information and diffuses it to these two pillars. At the same time, these two pillars pose questions to the mechanism of research, which is collecting this information and disseminates this information in order to make it useful. We have already diffused three questionnaires on the contents of which we will have the possibility to discuss during the Meeting.

This is in a few words the ENHSA project. I hope that now it is more clear for all the participants the framework and the context of the Meeting.

So, since the time is running, I would like to close my presentation reminding those who were here at last meeting, informing those who are coming for the first time or who were not in the last meeting that in the fourth meeting we finished our debates with a statement. That was a debate that started four years ago. It was a permanent debate on issues relating to architectural education. After four years discussion, communication, exchange and investigation of tendencies, conflicts, different views, we managed to produce a statement which had a number of political decisions in it.

The one was that we cannot understand the title of the architect after a period of studies shorter than five years.

The second political decision was that we have to protect our freedom in order to have the possibility to manage our curricula in a way of three and two, four one or without splitting them and having five years diploma.

We had a third point that the ECTS is something which will permit us to have a better communication on the ways that we teach and we evaluate our teaching activities which is not the same and we have to work on that.

Lastly we agreed that we have to work on the evaluation processes in a way that we will organize ourselves, our own ways of evaluating as a peer review and self-evaluation processes and not under a governmental and professional body accreditation which is something out of us and probably beyond us. That was a framework that was created in the previous years and it closed a circle of four years debate.

What we need now is to work on that. This Meeting must be a Meeting which will define a process. A process which will permit us in the future to have better collaboration and more useful conditions of exchange of information and experiences. This statement is our common ground of discussion and on this basis we will try to develop initiatives and processes in order to proceed on the issues that we have already stated in this statement. Our expectation from the Meeting is to have at the end of it clear axes on which we will proceed in the future. We propose to think this way on the basis of some working groups that we will create between us and those working groups will undertake to elaborate information and data raised by the discussions and our debates.

I would like to thank you for your attention and to ask if there are any questions from the participants.

Harun Batirbaygil, Instanbul, Turkey

First of all, thank you for the presentation. I'm here for the second time with my deputy Dean. We are enjoying our experiences here, it's been a year we have not contributed

much to the idea of EAAE and learning about the experience of ENHSA we immediately wanted to contribute and be active in the venture, should I say, in the project. But you have been very hospitable to us here in Hania and all the people of EAAE have been very hospitable to us also. We enjoyed it very much I must state this. Now as I see in your presentation here I see that your hospitality is not reflected in the map, in your map because Turkey is not in slices. It's a whole country which should be reflected on your map. If you have an idea we will be very happy so, Turkey is not Istanbul or Attalia. Apart from that if I missed something please say so, but we have been appointed as the last to be member of the European Union, and signed the Bologna Declaration, one of the last who signed at last. I think we have the obligations in full so, I think not as a country but as a full member we will ask to be in this let's say project, if possible.

Constantin Spiridonidis, Thessaloniki, Greece

I would like to say that you are right. We understand very well the problem and I already mentioned it previously. But it's not something which depends on us. It's not our choice to have this condition between us. This project is running in the framework of Socrates Thematic Network Project which has as condition to accept as partners Institutions coming form the so-called eligible countries. Turkey, Switzerland, Russia, Former Yugoslavian Republic of Macedonia, Croatia, Serbia, Albania or Bosnia, even if they have schools members of our Association, they do not belong to the eligible countries so their school officially cannot become partners of the project. But, of course those schools can be associate members, or collaborators. The EAAE, in its effort to keep all European Schools together, took all the necessary preconditions to organize here a Meeting with participants from all the European Countries without any kind of exclusion. The way we organized this event proves that nothing changed since last year on the conditions of our communication and exchange. Now concerning the map in the site, we will correct it. We will do our best in order to avoid any suspicious misunderstandings.

Dimitris Kotsakis, Thessaloniki, Greece

In fact, this was a point I wanted to make and I'm sorry that I come second. I had to be first. My point was and I'm glad that we laughed at the mistake but I'll not stay to the laughter. I will ask why we do such mistakes as cutting Turkey into two pieces and taking the European piece into the map and leaving the eastern piece out. This is not just the mistake; we must wonder why we let ourselves into this kind of mistakes. That was hard of me. I don't mean that there are any intentions and this is why I was glad that we laughed. Laughing means that there was no intention behind it, that we all immediately recognize that it was a mistake and I'm doing some sort of political psychoanalysis now saying why we did that mistake. So, that's the first point I wanted to make and I wanted to have made it first and not second.

The second point is that we are sliding without understanding how we are doing this. Through this I thought in the beginning it was a sponsorship that we are getting somehow the companies out but we are sliding into from sponsorship to become a political framework. I mean the point was not to get the companies out and take the governments in. The point was to find a better way of communicating and structuring all this otherwise. We must state precisely and not let ourselves that we are changing from a European

Network in the full sense and that is why the first point was very important. For the full sense covers Russia, Turkey and so on has to slide from this full sense to the European Union. A web site that has the name, no matter whether we put Turkey back together or we let it as it is. The names, the website and everything is a way of sliding. Maybe it is simple only may be we give very good explanations which are accepted very kindly. I would also say by the members of this meeting. Good explanations kindly accepted. Nevertheless there is a Network which is not sponsored but which is in the frame of the European Union, it has a web site, it has names in it and everything so, my first strong comment in this Meeting is to be very careful about symbols because symbols mean something more. And they mean something more because we slide through symbols to things and we hide things even if our intentions are not that. I know very well that our intentions are not of this kind because I know the people but that's not enough, intentions are not enough. So, that was my point.

Constantin Spiridonidis, Thessaloniki, Greece

Ok, I think that we will have plenty of time to discuss all the points. Of course, it's better to have proposals than to have points so, hopefully, we will translate the points to proposals and we will see what kind of measures and initiatives someone could take in the existing environment of conditions, constraints and possibilities.

Towards a Common European Higher Architectural Education Area:

Introduction to the themes and issues for discussion

Richard FOQUE
Antwerp, Belgium, Meeting's programme coordinator

Dear friends good-morning. I think in Greek time it is still morning. Dear colleagues, Constantin Spiridonidis asked me to participate in the preparation of this Meeting and asked me to give you a short introduction and I hope to keep up with time. Constantin Spiridonidis already gave the introduction and the starting points, the Hania statement 2001 we put together, we agreed a text last year with four main points. I resumed them again the five years of study as a minimum 300 ECTS credits. I think Constantin Spiridonidis did not mention that we agreed last year that a Bachelor can not give access to the profession of architecture. That EAAE supports the ECTS system as a key to mobility, exchange of mobility and flexibility and that we will participate in the process of quality assessment and accreditation. Constantin Spiridonidis also added that we made a distinction between the academic assessment and the one exercised by the professional practice. I think this is the starting point and maybe some of you know already, but I think it's important to say, that our statement is very important as it is selected among the main documents the so-called opinion papers, which will be used for the bilingual session of 2003 of the Ministries of Education. It's among the selected papers so, I think it proves that our organization comes to, maybe modestly, but comes to maybe influence decision makers on a European level. It indicates that EAAE, and of course this Meeting particularly, will be not only a local or a sort of Meeting of friends but maybe as we discussed it can also exercise the function of the working aroup.

We developed the Hania Meeting of this year round four sessions in fact in four items which came out of the Hania statement 2001. First item is the question of, or the necessity or not of building or discussing a European curriculum for architectural education. There are already some comments on that in your program and I believe that the Chairs of the several sessions will work on those comments. It is clear that

Chania Statement 2001

- 1. Five years of study or 300 DCTS
- 2. Bachd or connot give access to profession
- EAAE supports ECTS system as key to mobility, exchange, modularity & flexibility
- EAAE will participate in the process of quality assessment and accorditation

Political Dimension of Chania Statement

- The Chania Statement 2001 is among main documents for the Berlin Summit of 2003 of European Ministers of Education
- 2. EAAE can exercise influence on decision making

Mission of Chania Meeting 2002

- A European Curriculum for Architectural Education
- Exchange, Wobility and Collaboration between Schools in Europe
- 3. Relationship between Education and Profession
- 4: Quality Assurance and Academic Assessment

we have to make choices that will take into account the richness in fact we have in Europe, the diversity of schools and the diversity also in approaching architectural education. It's a question and I think personally it's important to keep that and to build on that, rather than go for a sort of ideal curriculum, unified curriculum.

A second item is devoted to the problems of exchange of mobility, of collaboration between the schools. It is a topic we raised several times already during these meetings but as Constantin Spiridonidis said I think we have to get into more details and of course, all those four points are related to each other and are interconnected.

A third item and I don't think we can deny it, is maybe the most difficult or the most tricky one as I already experienced in the previous meetings but we cannot denied that our education to architecture is leading to a degree which gives access to profession of the architect, or what we call legally protected profession. It's usually one of the main entrance qualifications we have to have to enter the profession and of course the profession in some countries asks extras to enter it. So. I don't think we can avoid discussing this, this relationship between education and profession and I'm very alad to say that over the last year there was a research going on between our School and the Queen's School of Belfast. It was sponsored by the architectural education board of U.K. and I'm very pleased to say that in that session our colleague from Belfast Lawrence Johnston will elaborate and will present the results of this research.

A fourth item is the quality assurance and the academic assessments. We must point out that in our Hania Statement what is important, in my opinion, is that the EAAE should play a role in that actually. We agreed about that last year that we should proceed and commit ourselves to work on quality assurance, academic assessment all around Europe and try to establish some level of quality for schools.

These are four key-issues we should discuss and as Constantin Spiridonidis already pointed out, the idea we had is that this meeting should try to get as many opinions, statements and ideas around these four points and then establish working groups that could work during in the coming year trying to deepen the aspects of all these four points. We hope that it could be the input for the next Heads' Meeting for 2003, I would say in Hania Meeting I don't know if it would still be in Hania, but anyway there will be I hope a sixth Meeting. It is very clear, I think, that this is a quite extensive and ambitious task. It's a challenge to do this and it's obvious that we cannot complete it all in this three-day meeting. Especially I think the results may

shape architectural education in Europe for the next decade. So, it's quite a work. Therefore it is important that we elaborate on how we see this conference, I mean the nature of the conference. Over the last years our conference was maybe much more structured in a way that we had introductions, lectures, key-note speakers etc. It was much more typical in a form of a typical conference.

We see this Meeting rather in an open atmosphere; I call it an open Meeting, which would allow in fact as much time on discussion as possible. So, you may have seen already in the program that the several sessions are introduced, we asked a few people to do an introduction, it would be short introductions, it's time there will be a possibility after a short introduction to have an open debate session and then it will be followed by workshops. We will split as we did in the last years in two groups and the idea is that during these workshops we could produce ideas, confrontation of meanings, generate ideas, opinions, propositions etc. It's an open conference and also the program in fact is open to changes so, if there are initiatives or if there are ideas please tell us and we will try to cope with it and introduce it to the program. I think this is clear; this depicts the nature of the conference.

As I said there will be four main sessions and a concluding session at the end of each session done by Chairs of the respective sessions and two parallel workshops for each session. So, to describe more or less the workshops, I think it's important that we all know each other and have quality discussion but it is also important at the end of the day to have conclusions which we can go home and work with. So, I think that the output of the conference could be on two levels. First, we should firmly agree on the four key-issues. I think we already did but maybe we can confirm that they can be the corner stones for the creation of a common European, our education area in architecture. Second, we should be able to try and define the 'issue statement' of the respective working groups Constantin Spiridonidis was speaking about. I think that means that we are the right, the correct crowd to do that and we have not only a creative power here as a whole but also we are a formal institutional power, which is important if you really try to go somewhere if you would like to reshape architectural education within the European context. (Slide 5)

To structure the workshops a bit, I think that the workshops should prepare the agenda for the working groups and I put six points. It was an idea, I discussed it with Constantin Spiridonidis but maybe you can add or you can skip points. First it's important that for the working groups there should be a starting point for next year; that we state the context

Character of the Conference

- I Open meeting
- Stimulate discussion
- Confrontation of spinions
- E Generals ideas, spinions & propositions

Output of the Conference

- Agreement on the 4 key-assum as committees for the creation of a Common Higher Education Space in Architecture
 - 1.1 European Dumoulare
 - 1.2 Mobility & Exchange 1.3 Education & Profession
 - 1.4 Quality Assurance & Academic Asses
- Defining the Mission Solderwist of respective working groups

Organisation & Structure of the Conference

- ∃ 4 main sessions & 1 condusting session
- Each session is introduced by a chairman & highlighted by an invited speaker followed by plenary decreasion.
- 3. Two partellel workshops for each session

Task of the Workshops

Each workshop prepares the agenda for the working group by addressing

- E State the context regarding the subject
- I Define the problem area to be covered
- Exercise questions to be answered
- Propose methodology
- Establish Mission Statement
- Suggest randidates for roll aberration

Reports of each workshop are presented at the conducting session regarding the respective subjects. Second, that we'll try to define the problem area to be covered as precise or as open as possible; that we'll try to formulate questions to be answered within the respective subjects; that we'll propose maybe a methodology, a way of strategy to work around and come to us as a conclusion, establish initial statements.

This is all about the working groups, this is what should be done next year and we hope to get a report on that for the next conference. The last point, maybe the most important one, is to appear candidates to take part in the work, in the respective working groups for next year. The idea is that at the closing session we will try to present maybe not the conclusions but the work, which has been done in the workshops so, we may ask and I think there is already in the conference pack a note for the workshop coordinators to produce by the end of the workshop maybe a piece, one or two pages that we can use for the concluding session. As you can see it's an ambitious task.

What is at steak is architectural education, the form it will take and the content that will have for the next decades: Boloana a sort of start process, which you like it or not, is going its way and I think we have to open it. It was vesterday at the excellent introduction by Professor Fatouros or as he said "Who cares?" and we should care. Indeed we cannot leave these issues about architectural education to politicians and administrative staff as we heard yesterday. Professor Fatouros was likely placed to say "who cares, who of those auvs cares about it"? We have to take a public responsibility and use the available means to put our ideas. EAAE has already stated that we should play a key-role in this process and our president did not deny this, everyone agrees on this Statement and of course it can only be done if the organization, if the EAAE as organization is fed, is fueled by all of this, by all of you. We altogether in our schools, are important decision makers so, we should use this. It's good to see you so many and also to see a lot of new faces, it's remarkable, it means that this Meeting is considered to be not only a pleasant Meeting and a nice environment but also an important Meeting.

I would conclude to say let us use the magic of the place of the city of Hania but also of this restored building, beautifully restored building. Let us use the energy of the moment here, to be here together for three days to take a next step into the development and the propagation of architectural education. I wish you a fruitful, enjoyable but certainly helpful, creative conference. Thank you.

Chapter 2

Curricula for Architectural Education in the Common European Higher Education Area

The recent reforms in the content and the structure of School curricula, which have been made by various Schools of Architecture in the name of the convergence to the European policies have proved that in many cases the content of studies but also the strategies for its organization have come with interesting divergence and incompatibilities. Could it be possible that the debate on the type of degree awarded (Bachelor or Masters) has distanced us and made us drift and shift from the actual discussion on the content of studies and the basic principles that should underline their organization? It is relatively easy to observe that the accession of Schools to the proposed schema of the two degrees (Bachelor and Masters) is decided upon and filtered through fundamentally different attestations on architectural education, a fact which makes the critical recording of the various trends absolutely necessary and essential. Neither in a utopian pursuit of the ideal, nor in the perspective of the indirect imposition of some of these trends in the form of instruction or suggestion, but in the perspective of mapping which will allow or support the identification and the effective communication between Schools that share common principles in the ways they teach architecture.

Introduction to the Session

Panel: **Kees Doevendans,** Eindhoven, The Netherlands

Johan Verbeke, Brussels, Belgium

Alan Bridges, Glasgow, United Kingdom

Chair: Richard Foqué, Antwerp, Belgium

Discussion Group 1

Coordination by

James Horan, Dublin, Ireland

Kees Doevendans, Eindhoven, The Netherlands

François Tran, Lyon, France

Discussion Group 2

Coordination by

Dimitris Kotsakis, Thessaloniki, Greece **Guido Morbeli,** Torino, Italy **Johan Verbeke,** Brussels, Belgium

A European Curriculum in Architecture How to Organise and Manage the Knowledge of a Dynamic Subject

Kees DOEVENDANS¹ Eindhoven,The Netherlands Johan VERBEKE Brussels, Belgium, Jelena PETRIC Glasgow, United Kingdom

Executive Summary

In this paper the authors want to introduce important key issues in relation to educational developments in Europe, which will be of importance when discussing an European Architectural Curriculum

The authors start from the Hania 2001 statement and again stress the importance of variety and cultural difference in Europe in general and in architectural education especially.

Key issues of knowledge processes and innovation are introduced and discussed in relation to architectural processes. It is argued implicit knowledge plays an important role. Also the European tendency of a more intense focus of scientific processes in the field of Architecture is discussed. The authors feel that the activities and processes in the design studio themselves should adopt a more scientific way of working and thinking and develop their own scientific standards (peer review, communication and transfer of more explicit knowledge, ...). However, this subject should be approached very carefully.

In relation to research, the differences between value based research, method based research and instrumental research is introduced. Architectural research is placed in the context of the 'Knowledge based society' promoted by the European Commission. Especially the growing importance of 'Mode II'-knowledge is an important issue to keep in mind when developing architectural research and developing an architectural curriculum.

Networks of excellence and strong co-operations between Schools of Architecture become a necessity in the changing world of education. The paper gives two examples: the META-University, which develops 'joint masters', and the USO-BUILT-network, which created an international PhD-School. These kind of initiatives are seen as consequences of the (inevitable) introduction of the Anglo-Saxon-model (Bachelor-Master-structure). Related to this is the subject of flexibility, semesterisation and ECTS.

¹ The present article has been written by all three authors but was presented at the meeting in a shorter version by Kees Doevendans.

The concepts of modularization, key skills and learning styles seem to be well established.

Using the tension between academic and vocational orientation as well as technical/specialist and arts/generalist orientation, a matrix was proposed by several authors. The current paper argues that although this may be useful in structuring discussions, examples not fitting in the structure can be given.

The growing importance of digital media in the field is also shortly discussed.

Finally, the paper finishes with a list of key issues, which are important when developing a long term view for the development of School of Architecture.

Introduction

The subject of a common European Curriculum in Architecture has led us to a 'deconstruction' of the curricula of our individual schools and universities. Deconstruction is negative _nd positive, as it could be read as the synthesis of both the destruction as well as the re-construction of our curricula. Most of us are currently working on this process of transition/change.

Some of the important questions concerning this subject are: What is a European Curriculum of Architecture? What does Architecture mean? Does it include, for example, Urban Design? And does Architecture also include the technical engineering disciplines?

And what does Europe mean? Is Europe a fiction or a reality?

What will be deconstructed? And what is the Anglo-Saxon system we often refer to, nowadays? Does anybody know? Is it a myth? Is not only something that exists a manifold of interpretations? And do we, for whatever reasons, perhaps even fear the introduction of the Anglo-Saxon system?

How do we cope with the different types of schools in Architecture and Urbanism? Is it possible to create a kind of common kernel for a European curriculum, maybe even guarded or protected by the EAAE (European Association for Architectural Education) or the ENHSA (European Network of Heads of Schools of Architecture)?

How do we cope with the consequences of the Bologna en Sorbonne declarations?

Many of the thoughts in this contribution to the Meeting of Heads of Schools of Architecture (Hania, September 2002) were developed during meetings where the concepts of META-University and USO-Built were born, both initiatives are meant to meet the challenge of the new emerging European space for Education and Research.

In general we follow three main issues for the development of a curriculum:

- culture (of the school)
- structure (of the curriculum)
- content (of the curriculum).

The central idea is, that a curriculum means the organisation, management and transmission of knowledge and skills on a specific subject, in our case: Architecture.

This paper and the ideas it contains are intended to stimulate and provoke discussions during the 2002 Hania meeting. It should be regarded as 'work in progress'.

I Some Initial Points

In September 2001, the EAAE stated in Hania that it will actively collaborate in developing the ECTS-credit system in their schools and that the EAAE considers this system as the cornerstone towards mobility of students, modularity, flexibility in the curricula - necessary for the cultural, regional and pedagogical diversity it considers to be of large value for education in architecture in Europe (EAAE, 2001, p. 2 and appendix 1).

Also was stated that Architectural Education in Europe will always have a pluriform identity.

This means that no specific school can be as unique or 'holy' to have the model for a curriculum. Variety and difference is seen as important and even necessary to the field.

For a European curriculum we cannot take into account all systems in schools. This is simply too complicated, we will have to generalize and focus on the key issues. Which also means: everybody has to take some distance from the system of his own school or university in discussing this subject. Of course, we should also allow variety and differences in focus. And we will not fall into the trap of proposing one unique curriculum for Architecture.

Every school is unique and has its own well respected system, which is part of the identity of that school; but differentiation of schools, systems and models in the heart of a European curriculum on Architecture and Urbanism and differentiation can even be considered as the strength of Europe.

'Europe'

There is not one European tradition, or a single style, school, paradigm which can be pointed at as the root of a European curriculum. And what is, by the way, 'Europe'?

A European curriculum should take into account the different traditions, styles, histories, paradigms, in a similar way as Europe is determined by different traditions, styles, histories, cultures etc.

Still there is a recognisable European architectural heritage and also a recognisable historical concept of the European city, a city starting from the Polis, the elementary form of Western free society, which became to full growth in the Middle Ages. The Polis, also the place -according to the philosopher Hegel- afflicted with a fundamental problem: the tension between general interest and specific interest, a dilemma hardly to be solved.

'Europe', as it develops now, means a new phase in the development of Architectural Education. A new phase in the Polis. Maybe it is not a coincidence that the Network of Heads of Schools of Architecture takes position in Greece to reflect on a European Curriculum for Architecture (and we add: and Urbanism?). What is the quintessence of this new phase?

We could state that the essence of Europe is variety in all its forms. This is crucial and makes a difference with other cultures. There is the tension between universality and particularity. In pre-modern times freedom was located in our cities and regions. There was also the base of our identity. But during modernity freedom was made a universal principle and the western tradition was seen as a process of emancipation in which the individual subject was liberated from his traditional ties. Also the specific historic constellation, according to the Greeks the representation of a cosmical order, was robbed from its cosmic foundation, and the specific historical building collapsed. For some time

this foundation was replaced by the Christian belief in the Heavenly Jerusalem, but during the Enlightenment this foundation was pushed aside by pure reasoning. As pure, universal reason seemed to be too light for this foundation, the inner consciousness of man as the free subject he was, was the new source of his identity.

Now, in this time that we are thinking of the creation of a new European Curriculum in Architecture and Urbanism, we are confronted with the attempts also to pull down this last handhold. There is no identity that is transcending a specific context, all truth is particular, not general, not universal. And the idea that Western culture is a process of emancipation in which the subject frees itself from traditional freedom and makes his own individual freedom as his foundation and point of departure for reality, is rejected as a false illusion. Only postmodernism is still a form of emancipation: the 'emancipation of emancipation', a farewell to a way of thinking concentrating on the individual subject.

Europe is ontologically afflicted with the fundamental discussion of particularity and universality. This is part of Europe's identity. It is the struggle of the polis between specific and general interest. Do we all have our own interest and make our own identity, or do we have a joint identity and value system in which we all try to participate? (Local) Context seems to be an extremely important factor.

Hopefully Europe will not just develop as the free market, for which the style of 'managerialism' is fundamental (because this is the hero that rose at 'The End of History', the moment all social-economic systems, except the free market, died) and Europe will also not become the bureaucratic Europe. This would mean that the language of bench marking, exit- and output-criteria, Quality Assessment, Total Quality Management, etc. becomes our main language. On a national level, we are already facing daily the impact of managerialism on our education.

The theologian Richard H. Roberts has written an article on this subject, entitled 'The End of the university and the last academic?'. He quotes from an essay by Friedrich Bonhoeffer, asserting that:

'There are three fundamental attitudes which the life of the mind assumes with regard to reality: judgement, action and enjoyment (play and delight). In these attitudes man confronts in freedom the reality of which he himself forms part, and he thereby shows that he is a man.'

Richard Roberts states that we observe and analyse an imbalance: *judgement* has been expropriated by managerial *fiat; action* has been mechanised into the policy of meaningless circularities of 'Quality'; and *enjoyment* has become the casual pleasure of the 'receiver' or 'customer' who picks and chooses in the 'knowledge outlet' (Roberts, p. 89). He also says: 'University education is like beer: it can be 'real' or a synthetic *Ersatz*, a concocted simulacrum, and we need to relearn the distinction between the two.' (p. 88)

Managerialism has made our universities 'higher education outlets', 'prison houses of learning', 'factories of production' and so on. This means a clash with the real university (in the traditional sense), mainly because 'the relationship between individual and institution is radically changed when alien managerial models non-consensually reconfigure universities into 'higher-education outlets'.'

II Deconstruction

The postmodern university

A European Curriculum in Architecture (and Urbanism) does mean a deconstruction of the unique curriculum of each of our schools, the curriculum which is one of the main elements for the identity of our different schools. Also a European Curriculum will lead to a mix of systems, content and qualifications. It seems to be a fragmented whole. Smith and Webster (1997) speak about the post-modern university as 'a multiplicity of differences'. This could be the characteristic of a European curriculum in Architecture and Urbanism.

"...different academics pursuing different knowledges, different teams of researchers combining and recombining to investigate shifting topics, different sorts of students following different courses, with different modes of study and different concerns among themselves, different employment arrangements of different types of staff -difference everywhere in this the postmodern, flexible accommodating university.' (Smith & Webster, 1997, p. 104)

In an article 'Back to the Future; the higher education curriculum in the 21st century' (from which article the quote above has been taken) David Bridges (2002) analyses some of the developments that have lead to this postmodern university. These developments are, on one side, applicable with regard to our individual schools, and, on the other hand also relevant to the European Educational Space and the European Curriculum for Architecture and Urbanism within this space.

Some of the boundaries which formerly gave definition to a university and to the students' experience, states Bridges, have been removed over the last decades. Such as:

The identity of place (universities have become large institutions scattered over different sites, sometimes even a region and are promoting Distance Education);

The identity of time (the idea of a tightly contained academic year of intense interaction broken by long periods of separation, has been changed by demands of part-time evening courses, short courses, day seminars in weekends and summer schools etc.);

The identity of the scholarly community (this identity has become extremely difficult because of the growth of institutions, their spread to multiple buildings and sites and more and more part time and short time staff contracts).

The identity of the student community (as students have more and more different educational programmes, study at different times of the day and the year, combine learning and working (dual systems), represent a wider span of ages and cultural backgrounds etc.

All these developments are also of importance for a European curriculum in Architecture and Urbanism. And these recent deconstructing developments have to be embedded in a larger deconstructive development of the Architectural discipline, by which we mean the fragmentation of this discipline during modernity. The architect has become almost a specialist between specialists. He is a kind of aesthetic specialist and his role as the integrating person is often replaced by a team of designers. The impression has emerged that the architect should be skilled in methods of Team Design and Communication. In some cases he is also the generalist with final responsibilities and covering all fields involved in the building process. In his speech of acceptance of the 2001 RIBA Gold Medal, Frank Gehry argued that computers will counter 'infantilisation and marginalisation'

of the architect in the construction process: "I see a chance where the architect becomes more the responsible party in the equation ... a great opportunity for architects to become master-builders again." But it will be clear that this assumption is not shared by all architects!

The organisation and management of knowledge

In his article Bridges concentrates on the subject of Knowledge, on what he refers to as 'The Construction and Organisation of Knowledge in the University Curriculum'. Bridges states: 'The higher education curriculum has become the site for a fascinating clash of epistemologies as well as values and educational and other priorities. (...) We are faced with some very practical as well as philosophically grounded questions as to what selection of knowledge should be represented in the university and how that should be constructed (epistemologically and from the perspective of learners). These in turn raise questions as to how this knowledge should be organised (institutionally and form the perspective of teachers) so as to provide more effectively the teaching and learning which that structure should support.'

These questions are, according to Bridges, extremely interesting in their own right, but 'there is a real opportunity for those who engage with this questions with them to affect the outcomes, since, unlike the school curriculum, which has been rested almost entirely into the hands of our political masters and mistresses, the university curriculum remains for the moment pluralistic and (with the important exception of courses carrying, for example, professional accreditation) self-determined at institutional level, though the demand for the 'bench marking' of degrees (...) poses a serious threat to this autonomy'.

Professional and scientific standards

It is clear that curricula in Architecture and Urbanism are faced with these kinds of questions in at least two different ways: the curriculum should meet professional standards, and the curriculum should also meet scientific requirements. We are benchmarked on a European level, for the professional standards there is the European Guideline. The scientific standard will become more and more important, and many of our schools and faculties experience the struggle for scientific recognition, which is of vital importance to generate the so necessary flow of funding. An exponent of this was seen with the EAAE-conference 'Research by Design' (Delft, NL, November 2000). As already mentioned, the categories of most European science programmes do not have any place for the field of Architecture and Urbanism. Nor are many people representing the field on scientific selection panels. Does the knowledge in these fields not play any role in the scientific world?

A central issue in the discussion on a European Curriculum is concerned with the type of Knowledge this curriculum consists of.

One research area in which architecture has been competitive, and arguably, a leader, is the development and application of Information and Computer Technologies (ICT) in design practice and design education. Researchers working in this field have found common cause with a range of engineering disciplines, to the mutual benefit of both.

Implicit and Explicit Knowledge

Knowledge itself has become a scientific subject. How do we manage and organise knowledge? These are important questions for the creation of a European Curriculum for Architecture and Urbanism.

Nonaka and Takeuchi (1995) studied the issue of Implicit and Explicit Knowledge and their interaction. Both explicit and implicit knowledge play a crucial role in the development of a field. Both influence and enforce each other. But if the focus becomes too much on one, then innovation becomes difficult. If a European Curriculum is just grounded in Implicit Knowledge we could say that this European Curriculum does not exist, it will remain 'implicit'. So a European Curriculum should also be research oriented.

This concept was extended by Cook and Brown who introduced the concept of 'knowing as action'. They state that 'tacit knowledge can not be turned into explicit, nor can explicit be turned into tacit'. It is the interaction between both at the moment knowledge is used which creates new knowledge, insight and skills.

However, implicit knowledge is an important part of the Architectural Curriculum. The Studio is often seen as a place of design as well as of research. It is seen as the core of the curriculum. Rightly, as education in Architecture and Urbanism is highly design oriented. But the Studio should not be made a false fortress. This happens when we concentrate all the education on the Studio, arguing that the Studio is also our scientific place to be, that Design is a type of research. However true this may be to some extent, it is also a false idea, as we neglect the necessity of research programs, the specific scientific types of communication and output criteria. We cannot neglect the regular bench marking-criteria and make pleas for positions of exception for architecture and urbanism. In the end this will be fatal to the discipline.

In the Masters-PhD-phase of our European Curriculum for Architecture and Urbanism, we need the right balance between design-oriented and research-driven. In an integrated Masters-PhD-phase, which we see as an important step for a European Curriculum, this balance can gradually move from an emphasis on Design in the Master-phase to an emphasis on Research in the PhD-phase. It should be made possible that the Designpart of the Master-phase is a part of a PhD-programme and PhD-thesis. In this sense, another position may be taken into account, arguing that scientific thinking is a special form of design thinking as was argued by Glanville (1997).

Of great importance is, that ENHSA and EAAE work on criteria and so the recognition of a Design Thesis at the PhD-level. Within the framework of the USO-Built-Graduate/research school a task force already worked on the formulation of quality criteria for an academic design thesis (and other design output). (See Archives on http://www.uso.tue.nl)

Studio

The tension between Implicit and Explicit Knowledge, is a very delicate discussion. There is the danger, that this discussion becomes polemic. On the one side, the Studio is protected as the place of implicit knowledge, on the other side studio is rejected, as it is a place where beliefs, attitudes, convictions are transfered from the teacher to the pupil in a way very similar to the master-aprentice relationship in old craftmanships. At the EAAE-conference on Architecture and Ethics this 'conviction' was made very explicit by Philip Boudon. He argued that one does not learn anything in the studio, and presented an alternative, Architecturology. But this Architecturology, grounded mostly in geometry (as the whole of modernity is grounded in geometry, guiding science), can be almost regarded as a symbolic attempt to make architecture scientific. Another example of such a symbolic scientification of Architecture and Urbanism is perhaps the Space-Syntax-method?

The type of polemic overfocus and concentration on the Studio has not been very fruitful. We cannot limit ourselves to tacit knowledge as the interaction between both implicit and explicit knowledge is crucial to innovation and knowledge development. Architecture may stem from the learned professions, the times have changed. We should avoid the polemic 'Studio - Science' by renaming the Studio a scientific laboratory. This is just semantics. It can be questioned if a presupposition like 'Research by Design' is helpful and does not masque the problem. The importance of the Studio is evident, and instead of polemic discussions - in order to become useful - we should discuss different types of knowledge that are vital to Architecture and Urbanism. This can be done, if we link the discussion to other scientific discourses, such as on the difference of Implicit and Explicit knowledge, Phronesis and Episteme, Hermeneutics and Empirical science, to understand and to explain, Phenomenology and Natural Sciences based Technology, etc. The activities and processes in the design studio themselves should adopt a more scientific way of working and thinking and develop their own scientific standards.

ICT

It is obvious that the Studio will change because of ICT. Does the Design Studio of the (near) future still contain drawing tables? Probably the studio will become mare and more a mix of traditional and modern, advanced tools, such as computer and lap top. As amplifiers of the intellect, computers have the potential to profoundly change architectural praxis and education. The proceedings of the past 20 annual conferences of ECAADE (Education in Computer Aided Design in Europe) show the increasing impact of ICT not only on how design education is carried out but also on the modes of delivery. (See ECAADE Digital Proceedings 1983-2000).

Increasingly, our graduates will be in demand to design virtual as well as real buildings. The theoretical and philosophical issues relating to virtuality will surely occupy central stage in architectural education.

The Department of Architecture and Building Science of the University of Strathclyde runs an experimental studio which take advantage of a real-time VR environment in which students, working remotely and on different machine platforms, can collaboratively design from within the virtual world they are creating. (See J Petric et al, 2002)

Evidence from initiatives, such as that at the TU Eindhoven, where ICT becomes ubiquitous by giving every student a high specification laptop, shows that integration and collaboration in project work is greatly enhanced.

Also the deployment of multimedia and internet technologies offers wholly new ways of delivering education and provides the currency for the "knowledge economy". And the big issue of a sustainable built environment has to be central to our educational programme; there is some optimism that advances in the development in integrated computer-based modelling systems will help address this complex and important issue.

The Style of Architecture (and urbanism)

This leads us to the question of 'style'. But 'style' is not used here in the common architectural way. By 'style' we mean 'attitude' (scientific and/or artistic), 'drive', a 'configuration of preferences', 'set of values', the 'culture' of an organisation, also the scientific and professional culture of a specific discipline. A 'style' has to be distinguished from a paradigm; a paradigm is already a more settled disciplinary matrix, including specific

methods, ethics, etc. For example, modernity could be seen as a 'paradigm', postmodernism still as a style, a style with a preference for disorder (instead of order), the dynamic (instead of the static), spontaneity (instead of a preference for clear processes) etc. (See W.T. Jones). Sometimes schools of architecture are birthplaces of a new style because of the presence of a group of specific people, often well known architects, and in this way these schools gain a strong identity of place, time and scholarly community.

But not all schools can follow this strategy, just because they are large institutes with many students and having to deliver large amounts of professionals for common practice.

So, we will have to raise the question in general: does architecture have an own 'style'? Let us hereto take a look into the history of architecture.

Before the 18th / 19th century, architecture was a part of culture without demarcation, it formed a coalition with sculpture, drawing, etc. The style was artistic. There was no specific education. The architect was the fore man, the leader, but he was not a specialist. He was the one with some special capacities, someone who could give orders, was extremely able in reading, drawing or something else. But architecture was always a collective enterprise, although the products of architecture finally bore the name of the 'fore man'. Note that this collective enterprise didn't mean Team Work based on management or communication skills, 'culture' was the binding factor.

During the 18th and 19th century schools emerged, Polytechnics and Academies. Architecture became a profession. In the beginning architects were very well educated, which means: in an broad sense. But during the 20th century a more narrow education was established, the architect was even educated in Universities of Technology and taken apart from humanities. The architect became an illiterate. He grew up in de-alienation, amidst representatives of the sciences. He had to meet with these scientists and the engineers. This leads, says one of the general view points, to a weak position for the architectural discipline. From a general discipline to a very specialized discipline in the professional field - the architect complains he is becoming an esthetical advisor, and that is all. Concerning the scientific context architecture finally arrived in the Universities of Technology, they have to survive in this specific academic world and architects need recognition as scientist and researchers. But there are almost no doctorates, there is almost no research output, and this means: no money not the recognition the work and ideas deserve.

University of Architecture?

Architects had different style from the engineers. For this reason Tomas Taveira launched the idea of a 'University of Architecture'. We quote here from an article by Geoffrey Broadbent in 'Educating Architects':

The most ambitious scheme for the future, however, seems to be that of Tomas Taveira, the Lisbon architect who seeks to set up a University of Architecture. He finds himself as Dean of Architecture in a Technical University surrounded by engineers who have their own immensely successful ways of thinking which they apply to various kinds of engineering. But architects have their ways of thinking too, which involve a firm rooting in culture and history; the obvious skills of drawing and designing; profound understanding of human values, namely spiritual, physiological, psychological, social; and the ability to 'juggle many balls at once' in the resolution of complex problems, fraught with ambiguities. They need a knowledge of many crafts, technologies, the ability to communicate with

specialists in many fields and so on. Thinking, in Taveira's view, can be applied with equal relevance to all the visual arts - to theatre in its very many aspects, to film, to television etc. So Taveira is trying to set up a University of Architecture in which all these fields are represented and feed directly off each other.' (Broadbent, p. 22)

How is such a University institutionalised? Is it just a large department within a University, or is it a separated and exclusive university? Is it really useful to separate it from the other sciences and professions? Do other engineering disciplines not have many of the same characteristics as architecture? We notice that more and more the engineering disciplines become design-oriented disciplines and put emphasis on the social and cultural embeddings of their products.

However, the separation of Architecture from the humanities is certainly a problem. Note that architecture by itself is never alienated from humanities, but that both Architecture and Urbanism got lost in the domain of the sciences and have to cope with their type of reasoning. As the way of reasoning of the modern sciences have as their characteristics: certainty and distance, evidence and clarity, generalisation, lawfulness etc.; in architecture another way of reasoning is found. A style of *reflective reasoning*, starting from involvement with the actual, wholeness instead of fragmentation, ethics instead of empirical regularities. According to Dalibor Vesely this type of reasoning has its roots in phenomenology. Maybe this style also becomes more actual in postmodernism again, with its emphasis on the particular instead of the general and universal.

Ethical dimension and social theory

Following the ideas of Dalibor Vesely: architecture has always had an ethical dimension. This dimension is inherent to architecture. And in spite of specialisation, architecture still has to cope with the wholeness of reality, with culture. So the architect still is partly a philosopher? Yes, we see many references to philosophy and social and cultural theory in Architecture. But at the same time it seems that the architect is just an illiterate philosopher, a dilettante, because he was not educated and cultivated in this discipline - referring to too many, sometimes very divergent philosophers at the same time instead of the concentration on one philosophical corpus. We see at present that the pure reflexive disciplines take this place. Historical and critical reflection substitutes the reflective dimension of architecture itself, and its reflection is performed by representatives of disciplines which are not designing in the sense that architecture does, constituted by scholars that do not have the affinity with design as ars inviviendi. The dilemma is however, that we cannot cultivate the architect as a professional philosopher, because we see 'philosophy' differently - not in the narrow sense of this term. We will have to educate him or her with some philosophical or reflective skills. Reflective reasoning should be an important component of architecture!

In his contribution 'Fractures and Breaks' Neil Leach pleads for a strong linkage between Architecture and Social and Critical Theory:

'The idea of a certain universality of theory, that one discipline has points in common with the theory of another, and hence that the theoretical discourse in one discipline can inform the theoretical discourse in another lies at the heart of an initiative set up at the University of Nottingham. The School of Architecture at the University of Nottingham has recently forged a link with the School of Critical Theory. 'Critical Theory' refers to the theory of criticism and is an umbrella term covering contemporary theoretical debates

in areas such as philosophy, gender studies, psychoanalysis, literature and other modes of cultural expression. The hybrid that has resulted from this link, a Master Course in 'Architecture and Critical Theory', is an innovatory venture that aims to promote a heightened awareness of architectural theory and set it within a broader theoretical context. The aim is to focus on the origin and nature of debates in contemporary society and to make connections between developments in architecture and other disciplines. The intention is to expose architects to a range of debates to which, traditionally, architecture has not been exposed, and to introduce architects to a range of thinkers who are not normally considered within the traditional architectural education - thinkers such as Adorno, Benjamin, Habermas, Foucault, Baudrillard, Derrida, Freud, Lacan, and so on.' (p. 28)

Neil Leach takes a different position from Taveira: no separation form other disciplines and the exclusiveness of an architectural discipline, style and attitude. As we shall see in the last section of this document, 'Social and Critical Theory' was some years ago an almost neglected part in the architectural curriculum. But today we see a growth of journals on the linkage of Architecture, Urbanism and Social and Critical Theory, and apart from Nottingham-there are examples of schools that succeeded in the introduction of humanities, social theory etc. in their curriculum in a 'non-dilettante' way, for instance Sint Lucas in Brussels-Gent, and the department of Architecture and Building Sciences of the University of Strathclyde, Glasgow, who set up a specific unit Advanced Architectural Design within their Graduate School.

Also we could mention the seminars on phenomenology of Dalibor Vesely at the Department of Architecture of the University of Cambridge (however, it should be noted that according to Dalibor Vesely architects should always work from the studio, also in the case of social criticism and cultural reflection).

Types of research

Better than to become polemic to other disciplines, arguing for the exclusiveness of Architecture and Urbanism, we should differentiate between types of research relevant to our own discipline. We are not an island between other disciplines, the scientific research field itself is built of many islands. The philosopher J.F. Lyotard uses the image of an archipelago of islands. Every island is a research-island. Every island has not just its own type of research, but also its own language game (the Wittgenstein-concept).

Lyotard distinguishes as most important research questions, types of questions and language games:

- What do we have to do? (= questioning-prescriptive research; determining of goals)
- What are we able to do? (= questioning-descriptive research; knowledge of means)
- Look what we could do! (= research of imagination focussing at the artistic truth, concepts, simulations, scenario's, designs, scripts, etc.)

These types of research should not be mixed, they are different, they cannot be brought together into one system. 'We have to play the game of difference.' However, a problem is found in the communication inside the archipelago. For this reason we have to build bridges, or we would need boats to connect the islands.

State of the art in architectural research

The EAAE-conference Research and Architecture, Paris, July 2000, displayed the following state of the art within architectural research. The contributions could be summarized in three categories:

Value based research. Research starting from presuppositions like 'architecture is life, is pleasure, gives vital signs, makes the world better', etc. Research starting from transcendent human values (stated values, not hermeneutically interpreted from reality). Contributors saw architecture as an autonomous discipline, hardly communicative to other disciplines and often stated sentences containing 'me as an architect'. This means that the autonomy is mainly grounded upon their own subjectivity. Curious was that a large part of the North-American Ph.D.-research was based on this type of assumptions.

Method based research, with a strong reference to the dominating methodology of the natural sciences (empiricism, inductive or hypothetic deductive, and so on). This emphasis on methodology was certainly also an attempt to be taken seriously in the academic scientific world. From Germany there was an extremely polemic contribution, contributors challenged the (soft) architects. However, their contribution was not entirely convincing, because they used from the natural sciences borrowed ideas on methodology, but still had no research content.

Instrumental research, focussing on tools for design and research (measurement), tools especially for studio work and architectural practice (professional values as reference), instruments for trial and error and heuristic approaches, the studio seen as laboratory.

Let us shortly summarize this state of the art of architectural research. First, we see subjective value-based architectural research and architecture as an autonomous discipline. Secondly, the development of architectural tools, but without intentions, goals or aims; mostly practice-centered. Thirdly we find a strong method-oriented approach: to create an image of science is the most important issue; this approach is looking for communication with the sciences and to come with them on speaking terms. The danger here, however, is the introduction of a borrowed methodology.

All three domains of contribution touch a substantial part of architecture: values, methodology and heuristics. The types of research refer to three important ways of reflection in architecture:

- hermeneutical reflection (the German idealistic-phenomenological approach)
- methodological reflection (the Anglo-Saxon approach) (See Sarlemijn); and:
- professional reflection.

However, there was no coherence at the research-conference in Paris, the three domains were not linked, and each of them was presented in its own autonomy. From this perspective, it seems necessary to find a coherent concept.

Knowledge based society

Here we have put emphasis on the subject of research in Architecture and Urbanism, because research has to be a significant part of the European Curriculum of Architecture; also seen in the light of the emergence of the knowledge based society. Are Architecture and Urbanism ready to participate adequately in this society?

'The notion of the knowledge based society can be traced back at least to the work of

the sociologist Daniel Bell (1973), and has been central to the work of more recent theorists as Castells (1996). A common thread is the idea that codified knowledge, especially in the form of science and technological innovation, has become the key strategic resource in society, displacing control over manufacturing processes, which was the main strategic resource of an earlier era. This change is related to changes in the nature of products and production. In the words of one of the UK's contemporary guru's of the 'knowledge-driven economy', the centre of gravity of economies is shifting:

'The old economy was organised around physical, material and tangible assets and products. The old economy had a large service sector but it was largely organised to service physical products: processing paper, taking orders, managing production, selling, servicing and repairing. In the new economy more of the value of manufactured products will come from the software and intelligence that they embody, and more of what we consume will be in the form of services. Across all sectors the knowledge content of products and processes is rising.' (Leadbeater 2000, pp. 38-39)

According to proponents of the knowledge economy thesis, the creation of value increasingly derives from the intangible, symbolic qualities associated with goods and services, rather than their purely functional attributes. Hence, activities such as design, marketing and brand management have acquired a more central, strategic role. These changes have been accompanied by the creation of a new leading group in society, made up of those who create and distribute this knowledge, such as high level experts in science, engineering, design, finance, law, marketing and other fields.' (Griffiths, 2002, p. 2)

Although many aspects of the knowledge society or knowledge economy thesis have been challenged, according to Griffiths 'it has nevertheless stimulated a number of ideas about the nature of knowledge production and knowledge application that are of value to an analysis of the relationship between teaching and research in higher education.'

Two themes in particular are worth lightening. The first concerns the sites in which, and the processes through which, knowledge generation occurs. (...) High level knowledge advance is no longer the preserve of the university, but now occurs increasingly in centres outside the conventional academic setting: in company research labs and R&D departments; in consultancy firms; in government sponsored research institutes; in independent think-tanks. This growing diversity of settings has been accompanied by shifts in how knowledge is created and applied. Processes of knowledge creation are now less tied to traditional disciplinary boundaries. There has also been an erosion of the devide between creators and users, as knowledge creation becomes more closely interwoven in to the activities of particular communities of practice. This trend is connected to a growing demand, from the government and the public at large, for the accountability of professionals and experts. This has led to a new emphasis on so-called 'evidence-based policy and practice' which first gathered force in the medical field but has become much more pervasive (Davies et al, 2000)' (Griffiths 2002, p. 3)

'These changes in patterns of knowledge creation and application have been conceptualised by Gibbons, Nowotny and others in terms of a distinction between 'mode 1' and 'mode 2' knowledge (Gibbons et al 1994; Nowotny et al 2000).

'The following table provides a summary of the many features of this distinction:

Mode 1 knowledge is defined as 'The complex of ideas, methods, values and norms that

has grown up to control the diffusion of the Newtonian model of science to more and more fields of enquiry and ensure its compliance with what is considered sound scientific practice'. By contrast, Mode 2 knowledge is 'knowledge production carried out in the context of application and marked by its: transdiciplinarity; heterogeneity; organisational heterarchy and transience; social accountability and reflexivity; and quality control which emphasizes context and use dependence.

Mode 1	Mode 2	
segregated	integrated	
university based	cross-disciplinary and transdisciplinary	
discipline-based		
'pure'	sensitive to context of application	
hypothesis-led	social robustness	
deductive	messiness	
concerned with truth and predictability		

'A second theme to highlight concerns the types of attribute or capability that are increasingly called for the context of a knowledge-based society. As the rate of knowledge generation increases, knowledge advance occurs through dialogue across traditional disciplinary boundaries, and processes of knowledge creation becomes more relatively less valuable as an attribute. Different capabilities are now at a premium. They include the ability to frame problems and define knowledge requirements; to access and make sense of knowledge derived form different places; to commission research; to critically assess the validity of knowledge and its relevance to practical contexts; to turn knowledge into understanding and judgment. In short, there is a shift of emphasis from knowledge acquisition to knowledge management'.

Research-led teaching

'Even if these themes have only partial validity, they would appear to have profound and wide-ranging implications for the nature of higher education. They imply new emphases with respect to what is taught, to whom is taught, how is taught, and when is taught. And, of many of these aspects of the higher education enterprise, they imply a need to reconsider the relationship between teaching and research.' (Griffiths 2002, p. 3)

According to Griffiths we should distinguish 'an externalised, product-driven notion of research, and a teacher-focused, information-transmission notion of teaching' from 'an internalised, process-driven notion of research, and a student-centred, conceptual-change notion of teaching'.

In the first conception research and teaching are 'two separate types of enterprise', as in the second conception 'the separation starts to vanish'. Both activities, teaching and research, are 'revealed as expressions of a common, more basic category: learning. (Brew and Boud 1995)'.

Griffiths has a preference for the second option, and we cannot fully distinguish if this choice has also been made to strengthen the research-position of the younger generation universities in UK (the old Polytechnics). The choice for the second option means an emphasis on general skills concerning research: critical thinking, problem solving, arguing, the finding and interpretation of information, statistics, etc, maybe also: Leadership? (see Richars N. Sweet). It will be clear that these kind of skills are more and more of importance in the context of the knowledge society. But the tendency should not lead to the denial of the necessity for knowledge production by PhD-research in order to construct a real 'body of knowledge'. This type of research should not disappear in rather vague concepts of 'research-led teaching'. We have to guarantee scientific knowledge production in architecture and urbanism. Students need to 'internalise' the scientific research attitudes during their education.

The Studio again

Nevertheless, the curricula of architecture and urbanism have a fantastic site where 'research' as a set of general skills can be taught: the studio. According to Donald Schön 'studio working (...) seems to be a 'reflection in action', indeed 'a kind of on-the-spot-research' conducted within the very 'media' of architecture itself. (...) 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, says Schön, constantly 'need to educate themselves to a new competence when they don't yet know what it is they need to learn.' So unlike other kinds of students, they must therefore take a plunge into doing before they know what to do. (Broadbent, p. 23)

Schön sees the Design Studio 'as the very model for education in all the professions, including medicine, law and even business. Just like architecture these professionals have to deal with: 'complexity, uncertainty, uniqueness and value-conflict'. They all have to learn, understand and incorporate material from the applied science which themselves are constantly developing. Indeed, such professionals all have to integrate their methods of working with what Schön calls 'reflection in action'.' (Broadbent, p. 22)

The studio as the place for teaching and learning research skills for the learned professions. Just for the learned professions? The late Herbert Simon, one of the few philosophers to address the complex issue of design, said 'Design is the core of all professional education; it is the principal work that distinguishes the professions from the sciences. The professional schools will reassume their professional responsibilities just to the degree where they can discover a science of design, a body of intellectually tough, analytic, partly formalizable, partly empirical, teachable doctrine about the design process. (Simon, 1968)

In a contribution to a publication about future developments in the social domain of postmodern society the Dutch sociologist Anton Zijderveld points at the importance of a place where students can work independently, supervised by coaches and not by pedant didactic teachers at 'concrete projects to solve concrete problems, and following concrete goals'. This process is of great importance, in order that the student can experience 'meaning' in a 'postmodern, unlimited, decentralised and globalised world'. Zijderveld does not see the Humboldt-university of the 19th Century as the model for academic teaching, but the studio of the Bauhaus. So the studio, also for academic aims! Zijderveld does not plead for a return to 'old professionalism', he wants a 'realistic craftmanship' linked to an ethics of responsibility ('Verantwortungsethik') focussing at the 'demand of the day' ('Forderung des Tages') (Weber, Durkheim).

Evaluation

It seems to be necessary to re-think the Studio taking its postmodern context as a point of departure. Important elements of this context are:

Giving the student a sense of meaning in an 'unlimited, de-centralised, globalised world' by focussing at concrete projects and confront the students with an ethics of responsibility, for the university should 'live in truth'. (Havel, see Roberts 2002, p. 89)

The development of a 'new professionalism', a realistic type of craftmanship to resist the strong tendency of de-professionalisation, because of 'the emergence of bureaucratic and market-based forms of structuring work', leading to a loss of professionalism 'as the occupational control of work' and also the decay of a professional tradition.

Networks of Excellence

However important the Studio may be, the Studio cannot be the panacea.

We will have to reflect very critically on the place of the studio in the production of knowledge (the 'research by design'-assumption), also seen in relation to the 'degradation' of the traditional university, (according to the model of Van Humboldt, the research-driven university) as in the knowledge-society 'production of knowledge' (research) is not the privilege of the university anymore. 'Networks of excellence', being cooperations of several type of institutions, are important in this respect. (In the PhD-Graduate school USO-Built an attempt has been made to establish such a network, including the disciplines of Architecture, Urbanism and Building Technology.)

It is important that we define the subjects of our research, and define research programmes that will be part of our European Curriculum in Architecture and Urbanism. This is the only way to manage this curriculum as a construction and organisation of knowledge. The PhD-level will influence positively the Masters-phase. Not only a European Educational space is emerging, also a new Research space. We can point, for example, at the call for proposals as part of the 6th Framework- programme for Networks of Excellence. Do Architectural Schools know that this is happening? We hope so!

III Architectural Education

In Europe a new educational space is developing. The following issues seem to be of crucial importance.

First, implementation of the Bologna- declaration (following the Sorbonne declaration, and followed by the Prague declaration) is an important step in the creation of this new educational space.

Also the increase of student-exchanges between universities and schools is a major factor in the creation of this space; for this we need flexible curricula and modularisation.

Thirdly, a new European research space is emerging together with the new educational space (6th Framework: Networks, Centres of Excellence). Architecture and Urbanism should find their place in the European Space of Research. This however is difficult, as the categories of, for instance, the 6th Framework are not very open to fields such as Architecture and Urbanism. We are just the 'Other engineering sciences', a miscellaneous category. We should all make efforts to change this, probably in collaboration with other organisations, for example the Association of European Schools of Planning (AESOP). Our

joint mission then is - now the discussions for the next European framework programme have already started- to put architecture and planning on the research agenda of this next (7th) Framework-programme.

Then, fourth, the new European Curriculum will be structured according to the Bachelor-Master-PhD-structure. Yes, but do we know what this system is? Is it clear what the levels of Undergraduate, Graduate and Postgraduate mean? How are final terms and core qualifications for the Bachelor, Masters and PhD defined and how can we agree on them?

Let us limit ourselves: for a European Curriculum in Architecture (and Urbanism) we should focus on the Master-phase; for research on the PhD-phase. The Bachelors is to the individual schools. Or do we also need end-qualifications for the Bachelors-phase, because we can expect that a lot of student will become mobile after the Bachelor-phase and want to continue their study at another school?

For the PhD-stage we need research schools or PhD-Graduate schools in architecture and urbanism, network-schools, like the emerging research school USO-Built (http://www.uso.tue.nl). This brings us to the scientific character of Architecture and Urbanism.

The PhD-schools should always be international, to strengthen the position of research-activities and stimulate multi-disciplinary and multi-cultural approaches, essential for a European PhD-curriculum. For the recognition of these types of education there is an important role for EAAE and ENHSA, for they can legitimise these activities. These PhD-schools will also enable the research community to gain critical mass for research groups.

All schools should have criteria that students from other schools (Bachelors), intending to enter a Master-stage, should meet before entrance; limited homologation should be part of the Master entrance phase. How will the accreditation and recognition of Bachelor-degrees be arranged?

All schools should apply the ECTS-system for mutual insight in curricula and recognition of degrees and modules.

- The Bachelor-phase is at least 180 ECTS.
- 40 50% of all courses are Design Studios and Project Based Learning-Modules.
- The Master-phase is at least 120 ECTS in post-bachelor-education.
- The Bachelor and the Masters can be a BArch and M Arch as well as a BSc or MSc.

Sometimes the Bachelor- and the Master-stage can be followed by Professional Masters in specific areas. Are we sure we want to continue this type of Masters? Or do we reserve the name Masters just for the 4th and 5th year after the bachelor-phase?

The Bachelor-phase is offer-driven, the Master-phase is demand-driven. This means: the Bachelor-phase has a curriculum that is almost completely compulsary for all students, while in the Master-stage there are a lot of optional courses and specific specialisations. 'Optional courses are an opportunity for students to widen their horizon in the field (breadth) or strengthen their understanding in a chosen area (depth). Optional courses allow more flexibility on the course and may also include opportunities to travel, practice or attend classes in other related disciplines.'

Joint Masters is an important new development and are structural to a European Curriculum in Architecture. Joint Masters are joint curricula of a network of schools. Students have one home university, but also take offers from curricula of other schools.

Joint Masters lead to the diploma of the home university plus a Joint Masters-certificate issued by the international network partners and need mutual agreements of schools. As an example we take the so called META-University, an initiative of TU Eindhoven, NL, adopted by EAAE (see below). Also the European Association of Universities started a Joint Masters-project. This is also very high on the agenda of the European Commission.

Entrance to the professional field is in the care of professional organisations or ministerial rules (professional requirements). It is not the care of schools and universities. However: 'The involvement of the professional organisations in education varies from total control (UK) to no involvement (Spain).' (Worthington, p. 34). Total control should be rejected because of academic freedom. So the RIBA-model for accreditation of schools is not the model we want to follow. Nevertheless this RIBA-accreditation is for some schools outside UK, mainly in Eastern Europe and also South-Africa, an important reference. Maybe ENHSA can take over such an accreditation?

Schools and universities can take professional requirements into account for the content of their curriculum, but these requirements are hardly of interest of a European curriculum. On a regional level communication with professional organisations is recommended and even necessary.

Three types of architectural education can be distinguished:

- The architect as professional. (Bachelor + Master of Architecture)
- The architect as professional to figure as academic professional. (Bachelors + Master of Art or Science)
- The architect as scientific researcher and designer. (Bachelors + Master of Art or Science + PhD)

A European curriculum for student exchanges needs agreements on systems and rosters, not to make one coherent curriculum, but to make flexibility possible and arrange necessary practicalities.

Joint Masters are also the vehicle for peer reviews and quality assessment.

Necessary are Core Qualifications for Bachelor and Master, an example is given in the annex of this paper. All schools will have to make their own interpretation, elaboration and implementation.

META-University

META-University is an initiative to improve international relations and to form a network of exchanges between students and staff of Universities and Design Schools with departments of Architecture, Building and Planning. The META-University is a network of universities and design schools. The schools agree to offer part of their existing activities in the form of international design workshops and theoretical modules open to the students in all schools of the network. This can be achieved by using a common website as a way to make the offer known. However, it is important to emphasize that META-University is not a virtual university, all the workshops and courses take place in 'real space' on the locations of the members universities and under their full control. Staff and students also meet each other in 'real space'. This concept of a META-University is founded on the conviction that, although modern communication offers invaluable new perspectives for e-learning, education on line, etc. nothing can replace real experience and real contacts. In this concept the web-site is just a tool for communication, for

assembling the different offers and for exploring areas of common concern. The aim is to make the best of both the shared interests and the individual qualities of the member schools and make appointments about the roster of the offerings, the recognition of modules in terms of ECTS, the language of teaching ('International English'), and so on.

In fact, the META-University is the creation of a European Curriculum in Architecture. At this moment there is a pilot group of TU Eindhoven, University of Strathclyde, Sint Lucas Architecture Brussels, Chalmers University Göteborg, University of Rome, University of Warsaw and the Bauhaus-University, Weimar.

A main issue is the formation of Joint Masters-programmes in Sustainable Design, Urban Morphology and Critical Theory, Advanced Architectural Design, Information Design and Urban Renewal.

Networks connecting European Universities with universities and design schools in the United States, in Asia and South-America are in preparation.

IV Contents of a European Curriculum for Architecture

Now we come to the content of a European Curriculum for Architecture, we have to stress the importance of some tensions or forces at work regarding this curriculum.

Firstly, some remarks on the subject of the Curriculum. However, also the subject is in deconstruction. Bridges mentions some of the forces to deconstruct that subject, such as:

- the modularisation of the curriculum
- the cross-curricular key skills movement
- the learning through experience movement and the shift of the seat of learning outside the academy
- the anarchic potential of web-based learning.

Finally Bridges makes a plea for the reaffirmation of the subject as the academic and organisational identity.

The first three of these developments will be focussed on very shortly.

a) Modularisation of the curriculum

This term refers to the creation of small units of knowledge to facilitate 'more flexible patterns of study, allowing students to accumulate 'credit' for courses successfully completed over a period of time which suited their personal circumstances and, by extension, to assemble credit for modules taken at different institutions. There are then three ingredients to this disassembly of traditional patterns of learning supported by the 'credit' revolution:

- the taking apart of traditional subjects as the epistemological units of study;
- the taking apart of the three year undergraduate course as the chronological unit of study; and
- the taking apart of the single university as the topographical location of the unit of study.'

The modularisation, states Bridges (2000), 'opens opportunities for the expression of two

different educational principles. First it renders possible a more student-centered curriculum, i.e. (within certain bounds) it allows students to assemble a degree- programme which fits their interests and aspirations. (...) But the same organisational structure can also satisfy a different social imperative - the expectation (...) that university programmes might serve more directly the needs of employers.'

It becomes possible to create 'tailored degrees' to prepare students for specific professional, scientific and management roles. Programmes also that cross boundaries of subject departments and faculty structures.

However, the effects of modularization on staff are not always so positive. Tony Rich and Clive Scott describe how 'one of the general features of the modularization / semesterization process is a feeling of alienation or dispossession (among staff).'

Bridges concludes: 'A number of very different considerations continue to restrict the flexibility on offer to students. These include:

- the need to fulfil the requirements of professional bodies for the accreditation of programmes as a professional qualification;
- the desire to build consecutiveness and progression into the study of a particular subject, and hence the need to make the study of x a prerequisite of the study of y; and
- the desire of heads of departments to protect income streams and hence their inclination to place disincentives and barriers in the way of student choices.'

b) Focus on key skills

A second current of change in higher education runs across the first and adds to the disturbance of the nature and role of the traditional subject and its institutionalised expression in the department. This is the demand for what has variously been identified as transferable skills, cross-circular skills, core skills and key skills (...)', such as (after Dearing):

- communication skills
- numeracy
- the use of information technology
- learning how to learn. (...)

We believe that these key skills are relevant throughout life, not simply in employment... All institutions of higher education should aim for student achievement in key skills... to become an outcome of all programmes.'

The emphasis on general key skills include also:

'an attempt to draw attention to and develop some of the more generic capacities which underlie traditional university education (e.g. critical thinking and problem solving) and which are prominent in what employers expect or are looking for in a graduate employee;

a fresh emphasis on what might be called the interpersonal dimensions of working in an academic as well as an employment context (e.g. on team working and oral as well as written communication and presentational skills and the development of personal confidence in social situations);

an understanding of 'the world of work', of the way businesses function and of how knowledge can be applied in these settings (which leads of course to pressure for the

inclusion of work experience as part of undergraduate programmes (...); and

the establishment of basic skills which, it is claimed, any of today's entrants to higher education lack (numeracy and basic writing skills as well as competence in the use of information technology).'

The question Bridges raises is: do we need special skill training centers? Or, for architectural education: can we teach all these skills as part of studio work and project based learning, so that the integration of skills and subject is guaranteed?

But, on the other hand: is the remark that design is the summary or synthesis of all necessary skills not too simple?

c) Learning from experience

Learning from experience means for Bridges 'the incorporation of experience-based learning (including work-based) learning as a part of the university curriculum (...)'.

This subject is presently gaining importance. Not just because of new types of learning, such as Problem-Based and Project-Based Learning. Architectural Education does not have problems with this kind of teaching, because of its experience with studio work, which is a type of project based learning. But there is also a growing agreement in Europe to recognise capabilities and competencies earned during periods of work.

So new types of education emerge, such as Dual Systems, where students can follow supervised projects in practice.

But: 'To what extent is this experience integrated with, or separate from, mainstream teaching? How far can it take the place of other forms of learning, and at what price? How is quality assured in off-campus provision (...)? What is the status of the off-campus mentors of this experience and how are they rewarded. How far can the standard university timetable be adjusted to facilitate this kind of learning?'

Or, do we really think that, again, we can solve these problems in the Studio?

V Different types of Curricula

The curricula of Schools and Universities have different accents. There is a permanent tension between generalisation and specialisation, between a professional oriented attitude to a scientific oriented attitude.

The tension and balance between generalisation and specialisation is an important issue. The changes in curricula are often attempts to restore the balance, because one of the dimensions has become dominant. Generalisation may lead to an emphasis on general skills, and a wide range of disciplines and variety of content in the curriculum. Specialisation on just architecture may lead to a very limited scope of the student.

The balance of specialisation and generalisation is also a division of these dimensions over the different years of the curriculum. In terms of the Bachelor - Master-structure: is the Bachelor the general part of the curriculum and the Master-phase the specialist part? Does the student first have to get experiences in general key skills (also skills from a scientific side, academic values, etc.), to be applied in a specialist way later on? Or is it the other way around, as a student needs to specialise first, to have a background that makes it later possible for him of her to get involved in more general questions?

In the final sessions of the EAAE-conference in Plymouth, UK (Architecture and Engineering. Teaching for a Multidisciplinary Practice, 1999) Constantin Spiridonidis spoke about two models (he called them paradigms) of curricula:

Model 1: you start with breadth and synthesis, followed by specialization; Model 2: you start to specialize and tries to synthesize and integrate afterwards.

At the Plymouth-conference examples of both models were shown.

These are very rough models. Marvin Malecha referred in one of his contributions to a Hania-Meeting to the insights of the philosopher A.N. Whitehead. In Whitehead's 'Aims of Education ' an essential side of education is explained as 'a cycle of romance, specialisation and generalisation depending on education and joy in the act of learning, quickly followed by an immersion in the specialisation of a discipline which then together provided generalisation of the ability to make greater observations. (...) The iterative nature of this cycle reflected that generalisation was the result of specialisation and it stimulated romance with a discipline (...)'

Based on these views, at the Technical University of Eindhoven another model was implemented, built up like an 'X'. In the first year a broad range of disciplines is taught: orientation, generalisation.

In the second year specialisation (depth) is introduced, in one of the disciplines, still combined with some general courses, and in the third year specialisation is central in the discipline chosen (depth, concentration).

The fourth year is concerned with a focus on generalisation again by letting the students from different disciplines cooperate in multidisciplinary teams (Team Work, Team Design). The essential idea behind this is that students' cooperation is not based on just general skills, but mainly on their specialisation. In this year also time for a practical placement is reserved. In the fifth year: specialisation and generalisation combined in the final project, which means that the problem to be solved has a specialist core, but clearly a multidisciplinary context, and also supervisors from other disciplines in the exam committee.

It is clear that these models can only be valid and realised if the five year curriculum is seen as a unity. Nevertheless, Bachelor as well as Master-phases will always on their own be coloured in terms of specialisation or generalisation.

Another tension or bias is between a professional or scientific orientation.

In his report 'Architecture and Town Planning Education in the Netherlands: A European Comparison' John Worthington (1995) makes two divisions under which the study of architectural education can be grouped. 'These are cross-European categories and not country specific'. (p. 20)

'The first division is between academic and research-based institutions (education) and vocationally-based (training) institutions. (...) Schools of architecture can also be grouped for their emphasis on either a technical or arts/humanities based education.'

The two divisions lead to the following matrix:

academic	vocational	
		technical
		arts

In his study Worthington examined European curricula 'for full undergraduate courses, first with regard to the total contact-hours as allocated to different areas of study, an then in terms of:

- breadth, depth of content;
- options and flexibility within the course;
- specialisation routes during the study;
- research and written requirements;
- integration with practice, other disciplines, years, taught and studio courses.'

One of the conclusions that Worthington mentions, is that 'depth in subject area is more prevalent in the academic and technical schools compared with the academic and humanities-based schools, where a wider range of subjects is taught.'

Academic and vocational distinguishes the difference of objective in education (Universities) and training (Institutes and Academies). In schools with an academic focus, there is normally a greater emphasis on research and educating individuals, who may not all become design architects as such. Whereas at schools offering vocational focus the interest is in training design professionals. (...)

In a division of technical and arts/humanities based content, technical refers to the difference between greater engineering and science weighting in the curricula, and humanities to a more arts-based education.'

This leads to a specification of the matrix:

academic	vocational	
Design Project and Technology	Practical understanding is central	technical / specialist
Design project and Theory	Design is central	arts / generalist

However, we doubt if this matrix shows a useful scheme. For example, the focus of the faculty of Architecture, Building and Planning of the Technical University Eindhoven combined a technical focus with a wide range of disciplines taught. Students were taught as broad educated specialist in architecture, building and planning. Another example contradicting this matrix is found at the Sint-Lucas school of Architecture in Brussels and

Ghent (Belgium). They start from a more generalist view, but the curriculum clearly contains several highly specialised courses.

For the comparison of the content of curricula general areas of study are grouped in 14 categories and five main areas: (See also the Questionnaire of ENHSA distributed in advance of the ENHSA-meeting.)

A Basic Background Subjects

- History and Theory
- Supporting Social Sciences
- Basic Sciences

B Building Construction and Process

- Building Physics, Construction and Science
- Building Services
- Construction Economics, Management and Law

C Understanding the Surroundings

- Urban ad Environment Studies
- Topography, surveying and recording

D Project Preparation and Design

- Presentation Techniques
- Architectural Design

E Complementary studies

- Conservation
- Interior Design
- Research and Written Dissertation
- Optional Courses

If we summarise the hours of the different categories to the main categories and we determine the percentage of the main categories on the total of curriculum hours, then we get the following scheme:

academic	vocational	
D: 38% B: 26% A: 15% E: 14% C: 6%	D: 47 % B: 25 % A: 15 % E: 8% C: 5%	technical
D: 40% B: 30% A: 22% C: 9% E: -	D: 49% B: 24% A: 19% C: 6% E: 2 %	arts

This means that in schools with a vocational focus 10% more time is spent on design, but in general the differences are hardly of importance. Does this perhaps suggest that implicitly we already have a European Curriculum of Architecture?

Evaluation criteria

In a peer review session the following points (called 'Professional expectations'), the following were identified to be of value for schools to produce high-quality architects:

- a Time to reflect
- b Practice and criticism
- c Urban Design in the Curriculum
- d Practical experience both in the office and on site
- e Exposure of 'real' problems
- f The deeper understanding of architectural practice.
- g Provide a basis for specialisation and continuous learning.

However, it may be necessary to add some 'scientific expectations' to these 'professional expectations'.

Strengths and weaknesses

Also some indicators were formulated, 'five kinds of relations that could be applied to indicate the strengths and weaknesses of schools against what they (= the Peer Group) considered essential for architectural education':

- Relation between studio work (projects, field work) and taught courses (facts, theory) in the total study.
- Relation between school and the profession.
- Relation between the school and the local community.
- Relationship between basic, mainly compulsory, courses and optional lines of study.
- Relations between schools and practices.

This list could be enlarged easily. And, as it perhaps is clear for the Peer Group that the strength of a school is always found in an existing and positive relation on all of the five points, this clarity could be discussed. Also we have to notice that different strategies are possible. Maybe a weak point is of greater importance for a school than the strong points. The weak points are part of a school's identity. So, do not just focus on the strong points (to make them stronger by introducing an accumulation of policy on this point) and do not try to turn weak points into strong points to conform your school to other schools. 'Make your weak points as they are strong points!'

VI List of Action Points

Instead of a conclusion, we would like to summarise above lines of discussion with a short list of subjects that might be of importance in further discussions on the (nearby) future of European curricula and education of architects and planners. The issues mentioned in the list also refer to points in which action will have to be taken by individual schools or cooperating networks.

Admission requirements

Core-Qualifications Bachelors and Masters

Common Kernel of the Architectural Curriculum

Key Skills

Flexibility offered

Specialisation - Generalisation

Professional and scientific standards / expectations / evaluation criteria

Modularisation of the curriculum

Typology of Schools

Studio: Educational and Research Philosophy

Social / Critical Theory and Architecture / Ethics

Joint Masters-strategy

PhD-Network-Strategy

Types of architectural research - future developments

Teaching and Research

7th Framework Discussion

Quality control and accreditation

References

Daniel Bell, The coming of the Post-industrial Society, 1973

Philippe Boudon, Architecture, Ethics and the Education of Architects. In: Ethics in Architecture, Architectural Education in the Epoch of Virtuality. Transactions in architectural education No 08, EAAE, A.E. Toft, ed., ISBN 2-930301-02-3

A. Brew and D. Boud, Technology and Research: establishing the vital link with learning. In: Higher Education, 29, 1995, p. 261 – 273

David Bridges, Back to the Future: the higher education curriculum in the 20th Century. In: Cambridge Journal of Education, Vol. 30, no. 1, 2000, pp 37 – 55

Geoffrey Broadbent, Architectural Education. In: Educating Architects, Martin Pearce & Maggie Toy, eds. Academy Editions, pp. 10 - 23

M. Castells, The Information Age: Economy, Society and Culture, Volume 1: The Rise of the Network Society, Oxford Blackwell, 1996

Paul Cobben, Van Agora tot wereldmarkt, waar ligt het Europese huis? In: Wijsgerig perspectief, vol. 32, no. 5, 1991/92, p. 135-140

The Dearing Report: National Committee of Enquiry into Higher Education, Higher Education the Learning Society, London, HMSO, 1997)

ECAADE Digital Proceedings 1983-2000 ISBN 0-9523687-9-X. Available from ABACUS, University of Strathclyde, Glasgow, UK.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994) The New Production of Knowledge, London, Sage.

R. Glanville, Researching Design and Designing Research, Design Issues, vol 13 no 2, 1999

Ron Griffiths, Planning education for a knowledge-based society: strengthening the links between teaching and research. Paper presented at the XVI AESOP Congress, Volos, Greece, 10 – 15 July 2002 (see also: www.brookes.ac.uk/LINK)

Neil Leach, Fractures and Breaks. In: Educating Architects, Martin Pearce & Maggie Toy, eds. Academy Editions, pp. 26 – 29

C. Leadbeater, Living on Thin Air: the New Economy, Harmansworth, Penguin, 2000

Marvin J. Malecha, Foundations: An epistemological approach toward understanding the teaching of architecture and design from patterns found in design decision making, NC State School if Design, april 1998

- H. Neuckermans, The Institutional Context of European Architectural Education. In: News Sheet EAAE, June 2001, p. 5 12
- Nonaka, I. And Takeuchi, H., The Knowledge-Creating Company, Oxford, Oxford University, 1995. H. Nowotny et al, The New Production of Knowledge, London, Sage, 1994
- Aylin Orbasli, John Worthington, Architecture and Town Planning Education in the Netherlands: a European Comparison (+ Appendices), York, Institute of Advanced Architectural Studies, 1995. ISBN 0904761487
- Tony Rich and Clive Scott, Modularization and Semesterization: ringing the changes, Perspectives, 1 (3), pp. 70 76
- J Petric et al. Real Teaching and Learning Through Virtual Reality. Proceedings of ECAADE 2002, Warsaw, Sept. 2002
- Richard H. Roberts, The end of the university and the last academic? In: Religion, Theology and the Human Sciences, Cambridge University press, 2002, p. 86 110
- S. Rowland, Relationships between teaching and research. In: Teaching in Higher Education, 1, 1996, p. 7 – 20 Andries Sarlemijn, Het ontwerp, spil van de techniek-kultuur, TU Eindhoven 1990
- H Simon, The Sciences of the Artificial, 1968
- A. Smith and F. Webster, Conclusion: an affirming flame. In: A. Smith and F. Webster, eds., The Post modern University? Contested visions of higher education in society, London, Open University Press, 1997
- Richard N. Sweet, Architect and Top-politician. Interview with Richard N. Sweet in: News Sheet EAAE, June 2001, p. 28 32
- Dalibor Vesely, Architecture and the Question of Technology. In: Educating Architects, Martin Pearce & Maggie Toy, eds. Academy Editions, pp. 44 53
- A.N. Whitehead, The Aims of Education and other essays, London, 1950
- A.C. Zijderveld, Zingeving en zinbeleving. In: Met het oog op 2010, de toekomst van het sociale domein verbeeld in elf essays, Paul Rademaker, ed., De Balie, Amsterdam, 2001, pp. 19 26 www.uso.tue.nl

www.metauniversity.tue.nl

Appendix 1: EAAE Hania Statement 2001

- The studies leading to the diploma of architecture which gives access to the profession of an architect, should be minimum 5 years of 300 ECTS credit points leading to graduate level ('masters'), in order to meet the achievements listed in the above mentioned documents 1, 2, 3.
- Following a comparable but flexible qualification framework each school may decide to structure their curriculum as a 5-years integrated (i.e. unbroken) programme or subdivided in two cycles (3 + 2 years or 180 ECTS + 120 ECTS credit points), in which case the first cycle can not give access to the profession of an architect.
- 3. EAAE will actively collaborate in developing the ECTS-credit system in their schools and considers this system as the keystone towards mobility of students, modularity, flexibility in the curricula, necessary for the cultural, regional and pedagogical diversity they consider to be invaluable for education in architecture in Europe.
- 4. EAAE is willing to take part in the development of a quality assurance and assessment system tailored to the needs of architectural education and respecting its diversity. With respect tot this participation it should be made clear that it refers to the 'academic' assessment of the educational programmes by means of a peer review and not to the 'professional/governmental' assessment of the diploma leading to accreditation and the validation by the professional/governmental bodies of the member states. The EAAE will

install a representative committee at European level and will present its result and proposals regarding the evaluation of the two cycles (in both hypothesis mentioned sub 2) before the end of the year 2002.

The Heads of Schools underline their commitment to further elaborate and contribute to the development of the European Higher Education Area.

Appendix 2: Example of (general) Core Qualifications for Bachelor and Masters, translation of Core Qualifications in Prikkelen, Presteren, Profileren, final report of the Dutch Commission for Accreditation Higher Education (Commission Franssen), september 2001 Core qualities for University Programs leading towards the diplomas of BSc and MSc

1. The BSc program

A BSc program incorporates academic skills, scientific domain knowledge, and a number of academically relevant courses of choice.

1.1. Academic Skills

- Ability to logical reasoning
- Ability to judge and to form founded opinions
- Ability to communicate

1.2. Scientific domain knowledge

- 1/4 of ECTS devoted to the chosen major
- 1/4 of ECTS devoted to major-related disciplines
- 1/4 of ECTS devoted to academic core subjects
- 1/4 of ECTS as freely chosen courses

1.3. The Major

Majors are formed from the course offer of the home university. They should be sections of recognised scientific or technology disciplines, such as political sciences and international relationships, economy and management, natural sciences, history, etc, or combinations of such disciplines (life sciences, social sciences, language and cultural sciences).

After the student has completed the BSc program he/she

- Understands foundations, history, and structure of the chosen major, as well as its relationships with other disciplines;
- Is knowledgeable on the main elements and theory of the chosen major;
- Has the ability to use the major domain creatively.

1.4. Courses of Choice

So-called free courses should be taken from the following categorories:

- Academic core subjects;
- Scientific domain knowledge;
- Domain specific and application oriented courses, such as management, pedagogy, political sciences, technical physics, etc.;
- Courses in the performing arts: music, theatre, painting, sculpture, etc

1.5. Personal Curriculum

Students desiring entrance to the MSc program are asked to present a detailed curriculum of followed courses and the ECTS earned with each course in order to check adherence to the program above.

2. The MSc program

The University MSc program produces academics who are qualified to do scientific research, or to perform an academic profession.

2.1. Academic Skills

The research-oriented program focuses on deepening of knowledge and research in a specific academic knowledge domain of research or design.

More profession-oriented MSc programs strive towards deepening of knowledge and extension of skills towards a certain academic professions, such as physician, notary, engineer, etc.

Four different core qualifications may be distinguished:

- Intellectual development and expansion;
- An inquisitive and critical mindset:
- Domain knowledge:
- Multidisciplinary skills and insight.

2.2. Intellectual development and expansion

This process includes a number of aspects:

- Logical reasoning;
- Handling the paradigms of the domain;
- Developing logically founded opinions in the scientific debate;
- Reflection on personal actions and thinking;
- Integration of ethical, normative and expressive trains of thought in science;
- Communication with colleagues and others on problem solving, leading to active learning processes;
- Handling complex situations, and pass a well-founded judgement in the absence of complete data;
- Debating developments in the academic domain.

2.3. The Inquisitive Mind

An inquisitive and critical mindset includes:

- Be observant:
- Have a critical attitude and be original:
- Be independent in choosing the direction of knowledge expansion, of performing research, in professional practise, in choosing a personal niche in society;
- Enjoy the attitude of lifelong learning.

2.4. Domain Knowledge

The required domain knowledge consists of the following elements:

- Possessing the newest knowledge of the domain;
- Understanding the structure of the domain, the relationships among domain sections, as well as with other domains of science and technology;
- Follow and interpret the route of (changes in) truth finding and theory development;

- Application of methods and technologies in independent research, and using the results for the development of advanced practical solutions;
- Deliver an original addition to domain knowledge in one or more sections of the domain, and passing the master-test of this new knowledge;
- Having shown originality and creativity in the handling of the domain;
- Possessing the required domain-specific skills, such as designing, researching, analysing, diagnosing, etc

2.5. Multidisciplinary Skills and Insight

Multidisciplinary skills and insight are needed to recognize the limits of the domain. This includes:

- Understanding and interpreting bordering domains;
- Placing own research in a multidisciplinary framework;
- Being able to function successfully in an international, multicultural, and multidisciplinary team.

26 Accreditation

A number of questions are asked to assess actual quality before accreditation of the MSc program is possible.

- a. Are the four core qualifications met (see section 2.1.)?
- b. Are abilities and skills developed far enough to deliver original contributions to one or more sections of the domain? And has this level been tested in an accepted master thesis?
- c. In case of a MSc focussing on research of education, has the domain knowledge been deepened sufficiently with respect to (i) foundation and history of the domain, (ii) structure and interrelations, (iii) specific skills (design, research, etc), (iv) ethics of education and research, and (v) understanding the relationships with other domains of science and technology;
- d. In case of an academic-professional oriented MSc, has the knowledge of a specific domain of academic professions been deepened sufficiently with respect to: (i) positioning of the domain among the other academic professions and disciplines, (ii) positioning the domain in the whole of societal developments, (iii) skills and abilities needed for the specific profession, (iv) ethical aspects of professional practise.

Ferran Sagarra, Barcelona, Spain

Thank you for your contribution which, I think, it is very useful. I just want a further explanation on what do you call "the typology of the schools" because I really don't understand this classification.

Kees Doevendans, Eindhoven, The Netherlands

It's a typology taken from John Worthington's report where he had these two dimensions: the emphasis on technology or the emphasis on arts in a curriculum and the academic setting or the vocational setting of a school. I do not to propagate this typology. It was a typology, which came out of an observation of schools in Europe. For instance, in Netherlands we have not schools in all the boxes. We do not have architecture in a purely academic setting; it's always architecture in a university of technology. So, this is what we wanted to map; this differentiation. If you want to use this typology maybe you say "well, it's useful", but I do not recognize myself in it. It was just a suggestion. We do not want the uniformity, we want the differentiation but what is this differentiation, is it all schools separated or are there different types of schools with different emphasis in this curriculum? This was just a starting point.

Constantin Spiridonidis Thessaloniki, Greece

I would like just to make a comment, which is rather beyond the contents that Kees Doevendans presented. I feel that the discussion that we will have in the afternoon and more generally all the discussions in the framework of this Meeting must take into account the fact that not all schools of architecture in Europe have already been involved in the Masters - Bachelor system. For example the French schools are not yet in the same system, the Greek schools are not in the same system, the Spanish schools are not in the same system and a lot of Italian schools are not already in the same system since institutionally they have both possibilities to be or not to be. I would like to remind you that in the last meeting's statement we gareed that the possibility of freedom of the school to apply or not this system must remain active. So, it is important to find a way to discuss all these issues in a broader orientation. The issues that Kees Doevendans mentioned concern all the schools whether they are in the Bachelor-Masters system, or they prefer and decide to stay out of it. I strongly believe that in this Meeting we must protect ourselves by any kind of exclusion and to try to introduce or to find ways of discussion, which will incorporate all the spectrum of aspects and will raise all these very interesting issues in all the types of systems of architectural education that we could register between us. A great contribution to this point will be that which Wim Scheafer will present concerning the posters with the presentation of the system of studies applied by the participating schools. He will do that later as a means to see how many schools are following one or the other way. It will be very interesting to see the representativeness of each educational system and I hope that we will have the opportunity to do it.

Richard Foqué, Antwerp, Belgium

Yes, I think it's an important addition. I want to make another addition actually, which I think was missing from the interesting opening introduction. I think that what we are

missing also is that some schools in Europe apply a system in which the students, between the two cycles or in between their studies, go for internship into an architectural office. I think this is not a consideration. I think, this afternoon we should take it into account and discuss how do we go about that. Some countries do it in between the studies, other countries have internship after the studies and before the profession and so on. I just make a point; I don't want to have a discussion about that right now.

Another important point is raised from the slide you showed about the distinction you made, or the suggestion, between Bachelor of Science, Masters of Science, Bachelor in Architecture, Bachelor-Masters in Architecture, the professional degree, the more scientific degree. I think we should be very careful with this distinction because distinguishing the Masters in Science and the Masters in Architecture, (I don't think it is pure semantics), we may say to the outside world that we consider that Architecture is not a Science. It is just an idea, which you could consider as a point of discussion.

Kees Doevendans, Eindhoven, The Netherlands

Yes, but it's not always just mentioned because if we in Eindhoven will decide to do a Masters of Architecture, we will lose our firm name. Why should we lose our firm name when we are not a scientific education anymore? So, the only education we can offer right now is on a Masters of Science. I mean this is behind all this and you know it as Deans or Heads that behind are movements, there is always the question of funding of course. Well, I think we'll have important discussions on this in the afternoon.

The Case of the School of Architecture Saint-Lucas in Brussels

Johan VERBEKE Brussels, Belgium

I have been asked to present some issues, which are going on in the School of Architecture Saint-Lucas in Brussels and Gent at the moment and relate them to some of the issues which have been raised in the previous presentation.

First, the Dean identified the admission for students to enter architectural studies; it's the diploma of secondary schools. I've written down not for this fact but I note that in a lot of countries, there is a maximum number of students which some schools allow or some take exams in our case, in France, in Belgium. We have to accept every student who comes to start his studies if he/she has the diploma of secondary school.

At the moment we have a structure which starts with two years and after their completion, students get a diploma of candidate in architecture. After these they need two more years for the diploma of interior architecture and three more years for the diploma of Architecture. In the future this will change by law so, the next couple of years we will change to assist these three years for Bachelor degree and two years for Masters degree, which has for us quite a lot of implications because normally, at the moment, after the second year we have a quite severe jury and a big project for students to complete before they can start the third year. So, then the question remains in the second year or will move to the third year, which is the final year of the Bachelor degree. At the moment we have been discussing how to change to this new structure and how to adapt and change the curriculum. So, it's under development.

An important document, which is also mentioned by Kees Doevendance, is a Dutch formulation of qualifications for Bachelor and Masters degrees, which I'll try to translate this in the context of architectural education. In our case the design studio is the 'centre of training' and integrated in that is urban design, architectural design, of course, interior design exercises. It's integrated in the theory courses as well as in the design studio courses. We apply the ECTS system to indicate the work load and the amount of work involved with courses.

A few issues are important in the discussion for the European curriculum. One is that, for instance, history includes history of interior, history of design, history of architecture, history of culture and so a lot of parts, which are delivered by different teaching staff but for the student is only one examination at the end of the year. So, it's an integrated examination covering all these sub groups and the same also for the old topics.

Another issue, which is important, is the course, which is mentioned directly as explanation of forms. We developed some kind of special course; the student needs to design objects, let's say a little bit out of the context of buildings. They get a design exercise and they need to create an object at one-to-one scale, which gives an answer to the design problem. So, it's more or less related to art exercises and it turns out that this is quite important. We put it in our curriculum as it frees the student from the constraints of the building and they are given, let's say, some kind of free context. It makes it possible for

them to develop their creative design thinking. I mention this because maybe at odd places they are also special things, which have been developed, and it would be a real pity if they start working on a European curriculum and those issues disappear. There is only one examination by a group of teaching staff at the end of the year for the student, which those aspects need to be integrated with each other.

Another aspect is that we have an international program, which is starting. It facilitates the exchange of students. It's on fourth year level and it's completely one ninth of the normal course and it's also open for regular students. As I already mentioned we applied an ECTS system. That's also important in the discussion on the European curriculum, that we have a yearly system at the moment in Belgium. So, this means that at the end of the year we take the decision if the student passes to the next year or not. So it's not a credit accumulation system at the moment.

We move to a semester system then we have two periods of six weeks, that is interior design studio and then after that we have three weeks of only design studio that gives us a flexibility of creating the studio projects of six weeks, twelve weeks or a nine weeks and after that three weeks of exams and this repeats itself during the second semester. During the changing process and the discussion on the new curriculum some issues are important. This is an increased *academisation* of the activities. The search for activities becomes more and more important and has an influence on the new curriculum. That's the most important thing to us, to save some time.

The relation between art and science remains very important to us. We expected to have a greater flexibility in course options especially in the master courses so that the curriculum is fixed for all the students, which is maybe opposite to some other schools. In the Masters courses, we have students who come with a completely different set of courses. So the expectation is that we will move somewhere in between. The research becomes more and more important. We are activated in the research theme covered by the European Commission and what we did a couple of years ago was to get some external people who are specialized in research methodology, to develop research policy documents. It turned out that external input facilitates discussion between people within our Faculty and helps to overcome some problems. Networking and exchange of students and staff is considered very important and especially the new Masters Degree within Meta-University and in the USO-BUILT named Network, which is a case that is already mentioned by Kees Doevendans and then a few final remarks.

The title as well as the profession in Belgium are protected and students are required after the studies two years of practical training before they can enter the profession. I think this is also an important issue. In Belgium, the professional body of Architects has not an important impact on the curriculum as it is the case of the United kingdom and the RIBA. I think that is very good but of course things may change in the future.

It is maybe important that there is a growing impact of information and communication of technologies on the teaching. Collaborative design team work plays a more and more important role. Although they are a little bit opposite to the way of working in the design studio at the moment the students are changed in front of the individual design capacities. We have to be very careful because we have at the moment a very rapidly changing environment in the profession as well as in the educational and economic context. So this means that whatever curriculum deconstructs, it should have a great flexibility to react as fast as possible to this changing environment. Thank you for your attention.

The Case of the School of Architecture of Glasgow , University of Strathclyde

Alan BRIDGES Glasgow, United Kingdom

Kees Doevendans asked me perhaps to help in this afternoon's discussion by giving a very brief example of the structure that we have at Strathclyde, which is based around a Bachelors-Masters approach. One of the problems that we face is finding the balance between what we want to teach, the discipline of architecture, against the requirements of the profession for training professional architects. In Britain, as Johan said, the title architect and the areas of study are legally defined and are regulated by the Royal Institute of British Architect's (RIBA) and the Architect's Registration Board (ARB). So, we have to cover certain set curriculum elements but apart from that I think there are a number of issues, which we as a school want to teach, and we are trying to find the balance between the Bachelors and the Masters to both cover the professional side and our own research late interests.

Some of the opportunities that we see for schools of architecture come in areas which may not have been perhaps considered court to architecture before such as space planning, the important self business analysis and economics, building life-cycles, team building recognizing that construction is a collaboration between several professions. How can we perhaps work with contractors and be involved in the design of building compartments. The interdisciplinary skills that are necessary to perhaps cover the engineering aspects of architecture and the social science aspects of architecture.

Some of the specialist skills that we think are important to cover, because one thing that we do at Strathclyde is to say not all architects are equal. There is a lot of specialization possible within architecture. We've all been tempted in the past to see our students as the great designer that is going to go out into the world and make marvelous buildings. In practice we realized that we are lucky if 5% of our students really are brilliant designers. So what will the other 95% usefully do or maybe you can specialize.

Some of the things we look are specializing in formulating architectural briefs, design management, construction management, project financing, which is increasingly important. Health and safety aspects such as risk assessment management. Again procurement; how old buildings actually financed and delivered, how does a client actually get to a building, how can that building be financed and sourced, the ongoing modification of the building, facilities management, increasingly important areas of energy management. Special aspects of design are for some engineering for example, aspects of other engineering services, information technology systems in architecture covering things such as documentation control and that relates to the research interest of our staff and we look at social issues recognizing that the population is aging. How do buildings and access to buildings need perhaps to take into account the different population profiles, how can we look at the problems of urban renewal, lots of things about information technology, construction processes recognizing, increasing

mechanization of construction, how might that affect the way that we design, more general uses of technology, the recyclability of materials, environmental and energy management.

How do we structure our Course to even begin to look at a few of these things? The simple division is between an undergraduate school and the graduate school. We have three years of undergraduate teaching followed by a year out in architectural practice and we recommend this to all of our students because we feel that that has an enormous influence on the way that they are equipped to come back and tackle their Masters program. They come back and do two more years in the university and then have to complete at least one additional year of professional practice but usually, it's more like two years before they sit their final professional exam and are fully qualified architects.

The Royal Institute of British Architects really supervises the progression of qualification and we reach the first stage of our idea of qualification after three years. After our Masters Degree we reach the second stage, and then the final stage is the legal and practice site for full qualification taken after a further period in architecture practice. In the undergraduate school everyone follows the same course and we are tempted to teach almost all of the required professional elements in this undergraduate course. 50% of the time is spent on design studio, 40% is spent on court classes, essential classes and 10% is free choice by the students from any subject in the university.

Where we are perhaps different to many schools, even within Britain, is that the structure of our fourth and fifth year leads to a number of different Masters Degrees. In Britain we can award a degree with almost any title we want. We are not restricted by law to just awarding a Masters of Science or a Masters of Arts. So, recognizing again our research interests we offer a Masters Degree in advanced architectural design, which is essentially experimental studio, the more traditional sort of architectural education. We also offer a Masters specializing in using computer information technology in design. Recognizing again that urban design is important, we offer a Masters in urban design and also in collaboration with colleagues from the Department of Structural Engineering and Environmental Engineering we offer a Masters in, what we call, integrated building design where architects work together with environmental engineers and structural engineers in a team simulating the environment in which they would work in practice and we call this integrated building design.

All of these four courses are recognized by the RIBA as giving exemption from their "part two" requirements. So, these people who qualified as architects, have very distinct specialties and that speciality is denoted by the title of the degree that they gain. We also offer another course in construction management, which is not recognized by the RIBA because we do so many other different things within a course. If I've got two or three minutes more, I can perhaps explain.

The advanced architecture design course offers the students the chance to pursue, to a certain extent, their own interests in what we call 'special studies'. But together with staff in the department, it is essentially trying to get established to each individual student a theoretical approach to his own ideas about architectural design. Then having established a theoretical position, the student has to show how that position can be exemplified in a design project. Students are assessed on that studio design project, which is complemented by a written document explaining the theoretical approach that they adopted in that design.

The computerated design course gives an overview of computer technology and looks at the application of computers particularly in early stages of the design rather than simply the documentation of an already designed building. Again an important aspect here is design collaboration. We run a number of Internet-based design projects with students collaborating through the Internet both with a client in terms of developing briefs but also with other construction specialists engineers and so on.

The urban design course is typically based around an actual design problem in the city of Glasgow. There is a lot of urban rehabilitation work that has been done in Glasgow and we use the city almost as a laboratory for this course. We look at the history and theory of urban design and the practice of planning and design in urban development. We try and identify the key-characteristics of the city so that proposals are in character, and also the economic and social aspects of urban design. Again it is examined by design projects supported by a written document.

The integrated building design course is really training for students to work collaboratively in multi-disciplinary groups, really gaining an awareness of the skills that the other professions bring to the design and construction of a building. It really sets the context against which they will have to work in practice and so, there are also large aspects of this course which look at the legal and administrative, financial and managerial issues of running a practice.

The construction management course has a number of specialist options you can specialize in; strategic management, information technology or the special problems posed by international construction. The biggest construction companies now operate in a global market and the question 'what might be different by designing and constructing a building for construction somewhere remote from where you are working' is very significant. Again there is background in computing but much more management, human resources, quite a lot about economics, things about human management technology transfer if we are working in developing countries, how can we establish the infrastructure etc. perhaps it's necessary to build in developing country things about contracts, the performance of construction materials and engineering materials' technology. So, here is a possible construction of a course, which we believe gives the opportunity both to cover the professional aspects of architecture but also, I believe, through the specialization in the Masters courses equips our students for leading roles in the modern construction industry. Recognizing that architects really are multi-functional and there are many other things architects can do apart from simply design buildings. Thank you very much.

The Idea of a Poster Exhibition on the Structure of School Curricula²

Wim SCHAEFER
Eindhoven.The Netherlands

It's very nice to be here and to present this idea about a poster exhibition. Just to make some short notes to explain to you something very briefly. What happened was that in April, March I started to communicate with Constantin Spiridonidis about this idea of bringing some posters to this meeting as a concurrent event, on all the things we are discussing. As a result you have received my e-mail letter with a request and as a further result there are so many posters brought here that Constantin Spiridonidis and his staff need some more time to present them. I hope this afternoon, the majority will be there or at least tomorrow morning so, give to the staff some more time, please. The background idea, which I discussed with Constantin Spiridonidis, we needed maybe some five or ten e-mails to make sure we had no misunderstandings. I would very briefly reflect to you.

The Bachelor-Masters system in Netherlands now is a fact, we have it as a new law, it's operative, It's all about a programming system. It's how to organize in great chunks the degrees and the education packages. It does not however explain something about quality. We should be very aware about that. Let a system discussion not overrule the discussion about quality and contents. One specific quality in Europe, and maybe it's the specific quality we are referring to during the last meetings, is diversity. This statement is of a global notion, a typical European reality. Different cultures, different landscapes, different traditions, expressions, different climates, different economics, different research interests that is in fact the treasure that has been offered to us maybe as treasure keepers, as we are here. We ought to make it more transparent Bachelors, Masters. It is something we have to deal with as a motorcar system is offered to us with four wheels and we don't make a fuss about it. We just use it but we decide which road to choose with it. That means we should not wash away that European treasure by introducing a new organization system. This will be a point to keep in mind. So, we will be very interested to provide the guidelines, road maps to students and stuff how one could travel through the virtual and real space of Europe. As we are here, why not use it to look at each other's programs and see how we could travel through it. There are many more things to discuss but I would leave it with you. Thank you very much for your cooperation.

² This initiative of Wim Schaefer was presented in a form of poster exhibition in the framework of the Meeting. A big part of those posters is presented at the end of this volume. Wim Schaefer continuous to collect this material which will appear in the site of the ENHSA project www.enhsa.org.

Curricula for Architectural Education in the Common European Higher Education Area

Discussion Group 1

Coordination by
James HORAN
Dublin, Ireland
Kees DOEVENDANS
Eindhoven, The Netherlands
François TRAN
Lyon, France

James Horan, Dublin, Ireland

As we heard this morning, in the Netherlands the Bologna framework is now a legal requirement by the Netherlands government of the further educational system. However it's not necessarily a legal requirement for all the EU members and indeed, for the Countries who are not from the EU strictly speaking, it is not a requirement at all. So, to some extent, maybe it would be interesting to hear if there were views or comments that people might like to make about the alternatives or the alternative to the three plus two system and the merits or demerits of this situation. I personally believe that the significance of diversity in architectural education is extremely important and irrespective of or in respect of what governments and ministries of education might like to achieve in terms of making further education neater.

We as educationalists in the field of architecture have an obligation to think about the richness that comes from diversity and difference between one school and another. If ultimately we are all to be educating students in exactly the same way there will be no point on the Socrates program, there will be no point in exchanges, there will be no point in anything. The very fact that these programs exist testify to the differences and it's because of these differences that people want to experience the environment, the education process and the atmosphere of another school. I think it is dependent upon us to preserve this difference and somehow create an alignment among the different positions. It's the fine line of division between where that alignment occurs and where the difference is preserved is really what I believe our task should be.

Herman Neuckermans, Leuven, Belgium

I like to add that in EAAE Hania Statement, these issues of identity and diversity, culture identity and diversity in different approaches in schools is written. Ii is not just something like a comment but it is really written in the statement. That statement has been sent by

the EAAE to all Ministries of Education all over Europe and I also gave it to our representative in the Rectors' Conference, which is in the advisory board of the Ministers' meeting with these comments.

Juhani Katainen, Tampere, Finland

I am pleased to hear that it is our privilege to think what kind of education we can have and when last year in this meeting we ended up with a statement, the Hania statement, it was clearly stated that it can be so that schools have one way, five years education leading to the architects' examination and then this second thing has come very strongly forward in the introduction of today. I understand well that when these matters are put into the legislation, the architects and architectural schools are unhappy. They can't say 'we are not following our laws'. I still hope, and for example in Finland, a case is that we don't have that kind of legislation. I hope that the reason behind this kind of statement is that when we think of our task, what we are doing now, I think a bit narrow-mindedly. I'm speaking about education for architects and the profession of architects, without saying that the profession of architecture should be very narrow-minded but let's say that it has some things which are common and have been common for a long time.

I am of the opinion that we need these five years and I understand on the speech that when we divide our studies, we can put mobility forward. Actually in Europe I think mobility exists, and between students and schools there are many good examples of this mobility. So, my question is, (I don't expect answers, maybe the answers will be given in many various ways) whether we need this kind of richness, at least I feel it will enrich it, we have to divide our teaching into two parts because thinking what we have to teach these young people, actually five years is very very short time. How to make it shorter, how to make sure that then what comes out of these three years first and then the second part, two years more, how can we be sure that we are making a promoting world for these young architects. I understand this is anyhow the reality and so, it is worthwhile discussing what comes out of it. I also understand that exchange between schools can benefit from this system. I have nothing against that. I'm only trying to say that we should concentrate on what education for good architects should consist of and how to manage with that in different occasions and I can't stop without saying that we have very good element at our disposal and that is Architects' Directive and its goals and we can use and interpret these goals even for the future, I hope. Thank you.

James Horan, Dublin, Ireland

I get the impression that this morning's presentation was so comprehensive that there is very little maybe left to discuss on this issue and I certainly don't think it is a topic of high controversy because I get the impression from talking to people over the last days over here that this issue is one that we are very much in agreement about and last year's Hania Statement at the end of this Meeting reinforces that position. However there is one point maybe I might raise as a discussion idea. In the case of the Netherlands there has been a governmental decision made about the educational process or at least about the duration of time leading to awards. It doesn't, I think, and maybe those of the relevant schools will correct me if I'm wrong, it does not in fact prescribe to anyone as to how the educational process for an architect must be carried out or how long it takes before the

profession will recognize someone as a member of their organization. And with that in mind it seems to me that any member or government of the EU might at any point decide that in their particular country a BA (Bachelor in Architecture) type award is awarded after three years in line with the aspirations of Bologna but that doesn't necessary conclude a professional body like architects. And indeed the medical profession with whom I regularly draw parallels, from deciding that this is an award but it's not a professional qualification. Somehow or other it will be necessary maybe for schools to think about the idea of having this award after three years. Those of you who already do it, it isn't a problem but those of us who currently operate a five year system, I think we'll have to rethink the educational process from the ground off. In other words it's not just a question of snipping the five years into three and two and saying that after three years you have an award and you just give them a piece of paper. It seems to me that the structure and design of the educational program has to take this division in mind. I'd welcome comments from you on that, if you'd like to say something about it.

Kees Doevendans, Eindhoven, The Netherlands

Well, there are indeed several systems. They are next to each other and they are independent so, you have the system of credit points. It's a definition of study of 210 credit points in the Netherlands or this will be 300 ECTS and this is divided in 180 and 120 credit points. So, that's the one system. The other system is the system of grands. There are four or five years and it is independent because the study is seen as accumulation of credit points and you can do it in eight, ten, nine years, it doesn't matter. Another line is the professional recognition. It's separated not completely. We relate the professional recognition to the diploma this moment. The title is connected. So, there are separated systems next to each other, they are completely independent.

James Horan, Dublin, Ireland

I believe that probably the most sinister aspect of Bologna, if one wants to see it like this, is that a department of education in any member state may very well make the decision that its funding of education ceases at undergraduate level and therefore once an architecture student has achieved the first award after three years the government of any country may decide that it has no further responsibility in providing money, grants or anything else towards the additional years that are required for the architect to graduate. I suspect, this might be an underlined motive behind Bologna.

Joaquim Braizinha, Lisbon, Portugal

I would like to reinforce what you said. I and many others think that before the Bologna Declaration there is an economical problem. The financial system of the public university is in a big crisis and they can't offer five years without paying anymore. This is the reality. If they put the obligatory system in three years after they say 'you want more?', 'ok, you have to pay'. They land this way at the private university and they learn well but they may not make the mistake if they want they can privatise all the public universities in Europe. Instead of this kind of paradox of three plus two there will be Masters. Why? You know in our schools the Masters is a degree, it needs investigation, it needs the production of writing, thinking and so on production of material that it is part of research in our

schools. It is the first level for after training to the later PhD. It's still like this in our schools. If the Masters belongs to the basic information we will lose all this work produced in our school as research apart from the Masters for the teachers and for the students. And I think that is a loss. There will be no recovery from this, vulgarising the grade of a Masters and so on... but it's an economic problem, dressed with a search for a new paradigm for the university. Maybe later, we will have no other things to say so, we are discussing the sex of the angels. That's my sense. Excuse me and thank you.

Ferran Sagarra, Barcelona, Spain

In our case in Spain as my colleague from Portugal said, it is true that we used to have the Masters, it was a third, it is a third cycle and that means after the five years it's two years. And before the other two years or three of PhD, it's very long. So, that's really very expensive. I agree there is an economical problem but this is not an invention of the bureaucrats. It's a problem. Perhaps we had to talk about it. Are we the necessary number of architects in Europe? Is it normal that in Italy every school has 18.000 students of architecture. Is that normal, I mean is it something to reach or it is just an illness? It means perhaps that we have to talk about systems of selection before talking about how many years the career has to be in order to feed the discussion.

Andrzen Baranowski, Gdansk, Poland

I would like to add one more comment to what you have said. So far in Poland we have not this system -three plus two- or anything like that but we are experimenting on it a little bit. The real problem that we are facing now which concerns us is the idea of two steps or two degrees. Our politicians, I mean both the government and the members of the parliament, are now considering how to make a whole investment process more effective especially when foreign companies are coming to Poland. They have found quite unexpectedly that the best way they can do it is to reduce the demand for qualified professionals to make the project. They might be, I'm afraid, extremely happy once we introduce the new system. They will consider that Bachelors of Architecture is enough, it is fine. If somebody is so crazy to do a Masters degree, that's his personal problem. In general, the point is that we have no power to demand the fulfillment of high level standards of professional competence for those who are working as designers or urban planners or whatever it is. So, that's a sort of danger, which we, I mean architects or people involved in creating the space, are helpless when we are faced against the politicians who have some sort of ideas about how to make it easier. Thank you.

Christian Huetz, Regensburg, Germany

We have a distance to what is discussed today. I want to say that we shouldn't go back to the discussion of last year and we can discuss now whether three plus two is better than two plus three or it's an economic problem that the politicians have just to not pay too much. I think we can do that we have just now to think about and I think it was a task of today to discuss how was the European curriculum in architecture? It was a question mark I think, it was very good that Kees Doevendans put a question mark because I'm always wondering whether we have to have one. Because we are talking about identity and diversity and if we are talking about identity and diversity, with diversity there is no

need to have a European curriculum; we'll never get that. So, we should think about what we could do just to come together and just have the diversity which is very fruitful for the students which are changing and which are in mobility. Aftre we should talk about discipline and the profession. I think that's a very important thing to discuss about teaching in two parts or teaching in one part. Remember the UIA, (Union International d'Architecture); they said "an architect will have to study five years" so, that's it. But we know they don't say that someone who has only done studies in three years, who has a Bachelor, can become an architect. So we have to define what the quality of a Bachelor is and what can someone do who has a Bachelor. I think that this is the most interesting thing. As we said last year someone with a Bachelor will never be an architect. So, I think there is no need of discussing now how to define the Bachelor and how not to define the Masters. Because you know what a Masters is: that is an architect. We have to define what a Bachelor is. So, that's all. Thank you.

Matteo Robilglio, Torino, Italy

I was feeling like the debate was getting stack into three plus two so, thank you very much for getting the ball in the field again and I'll try to keep it so. We are enthusiastic about the three plus two system and I'm very fond of it but I think we should discuss if we want to keep our diversity, which is the main issue. I don't think we need something like the Euro money in the architectural education field. We should keep our national currencies very well but we should work on certain problems like how do we exchange our currencies so, how do we validate knowledge, credits and scientific research in mutual exchanges. This is a big problem. Second one, what our common knowledge is and when should it be required. It does not matter if you study five years or three years but is very important when do you start for instance studying construction and mathematics applied to construction.

I report this because I feel three plus two doesn't make five so, if you want to change you can't just cut after, as you stated before after the third year but you really have to reorganize completely the distribution of knowledge and acquisition through the five years that we all charge being time of a real architect. I report this because in our school one crisis fact in the three year system is that all the science construction teachers want now to go back to the old system having mathematic analysis and then science of construction and they go on actually building experience later than third year. So, we have a kind of schizophrenic system where students receive very practical skills and integrate knowledge in the design studio but they still get very abstract teaching in other disciplines. So, we have to decide what should be taught and how, at which stage regardless of what system we use and we choose from the bureaucratic point of view, three plus two or five integrated.

The second thing we should work on is how we will surpass and leave the Erasmus and Socrates way of accreditation of a mutual teaching and have a real automatic system of acquisition of credits between universities. EAAE is the place where that should be decided. At this moment if I want to take a course in Eindhoven I can. But there must be a mutual treaty and it must be negotiated each time or nearly each time, how could we have some automatic system that I can put some courses in Eindhoven and having the credits in my curriculum in Turin without having problem.

The third issue I would like to discuss with you in this meeting is how we can validate a scientific knowledge. It is an issue you raised this morning in your paper in front of other

disciplinary fields. You mentioned that the only thing -I didn't agree with your expositionthat was architecture was not mentioned in the sixth framework program. In fact the sixth framework program doesn't mention any discipline; it doesn't mention medicine more than it mentions architecture. It mentions some fields' environment and energy or local aovernment and citizenships and so, it was to mention that sixth and seventh paper are inside the framework program are deeply related with what we do in our faculties whether it is management let's say or energy sustainable design. In fact the problem is that we are not able to cope with the system of entry into the sixth framework program and one point on which we are weak is that our system of producing knowledge apart from the ones who apply themselves regularly in papers production is not validated according to scientific standards because scientific standards, everybody of us knows, are based on physics and mathematics way of doing research which doesn't match the specific aspects of our research. If you take the Masters for making an example that everybody of us knows, if you take the Masters in a relevant book in the history of architecture, postwar which is maybe the architectural "La Citta" of Aldo Rossi or the most translated will have no relevance, it had no pure review, it didn't appear in any scientific publishing house. So, it wouldn't match the criteria but it was nevertheless relevant, it had an impact. So, what I would like to discuss with you is whether we are able in the EAAE to go towards a way of some kind of impact facts of our studies including also the design studies and design publications. If I design a very well designed energy saving building which becomes a standard reference for other professionals, for students why shouldn't that be as relevant, as an irrelevant theorem in mathematics published in negligible local but peer-reviewed journal. So, I put it in a provocative way. I feel like that if we want to compete with other disciplines and scientific sectors we should not mean the way they produce research but state the legitimacy of our way of producing and accumulating knowledge. Thank you.

Kees Doevendans, Eindhoven, The Netherlands

Can I respond to this? I agree with you. It was part of my presentation I think that EAAE could be very important to make these signs scientific standards and be proactive for they are very powerful or could be a very powerful organization. Of course, there are also scientific journals you can publish in, so, it's not a black and white situation, I think, and science is a kind, established as a way of communication. You cannot neglect this way of communication. So, I agree with you but you have to be careful that you are too defensive and deny the scientific word research.

Matteo Robilglio, Torino, Italy

Of course, that is not black and white but let's bring another example because on the other hand we should avoid to go to the fine arts system, where your excellences are always stated but never demonstrated. But if for instance we use public publishing, which is a scientific activity but we include also architectural magazines or a selection of scientific relevant architectural magazines we could include professional research, which I very hardly can distinguish from architectural research. I don't know if Rem Koolhaas is not doing research, when he publishes one of his projects and becomes a maestro for my students. So, I cannot deny that it is relevant. Of course, we should select reviews maybe find some way of crediting reviews, a kind of quality label but if you publish in "Lotus" that is scientifically relevant, it comes into the debate maybe if you publish in the

review of the "Order of the Architects of Turin" is not relevant because it doesn't come into a European debate but we could make some steps forward by accrediting maybe some reviews not just scientific reviews but also architectural reviews or tendency reviews but which have acquired certain stage of being the reference. Detail is a reference for sometimes, even if it is not a scientific review publishing something on material research in detail is important, becomes a standard so. I won't put it in black and white.

I would like to see if you cannot include more of the professional market and professional research into the scientific research. Otherwise, I feel like we are having real schizophrenia of running a system which if you want to have a career, you publish just papers but that's not always quality papers, there is also rubbish into the papers and scientific. Everybody of us knows and on the other hand you have hyper-professionals that enter our universities only when we called them for key-note speech of a main conference such as Peter Rice when he came to my university. Every student will be excited about that and I feel like we should try to fill the gap also to legitimate us in front of European Community when there are important programs of research. If now we want to make a proposal altogether for instance for sustainable buildings in the six measures of the sixth framework program, we could, we are eligible but the pilot of our scientific titles will never match the one of, I don't know, physics scientists because that's their only activity, that was my point to define a little.

François Tran, Lyon, France

Maybe another way to go on. I suppose my presence at this table is expressing the interest of French schools to adopt the EU model. We have to benefit from the first good experiences and my question is to Alan Bridges, and Kees Doevendans. Which are practically the main difficulties for example institutional conditions or how to define the new content?

Kees Doevendans, Eindhoven, The Netherlands

Well, I think the main question is about the content. The generalization of the curriculum after how general should a Bachelor be and how specialized the Masters. This is the main question. I think the institutional context is not a problem. You can always change the juridical paragraph of the curriculum, that's no problem. That's just a question of some sentences or some words, that's not a problem but the content and how is the admission to the Masters, how is this regulated, arranged, do you need a general Bachelor or not is a kind of homologation, how do you call a possibility in the master face. I think these are some main problems but maybe others have other experiences.

Per Olaf Fjeld, Oslo, Norway

In someway I think we all agree that our main goal is still to make these schools better in a way. That means that to qualify for architecture in the future that has a capacity to face the complexity that architecture is facing. We certainly know that there is a line of thought between the line of teaching, the process that follows the line of teaching and the project in the end. These three things go together in a way; the line of teaching, the process and the product. In some way I think these will continue to be individual. They will be individual for each school. I mean, it would be strange if they didn't continue to be individual though

will again live in an even global sphere there is still a certain type of line, there is still a certain type of condition that belongs to each school, though we are working in an international event. So, the question that we are facing on the three years or five years maybe some schools want six years maybe is a very simple question related to the question that we have a problem of finding out what we really focus on. In some way we might put on another layer of bureaucracy, you know, we discussed. If that, having in mind that, after all, our goal is to make schools better in some way. The question is what is really focused related to the three years, five years, seven years or ten years, what is the game, and that in some way can we make these schools better. I can't really see the real focus on that question related to whether three years, five years or ten years. Thank you.

Onur Selahattin, Ankara, Turkey

This morning Kees Doevendans presented to us certain points, which are very clear and I think a very good checklist as far as I can see. I have a question related with one or two of the categories or the boxes let's say. I find this expression of a common kernel common core I think, the critical and the most important expression and this is I think something that we should find ways of converting a plan and coming to a certain consensus. I find those two boxes, categories of common kernel and typology of schools a little bit conflicting that there is under the typology of schools a differentiation in common kernel. Shall we accept a differentiation or are we going to accept a common kernel, which is maybe more or less a constant though its realization maybe differs. I think that needs clarification. Do we, for instance, accept a common kernel in the matrix of technical and vocational? What I can see from the rest of the boxes is that there is a possibility for a differentiation after three years. I think this morning Strathclyde was a very good example of that: after three years there is a flexible area in which there can be differentiation, specialization of areas. So, I find that kind of relation significant and I think Richard Foqué will elaborate on that.

I have another question related with the follow-on of the Bologna process at Prague. As far as I can see from a schedule that was issued and it's I think in the Internet, there has been a conference in April, in Lisbon for the European educational area on recognition issues in the Bologna process and there has also been another seminar on 20th of May on joined degrees in European perspective, seminar or Master degrees, seminar on integrated programs. Well actually those two are going to be in February 2003 and in the spring of 2003 and this is going to be I think another seminar following, one on the social dimension of our education area and life long learning in the beginning of 2003. Now, these seminars as far as I have been informed are formative seminars which are going to influence the Berlin conference, Berlin meeting of the Ministers. So, I'm wondering if so far from those seminars, which have been already realized is there anyone who attended all or is there any information about those and I wonder if it is not important to join in the coming seminars in order to influence from the perspective of architectural education whatever is going to be taken up and discussed? So, those are two questions and some remarks that I had to point out.

Herman Neuckermans, Leuven, Belgium

I would like to reply to your last suggestion. You mentioned some seminars. Personally I

don't know what is their influence on the politics of the Ministers. The only thing I know is that the conference of Rectors is influencing deeply their decisions because they made the document, which is preparatory to the meeting and normally they follow their guidelines. That's where I can guarantee we introduced our Hania Statement. That's all that I can say.

Many things have been raised here, very many different things especially you Professor Robilglio mentioned a whole life time debate, starting from the compulsory and core elements ending in the scientific states of what we are doing. I think that although I advocate this diversity, an identity of the schools, and if you take the example of the Euro, when I go to Italy, they say Eouro, when I come to Greece they say Evro. I think that in fact we are not, we are reacting against equalization and I think, I'm quite confident that we will survive this thing but nevertheless, somehow I have the feeling and I believe that maybe we can define some core elements that when you afterwards after five years you talk to somebody you know more or less what he is aware of. That doesn't mean in my opinion that it takes you three years of the Bachelor. It can be less but I think we should be able to define some of these core elements.

The other remark I would like to make is that we cannot avoid to add a discussion about five years because we said in Hania, everybody has said it, we made references but I have a lot of experience with students from different schools and they are not working at the same pace, at the same rate. So, ultimately it would be much better to go to the credits and focus the effort on what are the credits for what effort do you get the credit, does it take you or you three months and the other six months or do you sleep half of the day and take two years, that's his business. I think we can stick to the point that we say according to many many years of practice we know that we cannot compress the making of an architect in less than five years but apart from that I would stress seriously the issue of the credits and focus not on what you eat but on what you produce. In our school regularly we get files from people from all over the world asking for equivalence with our Diploma. Then as a director of the program I have to look in all these programs. The last one I had was someone from Adelaide in Australia having a Bachelor-Diploma in Architecture after six years of study. If you go to all the subjects, all subjects are there, structures is there, all you can imagine all say whatever you like in architecture is there. So, it's not enough to have it on the list you also have to know what is behind the list and what is in the head of the one that you face afterwards. That's very important because I couldn't make up my mind if this person knows about structures conceptually or he could calculate them or something in between, I don't know. So, I think we still have to do a lot of work and I would focus on these core elements trying to define with core elements and then to define contents and then work on the ECTS and the delay on the time spent is five years divided or not etc., that's my position.

Carlos Weeber, Delft, The Netherlands

Let's not say a lot about the subject I just want to add some Dutch items. As you know we are a rather liberal country so, we don't have a profession, which is profession in the whole can do the profession. So, we don't have a connection, which is profession in the whole of our school. We are just independent. The only thing we have is this governmental, we say as well as five years and that's it. It is a department system and then it's in the responsibility of the school to achieve the quality. I agree with the idea of diversity in

Europe. I don't think we will ever have European architectural education, that's not necessary but it's very necessary that we accept our students mutually that we don't use it against our schools. Often the diversity is used to put barriers between countries and that we have to stop in order to avoid this. Especially the profession has the habit to put barriers between countries like in the Netherlands. Architects cannot work in Belaium for example, it is stupid, no? So, that's far more important than unifying the educational system. Nevertheless our university decided to give the Masters courses within three years only in English. You may also know that the Dutch language maybe abolished in the university in the next four years and that means that our students will be educated in English and if every country could do that, that could be nice. It would be much easier to exchange students and staff within this so-called diversity. So, we can imagine some rules, some actions beside the content of the education to encourage two things: to encourage the exchange of students and staff and secondly to encourage the competition between schools, it is also important. The diversity should not be used as an instrument to reduce the competition between schools and that's important. The students understand the quality of the school in Europe even in a diverse system. So, there should be some communication between the schools to check their own quality. It's of course a subject for Saturday but I want to say that, of course, it has to do with this problem too.

Kees Doevendans, Eindhoven, The Netherlands

This is why I proposed this idea of joined Masters in network strategies because within networks you can keep your identity but still there is also a competition and within these joined Masters or these cooperations of a few schools, with their own identity but also with some common things, you can arrange this kind of admission and recognition of credit points of courses. I don't know what Herman Neuckermans meant, but you always have to see if a student can be admitted to a Masters. This is always an individual case but if you make joined Masters in some schools then it can be regulated in general. That was the idea behind this idea of joined Masters in networks. I think we should not create this one uniform curriculum but a concept in which schools can have their identity but also cooperate and may have peer reviews and this kind of things.

Christian Huetz, Regensburg, Germany

I always think about what we are discussing because I made a mistake; I said one of the five years they should come out architects. What is in the end of the five years; we will have someone who is absolutely able or is able to do architecture or is someone who is just ready to do architecture? I think there's a very very big difference in between. So, everyone is talking about five years, seven years or six years but there is no definition of the quality, the core quality of someone who finishes after five years and should be able or ready to be an architect and I think we shouldn't think about that. We could create in five years or in seven years a real architect and that's impossible, I think. If we have five years or we have four years beyond, we have four years and a half so, well anyway everyone knows that main quality and ability to do architecture is just coming when you are in the profession and not when you leave the studies. So, I think it's very very important just to talk about what are the core qualities of someone who is coming out of school, who studied five years in what school. However we have not made a contribution to that point. I think that's absolutely necessary to find a solution because otherwise we just

discussing "well, let's order the sex of angels". I heard that, that's it.

Richard Foqué, Antwerp, Belgium

I was listening very carefully to the several interventions and I want to make a few points. First of all about the Carlos Weeber language problem that came up again in Belgium as well. I want to place a comment on that, on language problems. I'm not so sure that it is a good idea to turn all education into English in Europe. I think it's more complex than that. Language has also to do with the way of thinking or it influences directly the way of thinking. English is a way of thinking but French is another way of thinking and Italian is another way of thinking as well. So, If you are speaking about diversity and richness language is a part of it.

I think it is typical for these meetings not only this year but the other years as well that we implicitly take for granted a lot of things on the question what is an architect, what is architectural education and so on and so on. We are speaking for instance about diversity but if you look and visit schools in Europe you don't only see diversity you see a lot of things in common as well. You discover that schools do things in the same way or deal with the problems in a similar way and so on. So, it's maybe also interesting to see not only the things that divide us but also the things that unite us, we have in common. So, if we really want to go for and keep the richness and diversity we should also see what we have in common. This morning someone said that the culture literature in Europe is important. I plea in fact to get a more transparent view on what the several aspects of the several schools are and what is the diversity, whether it exists out of modules, which are different in the ECTS points and credits or is it the way of teaching, is it the subjects we are taught and so on. There is a need for a kind of survey and I think the questionnaire that Constantin Spiridonidis was sending around was an attempt to do this. Maybe we should improve that questionnaire or we should change it a bit, maybe but it was an attempt. We need to clarify this and make it transparent.

Carlos Weeber, Delft, The Netherlands

Yes, of course, a language is a way of thinking but Dutch people like the way of thinking of English people. That's of course the reason behind it. I want to propose the idea of who is an architect. I can tell you one of the interesting developments in Holland for the last fifteen years is that we trusted the students who just come from the university without knowledge and they just started a building, you know, encouraged by the government. That's why we have so many young and interesting architects at the moment which of course, have lot of failures but making failures, that's what you learn from. After ten years making failures all the time, you know then you are an architect maybe without failures but nobody can tell you who is an architect. But just if somebody wants to be an architect even without education, let him be an architect. It's not your problem; it's not even the problem of the school.

Loughlin Kealy, Dublin, Ireland

I find myself coming back to what are the purposes of the conversation here is and very much speaking of what Christian Huetz was saying, I find it very hard to conceive that the preparation of an architect is something that happens in isolation from the practice of architecture, from the architectural profession and although there are many positions along with a kind of spectrum as to how much engagement there might be between the schools and profession, I think it's looking at things in a very partial way just simply look from the perspective of architectural schools alone. As a Head of a School, I find myself to some extent resisting perhaps the imposition of simplicities from the profession in the same way as I find myself resisting the self-referential nature of academia, when I am dealing with architectural education. So, if architectural schools are sui generis in their own way then we have a unique position and we have I think, a pretty difficult task to present what it is that we do that's so interesting or so special or so valuable. Other people, I don't think necessarily see it. I think they wonder what the problem is. So, I'm really thinking of what it is that we can do better together, than we can do individually because I'm quite sure individually, people they are fighting their corners guite effectively and I believe the only thing we can actually do better together than we can do on our own is we can act on better information and I find the conversations that we have and we tend to have to ao on in the presence of very very partial information. We don't have the data, we don't know what we are talking about. We don't know where to go next except of what I have to think of like that. So, I see no substitute if there is a future for this kind of discussion, it has to be based on good solid information, we have to be prepared to provide it and I have my own hand up said "I didn't fill in your questionnaire. I will do it if I can have another chance, I will be a reformed character but we can't go forward without it". If EAAE wishes to prepare a position about architectural education, on accreditation for example, how can we move on without that kind of information? I don't understand how we can move forward without the basic ingredients. That's all I want to say.

I think there were a couple of efforts made to collect information here. I think that there is something missing. I would like to add something else to that information. I think that in the information is some sort from the school apart of the structure of the curriculum, the actual relationship to the profession should be spelled out as well. Otherwise, what type of professional accreditation is there, how long it takes, whether there are partial apprenticeship programs or whether people are expected to spend time in practices and so on so that we get rounded view. I looked back at Kees's diagram that is produced from John Redington's study. It was over a dozen of years ago that John Redington did that and he produced his taxonomy of the schools of architecture. I would find that taxonomy that my school of architecture actually participates in most of those quadrants to a greater or lesser extent and it would be helpful I think, if schools of architecture could find a way of charting where they are or how they participate in those quadrants so that we can actually get some, let's say, solid data, that's my suggestion. Add the profession to our discussion.

Leen Van Duin, Delft, The Netherlands

I think the discussion is rather defensive in this room and especially I want to resume something. It is easier than it looks. We have from the Bologna Declaration five years to build up a program and what we should do is to make the best program we can within the limits of five years and the relation to the European guidelines, of the European Committee. What I did in directing the Masters program of architecture in Delft was to start four different programs and there is a competition between them. We will see what

the best program is in the future. What we should do is to make the best program we can, competing with the others. Of course, we need information about what the other schools do and we can see what will be the best this year, next year and so on. So, let the market do its work.

James Horan, Dublin, Ireland

A point that has just been made by Loughlin Kealy strikes me. Indeed Laughlin's talking about the five years within the educational program and we wondered about what happens if we are working in the three plus two or working in the five. At the end of the day, if we find, as Heads of schools and educationalists that we are running into conflict with our independent governments about things like funding or whether in fact they will only pay for the education for so many years at the end of the day the profession itself, which is really an extension of education, must be the group in conjunction with the educationalists, who decide what a qualified architect actually is. In one respect, I feel almost that we were a little bit involved as Heads of schools because I don't think that a school can expect to operate in isolation from the profession. It's actually its servant.

I could ask a question starting from Alain Bridges's presentation this morning from the University of Strathclyde. He set out a very interesting scenario of what the structure of the 4th and 5th year is, how it is divided and the fact that every student of architecture is not going to become a great designer. There were a number of parts open and recognized by the profession at that point. Could I just ask another question that has stayed in my mind from that presentation this morning? When you have a reselection process for somebody to do the Masters program or enter the 4th or 5th year process what happens to the individual, who has already completed three years and does not get into the 4th or 5th year program. Where do they sit? Because, according to the Bologna Declaration, they are not only supposed to have a degree and a qualification, they are supposed to be employable and I think we must as a group of educationalists have an answer to that question. If we operate the three plus two, for example and reselect after that point we have to be able to say what the three year person is able to do after he leaves our system.

Hansjorg Hilti, Vaduz, Liechtenstein

We discussed in our school another group of students and these are students, who don't study anymore in the traditional curricula. This study may be one year arts, two years architecture, and one year philosophy. They leave school and work in some kind of a new media establishment, try to get a gain, an education in maybe some kind of engineering department. We are with one of our professors discussing to what extent our profession defends itself very much as we do here on the straight line of architectural education. He stopped from the one moment to the other, sat down, jumped up again and said 'my son is doing exactly the same; he is changing his curricula since ten years and he is doing a wonderful job. He leaves university, comes back to university and is in many different fields. That makes me think that maybe the future is a completely different thing from what we are defending and belongs to the past. I think there is another generation coming up which it's not very much interested in studying architecture for five or six years.

Koray Gokan, Istanbul, Turkey

I think we are making an assumption that there will be a structured future for us, for the future of education, for architecture. But if we look at the changes happening in the universities, vocational courses are disappearing. All architects and medicines have this problem. They have to go for vocational courses, they also have educational courses. But here we are as educationalists as academicians; we are trying to see ourselves and everybody is trying to find a formula for each architectural schools. I start forgetting the clients, the students. Shouldn't these be changed? They don't want to become architects. They don't want to have the diploma, they don't care because especially in Turkey with the diploma of architecture they can't find a job so, what they do or what we should do or we should start thinking? I think for educational services in bia diversity we should provide art classes, experimental classes or architecture design studios or anything, we can think of anything we can make within our groups and then we can start thinking whether this will go on, whether this is the right experiment which we take; the art of doing experiments for the next years programs. I was asked four years ago to formulate a structure for an undergraduate school of architecture. I had a hell of a time, eight months at the end I came up with an idea of a structure. Every year I changed my curriculum after four years. I have only one structure, the content of the subjects in to the studio works and all the base is changing. I can manage it because it's a new university, nobody wonders about what we are doing.

Christian Huetz, Regensburg, Germany

I think you said something very important that the students who should leave the school of architecture after six semesters or three years what will they do. I think, I forgot something that's a life-long learning and I think there would be a chance for them. I think we could offer a better education with people that really want to study well, to do the Masters and the others who just go out and go out for themselves do something else, to work. They have the chance of life-long learning coming back as well and perhaps if he or she leaves the university, well maybe after three years she or he will come back and study for the Masters. We'll have the quality to offer the Masters. I think we shouldn't forget this life-long learning.

Ferran Sagarra, Barcelona, Spain

Perhaps, I will talk about things that don't center anymore in the discussion but I think they are important because my school is inside a Polytechnic University and that gives us some experience on dealing with engineering. I think that one of the most important things we have in common and we have to publicize is one very simple thing but very important. One is to say that the design is a way of knowledge and that is a very specific approach for architects and that's a very post-modern approach to knowledge in general. So, a lot of our students are getting jobs that have nothing to do with architecture, but that just have to do with intelligence, the capacity of understanding the world that now is in scientific change. That's very important in the same direction to say that the project is a scientific practice, it's a way to analyze, to understand but not only to understand but to change and without changing, it's not necessary to go to Mars, but without changing you are not able to think. These are two very easy statements, not easy but very simple.

I think it's something that architects must show, must explain to the rest of the people, professionals or scientists. Well, in another level the third year graduation let's say, the certificate of the title, you have the third year in some countries which can be used just for work. I don't know but that doesn't matter for the effects of architectural schools. What is important for architectural schools is that opportunity to have let's say, a unifying moment, instead of a common core, it means a moment where we can exchange students if you want because you know what they know. So, it means we have to focus specifically on the three first years, know what to know, what a student knows at this moment and this way it could be easy to exchange, to make mobility easier for our students. This cutting, this stop in the five years, I don't know in the 5th or 4th, I think 5th is good enough but it's also very important for the students now.

Now the way to measure the time is different for students and different for us. I think for us, at least for me, five years, seven years was not an enormous amount of time. It means, I have been ten years doing my thesis, well, it's crazy of course, but it was not so strange in my country at least. Now, five years is an eternity for the students. So, having this cutting it's very important in order to restart, to restart with enthusiasm because what I can say is that even with our students in my school they are very vocational. When they arrive in 4th or 5th year they are tired and so, if we could think this way, we'll restart with another enthusiasm.

Finally, I would like to say that I agree with what has been said about the information as the principal thing and the opportunity we have in meeting together. In the context of European Community, Erasmus and Socrates programs have provoked a big mobility of students. That's good not because they learn better from one university to another but because they know a city where in summer and in winter time it doesn't rain or in another where people get up at seven o'clock in the morning or this kind of strange things, where girls are easier than boys etc. That's the important fact for Socrates. But for knowledge and for our unification or our information I think what is very very important is to claim for more mobility of teachers. Not only mobility in the sense to make some meetings like this one or others that are interesting. I learned a lot from another country and another way to make architecture when I've been teaching in this country and when the problems I've got with my students there are for me to understand the problems of the city.

I want to finish by saying another thing. We are Europeans so, we are not Americans for instance or we are not Africans. That means that we have a very very strong network of cities and we have urban civilization, which is in danger. So, it's our task as architects, I think one of the most important tasks is to pre-invent and to reinvent our cities. So, well that's to say in these curricula we are discussing, I would like to put the emphasis on the necessity of not only understanding the city in a theoretical way as the surrounding of our task but just as our subject. The city, the European city is our subject even if it is a very diffused city, even if it is a post-industrial city, it's a city and it has to be really pre-invented and rethought in fact. Thank you.

Herman Neuckermans, Leuven, Belgium

Well, in fact I wanted to comment on several things that have been said earlier and I would like to relate just the opposition from Loughlin Kealy saying that we need more interaction with the profession. Carlos Weeber before said, "don't care about the profession" and Leen afterwards said "we have to set our curriculum and let the market play its role".

So, I think these are three examples of people here and if other people would speak, we would have more examples of what we are. In fact we are individuals and we are individual schools. I'm directing the program of my school and I'm creating a Bachelor and a Masters program with diversity in different specializations. What happens today? In fact, everybody I hope, is building up or thinking in the new system. This kind of meeting cannot produce knowledge that would be the basis for such a production because the production is going on. We have, anyhow, the higher European education area by 2010 so, if you deduce five years in fact, we have to be ready in this one year or two years to introduce programs, so in fact what will happen?

What will happen is shown here. Everybody will do their own thing according to the best they can and to this local conditions. My question would be and my suggestion would be: Is there any subject that we are all interested in as a whole and we are willing to work on for the future because at the same time, you know that we produce all our programs and they are different. We know it now, somebody said the first thing we do "we need information". Yes, of course, we need information but also we need to read the information but forget that because I just have here the new sheet, which is not the only information of course, but in the Newssheet 61, you have the picture of the European scene at the moment. I wrote it but it gives the eleven points, which are in the directive, which are everywhere, what are the achievements qualifying what is an architect. Of course, this thing has been written in '85 or something like that so, it needs probably an update. As I said last year, I see an evolution in the schools of architecture not everywhere but a lot of schools are moving from the education of an architect, which is completely the subject of this directive and all the professional involvements to the education in architecture, which is why there is a scope, which opens up to many different professions. So, my opinion is that we have to revise these definitions or at least that we have to know precisely what we are talking about. But it has been described well, somehow. It's not so that we have to reinvent the architect. You said you know what an architect is and to some extent we more or less know what it is, of course.

Carlos Weeber, Delft, The Netherlands

Your question about what should we do about students that leave the school after three years. There is no problem, I tell you because at this moment from our school in the old system 40% is leaving the school before finishing the education and it's not our problem and we never get any problem. Some go to study, some go to work, and by the way the BA Bachelor is not meant specially on the first place to be an end of the study, it's just a moment to change maybe from your study to somewhere else but the main idea is to continue with your study and if still after some years at a new system 40% is leaving the school before five years education is not our problem.

Kees Doevendans, Eindhoven, The Netherlands

First a small remark to Carlos Weeber. Of course, I agree it's not a problem in a system of output funding but it is your problem. Well, then of course, my impression of the discussion, we talked about this diversity, the differentiation well, that's a fact and that's not a problem, that's treasure, richness. So, what we are talking about not about this differentiation but I think we are talking about coherence, about integration and what we have in common.

Well, why do we talk about it? What has changed and I think it was from the Professor from Liechtenstein, who said that the world has changed and there is completely a new generation. So, I think what we try to discover during this discussion is a kind of new concepts for this coherence, for this integration. Several concepts were mentioned; for instance teaching of students' mobility, precise idea of what an architect is. Joined Masters is a concept for these things, the ECTS, a common kernel, the information is one of the concepts to get this integration. My impression is that we try to go beyond this stage of differentiation and that's great but how can we define and maybe not introduce a new system. There is a new system but it's not the main issue, the new system in our concepts is how we can cooperate and integrate because we come from several countries, several nations so, that's our new challenge.

James Horan, Dublin, Ireland

It is quite difficult really to draw conclusions from this discussion. I think they are really to do with stimulating people's thinking and actually arriving at firm conclusions but maybe providing us with some of the information that we need to help us make these decisions later on. In my own case, in my school, there is another school, which is located in the same building and it's a school of surveyors. Every now and again I take a cup of coffee with the Head of the School of surveying and we discuss the difficulties of running a school and I have said to him in the past that his difficulty is nothing compared to mine because he is running a farm, I'm running a zoo. It is this difference and diversity that is the natural and inherent attitude and mindset of the architect that is going to preserve the diversity of our profession. Right across Europe irrespective of what any governments say or what any declaration of Bologna tell us to do with our educational program. I believe that we will survive no matter what happens. What Kees Doevendans rightly pointed out, there is a possibility for integration between us and maybe the single greatest strength of meetings like this in Hania, is the formation of the independent networks that take place between us and individually afterwards. Thank you very much for your contribution this afternoon.

Summary discussion workshop 1 European Curriculum

Working group 1

Kees Doevendans, Eindhoven, The Netherlands

There is a need for reflection on the architectural curriculum because of the changing of context for education and research, especially the emergence of a common European Higher Educational space (internationalisation, Bologna-agreement).

The diversity of architectural education, represented by the variety of schools in Europe, is seen as an important starting point for this reflection, this variety is a fact and considered as 'richness' (Hania Statement 2001).

The tension between this variety and the emergence of a common European educational space does not lead to the necessity of a uniform or standard-curriculum in architecture, but is seen as a fruitful starting point for the exposure of the own specific curriculum-identity on the one hand, and the discussion on common, integrating elements with other schools on the other hand.

The interpretation of the consequences of new structures like Bachelor-Masters is to the schools, also the specific relation of a school to the profession, and the view on architecture as a discipline, as well the relation between profession and discipline.

In the context of BaMa it is important for schools individually and collectively to define the nature of Bachelor-qualifications.

EAAE wants to support the discussion on coherence and differentiation of architectural education in the common European Higher Education space by the development of concepts and means of communication (meetings, networks, working groups, comparative information about structure and content of curricula based on ECTS, core qualifications, joint masters-programmes, student and staff mobility-scheme's etc.).

Curricula for Architectural Education in the Common European Higher Education Area

Discussion Group 2

Coordination by
Dimitris KOTSAKIS
Thessaloniki, Greece
Guido MORBELI
Torino, Italy
Johan VERBEKE
Brussels, Belgium

Guido Morbeli, Torino, Italy

I will try a brief summary of what are the conclusions of this morning. Then there will be other speeches by my colleagues on the left and on the right and then, I think that the most important thing to do is to listen to your observations very carefully. We will try to synthesize them and then we will make a procès-verbal of the whole thing to give it then for the work of the permanent group that was suggested to us this morning. You all know the small revolution in university teaching, the Declaration of Bologna, Sorbonne etc. and of Hania last year and we know now that in some schools in Europe, in some universities the so-called BA-MA system, Bachelor and Masters is already applied, sometimes by initiatives of the single university, sometimes there are laws as I heard in the Netherlands also in Italy but there are also some opposite opinions about the system. Universities know that in the three plus two, we can have exceptions; four plus one or one plus four etc. The central problem is being right as you said of maintaining diversity. We can have very very fertile diversities among teaching in Europe because we have different law, climate, traditions etc. We differ from country to country. It is impossible to have one standard system and I think it would be very also rigid and boring. What is really making social life alive is diversity and discussion.

I take from this sheet that was given to me this morning a sensual phrase that is a question to be answered is: 'whether to pursue a universal ideal curriculum or a situation of many but qualitative identifiable curricula'. Our task of being present here we have been suggested by the coordinator Richard Foqué to have these guidelines for the workshop. I think they are very well-balanced and I say it to you there are six guidelines. The first is considerations and context regarding the subject, the second is definition of the problem area to be covered, the third is main questions to be answered, the fourth is methodology to be used, the fifth is a mission statement of the working group, which has to be established. We would like recommend to this working group to propose candidates for active

collaboration for the sixth Meeting next year. I conclude saying that I was especially, I do not expect anyone to share my idea, interested by what professor Doevendans put this morning in his speech, not to diminish what that the other speakers said but also because he presented with a written scheme, which makes the things much easier for me. From the actual points that Doevendans proposed, I choose these; I think the most interesting are admission requirements, the common kernel, the problem of generalization and specialization, the relation between the Masters and the projects of the Masters and the PhD, the studio as a location of strategy, research laid teaching etc. I want to read them out or it would be a bit boring. So, this is just to try to put a frame to the discussion. I think professor Kotsakis has something to say. He was patient to go through all the official documents of these times and also my Belgian colleague Johan Verbeke has something to add to this interesting speech of this morning.

Dimitris Kotsakis, Thessaloniki, Greece

I wanted first to make some clarifications because there is a big confusion about what is the Bologna frame. What is this Bologna frame or context within which we are working? First of all to remind you that after the Bologna it was Prague, that is, the same ministers of the same countries convening in Prague and they follow up explaining what the Bologna was and in between Bologna and Prague there was a meeting of all universities in Salamanca and then it was the University Rectors, official representation of universities, the University Union of European countries and also a meeting of students in Götenborg and these two meetings had decisions that were incorporated into the Prague. So, when we are referring to Bologna we must actually refer to the whole process and to Prague as well and we must not refer only to the ministers but to the universities and to the students. And why is that? Not only because we want to, but also because the Prague communiqué does so.

In Prague the ministers themselves said that, I read here, ministers took note of the convention of European Higher Education Institutions held in Salamanca and the recommendations of the convention of European students held in Götenborg. So, the ministers themselves recognized this as part of the process. Then they said that taking into consideration all these, the ministers supported the idea that higher education should be considered as a public good and will remain. All these words are very important because they are an outcome of debate and conflicts so, the words are important. I'm reading the document of the ministers: "it is a public good and will remain a public responsibility, which means regulations" etc, etc. Is part of the document that students are full members of the higher education community. Now, what does that mean? If you go to the two documents that the ministers are referring to, Salamanca and the Götenborg, you read in the Salamanca document, I mean the universities document: they say, they have many theses but I'll read the only one which is relevant to our discussion, which is thesis eight. Thesis eight of the universities now, (this is not our Hania Statement, this is a Salamanca statement), thesis eight: "a university may decide to structure a curriculum as a five year integrated that is unbroken program leading directly to a Masters level degree". So, all this business that Prague and Salamanca suggest that we must break our degrees is false. It's not an opinion. This is a document. Now, why a false opinion is being speculated I really don't get in to that. It is part of rhetoric, it's part of politics, it's part of power but it does not correspond to the decisions and the documents. Nobody said to anybody to break the degrees, ok? The documents are here. Now, this is about the five year integrated and unbroken.

A second thing, which is important and it is part of the universities Salamanca Declaration is referring to the outcome of these studies. Very crucial this, it is thesis two. Thesis two says that the curricula concepts, the ideas with which we structure our curricula, should promote the life-long employability of the students and their adaptability, which means that we don't give degrees that expire, abilities and knowledge that has time span of five or six years and then knowledge is over, antiquated and then the students have to come back to the university for life-long training. We educate them so that they can have not only life employment which means that we are obliged to give degrees that have a span of thirty years not only that but to cope with change. We must give such a kind of degree as to make students adaptable, which means that the students must be able to re-educate themselves. Again five years and life-long education mean a big thing, it doesn't mean specializations.

Third point. Salamanca made eleven points, I'm reading the only three points of it. Third point, which is the first: "universities as legal entities need autonomy and want to be helped accountable for all things that define this autonomy" and this autonomy has been defined in Bologna but not the Ministers Bologna, the Universities Bologna, as independence. I'm reading again the document, "independence of all political authorities and economic power". First, that means that they should have adequate funding from the states so that they will not be dependent on economic power and second that this funding from the state should not subject the universities to the political authority. I mean it's obvious; and it's not obvious because it is written very clearly. It is obvious because later it is being specialized in terms of demands that make this clear. Second part of this autonomy is that teaching and research in universities must be inseparable. So, you don't have teachers and researchers and separate funding and that freedom in this teaching and research should be augranteed by aovernments and universities. Now, this is another declaration all this is Prague Declaration so, people say well, in Bologna we decided to leave universities open to funding by anybody and then we should break up our degrees into three plus two. Then this three plus two must be specialized because this is the general directive. Nothing is more false than that.

This was the first thing I wanted to clarify and I'm talking only with documents. I'm not saying my opinion; of course I agree with these documents. I explained to you but that's beside the point. I'm trying to say that this is how we should understand that. The other thing is that when last year having all this in mind we made the Hania statement, the Hania statement did not only repeat what I've read here from the Salamanca in the first point saying five years, three hundred ECTS credit points leading to a graduate level, Masters but it also said that we need this, it explains, in order to meet the requirements listed in the above documents and the documents are the Architects Directive of the European common market, which is the famous Article 3 of the 85 Directive and then it is the UIA and UNESCO Charters. So, in fact they say we want to use the five-year education, not because only this is a university standard and so on, but because the content of this education has to apply to these requirements and these requirements cannot be met with less than five years. This is why the document says that the schools who want to break it of course they can, obviously, but they should know that the three years will not, it says 'in which case the first cycle cannot give access to the profession or an architect'. So, this is part of the problem. This is not a full clarification though because if you go to these documents, the European Union document, Article 3 and the UIA document, you will see that there are some formulations that are very strange. For example, in Article 3 document they use three kinds of epistemological concepts, the knowledge, the understanding and the skill. For example, knowledge of history and theories, skill to create architectural designs and understanding of the relationship between people and buildings and then another directive came. An advisory committee for education and training in the field of architecture, which was in '90s that explained that this differentiation between knowledge, understanding and skill had an educational meaning and the educational meaning is that knowledge you give in lecture rooms but understanding and skill is given by individual tuition, which means that there are two ways of reading all these directives:

The one is that the education covers all six branches, which are design of buildings, construction, conservation, landscape design and town planning. This is one reading and I put the sixth, which is history and theory of architecture and the city. So, this is one reading.

Another reading of it is that you concentrated on design and for all the rest you have knowledge of. So, in fact, it is up to us, I mean the discussion starts again and why I say the discussion starts again. In Beijing, when the whole thing was put forward there is a very interesting in the Beijing Charter, it's a very interesting way of putting the question. It says that basically the general theory of architecture is an integration of architecture landscape and urban planning with or within the court of city design. This is the tradition but they say that however, the increasing scale in scope of modern development provides architects with great opportunities to deal with architecture landscape and urban planning as a whole. That is very crucial because it means that at this point the schools who want to have an integrated or an integral study of architecture and this is why it makes the difference between integral and general study they are not just keeping to the traditions, they are creating a new perspective. That is very important. Those of us who want to have integrated studies, we are not just repeating the past. We are creating a new type of studies because in the past all these were structured around design but now we have to integrate them as the Beijing charter says. So, in fact we are in a crossroad at this moment. We are not just the ones, who preserve the tradition and the others, who are in the new area, we are both in a new perspective, the perspective of segregated, specialized every five years renew themselves broken up studies and the schools who will try to see how we are going to have integrated studies. So both directions are new, that was my clarification, not only both directions are new but also both directions are under the same political frame. So, nobody has an advantage of the other. It's a choice and it is a philosophy and it is both a philosophy of architecture and studies. That was my point.

Johan Verbeke, Brussels, Belgium

I will make it very short. First, for information for the group here the Belgian and also the Dutch law at moment state that we have a structure of three years for Bachelor plus one or two years for Masters degree in which it is very clear that for access to the profession it will require the full five-years of study. But a Bachelor-Masters structure is legally in place. Then a few short points, which were also mentioned but in a wider context this morning is that I think it's extremely important to keep variety within the curricula of architecture in Europe. The relationship with the research puss at such activities needs further

elaboration and clarification. It may be a task for this group for the coming year to see if we can elaborate on course qualifications for a Bachelor and a Masters degree in Architecture. It seems that at least also in the Netherlands and in Belgium the semester structure is almost everywhere accepted and implemented. I think also in quite a lot of the Scandinavian countries. It seems that there are a lot of arguments for joined Masters and collaborations in order to exploit the different specific capacities of the different schools of architecture and a lot of issues as the flexibility offered especially during the Masters degree either we are going to fix most of these curricula or are we going to allow following the case of Strathclyde University in Glasgow almost completely different curricula for students in the Masters degrees. And then finally I want to introduce the idea, which was developed during the last ten or more years which state the difference between implicit of tacit knowledge and explicit knowledge, which is somehow written down in an explicit way available in opposite to a more implicit and tacit knowledge, which is also available. For good development of fields is important that both of them interact and enforce each other. An example of this implicit knowledge is driving a bicycle. It's extremely difficult to formulate it in an explicit way how to do this but all of us of course. know it. So, that's some knowledge, which is implicitly available, which is very difficult to forward in an explicit way to a child. A conjunction can be that within the filed of architecture this interaction between these implicit and explicit knowledge is not there in the same way outside these different fields. So, this may be something to reflect on during the coming year. I will stop here because I think it's important that the other people attending the sessions have the time to contribute to these issues.

Bernard Wittevrongel, Tournai, Belgium

I want to react on what professor Kotsakis told us about the official texts. One of the important things is that you focused on the text of Salamanca which speaks about five uninterrupted years. So, from that point of view, I think in the way it is uninterrupted the structure from three to two or two to three or whatever structure is has, it is not so important. I think that the structure three five is chosen because of one of the points of Bologna is to create certain types of mobility. So, an important point is to define what kind of mobility we want. Is it a mobility that is just a possibility for the students to consume a maximum of schools of architecture throughout Europe or we want something much more structured. And I think it should be maybe interesting to hear your point of view on what the text exactly means by that mobility because for me it's not so clear what kind of mobility is implied in the process of Bologna.

Dimitris Kotsakis, Thessaloniki, Greece

One argument is that there are three requirements for mobility. One is transparency of course that means that curricula have to be structured in a way that is readable in different cultural...ok, that's easy. The other is the structure of the curricula. That is the ECTS system; so that one can know if they've done something in one place what actual weight this has in terms of...so, this is the second. Transparency is the first. The second is the ECTS system, the credit system. Now, the third, which is part of our discussion, is whether this would be facilitated by breaking the degree in the third or the fourth year so that the students can change schools, can change universities in that level. This is supposed to contribute to mobility. One argument for the breaking up of the degree is this. Now

what comes as a counterargument is if this is possible under the question of integral studies. If it is possible that you have integral studies in all these six areas I said before and then keep this in three or four years so that you have your five, the thesis year on top of it then ok, do it. My experience from my school that we discussed this for the last five years is that it is impossible to have integral studies, which will be broken. So, I take the opportunity of this position to support the thesis of integral studies. In architecture, integral studies need at least five years. So, this is a challenge to all of us to discuss, it's a point. If anyone can prove that we can have integral studies in three years, that's ok, it's a challenge. We'll make this discussion, I doubt it very much and many doubt it. In France for example, there is an opposition to that breaking up. In Spain, in many countries so, this is the only answer I can argue on the mobility side. It is subject to this.

Michèle Tilmont, Lyon, France

I would like just to say that from my point of view the question is what could be the requirements to enter a Masters class or a Masters course. If you break the curriculum at three after that if you want to change of school, if you want to go to another school, what you will be asked as requirement? Maybe it is not so uniform all the common market. So, it will be a kind of market for students to find the place where they are accepted of course. I suppose that if you stay in the same school, there will be no problem but is that a real question? Because there can be a very strong competition between schools depending on this kind of requirements, if they are selective or not selective or depending...

Angel Luis Fernandez, Madrid, Spain

I think I can represent more or less the general sense of all the Spanish Schools of Architecture. We have been all these years in a lot of meetings just to discover this question. In our country we feel that the title of architect has several differences with several countries in Europe and all around the world as we also consider the title of architect as an integrated title that fixes all the knowledge of technical knowledge, artistic knowledge. The title is very special in that sense in relation to other countries. In that sense, we don't see any other horizon than to maintain the five years because this mixing of knowledge in one integrated thing is not possible to be explained and be developed in only three years. So, we have concluded that five years is absolutely necesary. Perhaps in other countries where you have a rather artistic sense for architecture and you have separated civil engineer and the technical knowledge from the artistic one, it is possible to have this separation. But in countries that still maintain this whole idea of architect as a mission and as an artist is really very difficult. It needs something that according to the quality of architecture we want to maintain in our country. We have decided to maintain this structure of general studies and in that case five years is the only solution.

I see also that the idea of mobility has also a very big problem because with this same idea of integrated studies that means that all, especially the technicians, also the cultural fields or the cultural routes of architecture have too many things to do with all the culture, the history, the own history of each country, the own traditions and so on but the technical questions of this subject of architecture are very related with the own normative of each country. So, the mobility does not allow student to have a real knowledge of what is the normative of his own country. In our country, all the technical subjects related to

architecture are very well developed in a number of laws, which is a very complex to understand. So that is very difficult for Spanish students to go abroad to another country and study the technical subjects, and hat's why also for us mobility has a limit; normally for one year and in that case what a Spanish student goes to study in another country is only things related to design or urban studies or things that are part of this general knowledge related with architecture. With all this I mean that I want to state here that the general sense in Spain is that we want to have a challenge, to take this challenge of the European Community and to answer that we are absolutely determined to defend a five-year course as the only solution for our cultural idea of architecture.

Dimitris Kotsakis, Thessaloniki, Greece

May I take the opportunity to say that in Britain, that they have an opposite cultural tradition and they have broken up the whole studies into building design, structural design, which is done by another profession, they have landscape design, the three designs are separate and in different professions. Three designs, plus conservation of course and planning so, in Britain that they have this, they have a problem. I know a report of the deputy Prime Minister's working party on urban regeneration the title of the report is "Towards an urban renaissance" in which they challenge the system they have because it is not good enough if you want to take responsibility of the city. So, it is more important to have voices from Britain, critical voices than voices from Spain, Greece, France and so on who somehow maybe they feel guilty for supporting their own traditions, which is not the case, I mean this is why I said we are in a crossroad now and all of us are looking for the future, nobody is actually defending the past. It's only what use we make of our traditions.

Bernard Wittevrongel, Tournai, Belgium

Shouldn't it be interesting that we take just one theme for example mobility and everybody could react what are the advantages in a certain type of mobility for the school and for the students. Because we all start from the idea that mobility is the solution and a great part of Bologna is for that mobility; because the theme is to say we create one educational space in Europe and as you said there must be a certain transparency in our education system. That is important but does it mean that we have to have the necessary mobility and what kind of mobility? I think we have all an idea on the way it could happen and that's what the speaker of this morning talked about. I don't know what he called it but the kind of joined Masters strategy are there other schools, other opinions about that, other experiences how to integrate on a very pertinent way that mobility that gives also to the schools, to the different students, those in the school and those going abroad, how we see the advantages of such a system? Maybe we could all of us speak about that them and could maybe animate the discussion. It's just a proposal.

Michèle Tilmont, Lyon, France

In these ways there are two types of mobility. There is mobility described in a few groups. It is compulsory; some of your students, maybe not all of them, have to go outside the world and there is a free mobility. It's like choosing and planning education. You have to distinguish these two things.

Jacques Gubler, Mendrisio, Switzerland

Mobility existed before the Bologna model or pattern as you call it. I think only the imagines of the Bologna pattern change the mobility as has already existed for many years. It was I think '92, since we celebrated this very year the tenth anniversary of Erasmus program. Now, Bologna does certainly mean a change in organizing exchanges among students. I think what is very interesting about mobility is that it's now part of the students' culture and it's impossible for them not to think of not only leaving a school but of going to another city or another place and study architecture from the experience of living in other place, in another city. This is how I did experience it. How are you going to implement this, is it a year, is it a semester of going abroad? Technically, we'll be part of the first cycle as one says, or the second cycle? Is it going to be before or after the BA? Is the aim to double the administrative structure because this is one of the constant problems, the management of these problems is very very complicated and then as my colleague from France said if a student is not officially sent by a school to a guest school then he will go anyhow? Is he going to be a free mover?

I don't think that one should react as our colleague did from Madrid to say that we want to form a professional architect. In this case, he must be in the country for at least five plus one year because I know the technical vocabulary, the laws will change from one city or one state or one country and what's the use of going to Berlin if you are going to become an architect in Madrid. I think the question is ridiculous because it's so advantageous to be a student in Berlin and go for a year to Madrid and who cares about the law, the Spanish law when you are a German student or about the German law when you are a Spanish student? Maybe law of course, it dominates subjects, it's probably the future of architecture is going to be law as it also was the past and the future of architecture. It was law, but 2.000 years ago. So, I think as you said you remember that the students, who gathered, was it in Scandinavia in Göteborg and probably they were the main characters in this idea to be more open. I think their ideology does not correspond to the ideology of the majority of professors or deans or heads responsible for the political justification of reforming the presence of their school within the political landscape. I don't know maybe the question is now finally how does the Bologna pattern change the way to implement mobility in Europe? Is this a question, the question was a student that, a French student has a BA in a French school, is he going to be admitted in another school to start the beginning of the second cycle, maybe the first year of...is it going to be possible for a French student carrying a BA to go on and have an MA in Spain or what would be your answer? Probably not because it's not familiar enough with the technicality of the Castilian vocabulary regarding the practice of architecture in Spain.

Dimitris Kotsakis, Thessaloniki, Greece

There is in Göteborg a comment on that. The students say that the two-tier degree system should guarantee free and equal access for all students and should not lead to the exclusion of students. Now, what happens with the three plus two? Sometimes it is a mechanism for a barrier. So, there is also a point about that. It's a technical way to exclude students so, you have a three-year general education and then you go out. So, in Göteborg this was mentioned.

Angel Luis Fernandez, Madrid, Spain

You want to know my opinion? What we are trying to guarantee is something that we find that has been marking during last years something we see as a sign of quality in architecture. We want to preserve these technical requirements. We normally don't talk too much on what the technical requirements are in our theoretical discussions and I think when we are going to talk about the auglity of architecture anyway, we are not going ever to talk about the technical requirements that all architects have to take into account. But in the deep sense of what makes architecture more real, more intensive we are convinced by the technical requirements that are still very important. But this is only an instrument, it's not the debate which is about ideas of course. We know that and of course, we architects and the students may be forward in exchanging ideas in our country. That's very good of course, mobility is something absolutely positive, and we know that. I was just only saying that our entire panorama is absolutely different from the Italian area. We have exchanges with the Polytechnic of Milano, we have many other schools and we know perfectly well that. What we find as a difficulty of our students to remain in those countries going as architects with their formatting processes that separate absolutely the technical and the design process. That's something very difficult because in our country the process of building an architect is always mixing it and the results from our point of view confirmed that that's the good way. So, as far as we are not convinced of the other questions that separate technical knowledge from the artistic or design things is a good way, we are going to maintain this but that doesn't mean that we don't know that of course, mobility, of course, the exchange of ideas is a good thing. The Spanish schools are full of foreign students and we like the fact that our students also go abroad.

Guido Morbeli, Torino, Italy

If nobody wants to speak can I take the advantage to say something about my country, which has been nominated? I'm not special defender of the teaching of architecture in my country, which I have criticized in the whole of my life but as far as is this separation of design from technical methods mentioned by my Spanish colleagues, I don't know what has happening in Milano but is not in Torino. Because we are trying the degree. which the minister gave us. We have to mix several kinds of teaching in the three and in the two. So, there is not a separation between what they call technical in the three and design in the two. It's not like that, it is a tremendous work, we struggled in trying to make these programs, it took several people and more than a year to put them, it's not amusing. Also in Italy to take the three plus two is not compulsory because for example, in the Polytechnic of Torino there was a big push of the rector to make the three plus two because they like very much to follow the politics of the government of that time it was very much for the three plus two and so, we took altogether this medicine of this three plus two. But many of us were not so happy, there was a strong dispute and then we agreed. But many schools as I can assure you in Genoa, I don't know which the others are; they are still going with the five year system. So, it is not compulsory by law, changing to the three plus two. If you want the three plus two, you do it otherwise, you do the five and I want to have, just to stress out what is important.

The background of countries for making one thing or the other, the special situation and I would say the unhappy situation of Italy was that we had overcrowded schools of architecture. We had a tremendous length of studies, the average. We have a cumulative

system of examinations about 30 and so, there were some enquiries in average. They took eight years to graduate so, in average from five a very small percent to even ten years and still there are students who are having two years and say well I stop studying but, I want to start again and they restart after 20 years because they want the piece of paper but what is important to know, maybe you don't know in Italy, the lower degree has legal value so, some people take especially in the state or public bodies where you can enter by competition and if you are graduated, if you have the piece of paper of the lower you can. Otherwise you cannot enter to such a kind of job. According to your success and scores in the school, you are in the position or in another. So, this makes quite a difference, the legal value of the lower of the evaluation. And also our very unhappy situation, typically in Italy is that we have to fight for longer because there is a profession in Italy, which I think formally stopped, is the profession of geometer.

The geometer was born for measuring the fields but slowly, because of a lobbying activity, went up and up and up and the geometer came to design small houses. Italy has a beautiful landscape but some areas have been completely spoiled because of these terrific projects of the geometers. Geometer is a technical man, who gets out of his secondary school at 19 years, very ignorant, he knows very certain things and they are the kings of small towns and of the countryside. Very few people use architects because they cost more. Geometers have more reasonable fees. So, we are attached from the bottom by this geometry and from on other side by the engineers; the civil engineers, who also want to design, and for reasons that I would need a lot of time to explain, the engineer has better reputation in Italy than the architect. The architect is distinguished so to be a little bit of a mad man, who creates etc. but the engineer is a person who knows what to do and they take a very large part of what it should be our work, our domain and our mark. So, this just to say that by law as far as I know the geometer has disappeared but not the geometry, the profession. The geometers, however, we cannot kill, they are still there, they are many, they are thousands and they can make a strong lobby in the parliament, which is a help for them. My farther was an artist and he said 'Geometry my God!'

As I said whether the three-plus-two or five, we should have a reasonable length of carrier. I teach since a long time unfortunately and I was desolated over the very law passion of many unmotivated students, this is also a question of the length of the studies. So, we said well we have a terrible failure rate. From one hundred students that enter, thirty of them graduate after the five years and maybe a half or less than half take the state examination to become architects. 20% pass the examination because they do terrible design, because they also do other things while doing their studies. We had to remember the students' revolution after of 1968 etc. and the group examinations and so on. They were not able to do it because they do as the final study maybe a thesis in history or even in mineralogy and few in design so, when they then go to the State examination, there is a tremendous failure. Just to say that from country to country things can be very different so, at least this system of three-plus-two has been not so warming but accepted because we say well, people, who are not motivated after three years get out. So, we'll have in the two, what is called lower spezialistica, specialized graduation and motivated people who can eventually become good architects.

Dimitris Kotsakis, Thessaloniki, Greece

I want to go back to mobility. There are two kinds of mobility the one is the fitting into a program of courses from another university, in which case the two conditions for doing this is transparency and credit systems so you will know how to fit one course into one program. This is one type of mobility. The other type of mobility which, I'm afraid is not a tool for mobility but it is said that it is a tool for mobility is the two-tier dearee system in which case you change university. The first type of mobility has only advantages, no problem. Students move and they can work for one module in another country, they go back and they give to their university experience in the role, place experience. The second type of mobility, the two-tier degree system has two problems. First is that creates two levels of schools. The second level, which is the preparatory schools and the first kind of schools, who are giving the degrees, might be so, but the basic thing is that it is subject to a very strict condition that it is possible to break your curriculum. So, in fact the twotier system is not actually an answer to mobility. An answer to mobility is the transparency in the ECTS system. Now, I'm afraid that the case of Italy is very very interesting because of course, if you have overcrowded universities, you might use the two-tier system not as mobility but as a barrier. This is exactly what the students in Götebora said they are afraid of; that getting to the university and then having the three years' barrier through which you are excluded from the university. So, this is a transitory political solution to overcrowd the universities; a solution that most students would not accept neither would most of the teachers. Create more universities if you want, create different universities but do not exclude people from higher education. So, this is a second kind of mobility, mobility to nothingness, I mean mobility moving out but this is mobility also not from one place to another. So, mobility is very intricate but I believe transparency and ECTS system is the basic tool for mobility.

Guido Morbeli, Torino, Italy

I just want to clarify and correct that we don't put a barrier after the three years. If they want to go on, they go on but I suppose that a student that is not so interested in architecture is happy to have a small thing and he can go out and so, we have more time and we can concentrate on the people, who are really motivated.

Dimitris Kotsakis, Thessaloniki, Greece

But if you have entry examinations that have art requirements drawing and everything then you have the motivation before you enter the university? This is what happens in Greece, we must take exams in order to enter the schools of architecture, exams in freedrawing and architectural drawing. So, in fact you are motivated. So, there are ways. What I'm saying is that there are many ways.

Guido Morbeli, Torino, Italy

I agree with you but it would be very difficult to introduce this initial grade in Italy mostly for other than logical reasons. In Italy they have solidly the right principles by which if you entry a school with a certain system, you make a part with the school and you have the right to finish. So, we are going out with three systems because we changed it so

many times, we have three orders going on; an old order then a less old order and then a new order. So, we are operating with three systems. I've been teaching for a long time and I happen to have all three types of registrations; the students who started in 1960, in 1970 so on...What do the students who have a bachelor degree do after three I don't know because we are only in the second year. We are starting now the third. If you have patiently read my page, the order of architects is modified. We have A series, B series and we have small architects and big architects, the so-called junior architects; we have still to define what they can do or not do. But because of the problem of geometers, it was necessary to give an entry to a professional body otherwise nobody would do the three year scheme. What they think is 'why should I become geometer and make money have clients in geometry?'.... 'But if I have nothing why should I have leave?'. So, as I said there are six small orders because the order became the order of architects, landscapers, preservers and planners. What would really happen I don't know because I do not have the crystal ball to foresee what will happen in one year. Maybe this government will say that we should cancel and go back to the five years. It is possible because this government has many different ideas I might say. But students are supposed to finish the three years then they have one year if they want to go out, one year of professional training as in France and England. Then they sit oral as well as written State examinations -design and oral- and if they succeed they can get into the lower tire of the order of architects, planners etc. The junior architects are supposed to be in private practices. They do a lower level of work. They are never leaders; they always do something that somebody told them to do. Also their profession in public places includes a lower kind of functions but it is not yet defined because there is one-year's time. They will probably become employees in architecture firms. It is always better than to do what they used to do. I know people who graduated from a five-year course a few years ago and many of them I see helping in shops as interior decorators. Once I passed through the toll-post in the motorway and I hear somebody sitting in his box saying 'Goodbye Professor'. He was issuing tickets in the toll-post. I think there should be a bit of regulation of this system. Several years ago I was really amazed by a very demagogical idea about what a university should be.

Jeanne France Ruan, Ministry of Culture, France

I think we have two main problems from the reform of Bologna with the French schools. The first one is a stronger reformation for our course because you know we are the course with six years, with three cycles, the type is very different but a second question is about the level of the Masters. Perhaps you know that in France an award diploma permits the young architects to sign their projects' planning permission immediately. It's a professional level, as well as an academic level. One of the main questions in my Ministry and with different associations of architects is this problem because now what can we do with our six year-course? It seems to me that the main question is higher reformation in the course but it's not the main problem. The main problem is that of the professional and the academic level of the Masters.

Participant (It was not possible to recognise the participant through all means available)

I wanted to add right now that we do not know really what the architects are doing; we used to know in the past with the system of three, five, and eight. For example, in France we know that we are 26.000 architects registered to sign a planning permission but we

have 37.000 or 38.000, we don't know exactly how many architects have got a diploma from a school of architecture. So, you see the gap between the two numbers indicate that some architects are doing something else than just learning. So, that's the first point. The second point, as Jeanne France said, is the right to register. It's given automatically by the diploma awarded by the Ministry of Culture. So, it's a very important problem and makes the difference bigger between these figures because if you don't build, you don't need to be registered. That's the point.

Harun Batirbaygil, Instanbul, Turkey

I can explain that our situation is a dilemma; we have four year of studies towards a Bachelor Degree and two or two more years approximately -two and a half years- for Masters and immediately after graduation in both positions ministry of education or culture or whatever, the government let's say, gives the right to do architecture of any level. So, this is very dilemmatic for us because Bachelors do anything that the architects with Masters do. No difference nothing at all. So, people are trying to gain and practice architecture immediately after they get their Bachelor. That's a preferable thing which may be compared to the three-plus-two of course. Three-plus-two wouldn't give any chance for Bachelor holders, causing them to do drawing work in highly regarded offices etc. giving only the right to do architectural practice to graduates. That's levitation to a degree I think, I mean by doing so the architectural practice level is a bit limited to degree. I can't say it exactly but the situation is such because by having a Masters you have the right to practice architecture. So, this may be a solution for my country to a degree of course, but we have to debate on the three-plus-two again. Thank you.

- So, as far as I understood you have a four-plus-two system. So, six years as in France.
- Yes, not plus two. We have several schools for two years those are colleges of course. I'm not talking about that but we have four-plus-two.
- Yes but to practice the profession, do you have a state examination?
- No, we don't have. Now a recent law has been circulated but it's not implemented as yet.
- Then you can be registered architects after four years.
- Yes, after four years.

Philippe Lequenne, Grenoble, France

Just to complete what has been said by Michelle Tilmont from Lyon and by Jeanne France. I'm not defending an ideal system because our system is very critical of many things but we are twenty public schools. There is a selection after the first year and any student, who wants to do architectural studies, can do it, it's not very selective. Just after the first year and once they go through the first year it's more or less easy for students to go to the diploma. The restriction is at the beginning in most schools but not after that. Then we have a body of many architects, more than you know in other countries, such as the U.K. and they have general information and then the goal on the labor market makes differentiates the good and the bad architects. It's not the role of a school to do that, it's not an ideal system but it's a system in which we are. All the schools have the same curriculum because the Ministry gives a general frame with inspection on the curriculum

every four years. So, there is not a strong competition between schools. They have all the same curriculum of six years and what I heard this morning and what we heard from Dimitris Kotsakis, perhaps I'm wrong, is that the European Commission wants to make more difference between the schools in all Europe, to find the good schools and the bad schools, to eliminate students after three years, is that an aim or...? What is the real aim for that?

Dimitris Kotsakis, Thessaloniki, Greece

The real aim as it is put forward is that you have the minimum time of education so that you can quickly get into the market. That is stated and then you can be educated for life because you can go back and back again so, they state this flexibility and is not expensive, is cheap. This is the stated purpose to make it flexible and economic. So, this is why they say that when we have to break into three and two, this is stated in Bologna; then the three must have also access to the labor market because this brings out the reason. If you cannot have access in the labor market then you don't break it. This is why I said that the argument for mobility is not actually the stated, it uses the same purposes. The stated purpose is to have access to the labor market at every stage of the education system, secondary and tertiary. Every exit from the system should have... So, this would be again an argument against breaking unless it is a question just of craftsmanship in architectural offices. In three years you have an educated sort of secondary staff in the offices but nobody would accept that as a university education. They would say that this is a secondary technical education. It's not a university education because then it brings up the question 'what is the university level of education?', if you accept this. So, it is very complicated if you accept this answer because by introducing this kind of mobility is lowering down the level of the university education.

Keynote Speech by Suzana and Dimitris Antonakakis, Architects

Presentation of the honorary guests by Maria Voyatzaki

It is a great pleasure and an honor for me to introduce the next key-note speakers, whom you already know. Dimitris Antonakakis, the founder of the Center for Mediterranean Architecture. You see him in the last five years in this capacity but this is something that he does with areat pleasure as a voluntary work offered to his home town. Hania, But his capacity is to be an architect; a famous, well-known, imaginative architect the one half of Atelier 66. I have the honor to have on my right Susana Antonakakis, his life partner. who is the other half of Atelier 66, which is obviously called like this because it was founded in 1966 and ever since it has operated with many partners with this name: The scale of projects Ateliers 66 design vary from tiny residences up to huge public buildings, university campuses, master plans, train stations and so on open-air theaters. Their projects vary also in terms of content and context. What I would like to say as the last thing is that for all these years I have been admiring these people for being great architects. When I recently had the pleasure of translating their lecture into English I realized that they are not only great architects but great poets. I shall leave you to their lecture to find out for yourselves. Susana and Dimitris Antonakakis on "Thoughts on Architecture, the Defined and the Interminable".

Thoughts on Architecture

Suzana and Dimitris ANTONAKAKIS Architects, Athens, Greece



Defined and the Interminable: The old Venetian Harbor, Hania



Defined and Interminable: the Byzantine Church

Suzana Antonakaki

Through some **thoughts on architecture** we will speak about the **Defined and the Interminable**.

"Diastima" is for the Greeks the word for space, which expresses even on our days the defined void, as well as the interminable area of the sky. **Defined** and **Interminable**: two meanings directly related to architecture. Let us remember the interminable space, which according to P. Michelis constitutes one of the characteristics of the Byzantine church.¹

The defined void, in which the creation takes place, the limit and its process, constitutes an important point of reference, whether it concerns fiction, music, cinema, painting and of course (for one more reason) architecture.

The terms used for the analysis and criticism of works of art often allude to spatial relationships of movement and stop, solid and void, cyclical, linear or daedal routes, in repetitions which count time and measure space, on planes and volumes, in open and closed forms, organized geometrically or freely.

Italo Calvino, in his *Six American Lectures*, written in 1985 and published after his death entitled *«Six proposals for the next millennium»* ² (he only managed to finish five of them) he had recorded and analyzed six points which according to him characterize tendencies and define directions for the process of creating literature.

The six points, which the author has chosen with great care in order to project the future of literature, are:

- 1. Lightness
- 2. Quickness
- 3. Exactitude
- 4. Visibility
- 5. Multiplicity
- 6. Consistency

The introduction of the book refers to the texts by Massimi

¹ Παναγιώτη Μιχελή ΑΙΣΘΗΤΙΚΗ ΘΕΩΡΗΣΗ ΤΗΣ ΒΥΖΑΝΤΙΝΗΣ ΤΕΧΝΗΣ

² Italo Calvino -Lezioni Americane Sei Proposte per il Prossimo Millennio Garzanti Milano 1988-ΕΞΙ ΠΡΟΤΑΣΕΙΣ ΓΙΑ ΤΗΝ ΕΠΟΜΕΝΗ ΧΙΛΙΕΤΙΑ ΕΚΔ. ΑΛΕΞΑΝΔΡΕΙΑ 1995

Piatelli Palamarini, which was published in the newspaper 'Corriere de la Serra' on 20.09.1985.

...He was talking in the lectures, as someone who is getting ready to demonstrate a new and admirable game, a distribution of playing cards, capable of transferring simply to others the pleasure of being thinking ...

Reading the same book this summer and enjoying this elaboration we could draw parallels between literature and architecture. As we work for many years now, designing and writing, we think that we have got to some 'principles', which constitute some kind of guidelines which direct us from the concept to its treatment and its materialisation.

They are some departure points for our work that with time have created an esoteric 'typology' which creates the conditions for cooperation in teamwork.

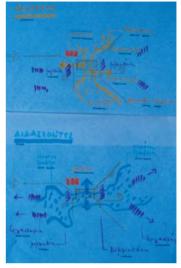
Dimitris Antonakakis

I shall attempt to illustrate the approach that Suzana described using as an example the project for the two faculties of the Polytechnic of Crete.

A diagram, which is adapted to the local data and defines in space the areas of activities as these are prescribed by the brief, precedes the model. In this phase the open spaces are defined by the volumes of the buildings. It is more important to us to relate and to organize accordingly the two opposite sides of the two different buildings which define the open space, than the facades of the building itself. We consider the open space –the square- as a larger hall with no roof on it. The buildings which define it are its walls and they ought to obey to common rhythms, common scale, relevant materials. Their treatment on these buildings comes later as a variation of the homogeneity of the whole. 'Typology' in this particular case refers to the entities of indoor spaces which are repeated with variations, as well as to the open spaces that contribute to this relation of the entities.

Suzana Antonakaki

Although the projection of an art onto another art, is often considered by theoreticians a risky process, which can only cause confusion (I would like to remind you that Sartre supported such view with confidence in his essay "What is literature?" 3) nevertheless (bearing in mind the possibilities



The diagram for the Polytechnic of Crete, 1982



The model for the Polytechnic of Crete, 1982

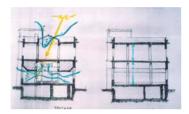


The Central Square, Polytechnic of Crete, 1982

³ Jean Paul Sartre Que c'est que la Littérature? Ed Gallimard. Idées 1948



Ioniki Bank, Heraklion Crete, Ground Floor. 1987



loniki Bank, Heraklion Crete, Section after the intervention (left) and before the intervention (right), 1987



Faliro Residencies, Sequence of proposals for extension, 1954-67-72



Faliro Residencies, View from the street

offered by technology as well as the general attitude that artists have adopted on approaching the arts) and continuing on the playful mood of Calvino, I think that it is interesting to take the risk and search a few correspondences between architecture and Calvino's views on literature.

Let us consider these comments a brief introduction and a staring point on our problematic and the accumulated doubts which stimulate our architectural work in Atelier 66, for many years, but also views which to a great extent represent paradoxically the current scene of architecture on our days...

These are the tendencies that have appeared on the horizon, with regard to the design activity, as well as with regard to the brief and the treatment of limits influencing this way the style of the projects both in terms of design and in terms of realisation.

Italo Calvino's sensitivity for the cities and their inhabitants is known from his book 'Invisible Cities':

The city, an exceptionally complex symbol, gave him the possibility to express the tension between the geometric logic and the mosaic of the human existence. This relationship of geometry with the human activities, in everyday life and on a special day is and might continue to be a successful definition of architecture.

Dimitris Antonakakis

This relationship of geometry with the developing human behaviour is expressed in the Greek architectural reality either with the regeneration of old buildings, or with successive extensions to the existing constructions, which transform their geometry, adapting it to the new needs of their inhabitants. Two examples of this rich in experience type of projects are: the first one, the Ionian Bank Branch, in Heraklion, Crete. Here the intervention to the section of the slope illustrates the effectiveness of the rearrangement of the regenerated indoor space.

The second example illustrates with elegance the geometric transformations of an existing building (1956) with the sequential extensions which we executed following the, increasing with time, needs of a family.

Suzana Antonakaki

It is neither in our intentions, nor in the constraints of the time available to deal with each one of these interesting themes, which could certainly not be isolated but interrelated. The

author with his chosen references has written amazing texts on literature, always reminding us that each one characteristic is in pair with its opposite.

At the end of reading this book, we realize that the remarks on the style of a piece of literature are, to a great extent, applicable to architecture. Meanings, repetitions, spatial and time distances, connections in which precision is necessary as well as an open narration for the reader to interpret.

If we think, however, that in architecture the "Topos"- place (whatever that entails) the **brief** and the **construction**, are even today, to a great extent, the axes which determine the design activity, we would realize that the six points by Calvino have to do with the tendencies of our times and the principles which drive architecture and its possible projections in the future.

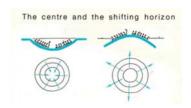
According to the poet Seferis⁴, words are like ships. They depart for new destinations and return to their departure ports. In the same way "architectures" some times return from their trips with valuables loads, that are useful elements adaptable to the place they return to, and some other times return with useless stuff. As you can appreciate these are the choices of the poet – architect, which judge the quality and the future of the texts, built or written.

In an attempt to search for the driving force of our architectural thinking and aiming to make it more understandable, beyond slides which always show an incomplete reality, we will also project some of our compositional views that, we think, make it possible to relate to some of Calvino's points.

From his thoughts, I would stop to the one, in which the author, by recognizing literature as an existential function, considers the pursuit of **lightness** (with content far from frivolous) as a reaction to the weight or load of life.

I would associate this characteristic with our choice to reorganize the brief and to recompose units, which permit the interpenetration of indoor and outdoor space in a way that releases some weight from the composition. Scale and the treatment of limits are also associated with this characteristic.

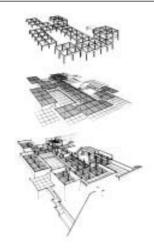
As the author claims, when he elaborates on the proposition on lightness it does not mean that he underestimates gravity; what concerns him is the dual relationship weight-lightness, in the *twin phenomenon*, to use Aldo Van Eyck's terminology.⁵ Let's remember at this point, the drawing with the centripetal



Aldo Van Eyck's analysis on the weightlightness relationship

⁴ G. Seferis Dokimes vol.1 Ed. Ikaros 1974

⁵ Alldo Van Eyck Ethniki Pinakothiki, National Gallery Athens 1983



Hios Museum, 1965 The Organization of the Construction and the Use of the Grid



Hios Museum, 1965 Access from street level



House in Oxylithos



House in Oxylithos, View of the master bedroom

forces, which direct movement and stop towards the center and the centrifugal forces as they open up to the open horizon.

This proposition by Aldo Van Eyck refers indirectly to the relationship between weight and lightness: the stocky volume that opens up to the horizon direct the spectators to look at the infinite and in the other case, the two opposite hill sides define the void attracting the stare of the spectators.

This reference, which is directly related to stare, the movement of the eye, portrays with distinctness the relationship *see* and be seen which has been analyzed by J. P. Vernant.⁶

The mutual stare alludes to relationships between theatricality and architecture.

With our means and possibilities, we attempt in our work to break the solid structures, in the buildings we design and built: residencies, schools, museums, settlements or hotels. Our intention starts from our intensive search for transparency and interpenetration of solid and void, but also for ways in which our works can touch the landscape, which will enhance it, allowing it to pass in or through the built volumes.

Dimitris Antonakakis

On this intention, which you have probably distinguished already in our drawings for the Polytechnic of Crete, we elaborate systematically on large as well as small scale interventions. Two examples here:

In the first example of the Museum in Hios, the areasrequired by the brief surround, as they open spaces, forming a series of internal courtyards, and multiplying the area of exhibition and studio-laboratory space.

The second example, a small summer house at Oxylithos, one of many houses that we have design along the same lines of varying the volumes and their use, is organized in alternate parallel zones of indoor and outdoor spaces. The landscape, in this case, constitutes a great part of these houses as the open space is part of the concept and is not added to it after it is formulated.

Suzana Antonakaki

In parallel with the **successive zones** which we explore in the synthesis of small scale projects -residencies- but also in small complexes -settlements and so on, we aim, when that is

⁶ Jean Pierre Vernant Mythe et Pensée chez les Grecs Maspero 1965

possible to 'open' the closed element to the interminable.

I would like to stress, at this point, the great importance we place on the **movement** as an almost autonomous element during our design activity.

The street with all its complexities, **the external and internal street** as a meeting point and **journey** is one of the fundamental themes, which articulate from the start the determinants, and the tissue of the composition. (Barlos, settlement in Distomo)

Dimitris Antonakakis

In this early, austere and utopian, to some extent for its times, example (this could be perhaps the reason it was never completed) we attempted to introduce to a sloppy site a settlement for the work force of an industry in Distomo; a proposal which opposed to the brief requirements to design three blocks of flats. In this ambitious design there are three alternate types of residences and their variations, sufficient to adapt to the different positions in the layout of the settlement. and limited to allow a kind of standardization. These three types, organized in parallel zones, where the private open space and the public open space with the zones of the enclosed volumes of the residences alternate, they ascend on the slope forming an articulate residential complex. The public space zones -the pedestrians routes- serve, with a number of alternative entrances, the residences which lie on either side of their zones, and which open up systematically to other in-between zones of private open spaces which include their inner courtvards.

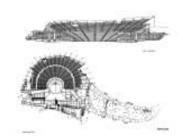


Residential Complex, Distomo, 1969

Suzana Antonakaki

Similar is our intention to juxtapose the **monolithic gravity** of the built volumes by the introduction of **a defined or endless void** of the outdoor spaces, in complexes, which form more complex entities.

There are some buildings which belong to the ambiguous category: building - non-building rather built landscape one could say, as: the open-air theatre of the Forest in Thessaloniki, as we have designed it. It was finally built losing some of the special characteristics of the treatment of limits, which, in our opinion, would give it, the necessary vagueness in a well-calculated complex, where the element of distortion of a self-explicit geometry stresses the penetration of the theatre in the landscape, creating relationships and proportions which allude to Calvino's text on precision......



Open-air Forest Theatre in Thessaloniki

Our proposition on lightness was sustained on the restless search for the diffusion and the impregnation of the built form with tiny pieces of infinite sky as well as the adjacent or distant landscape.

Our intentions of course, have been let down often by bad construction, or by the hostile attitude of the inhabitants towards the building, or even due to our wrong appreciation of reality and real needs.

Dimitris Antonakakis

In this example – a three-hundred roomed hotel at Heraklion, Crete- in order to avoid the feeling of a gigantic volume, we broke it into wings, forming a new artificial landscape with some level changes so that all wings can have a relationship with the sea while nature would penetrate them. In an effort to facilitate the 'legibility' of space, we used a palette of colors characteristic of Mediterranean settlements. These colors gave scale to the necessarily large-scale volumes which inevitably emerged from the brief requirements. Along the same lines, we elaborated on the cantilevers of the rooms by alternating their balustrades and the respective proportions, so that there is variety in the big-scale facades.

Suzana Antonakaki

The briefs and the special conditions, have not always permitted the **fulfillment of these intentions,** that is the penetration of the void in the body of the building, such as the cases of the blocks of flats in the urban tissue, where we created, with the proportions of the plan and sections, internal spaces, with characteristics of open air spaces and we treated the limits with these presuppositions.

Examples in this direction are the Benaki Street, and the smaller block of flats at Philopappou Hill, Zannas residence.

Dimitris Antonakakis

Apart from designing the entrance and the core of vertical circulation of the block of flats of Benaki Street, the interior space of the flats develops in most cases on more than level. This arrangement, the analogous arrangement of openings and the two-aspect reception areas –the living room-apart from their advantage to achieve excellent ventilation, remind us of a kind of internal courtyards, to which the smaller units of the more private rooms of the flat open up; the master bedroom and the children's room.



Lyttos Hotel, Heraklion, Crete, 1974-76, View from the Entrance



Lyttos Hotel, Heraklion, Crete, 1974-76, Rooms



Block of Flats, Benaki Street, Athens, 1972



Block of Flats, Benaki Street, Athens, 1972, Main entrance



Block of Flats, Benaki Street, Athens, 1972, Interior

In Zanna's residence, the children's courts are placed on the ground floor and have independent entrances. This is the reason for their arrangement in relation to the pavement. The main entrance of the couple ends on the upper floor, to a piano nobile with high headroom, which as an enclosed courtyard creates the reception space and its services, with a study space on a mezzanine.

Suzana Antonakaki

Calvino's analysis on the point of **precision**, refers to the light feather, which was used as a weight on the weight scales for the souls of the ancient Egyptians – the hieroglyphic Maat (goddess of scales) implied the length of a brick which was 33 centimeters but also the **basic note** of the flute. It is worth remarking, that the weighing that refers to the soul, the lightness of a feather, as well as the reference to a **tone for the music** or a, **measure** for **construction** have the same symbolism...

Precision alludes in summary, to defined design, to linguistic clarity and to images worth to remember, charged with an **esoteric necessity.** Images that have the power to capture the attention alluding to a plethora of probable signified, remote from the well known phantasmagoric games with which, we are uninterruptedly bombarded from everywhere, the cloud of images that surrounds us and is blown up, leaving us with a feeling of emptiness.

Calvino's analysis on the point of precision becomes very interesting in architectural terms, where he distinguishes the concept of infinite **-infini-** from the concept of indefinite **-indefini-** and writes:



Zanna's Residence



Zanna's Residence, Living room



Atelier of a painter, Aegina, 1990



Two residencies in Heraklion, Crete, 1999. Interior



Two residencies in Heraklion, Crete, 1999, the Courtyard

I would like to refer to my preference to geometric forms, symmetries, consequences, combinability, mathematic proportions, I would like to explain the things I wrote, with guide my faith in the idea of measure, of limit....Perhaps though it is this idea of precision which also attracts the idea of the absence of the end: the sequence of integer numbers, the Euclidean lines

He goes on to refer to the obsession that conquers him so that he limits the spectrum of his themes into smaller spectra, and the obsession for the detail that conquers him reminding Flaubert's words that good **God is in the detail,** which was also repeated by Mies Van der Rohe.

We have often felt this need of interminable search of the small, which is contained within a bigger form and in the elaboration, which blurs the roles of the small and the big, the open and the close, the public and the private. It is perhaps the search for the indetermination in explicitness, which is expressed in many ways such as the preciousness in the outdoor space and the sharpness in the indoor one, or the study of movement in order to create dilemmas of choice and intentions of labyrinthine character.

In this relationship of our architecture with precision, we have practised from our student times, with the catalytic influence of James Speyer, who –as an open-minded apprentice of Mies Van der Rohe- taught us, the importance of moderation and measure which determines with precision the proportions, but also the importance that **deviations stress in these normalities**.

Dimitris Antonakakis

In these last examples, which follow the same principle we used bear cement blocks with color in the mortar and we obeyed to the constraints which were imposed by their size.

The first example is a painter's atelier in Aegena. It consists of a large and tall volume, the studio space, which is surrounded by a zone of ancillary spaces and outdoor galleries which function as protective 'wrap' in which the principal space, the core of the project, emerges.

The second example includes two residences at Heraklion, Crete placed in the space available so that they form courtyards of a greater or lesser degree of privacy, common or separated for both residences.

Once again in this example, the organization of the residences in zones which accommodate movement, is evident. Such a zone -gallery- oriented towards South distributes activities to

different levels in both residences. These levels, in turn, open up to protected terraces or courtyards; a series of spaces crossed by open or protected movement or are adjacent to two-aspect transparent spaces of smooth transition from the open to the protected or the indoor space of the two residences.

Suzana Antonakaki

To this education we owe the practice of applied- $\lambda\dot{o}\gamma$ os discourse and the open interpretation of the grid in architectural composition. A pace, which is selected in order to allude to measures which correspond to elements repeated in the building, a pace which measures vertical as well as horizontal surfaces, indoor or outdoor spaces and it is therefore diffused in all the volume....

With architectural terms we search a vocabulary and the articulation of our **own language**, which will allow us, to apply an **open typology**, which is useful as a starting point, for its adaptation to the particularities that appear each time, due to different reasons: financial, local, constructional, or even due to the brief...

However, we never stop considering, that we found something that will solve all our problems. This is the charm of architecture. It is a domain for the investigation of properties which coexist influencing each other analogous to what Calvino refers.

"Training" in architecture in an attempt to summarize all those things that for years we have been trying to articulate with our work, fighting with tough reality, with the indifference that surrounds us, with the inflation of the empty image that devours the variable landscape, with a ruthless bureaucracy that only rarely has a face and escapes from the neutral fear of responsibility, is an extremely painful experience.

.... And if one could think that we live in this magic land, Greece and we speak a language, which has sustained its continuity and its *stemonologic vocabulary* from Homer's times. Words such 'thalassa' for the sea or the word 'plhiggi' for wound, which have been left, untouched.

Closing by returning to the texts, I would say that we architects could with all the downfalls of architecture, as we experience it everyday, derive the power from the strength of the Greek language throughout the centuries. Its poetic infrastructure, its assimilative confidence, recognizable especially on Crete has proved that it receives and assimilates the particularities of the Greek language, which according to M. Z. Kopidakis are:⁷

The ability to abstract
The plasticity
The richness of meanings
The competitive polytypy

A proof of the invention and the need of the Greeks to escape from dry mathematics, is that in order to express the particularities of individuals they invent thousands of names, what M. Kopidakis has called idioprosopia. In a speech entitled "Language is our home country", he refers to some of the fifty names that Isiodos used to name Nirihides: Ploto, Amphitrite, Pontoporia, Sao, Gallini, Glafki, Kymothoi...

The difficulties that architecture comes across are infinite, in this dual road of wish for legibility and plurality, for the design and materialisation of spaces that are distinguished for their 'narrativity' and which allow us to fascinate others, beyond our own self, spaces that offer what inhabitation really ought to be. To be poetic as Heidegger⁸ so characteristically has described...

In this difficult route that architecture has taken it is exposed to everything, from inflation and deprivation, thousands of mute images, verbosity of materials, bulimia and unlimited exhibitionism, arrogance or indolence of power, pedantic attitudes and fear of responsibility for the interpretation of the laws and the most painful; indifference that leads to aggressiveness and hostility to the bodies of buildings that have been designed with love...

Nevertheless we carry on regardless to hope and to dream. Let's not forget that the word ονειροπόλος -'dreamy'- has been left also untouched from Homer's times...

We would like to thank Maria Voyatzaki for translating and editing our text.

 $^{^{7}}$ M. Kopidakis Language is our home country Mikros Naftilos Heraklio 2000

⁸ M. Heideger Essais et conferences Gallimard 1958

Chapter 3

Exchange and Collaboration between Schools of Architecture in the European Higher Education Area

Mobility is a key word in constructing European policies in the Higher Education space. What are architectural education's expectations of this mobility? Why do Schools want and need mobility? What do they expect their students are going to gain from it? The model of student who collects credits from different schools: what problems does it resolve and what problems might it generate to schools of architecture? It would be true to say that school exchanges developed ad hoc and are based on personal relationships and acquaintances. Most Schools do not have an organized and well-thought out policy on cooperation between universities. Often the incompatibility of the programmes of study makes these exchanges problematic with no real gain either for students or for teachers. Even in the case of the implementation of ECTS, which defines the way of awardina credits, the credits of one school do not necessarily correspond to the real teaching hours and coursework of its partner school. It is, therefore, important for schools to adopt exchange strategies for effective and constructive academic exchanges in the Common Higher Education Space in Europe. The Fifth Meeting investigates the various approaches to the subject in order for some general principles to be articulated which will reflect the particularities of architectural education and the diversity of architectural studies in Europe.

Introduction to the Session

Panel: Coenraad Van Cleempoel, Antwerp, Belgium

Michèle Michel, Bordeaux, France

Chair: James Horan, Dublin, Ireland

Discussion Group 1

Coordination by

Alan Bridges, Glasgow, United Kingdom **Christian Huetz,** Regensburg, Germany **Stefan Wrona,** Warsaw, Poland

Discussion Group 2

Coordination by

Joao Antunes, Setubal, Portugal Nur Caglar, Ankara, Turkey Francis Nordemann, Darnetal, France

Exchange and Collaboration between Schools of Architecture in the European Higher Education Area

Coenraad VAN CLEEMPOEL Antwerp, Belgium Michèle MICHEL, Bordeaux, France

Coenraad Van Cleempoel

To start we wanted to make clear what we understand by mobility. We think there is a distinction between institutional mobility, on bilateral agreement mostly like the Erasmus bilateral agreements, and free mobility which is usually based on personal initiatives. Bilateral mobility is usually referred to as 'exchange'. So, that's a difference we make. Mobility of course, is good for students and staff and we also make a distinction between a long term mobility for one or two semesters that's usually part of the exchange program and the short term mobility such as international workshops or exchange of modules. I think that sets the first framework.

Session 2:

Exchange and Collaboration between Schools of Architecture in the European Higher Education Area

What is Mobility?

- Institutional Mobility based on bilateral agreements vs. Free Mobility based on personal initiative
- Students & Staff
- Long-term mobility (1-2 semesters) vs. Short term mobility (workshops, international modules)

Michèle Michel

Concerning the main issues that we can at least be concerned with is mobility. I should say that until now and I think that everybody will agree, mobility was a necessity for students and teachers as well as a means to develop a wider system of intellectual references or to enrich personal and cultural development when compounded with different social, cultural or educational context. We think that today there is something new, that is, that the students will be offered to practice abroad so, they will have to repair in a new space and in fact they will have to think differently from a national scale or space, the European space. This means that we have there an important responsibility to give them the necessary tools to cope with the new environment.

Main Issues

- Mobility: a necessity for students & teachers as means to develop a wider system of intellectual reference.
- To enrich personal and cultural development when confronted with different cultural, social and educational contexts
- A new scale in a new space: from a national to a European space

Coenraad Van Cleempoel

A brief statement that Michèle and I observed is that we see that most of the disadvantages seem from the members of

Situation Today

Most disadvantages are for the staff involved

Most advantages are for the students involved

Advantages (1)

- Mutual benefit being in a different cultural and academic
- Fresh input: contents and methods, both on the level of students as staff
- Better understanding the position of your own school within the international context
- E Creation of networks
- A generation of more mature & international orientated students
- ∃ Improvement of linguistic skills

staff of our school and most of the advantages of the system seem to come from the students. (Power point 3)We'll be encouraged to see how it is in your school but I feel that a lot of members of staff involved sometimes complain for the disadvantages that we will refer to later and that students only see the advantages. The most obvious advantage for the students is the benefit of being in a different cultural and academic environment. I don't think that needs much explanation. There is also a fresh input of different methods and techniques and I think here teachers also benefit from the system a lot. Another very important matter is that students having taken some distance from the school come back and understand to prove your own school much better. We have two auestionnaires trying to survey that. My last point is that through the system of exchange networks sometimes emerge. when you have good experience with certain schools. We tried to deepen that relationship and we now see after a while that there is an internal network of Erasmus partners.

Advantages (2)

- Confrontation with new approaches towards architectural education
- Development of a critical sense & a wider system of personal references

Michèle Michel

For the fifth point we can observe that when students move we have a kind of generation of more mature and international orientated students. I suppose you observed in your schools that often the same student has to move several times. They move from the first time very often in an Erasmus program but after that they are always the first who want to participate to international workshops, training abroad and so on and even prepare their diploma on a subject concerning a foreign country they visited during their courses. The sixth point, of course, is an evidence of the students who go abroad and then come back. They can speak a second language; this is very precious for their future practice of course. One other point Conrad already talked about this a bit, is the confrontation with new approaches to architectural education and this allows the students to develop a critical sense and to build a wider system of personal references. This is also very important for them, for the future in practice.

Coenraad Van Cleempoel

I'm coming into the problems or sometimes disadvantages of the system. I think a first and crucial one which will come back later as well is the different interpretation of the ECTS system by the different schools. For the sake of clarity the ECTS, that stands for the European Credits Transfer System and is an instrument designed by the Erasmus network to ease the exchange. I think the correct issue is that one ECTS point stands for at least twenty five hours and those hours is the sum of contact hours and study hours at a maximum of thirty hours. So, if you have one year or sixty ECTS and our school that equals 1700 hours roughly it can vary from year to year. When students come back form the Erasmus exchange when we look at their learning agreements we sometimes have difficulties trying to understand how the other school applies the ECTS formula. So, maybe that's something we can talk about later.

Another difficulty is trying to understand the academic program, the curriculum of the other school and the academic system. I think that it's a problem that can be solved. It's a matter of dialogue and tuning towards each other. A third obvious problem it's the language barrier. I think Carlos Weeber yesterday already mentioned that Delft's Masters program will entirely be taught in English. I think that's very daring and I don't think for example that in our School it's legally possible. Maybe at Masters level we can introduce courses in English but not 100% English taught course. So, that's another problem.

Problems (1)

- E Different interpretations of the ECTS-system by the different schools
- Difficulty in understanding each others programmes and academic system
- Language barriers
- Incompatability of the academic calendars (start/ends of semester, exam periods, ...)
- E Different methods of assessment & marking
- Difficulty with "Learning Agreement" and transmission of transcript of confermed results

Michèle Michel

Another problem is the incompatibility regarding the academic calendars. When you start and you finish your semester for example the exam period that can be very different from one country to another. Something difficult also is the different methods of assessment, marking and especially for marking another School's one of five, one of ten, one of twenty, one of thirty and when you are in the system of one of thirty or twenty. So, it's very difficult to make a good analysis on the results. Something important also concerns the learning agreement and the transmission of transcripts on firm results. In certain cases we have students who move without any learning agreement like free movers. This is also a real problem and people specialized in the field of mobility I think that they are like translators but this is a bit artificial because we are obliged to translate the local system into the ECTS. It's a kind of affair of specialists and it will be very important that mentalities could evolve in the framework of the European reform.

Another important problem is often the lack of confidence in the program of the host School and often we are confronted to a situation of second assessments. So, I think that could be interesting just to have a best understanding of the program of our partners and that will be obliged to evolve in a more confidence state of mind. This is a real problem because we think that when we have a contract with a school we need to have confidence in each other and not to try to propose

Problems (2)

- 7. ECTS translators: an affair of specialists
- Lack of confidence in the programme of the host school: situation of second assessments and juries
- 9. Escape possibilities for weak students
- ∃ To position incoming students at the right level
- Ξ Students' possible financial difficulties

exactly the same things and ask our students to do exactly what they would have done if they had not moved.

Coenraad Van Cleempoel

Another point is that we see that the exchange in our School takes place in the fourth year, which is quite a heavy year and Erasmus is also democratic so, we allow everybody to apply. We've noticed that some times weaker students also participate because they know if they are accepted they skip the fourth year. It's not a serious problem but it happens. Something that can be addressed and a difficulty sometimes to position an incoming student to the right level is also true. Our students going out sometimes they are placed in the third year, in the fourth year or even in the fifth year. So, that's not always transparent.

Some general observations that Michèle and I came to is that we see an increasing demand from students outside of the EU. This may have to do with the second point and it's the national and transnational diploma shopping. We've had cases from students outside of EU coming or applying to us to study in the final year in order to receive a diploma from a member state because this will allow them to work in the European Union. The diploma shopping also takes place with students within the European Union, taking one year at the school, traveling to another school and amounting some modules there.

Another point is the mobility related to immigration. We see in our schools sometimes that immigrants having lived in Belgium for several years being an architect but not having a Diploma recognized coming to our School to have the programmed script and ask which modules they have to take in order to get the final Diploma, for the same reason as the first point. Mobility may also be motivated by the national differences in the entry to the profession. I think Lawrence Johnston will talk about that later; that the great diversity of entry conditions to the profession may stimulate students to move and to decide to work in a country. Students may become academic immigrants in the sense that exchange can become mobility. We had a case of students going abroad with Erasmus lacking in so much for various reasons and deciding to leave our School and stay at the host School to araduate from it.

Another observation is the possibility of schools offering modules or workshops on the international education market. I think this is a very good trend and at our School for example, we organize once a year an international workshop, where

we invite various professors to spend a week with our students and bring their own students as well. So, there is an exchange product level of staff as students. The final point perhaps, this is maybe a bit more sensitive, is because of mobility. I mentioned already that a profile of foreign schools becomes clearer and this may lead to what is an American referred to as transranking; that students compare different programs and choose themselves which Schools they go to. So, maybe that's at the moment not really a problem but may become one in the future.

Observations

- Increased demand from students, especially from non EU countries
- National & trans-national 'Diploma shopping'
- Mobility related to immigration
- ∃ National differences in entry to the profession
- ≡ Students may become 'academic emigrants'
 ≡ Possibility of schools offering modules on the
- international education market
- E Competition between schools (ranking)

Michèle Michel

Just to conclude we need some proposals to improve mobility maybe but within that reform things we'll go better. It would be interesting to come to a general implementation of the ECTS structure and value because this is a big point, an important point and to come also to a unified marking system to facilitate the mutual understanding, to come to more comparable and transparent curricula. This is the problem of information between us, understanding of each other organization: to be more confident in the partnership. This is very important too and maybe we will end on a question because maybe we don't have the answer, but we will be able to discuss the problem. Mobility tomorrow: what will be mobility tomorrow? Will it be a free mobility, the student building his own curricula, will be a framed mobility with a curriculum built by the Institution with the students, how we will manage mobility later, in the years to come? This is the big question today maybe in the framework of the European reform.

Conclusion

- E Come to a general implementation of the ECTS structure and value
- E Come to a unified marking system
- ∃ Come to more comparable & transparant curricula
- More confidence in the partnership
- 5. Mobility tomorrow?

James Horan, Dublin, Ireland

It's been quite a few years now since the original Erasmus program began, which started off a significant exchange of both staff but more particularly students across the Schools of Architecture of Europe. As a Head of a School one feels very much positively inclined to encourage this type of exchange as much as possible but one of the things that I have found is that exchange programs particularly for students who spend sometimes studying in another school may point out to you what in fact your school is lacking. They come back from the trip and they tell you all the things the other school has and you don't have and it's almost like the inventory that follows this student's exchange and you feel in some sense that you must provide some of these goodies that the other school may have in respect of the fact that you may have goodies and they don't have that's the point. However and that's not a negative comment, I feel that the entire business of the exchange has been enormously positive for schools of architecture and certainly from my own point of view, the number of representatives and heads and students in other schools that I have met in the past ten years has been enormous and I know that my school has benefited hugely from those contacts.

Alan Bridges, Glasgow, United Kingdom

I think Michèle and Coenraad have given us a comprehensive overview of some of the advantages and disadvantages of student and staff mobility. However, I think before we go to a general debate, I would like to give you two specific examples from my own School of advantages and disadvantages. The advantage first of all, something like 90% of the intake to the Department of Architecture to Strathclyde in Glasgow comes form the west of Scotland. We recruit very much from the area surrounding the university. Most of these students would probably never even have visited Edinburgh, which is some sixty kilometers away on the other side of the country, let alone straight into a foreign country to visit somewhere like London. So, the opportunity for them to travel abroad is absolutely crucial as far as I am concerned in terms of just opening their eyes just a little bit in appreciation of a different culture, let alone a different school of architecture and different kinds of architecture and discovering that there are some countries where it doesn't rain all the time.

Some of the disadvantages though associated with that, and again it may be something that we will be discussing this afternoon, is that the students who go on the exchanges, we sometimes have to ask that they do extra work on their return in order to meet our professional validation and accreditation criteria within the United Kingdom. I think that this is a serious problem.

Christian Huetz, Regensburg, Germany

I would like to point out some aspects of mobility. On the first, one has to say that mobility is not tourism for students; it's more than just tourism. I just have to go a little bit back in the time when Germany was reunited. You see there were two parts physically united again but they came up with the sentence of unity in mind. So, I think we have to think about what's the mobility in mind and mobility mind means that the schools and the staff just have to think about. Michelle had talked about the confidence we should have. I will go a little bit further. That's really crucial that every work is just recognized by the

different schools. Only imagine when you send students away and then come back, they are also very very much well moving from recognition of points and getting points and getting notes and marks. I think that's very very important and crucial for the mobility that students not only go to a different school with confidence to learn something but when they come back and they must have the confidence and the recognition of the work they did. I think that everyone should think about that. How is it? Well, that's appreciation.

The next thing I have is the ECTS. I think that's crucial for the mobility. We have collaboration with some schools and I sent over some students there. They came back after half a year and they have about sixty credits. You see, half the year is thirty not sixty credits. What they did, they won credits. I think that it is necessary that we think a lot when we talk about mobility. Everyone believes that mobility is marvelous, wonderful, everyone can travel around Europe and get credits. We also have to think about the social and economic aspects and problems of mobility. There are some students, who can't afford just to go around and they do need a program. Then, you have students that just travel around with a program they get not enough money but they can earn something. So, they are able just financially to go around and then we have a group, which can't afford even if they get money from a program so, what should we do with them? These are three points we should think about and we should discuss; how we can manage to get all students well, not all students into movement but anyway to give them a chance for mobility.

James Horan, Dublin, Ireland

We now have had four different view points about the business of mobility and exchange and I suppose that in the workshops that will follow, you will have an opportunity to open up this discussion and perhaps enlighten various groups with individual experiences that you, the general body of the audience may have. From my own point of view, I think that there are a few things that are absolutely clear. There is no question that students and staff exchanges are exceptionally good for a school of architecture and even if there are disadvantages certainly in our experience we would find that the advantages generally put away the disadvantages by a number of faults. Really most of the disadvantages that we even counted have to do with the day-to-day practical dealing, with the administration of the exchange such as marking, such as just practically dealing with the foreign student who comes to our School. But all balanced, this has to be good and I feel that it's one of the most positive steps that is going out of the various relationships and the development between schools in Europe and elsewhere.

Exchange and Collaboration between Schools of Architecture in the European Higher Education Area

Discussion Group 1

Coordination by
Alan BRIDGES,
Glasgow, United Kingdom
Christian HUETZ,
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Stefan WRONA
Warsaw. Poland

Alan Bridges, Glasgow, United Kingdom

As people said yesterday I'm not sure what we three did to deserve being asked to coordinate this discussion but I think we must have upset the organizers someway or another because I cannot see how the three of us can coordinate the discussion. Again I felt that the introductory presentation by Conrad and Michelle really posed most of the questions. We did not give anyone a chance to respond at that time so, I think one way that we might begin is to allow anyone who would like to make a contribution based on their own school's experience to tell us about that. After that I think it might be useful if we possibly addressed some issues which we left unanswered earlier this morning regarding perhaps possible futures for students and staff exchanges and how we might like the system perhaps to develop. So, would anyone like to make an observation of their own experience of students or staff exchange?

Koray GOKAN, Instanbul, Turkey

I'm a newcomer to this group. I'm going to express my personal views. I think the talk is already known. I mean everybody knows what it is all about. I wanted to hear more since I'm a new comer. I don't want to be the first one, who takes this microphone and talks. But since you let me have the chance I would like to say that I'm from a new University with no experiences; not from an established one. My problem is I like to see a structure, which can offer me opportunities for the future when my students and much more my staff look for exchanges. It looks that in these meetings we talk about concepts; there is nothing concrete for the future.

Alan Bridges, Glasgow, United Kingdom

Would anyone like to respond to that? My own initial response is that individual exchanges can't take place under the current system with what is known as free movers rather the much more formally coordinated exchanges. But again I see meetings like this as an opportunity to maybe make contacts and talk to people about possible exchanges. James Horan was severely reprimanded by Maria Voyatzaki this morning for finishing early. She felt that the conference had a large agenda and we ought to use that space to continue some other discussion. I think James and myself felt that the large agenda fills too much of the time that we have available and to have an hour when people could talk amongst themselves was probably very useful because by the time we get to dinner in the evening are we able to talk to each other, I mean most people are so tired that it's not work that you want to talk about. So, I felt that was a quite useful opportunity and maybe that contacts can be made to help new people join various exchange programs. Are there any other comments people would like to make?

Halldor Gislason, Reykjavik, Iceland

I'm from Iceland, I have been teaching in Britain for a very long time. In our School not far from London we have for many years set up an exchange of students inside Europe where the best money is spent. The European system ever spends on anything because it's actually moving very young people to meet each other and what happens? I have found out through my ex-students that have left the school that they still keep in contact and very regularly on a more than an annual basis meet in major cities in Europe even though they were maybe my students in fifth and sixth year about five or seven years ago. So, this is the kind of money that Europe is spending that is actually unifying something in Europe and now I'm talking on the personal level between the students.

The biggest problem with the exchange of students and of course, this was pointed out this morning, is that they are all for it but we actually have a kind of secretaries or people looking after them very often in the schools. So, it's a kind of a problem the exchange of students when they arrive. They are almost like a little problem because we do not have any time to look after them properly, especially if they have let's say, language or cultural problems and very often there are administration people looking after them. They are not connected easily to the academic part, the studio part of the system and actually if the students are like personalities that kind of eager or don't have a kind of inner strength, they are kind of left out. So, I think that this is actually the problem in the host university. We should in our own schools try to develop a system where we can accommodate them better.

Alan Bridges, Glasgow, United Kingdom

Yes, I think that's probably a common experience and I suspect the problem may well be largest in the sort of middle size schools that many of the schools in the United kingdom are small in comparison to the rest of Europe and I think moving into a small school, it's more of that family atmosphere and it is perhaps easier to adapt to someone joining us. I think the biggest schools can deal with it in a different way, I mean that Leen van Duin might say something about Delft, where they have a member of staff whose only responsibility is administering the exchange programs looking after the students. So, a

big school can afford to dedicate a member of staff to do it. I mean the middle size school has the difficulty.

Jacques Gubler, Mendrisio, Switzerland

Someone said this morning I think it was Christian Huetz, that we want to give all students a chance for mobility. Remember that, all students a chance for mobility. Now, my question will be about the possible selection of the students. What are the practices in the various schools? Is it true that we are going to give all students a chance for mobility? It is true on the contrary that we want to make a selection so, that when the students arrive to the host school, they will be accepted because they have been maybe selected, maybe for some kind of interesting quality. I remember the very bad publicity one school offered when students were sent, they were not the best students of the school. I'm not talking about excellence as an absolute criterion but we had the feeling that within that school probably that there must have been some kind of problems. Is it true that you want to give all students a chance for mobility or, on the contrary, is it true that we are going to select the best rackets, best students because we work in a context of concurrence and we want to try to give the impression that we are the best school in Europe maybe in the world, I don't know. I would be very curious to have answers on this very precise point.

Alan Bridges, Glasgow, United Kingdom

I think there is maybe an opportunity to start to perhaps think about how the future of students' exchange might work because to a certain extent I think the plans for the Bachelor and the Masters structure and the free movement between schools may answer your question that it will open to everybody to move under the new system automatically.

Ferran Sagarra, Barcelona, Spain

I agree in some way from the impressions I had in the sense that after a period of indiscriminate policy I think we have to start to think on selection. In our case, we have also the best school in the world of course, but what we are, I'm sure, we are the biggest school. It's a quite a big school and we have 150 Erasmus students. Some come from Mendrisio and not Erasmus but I don't know what program. So, we have a big experience I think right now and what we did is we have two kinds of programs. One is the Erasmus interchange. We don't accept free movers. We want always to have the contract with the other partner and to know so, we even organize the figure of the ambassador of our coordinator with every school. I don't know if some of you know so, there is a teacher of the staff, who is in charge of people coming and going to every school. That's one part but this is a program just for rich people, I mean, the Erasmus in our country at least. It's very badly paid in Europe in general and only if you have rich parents you can use the Erasmus program. So, that's the selection, financial one. So, what do we invent or reinvent? What we try to do is to improve the intensive programs in order to organize workshops all around the world if possible and these workshops we try to pay all to our students. That's more democratic and in this case of course, we select, we have a very strong selection. It's a kind of prior-home in our School, So, when someone in the school of Barcelona has been allowed, who is who in Barcelona is in view of being an architect and you are young and you have been allowed, you are someone. So, we organize these very high level events just to select the best students and to create an aristocracy in our School

Christian Huetz, Regensburg, Germany

I think it's not a question of butterflies, students are like butterflies but to just flying around and getting everywhere the nectar and downing just to every flower we have in Europe. Anyway, we are very proud of our diversity but I think what the selection of students is. If we talk about selection, we should talk about and think about the future of high education space, on what's going on Bachelor-Masters studies, when is it a chance to be mobile, when schools let their students go out to study elsewhere abroad, I don't know where. Anyway, when it's a chance for them, it's a chance for what we could let them out the first year or the second year or it's most useful when we send them out after they did the Bachelor studies and perhaps there might be collaboration of schools, which just have for Masters program one it's the school where the students come from and then we have two other schools, which are just in the spot of the Masters program. So, you can study in another institution. You are mobile and I think it's the freedom they have just to use the freedom I think freedom is nothing if they can't use it so, I think there should be a little bit restriction to get more freedom.

Selahattin Onur, Ankara, Turkey

Actually, this last point by Professor Huetz is very important because I think this ECTS system was especially initiated to have these two cycles thing work efficiently. Especially it's expected for those who finish the first cycle and want to go into other programs, different parts regarding what they are interested in, regarding what they want to continue their studies with and in that case the importance of comparable and transparent transcription curricula becomes very important. So, this system of diploma supplements is initiated for this purpose. So, it's also left to the host university to accept or not accept the applications. So, there are these mechanisms, which, I think, will confront these kinds of problems and this mobility is not mobility for mobility's sake.

We already have I think, what you know, the French preconceptions of mobility already existing in different forms but I think should be viewed in the perspective of the Bologna process, which involves the two cycle thing and adaptation of the different programs and to see the relative comparable situation of different schools. I think what we are doing now, it's going to continue to have the programs of each school transparent to us, will contribute a lot so, there are things that should be done, which are necessary for these things to go further. The ECTS for instance; how each school is going to adapt this system is very important. How to credit the different courses and I think this is supposed to be done very soon so, that can really work. So, there are things to be done. There are things that have been undertaken by each school as a project unless this will just be repeating itself.

Richard Foqué, Antwerp, Belgium

I agree that we have a lot of practical things to do as you say to make the exchange system transparent. It's this session in which it was actually pointing out the different programs we have and we should work on, but if I go, in fact, a step further I think this transparency is important if you look a bit into the future. We are still discussing, in fact, these problems of mobility exchange from the viewpoint of the discipline. You are discussing the things within our discipline of architecture. When we see, and of course I'm not the only one who sees, everybody sees, that we are moving to our society in a condition where the real problems are situated in between the disciplines. You need an interdisciplinary approach; this is the one point.

Another point is the tremendous pace the problems are changing and the world is changing so, change will become a sort of study state of society, a permanent situation you are in is changed. So, the scale of things, the complexity of problems is increasing, a lot of problems are known to be situated in the world scale, in the scale of the earth. So, if you look at this, we may move to our educational situation where the disciplines are not important anymore but where students may want a sort of à la carte education. You know if you go to a restaurant, you have the menu but you have also à la carte, you can eat à la carte. So, I can imagine for instance that students who sort for their own career possibilities maybe not want to be an architect in a traditional way but may ap in other career possibilities related to architecture. They may choose their objects in the school, their modules related to that, to the further career as I can see from other disciplines. Take an example; law for instance. Maybe somebody wants to specialize in building law. I can easily see that such a man or woman may take modules from our Institute related to construction or whatever construction problem. There is a lot of variety possible in the future and this may in fact cause much more practical problems, not only financial, and it may change the complete idea of traditional education we have. Then, if you add elearning and the distance learning, that in fact can expand a bit the discussion. I don't mean that these practical problems are going to be solved; on the contrary, I think that it should go first to make that step in the future.

Alan Bridges, Glasgow, United Kingdom

Thank you Richard. Perhaps the microphone is going towards the back. I'll just make a comment. We say, it might be something that we carry forward Richard Foqué's ideas to this afternoon's discussion because I think the situation that Richard was proposing about students selecting from a whole menu the different options and putting together their own ideal course, put us of course immediately into conflict with all of our professional validation systems. I think it might be something this afternoon. That we might discuss all professional associations and then use in the future, they were set up about 100 years ago separately to protect individual interests, architects have their own professional institute, structural engineers, civil engineers, all protecting their own interests but really the construction industry is much more fluent in that and I think what Richard Foqué is proposing really cuts across that idea of protectionism. We really have to look perhaps at new structures, much more broadly than just educationally.

Krumlinde Heiner, Bochum, Germany

My head is full of problems and they are becoming more and more and my head is full of hope. It will be better in the future. I think our common purpose is to have a European network of schools. I know from my own experience, because we have a lot of exchanges

with Milano in Italy, that German students normally don't speak Italian but if they go to Italy and when they come back after half a year they can. Bochum is not so well-known in the world but it's one of the most interesting cities I know because it's in an industrial region with a lot of architectural and historical settlements. I know that there would be a lot of experience for foreign students to come. But the Italians don't come really, there have been two of them in our School and they had a good experience. They didn't have problems with the language. For other students from foreign countries it's a problem to speak German because it's a difficult language, I know. But it's not a real problem for architects because we have this very nice kind of workshop and we have these studios and we are working together in groups. Everybody has time to speak a bit English or a bit French or what he speaks.

My suggestion would be to make a bit more propaganda for these, I say on unknown cities. Everybody wants to go to Florence or to Rome or to Milano but there are only few students who know the other cities even in the eastern countries or in Turkey or wherever you want. I want to have a bit more equality between the cities. There are attractive cities and there are less attractive ones but each school is maybe very good so, what about the idea of having a catalogue of our Network's schools represented on two sites for instance with the main specialties of the school. Every school has a best way to approach architecture, I know and what is the specialty of this school? Harald, my friend from Bochum, has done a booklet. You can find it downstairs, which is about the last meeting and why not have such a booklet with the results. I think, of these posters you did all or not all; give them to the students if they are interested to leave their countries.

Another dream of mine is that we have in each country a guesthouse, small one, small groups to have workshops, international workshops there and to make the first step for students to stay. They need help in another country because first is their fear, they don't know how it would be there, how to live there, how to pay and so on and so. For me as responsible for foreign exchange, is often not possible to say everything about this country. How it would be, how we can live there, how to have an apartment and so on. So, maybe we can talk about some helpful things like a booklet to come nearer to this problem.

Alan Bridges, Glasgow, United Kingdom

I think that really apart from the promotional part from the Bochum Tourist Board, it really supports Richard Foque's suggestion that we can see people picking from amongst the schools a specialist's menu and really although I think it offers an interesting possibility in a market driven economy, we might find that it is still perhaps the big schools that people choose to go to and it is a difficult possibility.

Zef Hemel, Rotterdam, The Netherlands

My head is full of just one problem that my students want to go to schools in China. What I mean is that they are not interested in cooperation with schools in Europe. They all want to go to China. We have projects in South Africa. We had cooperation with Moscow, with Shangai and that's what interests them. What I can't get them to do is to go to a school in Florence or in Rome so, what to do about that?

Christian Huetz, Regensburg, Germany

We should have a European space of higher education and we should have on for China so, I think we can do that. Well, I think perhaps we have to solve the problem we have now in Europe and it just came to my mind that Europe is getting very very close you see because we are talking about mobility and this morning I said that my students say "the longest way they go, they go to London". Everyone is talking about problems. What should we do just to have a common education area? I think that's the problem we have, we can't look for students who go to China that they can do if they want to. But we have to think about the normal student, who just has not too much money. I think this sort of problem is a very very difficult one we have to solve.

Pierre Culand, Bordeaux, France

I would like to say that you used a kind of metaphor talking about studios as a butterfly but I would like to say: let's see these students as bees that make honey of their road away the travel. Perhaps I'm optimistic but I feel that the mobility and exchange is a sort of a free program for students. It is something that we have in the back. We have to think more or less what kind of new mobility is just in front of us. So, how could we build Masters in common or exchange Masters with a group of schools. I think it's the main topic. How do we do these Masters so that they are recognized by the professional organization it's the second point. These are the main points we have to face.

Matteo Robiglio, Torino, Italy

I think many very interesting things have been said. Also our students don't dream anymore of going to Glasgow or Eindhoven or Amsterdam. It has become banal. We are not supposed to provide them with the thrill of exotism by our programs but with some education. Of course, we have to establish relationships at a larger scale but we have to manage a process of different integration and also vulgarization of exchange in our university. Socrates used to be a real journey and now, it has become something quite normal. I very much sustain Richard's opinion that we are going towards an à la carte formation. That means that we are leaving apart the old modern idea of whole boxes of formation that everybody would pick. That's the reason why maybe the educational institutions in the field of architecture should not be taken for granded the interest going by side with professional organizations because I have the fear that we might sink with them. I don't see a great future for professional territorial organizations defending professional fields. There are many doubts as it was meant in the old modern welfare state inherited from the last century. So, we might move apart also for economical reasons.

This year our schools show a tremendous shrank of inscriptions in the field of architecture and in the field of civil engineering, which were our outstanding curricula and everybody is struggling to get into the newcomers, which are web design and industrial design. So, something that with the academic in architectural design usually despises a secondary discipline but what brings the cash in the faculty and keeps also the old cavalry of architectural design alive and afloat that is not covered by professional organizations. It was long by gone all these parts. So, we will have to provide let's say, pass from a supply side policy to a customer-oriented policy, in which our role will be more and more to validate per courses that we have not stated.

To give an example; we decided when we adopted the three plus two system that people could apply for our curriculum in specializations of the plus two years even if not coming from a formal architectural education. They can submit their curriculum and the faculty can accept or can state some doubts in specific sectors. Let's say, they have to take courses in architectural desian but just architectural desian and then can enter the specialization courses of the Masters classes. This is a small example to say that we should work more and more in this generalization and vulgarisation of exchanges on joining more the context of the boxes and this joins should be made of credits. How we validate an exchange credit is not on mutual basis but on an associative basis. How we validate quality in this voluntary association like us is very important because we can be like the RIBA, we can state the quality so, if somebody is not in this association, is not labeled, is maybe regarded as second class. ... we have the problem of languages and this is the reason we could try to provide more multilingual teaching in our school. This could be done even if we teach that part of the language for the exchange purposes. We should work on calendars, which are one problem. Timetables in teaching during the years, not being generous, are risky to hinder the mobility of our students and of course, we should have as it was already said yesterday networks, in which some teaching is provided elsewhere. I think that it would be especially related to Masters Courses because it is no use for us to look for excellency in sectors that we can't be excellent. We will provide teaching by pacts and accords with other universities. So, we would very much like to work on these small and practical problems, which in my opinion hinder mobility that should be generalized and no longer taken for something special in the curriculum.

Stéphane Hanrot, Marseille, France

I just want to say that the Bologna Declaration gives a frame for exchanges in the end of the process of changing. It shows that students will have to spend a semester in the Bachelor cycle abroad and another one in the Masters cycle. So, perhaps it will give the new conditions of exchanges compared to the Erasmus process that is working today. Perhaps we could think about that, one semester in each cycle, what does it bring as new condition?

Jose Depuydt, Brussels, Belgium

I will start with a personal experience. In order to send students to Australia in terms of an exchange I had to select good students and we have sent two good students to the University of Newcastle. In Newcastle they were running a problem based learning strategy. In New Castle those students were very bad students because they could not assimilate a totally different learning strategy. So, what I want to say is that it's very difficult to make a distinction between good and bad students because good students can be bad students and vice versa. What is more important is that the students become aware of their own learning style in confrontation with, and in a learning context. A benefit of exchanges is the confrontation of people in changing learning contexts and a particular benefit for the student is that changing the learning contexts offers him or her an insight into her or his own learning style.

I will generalize that and return to what Koenraad Van Cleempoel said in the beginning of the statement. If the disadvantages are addressed to the teachers and the advantages

are addressed to the learners I would suggest to approach the whole program of mobility to see it from the stand point of the learner. For the learner, mobility means flexibility and thinking and doing; means to change her or his learning context and we can define a learning context as a relationship between learning strategies, learning cultures, learning structures and dialogue conditions between teachers, teachers and students and students to students.

Let us go back now to a metaphor that Richard Foque used: the menu à la carte. If you go to eat and take a menu à la carte, you have to know before the quality of the restaurant. You can do it in the same way in the case of schools; you have to know the quality of each school. For the schools you can also say that there are no good schools or bad schools because you can use the same argument that I used for the students. It only depends on the context of the learning environment.

Richard Foqué, Antwerp, Belgium

Now, I just want to disturb this discussion about this but it was an addition to colleague from Torino. Just for information, the government of Flanders in our country is preparing now a new legislation according to the Bologna implementation. It has not been voted yet but it will be voted I think by the end of the year and one of its articles says that by awarding a diploma, it would be possible on certain conditions and in Flemish law because now, we are in a Flemish state, is written one third abroad and two thirds in the own school which will give the diploma. It will be the legislation in Belgium. Just for information.

Michèle Michel, Bordeaux, France

I would like just to add something concerning this question of menu or program à la carte. I think that with generalization of the masters we will see clearly the diversification and specialization proposed by the different schools and I think that in each school, we have special work to do with the students to help them to build their professional project. I think it will be very important in the coming year to think to this question of professional project for the students to help them to have a good orientation on this big European scale.

Selahattin Onur, Ankara, Turkey

One thing that bothers my mind is about what is mobility. Is the danger related a little bit to the social, cultural aspect of the higher education area? I think one of the basic tendencies of this common European higher education area is to develop and sustain a social, cultural environment at a higher education level. So, I think there should be sensitivity in awaiting students from feeling themselves as customers and customers of educational super market. I think that's one of the dangers that we may face and this environment should emphasize this feeling of belonging to an area, which is trying to consolidate a certain co-social, culture environment. Again I want to emphasize the importance of some seminars that should be done towards the Berlin conference of the Ministers and one of them is going to be in October, in Zurich about ECTS and what are the challenges to institutions. The other one is I think, in Athens, I don't remember the exact date but related to the social aspect of this dimension higher education area, it's

going to be in June, 2003, I think or in February, 2003. So, these two meetings are important. It's important how the climate will develop in those seminars because it is going to be somehow framed into the Berlin meeting.

Alan Bridges, Glasgow, United Kingdom

It's so far the discussion seems to have been mainly about students' mobility. We have not really discussed very much about staff mobility and the possible advantages that we might see people gaining experience exactly is the point made from representatives from Brussels about experiencing different educational systems and environments and maybe that would be advantageous to members of staff to go and spend a short time in a different school and discuss approaches to teaching to bring back to their own school.

Joaquim Braizinha, Lisbon, Portugal

I'm from Lisbon and for a long time I exchanged students with other schools. I learned very important things, that they are common people not only students. They go to other countries and firstly they have the first experience out of the house of their genitors. They are in contact with other languages, other food, and other cultural things in general. It's an experience more important or at least equally important to succeed in disciplines that are going to do in other schools. They learn about other architects, they see architecture in its real dimension with all its body and not in the books, they see exhibitions, they go to cultural events and this is very important and has not being considered here. I don't agree with menus, I don't agree with total correspondence with curricula. In general, I send my students to do projects only and I advised their parents because in general, the fellowship is very low so, only parents with money can send their sons or daughters to the Erasmus or Socrates. So, I advise them that even if they do not succeed to have a lot of credits abroad they will grow up with this experience; that they will become more mature, which is more important than to get a credit more or a credit less. This is the humanistic view of this program. We cannot instrumentalize this poor program Socrates. We must do a reference to the name of Socrates. Don't forget, knowledge is not only to go to school and follow courses.

Our students prefer to go to Spanish schools, to Italian schools, to French schools because they speak the language and this is easy to line in town, to contact the others, to exchange experiences but they also do go to other Northern schools, English schools, German schools and so on. For instance, once we had the opportunity to run a Tempus program with Bucharest it was fantastic to learn that other names, other architectures experienced that we have never taught before, teachers, students we learned a lot of new things that we didn't know before. The scholarly success is not very important but the human experience that they must have to get maturity.

The second point you put in the discussion is staff exchange. I think that Erasmus started in a program first exchanging students and after exchanging staff. I always say that for us they have exchanging staff to know each other and after I can tell let's go to exchange students and I know to whom I'm going to send students or from whom I'm going to receive. We can exchange personal experience and so on. I always ask for improvement in staff exchanges. It can be very rich because when professors from other schools come

to our school, they do teaching, they do a conference and it's for 100, 200 students or even more and a student when he goes, he has humanistic and very important experience that finishes in the limits of his body. It's not transmissible. So, the investment that must be improved to restart this project with staff mobility, we need to know each other, we need to know our schools to see the works, to see the teaching and the methodology. As we are only teachers, I know that there are not students here to kill me immediately.

So, I'm saying this because all my visiting to other schools allows me to learn a lot of things that I used in the pedagogy in the adjustment of the curriculum and so on. I thank you for your advice and discussion about the staff mobility and please, don't think of students as pieces of a puzzle that is sent elsewhere to be achieve great works, to be part of a star system but to learn how to live with the others, how to meet other cultures and so on.

Hans Lindgren, Goeteborg, Sweden

I would like to comment on this issue of teachers' exchange, which I think is very interesting. We are looking forward to a situation where we have a possibility to run design studios, which will be a platform, you can say, for people to work on certain issues for maybe five or six years. It will be a platform for a kind of team-building, which includes teachers, researchers, PhD students, Masters students and the students working their candidate papers and I think we can create some frames for our work within the Masters courses, which include people with these different backgrounds. We can give a much broader possibility for the teachers to visit the different schools because if you can count on other places to teach and also take part in research, I think, teachers will be much more interested in taking part in this kind of exchange and also it's possible to build a more long-term relationships between the different departments.

Hansjorg Hilti, Vaduz, Liechtenstein

I would suggest that we talk about the implementation of some tools, which would help us at least to ease the associations of exchange. To give an example, with a colleague from Amsterdam, we talked last year about implementing a week workshop between four to five schools at Christmas time when it doesn't interfere too much with the usual curricula and the four-five schools will do workshops. The students can choose to which school they wish to go and the teachers can change too. I think it could help to have very small tools, I mean the teachers can go for a year to another country. It's not so easy for their families and things like that. But for one week everybody can go and to have small working tools where we can interchange. I mean we are one hundred schools here and if we just agree in maybe some kind of timetables for interchanging, small practical instruments to really do it for staff exchange, students exchange is working anyway.

Our colleague talked about China. I would prefer to have a map on the Internet from this association, where the whole world would be. I mean we don't have to have a contact but nowadays, countries like China is a fashion. We are now in touch with Shanghai; Peking there is some interest to get in touch with us in Europe, why shouldn't we use this connection? Why should we close in ourselves in Europe? I mean we have aboard for immigration a high world part from east and west and United States but at least on academic level we should open up to the world.

Alan Bridges, Glasgow, United Kingdom

I think all these things are open to us but at the moment the discussion is nationally based around some European Union initiatives. We can all have these free exchanges and again in terms of asking for the mechanisms, I think we should focus on schools as a simple thing to do about students being involved in workshops and so.

Stéphane Hanrot, Marseille, France

As a teacher when you go to another school during a certain time it's interesting because you can have a kind of experience and use what is happening in this school as an experiment in relation to yours. Just to give an example. I went for a semester to New Castle in Australia and because I was interested in problems on learning strategies I observed different things that are very useful in the context of European exchange for instance. In this school in Newcastle, they implement that for a long time, the way of three plus two, Bachelor and Masters as we tried to implement it in Europe. After the Bachelor they ask their students to spend one year somewhere working in some place related to architecture as well for instance, offices, administration and so on. I asked myself if the students in the end of this practical period were more keen on studies or not, if they were more professional in the attitude in relation to their studies or not and in fact, it was very interesting to see that students who wanted to go out of the process of studies find at these moments an exit door that allows them to have a real position in practical situations. On the other hand, for the ones who want to an further they go back to school with a real demand of knowledge and deeper experience in design and reflection. So, that was a kind of proof for me that this system was beneficial for school itself because the students demand more academics than I could think at the beginning. So, this kind of experience is very interesting when it can be related to creative situations as we have in Europe now.

Ferran Sagarra, Barcelona, Spain

I wanted to say a few things on the case of menu à la carte that it's premature. I think we have a lot of things to do before that because we have to create the confidence that doesn't exist of course, and doesn't exist because I think that most of us, I suppose we'll agree, not all I know, that there are good schools and bad schools, good students and bad students. Unless some good students can fail in a bad school or in a good school but that's very complicated. There are some levels of persons and institutions. To create this confidence, the problem of knowing each other, to create the channels of knowledge to each other is very important. I'm sure that the question of ECTS, for instance, of the marking system is a very vital question that will be solved in some months, I suppose but even to come to comparable and transparent curricula is a very important way of knowledge in order to, in the quite far future, establish this menu à la carte.

I think, now that the most important thing to do is to know each other. As someone said here, one of the ways to do that is with the mobility of teachers, of staff mobility not just to meet two days or one day but work together with the students of the other parts. In this sense, I think there are not enough programs in Europe to improve, increase, and encourage this mobility in order to do workshops and intensive programs. In the same sense I think also that it's premature to trade, to establish a system of mobility, a common

system. I mean, we have to continue having agreements with two partners or three maximum. It's quite impossible right now perhaps in the future when we know each other better so, it would be possible.

Last thing, as in the case of Australia, I had a sort of opportunity to teach in America and it has been for me a splendid occasion to understand a lot of things of the Americans of course, but also to see how European we are, how different we are from the others. So, I think that this kind of experiences is very good but within Europe, it's more important.

To finish I would like to explain one personal issue. I used to work with my students on some town near Barcelona, near our University 20-25 kilometers. The first day I started asking my students who had been in New York. 80% has been in New York but then I asked who has been in Madresa; it's one of these Catalan towns, a very nice Catalan town 25 kilometers from Barcelona. It was 1 or 2%. So, that has to make us think how important is to know what do we have very near, very close in this case Europe. Thank you.

Christian Huetz, Regensburg, Germany

I just have something to say. I don't know where I'm sitting now because we don't just stress every time that mobility is a very interesting and very good thing to do for the students and also for the staff. I'm now thinking what is in the new sense of the Bologna Declaration and in the new sense of the new programs of studying, how could we establish there as a form of teaching the mobility of students. I think that's very important. I didn't get any note out of the audience now.

Eugenijus Staniunas, Vilnius, Lithuania

I would like to give you a piece of information about the experience from East Baltic ountries. We have about eight years' experience of two level studies; Bachelor and Masters, the system four plus two years and about four years of experience of Erasmus, Socrates programs. I found that the exchange of the students is very successful in spite of some problems we meet in the field but by exchanging the teachers we meet some more difficult problems; more specifically three problems.

The first one is the insufficient capacity of teachers in languages. The second problem is that about 90% of our teachers work as designers-architects as well. They have no time to leave their business, they have no time to prepare very deeply for their lectures, the best thing they can do is to invite students to their studios and to learn the practical aspects of the profession, the things they can do. For some teachers that work more in the theoretical field, it's a bit difficult, and risky to go to an unknown university, to an unknown context and to say something because the teacher doesn't know if the things he'll say will be well-known for the students. It makes no sense to go and say the things that everybody knows. It's very hard to find or to know the situation in the university you are going to, and to find the things that could be interesting for the students there. Thank you.

Alan Bridges, Glasgow, United Kingdom

I think we are now starting to hear very clearly a common message in several themes that keeps re-occurring. Everyone seems to agree that students' mobility is a good thing.

It seems that we agree that staff mobility is advantageous both in terms of personal development but also getting to know partner schools and ensuring the success of student exchanges. So, could we perhaps stop to think about drawing some conclusions about how we might make sure that this develops positively, what mechanisms we might like to see in place to improve this mobility and avoid perhaps some of the problems that were identified?

Jacques Gubler, Mendrisio, Switzerland

I think you yourself put a question how the Bologna process or pattern will influence the future development of this kind of habit of the mobility as it has already existed in the last ten years. How will this affect these habits? I think it's a very important question and it also gets to another question, which is: how do these students or where do the students get their information from in the first place, which allows them to choose to go to Berlin and not to Weimar or to Madrid and not to La Coruna or to Stuttaart and not to Bochum? All these other schools are very good schools, but how do they access this information? It's obvious that they go on the Web and then they go to the cafeteria and talk with the students who had an experience, a fantastic experience as in Glasgow. So, now we can send the students to Glasgow because of the good experiences of their fellow students. I'm sorry to say that, I could talk too long about this question of selection. I'm not in my ideology partisan of this theory of the revolution to know if butterflies evolve into bees or mere flies but there are practical questions because we have bilateral agreements and these bilateral agreements generally stipulate that we can send two maximum three students per year and there is always every year a dispute because we have at least four students who want to go to Madrid, where we can send only two. So, how will we pick up or select or choose these people. This is a technical problem, which is very important and then we have the good fortune of a pioneer student, who has gone to Delft the first time and then the students want to go to Delft because he came back from Delft, or very much with the students who first went to Stuttgart. They all wanted to go to Berlin. So, we have developed with certain schools the possibility of rotation not only in one-way direction. We send students to them but they also send us their students and this obviously leads to a personal contact.

Generally, it is very difficult to have staff moving because they already move and they don't want to move for mobility's sake, we invite them. So, coming back to the question asked by my colleague from Bochum, I'm sure that when one student will taste the flavors of Bochum and will have to come back to his home, to say home-school with wonderful memories of Bochum then there will be a dynamics and I'm sorry I have to come back to the first question: in which way will the Bologna pattern influence this habit of sending students for one year? I mean, the winter in Bochum is wonderful, the spring is even more wonderful than winter and I think, it's important for students to learn from the city, not only from the school or even most of them when they are in Barcelona, they don't want to go to school, they want to go to all other places which they only find in Barcelona. So, two semesters I felt, two semesters are what is required to pick up the language, the technical vocabulary in Barcelona, which is not exactly the same as it is in Madrid and to have at least two of the seasons to see the evolution of the climate in Glasgow or in Berlin.

Now, if we go to the semester pattern, which is implicitly described in the Bologna pattern,

it is going to make things more complicated because we have to double the administrative structure of control, which does exist and will exist even more and more with the adoption of the three plus two; the idea of going to another school for just a semester and then come back or go to another school. So, this is what is expected of us. We are going to have more people working in the administration field for developing these exchanges, when the Bologna pattern will be part of a new habit.

Alan Bridges, Glasgow, United Kingdom

Thank you. Michel and I would like to make a contribution. A question arises in my mind as well as this coming would that be the Bologna source on Richard's à la Carte menu?

Michèle Michel, Bordeaux, France

Just an idea, I think that in the future maybe we will have two kinds of mobility. The mobility as we know it actually just now through the Erasmus program and a new kind of mobility based on common diplomas and in this case, I think that a lot of problems will disappear because this kind of organization, a common diploma, induces that the partners know each other very well because they will build common projects. So, when the mobility will be organized, there will be no problem for the students and for the staff. So, this second kind of mobility will have to be built in the years coming. I think maybe it's in this way that we will observe a big development in the years coming.

Alan Bridges, Glasgow, United Kingdom

Thank you. Kees Doenvendans is around here. I saw all faces all were much darkened but his concept of the Meta-university that he spoke about yesterday is really a step in that direction, where three or four schools have got together putting their own individual expertise together into a common course, where you take modules across these four different universities and graduate with a Masters degree.

Eugenijus Staniunas, Vilnius, Lithuania

On the question of how we develop a system beneficial for the bad schools and the staff, I'm talking about staff exchange systems and how do we develop it. What comes to my mind is that firstly the school should have some flexibility in the educational policies to accept newcomers or new ideas into their system. If you have a strict system of lectures or studio works, the staff coming to your school will have problems in the school and also with the students. To my mind the best place for staff exchange is the design studios. If you have flexible design studio systems and each teacher or professor group has various educational fields...but this is just an idea I've got for a new system.

Stéphane Hanrot, Marseille, France

I just want to say that practically when you want to exchange or go somewhere as a teacher there are two levels of duration that imply two different organizations. If you expect to go somewhere for a workshop for a week, you wait for a very well organized

welcome. I mean a practical organization to be in a hotel and so on and for the school, it's not very hard to organize but it must be done well and for you it doesn't demand a strong organization to leave your own basis to go there. Another thing is to spend a semester somewhere. So, you need another organization from the school that receives you because perhaps you will go there with your family and so on and on the other hand you have to organize yourself as a teacher or a practitioner to stop your activity, to find in your own school a new organization, when you are missing and so on. So, perhaps we can make a distinction according to the staff exchanges on these two kinds of exchanges, two conditions.

Jose Depuydt, Brussels, Belgium

Since I love metaphor I will use another one. I make a distinction between the function of a building and the capacity of a building and we can do the same thing using it and applying it for schools. We know that the function of a school is to educate and you can measure it using ingredients like the curriculum, the link of the courses, the content of courses, credit and study points and things like that. But the capacity of a school is to generate a learning environment, which offers the possibility to reflect on values whether they are cultural, ethical, social, economical. So, my question therefore is what is the capacity of a school in terms of what we can learn there? What is the vision of this school? What is the mission statement of this school and I agree that we have to share that sort of knowledge. I agree with the suggestion of another colleague saying that we have to make a booklet and we will bring all knowledge together based on possibly the posters but not only the content of the posters but sharing the knowledge for what our schools stand for in terms of vision and mission statement. So, students can make a choice in going to another school based on how they can learn in that school, based on that sort of ethical awareness.

Alan Bridges, Glasgow, United Kingdom

Maybe that again starts to point towards how we might develop that after this conference. We are supposed to establish a working group in this area and maybe some of these things about the school mission statements and cultural inspirations and so on might be a subject that a working group considers so, I think people who would like to join that group and I think Kees's suggestion yesterday that maybe they will make a discussion group is a useful one so, if people could notify the secretariat, if they are interested in joining that group, that's a debate that we can take forward.

Per Olaf Fjeld, Oslo, Norway

Just a remark from Oslo. The first one is related to the language aspect of exchanges. Very few, except the Norwegians, see language in itself as a problem. The other remark is that the Erasmus and Socrates programs in general, work well though the program that works at best is unity. We have established with four different other schools relationships between the students and the teachers and this is easier through a development that has been working well for several years. Thank you.

Selahattin Onur, Ankara, Turkey

Actually another thing could be about each school to put down their experiences of mobility so far; the different types of exchanges or activities that they have done. I think that would be very very useful because we hear different examples, we put forward and I think a collation of all those varieties of mobility could give us a lot of ideas for the future.

Alan Bridges, Glasgow, United Kingdom

Thank you very much. I would like to thank everybody in the audience for such a lively useful discussion.

Exchange and Collaboration between Schools of Architecture in the Euro-pean Higher Education Area

Discussion Group 2

Coordination by
Joao ANTUNES,
Setubal, Portugal
Nur CAGLAR,
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Francis NORDEMANN,
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Joao Antunes, Setubal, Portugal

I have one or two things to say about my own experience concerning the mobility of students within the EU area. The first and the main question I would like to pose, is about the money and the possibility for the students to be elsewhere in the European Community supporting themselves or being supported by their families. I believe this is a major problem, as at least in my university, because there we have lots of students, who just work and study as well. So, when they attend their studies they have a special, let's say, agreement with their employers in order to have some hours and some time free for studies but they must work afterwards. So, if we are facing this kind of problem I think we are not going to have any solution on that because they are students as the others, and they are even more committed to their studies. Anyway, it's practically impossible for them to get their award because it means that they are going to stop working. This is a major problem.

In my university in particular we have another problem, which is related to this one; in the Erasmus Socrates Programme the fees, which just support this kind of placement, are too narrow at least for peripheral countries, such as Portugal. Anyway, I believe and I am committed to this program of exchanges between all countries and between students but I think that probably the investment and the effort of the E.U. in terms money, will be better to begin with the staff exchange. Above all, if we assume that we exchange a student that is ok, he will go somewhere else, he will surely gain something from the place where he stayed and he'll keep it to himself. If a professor goes abroad, it will probably be much more useful for his country itself because when he returns, he will convey all his experience. I saw a very keen commitment by the E.U. in terms of exchange of students but not of researchers and professors whatsoever. For me, the exchange must be holistic, professors, students and so on, because if we exchange professors it is the best way to

have more acknowledgement about each other; about the methodologies and the courses and how we work in our respective countries in order to avoid some misunderstandings and some failures that unfortunately happen in this kind of exchanges.

A colleague from Glasgow has just said and I have underlined his words that he has several students from the regions nearby his school. In my case that happens all the time. He said that his students do not know London. I cannot say the same about my students. They know very well Lisbon, which is about forty kilometers north so, it's easy to know it but unfortunately most of them do not even ever go abroad even to Spain, which is about two hundred kilometers away. They do not have an urban culture, they are not urbanized, they are people, who just came from the countryside. So, this is one question that I would like to pose and I would like to add that we have many cultural experiences and very different culture approaches to our day-to day life. This is very important when we think about the exchange of students. Thank you.

Nur Caglar, Ankara, Turkey

The theme of the workshop of today is exchange and collaboration between schools of Architecture in the European Higher Education Area. So, the mobility and the exchange become the key-issues for the creation of the higher education area in Europe and we are going to discuss the mobility and exchange. We are in a way very lucky that we have attended already a very brief and comprehensive speech on the meaning of mobility and exchange and the advantages and disadvantages both for the students and teachers. The last session in the morning as my colleague put it forward is the financial problems. I'm going to elaborate on the problems of the curriculum because we all agree that mobility is a necessity for both students and teachers to develop the system of intellectual reference from a national to an international level and also to contribute to the cultural and personal improvement by giving the opportunity both to students and teachers to educational and professional experiences in a different cultural and social context. So, this is a kind of advantage but we only have the ECTS issue in our hands to operate on as well as the assessment, which was discussed already in the morning session. So, maybe we can discuss and think that the diversity of the curricula of different schools is a kind of obstacle for the exchange of both students and teachers and attempts to overtake this obstacle may consequently and evidently lead to the uniformity or similarity of the curricula, which we don't like to have. ECTS as a system is a basic criterion for a comparison. However, in practice it seems that different schools have slightly different ECTS rules, so the interpretation of the ECTS system differs from school to school. What are the ways to achieve diversity of curricula within the context of exchange of both students and teachers?

Francis Nordemann, Darnetal, France

I'd like to speak about the curriculum starting with the difficulties we had in the School of Normandy with a long tradition of exchanges with England actually. When I came to the School, I realized that because of relationships between different professors of both schools there were informal really dense exchanges but which couldn't make sense in terms of the curriculum. For instance, we had thirty students going to England for the fourth-year program but the contact person was a first or second year teacher. The

students were getting fourth year credits having spent a semester in the second year during the exchange. I think we should be open to this kind of situation because ECTS creates a framework for the quantity of work that's worth eight credits or a certain number of credits but it can't make one big school out of a network, I mean that's not one curriculum and every student should be able to shop on the market, on the network as well as he is shopping in a school itself. You know in our school, we have many different curricula offered and a student can choose to pass exams easily and be able to have a professional practice or something else or doing two sets of studies at the same time. Some choose to be really involved in the curriculum doing even more than they are expected to do. So. I mean the same idea extended to the network and to the market opened by the network. The only difficulty is the way it affects the population in the school itself. We have the problem of the fourth year, when we help students to leave thinking that the best moments they had was actually in fourth year; the moment where the best students leave the School and that leaves us with a sort of a weak semester or a weak year, which also has other implications in terms of students trying to bypass one special course by going on an exchange abroad and coming back afterwards. So, I think we have to do something ... that show we did in Normandy; we decided to cheat a little bit. A way is to check what work has been done abroad and to have a special presentation for students who have been abroad for a year and to evaluate it without giving credits. It's a way to insert what has been done abroad in our curriculum and to somehow relaunch the student backing the school. I want to elaborate on this more this morning but I think we can open a discussion that will be the goal of this group two.

Jean Pierre Bobenrietther, Paris, France

It's not a problem about the ECTS. That is easy to do. You said also that students do what they want, they go to the friend of the teacher and so on. So, my question is what to do? Is it good so, or do we have to make some suggestions and propose some schemes?

Francis Nordemann, Darnetal, France

No, I have to make it clear. First, I was describing a situation I saw, I mean and that somehow insighting me to find a role and to find a new way of exchanging. No, speaking of ECTS I think we need a framework, we need money, we need something to way what is the deal between the two schools and we really need that material to that framework to go forward but beside that we had to be really concrete and see how students react to that. I mean there are so many ways to have credits even in our schools. We know many schools where the students know that on that course it's very easy, it's not so much work and you are pretty sure you have the credits and in another one, there is a lot of work but you learn a lot. ECTS is the way to measure, the way to extend.

Loughlin Kealy, Dublin, Ireland

May we hear some more of your experiences later on but I would just say we have rather quite a mixed experience of the exchange and what we tend to do is to work only with schools where we know the people and we know the system. Now, whether this is against the spirit of freedom of a common education space in Europe.., it has been a very pragmatic response to the kind of issues that you have raised. I believe that if we are to

move to like a freer system then certain things will have to be adopted. That seems to me, and it's quite common, if you come from a large university, say in the United States, where if you wish to take a certain course there are prerequisites. If you know what I mean, you can't take this course unless you have certain other things taken in advance. And I think it will be helpful for a school that is aging to send a student abroad if that school was able to say for a course what prerequisites are actually necessary for someone who wishes to take that particular course because it gives an idea of the standard of the course which has been delivered. And you know that we were prepared to do the same. The problem about assessing the students' achievement when they are abroad is much more difficult, and this is the problem you have mentioned. I like the way that you have suggested it can be taken on board other way again I understand it is bending the rules. I have no problem bending the rules I must say. I think the rules are there to be bent, they have to be there and one is also looking both to the benefit of the school and the benefit of students. It is no benefit to my students to go to a course where the standards are high. We expect our best students to travel and to get courses, which demand their best work. If they don't get that, we lose and they lose. So, it's in our interest that we have someway of testing when they return. So, I'll be very interested in seeing how we could with people that we share agreements with, develop this particular aspect.

Dimitris Kotsakis, Thessaloniki, Greece

There are two kinds of mobility. The one is within a program and the other is across the programs. The first kind of mobility uses the transparency on needs as a tool, transparency in the ECTS system so that a student who follows a program in a school can move and follow bits and pieces of programs from other schools. And the other is based on the two-tier system one finishes the first degree in one school and then moves to another. The second kind of mobility is very very problematic in terms of architectural education for three reasons.

The first is that the two-tier system can create a two level ranking of schools. Schools who are preparatory, the BA schools and the schools who are the Masters schools so, that kind of mobility has inbuilt this danger.

A second danger, which was noticed and stressed very much by the convention of the students in Göteborg is that it creates a barrier in education because students drop out at the first level so, this mobility is actually the mobility to home, not the mobility from one school to another.

The third problem of this kind of mobility is the impossibility to break the program in schools we have integrated studies and they need, as the French say, we the Greeks and the Spanish schools say, to have a Masters degree such that the Bachelor is incorporated and this is what our Statement in Hania said last year; the possibility of having Masters degree with the BA incorporated unbroken.

So, I wouldn't talk very much about this second kind of mobility, the mobility between the two levels. I should rather focus on the first kind of mobility, which is the most interesting and which is really the kind of mobility that turns the integration into an international integration. Students study in one country then move to other countries and to other universities or to other university in the same country and get courses there.

A main problem in this kind of mobility is the economic question. Who covers the expenses?

The second is a language question. If you move across a civilization in which language you do that. Is it moving and speaking the language of the country or we have an international language or two international and why two and not three and why three and not four? I mean it is a question and it is a competition of languages and if we do not accept a lingua something like the Latin, English language plays this role at this. Then we'll have a problem with this kind of mobility, a language problem and then nobody discusses about the following point.

I would stress this point here very intensively; the question of creating on one hand a cosmopolitan elite of students who can afford to travel and to speak many languages and so on and then this is not the important thing, the important is a nationalistic reaction to that. We create this cosmopolitan elite and then in fact what you create is not this elite. In each country you create a strong nationalistic reaction to this. So, saying that mobility is a good thing, in fact, we are working for the opposite; we are actually working for all sorts of narrow national, socialist and other regimes without realizing it. So, this last point is very important. If we do not put these preconditions for the mobility to be the right mobility we are just provoking nationalism. So, that's one point I wanted to make.

A second point is that there is another kind of mobility, which I would call the 'cheap degrees mobility' or 'shop the easy courses around the world'. So, the story is that perhaps in Italy you can shop cheap courses in this sort of thing, in Germany others, in Greece others plus you have an extra plus or an extra bonus of tourism so, in fact, cheap courses plus tourism that's good mobility. I mean you stay in a country, you do the minimum to that and then the rest is fun. So, between nationalism, socialism and the cheap courses we have to develop among these two skills and I heard this, I mean the two monsters that have to steer the ship.

Joao Antunes, Setubal, Portugal

The last colleague was speaking and I was thinking about a very unpleasant experience we have in Portugal with my school just talking about the question of integration. Yes, it is true. There are problems and we must face them. It's not just trying to pretend that everything is all right and when we go abroad, we are going to be very very well and friendly to meet in the courtyard of that community. When we send some of our students in a European country, they do not dominate the language or dominate it very badly and there were some kind of, I don't say Nazism, some kind of very bad reception not from the professors but from the students themselves. When I have been faced with this problem I have asked but what is the problem, the problem is with the curriculum? I thought probably the professors would not like the level of their skills. I thought the professors would think that there were not sufficient changes to have the courses but no, the problem was with their colleagues. I was very surprised and at the end it would not have very happy end. So, I don't want to say anything else only to stretch and underline this point.

We must work also in this kind of problem, the problem of integration. Obviously, I think we are here to discuss mobility in terms of political aims and in terms of financial aims because we can't be so naïve and think that we are all dealing with this only on behalf of our investigation and the level of architecture. Obviously, there is a common market and markets are economic, financial and we are going to have some students educated in our universities but with foreign experience so, they have opportunities of being

integrated in the foreign markets and this is true for the rich countries and for the poor countries and this stresses the point that our colleague has just underlined. There is no chance to achieve direct integration when the students go abroad. It's a problem of post-studies integration in economical and professional terms. Do you understand what I'm try to point out and to stress?

Well, I do not have answers, I have many questions about that but I believe that we can work on it if the politicians are really committed in terms of exchanging people. Anyhow, I'm very pessimist in this kind of commitment. I believe that the Erasmus Socrates program is not a very successful one. I don't know your experience, I would like to know but my experience is telling me that it is not a very successful program. In fact I've heard somewhere else; I don't know whether it's gossip only, that the Erasmus program is going to stop. So, I stress my question; what are we going to do with this? I have some pragmatic solutions but these solutions do not pass through this kind of meetings. Anyway, I think these are very important issues in terms of the possibility that they gave us to meet, to know each other, to make acquaintances with one another and probably I don't want to be impolite but probably, it's more important to ad-pass outside this kind of discussions than the discussion did itself. Sorry, thank you very much.

Cyrille Simonnet, Geneva, Swiss

I think that this problem of mobility is both a positive and a negative experience. In our discipline there is a bia advantage with architecture. In the University of Geneva in the reunions with the other Chiefs of Departments of other faculties we speak about this problem and at the end-because in architecture the main, the nuclear way of teaching and learning is the studio projects, the problems of language of discussions are not so important because you can show your work without speaking too much- you certainly have to explain some things but I think there is a big power in the quality of the work that you show through the project, through the drawings and there are certainly some problems with the courses of history, for example. But at the end when we compare with my colleagues from the sciences, the literature, the economy or other disciplines we have a very big advantage. In Geneva in the Architecture School we have a lot of exchanges with many schools from Spain, Italy and half of our students are from abroad, which is another advantage. In our school the students from Spain, come because we have a bigger department of computers and each student can have their own computer so, it's an advantage. I don't know if you know, there is a French film that has just come out, on the screens Robert Espagnol, which is about this problem of Erasmus on exchange and is very funny because the situation is in Barcelona, in Catalonia and students have many problems because the courses are in Catalan and not in Casteliana, in Spanish. It is a very very big problem but at the end, the film is optimistic, everybody is very happy.

Francis Nordemann, Darnetal, France

Two words on what you just said. Architects and architectural students are very lucky because they can express ideas with drawings, which is all kinds of languages. I mean there are so many things that are based on site visits. A year abroad is a huge site visit and it's a succession of new urban experiences that we can't provide to them in our schools: 'Le voyage en Italie'.

Françoise Schatz, Nancy, France

I will be more optimistic than you are. We have exchanges in the last, I think, fifteen years or something like that. So, we are doing the exchanges all along this time. At the beginning, we made some mistakes such as asking the students to find theme courses and lectures as they would have done if they were at our School and so on, to have new assessment package at school after and so on and so on. After this experience we noticed that, for us, this was against the experience of going abroad and that it was better to have some simple rules; for instance what we suggest is to have the credits with big projects and the other half to be lectures, seminars whatever they want to learn or they are keen on learning because it is either taught differently from Nancy or it is a subject not taught in Nancy. That's all, it has very simple rules and so, they can choose. Studio projects are very often selected from the same level of studies in which is the student but the selection of lectures can be either higher level of studies. Even if sometimes there are students trying to escape things or not do a lot of things, I think the majority gains a lot of interesting things. At least my frustration is very often less nowadays; before they used to go outside or to go abroad in the fifth year so, the school didn't get benefit of these students because as they came back, they were different. They do not attend the same lectures, projects. they learn different methods and so on. So, now we try to send them on an exchange a bit earlier so, very often they go in the fourth year. That's the first point. I'm quite happy with that. Even if there are some problems like finances, you are very right about that, we are very fortunate in Nancy because it's a regional School and students are offered another grant on top of the Erasmus grant, which is not very much but some student have to ask for this contribution to their expenses. In some expensive countries students have the right to have a loan from a bank, so, it's not always very easy but I think it's a good thing to go abroad.

Jean Pierre Bobenrietther, Paris, France

I think Erasmus or not Erasmus it's impossible today for mobility to stop but for instance, in Paris Belleville, we have set up thirty agreements with not only schools of Europe but all the rest of the world and for the rest of the world we have no money, the students have no money to go. This morning we have set up a large problem when we discussed about agreements; it is with a school with interest in us or in French schools. That perhaps is maybe not very good for all the schools. How can all schools have mobility? It's not good that all schools have mobility with Barcelona, with Madrid about construction. We agreed with schools, it's a problem of democracy. We should have mobility with each school also with the small schools and so on. How to do that is the first question. Do we have an evaluation of the quality of students in each school in Europe, can we do that? Second question: Is it not too bureaucratic to make a rule that says that only two or three students from each school, but each school, must have two or three or four students in mobility. Two questions, so.

Françoise Schatz, Nancy, France

I just want to put another point. We have about thirty students going abroad but we have only fifteen students coming in. I don't know maybe it's a situation we are in this part of France and so on but the equilibrium between the outcoming and the incoming students

is quite difficult to obtain.

Francis Nordemann, Darnetal, France

Yes, but if there is a necessity to that balance. As a matter of fact we are able to accept students and not to have an empty year in our schools but beside that we don't have to be even. But I think what Jean Pierre pointed out is very important. I mean the idea of not concentrating on exchanges between Paris and Barcelona, we made with Constantin Spiridonidis this morning the hit parade of the Top Ten good schools for Erasmus students so, there was a moment for Paris and then another for Barcelona and now it's Prague. That's what you said. Prague is very fashionable in Erasmus exchanges. Well, that's ok but in addition to that, as he mentioned, some professors can be reluctant to make exchanges with a school in the further provinces of wherever part of Europe but the idea is precisely to help this kind of exchanges to somehow level or find a real platform for exchanges and have small schools that will be able to exchange with great schools. I think it's a very democratic issue that you raised.

Joao Antunes, Setubal, Portugal

Some kind of possibility of talking with one another but not with a kind of imposing rules from the politicians in the center of our base of EU. The second question I would like to stress and I believe we have stressed here is the political problem of how we can manage with the support and the interest of the politicians in terms of these things? I believe this kind of meeting and this kind of association could be and should be a very strong answer to this. We are all architects we all know the problem of CIAM, the International Conference of Modern Architecture and why they started it. So, if the objective and the subjects are different, the method can be used in the same way. The problem of language is a real problem. Yesterday I was speaking with a colleague of us, a Bulgarian one and I was joking about exchanging students and he told me 'well, it's going to be a problem for a Bulgarian to learn Portuguese or for a Portuguese to learn Bulgarian' because they are so much different and the time they are going to attend classes at a university abroad is too short for that. And if we increase that time it's too much time to do that. We really have a problem and this problem could stop in another, which is we may risk to create, I don't say universities of first class and universities of second class, but groups of universities by European regions. I think this is already happening today and probably it's a pragmatic answer but it's going to be an answer. Let's say, Portuguese will meet mainly with Spanish. Italians probably French people and the northern college will meet with one another. I think this is happening now whether we wanted it or not, the problem of the language is a very huge problem. We must face it but I don't know how to solve it. Probably in the near future, probably in the future we will be able to solve this problem with the experience of our colleagues of Switzerland perhaps.

Constantin Spiridonidis, Thesssaloniki, Greece

I will continue in the same line with Joao Antunes. We know very well that in Europe there is a competitive environment between the schools. Schools are competitive institutions because diplomas have competitive results and the better diplomas or the better reputation of diplomas is always something, which is expected of many schools. We are

speaking about the necessity of exchange and everyone can say that yes, we need it and it's something which is useful and can contribute positively to our educational programs but the exchange is used or can be used as part of this competition game. I don't have an answer. I do not have a solution to this issue but probably we have to think about the ways that probably someone will prevent or make some efforts in order to avoid the necessity of exchange to become a means for this competition game, which exists actually in Europe.

I would like to remind you that five years ago a number of Schools of Architecture in Europe, there is no point in naming them now, but it was something like ten of them, which decided that they will only exchange students between them and only between them. And the reason was that those schools considered themselves as the best schools of Europe and so, there is no reason to exchange with anyone else but between them. So, it is something, which of course, you cannot say that is possible to avoid because they are free to do it but that created, at least for some years, a kind of club of schools of excellence in Europe. The exchange became an instrument of a game, which is a political game. I think that it is a little bit beyond the technical dimensions that Dimitris Kotsakis mentioned and maybe beyond the political and the financial implications of the Bologna process. So, it is something in-between. For this reason I consider that the discussion between schools about the policy of exchanges is something which is absolutely necessary to be developed and to be clear. What kind of exchanges we want to have and how we will, in common, will avoid making the exchanges a means for discriminations and implicit assessments not related to the academic qualities of the schools.

Jean R. Bobenriether, Paris, France

First, I think mobility should be compulsory in Europe and so, the market should be larger. I have also a question for my Irish friend: how do you achieve to give good information to your students about us, the schools in Europe?

Loughlin Kealy, Dublin, Ireland

With great difficulty and with very few schools. We have an assistant, who has to visit every school that we had some interest in to exchange with and so, there was some degree of personal connection and some discussion as to how we do it. So, really the possibility for students was quite restricted and really we would not be happy with students going to schools that we didn't know anything about. We've had some very unfortunate experiences over the years where students went to schools, which were taught exciting but they didn't actually know what is going on and had a very bad experience. So, we decided instead at on our own expense -which is a very expensive business for us to doto send somebody to the school and spend some time with them, with the teachers and to come back then and to be able to inform the students about that school. Unfortunately, you can only do that once and schools change in time. So, our system is very imperfect and I think now I'm not contented with the state of knowledge that we have about the schools. There are still, I think, three or four schools only where our students go because we are in continuous dialogue with them. My question is: 'this is always possible for schools to work in small networks', the technical question arises when we want to extend the network beyond one's personal connection, one colleague's connection and I think that's

the field like the technical issue that one your lies all of this. So, that's a long answer to a short question.

Joao Antunes, Setubal, Portugal

I would stress this point for our colleague from Dublin, who just has touched a question I have put in my introduction and which is the necessity for agreement to mobility of students, agreement to mobility of professors, agreement of mobility of having exchange and research exchange. And one thing that does not have meaning if it is not fall by the other. Again I will talk about my own experience. I have exchanged students within schools. I have been myself for lectures and for workshops and the same for them. So, we can step-by-step construct a framework of confidence, a framework of self-assurance about our programs, about our interests and about our aims. This is a pragmatic way of doing things and a very costly one of course. I have to be my own sponsor but it does not have to be like that. I think I have and you have the right to be sponsored by the society in order to do that. I don't say in a 100% but in a very important part. I'm sorry I've underlined this, this is a main issue and a very important problem and I underline the importance that Constantin Spiridonidis as the Chairman of this Meeting because I think it's in this kind of raise we can stress ourselves and we will gain importance and a specific way of facing the political decisions. I believe all the European Education System is now in a very bad state. We are facing a very difficult situation and we must be aware that we must not let simply the things go. I don't think that in European Union in terms of political discussion they just align with the move we have here. I think they are very very apart of this. Sorry, probably I'm very pessimistic but I try to be realistic.

Can we conclude something I have just put here? The problem of transparency, which means equivalence and which has to do with the technical problems, the ECTS, the prerequisites frame, the question of money and the question of having more information changed between all the schools and of course, the question of changing professors and not only professors but to try to investigate to research with a larger range of nationalities.

...And the problem of democracy?

Chapter 4

The European Higher Education Area in Architecture and the Professional and Institutional Context

The changes that are scheduled in the light of the European convergence affect the relationship of Schools of Architecture with the profession and its leaislative context. This relationship is undergoing dynamic reforms, which architectural education, however, follows passively. The more the cuts of governmental funds that support education the more the search for external funding, rarely with nothing in return, In this context, the autonomy of Higher Education Institutions -a unique characteristic of the constitution of academia for centuries- is subverted. On top, professional bodies aim to influence education and the respective curricula restructuring to meet the needs of the profession and the labor market with specialized employees. This often shifts programmes of studies from educational to training environments. The redefinition of such relationships constitutes an important issue for the future of architectural education in Europe and has to be confronted collectively. The Meeting suggests the discussion of this issue with the intention to structure the principles, which will ensure a fruitful collaboration with professional bodies on a national and European level, while it would protect schools' autonomy to organize and manage their curricula.

Introduction to the Session

Panel: Lawrence Johnston, Belfast, United Kingdom

Koenraad van Cleempoel, Antwerp, Belgium

Chair: Juhani Katainen, Tampere, Finland

Discussion

Coordination by

Juhani Katainen, Tampere, Finland

Relationships between Architectural Education, Internship and Competence to Practice

Lawrence JOHNSTON Belfast, United Kingdom Koenraad VAN CLEEMPOEL Antwerp, Belgium

- **1.1** This paper explores the relationship between the providers of academic architectural education, the institutions or bodies that represent the body of practitioner architects and the ability and licence to competently practice as an architect. The paper draws upon information gathered from EU member states during the research project undertaken jointly by Lawrence Johnston (Queen's University Belfast) Koenraad van Cleempoel (Henry Van de Veld Institute Antwerp) for the Architects Registration Board, the Competent Authority for the United Kingdom.
- **1.2** It will be of interest to the organizations mentioned before and the professional bodies and member states aligning their provision for architectural education and professional training in the future.

2.0 Routes to Academic Qualifications

The established patterns of architectural education leading to academic awards were recorded in the initial Council Directive 85/384/EEC and updated on a regular basis by the Secretariat in the Commission Office in Brussels.

These are listed under the name of the member state, the title of academic award "Title of Diploma" and the name of the body or institution awarding the Diploma.

Across the member states the scope and duration of architectural programmes are broadly comparable, and when academic providers align their provision of programmes to the Bologna agreement the model of three plus two will be the commonly agreed system throughout the EU member states.

What our research explored, known individually to each member state and its academic institutions, is the significant absence of an interim academic award, midway through their existing full five year provision.

That means more and more consideration to the award at the completion of the first cycle and allied to that award, what it means in terms of title and ability. Some member states and their competent authorities are concerned about the market value of students at this interim stage and what they can and more importantly cannot do with their services.

2.1 Questions arise: For students unaccustomed to this interrupted study will they want to continue after the primary cycle?

Will these students adapt quickly to taking a period of internship or professional training as is the accepted pattern in several member states (UK).

Will these primary cycle candidates adopt the title or description architect? The Hania agreement of September 2001, clearly stipulates that the academic award at the completion of the primary cycle will not give access to the profession of an architect.

Concerns expressed by some member states included these.

2.2 Rise in the Number of Short Courses

There is concern about the increase in the start of three year degree courses that refer to regional co-ordination with no form of central planning and/or verification of distribution over national territory.

2.3 Increase in the Number of Courses - Not Mainstream

There is concern at the increase in the number of three year degree courses with "extravagant" names; these were being set up by Universities without any actual involvement in terms of checks with professional associations and/or fabric of production, in order to increase the offer from each site, to improve the use of existing academic resources to increase the number of students. This was forming training paths for professional figures that do not have defined specific activities.

3.0 Academic Awards, Professional Institutions, Entry Through the Gateway that Permits the Architectural Candidate to Practice as an Architect

3.1 Protection

An expression or term emerges from the research study on the capacity and competence of persons engaged in the practice of the profession of architects. In those member states where the function and title architect is not "protected" there is complete freedom for any person to proffer and undertake the services of a professionally educated, trained and examined architect. This term or expression "protected" may well have been generated by a perception that within a member state where the title or profession is regulated that implicitly "protects" the body or the individual architect, the person who is properly qualified and competent.

3.2 Regulation

Regulation means more than mere protection for the architect, it also enables protection for the consumer. For example in the UK, the Architects Registration Board, established under the UK 1997 Architects Acts, has a full remit to uphold and protect the interests of the consumer of architectural services, proffered by those architects recorded upon its Register.

3.3 Definition of "Title of Architect" and Competence to Practice in the Profession of Architects

The commonly expressed definition of 'Architect' as per the UIA Accord* on Recommended International Standards of Professionalism in Architectural Practice (Barcelona 1996, Chandigarh 1997) is as follows:

"The designation 'architect' is generally reserved by law or custom to a person who is always professionally qualified and generally registered/licensed/certified to practice architecture in the jurisdiction in which he or she practices and is responsible for the cultural expression of the society's habitat, in terms of space, form and historical context."

That definition would be commonly adopted and few would attempt to disagree with it. The question that must be addressed is the point of "acceptability" into the architectural profession in each member state and what are the necessary criteria for eligibility for entry, and upon reflection of another session in this Conference, the mobility factor of architectural students.

4.0 Entry to the Professional Body/Authority

Is the entry gateway controlled by a state body?

Is the entry gateway controlled by a professional body?

Is the entry gateway controlled at all?

Is there a quality validation process on the academic qualifications?

Is there an additional "professional" qualification examination allied to professional experience as an evaluation of "competence to practice"?

This last question has been explored by this research study. The table* displayed can be verified/confirmed by the delegates at this Conference by completing our short questionnaire which will be circulated at the close of this session. The information on the table has been gathered from requests to competent authorities for each EU member state. However, these procedures are changing in some states and the information displayed may be inconsistent with current events which each of you know about.

You will observe from our table that we asked two questions, firstly "is there an examination?", secondly "is there a requirement for professional training or internship?" We added the word compulsory as required by the body or authority giving entry or admittance to the architectural candidate.

On the receipt of the information we noted a clearer picture of the criteria requirements when the member state had in place some manner of "protected" status as referred to earlier in this text. We are pleased to receive more detailed information of what professional institutions/bodies require elsewhere and how these are also administered.

5.0 Professional Training/Internship/Practical Training

Returning to the requirement for Professional Training/Internship/Practical Training, two aspects arise from the feedback received.

5.1 Question One - Duration and Validity of Experience

We noted that the periods, within each state, varied quite significantly, from a few weeks, to months and years. Further aspects were raised on the qualitative and quantitative assessment of that experience and what happens if a candidate is deficient in some area of that experience? Does that unsuccessful candidate do more? in a different context? or in another member state?

Several member states have good working relationships with the employers and professional institutions and academic providers. Thus attempting to provide the candidates undertaking this training with as much "professional advice" as possible.

5.2 Question Two - Absence of Professional/Practical Training

For those member states who do not demand, nor require a defined period of professional training experience it might be helpful to look at the UIA Accord* again, under the heading of "Fundamental Requirements of an Architect". The definition in that document is as follows:

"The fundamental requirements for registration/licensing/certification as an architect are those skills and abilities that must be mastered through education, training experience and verified by examination, in order to be considered professionally qualified to practice architecture."

The definition goes on to list the content of Article 3 of the August 1985 Directive of the European Community, Directive 85/384/EEC.

Upon completion of the required academic route the successful candidates are, under the UAI Policy of the Accord "required to complete at least two years of acceptable training prior to being examined for registration/licensing/certification."

Are those member states, who do not yet require this two year professional training period and examination for entry to the profession, going to put in place the necessary measures? If so, how are these to be implemented and expedited. We need to gather more information and seek to assist the states achieve an acceptable system. The research showed that there a number of states whose knowledge and systems could be shared with others.

5.3 Extracts from the UIA Accord

5.3.1 Practical Experience/Training/Internship

Definition: Practical experience/training/internship are directed and structured activities in the practice of architecture following receipt of a professional degree and prior to examination for registration/licensing/ certification.

Background: To complement academic preparation in order to protect the public, applicants for registration/licensing/certification must integrate their formal education through practical training.

Policy: That students of architecture be required to complete at least 2 years of acceptable training prior to being examined for registration/licensing/certification (but with the objective of working towards 3 years).

5.4 Practical Examination

Definition: Every applicant for registration/licensing/certification as an architect is required to undertake an examination at the end of the period of training/practical experience/internship that demonstrates attainment of minimum professional competencies.

Background: The public is assured of an architect's competence only after he or she has acquired the requisite education and training/practical experience/internship, and demonstrated minimum competencies in the comprehensive practice of architecture by means of passing a written examination and interview.

Policy: That initial education and training (as set out above) should conclude with an examination in the comprehensive professional practice of architecture including such subjects as: management and business administration, relevant legal requirements, ethics and professionalism, etc.

The definition goes on to list the content of Article 3 of the August 1985 Directive of the European Community, Directive 85/384/EEC.

Upon completion of the required academic route the successful candidates are, under the UIA Policy of the Accord "required to complete at least two years of acceptable training prior to being examined for registration/licensing/certification". Are those member states, their professional bodies and institutions, who do not yet require this two year period and examination going to implement the professional examination? We need to gather more information and seek to assist the states achieve an acceptable professional examination system. The research showed again, that there are a number of states whose knowledge and systems could be shared with others.

6.0 Proposals for Future Action

- **6.1** Sharing and gathering of information on existing practical training systems and inter body agreements
- **6.2** Sharing and gathering of information and content of "professional entry" examinations for registration/licensing/certification to practice as an architect.
- **6.3** Compilation of model guidelines for candidates and practitioner employers on what is required during practical training experience, for use and deployment by all states.
- **6.4** Draft outline syllabus for the content of assessment in the "professional examination" for benefit of candidates, practitioners, professional bodies and competent authorities.

7.0 Objectives for Future Action

In accordance with previously published documents seek to achieve the highest possible standards in academic education and professional practical training experience and professional examination, for the benefit of architects and the consumers of their professional services.

References and Acknowledgements

*Union Internationale des Architectes o International Union of Architects

Accord on Recommended International Standards of Professionalism in Architectural Practice

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Discussion

Coordination by Juhani KATAINEN, Tampere, Finland

Juhani Katainen, Tampere, Finland

I take a few sentences from the program first and then a few comments and then we can enter the actual discussion. There has been a written text in the program saying that there is an affectionate relationship between education and and the profession between those matters and what we have heard yesterday and today there has been some reference to the profession but not so much. We have been looking at it from the educational point of view but we are not alone in this world. We are working for the purpose to provide good profession so, that is the part of the world we have sincerely taken into consideration and then there is a reference to the dynamic changes in this world. The UIA conference this year in May had this kind of lead, there was a key-note speaker Tom Peter, who spoke about changes, and had four items which he called "world changes". He referred to a construction world and discussed the kinds of changes that were visible in United States and around world changes. He spoke about the white color revolution and antiquity. He said that "tall buildings will vanish" and you may think whether this is true or not but this is a very interesting claim. He went to great lengths on this work changes subject.

Then he went on to the firm changes and he spoke about global services although we are dealing here with the European context. We have to remember and we do I think, that actually our work has a global dimension too. I wrote down a small sentence 'eat or to be eaten' and that would also be a good reminder. For us educators, we have to work properly and I don't know whether it is right to say that students are our clients and that schools have to fight for their living or for their existence. Coming from a small country, Northern Finland we have three schools and it is not long ago a decision has been taken to put one school away and that happens to be my school. We fought against that and we could have all the three schools surviving at least up today. I don't know what has happened since I left Tampere. I'll go back on Monday to find out. I haven't had news vet.

The last part of this talk was clients' changes and he took a very interesting subject for us Europeans and for us Northern countries; he took up a human, like our clients, maybe is a fact in the United States but this has not been yet realized. I think Europe is more advanced in this business I hope. So, that was the Tom Peter's changes and we are coming now to this discussion.

Lawrence Johnston, Belfast, United Kingdom

We can go though member states very briefly. As I said there will be a questionnaire for

you to complete and give us updated information. In France, we understand there is no examination for entry. In some Institutions there are six months of internship built in the academic course. I understand that in Germany there is no examination but there is a period of practical training and this is compulsory. In Greece, forgive me but I think it is true there is an examination for entry to the profession and practical training is not compulsory but in order to take the examination I would guess you need a big experience. So, it's not a professional exam it's on the design project.

Juhani Katainen, Tampere, Finland

Well about that, we changed our system two years ago and by that we changed the entry or offer of architect's services and it became clearer. Earlier it was free to anybody and in the association of architects or other bodies of the building industry they made a deal to found a register for architects as well as architects who are registered as planners. Architects also do urban planning in Finland. So, in this registers there are requirements; an architect has to have firstly documents that they have finished their studies according to the European Architects' Directive and secondly they have to have a two year experience. They also have to show the kind of experience they have and the time they spent on it; once they pass the board they go through all the applications. Today we have a bit less than 800 registered architects and they all study, individually. Their documents have been reviewed.

Maria Voyatzaki, Thessaloniki, Greece

I just wanted to add that there is an examination, which it is held by the Technical Chamber of Greece. The jury constitutes of members of the Technical Chamber but they actually examine the final design thesis project that was undertaken at the end of the five-year course at university.

Lawrence Johnston, Belfast, United Kingdom

I know that there is someone here from Iceland. There is an examination for entry to your profession and there is a period of practical training and experience. I turn to Alan Bridges, Loughlin Kealy and James Horan who may provide further information on this. Ireland is not a regulated architectural profession per se by statute but it is at the moment putting legislation through the Royal Institute of Architects of Ireland, which will in fact probably mirror much of the Architecture Registration Board but controlled by the profession. It is interesting that at the moment practical training is not compulsory but it is usual to take the professional examination.

Loughlin Kealy, Dublin, Ireland

Just to say that practical training is compulsory for the examination, you can't take it without a minimum of two years, preferably three.

Lawrence Johnston, Belfast, United Kingdom

In other words, what we are saying is to sit the hour examination. It is implicated that you have periods of practical training experience. And that is part of the component for entry to the profession. I apologize to my colleagues from Italy but we are getting this information from a competent authority so, it is out of date or incorrect now. This is the time to fill the questionnaire. We understand that there is an examination for entry to the profession but we are not clear if it was needed to enter the register and I hear that there are several statutory that it is going through at the moment.

Guido Morbeli, Torino, Italy

As I wrote in my small page yesterday, training period of one year either of the three years after the Laureat and also after the Laureat specialty after the five years is necessary. So, always one year training after both of the three years and after the five-year period. Just for entry for the state examination then there is a state examination. Have I been clear?

Lawrence Johnston, Belfast, United Kingdom

In Luxemburg, I understand there is no examination but it is compulsory to have a period of practical training experience. In Norway, we understand that there is no examination but there is a period of practical training experience. In Portugal the answer is 'yes', to both questions. In Spain, again the situation may be incomplete because we had some difficulties getting all the information through. We understand there is no examination and there is no stipulated compulsory period of practical training. In Sweden, there is no examination but there is a period of practical training experience. In the Netherlands, there is no professional entry examination but we understand that for admission to the BNA, the Architects' Board in the Netherlands, it is a requirement and it can be included with the Academy courses. I don't know if my colleagues are here today.

Carlos Weeber, Delft, The Netherlands

It has been recently changed so, there is no requirement anymore to become member of the BNA. You can become member of the BNA just finishing your academic education and there is no practical training included in the recent program of the academic courses anymore.

Lawrence Johnston, Belfast, United Kingdom

Richard Foque has reminded me that Belgium is very similar to Luxemburg. So, we can complete the table. Returning to the question of professional training or internship or practical training, there were two aspects we got. We noted that the periods required of the state vary quite significantly from a few weeks, to months and in some states to years. Further aspects raised on the quality and quantitative assessment of that experience and what happens if a candidate is deficient in some area of that experience. Does that candidate, who is unsuccessful, need more? Do they do it in a different context or do they move as in some cases to another member state? Several member states have good working relationships with employers and the professional institutions and academic providers. I was thinking particularly of the Academies in that case where the professional

requirement is part of the academic provision and so, they are generating as much professional advice as possible to the candidates.

Perhaps a question that is hard to answer or to resolve here is for those member states that did not demand, nor require a defined period of professional training. It might be helpful to look again at that heading underneath the fundamental requirements of the architects. I'm reading here again from the UIA document "the fundamental requirements for registration, license or certification for an architect are those skills and ability that must be mastered through education, training experience and verified by examination in order to be considered professionally qualified to practise". And that definition goes on to embrace all of the matters that are listed in the 1985 Directive. Upon completion of the required academic route, according to the accord, successful candidates are required to complete at least two years of acceptable training prior to be examined for registration on certification. So, the question arises "are those member states who did not require this period of practical training going to put it in place?". If so, how they are agoing to be assisted to do it? How is it going to be implemented?

We need to gather much more information in order to help those states if they decide to adopt that route. So, there is a considerable opportunity for not only ENHSA, for Hania, for the EAAE to share information and make sure that it comes forward to assist everybody. I just return to the UIA accord again. The extracts from that document are in italics, "you see that the definition is practical experience or training as directed and structured activities in the practice of architecture following the receipt of professional degree and prior to the examination for entry". The background is too complicated or complements the academic preparation in order to protect the public. Here are consumers and protection coming through. "Applicants for registration must integrate their formal education through practical training" and the policy there is, as I said before, the period of at least two years. In the bottom of this professional examination is defined that "as an architect you are required to undertake an examination at the end of the period that demonstrates the attainment of minimum professional competences".

It's quite clear, it is there in the accord and the background to that is that in turn the public is ensured of an architect's competence only to have acquired that education and practical training and demonstrate those minimum competences and is assessed by a written examination and an interview. I would assume it is a professional interview. That policy should include comprehensive of professional practice examining sub-subjects as management, business administration, legal requirements, ethics and professionalism and it goes on again to list what is in the EC directive. I'm waiting to forward your proposals. We are all going to go away from here with some ideas, some thoughts for the future. I thought for the rest of our discussion we should perhaps think about those aspects we could share. The sharing and gathering of information is important. As I said a questionnaire may be inaccurate. We heard from several people today, it's already out of date but we need to gather information on existing practical training systems and inter-body agreements. By that I mean those countries, those states which have a quite close relationship between the academic providers, the professional bodies. We also need to gather and to share the information on professional entry examinations. We all have something in place and then these days perhaps we all do it differently. Perhaps we don't need to have a common one but at least we should be sharing it. A concern I have, because I'm also a practitioner architect and I see a lot of students coming from other colleges both across the member states and within U.K., that we need some more guidelines

for those candidates.

The RIBA have its own, what is known as practical training record or log book by the students, and it has some good advice. But I think it's very important for the employers who are receiving these students to try and give them as broader picture of what they need to satisfy the examination requirements. In my experience and I examined I decided that in my own school it is very difficult for an employer to suddenly have just the right job, the right spectrum of practices, commissions or projects, the right level of responsibility to allow student to have the full range of experience in a year or three years, it is very difficult. So, the employers need some guidelines; a contentious one but one which is probably long out of date. If you considered that the UIA accord has been in operation for nearly three years is that we need some form of guideline syllabus for the assessment of the professional examination. I say that because those of you who are familiar with our regulated body will be aware that architects can be involved in litigation they can be sued, they can be found guilty of professional negligence, they can be stuck off the register and indeed it all comes back to the professional competence of the authority at that time.

It's interesting that over the period that Conrad and I were developing this, we had some worldwide national frights, scares which some of them originated from the U.K. The medical profession has been extremely worried about these disciplines and procedures you've all read and seen in the press, terrific stories of doctors and ironically those medical boards the BMA, the British Medical Association and there are other authorities turning to ARB which is perhaps the most regulated body of the in the U.K. and tell us how you do it because we have to put our house in order.

I'll finish on a high note. I think we should define our objectives for future action, we should say that to achieve the highest possible standards both in our academic provision, practical training experience and in our profession examination and that should be for the benefit of the architects and the consumers of our professional services to say there is no such thing as a free lunch you all have to do a little bit of work for us. This is a onesheet questionnaire. We will hand it out to you shortly and what we are asking you to do is; to tell us who you are, what state or country you represent and the organization title you hold and then under practical training or internship do you require it, 'yes' or 'no' to update our table and if so, how long should it be weeks, months or years and then perhaps more importantly across here is it assessed? Is it monitored and is that assessment well if they have done in two years it doesn't matter whether it was good or bad it's two years. I don't disagree with it. Is it qualitative, is it quantitative and then when it comes to the examination is there once again yes or no. If there is one how is it assessed is it written, is it electronic, is it a record of experience as Maria Voyatzaki was saying. Does it have to do with the design competence and interview, are there question papers on professional practice and is there going to be some form of professional interview? Who holds that and in some states it is a combination of the profession and the Institution. So, I open that to the floor and perhaps Juhani we can take some questions.

Juhani Katainen, Tampere, Finland

There are many issues here and maybe we can deal with them. We have now about one hour's time. There was a presentation of the other notes about different countries. I

understood that Herman was looking at his own notes and it is possible that when doing these questionnaires, the person who gives the answer affects this research. Things have to be then corrected and that is a procedure. Anyhow, this is a part of the study and I think the authors wish to continue this activity. If I understood right they cannot only speak for themselves, the financial part is now finishing for the study on that level.

If this conference would like to go on with these matters, it could be worthwhile thinking that if we are getting some backing from the EU, this kind of activities could be done by the same offers. I don't know but it's just an open-ended question that could be answered here today. This research, I understand, is a study for the future and it has been derived from the fact that what we are shown with this sheet from three different cases is that there are countries with one system and countries with another system. If students are going to use the mobility for the future, they come to some country and ask for registration. So, now the ARB has taken this challenge finding out what to do about it. I heard that they are dealing today with around 700 cases per year with architects coming abroad to the U.K. wanting to be registered so, they must have some practice on that. Other countries' registration board are also facing the same problems. It is very good, therefore, if this body -the educationalists- could provide information and maybe take those on board in their own activities and then assure our registered keepers and practitioners later that we are dealing with proper "products". So, there is a question of the path of learning like we have been talking about yesterday and today and even tomorrow. There will be different paths of learning to become an architect in the future. I think the situation was easier when we knew how our students were educated in each country and each country was providing this registration matters. In the future we will look certainly different.

Then there was an interesting work for me. The work award and Lawrence used it after three years studies and students are getting awards of this particular degree that is one new way of thinking about this matter; that the students are awarded for the studies in between being architects. It's interesting to lead one study that award matters sometimes and I think in this case and in this talk and interpretation the problem has been set to the registration but it is only a formal act. We are talking about how we are entering after our education to the profession. I have to remind you that we have this professional organization of member state organizations ACE Architects Council of Europe, which is also very interested in this specific question. It is on their strategy papers and I would be very happy to convey to my board at next week's meeting that the EAAE is a right form to work on those matters on that level but that really means that some work has to be done not only words but work and there was an interesting issue about UIA accord. UIA has produced in a very short time actually in its existence very many good accords worthwhile mentioning and worthwhile reading you probably have them all but if you have not, please try to get hold of these accords. There is one accord on the education of the architect. There is an accord on the validation of the architect and there is an accord on the professionalism of the architect. They all contain very interesting and very well-thought out themes inside whether you accepted or not they have been accepted in the UIA contents to be followed as advice. The UIA as you know is a voluntary organization, it can't construct any laws but I think has a long-standing effect actually when thinking backwards, when today we speak about the European Directive, we refer to that UIA accord which is saying this and that about architects' education.

What actually really happens, I was present in that meeting the European Architects' Directive which was introduced to the UIA Accord and then it comes back to us; we are

using it when we are defending the Directive what you probably know it's under big threat today. So, there is in Lawrence's and Coenraad's papers a list of actions and I hope that maybe not today but these actions and proposals for actions should be taken seriously put forward maybe in the EAAE Newssheet and then further on to be answered in a proper way. There are very interesting views. This is also containing the view that the registration is necessary everywhere, which is not the case today but may be, So, I'm personally involved in ACE circles, negotiations between ACUE and UIA incorporation in order to create a possibility for their architects to come to Europe, to work in Europe and our architects to go to the United States. This is the part of the written documents we have to be registered and we have to prove what we are. So, when we are talking today about helping our architects, which finalize their studies here in Europe to go abroad around the world. So, this is a very good point also to remember not only in a European context. There is this interesting question whether we have to create the acceptable professional examination system as we saw from the list some countries have them, some countries don't and this is also part of the business maybe we can see their different ways maybe there is not only one good answer, maybe we have more. So, the floor is yours and there was a colleague from Ankara, you wanted to say something?

Marina Roosebeek, Amsterdam, The Netherlands

We have in our school a special system. We have a Masters course and our students work and study. So, they work part-time and study...they follow courses for four years and in that case I have to say that they study to be an architect and they don't study just architecture. So, at the moment in the Netherlands you can register without practice doing the two-year practice although there is a discussion if it is necessary to do it; to have every architect doing the two-years of practice but for the students of our School it is different. That is because they do four years of this and in the Masters course, the two-years of practice are included already. For us it is really important because it is not only an internship but doing this is already part of starting a carrier, you know. So, in our vision it is really the way for an architect to study, but I don't know if in other countries they have this system. The only school I know is in Boston, in the United States. There is a School there with the same system but in the Netherlands we have five schools like this and for us it's really very good.

Juhani Katainen, Tampere, Finland

I think we have two matters here: the existing system about which we have talked a lot, but then we have the coming world with the mixtures, which we can see. I think the latter is really on question and we start wondering what should be done. Naturally we can speak about both situations and maybe even argue which is better.

Alan Bridges, Glasgow, United Kingdom

It's a comment on two of Lawrence's proposals for future actions. The second one, the sharing and gathering of information and content of professional entry examinations and the third one, the compilation of model guidelines for candidates and practitioners-employers. In Scotland there are six Schools of Architecture and together we form the Association of Scottish Schools of Architecture known as ASSA. ASSA together with the

Royal Incorporation of Architects in Scotland have all collaborated to form one examination for professional entry examination, which is applied throughout all of these schools in Scotland and is administered by the Royal Incorporation of Architects and in association with that we do have model guidelines for candidates and practitioners or employers. So, if people were not aware of this I'm quite happy to send a copy of their documents to Lawrence or to you as a possible way of approaching it. One other question occurs in my mind. Having distributed to your survey questionnaire to everybody what you are going to do if you get responses from people from one country, which differ in the way they interpret it.

Lawrence Johnston, Belfast, United Kingdom

All we do is scratching our heads to get the initial information. I hope everybody in the room will complete the questionnaire, not just the sixteen member states listed in the directive. We would like to have a full picture. I think, Juhani Katainen, we want to come forward to the ARB with some deep understanding of what is happening and, as you quite rightly said, it has to be updated maybe every six months at least. When, for example, I am concerned about a student, who has traveled across Europe, and has picked up academic awards, has worked in practice and then maybe seven, eight, nine years down the line presents himself to a member state and asks for recognition I want to know what to say. If I say 'no' that would be unfair to the student in many ways and we should be anticipating that move, we should anticipate the needs and we should be able to advice those candidates on what they need to pick up as they go.

Juhani Katainen, Tampere, Finland

There is a question which is what difference it makes when we have entry examination and we are not taking everybody into the schools. If we then have free entry after three years and we look at that system, what do these differences mean? This is one part of a whole question and I think at a very big scale it's essential that we discuss these matters in each country with our professional bodies of architects. How do they feel today about these questions? Information about these systems should be condensed, in a way, and easy to access and read. Then we should have also, let's say, officer launchers maybe for this study of our associations. It could be done by using ACE. If ACE sends brief information to each member association about the matter and some simple questions to be answered, we could gather these answers as this is important to practitioners. It's essential I think and it should be studied from the side of the schools and the side of the practice.

Lawrence Johnston, Belfast, United Kingdom

Well, I think that's the way forward. Through this network we can gather this information and distribute it to all.

Herman Neuckermans, Leuven, Belgium

I just wanted to comment and to remind you that in the Newssheet number 61 and the one before number 60, we have published the state of the art. Now, that was a year ago

I think about all the European Institutional contexts and what is the situation in relationship to the access to the profession for more countries than they are listed here, already and that we did by double check that means that it's not just an answer from somebody but also checked afterwards That's it

Juhani Katainen, Tampere, Finland

It is a fact that we would have a chance, if Lawrence and Conrad would go on with this study and these issues would be examined further.

Van Cleempoel Koenraad, Antwerp, Belgium

As a reaction to Herman Neuckermans. We viewed the survey and in fact it's listed in the bibliography of the consultants' sources in the final report. There is also a survey done by the Collegi di Architecti in Barcelona. That also was sourced and another is also published on the Internet by the Italian National Order. There are a lot of main sources.

Juhani Katainen, Tampere, Finland

Maybe we have to apologize. The fact that this study is confidential does not allow us to access it fully. So the information is not complete. Maybe when they are allowed, this research will be open and published.

Per Olaf FJeld, Oslo, Norway

I think the most important thing we can do in this sense is not to kill young architects and their ambitions.

Juhani Katainen, Tampere, Finland

That is very true, but I think that here we discuss matters in a more, let's say, bureaucratic way, but what we mean I hope is to create a very good climate in our Schools in order to be certain that our students get in the profession the way they hope and wish. Here we deal with comments and points but that is just preparation for the good work, I hope.

Marvin Malecha, Raleigh, North Carolina, USA

Just one caution regarding all these from the American perspective. There is a lot of discussion about model curriculum and all of these sorts of things embedded in the National Council of Architecture Registration Board in the United States is a model curriculum, which every once in a while raises its head that the schools have to deal with. So, I guess what I would urge you as you think about these commonalities and crossing boarders is to not allow yourselves to be backed in to a model curriculum by another association.

Juhani Katainen, Tampere, Finland

So, you are warning us not to take them on board or to ignore them?

Marvin Malecha, Raleigh, North Carolina, USA

I'm warning you to not allow somebody else to tell you what to do from the perspective of Registration. In United States whenever we hear the words well health, safety welfare we get very nervous because that generally is the clock for one organization to tell the schools what to do.

Juhani Katainen, Tampere, Finland

You are absolutely right but maybe we first gather information and then decision-making is not happening. Here we are just providing maybe information and maybe good advice but you are very right and schools are independent. I'm very happy to speak about Europe; that actually each country in our basic contract between each other in the EU context each country is free to do their education. Directives give some hinds on what direction you should go in but they are not telling us how the country is running their educational and I feel this is a very great freedom. We shouldn't lose that freedom. We can talk and I think we should talk about the goals and exchange experiences and that's it.

Lawrence Johnston, Belfast, United Kingdom

After a discussion with Juhani yesterday and working with Coenraad this morning we came up with some further points for consideration and discussion and I'm listening very carefully to Marvin because the same problem exists in United Kingdom. Juhani Katainen and others feel that a relationship between the academic provider and the Institution can be quite loose, can be unstructured, yet in some member states we know that it is very structured. I think the freedom to develop and implement a non-professional program is held in very high regard. It should be so because we are providers and our freedom is hard in many institutions but equally I think access to professional bodies is also an important value.

We heard from colleagues that students want to qualify in order to be marketable. They want to make money beyond the fact that they have spent seven or eight year qualifying or doing academic work. But that puts serious pressures on all of us; the academic providers, the professional bodies and the competent authorities. Those of you who read the press about the United Kingdom will know that our RIBA and the ARB have waved their differences publicly because ARB is a transparent body and occasionally, challenges and disagrees strongly with the professional body, which leaves the school wondering. They are meant then to cope with it but one question is the absence of a contractual agreement between the academic provider and the professional authority. Effectively, it means that these providers are working at risk. We are putting a lot of input into something but we know that the financial game comes back to our students. So, somebody is working a risk. There is a contradiction, and this is the point made by Marvin Malecha and others. If the professional body wants the schools to do more, more project management, more business management perhaps more contractual issues and we don't start to fight the students, then how will they cope with that? These pressed students, these pressed resources and staff. When a professional body wants to change direction or put the emphasis on certain subjects that means very big budgets. Alan Bridges, other colleagues in U.K. and I know about it. They want the students to come with their competences and

that can only be done by mutual agreements. There is another danger and that is when the academic provider wants to innovate, wants to take a risk, wants to do something different. Then there is a contradiction that the professional authority will not sanction it. So, who jumps first the school or the profession? Students can be caught in the middle. A real difficulty for a state where the courses are validated or accredited; it's actually happening to our knowledge within the British Isles and that is where the competent authority simply wipes away its validation overnight, after a visit, and leaves the students caught in a very difficult situation. They have a degree, they have an academic award but it's not recognized. There are some five schools within the British Isles who have lost their recognition and those students are hung literally in the vacuum because they have a degree but they can't go into the profession. So, they have to go through another handle. But the last one I leave you with. One of the very severe public and transparent criticism of professions is that when a profession is criticized it comes back to the authorities and bodies with public weighing behind it. We've seen it with the guidance, we've seen it with medics and you can't run away from that in modern society.

Juhani Katainen, Tampere, Finland

I think what we really would like to have is the reflecting position between academics and practitioners. Maybe in a small country, like in Northern Europe, we have I feel very easy connection with our architects' association, the practitioners, the students and the educators. Maybe the countries which are legally bound to do many things in these matters are in a more difficult position. From my point of view we react and reflect matters and even are ahead of our practice for example. This media technology is accepted very rapidly in Finland and in my school we started to teach our students how to use these computers and they got jobs because they went to the offices and could work with these tools while in the offices the old architects couldn't do that. So, they teach the older practitioners actually in this case. A year ago when the change of our legislation architects' position was happening in the building construction process -architects today are expected to take more a leading role in our world than it used to be- we started with courses calling them "the architects having this role". These courses are also actually suggested by the profession. We run two kinds of the same lectures but they are for the profession and the students. I think this kind of reflecting role of schools and a practice should exist and should be, let's say, allowed before the matters go too far.

Carlos Weeber, Delft, The Netherlands

I want to respond to a comment. According to our law, our education in Delft is not a professional education; it's only an academic education. So, we have no responsibility for the profession at all. We are free to do what we like and in general, we consider this position very profitable because we feel that the profession is in many cases some steps behind our development. You know, I think in countries where the profession manages to do education like in England, the education is a little bit retarded in many ways. So, that's the difference with the Academy in Amsterdam, which is a professional training. We are not, we are only academic architectural education and we don't like the idea to have any direct contact with the professional institutions.

Juhani Katainen, Tampere, Finland

Well, this is a very interesting point on something similar to what I was reflecting about this matter. I think this is a very nice policy to have schools free to think forward because that is our job, what we have to do. We are not looking backwards. We have to look also forwards but then our task is also to produce existing skills that you have to be able to have in this world at this moment. We have to look very far. That is the way and then comes the question whether this creates too big a distraction between schools and the profession. I don't know how this is happening but you were telling us yesterday, if I remember right that your young architects are given directly jobs without any formal practice and they do fine. That was a program in the 90s that created a new fame for architects in the Netherlands. I think that has stopped, now. Am I wrong? It is still going on, ok. I read somewhere that financing is going down. So, this is a very interesting question; actually what should be studied more closely and how schools could lead the profession? But if we are so hostile, we can say to the practitioners that we do not care on what you are doing. We shouldn't do that because we need this influence but I agree at least in this case. I don't know. Lawrence may have a different opinion that the system of freedom in your country is better than maybe in England. I don't know but Lawrence can say that we can have a battle.

Carlos Weeber, Delft, The Netherlands

Most of our teachers of course are architects and practitioners there is a connection, I have this experience personally and there is always a conflict.

Juhani Katainen, Tampere, Finland

Yes, that is true. I think if there is no country in Europe having schools with a purely academic content and no practice. I feel that it is a richness of our vocation that we do both and deal with both. At least in Finland today we are the only profession getting the professorship life-long or in five years without being a PhD, without having done a thesis. Other professions have to have Doctorate in order to be educators on a professional level and that has been clarified. That is because they are very good architects and their architectural work is proof of their capacity.

Per Olaf Field, Oslo, Norway

I think this is very much a critical point and it's a point in which each country within their schools really has to solve because the so-called professional is not a homogeneous body at all. There are many different types of professionals so, in that case we certainly have the full right to criticize the profession though we have a dialogue with the profession but the profession itself it's not our goal at all.

Marvin Malecha, Raleigh, North Carolina, USA

For the last three years I've been doing personal research on what's going on in design offices, just architectural offices and in the process I visited probably 250 design offices ranging from industrial designers to architects. I've written a book which is coming out,

but the point that I'd like to make is that we have to be very careful when we say as schools we are out in front of the profession. In some ways we are and in some ways we are a way behind what's happening in the profession because the profession is turning into a very agile figuring group, which is very project based. Associations are forming and reforming, offices are moving back and forth across oceans, skills are changing, the notion of management in offices and how management in contracts are effecting design practice is changing dramatically and it's changing so quickly, it's a way out in front of what we can reflect in the schools and in some ways that's ok.

On the other hand, we are really sort of the last place, where the traditional and cultural values of the profession of architecture are transmitted to the students. The offices now very rarely spend time talking about the way it used to be or how we do things because the moment an office starts to talk about 'we've always done this way' that office is probably in decline and so, in that sense we don't only act as the conscience of the profession; the profession acts as the conscience of the architecture schools and we exchange roles very freely. So, all I would say is in my sense of experiencing what's going on in the offices and experiencing what's going on in the schools, we change roles over who is the innovator and who is out in front of the other. That's the spirit of what we have to talk about. We have to be very careful to think that we are always out in front of the profession. Many times we are a way behind of what's going on there.

Stephane Hanrot, Marseille, France

In France, as you said, the license to be a professional is given with the diploma. That poses some questions in the content of studies regarding to the education about regulations, to the weight the regulation courses should have in the curriculum of Schools of Architecture. There is something that has been developed by the Board, which is a kind of permanent lectures on different subjects that concern the very professional activity where the young architects or others who are interested can go and pay for two-day courses on the new regulations for public contracts and so on. So, I think it's interesting also to speak about education, not only within the period of studies, but also about the way that schools of architecture participates in the self-education of the architects. It's also very important and it is mentioned as important not only in the Bologna Declaration but in further conventions related to the education in the European system. So, the question is how to participate in the education of architects who will be professionals.

Juhani Katainen, Tampere, Finland

We should not forget this cvd that programs for life-long learning and also that is a question what schools should remember, I think you do, but this is also an interesting question how we are working with practitioners further on, because in many countries that is the claim that you have to have those cvd hours per year, a certain amount to keep yourself in register.

Guido Morbeli, Torino, Italy

It might be of some interest to this assembly to know something about some aspects of the professional architect. I mentioned yesterday the case of Italy to a group of you, but I've been asked to say it again, because not all the people know it and might be helpful for better understanding. So, we went to a certain warm enthusiasm to this three-plustwo system in many schools of Italy because we had this problem of terrible length of time that students stayed at University, for seven, eight years in average. This was because there were many, let's say, weak vocations for architects, this was quite a problem. The funny story was that for a long time there were as many students of architecture in Italy as in all the rest of Europe. This is slowly going down but there is also a tremendous amount of architects in Italy.

One of the reasons why I said that the older architects were reformed last year forming a new kind of profession was that we are only in the second year of the tree. It will be possible to get out and after one year of training become a junior architect. This was mainly the long standing fight against a category which was the other exaggerated extension of a technique called geometry. Geometry, as the Greek origin of the word says is the measure originally; measurements of the ground. So geometers were both for measuring the fields and also for doing a cadastre etc. Slowly the geometry come out at the end of the secondary school so, one becomes geometer when he is 19 or 20 years old. So, the same is for the people getting into university and starts in architecture to get out of the secondary school from the various high schools that are in Italy. They don't get into a professional order, it is an institution. It is a sort of small order but they are very far from all. Geometry more and more had a possibility of doing things; especially active small buildings which help for the generating larger buildings. I don't say that many of them are not good but they have no culture. You can feel only a very technical type of culture. They copy a lot of handbooks and magazines something and they can do things to get them a lot of clients. We have many architects in Italy but geometers are far more and so, in this way by this necessary loss of culture, or let's say ignorant people. We have beautiful towns, especially in the outskirts, but small towns and the countryside has been absolutely compromised by large number of small buildings made by geometers.

You'll say what does this have to do with the possibility of entering the profession after three years? Because having embraced the three-plus-two system what could we say to the people getting out in the three years? You can do nothing because you are unprofessional? They would say then but why should I leave at three years if I can do nothing. I'll do two more years maybe an eight, a nine, a ten year-study and they know they will graduate so, we would be back to the system that was there before. So, whether we say 'well, why to do nothing', it's much better to become a geometer and so, we turn our back.

Officially, as far as I know the profession of geometry has been abolished but the geometers were not abolished we could not kill them so, they are still there and they are very powerful and they "kill sometimes others". So, this is to say that one has to be careful about the kind of professional activities that the architect can do and determine the attempt. There is a natural market made by this from the bottom. On the other side there is a competition of the engineers because civil engineers have also a good reputation in Italy. Architects are sometimes thought to be a bit funny. People think only that they are a bit leftish, they are worried about everything etc. Engineers are very strong, very determined and so they know what to do. They are able to make a building structurally sound and so, why to go to an architect, who is the man to make things we have to design, they go to an engineer.

So, with this system, as you can understand, maybe the country is happy that has not that problem. But this frame has very much determined the choices of the parliament and the universities. Furthermore, the Italian professions depend on the Minister of Justice not by universities. So, they are two separate ministers and this also may complicate the things a bit. I don't know if I have been exhaustive if you have questions. I can give you some other answers. Thank you.

Juhani Katainen, Tampere, Finland

Thank you for the information. It looks to me that we have plenty to do. What ACE is doing today is this problem you mentioned. The Architects Directive has much to do with that and then the schools have to compete. We have to, let's say, assure our students that they can make do these things better and if we can't assure them we are losing ground as you told us.

Herman Neuckermans, Leuven, Belgium

What I was going to say as a reaction to your presentation and especially the last list of topics which were more or less problematic is that, I think, architecture as a discipline can only become full grown and flourish in the tension between the partners and these partners amongst others are the practitioners and the educational people. So, I think that there is of course, a complex relationship between both. It has been shown here. Carlos Weber was in fact objecting against too much impact of the practice and he is a real practitioner, Juhani Katainen the same. So, this point is complex but there is a difference between relationship and some kind of dependence or obligation. I think in some of your statements I read some dependence, which is too far from me. I would go for conversation, communication but independence and it is in this independence that new ideas can get across and sometimes they come from practice. When practice is ahead sometimes it comes from education. When education is ahead because it is backed by research then normally it should generate things that for the future have to be introduced in pedagogy and education and then later on to come to practice.

Juhani Katainen, Tampere, Finland

That is the same thing that Marvin mentioned. Independence is important I think that's why we are here.

Loughlin Kealy, Dublin, Ireland

A number of people from our own discussions around here when we do find ourselves trying to generalize across very very different experiences and orientations but sometimes I think back that if we went back maybe a couple of dozen years and looked at people who were educated traditionally as architects and perhaps in the narrowest sense, they found themselves doing very diverse jobs throughout their life times. They did not find that it was actually a hugely inhibiting circumstance and also other people found themselves practising the discipline of architecture through buildings buildings. So, I ask myself why this is. And I think it is because of the nature of architectural education and what it is we are trying to do, where there is dependence on the project by a particular

intellectual orientation that we are trying to develop. I have no particular problem with close relationships with my professional Institution. I'm not led by them. The education as delivered in the school is not led by a professional institution.

I'll give an anecdote from the very recent past; we have just had our five year accreditation from the Irish Institute. It happens as I say, every five years that a formal visit is very awkward. It's very difficult and time consuming and so on. But as a result of the time we spend speaking with the profession's representations we have come to the conclusion and they came to the conclusion that they need to understand much better the ambitions of the school of architecture so that we could create a better two-way street so that there was actually better communication, it was a more fruitful exchange of ideas.

I think that the profession is intelligent enough to know that having to cope with day-to-day stuff is not always the only thing they have to do though I do take very much on what my transatlantic colleague has to say about it. They know that universities and the schools provide an opportunity for reflection, a very precious time that is bought and the expense mainly of the taxes very very often but there has a value to the profession and to the society that can't be reduced, it can't be treated in a reductive way, a simple part of a machine like process that begins when you enter a school of architecture and ends in your practising as a professional. I think there is that intelligence there and I think that it's part of the school of architecture's role to pastor that kind of intelligence. So, I would see that as not a passive acceptance of ordinances or anything else but something, which is a dynamic relationship, which schools of architecture have to pastor and work on themselves.

Juhani Katainen, Tampere, Finland

Thank you. It's really true when I say to my students that these are the last chances for you to be creative because when you go to the offices you have to look at what the others are doing and so they are taking that chance and that's what you are referring to. Leading the schools has a possibility for freedom of thinking and Delft is an example and Netherlands's example is in this case very prominent because of the publications as well of the results. Not seeing any hands raised, I feel that we had a very interesting hour or two and I thank Lawrence Johnston and Coenraad Van Cleempoel for their introduction which gave us the possibility to think about these matters to conclude and say that there are so many issues that we have to address. It is not easy to come to any direct conclusion but I think one word could be said and this is what Herman Neuckermans said in the end; that we want to be independent and, in the right way, we should be independent in a creative way. We have to look at the society and the society to look at us but we have to keep in mind that we are presenting the creative minds and we have a fantastic potential with our students. Thank you.

Keynote Speech by Dan Hanganu, Architect

Presentation of the honorary guest by Constantin Spiridonidis

Our third key-note speech and our fourth key-note speaker is Dan Hanganu. Dan Hanganu is an architect and a Professor in the School of Architecture McGill University in Montreal, Quebec, Canada. It is impossible to present you all the spectrum of his activities in few lines. I can just mention numbers and I feel that through these numbers we can probably have a picture of his profile. Dan Hanaanu has a very lona experience in teachina as visiting professor in United States of America, Mexico, Argentina, Chile, France, Italy and China. In his professional practice he has for the last two years six ongoing projects. which are under construction with a lot of millions of dollars budget each one. Thirtyseven projects developed after the '80s, forty-five architectural awards for projects and works done in Switzerland, Morocco, Romania and more recently in Canada. Ten first prizes in competitions from '86 to 2002. A lot of his buildings appear in publications in China, Argentina, Canada, United States of America, France, Great Britain, Germany, Holland, India, Italy, Japan and Romania. A big number of exhibitions hosted his work amona others' and some of them were dedicated to his own work exclusively. We are really very proud to have Dan Hanganu with us and on behalf of the Council of the EAAE I would like to thank him for accepting this invitation to participate in this event and to deliver his lecture with the title "Theory and Practice".

Theory and Praxis

Dan HANGANU, Architect Montreal, Canada

> "The man acknowledges no act which has not been previously lived by someone else, some other being who was not a man. What he does has been done before."

> > Mircea Eliade

In our fast changing times, the contemporary social fragmentation, the redistribution of the levels of decision and the current crisis of participation have no doubt a major influence on our behavior and production.

In a world - I quote Philip Johnson - a slippery meaningless world, where certainty is not even desired, much less attainable - end quote - in a world where the image replaces the word, **architecture**, more and more reliant upon the talkative, becomes the high blaze, fire works act

in continuous search of acclamation and prime time distribution.

Eisenman says:

"Society has no' satisfaction from the actual product of our labor, people are only interested in the mediated result."

I am still interested in l'Abbe de Cordemoy's definition of architecture made in 1706 as "ordonnance, disrlibution et bienaisance".

I am still interested in what constitutes the **difference** between permanence on one hand and '!that George Steiner calls unique, immediate and transitory on the other.

The difference between the architecture which passes the test of time and the volatile, trend-oriented "consummation du menu du jour".

I would like to cite Ken Frampton. He says:







Quebec archives at Montreal, Montreal 1997

"Architecture - it is as much about place-making and the passage of time as it is about space and form.... In this sense, it is neither high art nor high technology. To the extent that it defies time, it is anachronistic by definition. Duration and durability are its ultimate values. In the last analysis it has nothing to do with immediacy and everything to do with the unsayable."

It is in this context that I personally approach our contemporary behavior in search of education, critical knowledge, past experience, roots and understanding.



Faculty of Law library. Mc Gill University, Montreal 1996-1998





Le théâtre du nouveau monde. Montreal 1994-1997

I was born in Romania, a Latin Country. I was educated under Slavic influence by a misguided regime, I grew up with a Byzantine heritage and then I left everything behind, more than twenty seven years ago. I left Bucharest to go to Paris, which I left for Toronto, which I left for Montreal.

It is obvious that I established a connection between my experiencing different visual events and the way I practice; especially the results achieved.

To evaluate this, according to Rafael Moneo:

One approach would be to study the evolution of the architect and his work over the years, indulging in the pleasure of exploring how influences and circumstances have manifested themselves in his career.

First, I will show some images with certain comments. You will notice a discrepancy, an apparent disconnection between what I say and what I show you. This is intentional.

I will then present some projects, furniture and objects I have built, in the last twenty years, in which the echo of those memories can be traced.

There will be no conclusion.





Le cirque du Soleil. Le studio de création et de diffusion, Montréal 1994-1997



H.E.C. Ecole des hautes études commerciales de Montréal. 1992-1996



School of Design University of Quebec at Montreal 1992-1995





The picture you see was taken in the Montreal Harbour. It represents a frame, a view through a limited opening.

It contains what we may consider the essential, hence eliminating the disposable. It deals with the notion of limits and limitations: central and peripheral.

Behind, there is an object of unknown size and shape. The more we advance, the more we see. Discovery and surprise. All this happens in a given frame which we accept or not.

Like the skillful manipulation of the skin of the object, the envelope of the architectural space contains all the elements of the tectonic vocabulary, from detail to intentional gesture acting as divider as well as unifier, but always favoring the view, the continuity of space, the framing of what is to come.

It is in our power to set boundaries for ourselves. It is in our own power to disregard them.



Pointe - a - Callières. Museum of archeology and History of Montreal 1990-1992



Abbey Church. St-Benoit du Lac. Quebec 1989-1994





Chaussegros-De-Lery Complex. Montreal, Quebec. 1989-1992



Val de l'Anse. Nuns' Island, Quehec 1988-1990



Clos st-bernard. Qutemont. Quebec 1986-1987

I would like to associate these ideas with the natural behavior of building materials, their vocabulary, their limitations and... beyond that.

Notice the strength of stone, the prime form out of which the composition, the work of art, evolves.

Notice the resistance of the subject to its tool, the conflict, the opposition and the effort which goes into bringing about this metamorphosis.

It constitutes nevertheless a reproduction of what already

I would cite again Moneo:

"Things, utensils, architecture, have no need to be subjected to continual changes just for the sake of respecting stylistic evolution."

I associate the interaction of tool and object with the dialogue between metal and masonry; each behaving according to their own characteristics, strengths and limitations.

I like to parallel my intentions to those of George Steiner's, when he talks about the scientific and humanistic aspirations of human beings.

- Masonry: solid, limited to its own predictable known strength, representing the humanistic as in a painting by De Chirico where time and place seem to coincide.
- Metal: more inclined towards new boundaries of discovery, versatile and continuously changing, representing the challenge, the boldness, therefore the scientific.

They both sense the play of gravity and abstraction of geometry, <u>reason and memory</u>: masonry striving for timelessness above the transitory succession of events, whereas metal, beyond its structural endeavor, gently transcends the boundary of decoration.

I would like to mention Semper's theory of architecture which derives its formal elaboration from the so-called industrial arts and, above all, from the craft of textiles.

Semper insists on the primacy of tectonic form, urging that one decorates construction rather than constructs decoration.

It is a characteristic which is shared by objects and buildings; or in other words the craft and architecture which operate on two levels: the object which could serve a purpose, a service and architecture providing a space which elevates the experience of use.

It is these peripheral components of the contained space which emphasize the most visible metamorphosis in

contemporary production. Faithful to today's priority of the perceived reality over the actual product, the skin becomes volatile, transparent, immaterial, changeable and obedient to temporary constraints.

Here we approach the contained image: mass and void, opacity and transparency, reflection, duplication. Real and reflected, reality and perceived reality.

Chapter 5

Quality Assurance and Academic Assessment of Educational Programmes in Architecture in the European Higher Education Space

In the last Meeting of Heads, the EAAE committed itself to the participants to undertake initiatives in the direction of the development of a quality assurance and assessment system tailored to the needs of architectural education and respecting its diversity. It became clear that this system would refer to the 'academic' assessment of the educational programmes by means of a peer review and not to the 'professional/ governmental' assessment of the diploma leading to the accreditation and the validation by the professional/governmental bodies of the member states. The problem of academic evaluation, and the effective assurance of the quality of architecture school curricula, is a thorny subject in many ways. The perspective for the creation of a European system of evaluation is a challenge despite the obvious difficulties it entails. Along these lines, a first step is to record and discuss the various methods employed by schools of architecture and assess their efficiency given the particularities of architectural education and its divergence in the structure and organization of studies in different schools of architecture in Europe. ENHSA has already scheduled the construction of a record of the various quality assurance systems in Europe and a auestionnaire will soon be circulated to all Schools. The conclusions of this inquiry will be presented during this session.

Introduction to the Session

Panel: Katia Baltzaki, Thessaloniki, Greece

Chair: Herman Neuckermans, Leuven, Belgium

Discussion

Coordination by

Herman Neuckermans, Leuven, Belgium

Implementation of Self-assessment Procedures in European Schools of Architecture

Katia BALTZAKI Thessaloniki, Greece

The willingness for participation in the development of quality assurance and assessment systems, tailored to the needs of architectural education was stated in Hania in September of 2001.

In the same statement, the importance of respecting the character and diversity of architectural studies, for schools going through the above procedures, was pointed out as well. It became clear that schools are only concerned for assessment systems with a strictly academic profile. That is, assessment systems that are not necessarily relative or influenced by any accreditation or validation policies coming from professional or aovernmental bodies.

Quality assurance and assessment systems in this context are thought as tools for the development of architectural studies. They can also contribute to schools so that common and urgent issues are faced successfully. The compatibility of studies and diplomas awarded, the formation of a broadly accepted set of criteria for the definition of quality in architectural studies, the facilitation of the mobility of students, stuff and ideas and the preservation of the identity and the unique characteristics of each school in its given social, cultural, academic and legal context are some of these issues.

The precondition for these systems to be formatted and implemented is an extensive dialogue and collaboration between schools.

As a contribution to this effort and within the context of the project of European Network of Schools of Architecture, a questionnaire was formed about the implementation of Self-assessment procedures in European Schools of Architecture.

The questionnaire was instructed in order to scrutinize and write down any effort concerning considerations, decisions or implementation of self assessment procedures.

National policy for assessment issues and the existence of a relevant statutory and legal context including the operation of a national coordinating body were explored.

Methods for applying self assessment and quality measurement procedures were inquired. Evaluation of the results of the above efforts was additionally requested.

It was also thought as important to search for the connection between self assessment and quality management systems, as far as architectural education is concerned, considering the conclusions of the schools.

The research hasn't been completed yet, as a matter of fact it has just been started, and that is why presentation of results isn't feasible yet.

Nevertheless, a presentation of the questionnaire in addition to the tense that has been

registered from the answers given until now, is considered to be supportive to the actions developed by the Network.

In detail:

The questionnaire is divided into three parts.

Questionnaire Part I, is addressed to those schools which implement or decided to implement, self-assessment procedures to their educational practices.

Questionnaire Part II, is addressed to those schools which negotiate with the perspective of implementing self-assessment procedures.

Finally, Part III is addressed to the schools that don't apply or don't intend to apply self-assessment procedures.

From the answers given so far it seems that a remarkable majority of the schools implement or intend to implement, self-assessment procedures.

There in after, it was thought interesting to find out how is self-assessment generally considered by the first group of schools.

Until now, the majority of schools has a positive attitude and the most enthusiastic consider self assessment a schools' route to self-awareness.

Self-assessment procedures may concern school's activities in general or activities referring to specific areas such as the curriculum, a specific course, an academic team or research activities.

The tension that has been noted indicates that the majority of schools apply selfassessment procedures to all their activities.

Assessment procedures were often related to certain funding decisions or Union's policies about participation in Programs.

That is why, the relation between schools' decision of applying assessment procedures and any kind of financial issues had to be clarified.

Some schools chose to implement self assessment procedures so that funding or a quality label as a ticket to a program wouldn't be their problem. Most of the schools though face self – assessment as the key to their high faculty reputation or some way to develop architectural studies.

In cases where quality management systems are applied in schools, assessment procedures are also included in their functions. In other cases, assessment procedures require quality management systems implementation as an assurance of quality of studies.

A relevant question was placed in the questionnaire and results so far indicate that interest is not much from architecture schools in applying quality management systems despite the implementation of self-assessment methods.

Opinions about success and compatibility of the above systems to the character and nature of architectural studies were requested as well. Limited experience gave accordingly limited answers.

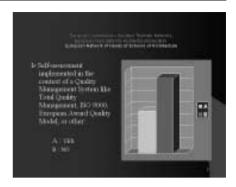
General conclusion so far: Quality management systems can be compatible with architectural studies if their nature and special character is distinguishable.













The type of methods that were followed in order to apply Self-assessment were:
Statistical Data Process
Usage of Performance Indicators (Pis)
Usage of Questionnaires or Interviews
Creating teams for Quality Development
Usage of tools or techniques of Quality
Management



Followingly, we referred to the methods that were used in order to apply Self – assessment in schools. Classic and old tools like statistical data, questionnaires and interviews appear to be in use in addition to ambiguous techniques like Performance Indicator usage or tools coming right through quality management systems.

Hopping that an evaluation is not too risky at the moment, one could observe that: self-assessment was imposed from the national educational system towards the direction of European Integration to those countries which are not full members of the European Union. In the case of full members self-assessment procedures were initiated by the Universities

Self-assessment in most cases is connected to the operation of National Coordinating Bodies especially where its procedures rely on the existence of a relevant legal context.

Accordingly the legal regime of the above body's operation is independent either funded by the State or by Universities.

Self-assessment procedures utmost rely on quality measurement methods and practices. Adapting a certain group of methods deals with how quality is defined in each school. That is why, methods that are used by schools to evaluate the quality of their studies were decided to be additionally explored.

The impression that was given from the answers so far, is that schools don't measure quality against a common context. Output/input processing, upgrading standards, performance and criteria are some key words but opinions are shared in possible answers.

During a self-analysis of a school in order to deal with self-assessment procedures, quality values must be scaled so that objectives and priorities for development are set.

It seems that no 1 priority of architecture schools are Postgraduate Programs. Graduate Status, Employability, Research Results and Curriculum Innovations are among the top five issues.

It is important to say that the questionnaire is designed in this point as a checklist that can take in opinions from more than one person from each school. In this way objectivity of the evaluation of the priorities can be justified.

According to the majority of the answers, self-assessment results are exploited as a feedback for development of the educational work. Their help as information for external peers, is appreciated from a group of schools as well.

No school has so far responded that it excludes the contingence of applying selfassessment procedures to educational practices. Up to now, according to the answers that were received only a small number of schools negotiates with the perspective of implementing self-assessment procedures for the development of educational practices.

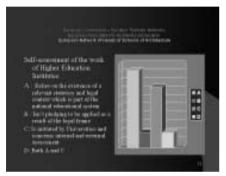
All schools in this second group, so far, consider assessment as a procedure with a possible positive contribution.

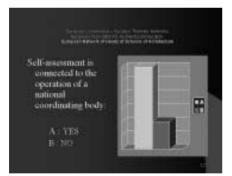
For this group of schools self-assessment concerns not only the curriculum but architecture school in all its activities.

The initiatives for self – assessment to be applied, started because of demands related to funding issues.

So the following answers weren't surprising, that is self-assessment in Higher Education relies on the existence of a relevant statutory and legal context which is part of the

















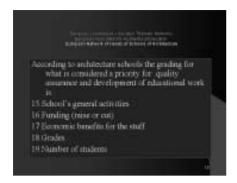
national educational system.

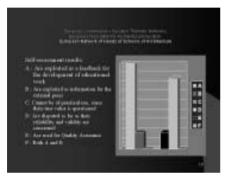
Self assessment is connected to the operation of a national coordinating body in half of the schools.

The picture connected to the legal regime of the bodies' operation or measuring quality of the educational work, is more or less similar to the answers given in Part I of the questionnaire.

There are a lot of empty questionnaires in the web that must be filled, in order to have information, answers and perhaps conclusions. So, your precious participation in this effort is kindly requested.

Closing, I should thank Maria Voyatzaki and Constantine Spiridonidis, for, without their efforts and advice this presentation would have never been possible.

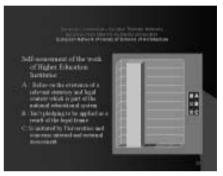


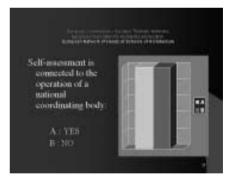












Discussion

Coordination by Herman NEUCKERMANS, Leuven, Belgium

Herman Neuckermans, Leuven, Belgium

I thank Katia Baltzaki for this introduction. First of all, I would like to go directly to the weak point. I would like also to hear from you what you think about this questionnaire. I would like to invite those who have not filled in this questionnaire to do so, after we make the amendments that will be suggested after this discussion here. First of all I would like to ask you all who is experienced personally in assessment of schools, whether that is their own school or other schools. I know Marvin Malecha has been involved in assessment. We should record the names at least because these people have the experience of what it is. You can add me to the list. That is also a reason why I'm here. We have got our School to do peer-review and I have also been involved. I was the Chairman of the peer-review committee in Estonian schools. I know that Juhani Katainen from Tampere has experience in this as well because he was also there with me in Estonia and then afterwards he did the peer review of the Gratz school of Architecture.

Dimitris Kotsakis, Thessaloniki, Greece

The question can be also misleading. Who has experience of assessment because we are developing a certain concept of assessment and maybe one school doesn't have experience of that concept of assessment but it has experience for example, of a community in the school assessing the work all the time through general assemblies, reports and so on. So, the question can be misleading.

Herman Neuckermans, Leuven, Belgium

Yes, but my question included this. I didn't specify the format of the assessment. What I like to say is that in normal procedures the self-assessment or the assessment by peer review is preceded by an internal self-assessment, which is a self-study report. That's the normal procedure and the ingredients of this are laid out by the European Network of Quality Assurance. This system, however, from which I have a copy here, that I also published in the Newssheet 61, is general. It's not meant for architecture and from our experience we know that this procedure does not include the assessment of the design studio work or the design aspect of architecture which is a very important issue. It examines, nevertheless, all other aspects that were listed here in the European scene.

You know from what I've written and we've already discussed earlier here that I think that the quality assurance will be part of the education system. Anyhow, whether you like it or not, the European Union has established a framework for the monitoring of all aspects

in your school and its pedagogy. It is also looking at results and not only at the inputs but at the achievements as well. It is also looking at how a school is functioning, in terms of physical space, maintenance of space, students, not just the number of students but how the students are tutored; it's a very complex thing. I have the scheme here with me. I don't know if I have to show it to you but it depends on how the discussion goes. In any case, I personally think that it is an interesting exercise for schools to have a snapshot first in this self-assessment report, an internal assessment. You see what you are and then afterwards in the peer review, which follows, the school is confronted with other exterior opinions from the outside.

The question was who has experience already, who has gone to such a procedure in whatever way. Not that I'm going to discriminate you but anyhow, maybe these people went to the whole thing and they can comment now or later on what their experience is in this thing and the others can learn from that. Well, as far as I am concerned, I told you that the system that is structured at a European level is not specific to architecture in that it lacks a major component; the assessment tools for what is the quality of your design curriculum.

Andreas Wagner, Karlsruhe, Germany

I may add some information from Germany. A lot of German schools have been evaluated during the last one or two years for several reasons; discussing whether schools should close or amalgamate with civil engineering departments and things like that. This way of assessing architecture schools is too general and doesn't take into account designers but, there is an organization initiated by the Architectural Chamber. I'm not sure, but this organization is working on a procedure to assess schools of architecture and they hope to be ready next year.

Loughlin Kealy, Dublin, Ireland

Would it be possible to find the name of that organization? It would be useful. We haven't as yet added the quality assessment. We're scheduled to have it in about three years' time and as part of that we have been asked to make an input to suggest who might be members of that peer review and the external review so, it would be very useful for us to know if there was a format developed for evaluation of architectural schools in Germany. It would be very useful to know who they are.

Herman Neuckermans, Leuven, Belgium

I mentioned that it is the ENQA, European Network of Quality Assurance who has proposed the scheme but as it has been said it's not devoted specifically to architecture. That's the one thing but that scheme is not just a copy of the ISO 9000, which is made for industry. It's looking more at procedures to apply to architecture. It's not applicable as such in the area of education.

Loughlin Kealy, Dublin, Ireland

I think a German colleague said that there was a setting of the system in Germany but

if they are, I'd like to know what their organization is. That's my question.

Alan Bridges, Strathclyde, United Kingdom

In the United Kingdom there is a very well-developed quality assurance scheme and as part of that there is specific architecture subject matter document against to which schools of architecture are reassessed and all of these documents are available on the Web

Joaquim Braizinha, Lisbon, Portugal

In Portugal this is the year of evaluation and self-assessment of architectural studies in both public and private schools. So, we are in the middle of the process. We have to finish it until 10, January 2003 and after that we will have external commissions and they will talk with us about it. Anyway, we have the experience from other courses in the same university. We have Law, we have History and so on, that already have a self-assessment. So, we have experience of the questionnaires to all students, new students, teachers and so on. It's easy because the Ministry of Education has done a briefing. That's quite a mystic thing. It's not very clear and can be answered in different ways. This briefing can only be understood with the experience of the schools that have already done their self-assessment. So, the first problem is the briefing for the self-assessment. It's a problem that we don't know exactly how to answer to those questions.

Herman Neuckermans, Leuven, Belgium

The contents of the self-assessment reports, self-study reports according to this European Institution start with the mission statement of the school. Then it looks at the limits in which this mission statement has to be realized. I summarize the analysis of pedagogical activities according to the whole frame. It also includes evaluation of research activities; is there any? The external evaluation in many countries is always preceded and happens at a different pace by an internal monitoring. Now, if I understood well some schools here belong to the university, which is a bigger thing and universities normally impose the scheme with suggestions to it.

If you are in architecture, you can add distinctions, which are specific to you. If I understand well, some other schools operate like individual bodies and can design this scheme themselves. Anyhow, in my opinion they should have a look at what the others did because it's very interesting. It looks at many different aspects of your teaching and the efficiency of your teaching, the quality. I think that quality assessment whether you like it or not, is part of this economic world we are in. But my strategy is that you have not to fight against economy, you have to use economy for your purposes, that's the clever thing to do. So, I think that we have to go for the quality assessment in general but turn it into our purposes. That's all.

Dimitris Kotsakis, Thessaloniki, Greece

I have a suggestion to make in terms of the special issues related to this assessment. Here are two special issues. First is architecture and second is the university because we are talking about university studies of architecture. So, in terms of assessment in universities, we must have experience also in similar research and information, in similar assessments like the assessment of the work on legislation, like the quality assessment in parliaments, assessment of the judicial work. How do we do quality assessment in the court of law? How do we do assessment of executive work? How do we do quality assessment in governmental bodies and local authorities? And when we have this range of experience about quality assessment then we can go on and discuss deeply what the quality assessment is, not in education, but in the academic authorities which are the universities.

I propose instead of having quality assessment to have a broader concept of responsibility to the community and to the society, which is the university. How do we respond to civic responsibility, internal responsibility to students and teachers in the university? This is what a government does, a court of law does, and a parliament does. They are responsible to the society and universities have to be responsible to the society. This is my proposal to our meeting. Take this as an important issue. Now, whether we do this with statistics or with general assemblies, newspapers, books, television that's a different matter. It's simply technical. The question is what our discussion today is. I'll put it this way: Civic and public responsibility and internal responsibility to the students, to the teachers, the researchers, external to the society in civic and public terms. This is our problem.

Herman Neuckermans, Leuven, Belgium

Yes, I agree with your proposal except that for the existing systems the terminology is different. I know you are different but I didn't mention it here, but the assessment of the universities includes this assessment. It starts with the mission statement. That means that you ask yourself what you see yourself as a school doing and to produce in a relationship with your students with the society. It's there and it's not only a matter that you have to really assess it afterwards. That's the point because in this system for the assessment in universities you have, and it's quite better, I can guarantee you in Europe you have assessment of education, assessment of research and assessment of civic involvement and attitude towards it, it's there.

Constantin Spiridonidis, Thessaloniki, Greece

If there are no other questions from the presentation, I would like to ask you to propose ideas about the way that we have to develop as group here in order to collect useful information on the question of assessment in different schools of architecture. It's clear that we need this information and that was probably a very small preliminary step, or if you want a pilot step but of course, it's not enough. We have to develop probably now, or in the afternoon, ideas and proposals on the way that we have to collect this information. What kind of information we need and through which means it will be useful and operational to select this information and to diffuse it. I think that it will be a very serious contribution of this meeting to all, if at the end we manage to give some directions in which in the coming year we have to work on, in order to provide in the next meeting useful information raised by the discussions that we had during this Meeting. Are there any ideas or proposals? Do you think that it would useful for example to continue working on this questionnaire? Maybe some kind of questions doesn't exist. We have to add them or to transform them. That would be something, which will be useful for us this moment.

Herman Neuckermans, Leuven, Belgium

I think it would be interesting to have a look at those who have done this process and at what they produced because it varies. I've written self-assessment reports in Estonia. I've written the assessment we've seen in our School. I think the only problem is that these reports normally are not safe for everybody and then language is the problem. In the report you see all the topics. That's the aspects they are looking for.

Alan Bridges, Strathclyde, United Kingdom

I would mention again the system of United Kingdom specifying the structure of the report. How you should report and how that report is then evaluated. Our role there, and I would suggest it might well be an example, was to look at and see how they may adapt it. All the background documents about the information you have to prepare, how it's assessed, how you can evaluate teaching quality in learning opportunity... Everything is there.

Herman Neuckermans, Leuven, Belgium

I would urge you not to be reluctant against looking at what has been done because I think that we have to look at these cases, we have to learn from previous experiences. I also think here that we have to do it. It doesn't mean that you have to copy but at least you have to know what has been done. Otherwise, we reinvent the wheel every time.

Joaquim Braizinha, Lisbon, Portugal

I think that even if the briefing is not absolutely clear but with the experience of self-assessment from the other courses, we can structure our regulations in a correct way. Of course, it's different to do questionnaires for the students before and after the exams, and design in particular in which they do not have a lot of interest. Our problem, the problem of all the schools until now in Portugal is the committees that come afterwards to discuss the regulations of self-assessment. The constitution of the committees is perverse. For instance, we have teachers from other schools evaluating our school. They are steps of procedure that I don't know what kind of results they will take in the future but at least we are not a lot of people and maybe we are always the same persons. There are problems when commissions constitute by professors from public schools and go evaluate private schools and so on. There is a problem. This is the difficulty of the process, the relation with the committee.

Herman Neuckermans, Leuven, Belgium

I know from our experience in Belgium as well as in the Netherlands, that they do not do comparative assessments but they do assessments of different schools of the same type at the same time with the same committee. That committee is negotiated by all the participants......It is a long procedure because there is always somebody who does not favor someone in the commission but it's, in my opinion, the most democratic way you can have. In our country, I can guarantee you, it took us I think two years to agree about who would be in this committee but then it was a consensus and the only thing they do is check whether what you say that you will do is really what you do. The only thing is that

they don't compare your school with another school. That's another story and I don't think that should be the case but they just check whether you really do what you say that you do and they have a whole set of instruments for that, for the project. They go and have all the projects looked at, they interview students without teachers, with teachers. It's a complex thing.

Claudie Viatte, Ministry of Culture, France

I would like to add some details about the French experience but I would like to speak in French and I know that the French language is the second language in the Council. So, I would like to say it in French. Thank you.

Voilà. Je disais que nous étions effectivement dans un cadre légal en train de commencer une évaluation interne et uniquement des enseignements et de l'organisation des études dans les écoles d'architecture et que justement je crois qu'il faut qu'on fasse très attention dans le questionnaire à distinguer ce qui est une évaluation interne d'une évaluation externe, si comme vous voulez une évaluation des enseignements de la recherche ou même du management des écoles. Donc, nous sommes nous en train après d'avoir commencer une évaluation interne des enseignements, de continuer avec une évaluation externe parce que nous avons une procédure d'habilitation qui est déjà un peu de l'évaluation mais quelque chose qui serait plus de l'évaluation en matière d'enseignement et de recherche, pour aboutir, enfin, à ce qui est une vraie évaluation, c'est-à-dire une évaluation globale d'une école et une comparaison à l'internationale avec tous les aspects de l'activité de l'école. Et je pense que ce serait très très intéressant particulièrement pour la France qui donc, franchit tous ces pas d'avoir l'exacte expérience de ses partenaires. Merci.

Herman Neuckermans, Leuven, Belgium

I will not translate the whole thing but for those who didn't understand anything about this, our colleague from DAPA, which is the Ministry of Education in France says that they are in the start of a process of internal and external assessment and they are eager to learn from the experience of the others because ultimately now, they are only looking at some aspects, pedagogy and research I think but ultimately they want to achieve the whole picture and see all schools.

Harald Gatermann, Bochum, Germany

I want to add some remarks to my colleague of Karlsruhe. I think you must know in Germany we have a federalist system. We have about eighteen different ways to go and we have some failures in some exercises in making evaluation in our school in different faculties. So, in civil engineering and in architecture it failed totally because there was nobody who had the time to do it and the students didn't like it either. But I think the result of our conference may be that the best assessment is the competition between schools and competition between colleagues and between projects and between students and it's normally in a school of architecture we do it this way. I think in every school of architecture there will be a kind of competition. So, for me it's not such an important thing this assessment question. I think the results show that it is similar with other cases.

I can tell you that in Germany there is another way to do it; every province has its own way but there is another way, it's more independent, it's a foundation of a media concern called 'Battensmoud' and they have a committee of professors and artists and people of art, intellectuals I could say and they have done, I think two years ago, a questionnaire for students not for professors, for students of schools of architecture asking them what is good, what is bad and what is worth in international relations and so on. Also what is used for the lectures, how are they done, how are the conditions, how are the rooms and so on. I think these results are very remarkable and we are very proud to be on the top ten of a hundred. So, it's good for us but it has been published in the most popular magazine in Germany 'The Stern' but you can buy it in any kiosk. So, I think maybe it's a way to do it and I think this conference is important to say something to it of course.

Herman Neuckermans, Leuven, Belgium

I can add something in what you are saying now because this way of questioning that has been done in Germany by publishing the results has in fact been published in the journal Der Spiegel. I think it is well-known in Europe but people who are really looking closely at the rigor of the procedure have serious doubts about this. I just tell you, the things we are talking about here are much more serious and in depth. The only thing that I also wanted to do to reply to your first suggestion, I agree that we can learn first of all. But I don't believe so much in this assessment story. I can tell you, I'm not a prophet but I think it will come all over the place.

Andreas Wagner, Karlsruhe, Germany

I'd like to add some information. I think besides, it's a lot of work going on assessment. The interesting and, I think, important thing is that we learn about how to organize ourselves, how to organize our school in terms of enriching our teaching and I doubt whether these questionnaires by 'Battensmoud' really give some information about that. I think there are rather populist. We are undergoing quality assessment the same way that Herman Neuckermans just explained in the same procedures and choosing the committee and things like that. But we are still kind of suspicious because it was ran by a governmental body and you could see that the state agency of Battlegutemberg wrote back and evaluated all schools of architecture. It suggested that Battlegutemberg didn't fit in the economic schedule and things like that. And what we have, it might be interesting for you just to learn how to evaluate yourself. The University of Karlsruhe agreed to a contract with two other universities Kaiserlaudern and Darmstaad and they had a contract to evaluate themselves, department by department and they are kind of supervised by colleagues from the Hilti Halt Zurich and that's what we have right now been doing. So, we are just in the middle of it and I think this is probably a more honest way. You are under colleagues and you really can face problems and discuss problems of your school and compare the schools and the different methods of teaching.

Herman Neuckermans, Leuven, Belgium

I would like to describe an experience I had in Estonia. We were three; one was Juhani Katainen and the other was I. We are academics and it was another Ratiola teacher; three teachers and architects and nobody from the state in our case in Belgium. There

was one person from the committee, who is in charge of Higher Education, permanent and attends all the different evaluations, that's all. So, it's maybe interesting to remind you of this. The discussion about the commission is clearly differently tackled in the different countries. But of course, that's a point where you have to fight because, indeed as you said Joaquim Braizinha, if this is not ok of course, the whole thing is not ok.

Richard Foqué, Antwerp, Belgium

I want to add something because we are speaking all the time about self-assessment, quality assurance etc. This is of course the most important point, the most important aspect of all matters but this is something, which most of the schools of course can manage. In several countries we see and hear in the discussion that there are several methods applied. Some countries do it from a legislative point of view. Others purely from university point of view, but there is another thing coming up and I don't think we can deny that or we can close our eyes to it. This is accreditation and accreditation is something different. It is another step or another level further than self-assessment and external assessment may be an aspect of accreditation but it's not the same thing. This is another important point maybe not to discuss today because it's quite a difficult point since it is immediately related to other things like professionals for instance. It's an important point and it should be one of our issues to discuss over next year. Maybe we need to have a position on it because it has direct implications on the funding of schools. This is what I want to bring into the discussion as an important item.

Juhani Katainen, Tampere, Finland

I wanted to come to another evaluation. I had a chance to be in Gratz and I think the reason for that evaluation was because they employed new professors and they wanted to look at the school and each structure before electing the new professors. As a consequence we were invited by a general court to the Architects' Associations around Europe. They are asked to be the representatives for this purpose and then they themselves select. The university selected and I was with that group. There were colleagues from Germany and Herman Neuckermans was asked but he didn't know whether he could come. Unfortunately he didn't come but anyhow, I must say that first of all we learn a lot, the evaluators learn a lot. So, that could be a nice way if we could manage that. It means money but we could learn a lot from each other when we could organize such kind of trip and spend a week in a strange place and listen to what teachers, students and all the people involved with that process have to say.

I think that the School learns a lot when doing the self-assessment reports. We had piles of papers, hundreds of pages and that is the process which is very necessary in this case. What we can as outsiders bring into the picture is our experience if we have any. Maybe we can give advice but I feel that the most important thing is the process and then the school makes its decisions. I don't know what came out of it. It was interesting at least for me. Pierre von Meiss was leading a group and he made a fine self-assessment report and suggestions.

There is a problem in this kind of activity. An issue I realized was that we are bringing our own culture with us when we go and do that work so, we make suggestions like our British colleagues just a few moments ago that their suggestions are according to the British

system. So, we are bound to our culture, but exchange of that culture is maybe part of the richness of the work and we value it as such. I remind you also that there is in the UIA charter something on this validation which is worth reading because it is quite an interesting work done recently by Fernando Ramos and his working group. Maybe this organization could work on that basis and then find out what is the European version of these activities. Thank you.

Herman Neuckermans, Leuven, Belgium

But this is about validation and you know that the session was about self-assessment. They are related but they are different. I would also like to add, not from the point of view of external validation, that it's very difficult for a single school to identify itself and to position itself in relationship to other schools. It's not always easy because it's by comparing that you see differences and that you can point to us the differences as we did in the studio.

Marvin Malecha, Raleigh, North Carolina, USA

I realize that this is an American perspective and perhaps Americans are completely preoccupied with self-assessment at this moment. There isn't a single administrative meeting that I attend where there is not a discussion on assessment. It is on every single administrative meeting agenda that I attend. The one observation I would have is that you are using the term 'assessment' in a very broad way and, therefore, it is confusing the discussion in my opinion. I see five different types of assessment. They are continuously on the way within the American University today.

Accreditation which is the professional bodies' deal and is the basis of the exchange across the country and how students from North Carolina State spend four years at N. C. State and then go to Berkeley for two years and get the Masters of Architecture Degree. It's the common currency it has all kinds of problems, it has all kinds of benefits. I have personally chaired twenty five accreditation teams most recently in Yale University and in Argentine. I have received some twenty accreditation teams to my school because I have six academic units each one of them having their own accreditation process.

The second level of this kind of account ability has to do with what the Faculty Senate does at N. C. State University. Each of our programs goes under the assessment by the faculty Senate relative to the quality of the curriculum and so, there the credentials of the faculty, the credentials of this course syllabus, the books that are produced, the thesis, projects that are produced, there is actually a visiting team from the faculty of our Campus from outside our discipline which looks at what we do relative to our academic quality.

The third level relates to the university's desire because in the United States we have this sort of academic free market we can compete against other universities primarily for graduate students. So, it's very important to be in the ranking, which is something called the Lambert Report where the universities are ranked in the top 20, in the top 25. North Carolina State happens to be ranked to the 27 in the nation. Our chancellor says that by the time she is finished to get a chance that we will be in the top 20 and that means that you as a college better be a sail and not an anchor in that process. What's in the Lambert Report is how many federal research galleries do you get, how many doctoral theses are produced in your colleges, how much aligning money has been raised, what

percentage of the align that they give money, how many national awards has your faculty received, international awards these things are counted. Then the Lambert Report ranks your university whether you are in the top 25 and my boss, my chancellor says colors of design you will help us be in the top 25 and if you don't help then you are very much insusceptible to being moved into another college and perhaps even program elimination. So, it's serious business.

The next level is in some ways very important but that's the discussion of how do I know you are successful. I sit with my pro-boss and the pro-boss says ok, you tell me you want to be the best design school in the world, how do I know that's true? And the way that I know that's true is that I have to have ten schools that are called peer Institutions and I compare myself to these ten peers in my case that's university of Texas at Austin, it's Michigan, it's Berkley University in Virginia, George Tech University in Minnesota, University of Illinois. I can list them all for you and I can tell you how many students they have. I can tell you how many faculties they can have. I can tell you how much money we raise by comparison how much money they raise. I can tell you how our research diverges from their research and it was one of the primary reasons that we've been able to have two very meaningful discussions; one of the Institutions of our PhD program a couple of years ago (because we are applying peer at Michigan where they have a PhD program) and now the discussion of a full time center in Europe is because everyone of our peers has a full time sent in Europe, we don't and so, we have to get to work to get to what they have done so, that's the peer group.

Finally and perhaps the worst of all measures in schools only uses this if they come in the top 10 schools. This is tough. It's the best measure ever and if they don't show up the top 10, they don't even talk about it and that's what the public U.S. news in world report architectural record, the surveys that they do. In the ACSA there is an adopted position to this kind of ranking unless you are ranked in the top 10 and then suddenly you use the material. I have personally talked to people who do that ranking for those institutions and I can tell you that it is very dangerous to use that material because sometimes they get on the phone and they call architectural offices and they say 'do you know about this school?'. If nobody in the office knows about the school then you get a low ranking. Now if you have a small program in architecture like I do, I have 250 students maximum, few graduates in architecture by definition. I'm not going get a high rank. If I have 1000 architecture students and I'm graduating 200 students a year. By definition I'm going to have students everywhere and I'll get in rank higher. So, you have to be careful using the public press. If the U.S. news in the world report don't report that and I don't show up at the top ten I assure you that I have coffee with the chancellor within a week after that publication and I have to demonstrate to her why my school didn't show up in the top ten. So, we are constantly in this assessment procedure and I guess all I would say to you is you need to do what I just did. You need the same thing because each one of those processes end up with different outcomes and they mean different things to different people and I think they are all getting mixed up in this discussion.

Herman Neuckermans, Leuven, Belgium

Yes, but anyhow in view of later accreditation which will come I think we and they will agree more or less about a procedure and the topics that you have checked otherwise are not comparable. If the ones call a newspaper and the other ones go to an in-depth

enquiry of all students, interviewing students, it's not comparable.

If there are not another questions or interventions I would like to close the session and to thank you very much for your contribution.

Chapter 6

The Preparation for the next Meeting

Plenary Session:

Conclusions and Proposals for Future Actions and Initiatives

Richard Foqué, Antwerp, Belgium

We are coming now to finalize our meeting It is good that we have maybe half an hour's time now for the first reactions to those two days of intensive work. I, myself, have seen a lot of points raising and if I compare it with previous Heads' Meetings, I would say that the same points were raised also two years ago but I have the impression that this year people came up with more precise remarks, more precise propositions, more precise comments to the four main items of the conference.

We had a first session on the curricula, on European curricula, a second session on all the systems of exchange mobility, ECTS system, a lot of interesting things were raised then we spoke about the relation between education and profession and this morning about quality assurance, assessment, self-assessment, internal assessment, external assessment and also the question coming up of accreditation. So, a lot of things to think about and we cannot deny that these four main issues are interrelated. The curriculum of course, is directly related to quality. It is important for maybe entrance to the profession and of course is also a key to exchange mobility. So we can go on and can make several layers, making interconnections and interrelations between the four issues.

Nevertheless, we should now move on. The yearly Heads' Meeting can play a very important role as I said at the beginning of this process to continue and take the initiative. If we don't do that all the students will do that for us and speaking for Belgium, it's the same maybe in other countries, the legislate as the ministries are already working on new legislation regarding the Bologna Implementation. We should be very careful in some ways in not only the way we would like to go. We should take initiatives. That's the main need which should come out of this meeting and then of course, how do we do that and how do we proceed or do we go further with concrete results because this is important. We cannot go on to refresh our minds and then go home and say well, we had very interesting discussion but I think we should be very concrete as well. I pass the word to Constantin Spiridonidis because he wants to make a suggestion on how we could proceed and it may be a start for discussion among us of the way we could work in the next year and prepare our 2003 meeting.

Constantin Spiridonidis, Thessaloniki, Greece

I will start from the beginning. I have the feeling that five years is enough to speak about experiences on such a kind of meeting. My feeling is that we should not continue to organize this meeting the way we did till now and we must change a little bit the way that we are working here. We work here and we leave this place for the next year. I think that we have to use the experience of all those previous years and introduce a new

scheme, which must be clear, transparent, efficient and responsible, and to open the participation to all participants in the preparation of the next meeting. I would like to confess to you that it was very difficult for us all those years to deal with the agenda because it appears as a kind of personal interpretation of the tendencies that someone could sense from the discussions, the feelings that someone could detect through the discussions and always, we felt that the structure of the agenda, which is the big responsibility of this meeting, must be something which is the result of a more collective and participatory process.

The fact that a new condition of funding appeared this year gave to this meeting a new possibility, which is to support in financial terms this preparation process and I think that we must use this advantage in order to make this meeting, I would say, more democratic probably but more open to people who participate in the event. I think we have to redefine what exactly this meeting is. All of us know, of course, and probably there is an evident answer but it must become clear that it's not a meeting where any power game is played. It's not a meeting, which represents the voice of schools of architecture in Europe, at least not yet. It is a meeting where people who care about the issues of architecture education and people who have an administrative role in the academic issues of the schools, participate in order to exchange information, to discuss and to circulate between them viewpoints and aspects, to raise questions which will be useful for the decision making or to undertake in the best case particular academic or political initiatives. The application we made in the framework of the extension of the previous meetings in the EAAE was that we asked for funding of a meeting, which will support the schools of architecture in the process of their introduction to the common European Higher Education Area.

In order to achieve a better quality of this discussion and the better quality of the organization of the event we must decide now the way that we will continue the discussion next year, if we will continue because maybe the decision will be no. So, it must be a very clear process, it must be very transparent and here we have to define the rules of our existence in order to avoid any misunderstandings or to create any kind of fears here or there. As I already told you in the beginning of the meeting the idea is to create a number of working groups, which will elaborate issues or themes, which appeared as the most significant in our debates in all the previous years. These working groups will prepare the themes for the next meeting and they will have this responsibility to prepare and introduce to the next meeting the results of their preparatory work. The program will have the possibility to support them financially. I cannot think at this moment of figures and budgets, but there will be a possibility to have support in order to work, to collect information, to elaborate or to ask people to elaborate this information and after to prepare for the next meeting the sessions in the framework of which this information will be diffused and probably, if necessary, some decisions or some statements probably could be made. This is the idea.

If this idea is considered as useful for our Meeting or there are probably others, we have to discuss it and decide. We have to decide it here and probably after that we have to define a kind of coordination of those groups in order to have a more coherent presence in that meeting. This year we had four sessions and of course, as Richard Foqué already mentioned, those sessions have very serious overlapping. Of course, the main subject and the most crucial one is the curriculum but we can see in the curriculum probably two different orientations: the one orientation is that which concerns the content of studies and that which concerns the system of studies speaking about the structure of the

program (three or four plus two, or five year continuous) and of course, the ECTS question, an issue that our discussions proved as extremely important. The evaluation is an issue which, remains one of the top issues in our discussion so, probably a working group will be concern with this subject and will deal with the way that we can discuss it. A fourth issue will probably be what we discussed yesterday and it concerns the relation with the profession. All kinds of interference between those two bodies, or two worlds maybe. So the idea is the structure of the program of the next meeting to have those four sessions and we will expect from the working groups to develop the main issues and prepare for the next year something more coherent. This is a very first approach and we can open the discussion for more inputs.

Richard Foqué, Antwerp, Belgium

So, if you take the suggestion of Constantin that it's a good idea to have these working groups preparing the conference for next year I think maybe it will be useful to have your opinion and your ideas about which working groups. We have the four sessions. The first idea is to have one working group according to issues but I can imagine that you have further ideas. You can say why not match two working groups to one because they are so much interrelated or not so, this maybe a point of discussion now that you form your opinion about, first of all the idea of working groups, secondly which ones.

Dimitris Kotsakis, Thessaloniki, Greece

First I would like to say a few words about the context in which you are going to do this, which is the Meeting of the Heads of Schools. I think we are really at the end of the after-the-Hania-Statement, at the end of what has been done here and some fears that were expressed in this room I think are justified. Not because there are bad intentions but, as I said in the first day, because if we are not careful we can slide. So, maybe it is something like an egg and maybe ends like the bird, which has been hatched by the egg then you know. It isn't. So, these four groups if we don't define the context in which they are we cannot define the mission statement, because the context gives the meaning to that and no matter what we say about the mission statement, if the context is not right then the mission statement would change.

So the context is, the framework are four points: this ENHSA is part of EAAE, in two senses: the first sense is membership, which means that it is not European Union, it is Europe, that is very important for what this Meeting is. Because if we are dealing with a space for education we have to be by definition and in action broader than the European Unions and even broader than the counties selected by the European Union as future members. So this very important and this is the context, Europe and not the European Union. These who are full members now, who pays for it, what are the papers that we must fill, these are technical matters I don't even get into.

The second point is who are the members of this ENHSA. The third point is what is the mission of this ENHSA. The members are not just individuals that belong to the Schools that form the EAAE. Members are representatives of the Schools. Maybe you have to change the H to an R. Representatives of two kinds; the one is the administration of the Schools, the other is the programmes of the schools. So, they do not need all the time people getting around, it depends on what is the discussion about, they represent their

Schools, they are sent by the Schools.

The third point is what is the mission of this, because if they represent Schools, the Union of the representatives of schools controls, deals with or has to be responsible for power, so we must be very careful about the definition of the mission and there are only two things that people can do. One is dialogue between Schools, people persons and the other is coordination, nothing more than that. And if there is a statement or a declaration then it will be very well prepared so that the schools know very well what their representatives are going to sign on. This is how I see the context.

Now, I'll come to the content, which is going to have meaning only in this context. Make three working groups quite clear, in fact they are not three they are two. The one is divided into two. The one is the programme and it is divided into curriculum first and then the system. The second is assessment. I shall start with the second first, because we had this discussion this morning. I think that Marvin Malecha was very kind as an honorary member of this Association when we talked about fusion. My feeling is that we are totally confused on the issue of assessment. You cannot give the mission statement to the group who is working on assessment unless we clarify the issues.

There are two kinds of assessment and taking in the levels and everything, there are six types of assessment. The first kind is the assessment by others, assessment by authorities, by economic powers. So, I am taking Marvin's point. First state accreditation, political authorities, they do assessment because they must accredit the courses, Second level is the professional accreditation. They do assessment because they have to do this. Third level is not about authorities but about market powers. They do a sort of ranking by several authorities which is a market assessment, the top ten everything. So these three levels of assessment are important to be mapped so that we know what is aging on. But according to our Hania Statement, we are not interested in this. We are interested only because we are acting within this. So we must know what is going on so that we can react to it. It is a question of existence, the first kind of accreditation, it is our own not according to our statement but it is the context in which we exist or not exist, State, professional and market. Now, the second kind is what we have already declared, which is self-assessment and this has three different types; the first is the University accreditation which is internal accreditation of courses. Second is the peer assessment which is a kind of guarantee of transparency and effectiveness control. Third, which is the culmination point of the two previous points, the one I mentioned before is the civic and public responsibility taken by the Universities. This group has to make a map and a charter of the first kind but concentrate on self-assessment because this is where we are going to decide according to our Declaration. So this is one group of working.

The other two groups; the one which is the curriculum relates to two things not only the profession which is very very important, but also to the University context because this is University education of architects so the curriculum group should also map the professional requirements but there are other bodies as well doing that, UIA, ACE. And the other one the system, is all what we have been discussing, is readability, transparency, this is the ECTS system mobility, the degrees, Bachelor and so on, so they are quite a lot. I think that these three groups have to be the permission between the three, but the fourth group about the profession is not really our own group. We must be informed about because otherwise we cannot form the first group of the curriculum. This could be done in relation to the others.

Herman Neuckermans, Leuven, Belgium

I think that a number of groups also have to do with a number of people you can mobilize. I would like to make a small comment but not to get enter into the discussion. There is still a huge difference between assessment and accreditation.

Richard Foqué, Antwerp, Belgium

I suggest not to go to the discussion now. I don't think it is the right moment.

Herman Neuckermans, Leuven, Belgium

But I think that the first one even if it is a combined group as well discussing curriculum as well as the system it's a lot of work. It's huge but I know if you split it, there is a danger. But on the other hand if you keep it together it's a lot of work, it's more work. So, who is willing to... I'm a little bit confident about how difficult it is to get answers to a simple inquiry so, maybe it's challenging to mobilize you.

Constantin Spiridonidis, Thessaloniki, Greece

So, are there any comments, reactions about not necessary one, three, four or fifteen groups but on the structure of the preparation and the way that we have to precede?

Joaquim Braizinha, Lisbon, Portugal

Well, Constantin I can come back to the first meeting for instance, when a group of persons clearly asked you that was very important to continue doing these meetings in Hania or anywhere to discuss and to know what was happening with architecture teaching, what was happening with schools of architecture. You say that maybe it cannot continue and I suppose this is not what you are thinking really. We must continue but maybe in another way. This is a forum where we have to discuss this very important moment of changing of schools and changing of the paradigm that is going through the future of our schools so, it cannot change. We cannot stop, we must change but with evolution. About the items I think the items have already been seen. We have problems with the curriculum for the reasons we know. We have problems with our relation with the profession and the mobility and I suppose that we keep on discussing these if other problems that we have to discuss don't come from the authorities. I think that the only problem is, and I agree with you, to see who is going to prepare the new meeting because we know where the problems lie.

Constantin Spiridonidis, Thessaloniki, Greece

This is one interpretation of the silence of course, probably there are some other interpretations. That's why I'm asking.

Herman Neuckermans, Leuven, Belgium

Yes, that means that all of us are on your list that...I would like to say that in my perception

I agree with the structure Dimitris proposed to us. However, being a realist I would say that we may come to limit ourselves to produce a document, which is circulated or not but which is prepared before the next meeting on: first, relating to the curriculum only the thing of the course subjects, is that something that we can think of and the second is what I remember from our discussion and the second one is about the ECTS because those two things are very important for all of us, I think. That is a suggestion; to focus down on two documents in fact we promised it when we wrote our Hania Statement that we would work on the ECTS, that we would collaborate so, that's an issue that is not just one of 1000 in the list. It's something that we could focus on. Thank you.

Richard Foqué, Antwerp, Belgium

But I think this suggestion goes along the same lines as proposed by Constantin but if you want to prepare such a document, I'm quite in favor of that. You need a working group to do that and personally I think it would be best that this working group consists of a limited number of people who come from different countries and from different regions of Europe. That makes it much more efficient. So, in fact, I think you are supporting what we are suggesting.

Herman Neuckermans, Leuven, Belgium

I have a suggestion. I would like to participate in the self-assessment group and first of all I would like to invite those people who have experience in collecting information because we speak different languages, to put something together but this is not limited if more people are willing to collaborate from now, ok but I think that all those who went to the process and have written these things, they should gather together and produce something which is readable for all of us because of the difference of languages and we can now invite more people if they are willing to contribute. That's my suggestion. So, I'm more or less designating volunteers. It's very democratic.

Joaquim Braizinha, Lisbon, Portugal

Yes, by the assessment I would like to contribute with the experience we are now having in Portugal...I say that for instance I'm desperate to be in a working a group, for instance, on the assessment because we are in the middle of this process in Portugal so we will have a lot of experience to exchange.

Carlos Weeber, Delft, The Netherlands

A practical question. You started with a remark to think about next year. So, I want to propose not only working groups for that we have done now but also working groups to what we will do next year because otherwise if we go to repeat what we get this year it doesn't seem very...so, I want to know from you how you are going to prepare next year a connection with working groups because we need working groups to become better than this year. I'm sorry.

Constantin Spiridonidis, Thessaloniki, Greece

No, we never had working groups preparing the curriculum of the previous years. This is why we had bad preparation if you want to accept it more or less, ok. It was something, which was empirical, very introverted, not at all representative but it was the only way to have an agenda.

Carlos Weeber, Delft, The Netherlands

No, I don't criticize the situation, I want to know how you are going to prepare next year a connection with the working groups you are proposing.

Richard Foqué, Antwerp, Belgium

The question is if we agree about establishing working groups. How will be then the relation of the working groups of this year with the next conference that's I think a question that Carlos put forward and is a right question. I think the idea is straightforward that the agenda of the next meeting will be the results or conclusions of those working groups presented in the general assembly of the Heads and maybe and hopefully it, will prepare the Hania statement 2003.

Carlos Weeber, Delft, The Netherlands

I think we can spend part of the time this afternoon to search for new items for next year and connect this with another working group because it should be very stupid to repeat the discussions we had this year next year or I say we have to start another sort of content next year.

Constantin Spiridonidis, Thessaloniki, Greece

The idea was that the working group, and it's not the working group that we have here defined in the program, I was thinking about something like five or six or seven persons, who will undertake the responsibility to organize the session on a subject, for example the curriculum or the system of evaluation and from this subject they will raise a number of issues which will be organized by their own responsibility for the session even if this session will be a paper presentation, a presentation of cases, a presentation of different viewpoints or that session could be, if the working group decides it to be this way, an open discussion about that. So, there is not any kind of predefined way of the way that this working group will do this preparation and presentation. I think that it must be in the responsibility of the working group to organize the session in the way that this working group will decide. That was the theme. Of course, I understand that the reason is not to repeat the same themes but I don't have the feeling that the discussion groups in this session got to something which was very exhausted or very defined. On the contrary, I think that it was just a discussion which was without coherence and without orientation as it was all the previous years and this is why I say that's enough. Probably, this model will not work but at least we have to try something different. We must self-evaluate ourselves and this is myself that I say this thing first because I feel responsible up to a point for this condition

Richard Foqué, Antwerp, Belgium

At least I think this conference as a conclusion you could say has defined the problem areas in a much closer way than before. Conclusion is these working groups which are proofing that we have defined let's say, the important problem areas. I think it's important to work on those areas and to go further into deepening it and furthering it and may hopefully come to some results, which can be helpful in creating this European Higher Education Area in architecture. That's the aim, the overall aim, the main goal.

Constantin Spiridonidis, Thessaloniki, Greece

If there are issues that escaped from our discussion, and someone considers that he or she would be interested in creating a working group on those issues or even to introduce them in a discussion framework, I think that now is time to say it. The idea is that we ask groups of five, six or seven, we will see how many, persons, to develop an issue or a group of issues and undertake the responsibility to prepare a session for the next meeting.

Herman Neuckermans, Leuven, Belgium

Yes, I agree with what has been said that we don't have to repeat over and over again the same thing. You know, it's my position, that we need to accumulate our knowledge and the first thing anyhow is that we have to create these working groups, a small number of people willing to do something. The first thing we have to do is to report or to synthesize what has been said here and at least input that as something that is given for the next meeting, plus, that they have to further some subjects and as I propose, I propose to limit yourselves to a few subjects, which stand more chance to succeed. That's all. Core subjects, ECTS and the evaluation; put the different things together and then use this meeting to inform each other about what all these experiences can bring to the others. That's my position.

Claudie Viatte, Ministry of Culture, France

Je pense qu'il serait très intéressant de changer nos informations sur les trois, cinq, huit parce que même si des pays n'adoptent pas ce système je pense qu'en lieu d'information réciproque ici ce serait très intéressant de faire vraiment un point un peu exhaustif sur où en sont les écoles, qu'est-ce qu'elles produisent comme diplomés ou non diplomés à ce niceau-là qu'on sache vraiment entre nous ce qui se passe et je pense que les trois niveaux sont essentiels le Bachelor, le Master et ne pas oublier le Doctorat sur lequel je pense qu'il y a beaucoup d'échanges d'information nécessaire pour bien comprendre ce qui se passe en matière de recherches dans les différentes écoles.

Richard Foqué, Antwerp, Belgium

Ok, I'll try to make a short translation for those who don't speak French. Our colleague is saying that it's important to put into account that the way the education will be structured in the three cycles in fact the three years Bachelor, two plus two Masters plus also and she says that the importance of also the Doctorate, the three years or four years Doctorate. I think that's the main issue you are raising and I think this is also an input, it may be an

input to the working group. I don't think as I said to the others, we are not going to discuss again about the content but I think it's worthwhile to make a contribution to the input for the working group that is working on that. Thank you very much.

Pierre Culand, Bordeaux, France

Within the working group of curriculum, I would like to work on one, two subjects. One is what could be the shared diploma and second subject, what could be the requirement to enter the Masters.

Constantin Spiridonidis, Thessaloniki, Greece

Thank you very much. That's already something raised. Our colleague from Torino and after James Horan.

Matteo Robiglio, Torino, Italy

I would be very interested in working on the theme of assessment and quality assessment but I have two questions. I agree with the working group structure. I suggest that working aroups should be more at a narrow so that they can be effective because it's very difficult to arrange learner's agendas in the academic world but in any world and they can report to assure transparency to the Website Constantin has presented. So, we can put papers and working materials by thematic areas on the site. Maybe somebody already says it's quite banal but that could use transparency and help people react while working aroups are working so that we can come to the next Hania or at a meeting somewhere else with some statements but then I have a question that is really a newcomer's question to the President. Can EAAE state somethina? I mean that if we make a working aroup and we produce something that in my opinion will more or less look like a standard or something that a faculty should adhere to, when you are saying we are a company, in fact each faculty is a company and our problem is similar to the problem they care constructors had at the beginning of the century when everybody was making his own screws and it couldn't fit the screws with the others. But if we make a statement on that, this is a real question, which way EAAE decides that this output of the working groups becomes the reference? Because otherwise I fear that we produce just maps. Ok, maps are very interesting knowledge, exchanging knowledge, getting into new doctorate problems, everything I love it. But I need maps like the militaries do for action because we want to move from year to year and so, we need a map of the ground to move. If we stay to maps, then let's say that these working groups are just meant to map situations and give a good geography and then everybody is free to do whatever he wants but I can think the EAAE, that is my opinion, it's no longer the question, could make maybe a step forward something that becomes a reference to what of course, you are not compelled to adhere but you are encouraged to adhere. That's the normal way that we do a quality assessment and the only possibility of having quality assessment not just being a self-portrait in which everybody says that he is number one in Europe like cities do and they do urban market.

Herman Neuckermans, Leuven, Belgium

I think your question partially is inspired by the fact that you are a newcomer. I repeat now here that EAAE has no legal power. EAAE is a non-profit making association and the only thing it can do is to act as the voice of and to act as de facto voice of. This is maybe not enough but do you know that the European Architects' Directive has also no legal value but it's a very powerful directive. Last vear we have taken position regarding the European Higher Education Area discussion and that has been circulated as a voice of the whole community of teachers, of Schools of Architecture to those people who ultimately made the decision. But that's for the moment all that we can do. The other track we are following without having the legal power is that we try to become part of the debate as a partner in the revision of the European directives concerning architecture and that's the reason why I mentioned very fast yesterday in the General Assembly that I attended the meeting with ACE because also I said a discipline exists in tension between the partners. ACE has the ambition to play a role in this revision of the Directive and our opinion is that EAAE is the counterpart in this dialogue and that's what we, EAAE are lobbying in fact but you cannot. We are a legal body but we have no legal power. It's a matter of convincing people. We respect that we are completely different from ACSA, the Americans, our sister association, who has this legal position in the accreditation of the schools. It's a completely different situation. Maybe we can achieve that in the course of time but we are not yet there and the only way we can do it is by lobbying and also by proofing our quality because lobbying by innocence is dangerous, I think.

Richard Foqué, Antwerp, Belgium

Thank you Herman for the clarification. I think it's sufficient for now. We have to close the session and the last intervention is from James Horan.

James Horan, Dublin, Ireland

One of the difficulties that I experience at meetings like this and conferences of this nature is that we have first of all, a very large number of people, all of whom individually have a huge amount of different experiences but it's always difficult to try and get some clear coordinated thinking coming from a group of this size. The discussions about the possibility of working groups I think, is extremely interesting and very important and I would put a proposal as to a methodology about how we might go about this process. First, there are many subject areas that we need to address as an organization and that goes from all sorts of things about accreditation, about methods of teaching, about the appropriateness of qualification. There is an endless list and it's very easy to wonder around like in a supermarket, not knowing exactly what to buy and what to pick up. What I suggest we might do as a starting point is to ask the individuals in this meeting after this session to sign their name to a paper outside here in the hallway and sign up their name and put down the topic in which they have a passionate interest. From that list we would form a series of working groups by people, who have already stated their commitment in this area. And if there are subjects that are not on the list we'll deal with them later. We will only deal with the stuff that we know. People will put in time and really put valuable work into it and if in the end of one year we have three, four or five topics carefully analyzed, discussed at length and presented to this meeting we would then be

able to publish something, which is the voice of the EAAE and becomes the credibility against which we are measured. That's how we get the power. We don't need the legal power if we are seeing to be effective. We will automatically get the power. Thank you.

Richard Foqué, Antwerp, Belgium

Thank you very much, James. I think it's an excellent suggestion and the applause is proving that we all agree. I think what we would suggest everyone could do that we put on that paper after lunch or before lunch.

Stéphane Hanrot, Marseille, France

Just to say that in this list of groups possible groups you will find one, which is dedicated to doctorates. The content of this working group was defined in Newssheet 62. I will put on a copy what was in the Newssheet. So, if you are interested, join us and work on that, put your name references and you will be informed of what is happening on this topic.

Harun Batirbaygil, Istanbul, Turkey

I feel a little bit trickled of the atmosphere I found here on behalf of our country. Therefore I don't feel empowered to contribute to those speeches and to groups by groups but I strongly feel that I want to work with the working groups. So, first of all, I think my colleague Kotsakis stated that we should clarify some points of working together. So, please clarify those and we'll have the courage to raise our hands for working groups. Thank you very much.

Constantin Spiridonidis, Thessaloniki, Greece

Of course, we have to clarify once again these points. You are very right to raise the issue and I'm really very glad that you raised it because I said that we must be transparent. I will speak as an individual. I really feel very uncomfortable because of this condition. I think that the possibility to overcome this condition exists. EAAE is an association which has no limitations of such kind that the European Union policies have. So, this is our ground and we are here as an association with no exclusions. Now, the fact that a process of funding creates such a kind of problems I believe that it is feasible to overcome it. I said it many times that this unfair for some EAAE members condition of discrimination has only financial implications which we can very easily overcome. It is only a decision of the EAAE to say that we cover the participation of our members who, because of that reason of European policies, are not equal to participate, making this way equal participants. I think that this is an obligation of the EAAE. So, this is a simple technical way to overcome that and to forget this distinction in this room and in our future meetings and to consider as necessary to have in these working groups persons regardless of their origin or country.

Harun Batirbaygil, Istanbul, Turkey

Ok, thank you. To further this, so, I would propose further to enrich this atmosphere and to invite all the people for the next meeting to Istanbul; if they found it appropriate, the next meeting could take place in Istanbul.

Proposed WORKING GROUPS to elaborate on the issues raised at the debates of the Fifth Meeting of Heads, and will present the results and proposals of their work at the next Meeting of Heads which will be held in Hania, 3-6 September 2003.

1. Profession & Education

- 1. Radford, Denis (Leicester, UK)
- 2. Johnston, Lawrence (Belfast, UK)
- 3. Krumlinde, Heiner (Bochum, Germany)
- 4. De Bleeckere, Sylvain (Diepenbeek, Belgium, states 'European Identity')
- 5. Tilmont, Michele (Lyon, Paris)
- 6. Roosebeeck, Marina (Amsterdam, The Netherlands)
- 7. Balogh Balazs (Budapest, Hungary)

2. Assessment

- 1. Kara Pilehvarian, Nuran (Istanbul, Turkey)
- 2. Fogué, Richard (Antwerp, Belgium)
- 3. Hilti, Hansjoerg (Liechtenstein, Switzerland)
- 4. Bridges, Alan (Glasgow, UK)
- 5. Braizinha, Joaquim Jose (Lisbon, Portugal)
- 6. Schaefer, Wim (Eindhoven, The Netherlands)
- 7. Robiglio, Matteo (Torino, Italy)
- 8. Neuckermans, Herman (Louvain, Belgium)
- 9. Onür, Selahattin (Ankara, Turkey)

3. Curriculum (BA-MA-PhD)

- 1. Batirbaygil, Harun (Istanbul, Turkey)
- 2. Wagner, Andreas (Karlsruhe, Germany)
- 3. Culand, Pierre (Bordeaux, France)
- 4. Henry, Didier (Paris, France)
- 5. Gatermann, Harald (Bochum, Germany)
- 6. Musso, Stefano (Genua, Italy)
- 7. Vovaulin Kealm?
- 8. Gökan, Koray (Istanbul, Turkey)
- 9. Hersek, Can (Ankara, Turkey
- 10. Kotsakis, Dimitris (Thessaloniki, Greece)

4. Exchange & Mobility

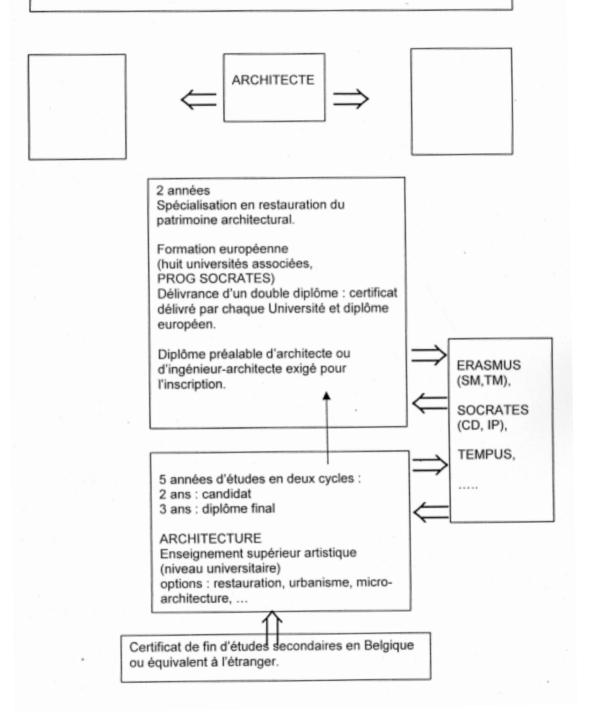
- 1. Baranowski, Andrzen (Gdansk, Poland)
- 2. Van Cleempoel, Koenraad (Antwerp, Belgium)
- 3. Caglar, Nur (Ankara, Turkey)
- 4. Pilate, Guy (Brussels, Belgium)
- 5. Ruan, Jeanne Frence (Paris, France)
- 6. Michel, Michèle (Bordeaux, France)

5. Doctorates

- 1. Doevendans, Kees (Eindhoven, The Netherlands)
- 2. Hanrot, Stéphane (Marseille, France)
- 3. Tran, François (Lyon, France)
- 4. Verbeeke, Johan (Brussels, Belgium)
- 5. Liberloo, Roger (Diepenbeek, Belgium)
- 6. Culand, Pierre (Bordeaux, France)

Posters

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Slovak University of Technology



Faculty of Architecture 812 45 Bratislava

Namestic Slobody 19 Slovak Republic Tel: +421 2 5296 7060 Fax: +421 2 5292 1533 Email: dekan@fastu.fa.stuba.sk

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Entrance tests Architecture (Ing. arch.)



Entrance tests Urban Design and Planning (Ing. arch.) Entrance tests
Landscape
Architecture
and Landscape
Planning
(Ing. arch.)

Entrance tests Design for Industry (Ing.)

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Study finished by: Second state exam, diploma work

Study specializations

A1 Housing Design
A2 Public Building
Design
A3 Industrial and
Production Building
'esign
A4 Interior.

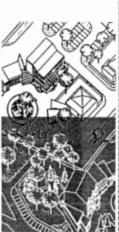
A4 Interior, Exhibition, Stage Design A5 Monument

A5 Monument
Preservation and
Design in Historical
Environment
A6 Design in

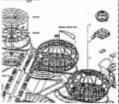
Architecture A7 Experimental and Ecological Design

A8 Progressive Constructions in Architecture U1 Urban Complexes and Zones U2 Town Planning U3 Landscape and Park Architecture





D1 Industrial Design
D2 Design in
Architecture
D3 Visual
Communication
and Multimedia
Design



3rd Degree Doctoral Study (PhD)

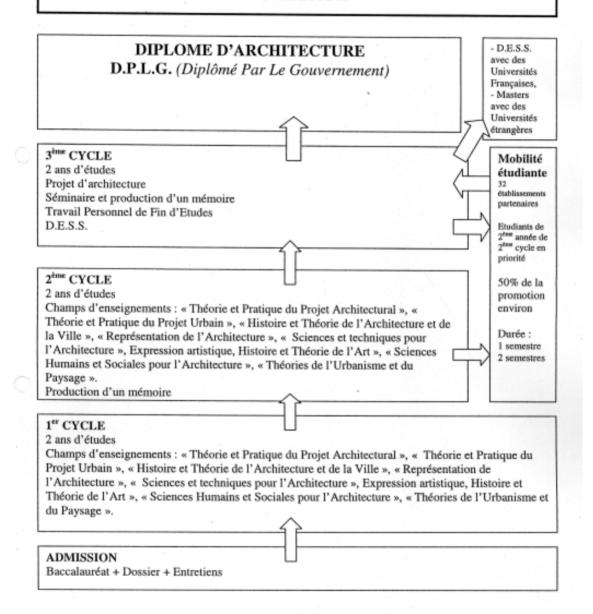
Enrolment interview

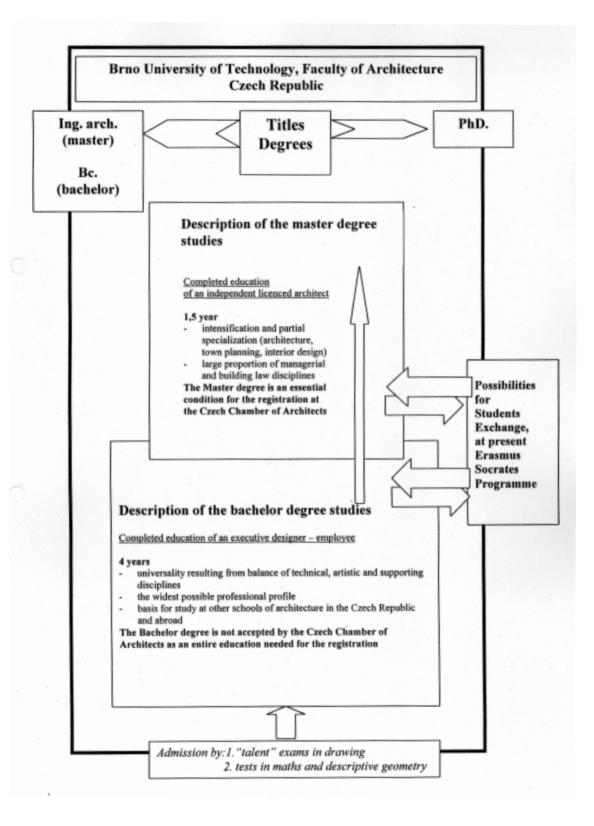
Architecture PhD

Architectural Urban Design and Planning **PhD** Landscape Architecture and Landscape Planning **PhD**

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PRESENTATION GENERALE

DIPLAME

 Le diptôme décerné est un diplôme de l'enseignement supérieur entistique de type long, de niveau universitaire, reconnu par la currenuranté française de Belgique. Ce diplôme décerne le tibe d'architecte. Il est confirme à la directive surripézaie 85/384/CEE, ratifiée par la Belgique.

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- ACCES A LA PROFESSION
 - Le diplôme permet l'exercice de la profession d'archinecte, dans le sers large du terme, sans limite de responsabilité, dans trus les pays de l'union européenne.
- ACCES AUX FORMATIONS COMPLEMENTAIRES

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- 1º cycle de deux anixées de candidature débouchant sur le diplônte de candidat en architecture. Le 1º cycle denne une approche générale des cours théoriques et metre les étudiants à l'architecture.
- 2º cycle de trois aumées dominant droit au diplôme et pur titre d'archatecte. La troisième nonée permet aux émigliants d'incienter feur cursus au moyen de cours à option ties deux décolères années offrent la prosibilité sux émigliais de chaisir une pédagogie spécifique du projet à travers 3 atéliers verticaux.
- Des échanges Erasmus s'ocyanisant en 4º armée.

OBJECTIFS PEDAGOGIOUES

- Formet des hommes palyvalents, pouvant aborder des problématiques d'échelles et de complexités diverses, etant en pesure de s'adapter aux conditions changeantes d'une société
- Former des architectes, à în fois au seris professionnel et culturel du terme, et ce su acquérant une liberté et autonomic intellectuelle, et sine réelle capacité de synthése.

CONDITIONS D'ADMISSION

Ezre portour d'un diplôme d'étodes secondaires délivré par la Comminauté française de Bolgique, d'un buccalauréar général ou rechnologique, ou de rout autre diplôme équivalent délivré à l'étrançair. Il n'y n par d'épreuve de sélection.

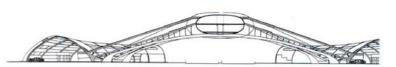








CEUL - Cooperativa de Ensino Universidada Lugiada, cri - Degt. cri Architectura Rue de Junquelle, 158 e 195 -13-9-001 Liebon Portuge **EDUCATION PROGRAM** Talera Doctoral areas Architecture Degree(s) Project Porterio de 20049 Theory and Hesony of on 4 de Selembro Amblecare Technologies Dec Lei nº 216/92 · Vidue Realty Territor or Diractinose de 12 de Outubro Advanced degree studies Students Dec/Lei nº 216/92 de 13 Outubro Eresmus/Socrates - Magner in Theory of Architecture - 281f - Nance in Iconography of the Conceptual Exchange processes of Art. Rectars and Design - 279h - Marcy in Design Management - 278h - Macris: m balfed Patrimory - 7759 - Manter in Technology of Communication - 288h - Poscustuation in Auditedium and lown disgnosts of susce. phene and offility - 140h - Posemeusson in Bustalinses Construction - 190s - Programment in Architectural Statelos Management - 1886 - Posenscussion in Presympton in the Land Scape - 1885. Pospredujton in Imagnery of the Portiguese Architecture -140h
 Pospredutton in Pitming, Quality and Construction of Buttings - 190h - Pregraduction in Returbish Resolution of Hallmost Centers - 16th محمد حصاط Specialization covers in Contemporary Architecture and Aparticle - 88h TITLE CONTINUES - Specialization counts in Asserts ment of Buildings - 42h 4BK Hamburg - Trending course in Arts - 1804 SABA Slutton - Course in Patientry Management - 207 Bij Vegimpi Description of the basic studies Bélgion Katholieka U. - Leovier Counts ! Security : Security : Secritic Highly in July : Sel ! "Security in Egitar ! O del Pers Vissos O Poi de Calatorya O Poi de Vissos 10-00-07 U Velladolit hiera. E. of each Youksule E of erch P Porthera G:Ada AFRICAL J. TRANSPORTER u daga Studid Faerus إس186 شيئة Politik Milaton - 100 C 100 C 10 U Architecture L Studiel Regge Colabria L' Shall di Rome Conc. Procedure 10 La Sapierna (U Architecture d Venedè Franhochscrule Liechten sieln. [A : 51 1.28 Admission high school degree or equivalent. - applying grade as established by U.L.



DEPARTMENTS



- · Drawing and Modelling
- · Free Creative Activity
- Theory and History of Architecture
- . Theory of Town Planning
- Building Structures
- Construction
- . Studio of Living Environment
- . Studio of Public Construction
- Studio of Monument Reconstruction
- Studio of Urban Design
- · Studio of Interiors and Exhibitions

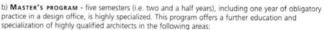




a) BACHELOR'S PROGRAM - eight semesters (i.e. four years) of a universal character. This program offers completed basic education of a professional designer – architect. The program comprises both creative, engineering and humanistic disciplines and architectural design and town planning. The

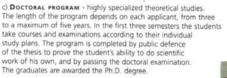
program is completed by passing the comprehensive Bachelor's examination consisting of the defense of the final project and an oral examination. After a period of practice they may continue their studies for a second degree.

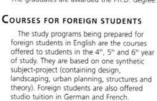
Architecture and Town Planning (Architecture)



- Architectural Design
- Urban Planning
- · Interior and Exhibition Design
- · Reconstruction of Historical Monuments
- . Theory of Architecture

The studies are completed by passing the state examination, part of which is the defence of a diploma thesis.







FACULTY OF ARCHITECTURE, PORICI 5, 603 00 BRNO, CZECH REPUBLIC

PHONE: +420 5 4114 6620, FAX: +420 5 4114 6605

E-MAIL: LETALOVA@ADM.FA.VUTBR.CZ, HTTP: WWW.FA.VUTBR.CZ











of architecture department

DESIGN
THEORY AND PRACTICE
CONSTRUCTION AND TECHNOLOGY
ENVIRONMENT
HISTORY OF ART AND ARCHITECTURE.

ch member of the Faculty is a specialist in one or re of these disciplines. Nonetheless, all members of Faculty are requested to participate to the programs of architectural design studios. In addition, the expertise renowned architects and engineers from professional ctices is engaged to complement the work of the idemic staff.

Students are encouraged to acquire proficiency in specific fields through an extensive range of elective courses, which are available to them during the third and fourth



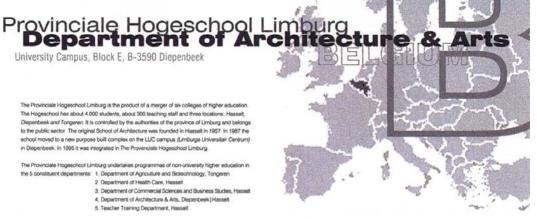


University Campus, Block E. B-3590 Diepenbeek

The Provinciale Hogeschool Limburg is the product of a merger of six colleges of higher education. The Hogeschool has about 4,000 students, about 300 teaching staff and three locations: Hasselt, Diepenbeek and Tongeren. It is controlled by the authorities of the province of Limburg and belongs to the public sector. The original School of Architecture was founded in Hasselt in 1957. In 1987 the school moved to a new purpose built complex on the LUC campus (Limburgs Universitair Centrum) in Diepenbeek. In 1995 it was integrated in The Provenciale Hogeschool Limburg.

The Provinciale Hogeschool Limburg undertakes programmes of non-university higher education in the 5 constituent departments: 1, Department of Agriculture and Biotechnology, Tongeren

- 2. Department of Health Care, Hasselt
- 3. Department of Commercial Sciences and Business Studies, Hassell
- 4. Department of Architecture & Arts. Diepanheek (Hasselt
- 5. Teacher Training Department, Hasselt



Architecture

Arts

Interior Design

Architecture

3D-design →ceramics, glass, drawing and sketching, jewelry) Graphic and Advertisement Design

Vienal Arte

→sculpture, graphics, mixed media, painting)

5 years

- 1. Introduction to Architectural Design
- 2. Individual Housing. Interior Design
- 3. Social Housing and Urban Design
- 4. Metaphor & Design. Structure & Detailing 5. Thesis, Ethics and Architectural Synthesis

seminar options

Architecture & Meaning Arts & Architecture Building Technology Urban Ecology

English Language Program

- History of Belgian Architecture and Urban Development.
- Architectural Design. Structure and Detailing.
- Analysis of recent projects. Study visits.
- Independant study

Accomodations

- 40 PC's
- CAAD
- Computer Facilities
- Specialised Architecture library

Schooling architects in Diepenbeek focuses on three fundamental dimensions embracing the professional domain: space, liveability and meaning.

SPACE

The three dimensional material reality with its complex and many sided nature. The space category points out above all the object-pole of the architects job. Material space forms the object he studies, approaches competently and changes responsibly.

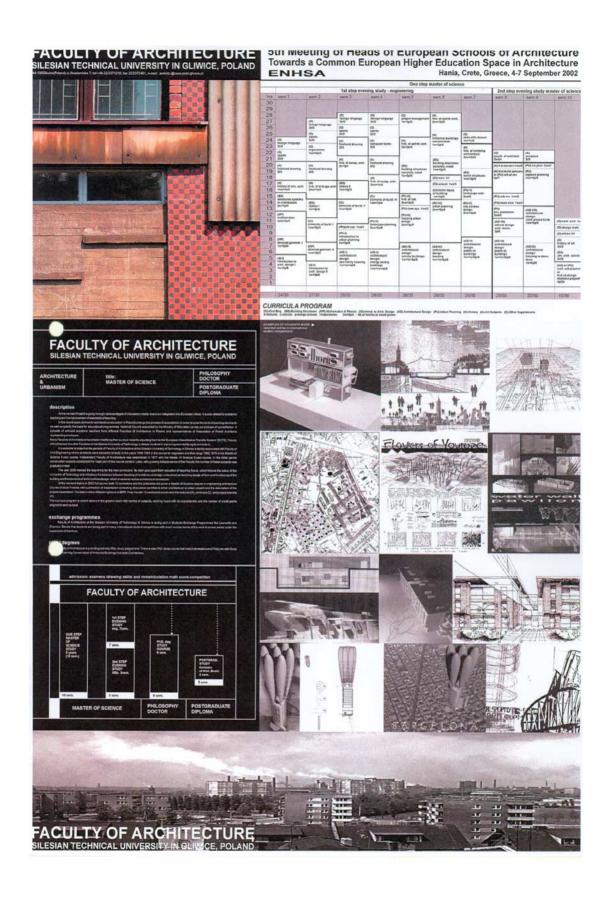
LIVEABILITY

Equally important is the subjective pole of liveability. The architect is not only handling space in an objective way. For him it's always subject related. Every space is in one way or the other always a living and working space for the individual, a micro or macro community. The category of liveability possesses an immanent architectural sense. In Dutch the word "leefhearheid" points with "baar" to the first human living space of the "baarmoeder* or womb. The liveability theme forms increasingly an important subject in the contemporary architectural discourse and develops into a major social and political issue. The debate about making liveable our planet in general and our towns in particular is a good example of it. With the category of liveability the contextual and social dimensions of the professional domain of architecture are positioned to the foreground.

MEANING

The object and subject polarity does only partially circumscribe the domain of architecture. The cultural dimension exceeds this bi-polarity essentially. The cultural meaning of the objective space is always much more important than its subjective meaning. We interpret this greater cultural dimension in the light of the contemporary cultural environment of the meaningful image and points to the meaning category. A greater awareness and critical approach to the overwhelming stream of images will be one of the architect's important attitudes in the future.





SILESIAN UNIVERSITY OF TECHNOLOGY IN GLIMICE (POL '9) - FACULTY OF ARCHITECTURE - CURRIC" A PROGRAM IN ARCHITECTURE AND URBAN PLANNING

				Ineering			II-nd step	II-nd step evening study master of sciences	r of sciences
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	() Foreign lang.	20/2	27.2	Project	History of P-Arch.				
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	(O) sports*	20/0	2c/0	1w+3p/2	(H)	(O) EcEffic&Doc			
(O) Foreign lang.	20/0	(A)	(0)	(H)	Historical Build.	1w+1c/2			
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(O) sports*	Ergonomics	317.3	31/3	Architecture	1w+3p/4	History of	(O) Psychol. of	(A) Sculpture	
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(A)	(A)	History of	Freehand drawing	(BS) Build-Struct.	Conor. & Wooden	2we+2c/ 5	(H) H.B.C 1we/ 2	(PU)Rur-PI 1we/ 1	
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Hist of Anc. Arch.	(H)History of Midl.	(88)	European Arch	(Ci)Phys-ofBuild	(CI)Acous twer 1	1we+2p/3	(PU)UrbPI-Ren	Regional	
(H) 1we+1c/4	Ages Architecture	Statica-II	2we+1c/3	1W+1c/ 2	(CI)TechEquaria	(PU)Arch.Krajobr.	4p/7	Planning	
(BS) Structure	2we+1c/4	1we+2p/3	(0)	History of Urban.	1w+1p/2	2we/ 2	(PU)URen1we/2		
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2w+1p/4	Statics-I	Elements	of Buildings-III	(PU) TS 1we/ 2			(PU)Environment	(AD-VIII)	
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Mathematics	(C)	2we+2m 4	(PU-II)		Planning	Design	(AD-VII) A-Forms	Design	(O)Cont-Arch 1w/2
2we+2c/ 4	Elaments	(PU)UrbSoc1we/1		Housing			Archof-interior	Work-Places-B	(O)Metod.of D.1/2
	of Buildings-7	(PU-I)	Landscape	Urban Design	2we+5p/8	2we+4p/ 9	3p/6	1we+5p/ 9	(0) Ethics 1/1
(MP)	See Spines	Introd-to UrbanPI	Planning	2we+3p/7					(O) History-of-Art
Descript-Geom-I	(MP) Descriptive	1w+2p/ 6	2we+3p/8						2w/ 2
1w+2p/ 4	Geom-II-Perspect	(AD-I)	(AD-II)	(AD-III)	(AD-IV)	(AD-V)	(AD-VI)	(AD-IX)	(BS) AArch Const
	1we+2p/3	Architectural	Architectural	Architectural	Architectural	Architectural	Architectural	Architectural	2w/ 2
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to Design I	to Design II	Housing	Buildings						Hist-Ad-Design***
1w+4p/8	1w+3p/8	1w+1c+4p/8	1we+1c+4p/8	1w+1c+5p/8	1w+1c+5p/8	1w+1k+6p/9	1w+1k+6p/8	1w+6p/9	4p/ 23
						DIPLOMA (Eng.)			DIPLOMA MGR
24/30	27/30	28/30	28/30	28/30	28/30	25/30	23/30	22/30	10/30

W - lectures c - classes p - design classes L - laboratories sports* - is unobligatory for expineering study ** P casalible to choose - each classes for the half No of students ** respecially to choose - each classes for the half No of students ** respecially of object under supervision with branch specialists consulting ** design of diploma project under supervision with branch specialists consulting

iD –Introduction to Design, O – Other Supplements: MP- mathematic & Phisics A - Art.Subjects,

Subjects possible to chose

CI - Civil Engineering, PU - Urban Planning, GROUPS OF SUBJECTS: AD – Architectural Design,

BS-Building Structures , H-History,

Fachhochschule Liechtenstein

Fürst-Franz-Josef-Strasse, FL -9490 Vaduz

EDUCATION PROGRAM ARCHITEKTUR Bachelor-/Master-Studies

DEGREE Bachelor/Master/Diplom













POSSIBILITIES FOR STUDENTS **EXCHANGE:**

Cooperation under the EU - Programmes Sokrates and Leonardo

Sokrates Cooperations

Universidade Luisida Lisboa / Portugal

TU Wien / Österreich

Academie van Bouwkunst Amsterdam /Niederlande

Universidad De A Coruña/Spanien

Ecole d'Architecture de Languedoc / Frankreich

Glasgow School of Art / Schottland

Paris Val De Seine / Frankreich

University of Plymouth/England

Politecnico di Bari/Italien

Vaasa Polytechnic / Finn-

ADMISSION

Matura, Berufsmatura (FL, CH, A) Abitur, Fachhochschulreife (Germany) or other similar international qualification sufficient for entry to a higher education



Comparible qualifications from other universities are acknowledged, in the case of a transfer to Liechtenstein University of Applied Sciences.

A maximum of 30 new places are available each academic year. The courses in wintersemester start in october, the summersemester-coures in march.



YILDIZ TECHNICAL UNIVERSITY FACULTY OF ARCHITECTURE

ARCHITECTURAL PRACTICE

(No extra procedures required for chartering)



B.Arch B.CP

M.Arch M.CP

GRADUATE STUDIES

Institute of Graduate Studies in Sciences and Engineering:

ARCHITECTURE
Structure; Main branch of graduate study with 7 alternative
programmes for Master's and PhD Degrees
lumber of Years: Optimum 2 years for Master's degrees;
4 years for PhD degrees
Programmes: Architectural Design;
Building Construction & Management; Building Physics;
Building Research & Planning; Computer Alded Design;
History & Theory of Architecture; Restoration
Classified: Professional / Academic

Orientation: Professional / Academic
Other characteristics: Research and Development Facilities;
Cultural and Artistic activities; Human Resources Centre

CITY AND REGIONAL PLANNING

STIP AND HEBIONAL PLANNING
Structure; Main branch of graduate study with 2 alternative
programmes for Master's and PhD degrees
Number of Years: Optimum 2 years for Master's degrees;
4 years for PhD degrees
Programmes: Urban Planning; Landscape Design
Orientation: Professional / Academic

UNDERGRADUATE STUDIES

DEPARTMENT OF ARCHITECTURE

Structura: Department with 4 main branches (chairs) and 11 sub-branches (units)

umbor of Years: 4 years ubjects: Architectural Design; uilding Construction & Management; istory of Architecture; Restoration

Orientation: Professional Special Interests: Interdisciplinary studies; Campus facilities

(including Library and Research Centre; Student clubs; Health services; Bookstore)

DEPARTMENT OF CITY AND REGIONAL PLANNING

Structure: Department with 2 main branches (chairs) and 2 sub-branches (units)

lumber of Years; 4 years subjects; Urban Design; Landscape Design Drientation: Professional

PhD DEGREES

- Architectural Design
- **Building Construction and**
- Management
 Building Physics
 Building Research and
- Computer Aided Design
- · History and Theory of Architecture
- Restoration
 - **Urban Planning**
- Landscape Design

STUDENT **EXCHANGE**

Limited participation to Socrates/Erasmus Programmes.

Open to student exchange with foreign schools under protocols.

ADMISSION

UNDERGRADUATE STUDIES: Applicants are admitted to the department of their choice according to their scores in the National Student Selection and Placement Examination. A certain level of English is required. A Preparatory Programme is obligatory for students who fail the proficiency exam.

GRADUATE STUDIES: Admittance requires a good undergraduate degree and sufficient scores in Subject-specific exams, and the Graduate Education Entrance Exam (LES). A certain level of English is also required.



WROCLAW UNIVERSITY OF TECHNOLOGY FACULTY OF ARCHITECTURE

UL B. PRUSA 53:55. 50-317 WROCŁAW, POLAND. TEL +48:(71) 320 6208. TELFAX +48:(71) 321 2448. E-MAIL dziełanstifiarch.gwr.wroc.pl. WWW.arch.gwr.wroc.pl





Department of Architecture

STRUCTURE

The general aim of the Programme is the *Integral Architectural Education* as defined by the *Unity of Studies in Architecture* and the *Unity of Theory and Practice* in the spirit of the *Freedom of Education*.

STUDIO PROGRAMMES

For the fulfilment of this aim the studios are grouped in broader, but educationally coherent areas of the design and planning practice, that allow for the programmatic connection of design-planning modules with distinct modules on the theoretical or technological aspects of practice. These connections constitute the Studio Programmes, which form the core of the Programmatic structure. There are four studio programmes.

DWELLING I

-Architectural Design

DWELLING II

-Conservation and Restoration,

HABITAT I

-Urban and Landscape Design

HABITAT II

-Urban Planning and Spatial Development

GENERAL PROGRAMME

Complementary to the studio Programmes is the General Programme, the aim of which is to develop the historical and theoretical knowledge and the practical competence, which cover the entirety of the studio Programmes.

The objectives of the General Programme are: (a) the connection between the theoretical and technological aspects of practice with the general theories, their integration with the historic context of the arts, architecture and urbanism, and their connection to contributing sciences (b) the specialised development of the necessary for architectural studies competences on arts, mathematics and informatics.

HISTORY AND THEORY

Theory of Architecture, Planning and Spatial Development -History of Architecture, the City and Art.

-Human Sciences

-Institutions and Law

MEANS

Arts

Mathematics

Informatics

Represetations of Space: analogue and digital

EDUCATIONAL PROGRAMMES

The ten semesters of studies (300 credits) are covered in three Programme. The first two semesters (60 credits) are covered in the Introduction Programme, the six semesters that follow (180 credits) are covered in the Programme of Basic Studies, and the last two (60 credits) in the Graduate Programme. All areas of the Programme's structure contribute to each one of the three Programmes. This general direction follows the principles of unity of study and unity of theory and practice. The specialisations by Programme are the following:

A. INTRODUCTION

The overall direction of introduction is dual: (a) founding the combined competence of representation and design-planning in the broader field of the integrated studies and (b) connecting design and planning with the broader architectural thinking in its contemporary historic context.

B. BASIC STUDIES

The Programme of Studies, in its entirety, is a continuous five-year course, which leads to an integrated diploma in Architecture. The Introduction Programme establishes the unity of studies; the Graduate Programme completes it. The Programme in between, Basic Studies, does not constitute therefore an autonomous Programme.

The Programme of Basic Studies consists of the two sub-Programmes, as they have been described earlier:

I. THE STUDIO PROGRAMME OF BASIC STUDIES
II. THE GENERAL PROGRAMME OF BASIC STUDIES

These two sub-programmes comprise the structure according to which the Individual Programmes of Studies are organised with students responsibility and the contribution of the Curriculum Committee.

In this open-ended programmatic context, the *unity of* studies is ensured through the limitation imposed: first, by the thematic and temporal organization of the studies into Programmes and, second, by the compulsory thematic areas within each Programme.

With these restrictive conditions as they are imposed by the unity of studies, the freedom of studies is preserved: on the one hand with he possibility of choosing modules beyond the context of restrictive conditions (free choice modules) and on the other hand, with the possibility of choice between alfernative modules in the compulsory thematic sections (choice among compulsory modules).

C. GRADUATE STUDIES

The Programme includes the Graduate Studios and the Graduate Projects with the following content and directions:

GRADUATE STUDIOS

-ARCHITECTURAL AND URBAN DESIGN

-URBAN DESIGN AND PLANNING

The aim of these graduate studios is the completion of the design competence in the broader spectrum of architectural studies, Both parts of the graduate Programme are compulsory.

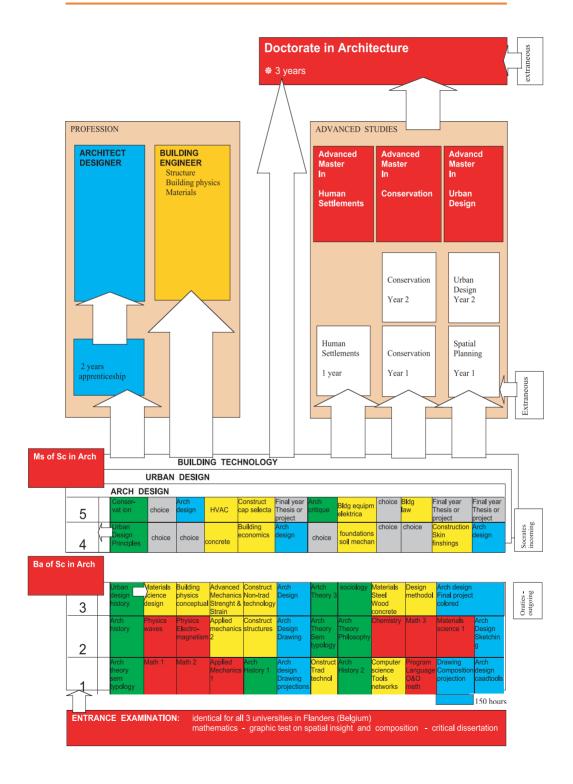
GRADUATE PROJECTS
-RESEARCH ESSAYS
-DIPLOMA THESIS











d'architecture

to the state of th

third academic level which is made up of 4 training specialties

Architecture and new technologies. Architecture and heritage

Architecture and building Architecture, cities and territory

s privileged relationships with the 2 neighbouring Schools engineers ENTPE and INSA, the Lyon School of architecture has set double degree which is unique in France. It allows students to) prepare the two diplomas and to obtain a degree in engineer only one additional year of study.

The Lyon School of Architecture also offers the following parallel trainings

- Preparation for the competition AUE (State Architect and rown planner Computer aided design applied to architecture
- The Lyon School of Architecture is home for 3 teams of research
 - ARIA (Applications and Research in computer science and archi-
 - VAH ICities Architecture Historyl

on School of Architecture developed international valuringships than 20 schools or institutes of architecture within the frame of either with schook of other countries.

The fields of collaboration firstly concern the mability of students. During the second academic level, they can follow a part of their curriculum a As a result, about forty students spend each year one or two semesters in a foreign school. Similarly the school yearly greets about thirty foreign students. and thus gains a cultural open-mindedness and an open reception from its

the Ahône-Alpes area), the skill centre in town planning, the Great

Projets 2000/2007 catalogue des IPFE, January 2002

du CERTU Morch/Mov 1998

Collection Memoires de projets EAL February 2002

L'Ecole d'Architecture de Lyon (EAL) est implantée depuis 1988 sur le campus de Vaulx-en-Velin dans des bâtiments construits par les architectes Jourda et Perraudin.

formation initiale

école accueille 700 étudiants et 110 enseignants dont 38 titulaires. Les études d'architecture sont organisées en trois cycles de deux ans :

le premier cycle d'études générales.

le deuxième cycle d'études permettant d'acquérir la maîtrise du projet d'architecture

le troisième cycle d'approfondissement et de professionnalisation, comportant un stage de formation pratique et un travail personnel de fin d'études, conduit au diplôme d'architecte DPLG.

L'école d'architecture de Lyon, assure des enseignements à la fois professionnels et universitaires qui intégrent les disciplines culturelles, artistiques et scientifiques. Les compétences ainsi acquises sont transférables à d'autres formations ou métiers que celui de la maîtrise d'œuvre. Ainsi, la diversification des métiers de l'architecte a conduit l'école à proposer un choix de plusieurs formations approfondies de troisième cycle :

- pôle architecture et TIC (Technologies de l'Information et de la Communication).
- pôle architecture et patrimoine.
- pôle architecture et construction,
- pôle architecture ville et territoire.

double diplôme

De par sa proximité avec les deux grandes écoles d'ingénieurs que sont l'ENTPE (Ecole Nationale des Travaux Publics de l'Etat) et l'INSA (Institut National des Sciences Appliquées), l'école d'architecture de Lyon a mis en place un dispositif unique en France qui permet à un étudiant en architecture de suivre un double cursus et, avec environ une année d'études supplémentaires, de préparer conjointement les deux diplômes et d'obtenir ainsi un diplôme d'ingénieur en complément de son diplôme d'architecte.

formation continue diplômante

Elle est accessible aux professionnels sous conditions particulières. D'une durée totale de quatre ans et demi au minimum répartie sur deux cycles, elle permet d'obtenir le diplôme d'architecte DPLG.

formations continues

- stage de formation post-diplôme au concours des Architectes-Urbanistes de l'Etat (AUE),
- stages de formation informatique DAO-CAO,
- stages de formation HQE (Haute Qualité Environnementale).

recherche

L'EAL possède des équipes de recherche habilitées par le Bureau de la Recherche architecturale du Ministère de la Culture et de la Communication :

- ARIA (Application et Recherche en Informatique et en Architecture),
- LAF (Laboratoire d'Analyse des Formes),
- VAH (Ville, Architecture, Histoire).

échanges internationaux

L'école d'architecture de Lyon a développé des relations à l'échelon international avec une vingtaine d'écoles ou d'instituts d'architecture dans le cadre des programmes d'échanges de l'Union Européenne (Socrates, Erasmus, Tempus) ou de conventions bipartites avec des établissements hors U.E.

Les domaines de collaboration concernent en premier lieu la mobilité des étudiants. En deuxième cycle, ils peuvent suivre une partie de leur cursus à l'étranger. Ainsi une quarantaine d'étudiants passent chaque année un ou deux semestres dans une école étrangère.

En échange, l'école reçoit une trentaine d'étudiants étrangers et bénéficie d'une ouverture culturelle et d'une audience auprès de nos partenaires européens.

diffusion culturelle et communication

L'école d'architecture de Lyon s'inscrit dans un réseau très dense de partenariats avec en premier, les écoles d'architecture de la Région Rhône-Alpes et de la Région Auvergne, et aussi de multiples institutions comme l'Alliance des Grandes Ecoles Rhône-Alpes (AGERA), le Pôle de Compétence en Urbanisme à Lyon, les Grands Ateliers de l'Isle d'Abeau et tout naturellement la Ville de Vaulx-en-

éditions

"Projets 2000/2001" catalogue des TPFE, janvier 2002

Banlieues : villes de demain, Vaulx-en-Velin au-delà de l'image", Editions du CERTU, mars/mai 1998 "Démarche Projets urbains, le Grand Projet de Ville à Vaulx-en-Velin". Collection Mémoires de

projets EAL, février 2002

"Ville et patrimoine. Travail sur la mémoire, matière à projets". Collection Mémoires de projets EAL, juin 2002

UNIVERSIDAD EUROPEA DE MADRID. ESCUELA SUPERIOR DE ARQUITECTURA

(CENTRO SUPERIOR DE ESTUDIOS DE ARTE Y ANQUITECTURA). C/ Tajo sio Villaviciosa de Oden Madrid 20070 SPAIN

www.uem.es/web/arm

Education Progress 2000 and 2002

Titles

ARCHITECT - FINE ARTS - LANDSCAPE - BUILDING

Phot ARCHITECTURE

Post Drepress ART & ARTCHITECTURE CRITICISM BUILDING ENGINEERING HOUSING RECOVERING HOUSING BIOCLIMATIC

Descriptions

ARCHITECT Structure 1" year 81 or 2" year 81 or	TING ARTS Structure of year 84 or 2" year 84 or
3 ^{tr} yoar 81 cr	3 th year 114 cr
4" year 87 cr	4th year 84 ter
5" year 80 cr	5th year 84 cm

8169)

5" year 80 cr

<u>Specialities</u> Architectural Design **Building Technology** Urbeniana Theory and Desing Support for Parforming Arts **Building Managinent**

> Entrance Second School Personal Interview Drawing test

FINE ART

Structure 1" ven year 12 cr 2"dyear 73 cr 3" year 64 cr

Years

€ritrbitce Second School Personal Interview Specialities

Ygars.

Performing Arts Visual Art Electronic & Net Art Industrial Depring

Enhance Second School Potfolio and personal Interview **Drawing test**

BUILDING

Structure year 81 cr 2" year 19 cr 3" year 79 cr

Years

Specialities. **Quilding Tectmology** Housing Recovering Bullding Wavagment Security

Entraside Second School Personal Interview



Escuela Técnica Superior de Arquitectura. Universidad de Granada.

Campo del Principe s/n.18071.Sraneda. España. 75 : •34 958242872. (ax.: +14 950246115.s-ms:); pryut@esphar.ugr.es

Tille: Arquitecto, Regree: Licenciado

School of Architecture, Architect. Dr. Architect.

(S years) (see note 1)

Basic Studies, IstCacle:Two years.

Topics: Mathematics (15), Physics, (12) Construction (18), Ristory of Architecture (16.5), Drawing (10), Secretry (15), Analysis of Architectonic Form(9), Projects (27), Drawing by Computer (3), Buildings Pranes (10.5) and Orban Planning (9).

. Others topics, of free configuration.

Credite:156(1560 house)

Orientation: Introduction to the basic items of avoid(ecture, Knowledge of architecture and town.

Admission: Selectivity exem. The same for all the students of the University in Spain.

Advanced Studies, 2th Cicle: 5 years,

Topics: Composition in Architecture(13.5). Other Planning and Design(22.5), Projects(50), Installations(15), Construction(28.5), Building Frames(16.5), Mechanic of sols(4.5), Law(4.5), Restoration in Architecture(6).

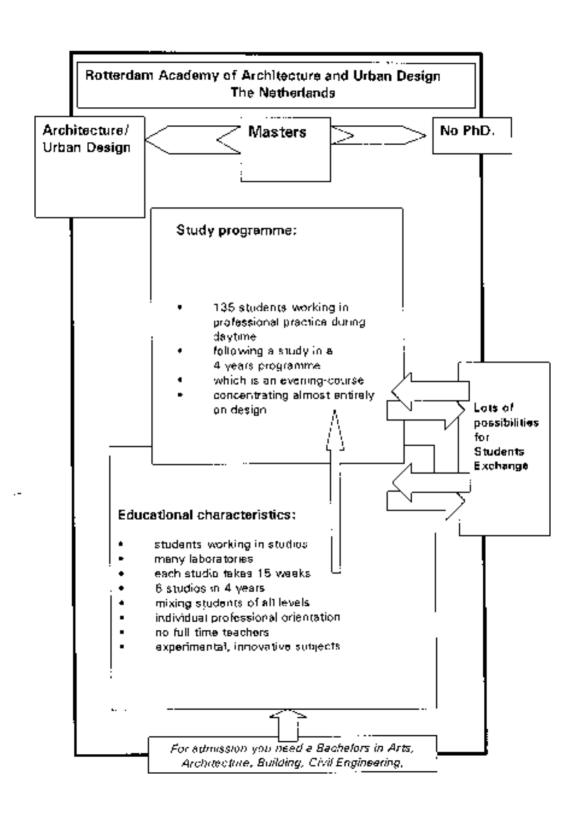
 Others Topics, of free configuration. Are possible professional practice in studica of architecture or enterprises. Naximum 40 predite, and exchange with others schools. Maximum 46 predite (programme Brasmus, Intercampus, etc)

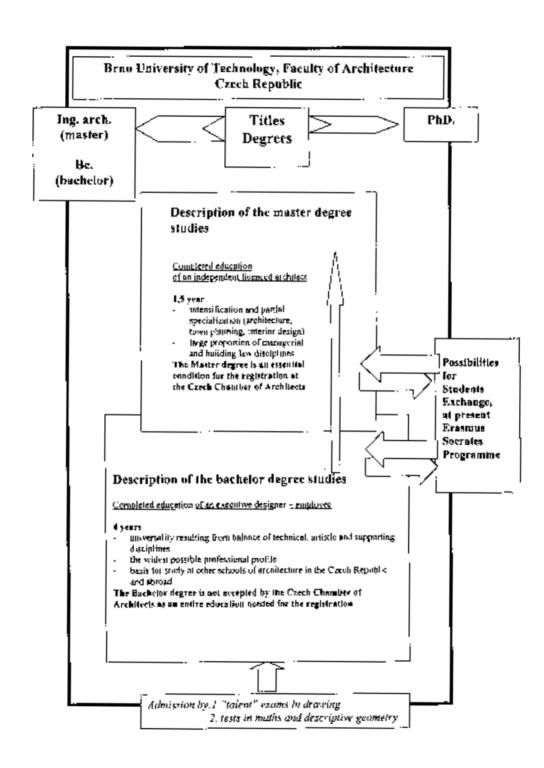
Project and of the Coursell). For to get the Tinle.

Credite:244 (2440 hours)

Orientation: Advanced studies in Architecture for professional plenum.

Note 1. Studies of Postgrade. Programme in The Department of Graphic Expression in Architecture. Two years of seminars in Investigation and a Thesis, under supervision of a Theorem and a Parector





Amsterdam Academy of Architecture	ŒΨ	ly of Architectu	ıre				
General Syllabils		Projects	Exercises	Form study	Saminars	Optional	Semester
 Architecture 	o o	P1a Object P1b Conlext	O1 lextual research	Via Form shidy Vib Form shidy	C1 History and predice	Selected topics	_1_
 Urban planning 						Workshop	
 Landscape architectura 	٥	P2a P2b	toz Gesign research	V2a Furm sbudy V2a Form sbudy	C2 History and precince	Selected topics	2
						Escumban	
ID = inter disciplinary D = disciplinary						. E	Examination 1
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	1					Warkshap	
	0 0	P4	Od Lechnics		G4 Professional knowledge	Selected topics	4
						Works/Exp	
						ਖ	Assessment
		P5	OB Paper to accompany P5		C5a 7,5 C5b Scciely	Selectors	2
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	<u> </u>	9d	Of Puper to		G6a Posticoemig G6b issected today	Sefected	9
			e a kinedi noma			Workster	
						Exa	Examination 2
							. <u>L</u>
			99	GRADUATION			8
						Ехвп	Examination 3

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Appendix

Documents about Architectural Education and the Common European Higher Education Area

EAAE Chania Statement 2001

Regarding the Architectural Education in the European Higher Education Area

The Heads of Schools of Architecture in Europe assembled in the 4th meeting of Heads of European Schools of Architecture in Hania, Crete from 1 until 4 September 2001, discussed in depth the future of architectural education within the European Higher Education Area and its implications for architectural education.

Most of the ideas expressed in the EHEA have since 25 years been the 'raison d'être' of EAAE and the focus of its collective efforts, its conferences, workshops, projects and publications. Today EAAE is representing more than 155 schools of architecture.

Having reviewed the EU initiatives so far concerning the profession and education of an architect, namely:

- The Architects' Directive 85/384/CEE (1985) and the advices produced by its advisory committee
- 2. The UIA/UNESCO Charter for architectural education (1996)
- 3. The UIA Accord and Recommendations (1999)

Being informed about the recent state of the art of the Bologna implementation process.

Being fully aware that architectural education can lead to a wide variety of professional and academic careers.

Within the framework of:

The Magna Charta Universitatum, 1988

The Joint Declaration of the European Ministers of Education, Bologna 1999

The Salamanca Convention of European Higher Education Institutions, 2001

The Student Gotebora declaration, 2001

The Meeting of European Ministers in Charge of Higher Education, Prague 2001

Committed to the exchange of ideas and methods in teaching and research as well as of students and staff among the schools in the prospect of a European Higher Education Area based on diversity and mutual understanding,

The Heads of Schools state the following:

- The studies leading to the diploma of architecture which gives access to the profession
 of an architect, should be minimum 5 years or 300 ECTS credit points leading to
 graduate level ('masters'), in order to meet the achievements listed in the above
 mentioned documents 1, 2, 3.
- 2. Following a comparable but flexible qualification framework each school may decide to structure their curriculum as a 5-years integrated (i.e. unbroken) programme or subdivided in two cycles (3+2 years or 180 ECTS + 120 ECTS credit points), in which case the first cycle can not give access to the profession of an architect.
- 3. EAAE will actively collaborate in developing the ECTS-credit system in their schools and considers this system as the keystone towards mobility of students, modularity, flexibility in the curricula, necessary for the cultural, regional and pedagogical diversity

they think to be invaluable for the education in architecture in Europe.

4. EAAE is willing to play a role in the development of a quality assurance and assessment system tailored to the needs of architectural education and respecting its diversity. With respect to this a clear distinction should be made between the 'professional/governmental' assessment of the diploma leading to the accreditation and the validation by the professional/governmental bodies of the member states and the 'academic' assessment of the educational programmes by means of a peer review.

The EAAE will install a representative committee at European level and will present its result and proposals regarding the evaluation of the two cycles before the end of the year 2002.

The Heads of School underline their commitment to further elaborate and contribute to the development of the European Higher Education Area.

Hania, 4 September 2001
The Heads of Schools of Architecture in Europe

EUROPEAN COUNCIL DIRECTIVE of 10 June 1985

on the mutual recognition of diplomas, certificates and other evidence of formal qualifications in architecture, including measures to facilitate the effective exercise of the right of establishment and freedom to provide services

Chapters I and II (85/384/EEC)

CHAPTER I

SCOPE

Article 1

- 1. This Directive shall apply to activities in the field of architecture.
- 2. the purposes of this Directive, activities in the field of architecture shall be those activities usually pursued under the professional title of architect.

CHAPTER II

DIPLOMAS, CERTIFICATES AND OTHER EVIDENCE OF FORMAL QUALIFICATIONS ENABLING THE HOLDER TO TAKE UP ACTIVITIES IN THE FIELD OF ARCHITECTURE UNDER THE PROFESSIONAL TITLE OF ARCHITECT

Article 2

Each Member State shall recognize the diplomas, certificates and other evidence of formal qualifications acquired as a result of education and training fulfilling the requirements of Articles 3 and 4 and awarded to nationals of Member States by other Member States, by giving such diplomas, certificates and other evidence of formal qualifications, as regards the right to take up activities referred to in Article 1 and pursue them under the professional title of architect pursuant to Article 23 (1), the same effect in its territory as those awarded by the Member State itself.

Article 3

Education and training leading to diplomas, certificates and other evidence of formal qualifications referred to in Article 2 shall be provided through courses of studies at university level concerned principally with architecture. Such studies shall be balanced between the theoretical and practical aspects of architectural training and shall ensure the acquisition of:

- 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,
- 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,
- an adequate knowledge of the industries, organizations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.

Article 4

- 1. The education and training referred to in Article 2 must satisfy the requirements defined in Article 3 and also the following conditions:
 - (a) the total length of education and training shall consist of a minimum of either four years of full-time studies at a university or comparable educational establishment, or at least six years of study at a university or comparable educational establishment of which at least three must be full time;
 - (b) such education and training shall be concluded by successful completion of an examination of degree standard.

Notwithstanding the first subparagraph, recognition under Article 2 shall also be accorded to the training given over three years in the 'Fachhochschulen' in the Federal Republic of Germany in the form in which it exists at the time of notification of this Directive and in so far as it satisfies the requirements laid down in Article 3, giving access to the activities referred to in Article 1 in that Member State with the professional title of architect, provided that such training is supplemented by a four-year period of professional experience in the Federal Republic of Germany sanctioned by a certificate issued by the professional body on whose list the architect wishing to benefit from the provisions of this Directive is

registered. The body shall previously have established that the work carried out by the architect concerned in the field of architecture constitutes conclusive proof of the practical application of all the knowledge referred to in Article 3. The certificate shall be issued according to the same procedure as that which applies to registration on the list of architects.

On the basis of the experience gained and bearing in mind developments in architectural training, the Commission shall, eight years after the end of the period specified in the first subparagraph of Article 31 (1), submit a report to the Council on the application of this derogation and the appropriate proposals on which the Council shall decide in accordance with the procedures laid down by the Treaty within a period of six months.

2. Recognition under Article 2 shall also be accorded to education and training which, as part of a social betterment scheme or a part-time university course, conforms to the requirements of Article 3 and leads to an examination in architecture successfully completed by persons who have been employed in architecture for not less than seven years under the supervision of an architect or firm of architects. This examination must be of degree standard and be equivalent to the final examination referred to in paragraph 1 (b).

Article 5

- Nationals of a Member State authorized to hold the professional title of architect pursuant to a law giving the competent authority of a Member State the possibility of conferring this title on nationals of Member States who have particularly distinguished themselves by their achievements in the field of architecture shall be considered as meeting the requirements laid down for the pursuit of architectural activities under the professional title of architect.
- 2. In the case of those persons referred to in paragraph 1, a certificate issued by the Member State of which the holder is a national, or from which he comes, shall constitute proof of the status of architect.

Article 6

Certificates issued by the competent authorities of the Federal Republic of Germany attesting the equivalence of qualifications awarded after 8 May 1945 by the competent authorities of the German Democratic Republic with the formal qualifications referred to in Article 2 shall be recognized under the conditions laid down in that Article.

Article 7

Each Member State shall communicate as soon as possible, simultaneously to the
other Member States and to the Commission, the list of diplomas, certificates and
other evidence of formal qualifications which are awarded within its territory and
which meet the criteria laid down in Articles 3 and 4, together with the establishments
and authorities awarding them.

The first list shall be sent within 12 months of notification of this Directive. Each Member State shall likewise communicate any amendments made as regards the diplomas,

- certificates and other evidence of formal qualifications which are awarded within its territory, in particular those which no longer meet the requirements of Articles 3 and 4.
- 2. For information purposes, the lists and the updating thereof shall be published by the Commission in the Official Journal of the European Communities after expiry of a three-month period following their communication. However, in the cases referred to in Article 8, the publication of a diploma, certificate or other evidence of formal qualifications shall be deferred. Consolidated lists shall be published periodically by the Commission.

Article 8

If a Member State or the Commission has doubts as to whether a diploma, certificate or other evidence of formal qualifications meets the criteria laid down in Articles 3 and 4, the Commission shall bring the matter before the Advisory Committee on Education and Training in the Field of Architecture within three months of communication pursuant to Article 7 (1). The Committee shall deliver its opinion within three months.

The diploma, certificate or other evidence of formal qualifications shall be published within the three months following delivery of the opinion or expiry of the deadline for delivery thereof except in the following two cases:

- where the awarding Member State amends the communication made pursuant to Article 7 (1) or
- where a Member State or the Commission implements Articles 169 or 170 of the Treaty with a view to bringing the matter before the Court of Justice of the European Communities.

Article 9

- The Advisory Committee may be consulted by a Member State or the Commission whenever a Member State or the Commission has doubts as to whether a diploma, certificate or other evidence of formal qualifications included on one of the lists published in the Official Journal of the European Communities still meets the requirements of Articles 3 and 4. The Committee shall deliver its opinion within three months.
- 2. The Commission shall withdraw a diploma from one of the lists published in the Official Journal of the European Communities either in agreement with the Member State concerned or following a ruling by the Court of Justice.

http://europa.eu.int/eur-lex/en/archive/index./TXTG - 31985L0384 - bas-cen.htm

U.I.A. WORK PROGRAMME "Education" UIA / UNESCO CHARTER FOR ARCHITECTURAL EDUCATION

April 1996

We, the architects, concerned by the future development of architecture in a fast changing world, believe that everything, influencing the way in which the built environment is made, used, furnished, landscaped and maintained, belongs to the domain of the architects. We, being responsible for the improvement of the education of future architects to enable them to work for a sustainable development in every cultural heritage, declare:

I. GENERAL CONSIDERATIONS

That the new era will bring with it grave and complex challenges with respect to social and functional degradation of many human settlements, characterized by a shortage of housing and urban services for millions of inhabitants and by the increasing exclusion of the designer from projects with a social content.

This makes it essential for projects and research conducted in academic institutions to formulate new solutions for the present and the future.

- That architecture, the quality of buildings, the way they relate to their surroundings, the respect for the natural and built environment as well as the collective and individual cultural heritage are matters of public concern.
- 2. That there is, consequently, public interest to ensure that architects are able to understand and to give practical expression to the needs of individuals, social groups and communities, regarding spatial planning, design organisation, construction of buildings as well as conservation and enhancement of the built heritage, the protection of the natural balance and rational utilisation of available resources.
- 3. That methods of education and training for architects are very varied; this constitutes a cultural richness which should be preserved.
- 4. That, nevertheless it is prudent to provide a common ground for future action, not only in the pedagogical methods used, but also with the aim of achieving an appropriate elevated level, by establishing criteria which permit countries, schools and professional organizations to evaluate and improve the education given to the future architects.
- That the increasing mobility of architects between the different countries calls for a mutual recognition or validation of individual diplomas, certificates and other evidence of formal qualification.
- 6. That the mutual recognition of diplomas, certificates or other evidence of formal qualification to practise in the field of architecture has to be founded in objective criteria, guaranteeing that holders of such qualifications have received and maintain the kind of training called for in this charter.
- 7. That the vision of the future world, cultivated in architectural schools, should include the following goals:

- a decent quality of life for all the inhabitants of human settlements
- a technological application which respects the people' social, cultural and aesthetic needs of people
- an ecologically balanced and sustainable development of the built environment
- an architecture which is valued as the property and responsibility of everyone.

II. EDUCATION AND OBJECTIVES

Since architecture is created in a field of tension between reason, emotion and intuition, architectural education should be regarded as the manifestation of the ability to conceptualize, coordinate and execute the idea of building rooted in human tradition.

- Architecture is an interdisciplinary field that comprises several major components: humanities, social and physical sciences, technology and the creative arts. Architectural education is available at Universities, Polytechnics et Academies. The education leading to formal qualifications and permitting professionals to practise in the field of architecture has to be guaranteed to be at university level with architecture as the main subject.
- 2. The basic goal is to develop the architect as a generalist able to resolve potential contradictions between different requirements, giving form to the society's and the individual's environmental needs.
- 3. Architectural education involves the acquisition of the following:
 - an ability to create architectural designs that satisfy both aesthetic and technical requirements.
 - an adequate knowledge of the history and theories of architecture and the related arts, technologies and human sciences,
 - a knowledge of the fine arts as an influence on the quality of architectural design,
 - an adequate knowledge of urban design, planning and the skills involved in the planning process,
 - 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,
 - 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,
 - an understanding of the methods of investigation and preparation of the brief for a design project,
 - an understanding of the structural design, constructional and engineering problems associated with building design,
 - 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,
 - the necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations,

- an adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.
- 4. Architectural students should be made critically aware of the political and financial motivations behind clients' briefs and building regulations in order to foster an ethical framework for decision making within the built environment. Young architects should be encouraged to assume responsibilities as professionals within society.
- Educational programs should promote architectural design which considers the cost
 of future maintenance, also taking into account that, unlike traditional construction
 methods with low maintenance materials, some contemporary, experimental and
 unproved industrial systems and materials require constant and expensive
 maintenance.
- 6. The balanced acquisition of knowledge and skills cited in point 3. requires a long period of maturation; the period of studies in architecture should always be not less than five years of full-time studies in a university or an equivalent institution, plus two years experience in an architectural practice. At least one year must be devoted to professional practice following the conclusion of academic studies.
 - The training should be formalised by an examination at the end of the programme of studies, the principal part being an individual presentation and defence of an architectural project demonstrating the acquired knowledge and concomitant skills. For this purpose, juries should include practising architects and teachers from other schools, and if possible, from other countries.
- 7. In order to benefit from the wide variety of teaching methods, exchange programmes for teachers, and students at advanced level, will be desirable. Ideally final projects should be shared among schools as a means of facilitating comparison between results and self-evaluation of teaching establishments, through a system of international awards and exhibitions.
- 8. Issues related to the architecture and the environment should be introduced as part of a general education at schools, because an early awareness of architecture is important to both future architects and users of buildings.
- 9. Systems for continuing education must be set up for architects; architectural education should never be considered as a closed process.

III. CRITERIA FOR ARCHITECTURAL EDUCATION

In order to achieve the above mentioned goals, the following aspects should be taken into account:

- Educational establishments are advised to create systems for self-evaluation and peer-review conducted at regular intervals, including in the review panel, teachers from other schools and practising architects.
- Each teaching institution must adjust the number of students according to its teaching capacity. Criteria for the selection of students shall be in relation to the aptitudes required for a successful training in architecture and will be applied by means of an appropriate selection process, organised by the schools at the point of entry in the programme.

- Modern personalised computer technology and the development of specialised software make it imperative to teach the use of computers in all aspects of architectural education. Adequate laboratories, facilities for research, advanced studies, information and data exchanges for new technologies should be provided at schools of architecture.
- 4. The creation of a network, on a world-wide basis, for the exchange of information, teachers and senior students, is necessary in order to promote a common understanding and to raise the level of architectural education.
- 5. Continuous interaction between practice and teaching of architecture must be encouraged and protected.
- 6. Research should be regarded as an inherent activity of architectural teachers. This architectural research must be founded on project work, construction methods, as well as academic disciplines. Specific review panels are to be created to evaluate architectural research and architects must be included in the general evaluation research commissions.
- 7. Design project work must be a synthesis of acquired knowledge and concomitant skills. The architectural curriculum should include the subjects referred to under the educational objectives (Section II.3.) of this charter. Individual project work with direct teacher / student dialogue must form a substantial part of the learning period and occupy half of the curriculum.

CONCLUSION

This Charter was created on the initiative of the UIA and UNESCO, with the ability of being applied by any architectural school on the international and national levels.

We hope that this Charter could be used for the creation of a global network of architectural education within which individual achievements can be shared by all.

We hope that this Charter, in its appeal to the whole world, can help in the understanding that architectural education constitutes both the socio-cultural and professional challenge of the contemporary world, and needs the guarantee of protection, development and urgent action.

April 1996

http://www.uia-architectes.org/texte/summary/p2b1.html

UIA Accord on Recommended International Standards of Professionalism in Architectural Practice

Principles of Professionalism Beijing, June 1999

Members of the architectural profession are dedicated to standards of professionalism, integrity, and competence, and thereby bring to society unique skills and aptitudes essential to the sustainable development of the built environment and the welfare of their societies and cultures. Principles of professionalism are established in legislation, as well as in codes of ethics and regulations defining professional conduct:

Expertise: Architects possess a systematic body of knowledge, skills, and theory developed through education, graduate and post-graduate training, and experience. The process of architectural education, training, and examination is structured to assure the public that when an architect is engaged to perform professional services, that architect has met acceptable standards enabling proper performance of those services. Furthermore, members of most professional societies of architects and indeed, the UIA, are charged to maintain and advance their knowledge of the art and science of architecture, to respect the body of architectural accomplishment, and to contribute to its growth.

Autonomy: Architects provide objective expert advice to the client and/or the users. Architects are charged to uphold the ideal that learned and uncompromised professional judgment should take precedence over any other motive in the pursuit of the art and science of architecture.

Architects are also charged to embrace the spirit and letter of the laws governing their professional affairs and to thoughtfully consider the social and environmental impact of their professional activities.

Commitment: Architects bring a high level of selfless dedication to the work done on behalf of their clients and society. Members of the profession are charged to serve their clients in a competent and professional manner and to exercise unprejudiced and unbiased judgment on their behalf.

Accountability: Architects are aware of their responsibility for the independent and, if necessary, critical advice provided to their clients and for the effects of their work on society and the environment. Architects undertake to perform professional services only when they, together with those whom they may engage as consultants, are qualified by education, training, and/or experience in the specific technical areas involved.

The UIA, through the programs of its national sections and the Professional Practice Commission, seeks to establish principles of professionalism and professional standards in the interest of public health, safety, welfare, and culture, and supports the position that interrecognition of standards of professionalism and competence is in the public interest as well as in the interest of maintaining the credibility of the profession.

The principles and standards of the UIA are aimed at the thorough education and practical

training of architects so that they are able to fulfil their fundamental professional requirements. These standards recognize different national educational traditions and, therefore, allow for factors of equivalency.

http://www.uia-architectes.org/texte/summary/p2b1.html

The Magna Charta of University

Signed in Bologna, 18 September 1988

Preamble

The undersigned Rectors of European Universities, gathered in Bologna for the ninth centenary of the oldest University in Europe, four years before the definitive abolition of boundaries between the countries of the European Community; looking forward to farreaching co-operation between all European nations and believing that peoples and States should become more than ever aware of the part that universities will be called upon to play in a changing and increasingly international society,

Consider -

- that at the approaching end of this millennium the future of mankind depends largely on cultural, scientific and technical development; and that this is built up in centres of culture, knowledge and research as represented by true universities;
- that the universities' task of spreading knowledge among the younger generations implies that ,in today's world, they must also serve society as a whole; and that the cultural, social and economic future of society requires, in particular, a considerable investment in continuing education;
- 3. that universities must give future generations education and training that will teach them, and through them others, to respect the great harmonies of their natural environment and of life itself.

The undersigned Rectors of European universities proclaim to all States and to the conscience of all nations the fundamental principles which must, now and always, support the vocation of universities.

Fundamental principles

- The university is an autonomous institution at the heart of societies differently organized because of geography and historical heritage; it produces, examines, appraises and hands down culture by research and teaching. To meet the needs of the world around it, its research and teaching must be morally and intellectually independent of all political authority and economic power.
- Teaching and research in universities must be inseparable if their tuition is not to lag behind changing needs, the demands of society, and advances in scientific knowledge.
- 3. Freedom in research and training is the fundamental principle of university life, and governments and universities, each as far as in them lies, must ensure respect for this fundamental requirement.
 - Rejecting intolerance and always open to dialogue, a university is an ideal meeting-ground for teachers capable of imparting their knowledge and well equipped to develop it by research and innovation and students entitled, able and willing to enrich their minds with that knowledge.

4. A university is the trustee of the European humanist tradition; its constant care is to attain universal! knowledge to fulfil its vocation it transcends geographical and political frontiers, and affirms the vital need for different cultures to know and influence each other.

The means

To attain these goals by following such principles calls for effective means, suitable to present conditions.

- 1. To preserve freedom in research and teaching, the instruments appropriate to realize that freedom must be made available to all members of the university community.
- 2. Recruitment of teachers, and regulation of their status, must obey the principle that research is inseparable from teaching.
- 3. Each university must with due allowance for particular circumstances ensure that its students' freedoms are safeguarded, and that they enjoy conditions in which they can acquire the culture and training which it is their purpose to possess.
- 4. Universities particularly in Europe regard the mutual exchange of information and documentation, and frequent joint projects for the advancement of learning, as essential to the steady progress of knowledge.

Therefore, as in the earliest years of their history, they encourage mobility among teachers and students; furthermore, they consider a general policy of equivalent status, titles, examinations (without prejudice to national diplomas) and award of scholarships essential to the fulfilment of their mission in the conditions prevailing today.

The undersigned Rectors, on behalf of their Universities, undertake to do everything in their power to encourage each State, as well as the supranational organizations concerned, to mould their policy sedulously on this Magna Carta, which expresses the universities' unanimous desire freely determined and declared.

Bologna, 18 September 1988

http://www2.unibo.it/avl/charta/charta.htm

Sorbonne Declaration

Joint Declaration on Harmonisation of the Architecture of the European Higher Education System

Paris, Sorbonne, 25 May 1998

The European process has very recently moved some extremely important steps ahead. Relevant as they are, they should not make one forget that Europe is not only that of the Euro, of the banks and the economy: it must be a Europe of knowledge as well. We must strengthen and build upon the intellectual, cultural, social and technical dimensions of our continent. These have to a large extent been shaped by its universities, which continue to play a pivotal role for their development.

Universities were born in Europe, some three quarters of a millennium ago. Our four countries boast some of the oldest, which are celebrating important anniversaries around now, as the University of Paris is doing today. In those times, students and academics would freely circulate and rapidly disseminate knowledge throughout the continent. Nowadays, too many of our students still graduate without having had the benefit of a study period outside of national boundaries.

We are heading for a period of major change in education and working conditions, to a diversification of courses of professional careers, with education and training throughout life becoming a clear obligation. We owe our students, and our society at large, a higher education system in which they are given the best opportunities to seek and find their own area of excellence.

An open European area for higher learning carries a wealth of positive perspectives, of course respecting our diversities, but requires on the other hand continuous efforts to remove barreers and to develop a framework for teaching and learning, which would enhance mobility and an ever closer cooperation.

The international recognition and attractive potential of our systems are directly related to their external and internal readabilities. A system, in which two main cycles, undergraduate and graduate, should be recognized for international comparison and equivalence, seems to emerge.

Much of the originality and flexibility in this system will be achieved through the use of credits (such as in the ECTS scheme) and semesters. This will allow for validation of these acquired credits for those who choose initial or continued education in different European universities and wish to be able to acquire degrees in due time throughout life. Indeed, students should be able to enter the academic world at any time in their professional life and from diverse backgrounds.

Undergraduates should have access to a diversity of programmes, including opportunities for multidisciplinary studies, development of a proficiency in languages and the ability to use new information technologies.

In the graduate cycle, there would be a choice between a shorter master's degree and

a longer doctor's degree, with possibilities to transfer from one to the other. In both graduate degrees, appropriate emphasis would be placed on research and autonomous work.

At both undergraduate and graduate level, students would be encouraged to spend at least one semester in universities outside their own country. At the same time, more teaching and research staff should be working in European countries other than their own. The fast growing support of the European Union for the mobility of students and teachers should be employed to the full.

Most countries, not only within Europe, have become fully conscious of the need to foster such evolution. The conferences of European rectors, University presidents, and groups of experts and academics in our respective countries have engaged in widespread thinking along these lines.

A convention, recognising higher education qualifications in the academic field within Europe, was agreed on last year in Lisbon. The convention set a number of basic requirements and acknowledged that individual countries could engage in an even more constructive scheme. Standing by these conclusions, one can build on them and go further. There is already much common ground for the mutual recognition of higher education degrees for professional purposes through the respective directives of the European Union.

Our governments, nevertheless, continue to have a significant role to play to these ends, by encouraging ways in which acquired knowledge can be validated and respective degrees can be better recognised. We expect this to promote further inter-university agreements. Progressive harmonisation of the overall framework of our degrees and cycles can be achieved through strengthening of already existing experience, joint diplomas, pilot initiatives, and dialogue with all concerned.

We hereby commit ourselves to encouraging a common frame of reference, aimed at improving external recognition and facilitating student mobility as well as employability. The anniversary of the University of Paris, today here in the Sorbonne, offers us a solemn opportunity to engage in the endeavour to create a European area of higher education, where national identities and common interests can interact and strengthen each other for the benefit of Europe, of its students, and more generally of its citizens .We call on other Member States of the Union and other European countries to join us in this objective and on all European Universities to consolidate Europe's standing in the world through continuously improved and updated education for its citizens.

Claude Allègre, Luigi Berlinguer, Tessa Blackstone, Jürgen Ruettgers

Claude Allègre Minister of National Education, Research and Technology (France)

Luigi Berlinguer Minister of Public Education, Universities and Research (Italy)

Tessa Blackstone Minister of Higher Education (United Kingdom) Jürgen Ruettgers Minister of Education, Science, Research and Technology (Germany)

"The countries signing this Declaration undertake to encourage changes in the architecture of their higher education systems to facilitate mutual recognition of qualifications, while continuing to uphold the benefits of their specific national features,..."

(extract from the Sorbonne Declaration of the 24-25 May 1998.

The main objectives of the Declaration are:

- to facilitate student mobility within Europe and their integration in the European labour market,
- to introduce greater flexibility in higher education systems, especially by encouraging cooperation between institutions,
- to facilitate continuing education and the recognition of study periods in Europe,
- to improve the readability of higher education qualifications in Europe,

http://www.sup.adc.education.fr/europedu/gb/vert/declaration.html http://www.bologna-berlin2003.de

THE EUROPEAN HIGHER EDUCATION AREA

Joint Declaration of the European Ministers of Education

Convened in Bologna on the 19th of June 1999

The European process, thanks to the extraordinary achievements of the last few years, has become an increasingly concrete and relevant reality for the Union and its citizens. Enlargement prospects together with deepening relations with other European countries, provide even wider dimensions to that reality. Meanwhile, we are witnessing a growing awareness in large parts of the political and academic world and in public opinion of the need to establish a more complete and far-reaching Europe, in particular building upon and strengthening its intellectual, cultural, social and scientific and technological dimensions.

A Europe of Knowledge is now widely recognised as an irreplaceable factor for social and human growth and as an indispensable component to consolidate and enrich the European citizenship, capable of giving its citizens the necessary competences to face the challenges of the new millennium, together with an awareness of shared values and belonging to a common social and cultural space.

The importance of education and educational co-operation in the development and strengthening of stable, peaceful and democratic societies is universally acknowledged as paramount, the more so in view of the situation in South East Europe.

The Sorbonne declaration of 25th of May 1998, which was underpinned by these considerations, stressed the Universities' central role in developing European cultural dimensions. It emphasised the creation of the European area of higher education as a key way to promote citizens' mobility and employability and the Continent's overall development.

Several European countries have accepted the invitation to commit themselves to achieving the objectives set out in the declaration, by signing it or expressing their agreement in principle. The direction taken by several higher education reforms launched in the meantime in Europe has proved many Governments' determination to act.

European higher education institutions, for their part, have accepted the challenge and taken up a main role in constructing the European area of higher education, also in the wake of the fundamental principles laid down in the Bologna Magna Charta Universitatum of 1988. This is of the highest importance, given that Universities' independence and autonomy ensure that higher education and research systems continuously adapt to changing needs, society's demands and advances in scientific knowledge.

The course has been set in the right direction and with meaningful purpose. The achievement of greater compatibility and comparability of the systems of higher education nevertheless requires continual momentum in order to be fully accomplished. We need to support it through promoting concrete measures to achieve tangible forward steps. The 18th June meeting saw participation by authoritative experts and scholars from all

our countries and provides us with very useful suggestions on the initiatives to be taken.

We must in particular look at the objective of increasing the international competitiveness of the European system of higher education. The vitality and efficiency of any civilisation can be measured by the appeal that its culture has for other countries. We need to ensure that the European higher education system acquires a world-wide degree of attraction equal to our extraordinary cultural and scientific traditions.

While affirming our support to the general principles laid down in the Sorbonne declaration, we engage in co-ordinating our policies to reach in the short term, and in any case within the first decade of the third millennium, the following objectives, which we consider to be of primary relevance in order to establish the European area of higher education and to promote the European system of higher education world-wide:

Adoption of a system of easily readable and comparable degrees, also through the implementation of the Diploma Supplement, in order to promote European citizens employability and the international competitiveness of the European higher education system

Adoption of a system essentially based on two main cycles, undergraduate and graduate. Access to the second cycle shall require successful completion of first cycle studies, lasting a minimum of three years. The degree awarded after the first cycle shall also be relevant to the European labour market as an appropriate level of qualification. The second cycle should lead to the master and/or doctorate degree as in many European countries.

Establishment of a system of credits - such as in the ECTS system - as a proper means of promoting the most widespread student mobility. Credits could also be acquired in non-higher education contexts, including lifelong learning, provided they are recognised by receiving Universities concerned.

Promotion of mobility by overcoming obstacles to the effective exercise of free movement with particular attention to:

- for students, access to study and training opportunities and to related services
- for teachers, researchers and administrative staff, recognition and valorisation of periods spent in a European context researching, teaching and training, without prejudicing their statutory rights.
 - Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies
 - Promotion of the necessary European dimensions in higher education, particularly with regards to curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research.

We hereby undertake to attain these objectives - within the framework of our institutional competences and taking full respect of the diversity of cultures, languages, national education systems and of University autonomy - to consolidate the European area of higher education. To that end, we will pursue the ways of intergovernmental co-operation, together with those of non governmental European organisations with competence on higher education. We expect Universities again to respond promptly and positively and to contribute actively to the success of our endeavour.

Convinced that the establishment of the European area of higher education requires

constant support, supervision and adaptation to the continuously evolving needs, we decide to meet again within two years in order to assess the progress achieved and the new steps to be taken.

Caspar EINEM

Minister of Science and Transport

(Austria) Gerard SCHMIT

Director General of French Community Ministry for Higher Education and Research (Belgium)

Jan ADE

Director General

Ministry of the Flemish Community

Department of Education

(Belgium)

Anna Mmia TOTOMANOVA

Vice Minister of Education and Science

(Bulgaria)

Eduard ZEMAN

Minister of Education, Youth and Sport

(Czech Republic)

Margrethe VESTAGER

Minister of Education

(Dermnark)

Tonis LUKAS

Minister of Education

(Estonia)

Maiia RASK

Minister of Education and Science

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Minister of National Education,

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Parliamentary State Secretary

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Ute ERDSIEK-RAVE

Minister of Education, Science, Research And Culture of the Land Scheswig-Holstein (Permanent Conference of the Ministers of Culture of the German Länders) **Gherassimos ARSFNIS**

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Adam KISS

Deputy State Secretary for Higher Education and Science

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State Secretary for Science and Research

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Baroness Tessa BLACKSTONE of Stoke

Newington

Minister of State for Education and Employment

(United Kingdom)

http://www.bologna-berlin2003.de

Themes of the Salamanca Conference on the Bologna Process

29-30 March 2001

Documents and Notes for discussion groups

The present material concerns the preperation for the Salamanca Conference and constitutes an interesting framework of questions and issues on the anticipation of the under-construction European Higher Education Area. This material originally appeared on the conference site www.salamanca2001.org which is at present inactive.

Theme 1: Freedom with responsibility: Empowering the universities

Pointers for the discussion

- If they want to take the future into their own hands, higher education institutions need
 to anticipate change that would otherwise be forced upon them. An opportunity like
 the Salamanca Convention grises seldom.
- Universities need and want autonomy. In many countries in Europe, over-regulation
 inhibits progress and innovation and constitutes a serious handicap in the European
 and worldwide environment. Universities request the power to plan their own futures,
 striking the right balance between autonomy and responsibility and between diversity
 and organisation.
- Institutions are prepared to take fresh initiatives now, in all areas where they have
 the power to do so. A lot can be achieved, in particular in the area of curriculum
 design and renovation and for the recognition of studies abroad. Significant progress
 towards the European Higher Education Area can be achieved in Europe through
 subject-based cooperation and networks.
- More effective self-organisation at the European level is an imperative both in the university and in the college/polytechnic sector.

Autonomy and accountability

Autonomy and freedom are values endorsed by the Magna Charta Universitatum. An Observatory to oversee the implementation of the principles of the Magna Charta has been established by the CRE-Association of European Universities and the University of Bologna. Higher education institutions are thus taking responsibility for the preservation of their core values - as well as their adaptation to changing times. When the pace of change accelerates, institutions need even more the autonomy to steer their course of action.

Accountability is the counterpoint to autonomy and institutions have to prove that they

provide a wide range of services in addition to their core mission of education and research. The responsibility of higher education in Europe, as a public service, has traditionally been heavy and it has become more complex: for example, to reflect critically upon the development of society, in an increasingly global context, or to create a sense of European citizenship. These, and ethical issues, for instance, demand a leadership role from higher education institutions. As preparation for the Bologna conference, a report on Trends in Learning Structures identified a trend across the continent in giving institutions more autonomy in relation to curricula. But, when universities are responsible for the degrees that they award, higher education institutions present in Bologna recognised that this right "equalled a responsibility requiring acceptance of anlexternal quality assurance system." Quality assessment, with a focus on responsibility towards the learner, is now generally accepted as an essential part of accountability.

In the face of demands to assume increasing responsibilities, higher education must keep its distinctive characteristics, and different types of institutions should cover the breadth of responsibilities. Sometimes, it is other parts of the education chain that share, or should assume entirely, the responsibility for an issue. Institutions need regular dialogue with state authorities to maintain the balance between their freedom and autonomy and their responsibility and accountability to society.

Reflecting on how hard it is to reconcile aspirations for higher education policy and institutions on different levels, a Finnish ministry representative has remarked that: "the only way we can cope with the situation is to strengthen institutional autonomy. This would allow the institutions to genuinely work on their individual profiles; they need to define the role they want to play in the national and international higher education communities. Such profile building is credible and sustainable only if the institutions can do it themselves without interference from the government." Higher education institutions must be free to make strategic choices, to concentrate on their core areas, to develop individual identities, to choose their partners, and to position themselves to compete to deliver quality education, research and services.

Dialogue with partners

Being more autonomous should help universities be more confident in their interaction with partners. For example, they may envisage installing a regular dialogue with the government or local business community, with a rolling agenda of issues, including an annual review, rather than occasional discussion with sporadic meetings, sometimes linked to crises. Institutions may then explain their plans for their future and their constraints.

There is a challenge for institutions to operate effective networks at different levels. The "vast majority of higher education institutions cater forllocal needs. Growing contacts to their national and international partners and academic exchange will not basically affect their local mission, but develop their European and/or international dimensions". Some institutions see themselves as regional or cross-border and develop an extensive network for their services. Others build global networks in their fields of academic strength, sometimes involving industry and trying to establish educational benchmarks from which they may establish a brand name. At its most sophisticated, such a network can develop joint products, combine marketing efforts and provide entirely new services. But, the present competencies of most higher education networks are more limited.

Freedom to compete

The most significant consequence of increased institutional autonomy should be improved teaching, research and related services. The freedom to compete implies the right for institutions to design their curricula, determine their research priorities and implement their action plans for innovation. In order to guarantee the quality of their activities, institutions are responsible for designing strategies. These strategies differ according to individual missions but, to be implemented successfully, they generally require autonomy in financial, personnel and operational matters.

Signs of such autonomy are, for example:

- the transfer of property and infrastructure from the state to the institution
- transparent lump sum funding from government, allowing the university to implement its strategic choices.
- institutions being able to generate, spend to generate and retain income, without prejudicing their state grant
- the freedom to charge tuition fees and set their level
- institutions deciding the employment terms and salaries of staff.

Other areas where the issue of autonomy is at stake include:

- the regulation of student places (number and selection of students)
- external representation on the institution's governing body.

True autonomy and accountability make more demands on institutions and on their leadership. If institutions do not demonstrate their capacity and willingness to plan their futures, explain the constraints on their action, engage dialogue and find help for solutions to those constraints, they are not using the power of autonomy, nor showing responsibility.

Future scenario

The European Higher Education Area will be composed of multiple networks for different purposes. Institutional and subject-based networks and associations will be used to achieve research excellence, to exchange ideas and experience connected with using information and communication technologies (ICT) in education, etc.. Different networking patterns are already emerging The networks will increasingly contain partners from outside higher education, e.g., a network on using ICT innovatively will integrate the multimedia business sector, ICT companies, publishers, ministries and associations.

Points for reflection

Autonomy and accountability

- Should all types of higher education institutions bear the same sorts of responsibilities?
- Can institutions demand total autonomy and unlimited state funding?
- Are higher education institutions using the Bologna process to examine their curricula
 in the light of today's requirements (the demand for more choice within higher
 education updated content, alternative learning paths, new methods of teaching
 and learning, a European dimension, etc.)?

• How could institutional autonomy be preserved if there were a common European framework for the recognition of qualifications and for quality assurance?

Freedom to compete

 Should decentralisation of power allow institutions to select their students, fix study fees, recruit professors, or diversify salaries? For which categories of students should institutions have the right to request fees?

Would a "non-profit legal entity status" at European level give higher education institutions more freedom in financial, personnel and operational matters?

Theme 2: Employability on the European labour market

Pointers for the discussion

- Students will increasingly demand and enrol for qualifications that can effectively
 be used throughout the continent. Higher education institutions accept that it is their
 responsibility to award such qualifications and want to be in a position to do so.
- Higher education systems and institutions that respond to the demand for relevant curricula, flexible learning paths and innovative delivery will attract more students, also from other parts of the world.
- All degrees do not have to be "relevant to the European labour market" (Bologna Declaration) to the same extent and in the same way. In particular, first degrees earned at different institutions may differ in their purpose, orientation and profile. They may, nonetheless, all fit into a transparent and cohesive system of understandable and compatible qualifications.
- Higher education institutions acknowledge the need to build bridges between different types of institutions and with other parts of the education system, so as to improve recognition of learning acquired in different contexts, including non-traditional education.

The type of expectations of higher education and the response

In the knowledge economy, wealth depends on the development and application of new knowledge - by workers, among others. Research is creating new jobs more than before, while lifelong learning is perceived as a necessity for all. Expectations of higher education have risen in the areas of knowledge transfer, of producing graduates for work - including for self-employment - and of retraining workers. It is the responsibility of higher education institutions and of governments to meet these expectations.

Previously, the responsibility of universities for their graduates ended at graduation. The growing number of unemployed graduates in the 1970s and 1980s intensified discussion of their "employability". Governments required universities to take responsibility for their students not just by educating them, but also by giving them "transferable" skills to make them more employable. New higher education institutions were created next to universities, which had more of an orientation towards the labour market. Today, governments feel

a responsibility to replace the big post-war cohorts of employees now slowly retiring from the labour market, with new graduates - for new types of jobs, including for self-employment - or with retrained people.

Employers stress that graduates should have "learnt to learn" and that they should thus be able to contribute to the development and application of knowledge required to maintain economic competitive advantage. But, employers are also concerned that their other workers acquire similar skills. Hence, the commitment to lifelong learning, with its implication of knowledge updating and renewal and, sometimes, complete retraining.

If the traditional idea of combining research and teaching and thus encouraging the development of a solid disciplinary and methodological knowledge in the student remains valid, it is expected now too to include the acquisition of skills such as communication or teamwork aptitudes. The transferable skills that graduates are supposed to obtain are supposed to be included in the process of "learning to learn". Universities argue that one of the best ways that they can show responsibility for their graduates is by awarding them qualifications that are recognised to be of high-quality, internationally competitive, including knowledge of research methodologies and how to learn. The general elements in higher education should be emphasised and specialisation would be left to a more advanced academic level or to lifelong learning programmes. Another response to demands for more employable graduates is for institutions to include more multidisciplinarity at the first level of higher education, so that workers can communicate better with specialists from other fields.

Growing professional mobility in Europe

As the economy becomes more global, a European labour market grows more real. Higher education systems and institutions are not just being asked to ensure that the people they are educating are employable, but also that they are employable on a European (or world) scale.

The Sorbonne Declaration in 1998 justified the idea of a European Higher Education Area by saying that it was a key way to promote citizens' employability and mobility - and the continent's overall development. The statement is reiterated in the Bologna Declaration. Employability and mobility are two different objectives for people, even if a link is made in this context. To be employable is necessary for the person who aspires to travel or not. To be mobile is an additional objective of more citizens now: young people who are conscious that Europe is a continent where national borders are less and less important (due mainly to the achievements of the European Union in many areas, notably in freeing the movement of goods, services, capital, and, to a lesser extent, of people). It is in this last area that action is being sought urgently, not just for the mobility of young students or of recent graduates, but also for workers seeking professional mobility. The prospect of an enlarged European Union adds to the attractiveness of the continent, for people in Europe and for people in other parts of the world, as a space within which people can theoretically gain professional experience in different countries. And, it is partly increased student mobility that has reinforced the idea that studying abroad is one of the most effective means of preparing future graduates for the needs of an increasingly international professional life.

Those people expecting a higher education experience to make them not just more

employable, but also to increase their prospects of employment at European level and success in a competitive labour market are interested to acquire another set of skills. "The internationalisation of higher education within the EUIreflects the general upgrading of European labour: skilled future professional labour [acquiring] not only formal academic qualifications, but also linguistic and cultural capital".

The labour market is also calling for these kinds of skills when globalised business is giving multi-culturalism a new value and foreign languages, for example, are seen as a way to increase understanding of different cultures.

"It has become very clear that the higher education sector is expected to contribute more to making the European labour market an everyday, effective reality."

This has been one of the stimuli for higher education institutions to incorporate external partners more into their consultation procedures or even their governing structures. The use of external examiners from industry in the assessment of courses, the organisation of work placements for students, joint research and the increase in continuing education for workers have also contributed to the improvement of links between institutions and the economy. The dialogue between higher education institutions and their stakeholders is important, given the high and varied expectations of higher education and the different responses possible. Institutions must develop open-ended strategies, enabling them to preserve a long-term view of disciplinary developments and a shorter-term view of graduates' needs.

The need for flexible learning paths

"Higher education should offer opportunities for everyone capable of profiting from degree-level work, with financial support as necessary to ensure access for everyone who can benefit" (G8 Cologne Charter). Widening access to higher education is one of the main motivations for systems and institutions to offer more flexible learning paths.

Another stimulus for flexible learning paths is a change in the profile of learners. The diversity in student profiles has resulted in the last two decades in the emergence of a vast range of new study options and combinations, of more flexible and modular design, and more distance learning.

Recognising learning in different contexts

In the context of lifelong (or lifewide) learning and the development of people's employability in Europe, at national and at European level, there is a call to move towards academic and professional recognition of learning acquired in formal and informal learning contexts through the use of mechanisms such as credit accumulation and transfer. For example, higher education institutions must consider whether to award credit for prior and experiential learning. The certification in one way or another of all knowledge and skills acquired until a certain exit-point could help reduce drop-out rates in formal education, which is a worrying financial problem in some European countries, and failure patterns. It could also represent a competitive advantage internationally.

But, certification by higher education institutions of skills acquired in some contexts remains a challenge.

Employers wish to better understand the qualifications of those applying for jobs and

businesses operating globally are requesting qualifications that can be more easily understood and compared internationally. This is giving impetus to the objective of the Bologna Declaration for European higher education to adopt a framework system of easily understandable and comparable degrees and, within that, to make full use of recognition instruments such as the Diploma Supplement.

Extending bridges between sectors

Vocational training, for example, imparts skills attuned to the needs of the labour market and opens up pathways to higher qualifications. But, until now, higher education "required the creation and maintenance of autonomous spacesland of separate and distinctive institutions. So did research. In contrast, lifelong learning requires theltranscendence oflboundaries. So does knowledge production. Both depend uponlever-closer partnerships between different types of institutions and organisations!"(Peter Scott). What type of bridges exist and which can be imagined as desirable to the higher education sector from other learning sectors?

Future scenarios

Students expect increasingly to receive a broad higher education that gives them flexibility on the labour market, since they will change jobs more often. They will choose to enrol for qualifications that allow them to work in different countries of Europe.

The demographic trend in Europe is towards an ageing population. The consequences are beginning to be an increase in adult learners and a likely increase in the demand for short masters degree programmes. The latter may also be interpreted as a response to the situation whereby more and more people enter to compete on the labour market with a first-cycle (bachelors) degree.

Higher education systems and institutions that respond to the demand for flexible learning paths will attract more students, also from other parts of the world.

If the higher education sector is not clear on which learning in different contexts it is recognising, the European Union or another international organisation may pursue the question, perhaps issuing a recommendation or a directive, or drafting a convention.

In the United States, where the transparency of qualifications is clearer for employers than in Europe but still not clear enough, a private enterprise "interprets" qualifications of job applicants for companies. If higher education institutions in Europe do not try and render their collective offering more understandable and use instruments being developed like the Diploma Supplement, a similar idea may emerge in Europe.

Points for reflection

- How can all types of higher education institutions organise themselves to respond
 better to the varied expectations to provide employable graduates with the sort of
 transferable skills now being requested and to offer lifelong learning? What are the
 differences between the extra-university and the university sector?
- Who will pay for lifelong learning? The G8-Cologne Charter states that an investment can be expected of government, investing to enhance education and training at all

levels; of the private sector, training employees; of individuals, developing their abilities and careers. Are, for example, those companies concerned that their workers acquire additional skills for lifelong learning willing to pay higher education institutions to provide some of those learning experiences?

- The Bologna Declaration states that: "the degree awarded after the first-cycle shall also be relevant to the European labour market as an appropriate level of qualification".
 But, all degrees should not be professional to the same extent and in the same way.
 What might a system of differentiated degrees resemble?
- Will higher education institutions especially universities recognise and credit learning acquired outside the higher education sector?

Theme 3: Mobility in the higher education area

Pointers for the discussion

- Students should be able to choose from among the entire range of courses on offer in the European Higher Education Space and mobility should become a central value of European higher education.
- The mobility of students, teachers and graduates is hampered by recurrent obstacles, in particular cumbersome recognition processes. The institutions want to increase significantly mobility of different types, working together to overcome structural obstacles and to free up the European Higher Education Space, by making their education and research programmes easier to understand, by organising the diversity of these programmes and their qualifications, and by using better instruments of academic recognition.
- Better mutual recognition of qualifications in Europe would also promote their better recognition in other world regions, thus enhancing the competitive edge of Europe in the global higher education world.

Mobility as a tool for internationalisation

The European Union (EU) - with governments and institutions - is still aiming to increase the mobility of students, teachers and administrative staff in education - the percentage of mobile higher education students in Europe remains less than 5%.

Mobility is a tool for internationalising institutions, as well for improving European citizens' linguistic and intercultural skills. Mobility has become central to internationalisation policies: the motivation to help people go abroad mixes the collective and individual benefits.

"After a first period of individual student mobility ("free movers") and a second phase of mobility and exchange based on institutional agreements, an internationalisation of academic content and processes is taking place. That is likely to have a more structural and longer-term impact on the institution itself, whereas the effects of mere mobility and exchange are limited to the individual students". In the early years of the ERASMUS programme, it was expected that teaching staff mobility would result in an added European dimension in curricula. But, teachers, if they went abroad at all, stayed for only

short periods and the impact on curricula remained small; it was more contact between professors and incoming and returning students that inspired curricular change.

The rationale for mobility of students and teachers has changed somewhat in recent years. Now, in addition to the traditional motivations for moving students, a growing part of international student mobility is increasingly market-driven. Institutions compete to recruit students from other countries, to whom they can sometimes charge tuition fees.

Different types of mobility

The EU programmes have promoted more organised academic exchange. Its purpose was "to deal with diversity and its consequences and complexities, but without pushing for structural changes in the national systems" (Haug, 1999). "Vertical" mobility - when a student obtains a qualification in one institution and moves to another institution to obtain a second - and "free movers" could function better if fewer structural obstacles existed. The National Union of Students in Europe (ESIB) has called for equal treatment under national law for this kind of mobile student (rights to health care, accommodation etc., if not domestic grant support).

Inter-university collaboration has traditionally taken the form of physical mobility. Virtual mobility is slowly becoming a viable alternative, sometimes to complement physical mobility, as more creative ways of using technology to internationalise education emerge. And, transnational education, when education moves to the learner rather than the other way around, is expanding dramatically in some disciplines and countries. Under the right conditions, the latter can provide an alternative international education opportunity for students who are not mobile.

These developments are reflected somewhat in the new generation of EU education and training programmes. SOCRATES for higher education maintains the aim of promoting quality education through internationalisation, but has added the objective of including more people - ERASMUS should be less of an opportunity for a privileged minority of students.

Obstacles to mobility and structural improvements

Despite the increase in student mobility in Europe during the last twenty years, the same difficulties of incompatible calendars, credits and degrees persist. The diversity of systems, institutions and qualifications has, in fact, been described as "the single biggest obstacle to more mobility in higher education in Europe." Structural improvements - the setting up of a transparent framework of compatible qualifications, the elimination of regulatory or administrative obstacles, easier access to more complete information and the provision of freer choice - are necessary to improve organised exchange and individual mobility.

In Bologna in 1999, student representatives prioritised increased funding - for higher education in general, and for mobility grants in particular - and highlighted the difficulty of transferring grants and scholarships.

The report on Trends in Learning called for better information and advice to students, through reorienting databases and publications, or by training further careers officers and student counsellors. The European Commission has begun work on an electronic Gateway to the European Learning Area, to provide better public online access to

information on learning opportunities throughout Europe.

The European Council in Nice in December 2000 approved a resolution for a Mobility Action Plan, focused on removing remaining barriers to mobility. EU Member States should coordinate the implementation of measures to increase and democratise mobility in Europe. Problems like unequal access to information, financial constraints, inadequate social security cover and career hindrances should be tackled. The main ideas are to:

- Create a portal for accessing information on mobility opportunities
- Examine the interaction of financing possibilities at different levels
- Promote multilinguism
- Train administrative and academic resource staff to give advice on mobility
- Examine the organisation of study programmes into semesters.

The European Association for International Education (EAIE) has called for the introduction of the legal status of "student-trainee" for full-time students who are on internships abroad of six months or less (those staying longer should be considered as workers). A European student-trainee agreement should be developed, detailing the relationship between the student, the home institution and the host institution during the training period. Within it, all legal formalities should be resolved, e.g. residence permit, health insurance, taxation, professional and personal liability. Although some of the difficulties encountered by mobile research trainees have been resolved, others remain, related mainly to legal formalities. EAIE recommends that universities offer the visiting fellow a "fellowship contract" (based on the principles of education and training), or an employment contract, whichever is more appropriate. In the early 1990s, an evaluation of European research fellowships revealed that around a quarter of fellows had no contract at all. For researchers, teachers and administrative staff, the Bologna Declaration calls for the recognition and valorisation of periods spent researching, teaching and training in the European Higher Education Area, without prejudicing their statutory rights.

Interest in freeing up mobility focuses attention on the issue of the recognition of qualifications. An increasing number of citizens seek fair recognition of their qualifications. Generally, a qualification, even if not completely equivalent, is recognised, provided it passes a "fitness for purpose" test - a foreign qualification may be at a comparable level and have a comparable function, even though it may differ in details. Recognition has replaced the earlier approach of evaluating diplomas on a course-by-course basis to establish full equivalence.

Since each country is responsible for its education system, the only EU instruments imposing mutual recognition of diplomas are directives on recognition for professional purposes for certain regulated occupations. Two general directives established generally acceptable minimum requirements for qualifications. If these requirements are fulfilled, the host country must prove that the foreign qualification is not up to standard.

For academic recognition, higher education institutions should use more the Council of Europe/UNESCO Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region. Credit transfer systems, and especially the European Credit Transfer System (ECTS), are facilitating academic recognition. More and more institutions have taken the basic step of allocating 60 ECTS credits to a study year.

One of the problems encountered when people move for either professional or academic

purposes is that original credentials produced for employers or host higher education institutions provide insufficient information. The Diploma Supplement, developed by UNESCO/CEPES, the Council of Europe and the European Commission, to improve transparency of qualifications and their recognition, and of Europass, a system recording work-based study periods abroad and facilitating the translation of learning experiences into credit accumulation, could help higher education institutions, employers and public authorities throughout the world to better understand qualifications. These instruments aim to improve the international transparency of qualifications and their academic and professional recognition. The supplement presents the national higher education system, so the diploma can be understood in its national context, and gives information on examinations passed and the level obtained.

More legislation and instruments are not needed at the moment - the challenge is for institutions to implement those that exist and for governments to ensure that national policy decisions are compatible.

Mobility outside the European Area

The Bologna Declaration concentrates on mobility within the European Area, but exchange with other regions of the world, and especially attracting more researchers, teachers and students to Europe, is a way to improve the competitiveness of European higher education. Higher education institutions could cooperate to organise activities abroad, e.a. to arrange mobility, and thereby add a new meaning to international cooperation.

Future scenarios

There may be a change in the type of mobility in Europe, particularly if the objective of the Bologna Declaration to arrive at a common framework for compatible qualifications is achieved. Besides short-term organised mobility (exchange), we can expect to see a trend towards long-term free mobility of students, who will continue their graduate studies abroad, having obtained a first degree in their home country. Such a trend may in time have an impact on the European programmes for cooperation and mobility." Free movers would test the limits of free choice and if they were to receive equality of treatment with home students, this might contribute to balancing presently uneven student mobility patterns in Europe.

"It is likely that, in the long-term, traditional student mobility will be eclipsed by study programme mobility, as more transnational programmes are offered. It is becoming cheaper relatively to move courses rather than students. However the initial cost of developing (hard-copy and software) mobile programmes is very high."

Networks of universities across Europe, and beyond, will play an important role in academic recognition, by developing more mechanisms like benchmarking and cooperation in quality assessment beyond the national level.

Points for reflection

 Which obstacles to mobility are higher education institutions able to overcome on their own (individually or by collaborating among themselves), and which require action from governments or from international organisations?

- What are the most urgent actions needed to achieve more and easier student, staff and researcher mobility?
- How can mobility be made possible for a wider range of students?
- How can non-European students be attracted to the continent?
- How can plans for mobility take into account the growth in transnational education?

Theme 4: Compatibility: a common, but flexible qualifications framework

Pointers for the discussion

- The diversity of study programmes and of qualifications strengthens Europe's
 competitive position internationally, but potential learners within the region and in
 the rest of the world must be able to understand the rich variety of education on
 offer so as to choose between courses, qualifications and institutions.
- A common framework is needed to show compatibility among different systems of higher education. Within a common but flexible qualifications framework, a basic articulation of studies into an undergraduate and postgraduate phase must accommodate the great variety of first degrees, reflecting their different purposes, and of postgraduate degrees, spanning different research methods.
- European credit accumulation and transfer procedures, respecting the principles of structured learning and institutional autonomy to recognise credit or not, are a powerful tool to arrive at a common, yet flexible European framework.
- Higher education institutions are willing to work more through disciplinary networks, in cooperation with professional bodies, in order to identify core features of curricula, qualifications and professional profiles.

Diversity of qualifications

Increased demand for higher education has led to the greater diversity of study programmes, qualifications and of institutions. The survey of trends in higher education structures "shows the extreme complexity and diversity of curricular and degree structures in European countries." Different types of degrees, diplomas, certificates, etc. take a general, scientific, professional, technical or vocational orientation. They are being offered to new publics: adults, lifelong learners, students at universities who have come from polytechnics or colleges, etc.. "Widened accesslmeans further diversification, personalised learning paths, better information about content of courses and combinations, flexible learning structures and transparent recognition and assessment systems."

Establishing a common framework

The Bologna process is a search for a "common European answer to common European problems". The report prepared for the Bologna conference identified these trends affecting the structure of degrees/qualifications in Europe:

• a governmental push towards shorter studies

- an increasingly blurred divide between the university and non-university sectors
- more academic credit transfer (and, to a lesser extent, accumulation) systems
- greater autonomy of universities, often accompanied by initiatives for quality evaluation
- challenges from abroad, notably via transnational education.

Suggested lines of action are:

- the adoption of a common, but flexible frame of reference for qualifications
- the gradual adoption of an ECTS-compatible credit accumulation system
- an enhanced European dimension in quality assurance, evaluation and accreditation.

The Bologna Declaration calls for organising higher education studies into the two phases of Bachelors and Masters. Despite discussion of such a move in a context influenced in 1999 by reflection in France on a 3-5-8 year system, the Trends Report showed that Bachelors degrees in Europe usually require 3 to 4 years of study; that there is a high degree of convergence to a 5-year Masters; and that there is no 8-year standard duration for doctoral degrees. What the report suggests instead is qualifications equivalent to credit years of study:

- Sub-degree level (certificate, diploma): 1-2 years of equivalent ECTS credits
- first degree level (bachelor's): no less than 3, no more than 4 years of equivalent ECTS
 credits
- Master's level: about 5 years of equivalent ECTS credits, of which as least 12 months worth of master-level credit
- Doctoral level: about 7 to 8 years of ECTS equivalent credits. In addition, the first-degree level should be gauged on the basis of the knowledge and competencies acquired rather than the time spent.

When establishing a common framework for existing qualifications, the possibility should be built in for new qualifications to find their place in that structure.

Moving from comparability to compatibility

A step towards transparency of diverse systems and towards compatibility of different qualifications is to develop credit transfer and accumulation systems. Credit systems complement general legal instruments of academic or professional recognition. For example, since university and extra-university institutions both use modular credit-based courses, student transfer between the two sectors has been greatly facilitated.

The European Credit Transfer System (ECTS) was established in the 1980s to facilitate student exchange and it functions on the basis of individual student learning agreements. It is a framework within which institutions agree to recognise quite automatically study courses and thus facilitate credit transfer. To make curricula more transparent, credit points are assigned to study programmes (one year of full-time study has a maximum of 60 credits). But, students are dependent on their professors and, if they take courses not included in their learning agreement, they do not necessarily get credit for them. Even if the system took a long time to gain acceptance and it is still not always applied completely, the tools have proved effective and ECTS has made a noteworthy contribution to making curricula more transparent and to facilitating recognition of study abroad.

ECTS is compatible with other credit systems in Europe, even if these have been designed to achieve different local, regional, national or international objectives.

An overarching European credit accumulation and transfer framework is now needed. The Trends Report suggested that ECTS should inter alia:

- Be applicable within all sectors of higher education
- Cover all forms of learning
- Recognise equivalent rather than identical learning abroad
- Distinguish between different levels of credit general, specialised, master
- Respect institutional autonomy to recognise credit or not.

The European Commission feasibility study on developing ECTS into a credit accumulation system to encompass different types of learning argues for a new credit-based lifelong learning framework that would:

- Include professional, vocational and corporate qualifications
- Be designed for use outside the EU (particularly in view of its scheduled enlargement)
 and take on board the fact that there is high demand for student exchange with the
 US
- Permit integration of students into degree programmes on the basis of accreditation of prior experiential learning.

The report concluded that it is feasible to extend ECTS, even if it requires further embedding in institutions and that expanding the system would

mean that mutual recognition would be more difficult to achieve. "Therefore, it is recommended that the development of a European credit-based lifelong learning framework should be connected to existing Commission initiatives to link existing national quality assurance mechanisms."

But, there is a difference between a credit transfer system and an accumulation system. Credit systems make it possible to underline the learning path - whether it includes education at universities, extra-university higher education institutions, or other bodies offering education and training. Concerns have been expressed that a credit accumulation system creates an "_ la carte" framework, within which the student is free to mix credit from different types and levels of education and then demand a qualification; this would not guarantee the intellectual development associated with obtaining qualifications. But, since it is the university that decides to validate study programmes and award a qualification - or not, credit-based curricula are not incompatible with a structured, progressive learning experience.

And, some doubt that ECTS has in fact the potential to become a model for credit transfer and accumulation on a larger scale. The main criticism is that in the drive to find a pragmatic solution to the problem of academic recognition that was hindering student mobility, ECTS bypassed the question of quality, which has become central to the present debate on the compatibility of European qualifications.

The possible extension of ECTS to incorporate vocational education and training has raised questions in some countries. Presently, most traditional European universities do not apply credits to vocational or to professional training. "There is a need to develop a

credit system that takes into account competencies (widely used in vocational education and training) that is compatible with a credit system based on workload (currently used in higher education)." The fact that education is being delivered in more different ways makes notional time measures of credit increasingly problematic. But, the idea is to keep the student workload approach at the core of any future system.

A pilot project to see how to measure student workload in terms of learning outcomes, knowledge, skills and competencies in five disciplines is being launched with the support of the European Commission. It will also examine in each discipline commonly accepted professional profiles, levels of study and curricula.

Future scenarios

New Masters courses will be offered by individual institutions or by consortia in areas where there are no short, or separate, programme at this level. They will be open to students who have done their undergraduate studies at a different institution or in a different country.

"The development and introduction of an ECTS credit-based lifelong learning framework will be a complex process, best achieved at the strategic policy level through processes enabling a wide dialogue between European higher education institutions, initial education providers, professional bodies and employers". The Bologna Declaration is perceived in this context as "an indication of the political support offered by European governments to such a process".

Points for reflection

- Will auglifications come to be described in terms of credit-compatible years?
- Will higher education institutions accept credit for learning acquired in non-higher education contexts?
- What are the advantages and disadvantages of ordinary and advanced degrees?
- Will employers accept new intermediate qualifications, particularly in the professional disciplines that usually require an integrated curriculum?
- Will there be a standard nomenclature for European qualifications? Will there be national and "international" titles (in English)?
- How can quality assurance contribute to improving the recognition of higher education qualifications? Which methods would facilitate comparability and could be linked to recognition mechanisms such as credit transfer and accumulation?
- Can more curricular convergence be achieved within broad disciplines?

Reference

Adam, S. & Gemlich, V. (2000). ECTS Extension feasibility study, carried out for the European Commission, Directorate-General Education and Culture. http://europa.eu.int/comm/education/socrates/ectsext.html

Theme 5: Quality assurance and certification (accreditation)

Pointers for the discussion

- The European Higher Education Area can only be built on high quality education and research, and thus on more cooperation in the crucial areas of quality evaluation and quality assurance.
- The European higher education community wants to organise itself in order to design
 and implement the mechanisms required for quality assurance/certification with a
 European dimension. When carried out in cooperation with partners in government
 and society, this will be the best answer to the pressing need for transparent quality
 assurance in the European higher education area.
- All forms of transnational education must be subject to the same quality standards as other education, both in the providing and in the receiving country.
- The Europeanisation and internationalisation of higher education demands a European
 dimension to quality assurance/certification mechanisms. The appropriate answer
 is not a European agency enforcing a single set of standards, but a system based
 on the development and recognition of quality assurance/certification at the level
 of a country, a region, a network or a discipline.

The need for international quality assurance procedures: the transnational context

Quality assurance systems in Europe have a national perspective, when the globalisation of the economy and the emergence of virtual learning have created an international higher education environment. Academic and professional mobility are on the increase and institutions and curricula are crossing borders. The rise of transnational education constitutes a challenge to quality assurance; the urgent need is to protect students and employers from fraudulent institutions and awards. While national quality assurance is geared towards accountability and improvement, there is a need to contribute to the international visibility and compatibility of European qualifications on the international leve.

Despite its obvious growth, there are no reliable data on the current size of the transnational education sector in Europe, partly because of the difficulty to agree on what should come under the term. Transnational education is particularly present in regions where there are high selectivity rates in traditional education and little diversification. The United Kingdom (UK) is by far the biggest exporter of higher education in Europe, while Greece, Spain and Italy are the main importers. The widespread knowledge of English facilitates exportation of education from the United States, the UK, Australia and other English-speaking countries, which earn money from their educational services abroad. Disciplines are also affected unequally: the most visible challenge is in business and management (especially MBAs), computer science and information technology, and foreign language learning. Much activity is at postgraduate level or in continuing education.

Transnational education brings opportunities and challenges. It can improve access to higher education and contribute to diversification of learning paths. It can promote innovation in curricula and delivery methods; further internationalisation of higher education; promote intercultural co-operation; and help make the sector more competitive.

For some institutions, there is the possibility to raise income; for others, there can be a loss of income. Conflict with national education systems surfaces when non-official unregulated providers (often franchised institutions and branch campuses) are not subject to internal or external quality audit. There is, then, a concern to protect consumers from exploitation, as well as to recognise quality transnational education. Global quality is more than academic excellence: it balances academic learning with transversal skills, professional competencies, and ethical and civic values. That is why quality assurance of transnational providers should involve all the actors in the process: creators, importers, exporters, students and stakeholders.

Strategies to deal with transnational education should fit with other national education goals, e.g., to promote lifelong learning, transmit culture or increase competitiveness. This is not a domain that is easily regulated through conventional legal measures. Current national regulation is fragmented, mainly requiring foreign providers to be registered, licensed or in some other way approved by local quality assurance authorities or by the Ministry of Education. Pressure to define higher education as a service that should be covered by international trade agreements is growing - a US proposal has been made in the framework of the General Agreement on Trade in Services (GATS).

The Council of Europe/UNESCO Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region does not treat recognition issues arising from all kinds of transnational education. But, their Code of Good Practice tries to give a normative framework for countries sending and receiving transnational. While, "in the short-term, the potential impact of transnational education is likely to stay as it is now, relatively small scale lin the longer termlits impact will intensify and broaden." "Transnational education touches on all dimensions of the current European educational debate engendered by the Bologna Declaration, including matters of recognition, transparency, accreditation, cultural and academic autonomy, convergence and divergence."

Different actors and types of evaluation

In nearly all European countries, some form of external quality assurance of research and of teaching is in operation. Quality assurance is a continuous process, which takes place at the level of a course, a faculty or an institution. It can serve to improve the quality of education, research or management, facilitate the recognition of courses and qualifications, and help increase the mobility of students and researchers. But, the scope of national evaluations varies: for instance, some countries evaluate programmes, others institutions. A European Institutional Evaluation is offered by CRE, and an Internationalisation Quality Review by CRE, OECD/IMHE and the Academic Cooperation Association (ACA). In addition, there are accreditation activities in many countries, carried out by a national agency or through mutual agreements between institutions, with institutions sometimes seeking American accreditation. The only European-wide accreditation initiative is the EQUIS model for business education, launched by the European Foundation for Management Development.

The growth and variety of evaluation activities in Europe prompted the creation in 1999 of the European Network for Quality Assurance in Higher Education (ENQA), founded on a recommendation of the European Council of Ministers of Education. The network assembles national quality assurance agencies to exchange information and experience

and to develop jointly their work, but this has not resulted yet in translating national outcomes of evaluations into international ones. ENQA is expected to play a strong role in the future in monitoring and exchanging information and good practice related to quality assurance for transnational education.

Accreditation

The question of external accreditation of courses and institutions is increasingly raised in the context of quality assurance, because evaluation without certification is perceived as unfinished business for those who wish clear information about minimal quality standards of qualifications, including transnational ones. There is pressure from the United States, where accreditation procedures are used widely and give information to potential students as well as competitive tools to institutions. European institutions are more motivated to seek accreditation as a way to enhance international recognition, as well as to attract students, teachers and researchers and facilitate mobility. Employers are interested in accreditation ensuring a minimal quality of standards. The debate on accreditation is new in Europe, confused and controversial, and what can appear to be a technical question is in fact a fundamental question for the building of a European Higher Education Area.

The basic idea of accreditation (of which there are different interpretations) is that it is a formal, published statement on the quality of a programme or institution, following an evaluation based on agreed standards. Accreditation is a process and a status: a process in that it gives the opportunity and incentive for improvement and a status in that it provides public certification of acceptable quality.

A CRE project has identified five principles that should inform the development of European quality assurance:

- Create a space for European convergence, while preserving national diversity
- Preserve institutional diversity to meet differentiated learners' needs
- Balance institutional autonomy and external accountability
- Build in flexibility and the capacity to adapt to new developments.
- Add value to current quality assurance systems, while preserving their improvement function.

Any move to validate accreditation procedures, while based on European values, should nevertheless be placed in the global context of higher education and research and should integrate both domains.

A system of multiple accreditation organised at different levels (country, region, subject area, institutional type, network, linguistic/cultural area) would suit Europe. Some areas could move to multilateral agreements for the mutual recognition of qualifications in specific subjects, for example. Mechanisms might be designed to extend locally-gained accreditation to the whole European area and scenarios could be developed for European cross-border accreditation in certain disciplines. This would have the advantage of combining internal quality assurance and external accreditation processes aimed at guaranteeing the highest possible level of quality and relevance of curricula and of higher education institutions.

Future scenarios

In the long term, a European quality assurance framework may emerge to complement the existing common framework for recognition of qualifications. In the meantime, national initiatives, with an increasingly open, international perspective, point the way forward. A step-by-step scenario could be implemented, building on current quality assurance processes.

If European higher education does not evaluate the potential of accreditation to contribute to its quality assurance procedures, evaluation of the quality of transnational education and eventual recognition of some courses and providers (accreditation or some alternative certification) will take place at national levels, in an uncoordinated manner. But, national accreditation is unlikely to be able to make decisions in a short time about the large number of courses now on the market. And, conflicting decisions will add to the confusion.

If nothing changes from the present situation, or if Europe moves very slowly to incorporate a more international dimension to quality assurance (on the basis, for example, of many bilateral and multilateral accreditation agreements), accreditation bodies may emerge from the private sector, or from outside Europe (the Global Alliance for Transnational Education - GATE, for example, could offer an accreditation procedure). US accreditation agencies are interested in Europe (e.g., those for Management (AACSB) or Engineering and Technology (ABET), which has already evaluated engineering courses in a couple of European countries).

The CRE project recommends that a working platform of European higher education institutions and relevant partners be established to clarify concepts of quality assurance and accreditation, analyse needs, test different approaches - such as validation of existing procedures, for instance, through pilot projects. An extra bureaucratic layer is not welcome.

Points for reflection

- How could national quality assurance systems incorporate an international dimension?
- How can national quality assurance systems judge the quality of education offered by new types of providers? What is the optimal way to protect students against fraudulent claims? If national legislation is developed for transnational education, what effect does this have on other countries in the European Area?
- Would it be possible to forge consensus on principles for a European platform to test mechanisms of cooperation and validation in the field of quality assurance and accreditation, based on an agreed set of principles?

References

Campbell, C. & van der Wende, M. (2001). International initiatives and trends in quality assurance for European higher education, an exploratory trend report. For the European Network for Quality Assurance in Higher Education (ENQA).

http://www.enga.net/

Machado dos Santos, S. (2000). "Introduction to the theme of Transnational Education". Haug, G. "Response". Aveiro: Conference of the Directors General for Higher Education and the

Heads of the Rectors' Conferences of the European Union.

www.crue.upm.es/eurec/transed.htm

Confederation of European Union Rectors' Conferences (with the support of the European Commission). (2001, unpublished draft). Transnational Education project report and recommendations.

Project information at www.crue.upm.es/eurec

CRE-the Association of European Universities (with the support of the European Commission). (2001, unpublished draft). Towards Accreditation Schemes for Higher Education in Europe. Project information at http://www.unige.ch/cre

Theme 6: Competitiveness at home and in the world

Pointers for the discussion

- Competitiveness is mainly the ability to be attractive to local and international students and teachers/researchers, in the global competition for reputation, talent and resources
- Competition in global and European higher education is inevitable and growing. The
 main question raised for institutions and governments by transnational education is
 why students choose imported education over national higher education in situations
 where they have a choice, and what effect their choice has on enrolment patterns
 and related funding of institutions and disciplines.
- Systems and institutions can use a European Higher Education Area to be more attractive at home and abroad, to students, researchers and staff. They can strengthen their individual positions and need to build collaborative competitive strength.
- European higher education needs and wishes to present an understandable identity
 to the rest of the world, based on high quality, positive diversity and transparency.
 European higher education needs to more present in the world, internationalising its
 quality assurance, developing flexible curricula, offering efficient admission procedures
 and providing user-friendly information.

Competition from where?

Competition in higher education is a relatively new development. Many new providers of education and training have emerged, some of which deliver transnational education. In Europe, competition between the established higher education institutions and these providers (traditional universities offering distance education, franchising operations and/or establishing branch campuses, corporate universities, for profit organisations and consortia uniting public and private organisations) is likely to intensify.

American universities are increasingly attractive for European students, while European universities are less attractive for American students. The top American universities attract students, researchers and professors from all over the world, and even the second rank institutions receive large numbers of foreign students. Part of the explanation is the use of English as the lingua franca of contemporary science and the most commonly mastered first foreign language.

An appeal to foster mobility and links between European and Latin American institutions was signed by CRE and its Latin American equivalent in Turin in November 2000. On both continents, the lack of a transparent qualifications framework and international quality assurance mechanisms inhibits cooperation. There is an opportunity for Europe to increase its potential in Latin America as an alternative to other destinations for mobility.

Progress in Europe in providing better information on qualifications, as well as in improving recognition practices, could help similar steps to be taken in other parts of the world, thus contributing to global mobility and cooperation, the other side of competition.

Competing for what?

More competition across boundaries for students and for staff would be a clear sign of the existence of a truly open European Higher Education Area. With demographic decline, fewer students are emerging from the traditional age cohort and institutions compete for students more at national level and, sometimes, internationally. The majority of a sample of universities responding to a CRE survey named other national universities their main future competitor for students, with foreign universities, non-university higher education, virtual universities and private universities following. Other national universities also topped the list of future competitors for recruiting staff, but competition from foreign higher education providers and private companies was regarded as nearly as big. To help universities attract researchers from abroad, the Confederation of EU Rectors' Conferences, in its comments on the European Research Area, has proposed a "green card model" in Europe, where it is still too complicated for people to obtain permission to do research.

Higher education institutions also compete to keep from having research, particularly cutting-edge basic research, moved to specialised institutes or to for-profit organisations. And, they compete for financial resources, influence, reputation and prestige.

How to compete?

The first condition for higher education institutions to compete is that they are not over-regulated and free to innovate. In a less-regulated environment, higher education institutions rely increasingly on market or market-like signals to make decisions and a shift occurs in rules about their positioning. There is, then, a shift from regulation by legal standards to regulation by market standards. But, less regulation and the freedom to innovate needs to be accompanied by changes in institutions' internal structures and decision-making processes.

To compete more on the global level, European higher education needs to have grown used to competition within the continent, and even at national level. Being competitive requires a certain culture of behaviour and not just rhetoric. Once institutions have specific proposals to make themselves more attractive to students, researchers, and staff, they could request more support from governments and from international organisations like the European Union.

What are, or should be, the distinctive qualities of European higher education compared with that offered on other continents? What are its strengths? In Bologna in 1999, institutions agreed that competing in Europe ought to be by emphasising "high quality rather than

by attempting to compete on prices." This highlights the importance of quality assurance. "In an increasingly competitive international market in higher education, quality will have to become a distinguishing characteristic guiding consumers and institutions in their strategic behaviour." But, comparatively low costs of European higher education could also be turned into a global competitive advantage.

Under which conditions can diversity be a selling-point for European higher education? Is international success possible for institutions delivering courses in lesser-known languages? The EU LINGUA action finances transnational projects to develop, for example, new language learning methods, Internet proficiency tests, marketing videos to attract students to learn a language in Europe. The market should be interpreted as the global one

Some of the capacity of European higher education to be competitive will depend on national policy decisions and on whether there is convergence between these.

Future scenarios

Countries will have to decide how they wish to position their national education, against the backdrop of the European Higher Education Area and in the global context

The way forward is for universities to use their autonomy to organise themselves to compete better, but a reasonable compromise must be negotiated between deregulation to allowing for a free market and the preservation of national interests related to higher education. Less regulation would result in even more diversification of qualifications - a common qualifications framework would then be even more necessary than it is now.

In the face of increased competition, higher education systems will try to close the competitive gap at home so as to compete better abroad, e.g., they will weed out poor quality, introduce more quality labels, introduce nomenclature to allow their extra-university sector to compete internationally.

The competitive gap will widen among institutions. More large-scale, transnational university networks will develop, clustering around some prestigious institutions. They will trade in the global educational market place as a collective, but with the constituent members maintaining their respective national identities. Qualifications, however, will be awarded within the legal framework of foreign higher education systems. Such networks will look for the most marketable compromise of image building on the one hand, using the names of the most prestigious partners, and freedom from national regulation in the areas of recognition of diplomas and quality assurance on the other.

Another scenario is the emergence of some transnational higher education institutions, for example in a border region, where two traditional institutions could plan close cooperation in education, eventually leading to a merger. The new university could then integrate its research and educational programmes and degree-awarding capacities. National legislation is not today prepared to deal properly with such institutions.

Transnational education or study abroad will become more and more of an alternative to studying in the national system, which would redirect resources.

Points for reflection

- Can Europe afford its "structural egalitarianism" (Aaviksoo), according to which all
 universities are supposed to carry out research and teaching and state funds are
 spread among them? How does this situation affect the ability of individual institutions
 to compete?
- What can European higher education institutions change themselves so that they are in the strongest position to maintain and improve their competitiveness?
- Do higher education institutions have the links with stakeholders, especially employers, to reinforce their competitive position? For example, should they seek greater participation of stakeholders (employers, recent graduates, students) in their processes and in their governance to tackle the new competitive situation?
- What changes in national higher education legislation do institutions
- want so that they would be freer to compete?

Message from the Salamanca Convention of European higher education institutions

SHAPING THE EUROPEAN HIGHER EDUCATION AREA

Over 300 European higher education institutions and their main representative organisations, gathered in Salamanca on 29-30 March 2001 to prepare their input to the Prague meeting of the Ministers in charge of higher education in the countries involved in the Bologna process, have agreed on the following goals, principles and priorities.

Shaping the future European higher education institutions reaffirm their support to the principles of the Bologna Declaration and their commitment to the creation of the European Higher Education Area by the end of the decade. They see the establishing of the European University Association (EUA) in Salamanca as of symbolic and practical value to convey their voice more effectively to governments and society and thus to support them in shaping their own future in the European Higher Education Area.

1. PRINCIPLES

AUTONOMY WITH ACCOUNTABILITY

Progress requires that European universities be empowered to act in line with the guiding principle of autonomy with accountability. As autonomous and responsible legal, educational and social entities, they confirm their adhesion to the principles of the Magna Charta Universitatum of 1988 and, in particular, academic freedom. Thus, universities have to be able to shape their strategy, choose their priorities in teaching and research, allocate their resources, profile their curricula and set their criteria for the acceptance of professors and students. European higher education institutions accept the challenges of operating in a competitive environment at home, in Europe and in the world, but to do so they need the necessary managerial freedom, less rigid regulatory frameworks and fair financing or they will be placed at a disadvantage in co-operation and competition. The dynamics needed for the completion of the European Higher Education Area will remain unfulfilled or will result in unequal competition, if the current over-regulation and minute administrative and financial control of higher education in many countries is upheld.

Competition serves quality in higher education, is not exclusive of co-operation and cannot be reduced to a commercial concept. Universities in some countries in Europe are not yet in a position to compete on equal terms and are in particular faced with unwanted brain drain within Europe.

EDUCATION AS A PUBLIC RESPONSIBILITY

The European Higher Education Area must be built on the European traditions of education as a public responsibility; of broad and open access to undergraduate as well as graduate studies; of education for personal development; and of citizenship as well as of short and long-term social relevance.

RESEARCH-BASED HIGHER EDUCATION

As research is a driving force of higher education, the creation of the European Higher Education Area must go hand in hand with that of the European Research Area.

ORGANISING DIVERSITY

European higher education is characterised by its diversity in terms of languages, national systems, institutional types and profiles and curricular orientation. At the same time its future depends on its ability to organise this valuable diversity to effectively produce positive outcomes rather than difficulties and flexibility rather than opacity. Higher education institutions wish to build on convergence - in particular on common denominators shared across borders in a given subject area - and to deal with diversity as assets, rather than as reasons for non-recognition or exclusion. They are committed to creating sufficient self-regulation to ensure the minimum level of cohesion needed to avoid that their efforts towards compatibility are undermined by too much variance in the definition and implementation of credits, main degree categories and quality criteria.

2. KEY ISSUES

QUALITY AS A FUNDAMENTAL BUILDING STONE

The European Higher Education Area needs to build on academic core values while meeting stakeholders' expectations, i.e., demonstrating quality. Indeed, quality assessment must take into consideration the goals and mission of institutions and programmes. It requires a balance between innovation and tradition, academic excellence and social/economic relevance, the coherence of curricula and students' freedom of choice. It encompasses teaching and research as well as governance and administration, responsiveness to students' needs and the provision of non-educational services. Inherent quality does not suffice, it needs to be demonstrated and guaranteed in order to be acknowledged and trusted by students, partners and society at home, in Europe and in the world. Quality is the basic underlying condition for trust, relevance, mobility, compatibility and attractiveness in the European Higher Education Area.

Trust building

As research evaluation has an international dimension so does quality assurance in higher education. In Europe, quality assurance should not be based on a single agency enforcing a common set of standards. The way into the future will be to design mechanisms at European level for the mutual acceptance of quality assurance outcomes, with "accreditation" as one possible option. Such mechanisms should respect national, linguistic and discipline differences and not overload universities.

Relevance

Relevance to the European labour market needs to be reflected in different ways in curricula, depending on whether the competencies acquired are for employment after the first or the second degree. Employability in a lifelong learning perspective is best served through the inherent value of quality education, the diversity of approaches and

course profiles, the flexibility of programmes with multiple entry and exit points and the development of transversal skills and competencies such as communication and languages, ability to mobilise knowledge, problem solving, team work and social processes.

Mobility

The free mobility of students, staff and graduates is an essential dimension of the European Higher Education Area. European universities want to foster more mobility- both of the "horizontal" and the "vertical" type - and do not see virtual mobility as a substitute to physical mobility. They are willing to use existing instruments for recognition and mobility (ECTS, Lisbon Convention, Diploma Supplement, NARIC/ENIC network) in a positive and flexible way. In view of the importance of teaching staff with European experience, universities wish to eliminate nationality requirements and other obstacles and disincentives for academic careers in Europe. However, a common European approach to virtual mobility and transnational education is also needed.

Compatible qualifications at the undergraduate and graduate levels

Higher education institutions endorse the move towards a compatible qualification framework based on a main articulation in undergraduate and postgraduate studies. There is broad agreement that first degrees should require 180 to 240 ECTS points but need to be diverse leading to employment or mainly preparing for further, postgraduate studies. Under certain circumstances a university may decide to establish an integrated curriculum leading directly to a Master-level degree. Subject-based networks have an important role to play to inform such decisions. Universities are convinced of the benefits of a credit accumulation and transfer system based on ECTS and on their basic right to decide on the acceptability of credits obtained elsewhere.

Attractiveness

European higher education institutions want to be in a position to attract talent from all over the world. This requires action at the institutional, national and European level. Specific measures include the adaptation of curricula, degrees readable inside and outside Europe, credible quality assurance measures, programmes taught in major world languages, adequate information and marketing, welcoming services for foreign students and scholars, and strategic networking. Success also depends on the speedy removal of prohibitive immigration and labour market regulations.

European higher education institutions recognise that their students need and demand qualifications which they can effectively use for the purpose of study and career all over Europe. The institutions and their networks and organisations acknowledge their role and responsibility in this regard and confirm their willingness to organise themselves accordingly within the framework of autonomy.

Higher education institutions call on governments, in their national and European contexts, to facilitate and encourage change and to provide a framework for coordination and guidance towards convergence, and affirm their capacity and willingness to initiate and support progress within a joint endeavour

- to redefine higher education and research for the whole of Europe;
- to reform and rejuvenate curricula and higher education as a whole;
- to enhance and build on the research dimension in higher education;
- to adopt mutually acceptable mechanisms for the evaluation, assurance and certification of quality;
- to build on common denominators with a European dimension and ensure compatibility between diverse institutions, curricula and degrees;
- to promote the mobility of students and staff and the employability of graduates in Europe; to support the modernisation efforts of universities in countries where the challenges of the European Higher Education Area are greatest
- to meet the challenges of being readable, attractive and competitive at home, in Europe and in the world; and
- to keep considering higher education as an essential public responsibility.

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Göteborg Student Declaration

25 March 2001

Preamble

We, the student representatives in Europe, gathered in Göteborg at the Student Göteborg Convention from the 22nd to the 25th of March 2001. Here we adopted the following declaration on the future of the Bologna Process. ESIB – the National Unions of Students in Europe is and has been actively involved in the construction of the European Higher Education Area.

In June 1999, ESIB and its members, the national unions of students had to invite themselves to the Ministerial meeting on "A European Higher Education Area" in Bologna. Two years later, at the Prague Summit, ESIB is a keynote speaker. The growing recognition of the student input in the process is the result of a strong commitment of European students to promote a high quality, accessible and diverse higher education in Europe.

Introduction

ESIB sees the Bologna process as the crucial step towards a Europe without boundaries for its citizens. A European higher education area should include all European students on an equal basis. The creation of this area is a common responsibility of all European countries and should take into account the political and socio-economic differences in Europe. The reason for creating a European higher education area is the improvement of all national higher education systems, by spreading good practices and promoting cooperation and solidarity between the European states.

The social implications

Although the Bologna Declaration pointed out the basic aspects of the European dimension in higher education, it failed to address the social implications the process has on students. Higher education enables students to acquire the skills and the knowledge they need further in life, both personally and professionally. The social and civic contributions must be present as the primary functions of the higher education institutions. Higher education institutions are important actors in civic society; therefore all members of the higher education community should be involved. Students therefore are not consumers of a tradable education service, and as a consequence it is the governments' responsibility to guarantee that all citizens have equal access to higher education, regardless of their social background. This means providing students with adequate funding in the form of study grants and the higher education institutions with enough funding to exercise their public tasks.

The Higher Education Area

for a democratic European society. Accessibility and diversity have traditionally been the cornerstones of European education and should remain so in the future. Next to this and to ensure that all programmes of higher education institutions are compatible and exchangeable, a system of credits based on workload should be implemented in the whole of Europe. A common European framework of criteria for accreditation and a compatible system of degrees is needed, in order to make sure that credits accumulated in different countries or at different institutions are transferable and lead to a recognisable degree. A two-tier degree system should guarantee free and equal access for all students and should not lead to the exclusion of students on other than academic grounds. To guarantee and improve the quality of higher education, a strong European cooperation of the national quality assurance systems is needed. Accreditation, being a certification of a programme, takes into account, among other criteria, the quality assurance process and should be used as a tool to promote quality.

A European higher education area promoting improvement and cooperation requires physical mobility of students, teaching staff and researchers. Mobility is also a way to promote cultural understanding and tolerance. Obstacles to mobility exist not only in the academic world. Social, economical and political obstacles must also be removed. Governments should guarantee foreign students the same legal rights as the students in the hosting country and higher education institutions should take the responsibility to provide students with mobility programmes.

The creation of a genuine European higher education area as outlined above will lead to expanded mobility, higher quality and the increased attractiveness of European education and research. The measures taken in the Bologna process are only a first step towards transparency. The provision of general information must be encouraged. To improve the level of information Europe needs a fully implemented use of a Diploma Supplement and the creation of a readily accessible database with all relevant higher education information.

The role of students

Finally, it must be stressed that students, as competent, active and constructive partners, must be seen as one of the driving forces for changes in the field of education. Student participation in the Bologna process is one of the key steps towards permanent and more formalised student involvement in all decision making bodies and discussion fora dealing with higher education on the European level.

ESIB – the National Unions of Students in Europe, being the representative of students on the European level, must be included in the future follow-up of the Bologna declaration.

ESIB – the National Unions of Students in Europe will commit itself to continue representing and promoting the students' views on the European level.

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Towards a European Higher Education Area

Communiqué of the meeting of European Ministers in charge of Higher Education in Prague

19 May 2001

Two years after signing the Bologna Declaration and three years after the Sorbonne Declaration, European Ministers in charge of higher education, representing 32 signatories, met in Prague in order to review the progress achieved and to set directions and priorities for the coming years of the process. Ministers reaffirmed their commitment to the objective of establishing the European Higher Education Area by 2010. The choice of Prague to hold this meeting is a symbol of their will to involve the whole of Europe in the process in the light of enlargement of the European Union.

Ministers welcomed and reviewed the report "Furthering the Bologna Process" commissioned by the follow-up group and found that the goals laid down in the Bologna Declaration have been widely accepted and used as a base for the development of higher education by most signatories as well as by universities and other higher education institutions. Ministers reaffirmed that efforts to promote mobility must be continued to enable students, teachers, researchers and administrative staff to benefit from the richness of the European Higher Education Area including its democratic values, diversity of cultures and languages and the diversity of the higher education systems.

Ministers took note of the Convention of European higher education institutions held in Salamanca on 29-30 March and the recommendations of the Convention of European Students, held in Goteborg on 24-25 March, and appreciated the active involvement of the European University Association (EUA) and the National Unions of Students in Europe (ESIB) in the Bologna process. They further noted and appreciated the many other initiatives to take the process further. Ministers also took note of the constructive assistance of the European Commission.

Ministers observed that the activities recommended in the Declaration concerning degree structure have been intensely and widely dealt with in most countries. They especially appreciated how the work on quality assurance is moving forward. Ministers recognized the need to cooperate to address the challenges brought about by transnational education. They also recognized the need for a lifelong learning perspective on education.

Further actions following the six objectives of the Bologna process

As the Bologna Declaration sets out, Ministers asserted that building the European Higher Education Area is a condition for enhancing the attractiveness and competitiveness of higher education institutions in Europe. They supported the idea that higher education should be considered a public good and is and will remain a public responsibility (regulations etc.), and that students are full members of the higher education community. From this point of view Ministers commented on the further process as follows:

Adoption of a system of easily readable and comparable degrees

Ministers strongly encouraged universities and other higher education institutions to take full advantage of existing national legislation and European tools aimed at facilitating academic and professional recognition of course units, degrees and other awards, so that citizens can effectively use their qualifications, competencies and skills throughout the European Higher Education Area.

Ministers called upon existing organisations and networks such as NARIC and ENIC to promote, at institutional, national and European level, simple, efficient and fair recognition reflecting the underlying diversity of qualifications.

Adoption of a system essentially based on two main cycles

Ministers noted with satisfaction that the objective of a degree structure based on two main cycles, articulating higher education in undergraduate and graduate studies, has been tackled and discussed. Some countries have already adopted this structure and several others are considering it with great interest. It is important to note that in many countries bachelor's and master's degrees, or comparable two cycle degrees, can be obtained at universities as well as at other higher education institutions. Programmes leading to a degree may, and indeed should, have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs as concluded at the Helsinki seminar on bachelor level degrees (February 2001).

Establishment of a system of credits

Ministers emphasized that for greater flexibility in learning and qualification processes the adoption of common cornerstones of qualifications, supported by a credit system such as the ECTS or one that is ECTS-compatible, providing both transferability and accumulation functions, is necessary. Together with mutually recognized quality assurance systems such arrangements will facilitate students' access to the European labour market and enhance the compatibility, attractiveness and competitiveness of European higher education. The generalized use of such a credit system and of the Diploma Supplement will foster progress in this direction.

Promotion of mobility

Ministers reaffirmed that the objective of improving the mobility of students, teachers, researchers and administrative staff as set out in the Bologna Declaration is of the utmost importance. Therefore, they confirmed their commitment to pursue the removal of all obstacles to the free movement of students, teachers, researchers and administrative staff and emphasized the social dimension of mobility. They took note of the possibilities for mobility offered by the European Community programmes and the progress achieved in this field, e.g. in launching the Mobility Action Plan endorsed by the European Council in Nice in 2000.

Promotion of European cooperation in quality assurance

Ministers recognized the vital role that quality assurance systems play in ensuring high

quality standards and in facilitating the comparability of qualifications throughout Europe. They also encouraged closer cooperation between recognition and quality assurance networks. They emphasized the necessity of close European cooperation and mutual trust in and acceptance of national quality assurance systems. Further they encouraged universities and other higher education institutions to disseminate examples of best practice and to design scenarios for mutual acceptance of evaluation and accreditation/certification mechanisms. Ministers called upon the universities and other higher educations institutions, national agencies and the European Network of Quality Assurance in Higher Education (ENQA), in cooperation with corresponding bodies from countries which are not members of ENQA, to collaborate in establishing a common framework of reference and to disseminate best practice.

Promotion of the European dimensions in higher education

In order to further strengthen the important European dimensions of higher education and graduate employability Ministers called upon the higher education sector to increase the development of modules, courses and curricula at all levels with "European" content, orientation or organisation. This concerns particularly modules, courses and degree curricula offered in partnership by institutions from different countries and leading to a recognized joint degree.

Furthermore Ministers emphasized the following points:

Lifelong learning

Lifelong learning is an essential element of the European Higher Education Area. In the future Europe, built upon a knowledge-based society and economy, lifelong learning strategies are necessary to face the challenges of competitiveness and the use of new technologies and to improve social cohesion, equal opportunities and the quality of life.

Higher education institutions and students

Ministers stressed that the involvement of universities and other higher education institutions and of students as competent, active and constructive partners in the establishment and shaping of a European Higher Education Area is needed and welcomed. The institutions have demonstrated the importance they attach to the creation of a compatible and efficient, yet diversified and adaptable European Higher Education Area. Ministers also pointed out that quality is the basic underlying condition for trust, relevance, mobility, compatibility and attractiveness in the European Higher Education Area. Ministers expressed their appreciation of the contributions toward developing study programmes combining academic quality with relevance to lasting employability and called for a continued proactive role of higher education institutions.

Ministers affirmed that students should participate in and influence the organisation and content of education at universities and other higher education institutions. Ministers also reaffirmed the need, recalled by students, to take account of the social dimension in the Bologna process.

Promoting the attractiveness of the European Higher Education Area

Ministers agreed on the importance of enhancing attractiveness of European higher education to students from Europe and other parts of the world. The readability and comparability of European higher education degrees world-wide should be enhanced by the development of a common framework of qualifications, as well as by coherent quality assurance and accreditation/certification mechanisms and by increased information efforts.

Ministers particularly stressed that the quality of higher education and research is and should be an important determinant of Europe's international attractiveness and competitiveness. Ministers agreed that more attention should be paid to the benefit of a European Higher Education Area with institutions and programmes with different profiles. They called for increased collaboration between the European countries concerning the possible implications and perspectives of transnational education.

Continued follow-up

Ministers committed themselves to continue their cooperation based on the objectives set out in the Bologna Declaration, building on the similarities and benefiting from the differences between cultures, languages and national systems, and drawing on all possibilities of intergovernmental cooperation and the ongoing dialogue with European universities and other higher education institutions and student organisations as well as the Community programmes.

Ministers welcomed new members to join the Bologna process after applications from Ministers representing countries for which the European Community programmes Socrates and Leonardo da Vinci or Tempus-Cards are open. They accepted applications from Croatia, Cyprus and Turkey.

Ministers decided that a new follow-up meeting will take place in the second half of 2003 in Berlin to review progress and set directions and priorities for the next stages of the process towards the European Higher Education Area. They confirmed the need for a structure for the follow-up work, consisting of a follow-up group and a preparatory group. The follow-up group should be composed of representatives of all signatories, new participants and the European Commission, and should be chaired by the EU Presidency at the time. The preparatory group should be composed of representatives of the countries hosting the previous ministerial meetings and the next ministerial meeting, two EU member states and two non-EU member states; these latter four representatives will be elected by the follow-up group. The EU Presidency at the time and the European Commission will also be part of the preparatory group. The preparatory group will be chaired by the representative of the country hosting the next ministerial meeting.

The European University Association, the European Association of Institutions in Higher Education (EURASHE), the National Unions of Students in Europe and the Council of Europe should be consulted in the follow-up work.

In order to take the process further, Ministers encouraged the follow-up group to arrange seminars to explore the following areas: cooperation concerning accreditation and quality assurance, recognition issues and the use of credits in the Bologna process, the

development of joint degrees, the social dimension, with specific attention to obstacles to mobility, and the enlargement of the Bologna process, lifelong learning and student involvement.

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