European Association for Architectural Education
Association Européenne pour l'Enseignement de l'Architecture

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EAAE News Sheet
Bulletin ┃ **2004** ┃ June / *June*

Contributions to EAAE News Sheet

Contributions to the News Sheet are always welcome, and should be sent
to the editor, who reserves the right to select material for publication.
Contributions might include conference reports, notice of future events,
job announcements and other relevant items of news or content. The text
should be available in French and English, unformatted, on either disk or
as an e-mail enclosure.

Contribution AEEA News Sheet

Les contributions au News Sheet sont toujours bienvenues.
Elles doivent etre envoyées á l'editeur, qui décidera de leur publication.
Contributions d'interet: rapports de conférences, évenements á venir,
postes mis au concours, et d'autres nouvelles en bref sur la formation
architecturale. Les critéres á suivre sont: Les textes doivent etre en
Francais et en Anglais, en forme d'un document de texte non formaté, qui
peut etre attaché á un e-mail ou etre envoé en forme d'une disquette.

News Sheet deadlines

No. **70** Oct. / Oct. 2004 – **01.06**
No. **71** Feb. / Fev. 2004 – **20.08**

Coverphoto

Designing the new cover of the EAAE News Sheet.
From left to right: Jacob Ingvartsen, Anne Elisabeth Toft and Jens V. Nielsen

Editorial

News Sheet Editor - Anne Elisabeth Toft

Dear Reader

The EAAE News Sheet has a new layout.

Graphic designer **Jens V. Nielsen** from Denmark is in the process of developing a new graphic identity for the EAAE. **Jens V. Nielsen** has in this connection already left his mark on a number of the EAAE's printed matters - and now he has also given the EAAE News Sheet a new design.

So far this design is, however, limited to the cover of the EAAE News Sheet, which means that the original layout of the magazine is to a large extent maintained.

Jens V. Nielsen has found inspiration for his design in the original layout of the magazine. This layout was originally designed by former EAAE President, **Professor Pierre von Meiss** (Switzerland).

The EAAE has in the spring of 2004 been involved in many different activities - workshops, competitions, conferences, etc.

According to the traditional practice we are reporting on these activities in this magazine. The size of the magazine reflects the many activities of the organisation, and as this issue of the EAAE News Sheet among other features includes as much as four keynote speeches, I have as an exception omitted to also include an interview.

Below I shall briefly mention the contents of the magazine:

A very important EAAE-arrangement took place in the beginning of June 2004 when the **EAAE** and the **ARCC** held the conference **Between Research and Practise**. The conference was held in Dublin, Ireland, and was the latest in a series of international research conferences sponsored jointly by the EAAE and the ARCC. Previous conferences were held in Raleigh, North Carolina, USA; Paris, France; and Montreal, Canada. The next conference in this series of international research conferences will take place in the USA in 2006.

On page 40 EAAE President **James Horan** (Ireland) is giving a brief reference of the conference which was hosted by Dublin School of Architecture. In the EAAE News Sheet # 70 you can read a longer and more thorough report on the conference.

Cher lecteur

Le Bulletin de l'AEEA fait peau veuve.

Jens V. Nielsen, designer graphique danois, a pour mission de concevoir la nouvelle identité graphique de notre bulletin. Jens V. Nielsen a d'ores et déjà marqué plusieurs des publications de l'AEEA de son empreinte - et c'est maintenant le Bulletin de l'AEEA qu'il imprègne de son originalité.

Jusqu'à nouvel ordre, le nouveau design ne concerne que la couverture du Bulletin de l'AEEA, tandis que vous retrouverez pour le reste la présentation qui vous est familière.

*Jens V. Nielsen s'est inspiré dans son travail de la présentation antérieure qui était signée par l'ancien Président de l'AEEA, le **Professeur Pierre von Meiss (Suisse)**.*

Au long de ce printemps 2004, l'AEEA a pris part à de nombreuses activités - ateliers, concours, conférences, etc.

Comme à l'accoutumée, nous vous en offrons un compte-rendu minutieux dans les pages du présent Bulletin. La diversité des articles reflète la myriade d'activités de notre organisation, et parce que le présent numéro compte entre autres quatre discours d'intervenants, j'ai volontairement omis d'ajouter aussi une interview.

Mais voyons sommairement quel est le contenu du présent Bulletin :

*La Conférence **Between Research and Practise** organisée par **l'AEEA** et **l'ARCC** a constitué un événement transcendant de ce mois de juin 2004. Cette Conférence, qui s'est déroulée à Dublin, en Irlande, est la dernière en date d'une série de conférences internationales tenues sur le thème de la recherche sous la houlette conjointe de l'AEEA et de l'ARCC. Les conférences précédentes se sont célébrées à Raleigh, en Caroline du Nord, aux USA, à Paris, en France ainsi qu'à Montréal, au Canada. La prochaine Conférence internationale qui complète cette série se tiendra aux USA en 2006.*

*Le Président de l'AEEA **James Horan** (Irlande), vous donne en page 40 un bref commentaire sur la conférence qui s'est déroulée au sein de l'Ecole d'Architecture de Dublin. Le prochain Bulletin # 70 de l' AEEA vous offrira plus de détails sous forme d'un rapport approfondi de cette conférence.*

The keynote speakers of the conference were: **Chris Luebkeman, Ciaran O'Connor** and **Brian Norton.**
On page 23 you can read **Professor Brian Norton's** keynote speech: **More than Skin Deep: Solar Energy from the Inside Out**.

Professor Brian Norton is president of Dublin Institute of Technology, Ireland. He has made major theoretical and experimental contributions to research in solar energy. His work is cited extensively internationally and he has received numerous awards.

On page 43 you can read EAAE Council Member **Maria Voyatzaki's** (Greece) report from the latest EAAE/ENHSA workshop on construction. The workshop was organised by Maria Voyatzaki, who is responsible for the **EAAE- ENHSA Thematic Sub-Network on Construction in Architectural Education.** The Network had its first workshop in Thessalonica, Greece, in 2002. Its second workshop took place in 2003 in France at Les Grands Ateliers at l'Isle d'Abeau, and its third and latest workshop took place in Athens, Greece, in May 2004.

The keynote speakers of the workshop included **Dimitris Papalexopoulos**, Athens School of Architecture, Greece; **Chris Williams**, Bath School of Architecture and Civil Engineering, UK; **Cyrille Simmonet**, Geneva Institute of Architecture, Switzerland; **Ed van Hinte**, the Hague, the Netherlands; and **Bjorn Sandaker**, Oslo School of Architecture, Norway.

On page 32 you can read **Cyrille Simmonet's** keynote speech: **Nouveaux matériaux, nouvelle conception: nouvelle incertitude?**, and on page 29 you can read **Dimitris Papalexopoulos**' keynote speech: **Teaching Construction for the Transformable.**

Cyrille Simmonet is a professor at the Geneva Institute of Architecture, Switzerland.

Dimitris Papalexopoulos is an assistant professor at the School of Architecture, National Technical University Athens, Greece.

The fourth keynote speech presented in this magazine is by **Jukka Jokilehto** (Finland).

*Les principaux conférenciers étaient **Chris Luebkeman, Ciaran O'Connor** et **Brian Norton**.*
 *L'intervention de **Brian Norton** vous est présentée en page 23 : **More than Skin Deep: Solar Energy from the Inside Out**.*

*Le **Professeur Brian Norton** est Président de l'Institut technologique de Dublin, Irlande. Celui-ci a apporté d'importantes contributions théoriques et expérimentales à la recherche dans le domaine de l'énergie solaire. Ses travaux, récompensés par de nombreux prix, connaissent un retentissement international.*

*Vous trouverez en page 43 le rapport de **Maria Voyatzaki** (Grèce), Membre du Conseil de l'AEEA, sur le dernier atelier de l'AEEA/l'ENHSA en matière de construction. Cet atelier était organisé par Maria Voyatzaki, qui est responsable du **réseau thématique de l'AEEA-ENHSA pour la construction dans l'enseignement de l'architecture.** Ce réseau a organisé son premier atelier à Thessalonique, en Grèce, en 2002. Le second s'est déroulé en 2003 en France lors des Grands Ateliers de l'Isle d'Abeau, et le troisième et dernier en date vient d'avoir lieu à Athènes, en Grèce, en mai 2004.*

*Parmi les principaux conférenciers de ce dernier atelier, citons **Dimitris Papalexopoulos,** de l'Ecole d'Architecture d'Athènes, Grèce; **Chris Williams**, de l'Ecole d'Architecture et d'Ingénierie civile de Bath, au Royaume-Uni; **Cyrille Simmonet**, de l'Institut d'Architecture de Genève, Suisse; **Ed van Hinte**, La Haye, aux Pays-Bas, et **Bjorn Sandaker**, de l'Ecole d'Architecture d'Oslo, en Norvège.*

*L'intervention de **Cyrille Simmonet** vous est présentée en page 32: **Nouveaux matériaux, nouvelle conception: nouvelle incertitude?**, et vous découvrirez en page 29 le discours de **Dimitris Papalexopoulos : Teaching Construction for the Transformable**.*

***Cyrille Simmonet** est professeur à l'Institut d'Architecture de Genève, en Suisse.*

***Dimitris Papalexopoulos** est Professeur assistant à l'Ecole d'Architecture, à l'Université nationale technique d'Athènes, en Grèce.*

*La quatrième intervention spéciale présentée dans ces pages est celle du Finlandais **Jukka Jokilehto**.*

Dr. Jukka Jokilehto has practised architecture and town planning in Finland. He worked at ICCROM from 1972-98 and was President of the ICOMOS International Training Committee from 1993 to 2002. On page 20 you can read Jukka Jokilehto's keynote speech.

Jukka Jokilehto's keynote speech was presented at the **Workshop on Education in Conservation** held in Leuven, Belgium, in 2002. The proceedings publication from this workshop has just been published and is advertised in this magazine on page 19. On the same page you can also read about the re-publication of the **EAAE GUIDE.**

On page 37 EAAE Project Leader **Emil Barbu Popescu** (Romania) talks about the **EAAE/AG2R Architectural Competition: The Architecture for the 3rd and 4th Age.**

The ceremony of announcing the awards took place on 18 May 2004 in Paris, France, at the exhibition hall of the Maison Internationale in the Cité Universitaire de Paris.

In September 2004 - on the occasion of the Days of Patrimony - the winning entries will be presented at an exhibition also to be held in Paris, France.

EAAE Project Leader **Stephane Hanrot** (France) and **Farid Ameziane** (France) reports on page 41 from the **European Conference on Research in Architecture and Urban Design**. This conference in Marseille, France, dealt with doctorates. The conference was supported by the EAAE and brought together more than 230 participants. 25 countries were represented.

EAAE Project Leader **Constantin Spiridonidis** (Greece) is on page 8 announcing the **7th Meeting of Heads of European Schools of Architecture**. The meeting will take place in Chania on the island of Crete, Greece, from 4 to 7 September 2004. According to the tradition, the **EAAE General Assembly** will take place in connection with this meeting, which is this year entitled: **S**haping Architectural Curricula for the European Higher Education Area.

The proceedings publication from the **6th Meeting of Heads of European Schools of Architecture** has just been published. You can read more about the publication entitled **Shaping the European Higher Architectural Education Area** on page 18.

*Le **Dr. Jukka Jokilehto** a pratiqué l'architecture et l'urbanisation en Finlande. Il a travaillé à l'ICCROM de 1972 à 1998 et il a assuré la Présidence du Comité international de formation de l'ICOMO entre 1993 et 2002. L'intervention de Jukka Jokilehto vous est présentée en page 20.*

*L'intervention de **Jukka Jokilehto** a eu lieu à l'atelier sur l'enseignement de la conservation **Education in Conservation**, tenu à Louvain, en Belgique, en 2002. Les débats de cet atelier viennent d'être publiés, comme nous vous l'annonçons en page 19. Nous vous signalons sur la même page la sortie du **GUIDE de l'AEEA.***

Emil Barbu Popescu** (Roumanie), Chef de projet de l'AEEA, nous raconte en page 37 le déroulement du **Concours d'Architecture AG2R de l'AEEA : L'architecture pour le 3e et le 4e âge.

La cérémonie de remise des prix s'est déroulée le 18 mai 2004 à Paris, en France, dans le hall d'exposition de la Maison Internationale de la Cité Universitaire de Paris.

En septembre 2004 - à l'occasion des Jours du Patrimoine - les projets récompensés feront l'objet d'une exposition qui sera organisée de même à Paris, en France.

***Stéphane Hanrot** (France) et **Farid Ameziane** (France), Chefs de projet de l'AEEA nous rapportent en page 41 leurs commentaires sur les **Journées européennes de la Recherche Architecturale et Urbaine**. Ce colloque célébré à Marseille, en France, s'intéressait à la place des études doctorales. Organisées sous la houlette de l'AEEA, ces Journées ont réuni plus de 230 participants. 25 nations étaient représentées.*

***Constantin Spiridonidis** (Grèce), Chef de projet de l'AEEA, nous annonce en page 8 la **7e Conférence des Directeurs des Ecoles d'architecture en Europe.** Cette Conférence se déroule à Chania, sur l'île de Crète, en Grèce, du 4 au 7 septembre 2004. La tradition veut que **l'Assemblée générale de l'AEEA** soit célébrée à l'occasion de cette réunion, dont le titre cette année est : **Shaping Architectural Curricula for the European Higher Education Area** .*

*Les débats de la **6e Conférence des Directeurs d'Ecoles d'architecture en Europe** viennent de paraître.*

*Voyez en page 18 pour plus de détails sur cette parution sous le titre **Shaping the European Higher Architectural Education Area**.*

In the text **Bologna bis** on page 35 **Professor Pierre von Meiss** (Switzerland) reflects on the directives of the Bologna Declaration and some of the consequences that he thinks they may have for the architectural educations in Europe.

The EAAE is on page 15 announcing a new conference - **The Rise of the Heterotopia**. The conference will take place in May 2005.

The conference will focus on the significance of public space and architecture for the so called 'everyday-life' in a post-civil society. Deadline for submission of abstracts is 1 October 2004.

On page 5 we are re-announcing the conference **The European City. Architectural Interventions and Urban Transformations**. The conference will be held at Delft University of Technology, the Netherlands, from 27 to 30 October 2004.

On page 13 you can read the latest news about the EAAE Prize 2003-2005 - **Writings in Architectural Education** which EAAE Project Leader **Ebbe Harder** (Denmark) is in charge of.

By submission deadline on 28 May 2004 the Organizing Committee had received 76 submissions from 23 countries.

Ebbe Harder states that a workshop will be held in Copenhagen, Denmark, at the end of November 2004. The prizes will be awarded at an EAAE Conference in the spring of 2005.

Yours sincerely

Anne Elisabeth Toft

*Dans son texte **Bologna bis** en page 35 le **Professeur Pierre von Meiss** (Suisse) nous fait part de ses réflexions sur les directives de la Déclaration de Bologne et quelques-unes des conséquences qu'elles pourraient avoir selon lui sur l'enseignement de l'architecture en Europe.*

*L'AEEA annonce en page xx une nouvelle Conférence - **The Rise of the Heterotopia**. Celle-ci est prévue pour mai 2005.*

L'accès y sera mis sur la signification de l'espace public et de l'architecture du soi-disant "quotidien" au sein de la société post-civile. Vous pouvez soumettre vos sujets jusqu'au 1er octobre 2004.

*La conférence **The European City. Architectural Interventions and Urban Transformations** est annoncée en page 5. L'Université technologique de Delft, aux Pays-Bas, accueillera cette Conférence du 27 au 30 octobre 2004.*

*Vous trouverez en page 13 tous les derniers détails sur **le prix 2003-2005 de l'AEEA - couronnant des écrits sur l'enseignement de l'architecture,** sous la responsabilité du Danois **Ebbe Harder**, Chef de projet de l'AEEA.*

A la clôture de la soumission des sujets le 28 mai 2004, le Comité d'organisation avait reçu pas moins de 74 résumés en provenance de 23 pays.

***Ebbe Harder** vous communique qu'un atelier est organisé à Copenhague, au Danemark, fin novembre 2004. La remise des prix aura lieu lors de la Conférence de l'AEEA au printemps 2005.*

Sincèrement

Anne Elisabeth Toft

The European City. Architectural Interventions and Urban Transformations

Faculty of Architecture, Delft University of Technology, The Netherlands & Henry van de Velde Institute, Antwerp, Belgium. 27 - 30 October 2004
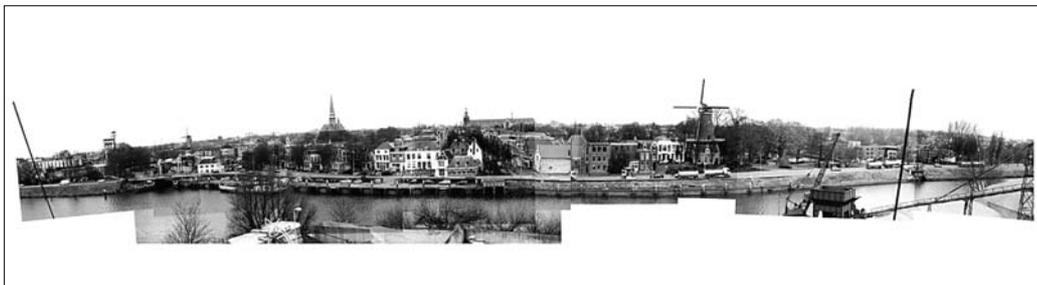
Key words:

Research by design, urban transformation, architectural interventions, typo-morphological studies, the European city, urban architecture.

Theme of the conference:

The history of Western architecture is intimately bound up with the development of the European city. From Antiquity to Gothic times, through the ages of the Renaissance, Baroque and Classicism, into the industrial era, the subsequent urban architectures determined the characteristic composite form of the European city.

This conference wants to investigate the role and impact of the architectural projects on the formal identity of the European city. In what way do architectural interventions contribute to and catalyze the process of transformation and renewal of existing urban areas, both now and in the past? Which are the programmes, typologies and architectural languages that anticipate these continues processes of urban transformation in Europe?

But also: can the architectural idea of a 'European city' still persist, in a time of ongoing globaliza-

tion, or has it by now become an anachronism? The conference committee invites professionals from both research and practice dealing with the built environment (architecture, urbanism, geography, history, archeology) to send in abstracts for papers on one of the following sub-themes:

A: Typo-morphological studies:

Plan-analytical studies of urban areas in European cities that investigate the coherence between the urban morphology and building typology, both now and in the past.

Sub-questions:

- Which are the typological and morphological elements that characterize the specific form of the European city?
- How do transformations in urban morphology effect changes in building typologies, and visa versa?

B: Research by Design

Design studies for urban areas in European cities that investigate the spatial potential for transformation and renewal by means of

concrete design proposals: architectural inter-ventions.

Sub-questions:

- Which building typologies, programmes and architectural languages can contribute to the renewal of urban areas?
- How to relate new architectural inter-ventions to the existing urban and built structures?

C: Theoretical studies

Investigations into the theories, methods and techniques of typo-morphological research and architectural design.

Sub-questions:

- Why and how should typo-morphology be a pre-requisite for architectural design?
- Which are the innovative ideas and tech-niques in the field of design methodol-ogy and design studies?

Call for papers

Abstracts with proposals for papers on one of the mentioned sub-themes should be send by 30 April 2004 to the conference committee. The committee will blind peer-review the abstracts, after which a notice of acceptance will be sent to the authors by June 2004. If accepted, the participant is requested to send a full paper of 4000 words or less before 30 September 2004, to be presented on the conference in October.

As there are a limited number of places available for this conference, the reviewing of abstracts will be strict. Their selection will be based on: rele-vance to the conference themes, significance of the topic, originality of the approach, scientific quality the research or design project, creativity of the proposals and solutions, balanced structure and clearness of style.

Abstract format

Abstracts should not exceed 400 words. The first page must contain the following data: title

abstract, name, position, affiliation, phone, fax, e-mail and correspondence address of the author(s). The second page contains the title, theme, keywords and the abstract itself, without indica-tion of the author. Abstracts should be send by e-mail both as attachment in MS-Word-format and within the body of the e-mail to: architectuur@bk.tudelft.nl. The text file should be named: 'abstract-your last name.DOC'.
  Please write in the subject box of the e-mail: 'conference abstract'.

Abstracts can be accompanied by 1 digital illustra-tion, maximum 1.5 MB, saved as 'jpeg' file with a resolution of 300 dpi. The illustration should be named 'illabstract-your last name.JPEG', and send as attachment by e-mail.
  Please write in the subject box of the e-mail: 'conference illabstract'.

Conference language

All abstracts and papers are expected to be written and presented in English.

Conference publications

All accepted abstracts will be published in a conference book, which will be available to all registered participants at the moment of registra-tion. A selection of full papers will be published in the conference proceedings, to be send to the participants after the conference.

Conference registration

Participants have to register in advance by sending in a registration form before September 2004. The registration fee is 250 euro; for EAAE members 200 euro. This fee includes participation to the conference, receptions, 3 lunches and 2 dinners, transfer by bus Delft-Antwerp v.v., a conference book and the proceedings. Please note that hotel accommodation and travel are not included in this fee.

Keynote speakers (invited):

The conference committee invited 3 architects and 2 theorists to reflect on the questions mentioned in the sub-themes, both from their experience in

practice as in their teaching and research at the university.

- **Zaha Hadid**
- **Renzo Piano**
- **Jo Coenen**
- **Françoise Choay**
- **Anne Vernez Moudon**

Although starting form different architectural perspectives, these architects/theorists share the idea that through architectural interventions we continuously shape and re-shape the city.

Scientific committee:

- Prof. Leen van Duin,
  Delft University of Technology
- Prof. S.Umberto Barbieri,
  Delft University of Technology
- Assoc. prof. Henk Engel,
  Delft University of Technology
- Prof. Richard Foqué,
  v/d Velde Institute, Antwerp
- Prof. dr. Piet Lombaerde,
  v/d Velde Institute, Antwerp
- Prof. James Horan,
  president of the EAAE,
  Dublin School of Architecture
- Prof. Vittorio Lampugnani,
  ETH-Zürich
- Prof. Antonio Monestiroli,
  Politecnico di Milano

Organizing committee:

- Assis. prof. Roberto Cavallo, Delft University of Technology
- Assis. prof. François Claessens, Delft University of Technology
- Assis. prof. Filip Geerts, Delft University of Technology
- Assis. prof. Esther Gramsbergen, Delft University of Technology
- Assis. prof. Koen van Kleempoel, v/d Velde Institute, Antwerp
- Assis. prof. Susanne Komossa, Delft University of Technology
- Assis. prof. Marc Schoonderbeek, Delft University of Technology
- Assis. prof. Willemijn Wilms Floet, Delft University of Technology
- Mrs. Annemieke Bal-Sanders, Delft University of Technology

Programme:

Wednesday, 27 October, Delft
    Evening: reception & registration

Thursday, 28 October, Delft
    Opening conference
    Key-note speaker(s)
    Morning paper sessions
    Lunch
    Afternoon paper sessions
    Key-note speaker
    Dinner buffet

Friday, 29 October, Delft
    Morning paper sessions
    Lunch
    Afternoon paper sessions
    Key-note speaker
    Reception

Saturday, 30 October, Antwerp
    Transfer to Antwerp by bus
    Key-note speaker
    Closing plenary discussion
    Lunch
    Excursion city of Antwerp
    Farewell dinner
    Transfer to Delft by bus

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Time table:

- Call for Papers: November 2003
- Deadline abstracts: 30 April 2004
- Reviewing abstracts: May 2004
- Notification on abstracts: June 2004
- Deadline conference registration: 30 September 2004
- Deadline full papers: 30 September 2004

The 7th Meeting of Heads of European Schools of Architecture
Chania, Greece, 4-7 September 2004

Shaping Architectural Curricula for the European Higher Education Area
EAAE Projectleader, Constantin Spiridonidis

Venetian Lighthouse, Chania

The Seventh Meeting of Heads of Schools of Architecture in Europe entitled "Shaping Architectural Curricula for the European Higher Education Area" will take place in Hania, Crete from 4 to 7 September 2004. For the past six years the EAAE has organized this meeting which gathers those responsible for the management of academic issues of schools of architecture (heads, deans, as well as programme and exchange coordinators). The scope of these meetings is to develop a positive framework for exchange of views and positions, criticism and proposals, in support of schools of architecture to integrate into the European Higher Education Area which is under construction.

Two years ago the Meeting of Heads was integrated into the framework of the ENHSA Thematic Network (European Network of Heads of Schools of Architecture) which is in turn developed within the framework of the Socrates Programme after a proposal originating from the EAAE. The scope of the Network is the generation of a broader milieu for the support of schools of architecture, which will survey the tendencies and dynamics of architectural education in Europe.

Having this survey as foundation, the Network attempts to articulate the convergence but also the divergence among schools in relation to the general principles, values and priorities in the education of the architect. In parallel, the Network is recording the strategies adopted by schools of architecture for the organisation of their curricula with the perspective of shaping the contemporary European profile of architectural education. The data collected and the conclusions drawn from this project are passed on to all European decision-making centres.

In order to elaborate the theme and the issues of the seventh meeting, the working groups defined by the meeting of 2002 for this purpose had a preparatory meeting in Antwerp on 21 February 2004. In these four groups there are 36 heads and/or their representatives as well as curriculum coordinators from 28 schools of architecture. The working groups, taking into account the debates from the previous meetings in Hania as these were recorded in the proceedings, the framework of the European policies and the consultations presented by the European Union through the Socrates Thematic Networks regarding the "Tuning" pilot project on the contents and structure of the curricula, defined as main theme of the meeting the new architectural curricula. This theme will be approached through the examination of the learning outcomes and the competences that the graduates of schools of architecture in Europe must possess.

As a first step, the working groups have already prepared a questionnaire on competences addressed to the teaching staff at the European schools of architecture which they will receive in mid-June. The collection of these data related to the competences (abilities, capacities, awareness, skills, knowledge, etc.) is of vital importance to drawing a concise picture of the state-of-the-art of the conception of contemporary academics about the learning outcome of the architectural education in Europe.

As in previous years, the Meeting is not a conference with paper presentations but primarily a milieu for exchange of views and for dialogue. In our increasingly changing world the importance of our meetings have become apparent as they aim to integrate, develop and preserve a lively and dynamic milieu for communication, exchange and collectivity, and to cultivate creatively with dialogue and collaboration, the future of architectural education in Europe. This is why the presence of all schools of architecture is extremely important.

This year our meeting will host two renowned personalities from the world of architectural education and architecture in general. The first keynote speech will be given by *Stanford Anderson* from M.I.T and the second by *Kas Ostehuis* from Delft University.

Those who want to participate in the meeting are kindly requested to send the attached registration form by fax as soon as possible and not later than 10 August 2004.
   In case some heads or programme coordinators cannot be with us in September, they can select another person related to the administration of academic issues to represent their school.

The 7th Meeting of Heads of European Schools of Architecture

Chania, Greece, 4-7 September 2004

Shaping Architectural Curricula for the European Higher Education Area

EAAE Projectleader, Constantin Spiridonidis

Preliminary Programme and Content of the Sessions

Session 1:
Learning Outcomes and Generic Competences for the New Architectural Curricula.

Sunday morning,
5 September 2004,

9:00-10:30 introductory panel,
11:00-13:30 workshop

What should be the contemporary profile of a graduate from a European school of architecture? Which competences should this person have? Which skills, abilities and capacities should his/her education ensure? How can we rank those competences and learning outcomes? Which are the most significant ones? Can we agree upon a ranking order of those competences? There are different ways to 'translate' those competences in terms of curriculum contents, structures and teaching practices. Can we map some of them in order to have a reference point to inspect them as to different curriculum profiles (ethical-philosophical, structural, operational, vocational, academic, artistic, technical, etc)? How can we construct the European curriculum of each school without looking for harmonisation of its degree programme to any sort of unified, prescriptive or definitive prefabricated curriculum? How can the discussion about competences and learning outcomes become a tool for the protection of the rich diversity of European architectural educations without restricting or damaging the independence of local and national academic authority?

Session 2:
Learning Outcomes and Competences Related to the Research in Architecture.

Sunday afternoon,
5 September 2004,

15:00-16:00 introductory panel,
16:30-18:30 workshop

Research is one of the main pillars of the European Higher Education Area. Research is not only developed into the framework of postgraduate studies but increasingly becomes, through different forms and practices, part of the undergraduate curricula.

Which are the desired learning outcomes and competences including skills, abilities, knowledge and content of the profile of the academic researcher in architecture? What is this academic profile? How can the above competences be 'translated' into contents of the undergraduate curriculum (topics to be covered) and into structure of this curriculum (modules and credits)? What are the strategies and objectives for such a translation? Which priorities, which ethics of the learning outcome? Which approaches to teaching and learning are appropriate to ensure those learning outcomes and competences (types of teaching methods, techniques and formats)? Which methods of assessment can we apply to evaluate the achievement of those competences (when required, which kind of teaching material must be produced)? Which educational units and activities must be created to achieve the defined learning outcomes?

EAAE General Assembly

Monday morning,
6 September 2003,

9:00 General Assembly

- The President's Report from September 2003 to September 2004
- The Treasurer's Report from September 2003 to September 2004
- New EAAE Council for September 2004 to September 2005
- The relationship between Educators and the Profession - a position paper by James Horan, President of the EAAE
- Discussions

Session 3/4:
Learning Outcomes and Competences Related to the Profession(s) that 'Emerge' from Architectural Studies.

Monday afternoon,
6 September 2003,

15:00-16:00 introductory panel,
16:30-18:30 workshop

Tuesday morning,
7 September 2003,

9:00-10:30 introductory panel,
11:00-13:00 workshop

The 7th Meeting of Heads of European Schools of Architecture

Chania, Greece, 4-7 September 2004

Shaping Architectural Curricula for the European Higher Education Area

EAAE Projectleader, Constantin Spiridonidis

Introduction to the Topics

1. What we have already done

The prospect of the creation of the European Area for Higher Education within the context of the Sorbonne-Bologna-Prague-Berlin process has constituted the central theme of all the past Hania Meetings of Heads of European Schools of Architecture. This prospect has triggered off our interest in getting to know better other schools of architecture and the persons involved in the decision-making for their future, and from this acquaintance to gain a deeper insight into our own schools and into our position in the European context of architectural education. What should we do about our schools in this new and increasingly changing social and financial context? What aims and objectives should we set and what strategies should we adopt to ensure their fulfilment? These are the fundamental questions for the answers of which our meetings pursue to create a constructive milieu.

For the creation of this milieu, our work went through various phases. In the debates that took place we critically followed the developments in the political context. We listened carefully to the positive as well as the negative considerations of the changes in the European context for architectural education. We managed to come to a unanimous agreement on the content of our own declaration: the Chania Statement. This crucial document set the framework for the principles of our debates, and at the same time it represented the views of one hundred schools of architecture, and conveyed them to all relevant national and European bodies. Moreover, from the debates we concluded that the nature of architectural education in the future is defined to a larger or lesser extent by the way in which these schools will deal with the four fundamental issues: firstly, the structure and content of architectural studies; secondly, the evaluation of the quality of school curricula; thirdly, the redefinition of the multifaceted professional profile of the architect of our days; and fourthly, the student and staff mobility, and the system of credits (ECTS).

For two consecutive meetings we focused our interest on these issues and we attempted to follow the various ways in which schools of architecture deal with them. We carefully mapped the points of convergence as well as divergence, the tendencies and dynamics, the particularities and differentiations. Through a thorough inquiry at schools of architecture, valid qualitative results yielded which could describe the nature and qualities characterizing a great number of schools of architecture in Europe. We continue to map the educational approaches and teaching methods in order to be able to draw a picture of the particularities of the European profile of education, but primarily to learn from the others and to understand ourselves through this knowledge. Our efforts are gathered in the two volumes of proceedings generated from the last two meetings as well as in all volumes produced concerning the pedagogy of specific subject areas such as the two volumes of construction teaching, and the forthcoming volumes relating to the teaching of architectural design, urban design and conservation.

2. What we will do

In times of such fundamental changes, the importance of our meetings became apparent as they aim to integrate, develop and preserve a lively and dynamic milieu for communication, exchange and collectivity, and to cultivate creatively, with dialogue and collaboration, the future of architectural education in Europe. For such a milieu to be kept alive, it must not limit itself to the level of exchange of views and information but should be in a position to proceed in more constructive and creative syntheses. This is exactly the point on which the 7th Meeting of Heads focuses this year. Its main objective is to schedule procedures for the development of tools and mechanisms which will more decisively support schools of architecture in their effort to be integrated in the European Higher Education Area.

More specifically, the 7th Meeting will focus on the curriculum and in particular on its structure and the content of studies as these two parameters encapsulate answers to the question of quality, professional identity, and the dynamics of mobility. Whilst the system of studies in most schools of architecture in Europe comes from governmental bodies, educational structures and the content of

studies are primarily issues dealt with by higher education academic institutions. The need for compatibility, comparability and competitiveness of higher education in Europe, as this is suggested in this new political context, requires reliable and objective information about educational structures and the content of studies, that is to say about the educational programmes we offer. We therefore urgently need new tools and approaches in order to be able to describe our curricula as well as to recompose them in the prospect of the reforms suggested by this new political context of the European Commission.

To better grasp the school curricula and to create the conditions for their comparability, the 7th Meeting will focus on the learning outcomes and competences to be ensured by school curricula. By learning outcomes we mean the set of competences including knowledge, understanding and skills that a learner is expected to know/understand/demonstrate after completion of a process of learning - short or long. They can be identified and related to integral programmes of study and for individual units of study (modules). Competences are normally obtained in different course units and can therefore not be linked to one unit. It is, however, very important to identify which units teach the various competences in order to ensure that these are actually assessed, and that quality standards are met.

Competences can be divided into two types: generic competences which in principle concern the broader academic education of an architect and are to a great extent subject-independent and subject-specific competences. The approach to subject-specific competences is proposed to run in two parallel and complementary axes: The first axis concerns the competences related to the graduate skills to practice the various forms of the architectural profession as these are achieved by schools of architecture today. The second axis concerns the graduate competences related to research in architecture. It goes without saying that competences and learning outcomes should correspond to the final qualifications of a learning programme. Competences are described as points of reference for curriculum design and evaluation, and not as straitjackets. They can allow flexibility and autonomy in the construction of curricula. At the same time, they provide a common language for describing what curricula are aiming at.

Learning outcomes and competences are the most relevant elements in the design, construction and assessment of qualifications ensured by schools of architecture, as they constitute the reference points to be met. It is of vital importance to discuss and agree on a rank order of learning outcomes and competences which will enable schools to structure their curricula. This way each school will be able to articulate their educational objectives as well as their reference points for quality assessment. In our effort, according to the principles adopted in the Hania Statement, we must not seek to develop any sort of unified, prescriptive, or definitive European curriculum, nor try to create any rigid set of subject specifications to restrict or direct educational content and/or to damage the rich diversity of European higher architectural education. Furthermore, we must not restrict the independence of academics and subject specialists or damage local and national autonomy. ∎

EAAE Prize 2003-2005 - Writings in Architectural Education

EAAE Project Leader, Ebbe Harder

How will the demands of the information society and "new knowledge" affect the demand for relevant or necessary "know how" in architectural education?

The EAAE Prize aims to stimulate original writings on the subject of architectural education in order to improve the quality of architectural teaching in Europe.

Organized biannually the competition will focus public attention on outstanding written work selected by an international jury.

The EAAE Prize was first awarded in 1991 and has been sponsored by VELUX since 2001.

The EAAE hereby invites all schools of architecture in Europe and the ARCC member institutions in the USA to participate in the EAAE Prize of 2003-2005.

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European Association for Architectural Education
Association Européenne pour l'Enseignement de l'Architecture

WRITINGS IN ARCHITECTURAL EDUCATION

How will the demands of the information society and "new knowledge" affect the demand for relevant or necessary "know how" in architectural education?

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Early October 2003 all schools will receive the competition material, and from October 15 the material and general conditions of the competition will also be available on the EAAE homepage: http://www.eaae.be

Deadline for contribution is April 5, 2004

ESSAIS SUR L'ENSEIGNEMENT DE L'ARCHITECTURE

Comment les exigences de la société de l'information et de "nouvelles connaissances" vont-elles affecter la demande d'un "savoir-faire" pertinent et nécessaire dans l'enseignement de l'architecture ?

Le Prix de l'AEEA sollicite des écrits originaux sur le thème de l'enseignement de l'architecture afin d'en améliorer la qualité en Europe. Évènement biennal, le concours attirera l'attention du public sur des travaux d'excellence, sélectionnés par un jury international. Le Prix de l'AEEA, décerné pour la première fois en 1991, est sponsorisé par VELUX depuis 2001.

L'AEEA invite toutes les écoles d'architecture d'Europe et les institutions américaines membres de l'ARCC à participer au Prix de l'AEEA 2003-2005.

Début octobre 2003, toutes les écoles recevront la documentation relative au concours, et à partir du 15 octobre, la documentation et les conditions générales du concours seront également disponibles sur le site de l'AEEA : www.eaae.be.

La date butoir pour l'inscription est le 5 avril 2004.

EAAE PRIZE *PRIX EAAE*
2003-2005
sponsored by *sponsorisé par*
VELUX

EAAE Prize 2003-2005 - Writings in Architectural Education

EAAE Project Leader, Ebbe Harder

How will the demands of the information society and "new knowledge" affect the demand for relevant or necessary "know how" in architectural education?

By submission deadline on **28 May 2004** the Organizing Committee had received 76 submissions from 23 countries; *Australia, Canada, Cyprus, Denmark, France, Germany, Italy, Latvia, Netherlands, Norway, Poland, Romania, Russia, Switzerland, Serbia/Montenegro, Spain, Thailand, Turkey, Ukraine, United Arab Emirates, United Kingdom, USA*, and finally *Zimbabwe*.

President of ARCC, Fatik Rifki, and President of EAAE/AEEA, James Horan, find the extensive interest in the Prize as well as the effort put into the 76 submissions more than satisfying.

The Jury:

- **Per Olaf Fjeld,** Chairman, Professor, Oslo School of Architecture. Own practice in Oslo. (Norway)
- **Peter MacKeith**, Associate Dean, School of Architecture, Washington University in St Louis (USA)
- **Juhani Pallasmaa**, Architect, Professor, University of Helsinki (Finland)
- **Dagmar Richter**, Architect, Professor, SCI-Arc, Los Angeles. Own practice in Los Angeles and Berlin, (Germany)
- **Alberto Pérez-Gómez**, Professor of Architectural History, McGill University, Montreal (Canada)

The Jury has now received the anonymous submissions and will before *24 September* evaluate the submissions and select 12-15 papers whose authors will be invited to present their material at the announced workshop in Copenhagen on **25-26 November 2004.**

All staff members from the invited schools of architecture are welcome to participate in the workshop with the purpose of discussing the submitted papers in relation to the overall theme of the Prize, as well as the process of change in which the architectural educations find themselves. The lectures given by the jury members will naturally be a central part of the workshop, but all

participants are welcome to offer points of views and give short speeches on this occasion.

Enclosed in this number of the EAAE News Sheet you will find a registration form for the November workshop.

After the workshop the authors of the chosen papers will be given the opportunity to revise and improve their papers, and the jury will then decide who will be the winners of the EAAE Prize 2003-2005 sponsored by VELUX.

The prizes will be awarded at an EAAE-conference in the spring of 2005.

EAAE Conference 2005

Kuleuven, Leuven, Belgium, 27-28 may 2005

The Rise of the Heterotopia and Its Implications for Architetural Education

On Public Space and the Architecture of the Everyday in a Post-Civil Society

This call for papers aims to provoke contributions focusing on the significance of public space today, in view of, on the one hand, recent discourses that lament the 'loss of public space' (Sorkin) and, on the other, contrasting opinions that advocate new forms of public space, located in private spaces for collective use (shopping malls or sports centers) or in alternative spaces such as wastelands or parking lots (Crawford). Whereas there are serious voices warning of the alarming developments in society at large, which seem to threaten the basic assumptions on which democracy and the welfare state are founded, others tend to take a more optimistic position in accepting the challenge to design for new programs in the realm of leisure, sports, shopping or transportation.

The concept of the heterotopia - a notion introduced by Michel Foucault in the late sixties, however very conspicuously underdeveloped in his own work - takes on a new urgency and relevance in light of contemporary developments and the ensuing debate on public space. The concept of heterotopia seems to offer the opportunity to both recapitulate and redirect the ongoing debate.

The rise of the network society: place and non-place

Michel Foucault introduced the tentative term heterotopia to point to various institutions and places that interrupt the apparent continuity and normality of ordinary everyday space. In contrast to utopia that inverses the normal existing society but does not exist as such, the heterotopia refers to a set of really existing inversions. Because they inject alterity into the sameness, the common place, the topicality of everyday society, Foucault calls these places hetero-topic - "des espaces autres". When we review all the examples mentioned in his lecture - the school, military service, the honeymoon, old people's homes, psychiatric institutions, prisons, cemeteries, the stage, the cinema, libraries and museums, fairs and carnivals, holiday camps, hammams, saunas, the motel, brothels, the Jesuit colonies, the ship - we get an idea of the vastness of the concept. Foucault's concept of heterotopia opens up a new field, a simultaneously archaic and modern way of organizing space. In the introduction to his

unpublished lecture, Foucault evoked a history of space and pointed clearly to the rise of network space. Today Foucault's analysis reaches its obvious conclusion. Within the network space the heterotopia has to a large extent changed its function. Rather than interrupting normality, heterotopias now realize or simulate common experience of place (common place, everyday topicality) in the non-place of the space of flows. In other words, a first layer of the heterotopia is the tension between topicality and a-topicality, place and non-place.

The reinvention of the everyday: the ordinary and the extra-ordinary

The reinvention of the discourse on the everyday, largely coinciding with the English translation of Lefebvre and de Certeau, is inspired by a discontent both with the elitism of contemporary neo-avant-garde architecture as well as with the shameless commercialization of popular culture. At the same time, the discourse on the everyday is an attempt to counter Foucault's emphasis on the extra-ordinary by mapping the vital potentialities of the ordinary(McLeod). The concept of heterotopia is positioned between the ordinary and the extraordinary. The question to be asked, however, is whether the discourse on the everyday does not remain an aesthetization of urbanity and whether any attempt towards an architecture of the everyday does not merely reinforce the ever more encompassing simulation of normality. Or, in other words, can the everyday survive today outside of the heterotopia.

The privatization of public space: oikos - agora

The polis, the ideal of the city/state, tries to realize the good life via an equilibrium between oikos (private sphere, household, hence economy) and agora (public sphere, the place of politics). 'Economization' is the erosion of the distinction between these constitutive terms of the polis, as is clear in the term 'privatization'. It is a sure sign of a crisis of 'politics'. The rise of the term 'governance' instead of government is a symptom of this crisis, and 'management' its apologetics. In this context the evident embrace of governance within urbanist discourse appears far less innocent.

In spite of its relation of alterity and deviance, the heterotopia is part and parcel of the polis and of the characteristic set of negotiations between the private and the public sphere, between nature and culture, zoé and bios, by which the polis is defined. Even the 'heterotopia of crisis' (e.g. the elderly home, the hospital) and the heterotopia of deviance (e.g. the prison) or any heterotopia one can imagine - the beach, the brothel, the cinema, the theater, the mall, the theme park- all of these heterotopias contain a moment of 'catharsis' with respect to the nomos of normality (such as the brothel is the natural counterpart to marriage, or the clinic the counterpart to our sporting life). Most heterotopias could be compared to rites de passages and in this function they reinforce the coherence of society. While often particularly exclusive, heterotopias belong to the inclusive character of the polis. In the post-civil society (Jameson), the heterotopia resurfaces as a strategy to reclaim places of otherness on the inside of an economized 'public' life.

The post-civil society: the camp as paradigm

After the proliferation of heterotopias that provided normality in the (atopic) network space, we now see a proliferation of camp-like situations. Traces of a growing awareness of these new realities are beginning to appear in contemporary theory, architecture and urbanism. The camp, however, we encounter before and after the polis. Before the polis: the encampment figures as the forerunner of the city and indeed of all human settlement as such. After the polis: the camp appears where the polis or civil society is suspended or dissolving, as we witness in the concentration camp, the refugee camp, the transit camp for asylum seekers or illegal immigrants. The camp is, according to Giorgio Agamben, a space outside the nomos, a space that is not like a prison an extension/institution of the law, but rather a space that is extra-territorial to the nomos, a space where the law is suspended. While the encampment emerges out of the nature state and moves towards the city, and therefore fulfills a proto-political role, the camp announces the relapse into the nature state and marks the disintegration of society in the state of exception.

The camp is, in other words, the situation in which the division between private and public is suspended. It is the space where the city is annihi-

lated and the citizen reduced to bare life. Today, we see such situations arise around us in the figure of the illegal immigrant, the people roaming around the closed centre of Sansgate and in the extralegal/post-human-right status of the inmates of Guantanamo. In the urban landscape we observe the rise of similar 'terrains vagues' and twilight zones, such as the camp sites were fourth-world people dwell in a 'permanently nomadic' situation. In that respect both camp and heterotopia are two phases and faces of the after life of the (welfare)state. Integral urbanism was an attempt to control the tools for welfare within the state under the aegis of the plan. In the network society, 'splintering urbanism' has to rely on the creation of heterotopias to sustain its integrating gesture. The camp, in contrast, is the symptom of a postcivil urbanism, which follows the disintegration of the (welfare)state and the economization of politics.

A call for cases

In this colloquium we hope to explore the question of public space, taking the concept of the heterotopia in order to articulate the utopic/dystopic dimension of public/private, topic/a-topi, ordinary/extraordinary contemporary spaces. The notion 'heterotopia' offers a device to reorder the different strata of the current debate and to cut across the deceivingly stable divisions that structure these strata.

We invite papers exploring various cases showing the heterotopic and camp-like logic manifest in the contemporary urban landscape. Besides such diagnostic case studies, we welcome more therapeutic approaches. Can architecture and urbanism take a critical stance vis-à-vis tendencies such as the increasing privatization of formerly public spaces, or vis-à-vis the marginalization or even exclusion of certain groups (refugees, immigrants)? How does the profession deal with phenomena like gated communities, transit zones, refugee camps and other effects of globalization? Can the tradition of an emancipating project that fueled so many discourses on architecture and urbanism in the past be sustained under the growing pressure of capitalist and neo-liberal forces? What is the place and status of gating and gated communities at the crossroads of heterotopia and camp, in the making and breaking of the polis? Is the new fortified architecture a heterotopia or a camp? In short:

what is the role of architecture and urbanism in a post-civil society, in a world where the welfare state and the state in general are dissolving?

We would especially welcome papers exploring some of the following (hetero)topoi:

- **The museum** - **the theme park**

  Are we heading for the 'all-in-heterotopia' where the museum is becoming a theme park, and the theme park a museum, the mall incapsulating both theme park and cultural center?
  Under the aegis of fashion, every space becomes exhibionist space (see Koolhaas' Prada). On the other hand, the museum has proved to be an almost magic lever to revitalize entire neighborhoods, even cities, with Bilbao as its ultimate icon.

- **Squares and terraces**

  The mediterranization of the city is by now a well known phenomenon. Although it is fashionable amongst academics/intellectuals to look down on this process, one cannot deny that the reclaiming of squares and the blooming proliferation of terraces has injected a new sense of conviviality into formerly derelict areas of the city. There seem to be two schools: those who favor a grand style and often grand gesture modern/post-modern design and others who choose for a nostalgia low brow renovation of squares and street corners.

- **Parks**

  Since Frederic Law Olmsted, parks have been used as decompression machines and space of convivial social control, exposing the urban masses to the socializing effect of civilized leisure and recovery in artificial nature. The claim that the days of the park are over (Geuze), seems to be defied by the park as the success formula of contemporary urban design.
  Furthermore, landscaping is the one happy branch of urbanism (deserving its own name 'landscape urbanism'). As Koolhaas states: "While architecture has to fight hard for every square meter, landscape stretches out over acres. Three dimensional megalomaniac stories that have become dubious in architecture are, as inscription on a patient and tolerant terrain, respectable and plausible."

- **The airport/the terminal**

  Not only are cities more and more resembling airports - without center, identity or history, airports also seem to have the ambition to become cities or at least malls. Is this tendency a desperate attempt at arresting the space of flows by overloading its nodes and terminals with the rituals of place or is it the natural evolution of an alienating eerie non-place, so much invested in the mass of people passing through, that it needs to become a place to stay. Yet another 'all-in-heterotopia' ?

- **The fortress**

  There is a deep rooted logic of gating and fortressing in our society, caused both by the sharp dualization of society as well as by a tendency to individualism and social distinction. Moreover, beyond the well known phenomenon of gated communities, we see the rise of the aesthetics of the fortress both in individual houses (metamorphosis) as well as in housing complexes. Gating as social defense is redressed with the attributes of disneyfication. In a society in which marketing -the selling of dreams and simulations- is all pervasive, it seems inevitable that dwelling will take on heterotopian overtones.

- **The camp**

  There is nothing to be found for architecture in the camp, besides a gruesome confrontation with its abject underside. Even if we are fully aware that there is no way to make the camp, properly speaking, the object of architecture and urbanism, one of the challenges of the twenty-first century might nevertheless be to think how architecture and urbanism can respond to the rise of camp and camp-like situations, detention centers, refugee camps, transit camps, etc. If we find the camp both before and after the polis, architecture should always try to go beyond the camp - but how?

Time table

- Colloquium's website + call for papers online: **31 July 2004**
- Submission of abstracts: **1 October 2004**
- Notification of acceptance: **15 November 2004**
- Submission of full papers: **1 March 2005**
- Colloquium: **27-28 May 2005**

For further information, please contact:

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Shaping the European Higher Architectural Education Area

Transaction on Architectural Education No 12

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The Sixth Meeting of Heads of Schools of Architecture in Europe entitled "Shaping the European Higher Architectural Education Area" took place in Hania, Crete from 3 to 6 September 2003. With this volume, we would like to present the lectures, the dialogues, and the debates of this framework.

For the past five years EAAE organises this Meeting which gathers those responsible for the management of academic issues of schools of architecture (heads, deans, as well as program coordinators). The scope of these Meetings is to develop a positive milieu for exchange of views and positions, criticism and proposals for the support to schools of architecture to integrate in the, under construction, European Higher Architectural Education Area.

From last year the Meeting of Heads has integrated in the framework of ENHSA Thematic Network (European Network of Heads of Schools of Architecture) which is a project developed in the framework of Socrates Program after a proposal originated by EAAE.

The scope of the Network is the generation of a broader milieu for the support of Schools of Architecture, which will survey the tendencies and dynamics of architectural education in Europe.

Having this survey as foundation, the Thematic Network attempts to articulate the convergence but also the divergence among schools in relation to the general principles, values and priorities in the education of the architect.

In parallel, the Network records the strategies adopted by schools of architecture for the organisation of the curricula with the perspective to shape the contemporary European profile of architectural education. The data collected and the conclusions drawn from this project will be passed onto all schools of Architecture as well as onto all European decision-making centres.

During the Fifth Meeting last year, the 115 participants, Heads or their representatives and curriculum coordinators agreed that the perspective of the generation of a European Higher Architectural

Education Area depends, to a great extent, on the compatibility of the general principles and values with which schools encounter the four main issues:

- The structure of school curricula in the undergraduate and post graduate level and their academic content.

- The relationship of the curricula structure with the types of professionals as these emerge from the diplomas awarded, as well as the relationship of schools with the respective professional bodies.

- The main principles for the assessment of school curricula both in terms of self-assessment as well as in terms of assessment by the broader academic society.

- The form(s) of mobility of students, teaching and research staff as well as the institutional framework and more specifically, the ECTS systems, for the development of this mobility(...).

(From: *Preface* by *Constantin Spiridonidis.)*

EAAE GUIDE
Schools of Architecture in Europe

New Edition!

The guide offers a comprehensive outline and presentation of schools of architecture in Europe.

You can find important factual information about the individual schools, their educational programmes and structure, etc.

156 p. 40 Euro

Le guide offre une ébauche compréhensive et une présentation des écoles d'architecture en Europe.

Vous y trouverez les informations importantes et factuelles de chaque école, de leur programmes éducatifs et leurs structures, etc.

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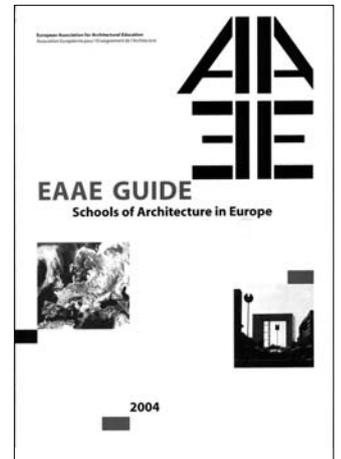
Editor:
Leen van Duin

Workshop on Education in Conservation in Europe
Transactions on Architectural Education No 21

The proceedings of the workshop on the European Education in Conservation held in Leuven at the Raymond Lemaire International Centre for Conservation (K.U. Leuven) have been published by the EAAE.

They contain the keynote speeches by Andrea Bruno and Jukka Jokilehto, all invited presentations, all discussions transcribed from tapes, as well as a summary by Andrea Urland of the discussions. All participants and members of the EAAE will receive a copy by mail.

Extra copies can be purchased from the Secretariat of the EAAE at 20 EUR for EAAE members and 25 EUR for non-members.
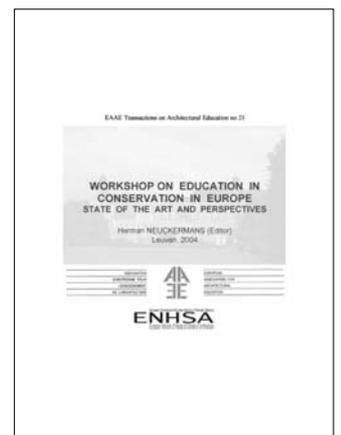
Editor:
Herman Neuckermans

Proceedings
20/25 Euro

Workshop on Education in Conservation in Europe

EAAE/ENHSA Workshop, Leuven, Belgium 7-8 June 2002

Keynote Speech

Dr. Jukka Jokilehto, ICCROM

The origin of concepts of and strategies for recent conservation and conservation training has to be situated in the 1950's and 1960's when, in the aftermath of the Second World War, Europe emphasised on the reconstruction of its built heritage. One had to face a situation of an enormous demand for housing, combined with severe financial and time constraints, which was never before experienced. These factors led to an attitude to building based solely on a rationalisation of the building process, in which attention to historic town centres, villages and nature could not be integrated.

In the 18th and 19th centuries and the start of the 20th century the main emphasis of conservationists was on the main buildings, the great and attractive national monuments. In the 1970's a shift takes place both towards an interest in environment and ecology, due to the noxious consequences of the industrial revolution and the post-war reconstruction architecture and towards a general interest into historic towns and settlements as a whole. In 1976 the UNESCO recommendation stresses the emphasis on historic towns and cities and on the conservation of natural reserves and landscapes in the context of environmental care.

The 1970's also mark the real beginning of training programmes in conservation and schools of conservation start to arise in Europe. Linked with the "European Architectural Heritage Year" (1975) and the UNESCO recommendations is for instance the founding of the Centre for the Conservation of Historical Towns and Buildings in Bruges in 1976, later transferred as the Raymond Lemaire International Centre for Conservation to Leuven.

Due to the energy crisis of the late 1970's and start of 1980's, the ideas of sustainable development start to emerge, still more stressing the importance of monument conservation and reuse of our heritage. The development of the ideas and concepts on heritage conservation that started in the 1970's, reached a state that can be characterised as a confident : "We know now how to do it, so let's do it".

The 1990's show a growing awareness of the vernacular heritage, the safeguarding of nature and landscapes and the relation between built heritage and landscape as cultural landscapes. Natural and cultural landscapes start to be listed as UNESCO World Heritage. Heritage and (cultural) landscape also obtain a connotation of cultural identity within a unifying Europe.

Today UNESCO believes that the issue of conservation of the built environment deserves enough public interest and takes it for granted. Recent focus of UNESCO is on intangible heritage as carried, for example, in languages, especially in Asia, Africa and also Europe (Lapland). Main points of interest of new projects in the field of conservation are clearly linked with the aspects of intangible heritage.

Looking at where conservation training has arrived at today, we still see an emphasis on the conservation and restoration of buildings, of monuments - taking into account the architectural and urban, even the natural, qualities - but not linked with the idea of cultural identity or intangible heritage issues. Only very recently has the cultural concern come to the fore. One main challenge for conservation training in the near future is to integrate concepts of cultural relations between tangible and intangible heritage and identity in a field which is on its own multinational, multidisciplinary and multilayered. Conservation as a field is global, but has a anti-global heart.

Another challenge is the integration of different related disciplines into the training programme. Conservation practice demands efficiency in the collaboration at different levels of architects, engineers, historians and craftsmen. Today they do not really work together. The question will be how to integrate different disciplines - each in itself highly specialised - into the process of conservation, and already in the training programmes on conservation.

The "Guidelines on Education and Training in the Conservation of Monuments, Ensembles and Sites", adopted by the General Assembly of the International Council of Monuments and Sites, ICOMOS, during the meeting in Colombo, Sri Lanka, in 1993, list a set of topics that should be concluded in conservation training and defines concepts for setting up training programmes.

In preparation of the meeting of the International Training Committee of the International Council of Monuments and Sites (ICOMOS - ITC), the Conference on Training in Architectural Conservation (COTAC) drew up the document "Multi-Disciplinary Collaboration in Conservation Projects in the UK, based on ICOMOS Guidelines for Education and Training in the Conservation of Monuments, Ensembles and Sites". This document was presented and adopted during the plenary meeting in Colombo, 1993. It identifies 16 professions contributing to the process of conservation in one way or another : administrators of property (owners), archaeologists, architects, art or architectural historians, builders/contractors, historic buildings officers, conservators, engineers, environmental engineers, landscape architects, master craft workers, materials scientist, building economists, quantity surveyors, town planners, curators.

From this preparatory work it is clear that a specific training and education in conservation is needed and that these conservation training programmes match qualitative requirements as regards content. The Network has to identify these requirements and new initiatives in the field. ICCROM has already done a lot of research and preparatory work in this field and has a lot of experience in organising and supervising training initiatives. ICCROM used to organise a series of international courses, which lasted from 3 to 5 months. However, following the needs in the different Member States, there has been a shift in emphasis on training organised directly in the different regions. On the other hand, ICCROM also continues to organise short training courses or seminars at its offices in Rome, which last from two to four weeks, and focus on specific problem areas each time. Such courses can also be organised for a group of professionals representing a particular Member States in order to debate on specific issues related to their heritage.

During the 90's we notice a tendency towards regionalisation of training programmes. Conservation schools in Europe, Asia, Africa, the Baltic States, and others stress in the composition of their programmes culture-related issues and attitudes. ICCROM also organises courses abroad in collaboration with local institutions besides the general and international courses at ICCROM in Rome. Both levels of conservation training programmes are important and should support and complete one another.

What is the role of the World Heritage Convention, of UNESCO, in the debate on training programs in architectural conservation? The World Heritage Committee (WHC), representing 175 countries, manages the WH list. The World Heritage List has today: 754 properties, out of which 582 are cultural, 149 are natural, and 23 are "mixed" (i.e. have been inscribed on the basis of cultural and natural criteria).

The World Heritage Committee approves the inscription of properties of outstanding universal value to the World Heritage List, and supports the States Parties in the conservation and management of these sites following the principles expressed in the Operational Guidelines for the Implementation of the World Heritage Convention. Due to various reasons, most cultural heritage sites so far inscribed on the List are in European countries. Most studies in the history of architecture have also tended to focus on the European context, while the other regions of the world have only been given marginal attention. For example, the well-known History of Architecture by Sir Banister Fletcher used to articulate the history of non-European architecture as: pre-colonial, colonial and post-colonial. It is therefore no surprise then that also studies in the conservation of the built heritage have so far been mainly European-based and extrapolated even to the World Heritage level.

Concepts today are widening far beyond the borders of European thought (see Banister Fletcher). One is aware that the concepts and strategies of heritage conservation cannot be imposed on every culture in the same way. The conservation of cultural heritage has to respect and take into account the diversity in cultural identity of the different countries. This means that the education in conservation has to develop the critical capacity of students towards the culture-related aspects of the conservation dogma. Europe can be a guide in the process but cannot impose its ways of thinking, its attitude.

Today, the concepts of heritage and relevant conservation issues have been broadened to cover the entire built environment. Much attention has also been given to the intangible aspects of heritage.

There are various consequences from this, which are associated with the ever increasing number of different disciplines and fields of interest involved. At the same time, the different value judgements and priorities in face of on-going change often provoke conflicts of interest. Here, conservationists are not always prepared to confront the market interests of the globalising world. On the other hand, having heard too much about conservation, the general public may be faced with an overkill. In the past, most conservation works were subsidised by governments. Now, focus is increasingly in the private sector, which also calls for new types of legal and administrative frameworks to meet the new challenges. This new focus has consequences also for the training of conservation professionals, considering that scholarships for conservation students are increasingly difficult to obtain, being blocked by political interests.   ■

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More than Skin Deep: Solar Energy from the Inside Out

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Abstract

Though the uses of solar energy have been long known to be beneficial, the optimal harnessing solar energy in buildings often requires a holistic team approach to design. The attributes of solar energy technologies, project conception and design process and contractual issues are discussed in relation to the diverse range of the potential applications of solar energy in, and contributions to, the achievement of sustainable and comfortable buildings.

Introduction

The energy efficiency of new buildings is critical to environmental sustainability. A buildings' performance is determined by its form, orientation, fabric and building services. As these may be difficult and expensive to modify subsequently, it is imperative that energy efficient design imperatives and technologies are adopted in new construction. The energy demand of the building sector in the European Union is reported to be nearly half of the total energy consumption and contributes 22% of the total CO_2 emissions which is higher than the industrial sector (Westergren, 1999).

Reducing energy consumption in buildings provides environmental benefits both locally, by reduced pollution and good air quality (Lo et al, 2001), and globally, by reducing the emission into the atmosphere of CO_2 and other greenhouse gases.

  Low energy consumption in buildings can be achieved by appropriate orientation of fenestration, high envelope thermal insulation, the provision of daylight and natural ventilation, the use of efficient heating systems, and low-energy consumption appliances. Energy efficient building fabric technologies either reduce or displace space heating, lighting and/or cooling utility energy or provide a substitute energy source.

Holistic Design

Solar energy systems are, on occasion, seen as merely technical additions to a building façade that contribute to, for example, service hot water requirements or provide electricity. However achieving the optimal contribution from the diverse multiplicity of roles that solar energy can play in buildings (Duffie and Beckman, 1991, Hastings, 1993, Norton, 1993, Hobday, 1999, Sick and Erge, 1996) requires a holistic approach (Peippo et al 1999) to harnessing all potential interactions of a building with the prevailing climate.

This imperative needs to ensue from the very inception of a design process. Such an approach should form part of the conceptualisation and analysis of the differing strategies and options to best satisfy the identified functional requirements of the building. In this way the inclusion of solar energy is both a natural consequence of the building design process and an optimal means of meeting specific requirements rather than being an optional addendum that process.

To be successful, this approach requires much more quantification of building behaviour in terms of diurnal and annual heating and cooling requirements. In addition to design successfully for less artificial lighting, requires the spatial distribution of daylight levels on both an annual and/or selected days' diurnal basis for alternative design solutions to be available during the course of the design process.

  Fortunately computer-based tools (Norton, 1995, Waide and Norton, 1995a, 1995b, Mardaljevic, 1995, Norton et al, 1996, Yohanis and Norton, 2003) are available with sufficient scope, versatility and user friendliness to render evidence-based design processes ever more readily available to even the smallest architectural practices.

The results of considerable research and practical design realisations, particularly in school buildings (Hobday and Norton, 1990), institutional buildings (Hastings, 1993) and houses (Yannas, 1994) are also now available in numerous design guides and textbooks. These deal with solar energy and urban planning (see, for example, Tabb, 1984), low energy design in particular climates (for the Irish climate see McNicholl and Lewis, 1996) or particular technologies (as an example, for building integrated photovoltaics, see Sick and Erge, 1996).

Figure 1. Retro-fitted photovoltaic installations on apartments at Sunderland Road, Belfast,

Figure 2. Cavehill School featuring photovoltaics and daylighting, Belfast.

Figure 3. Learning Resource Centre, University of Ulster, Jordanstown.
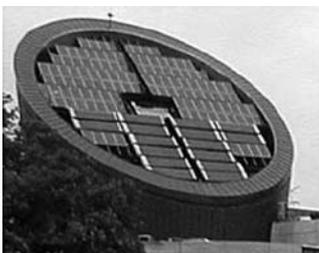
Figure 4. Roof-integrated photovoltaic and water heating evacuated tube solar collector installations at the ECOS Millennium Centre in Ballymena.

Specific initiatives to encourage the harnessing of solar energy in buildings include standardised methodologies for assessing whole life costs (see, for example, Griffiths et al, 1996), design tools for analysing the energy consequences of design decisions and guidance on interdisciplinary approaches to energy efficient design. Standardised methodologies for assessing the energy and environmental performance of buildings (for example in the UK, "BREEAM" (Baldwin et al, 1998)) are becoming established while the European Commission has initiated the development of Europe-wide standards and certification schemes (CEC, 2001).

Designs which make extensive use of solar energy are certainly not the result of straight jacketed creativity. The mix of design solutions and technologies adopted is as diverse as buildings themselves. As Figures 1 to 4 of examples in Northern Ireland illustrate, buildings that harness solar energy are certainly aesthetically diverse.

Some Attributes of Technologies

The form, orientation and massing of a building should provide optimum daylight, ventilation, heating and cooling as appropriate. Notwithstanding this, as part of an overall design strategy, the use of façade elements that manipulate daylight and air within the building may also be a relevant solution, particularly in the context of the refurbishment of existing buildings.

Systems such as lightpipes, daylighting window louvre systems (Eames and Norton, 1995) and thermosyphoning air panels (Hobday and Norton, 1989, Lo at al, 1994) are, in various forms, now available commercially. Building integrated photovoltaics have been developed that use concentrators to reduce the amount and therefore cost of the photovoltaics required to achieve a given output (Zacharopoulos et al, 2000).

Photovoltaic electrical output decreases as their temperature rises. This is an unfortunate attribute for a device that is intended to face the sun! Among the many novel approaches to keeping building integrated photovoltaics relatively cool is the use of phase change materials (Huang et al, 2004)

Envelope technologies can be either passive or active; passive technologies do not require parasitic energy to function whereas active technologies do. Passive technologies therefore can have much lower maintenance costs and are less likely to fail. However, active technologies can be more readily controlled automatically to maintain comfort conditions under varying weather.

Windows provide passive direct solar gain and daylight. The variation of the transmission of solar radiation with glazing plate position is well understood (Waide and Norton, 2003). Heat loss through the glazed element of a window is dependent on the glazing material, number of glazing layers, distance between the glazing, presence of low-emittance surface coatings and inclusion of inert gas fillings. Low-emittance coatings can be applied to inner glazing surfaces to reduce radiative heat loss by impeding longwave radiation exchange between internal glass pane surfaces (Button and Pye, 1994). Low-emittance coatings with an emittance below 0.2 (compared to 0.84 for uncoated glass), reduce longwave radiation exchange by up to 75%. Such longwave exchange accounts typically for 60% of total heat loss through the glazing (Button and Pye, 1994).

However sputtered 'soft' coatings that give the lowest emittance, e.g., 0.04 - 0.15, can significantly reduce solar transmission (Karlsson & Roos, 2001). Pyrolytic or 'hard' coatings can give an emittance of 0.2 have less of an effect on solar transmission (Karlsson & Roos, 2001). Inert gases, such as Argon, (used most frequently currently), Krypton or Xenon, may be used to fill air gaps between panes. Providing a vacuum between the panes can further reduce heat loss, (Griffiths et al, 1996, 1998, 2000).

Windows affect both the heat loss (i.e. fabric and infiltration losses) and heat gained (i.e. solar gains) in a dwelling. In housing, the direct gains from windows occupying 20% of exposed wall area is approximately 15% of the total heating load (Anon, 1988). The annual energy balance of any window unit can be predicted from the total amount of solar radiation received on the window, the solar heat gain coefficient of the glazing, the temperature difference between the building interior and ambient and the heat transfer properties of the glazing unit. The optimal window area for a house is related to the thermal insulation of both the opaque envelope elements and the windows. The optimal window area increases with decreasing window overall heat moss coefficients.

Simulation studies (Button and Pye, 1994) have shown though that only modest energy savings can be gained from increasing window area. For example, for a semi-detached house of 80 m2 floor area, increasing the south-facing glazing area from 18% to 30% resulted in only a 1% reduction in energy consumption. Increasing it further to 50% produced only a 4% saving.

Transparent insulation materials have U-values below 1.0 W/m2K and solar energy transmittance above 50% and can therefore be used as a daylighting, solar gain and insulation technology. Silica aerogel and capillary construction transparent insulation materials give the greatest transmittance and insulating properties, however silica aerogel achieves this with a much thinner construction, (Voss et al, 1996). Application of a quasi-homogenous silica aerogel to a typical external cavity wall with a U-value of 0.45 W/m2K reduces the walls U-value to 0.28 W/m2K.

Active technologies that employ a fan or pump include; (i) mechanical ventilation with heat recovery, (ii) roofspace solar energy collectors in which the south-facing side of conventional pitched roof is glazed to provide a passive source of pre-heated air actively distributed and supplemented by a warm-air heating system (Lo and Norton, 1996), (iii) conservatories & sunspaces (Yannas, 1994), (iv) solar walls (Voss, 2000), and (v) solar water heaters (Duffie & Beckman, 1991, De Herde & Nihoul, 1997, Smyth et al, 2001, 2003). For the latter, in many climates, long-term durability is dependant on effective methods of winter freeze-protection (Norton and Edmonds 1991)

Environmentally Sustainable Contractual Arrangements

Many factors affect energy use in buildings. For example, differences in occupant behaviour have been shown account for a two-fold difference in energy consumption (Everett et al, 1985, Lo et al, 1996). Construction contractual arrangements also influence energy use. While the client has an incentive to minimise whole life costs, contractors and consultants often do not as they have no long-term interest in the building. The primary incentives on contractors are to deliver to time and budget. Though public sector guidance on construction procurement in many countries has emphasised increasingly whole life costs (see, for

example, U.K. Treasury, 2000), project financing arrangements and imperatives to maximise floor area within a given budget serve to counter life-cycle cost considerations. The consequences can be seen in post-occupancy surveys of ostensibly 'green' office buildings in the U.K. that have found a prevalence of controls with poor user interface functionality, excessively complicated heating systems that occupants found difficult to use and, ironically, widespread energy inefficiency (Bordass and Bunn, 1999).

Clearer communications between contractors and clients, more robust and simpler design solutions, more usable controls, better support to occupiers after handover and better feedback to design teams are obviously required. The holistic process to harness solar energy thus must go beyond the design process and into the contractual and customer service arrangements associated with a building's construction and use.

Though forms of contract vary depending on the procurement route, increasing technical complexity has led to main contractors preferring to use subcontractors rather than bear the risks of employing staff directly (Gann, 2000). Risk often also arises from insufficient time for contractors and suppliers to prepare bids to meet the deadlines for competitive tenders. Subcontractors in turn accommodate risk by adopting over-specified conservative solutions. Heating systems, for example, are oversized ostensibly to accommodate variations in occupancy and activity over the building's life.

However engineering fees being a percentage of the capital cost of the building services provides a direct incentive to specify larger and thus more expensive equipment (Lovins, 1992). For the building services design team this tendency is countered by (i) the client's project budget limit and (ii) the often low-margin tender bid submitted to secure the installation contract (Winch, 2000). The net effect however is inefficient part-load operation of oversized boilers and chillers. In the U.K. this is at least 15% of UK heating and air-conditioning energy consumption (Brittain, 1997a, b). .

The direct penalty for installing oversized equipment is borne by the building's occupants as higher operating costs, with the ultimate penalty being unnecessary environmental emissions.

The Key is Teamwork

Designing novel or innovative building solutions has often been anticipated wrongly to take longer than specifying equipment that provides for or overcome missed energy-harnessing building design opportunities. When a longer design time is anticipated then the additional staff cost will be seen reduce the profit margin associated with the percentage of cost fees (Lovins, 1992). In this instance, there is a contractual incentive that ultimately leads to less efficient use of energy over the buildings life A ubiquitous consequence of lack of integration in the design process is building services engineers presented frequently with building designs - including orientation, form, layout and electrical loads - that are so close to being finalised that they are difficult to change (Lovins, 1992).

This has been avoided successfully by design teams who have viewed the building, with all its other specific functional requirements, as ab initio as energy harnessing system. To make the most of the abundant solar energy incident on a building requires integrated symbiotic design teams that combine the skills and expertise of a wide range of different specialists, (Wilson et al, 1998; Austin & Steele, 1999, Waterfield et al, 1996).

To avoid sub-optimal thinking, this team should have responsibility for and be remunerated on the basis of the building as a whole rather than particular overview, aspect or facet. The self-confident sharing of insight, knowledge and experience together with the objective testing of possible design options using simulation tools will lead to excellent environmentally sustainable buildings.

Conclusion

Successful utilisation of solar energy starts from the systematic analysis of the functional requirements of heating, cooling and lighting a particular building - "from the inside out". However, as has been shown, it extends from the composition and operation of the design team to the contractual arrangements for the construction and use of the building. Harnessing solar energy is thus truly "more than skin deep"

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EAAE-ENHSA Workshop

Teaching Construction for the Transformable

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Vision for the Future of Construction Education
Teaching Construction in a Changing World

Session 1.

The teaching of Construction and Contemporary Architecture

1. The transformable

Contemporary architecture deals in her leading trends with transformable environments and buildings. Architecture has to respond to a continuous change of the structure and nature of activities sheltered. Designing the time is one of its main preoccupations.

Building elements absorb data furnished by the interior / exterior environment and the user and respond modifying the buildings behavior. Buildings are data-carriers and data processors, and permit to their user to interact with them. Environments change through interaction with their users.

Yet locality design and definition remains architecture's principal objective. But locality is redefined through its participation to bundles of networks affecting its identity structure, prompting it to evolve through time.

Interactivity integrating IT catalyses the old notion of **flexibility**, leading to the **transformable**, its techniques and aesthetics. The flexible was segmented, the transformable is continuous, parametric and fluid. The joint was the hero of the flexible, sensors and actuators guide the transformable. What was called envelop is now called skin. Lightness is replaced by parametric transparency. What was clearly seen as a combinatoire, is now hidden in nanotechnology devices. Composite materials are evolving to smart materials. Kas Oosterhuis sees architecture as an activity "giving shape to the flow of data", as an act of sculpting the immaterial (Birkhauser 2004), instead of being the theater of visible technology.

2. Tools, technologies and education / research directions for the transformable.

IT *for* the Building:
Interactive membranes replace facades. A covering high interaction surface able to exchange informa-

tion with the inside and the outside of the building is applied. Reference could be made to Toyo Ito and the "Bluring Architecture" concept, or to "Polysurfaces", topological surfaces with variations and deformations depending on exterior or interior situations.

Construction education needs to integrate the use of surface modeling software. Mapping could refer to the surface alteration and the smart materials and morphing to the surface deformation and changeability. Also Blobs or Metaballs and Space Wraps refer to the interrelation of building elements and the changeability of the whole as depending of the transformation of partial elements, as Francesco da Luca and Marco Nardini pointed out in Behind the Scenes (Birkhauser 2002).

Those design technologies tend to a rethinking of our form strategies in order to integrate intelligent systems modifying themselves in accordance to the user's needs.

The CAD/CAM integration opens a new era for the architecture / industry collaboration. It could be considered as the end point of a movement leading from the prefabrication to open industrialization and from that to mass customization.

Construction education needs to integrate the teaching of file to factory techniques as:

- Production by subtraction.

- Production by addition.

- Reverse engineering, as a reintroduction of the model into design.

The transformable does not limit its presence to the "architectural object" per se. Space is evolving through design and even through the production/construction phase. Information management technologies give the opportunity to a multiplicity of actors concerned to participate to the design process, to work in team even if in the conventional design/construction processes belonged to different phases. Collaborative design is the key word and collective intelligence is at work.

Through CAD/CAM techniques design and production are synchronous and they mutually affect each other.

fig. 1

fig. 2

fig. 3

fig. 4
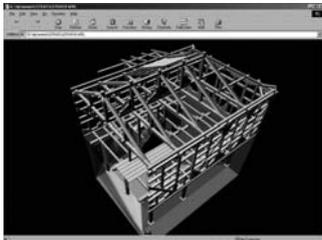
Collaborative design, based on information flow management, is organized around **the project's database.** Transformable buildings and environments keep track of their past, present and virtually future existence by organizing data in a form of a **building's memory** data base. Project's data base and building's memory data base are linked in the same flow.

Construction education needs to integrate the teaching of dbases creation and use. In that sense **Building Description** and **Metadata Definition** are essential components of the course's design.
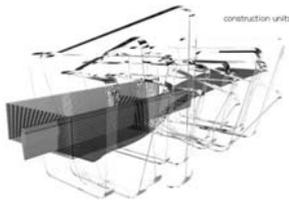
IT *in* the Building

Sensors and actuators refer to the **designing of the interaction** with the building. Information is thus considered as "building material".

Sensors based on **MEMS** (Micro Electro Mechanical Systems) technology, react to context stimuli by producing information and connected then to a processing information system could activate actuators for a response.

"Sensing" opens at least four areas of investigation:

- Sensing could refer to the **whole building** as Oosterhuis proposes with Transports, or **part of the building** as the 'Dynamic Skin" (Zerefos, thesis, 2004).

- Sensing could be **voluntary**, operated by the user at will (to open or close the windows according to inner temperature), or **involuntary** integrated in automatic building processes (regulating air-conditioning).

- Sensing could simply **add** information to the perceived reality by the user (informing about the need to regulate the temperature), or **create** an immersive environment in an augmented reality context (interior of Saltwater Pavillon or Archeoguide in Ancient Olympia projecting virtual temples restoration on the physical context).

- Sensing is also about **locating people** in smart environments that respond to their preprogrammed needs.
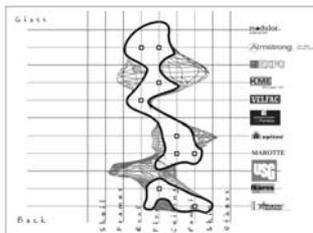
Through **Nanotechnology**, Smart Materials will propose in the next 10 years an interactive architecture defined as a "service" rather than a stable physical object. Smart materials techniques , as defined by Antonino Saggio will affect "glass and some new marbles, even the physical characteristics of walls may interactively change in texture, porosity, the capacity to absorb sound or colour" (Antonino Saggio, "New Subjectivity: architecture between Communication and Information")

The virtualisation of composite materials towards smart materials was demonstrated in Yannis Orfanos dissertation (School of Architecture, NTUA, 2003, www.mtua.gr/archtech)

The integration of the problematics mentioned above has been partially tested in a graduate course of the 9th semester of the NTUA School of Architecture("Information Management and Architecture", http://www.ntua.gr/archtech/inman01/index.htm). In this course, the end product of a research on building databases, Building Memory, was applied (fig. 1), in relation with the postgraduate course of the School of Architecture N.T.U.A. ("Architecture and Information Technology, from total to global design", www.ntua.gr/archtech). In a parallel session, in the same 9th semester course, a group of students explored the virtual space as a structuring tool of the information for modern building materials and industry products (fig. 2,3 and 4)

3. Conclusions for the Construction Education and Research

1. Architectural education in general and construction education in particular have to promote the Design / Construction continuum as it is catalyzed by I.T.

2. In the "transformable" perspective, construction design has to preview the building's evolution, and assume that there are always "design moments" during the building's life.

3. In that sense five themes need particular attention and could be supported for integration to the existing construction courses:

- Collaborative design, distributed in space and time, organized around a 3d model

of the building and the continuously evolving project/building database.

- Collective intelligence in construction, where dbases from different projects are linked.

- A "from file to factory" approach that integrates the mass customization concept into construction education.

- A programmable/swarm building approach, integrating Disappearing Computer concepts, seeking the building as an artifact having a physical existence plus a sensors/actuators device.

- Smart materials, supporting interactivity.

Needless to argue for the necessity to integrate the transformable perspective into existing courses and not to establish it in isolated education - research islands. Also one cannot speak for collaborative design without believing that tele-education networks must be established. Platforms, tools and Learning Objects for e-learning must also be developed in close collaboration between Schools of Architecture, seeking not only the higher education courses but also the education through lifetime. The transformable perspective could be helpful in that direction.   ∎

EAAE-ENHSA Workshop

School of Architecture, National Technical University of Athens, Greece, 27-29 may 2005

Nouveaux matériaux, nouvelle conception: nouvelle incertitude ?

Professor Cyrille Simmonet, Geneva Institute of Architecture, Switzerland

Lorsque nous voyons un chantier, lorsque nous y pénétrons, nous ne voyons guère autre chose semble-t-il que ce que nous avons toujours vu. La grue, la bétonnière, des stocks de ciment et de ferraillage, des banches pour la mise en œuvre du béton, diverses éléments normalisés ou préfabriqués : châssis, fragments d'objets, panneaux décoratifs, éléments de façade…

Où sont les « nouveaux » matériaux ? Disons que s'ils existent, ils sont encore d'un emploi confidentiel. On ne les voit guère dans les chantiers « statistiques », dans les chantiers traditionnels. C'est tout du moins le constat de l'homme de la rue, celui que nous sommes au fond.

Nous savons cependant que les producteurs de matériaux, les « grands » du secteur, comme Arcelor (acier), Lafarge (ciments), St Gobain ou Pilkinson (verre) développent de la recherche pointue relativement à leur matériau et leur usage. En 1997, le Centre Georges Pompidou présentait une exposition importante consacrée à « L'Art de l'Ingénieur ». On y voyait notamment des verres extraordinaires, du type « phototonique », variant de teinte de façon instantanée, passant de la transparence absolue à l'obscurcissement total sur la simple pression d'un bouton. Nous connaissons également les recherches développées sur les ciments de nouvelle génération comme le Ductal de chez Lafarge, armé de micro-fibres et utilisé pour les bétons dits de « haute résistance », capable de rivaliser avec les profilés métalliques.

Le bois également subit des manipulations impressionnantes. A force d'être broyé, mélangé, résiné, bouilli, trempé dans des mélanges chimiquement parfois suspects, il en vient à ne plus raconter autre chose que l'image de la matière, plus que le matériau lui même. Regardons les pâles photocopies plastifiées d'essence improbable que l'on nous vend aujourd'hui en guise de plancher ou de parquet pour nos maisons… Mais le bois a bonne presse, il connote avantageusement toutes sortes d'images rassurantes, il nous parle d'environnement, de développement durable, de qualité de vie.

Il faut faire la part des choses. Il faut reconnaître le dynamisme des entreprises de fabrication (et non de construction) pour développer des produits et les adapter. Mais il faut reconnaître que le secteur de la construction, malgré des réalisations parfois impressionnantes ou extravagantes, représente un secteur de

production relativement archaïque en terme de technologie. « Archaïque », cela signifie qu'il s'agit d'un secteur manufacturier et non industrialisé, peu mécanisé, exploitant une très grande quantité de main d'œuvre, peu qualifiée, peu organisée (au niveau syndical notamment) – tout du moins dans le gros œuvre, qui représente à peu près 60% du capital investi dans la construction (en France). Cela signifie que le produit du travail n'est pas « objectivé » par le rouage ou l'automatisme de la machine, mais qu'il reste « subjectivé » par la manipulation de l'outil, toujours assez simple au fond : la truelle, la pince, le marteau. Outils qui prolongent directement une activité manuelle au contact direct du matériau travaillé.

Les tentatives d'industrialisation du bâtiment ont en général échoué. Pour des raisons à la fois économiques et urbanistiques, liées à une certaine exigence de qualité de vie. On connaît les ravages opérés par la fameuse logique du « chemin de grue ».

Parler de « nouveaux » matériaux implique nécessairement que l'on parle également de leur mise en œuvre. C'est là que nous percevons une sorte de divorce, une sorte de contradiction. On utilise des résines, des colles, des plastiques, des adjuvants très performants, c'est à dire rigoureusement conçus et fabriqués pour optimiser l'usage précis auxquels ils sont destinés.

Nous pensons par exemple aux colles utilisés à la place du mortier pour monter la maçonnerie de brique en Hollande. Mais cette conception et cette fabrication, bien que participant au processus global de la production du bâtiment, d'architecture, ne touchent pratiquement pas l'organisation ou le développement spécifique de la construction, au sens où on l'entend traditionnellement : l'entreprise de construction (voir par exemple sur l'exemple cité en Hollande la résistance des entreprise à utiliser ledit procédé).

Ce divorce mérite d'être analysé. Il s'agit à la fois de technologie et d'économie. Il faut être lucide sur cette distinction entre « secteurs » de la production. Car faire l'apologie optimiste et libératoire des « nouveaux » matériaux est peut-être une chose généreuse, dynamique, sympathique en soi ; mais il faut bien considérer de façon réaliste les modalités par lesquelles se réalisent effectivement, in situ, les objets construits de notre société moderne.

Nous voudrions à présent dire quelques mots sur cette évolution notoire, apparemment, de la conception architecturale, notamment à l'aide de ces « nouveaux », encore, outils de projection et de communication : ordinateurs, dessin numérique, ce que l'on appelle déjà la « digital architecture ».

Déjà, le musée, l'édition, tous les grands appareils de promotion se sont emparés de cette production un peu baroquisante, de ces projets aux formes indéterminées, « non standard », provenant d'une génération d'architectes à la fois fascinés par la technologie numérique et habiles dans la manipulation de ces outils numériques censés libérer la conception de la géométrie euclidienne traditionnelle. Précisément, insistons sur cette question de géométrie. Il s'agit là, depuis quelques siècles peut-être, de l'outillage mental le plus approprié pour faire du projet d'architecture, quelles que soient la sensibilité ou la doctrine qui le portent. Géométrie au sens le plus banal du terme, à savoir un mode de représentation, appelé chez nous - architectes, constructeurs - « projection » (projet, projection…), permettant de représenter avec assez de rigueur les éléments du projet (plans, coupes, élévations, détails…) que l'on destine ensuite à l'entreprise ou à l'artisan qui va le construire. Le dessin appelé d'exécution a d'ailleurs un statut très clair : représenter en deux dimensions les composantes de l'édifice selon un langage approprié, afin qu'il puisse être déchiffré et interprété par ceux qui bâtissent.

Aussi, dans les nouvelles tendances auxquelles nous faisons allusion, il est intéressant de voir comment les projets qui en sont issus parviennent à cette étape de la réalisation. Ainsi, un des représentant de cette nouvelle façon de faire, Bernard Cache, fondateur du groupe « Objectile », a développé une procédure ambitieuse visant , pour le dire vite, à court-circuiter le système traditionnel de la séquence projet-réalisation, en faisant travailler ensemble les deux extrémités de la chaîne à partir d'un principe de programmation, lequel est censé guider simultanément la conception formelle et l'outil qui réalise. Cet outil est une sorte de tête fraiseuse actionnable sur plusieurs plans simultanés, commandée numériquement depuis un logiciel couplé avec celui qui guide la conception.

L´équivalent de l'ouvrier est donc une machine-outil. S'il était suffisamment éprouvé et généralisé, ce système réaliserait effectivement ce rêve vieux d'un

siècle : celui d'industrialiser la production du bâtiment. En effet, selon cette méthode (Objectile), la machine (la machine-outil) viendrait s'interposer entre l'étude (la conception du produit1), occupant dés lors une place prépondérante appelant à son service une nouvelle nature d'ouvrier du bâtiment qui, comme dans la production automobile par exemple, n'aurait qu'à servi la machine, à la contrôler, à l'entretenir et l'alimenter. A certains égards, le projet Objectile, encore utopique, fait penser à celui qui animait Jean Proului aussi avaitvé il y a cinquante ans. Lui aussi voulait industrialiser la production du bâtiment. Lui aussi avait acheté et dapté des machines (la plieuse…) pour favoriser le contact direct entre le facteur conception et le facteur exécution. Il disait que le « vrai » dessin de conception devait se faire à l'échelle 1/1, tracé directement sur le matériau à travailler (en l'occurrence la tôle), informant sans autre médiation la machine capable de le matérialiser.

Faire coïncider la procédure de conception avec celle de la fabrication, telle est pour simplifier l'ambition des protagonistes que nous avons évoqués. Schématiquement, il s'agit d'un authentique projet industriel, au sens de la théorie économique : « objectiver » le facteur de la réalisation, détacher le travail ouvrier du subjectivisme du geste, trop dépendant de son habileté ou de sa maîtrise propre, au profit d'un processus commandé par le rythme et la précision mécanique.

Revenons à la question des nouveaux matériaux, avec cet éclairage concernant la question de la production. Production assimilant notamment le secteur du bâtiment à la manufacture, et non à l'industrie. La question que nous voudrions poser est : qu'est-ce que l'arrivée de nouveaux matériaux et de nouvelles méthodes de conception peuvent apporter, si le processus de production reste le même, à savoir ce relatif archaïsme manufacturier. Question corollaire : ces nouvelles tendances vont-elles modifier quelque chose au niveau des modes de ait production ?

On a cette impression en trompe-l'œil qui nous fait assimiler les deux mouvement, relativement indépendants pensons-nous, de l'arrivée de nouveaux matériaux et de modalités de représentation et de conception également nouvelles, via l'outil informatique numérique. Bref, tout se passe comme si les deux dynamiques allaient de pair et devaient favori-

ser à moyen terme une révolution dans notre milieu, ou plus exactement dans notre secteur de production.

En conclusion, nous voudrions souligner un paradoxe assez surprenant. Actuellement, les expériences ou les applications constructives issues de la conception numérique (la digital architecture) procèdent de méthodes de travail et de chantier les plus tradition-nelles. Cette activité, toujours artisanale, est d'ailleurs fréquemment gênée par des géométries ou des générateurs formels inadaptés au traçage et au « formage » grandeur. Pensons aux difficultés rencontrées par les artisans du Café Georges, le nouveau restaurant du Centre Georges Pompidou à Paris, exemple spectaculaire de « blob » dont les surfaces complexes sont plus facilement calculées et maillés par les ordinateurs que réaliseés au moyen d'appareil à souder, de limes et de ponceuses.

Que ce soit pour les plis complexes de Greg Lynn ou pour les structures porteuses des bâtiments de Frank Gehry, la technique de fabrication demeure à peu près la même : les matériaux ne sont nullement « usinés », ils sont élaborés et ajustés sur le chantier par les moyens les plus conventionnels. Comme des sculptures à grande échelle, les édifices d'apparence « numérique » se construisent à l'ancienne, avec un outillage peu sophistiqué, des moyens de levage, des échafaudages, des occupations de postes de travail conforme à tout chantier manufacturier.

Alors que paradoxalement, des chantiers apparem-ment traditionnels comme ceux, précisément, des maisons « traditionnelles » en France réglés et orga-nisés en réalité par des groupes importants du type Bouygues, Phénix, Fougerolles…), exploitent parfois des systèmes performants de préfabrication à la carte de composants comme les fenêtres, les panneaux isolants préfabriqués, des volumes de toiture en « fermette » élaborés quasi instantanément en atelier, distribués en « flux tendu », livrés en kit selon les vœux du client qui choisit son domicile « à la carte ».

Il ne s'agit pas d´être pessimiste ou nostalgique. Notre opinion repose sur une exigence d'analyse que la pédagogie de la construction dans les écoles d'ar-chitecture devrait à notre sens prendre mieux en compte.

Les logiciels pénètrent les studios de projet plus aisé-ment que les matériaux nouveaux, confinés souvent dans les laboratoires de génie civil. Nous devons être

lucide cependant sur ce chapitre ignoré des étudiants d'architecture : la production en chantier. Le concept technologique et le concept économique s'y recoupent étroitement, mettant en lumière la sujétion radicale du projet d'architecture. ∎

Bologna bis / *Bologna bis*

Pierre von Meiss, Prof. Hon. ENAC, EPFL

European educational policy was rather unexpectedly creative in Bologna in 1999. Dividing academic courses in two opened a whole new perspective for students to readjust their career in accordance with their ambitions and capabilities after 3 years of study. It also introduced the basis for real competition among universities for acceptance to a Master's programme.

Even though it might appear like a postscript, I now realise the surfacing of undue conservatism and discrepancies in the interpretation among different European universities.

We all have to become aware of a renewed reality:

- **Sooner or later** Bachelor's and Master's programmes will be recognized as separate courses instead of being a mere new division of the already existing "diploma courses" in-house.

- Schools of architecture throughout Europe will be searching for the most promising candidates with respect to their area of competence in view of acceptance to their Master's programme.

The "Bologna scheme", if well interpreted, is real progress in the European university education:

- It allows students with 3 years of study (non-professional Bachelor) to "change career" in accordance with their own motivation instead of being locked in courses which may not really correspond to his/her by now more precisely articulated interests and capabilities.

Thanks to their Bachelor's degree they will be able to choose between:

- A more pragmatic career, probably enriched by some additional courses, training and entering active life, which in fact suits many of our young men and women.
- A rather demanding academic continuation towards a Master's and perhaps a PhD with fewer guarantees for employment.
- Pursuing their Bachelor's programme towards the Master's within their own institution will remain a possibility for some years. This is nevertheless a mere remnant of an already ageing system.

La politique euroréenne de l'enseignement universitaire s'est montrée particulièrement inventive à Bologne en 1999. En divisant le cursus académique en deux, on a ouvert de nouvelles perspectives afin que les étudiants puissent réajuster leur carrière en accord avec leurs ambitions et leurs capacités. A terme la déclaration introduit aussi les bases pour une saine concurrence entre universités en ce qui concerne l'admission au programme du Master.

L'innovation des cursus fait peur, aussi bénéfique soit-elle. On cherche à accommoder l'ancien avec le nouveau, sans trop de conviction. Cela ressemble plutôt à « sauver les meubles », ce qui n'est pas un gage de créativité.

*Soyez conscients qu'en Europe **tôt ou tard**, les BSc/MSc et BA/MA **ne seront plus conçus comme deux étapes d'une même formation.***

Les avantages de cette séparation sont considérables :

1. L'Etudiant évite de se laisser enfermer dans une voie à une seule issue. Ayant obtenu son BSc ou BA qui n'est pas une qualification professionnelle, il pourra alors :

- *Quitter l'université, acquérir si nécessaire des formations spécifiques complémentaires en fonction de ses ambitions et s'engager dans la vie active.*

- *L' étudiant sera en mesure de réorienter ses études en choisissant de se porter candidat pour un programme de Master légèrement ou considérablement différent de celui de son Bachelor. Dans le cas du choix d'un programme différent, il fera bien d'intercaler une année de stage et de cours complémentaires pour étoffer son portfolio (dossier) afin d'augmenter ses chances d'être accepté au meilleur endroit.*

- *Poursuivre la filière du BSc, pas forcément dans la même université, mais en cherchant à s'inscrire dans la meilleure université du domaine.*

Dans cette perspective, la vraie « mobilité » utile se situera entre le Bachelor et le Master et non à l'intérieur de ces programmes.

How can you be admitted to the best Master's programme of your choice - be it in Europe or North America?

- Your performance in the Bachelor's programme counts, but in order to be admitted to the best schools you will have to produce the extras: travel sketch books, work in offices, laboratories, or on construction sites, readings, competitions, awards, publications, etc. (portfolio). A year out after the BSc or BA is highly recommended.
- You need to demonstrate definite motivation with regard to the field you aim for and the school you apply to.

The European renewal in academic structure simultaneously introduces a larger freedom and thus more responsibility for each student. It also challenges the competitiveness of the universities.

How do universities respond to this new academic landscape? Sometimes with hesitation, but my advice is to "take it or leave it". Universities should not merely take half of it. This is unfortunately taking place in too many of our institutions, including my own. The legitimate reason for resistance is uncertainty, but one should consider the rewarding challenge and potential in the long run.

In the meantime, less known universities from the Atlantic to the Urals are structuring themselves according to the Bologna Declaration in order to be part of the European academic community. The more prominent and richer European institutions therefore have to play a more coordinated role in organising the architectural education. They should meet and agree among themselves upon the best path to follow in order to serve as a reference to others.   ■

2. Les universités entrent en concurrence stimulante :

- *Chaque programme de Bachelor justifiera sa performance par l'adéquation de la carrière de ses promus BSc ou BA.*
- *Chaque programme de Master cherchera non seulement à sélectionner les meilleurs absolvants BSc ou BA, mais surtout ceux qui démontrent un haut degré de motivation, de maturité et de préparation, qu'ils proviennent de la même filière ou non. C'est une ouverture et un défi qui s'adresse à la fois aux institutions et aux étudiants.*

Entretemps des universités un peu moins connues de lAtlantique à lOural se structurent selon la Declaration de Bologne afin d'intégrer la communauté académique européenne.
Si elles ne veulent pas perdre de leur prestige,les vieilles institutions éminentes doivent dorénavant jouer un rôle plus positif et coordonné en réorganisant l'enseignement de l'architecture en Bachelor et Master.

Permettez-moi d'encourager tous le étudiants et enseignants d'Europe d'adhérer à ce modèle de formation universitaire plus ouvert, flexible, compétitif et juste, suggéré par la Déclaration de Bologne.   ■

EAAE-AG2R ARCHITECTURAL COMPETITION /
CONCOURS D'ARCHITECTURE AEEA - AG2R

Paris, France

Report

EAAE Project Leader, Emil Barbu Popesco

Reflections on the Living Environment for The Elderly

"Reflections on the Living Environment for The Elderly" is the first international architectural competition organized by AEEA/EAAE. It took place between October 2003 and May 2004 and was sponsored by AG2R - one of the most important French insurance agencies, which provided a total amount of 62,000 euro for organizing the competition, for prizes and awards. The Agency, which had previously sponsored sport competitions (like Tour de France in cycling) and solitary adventures (like ocean sailing), was extremely interested in financing an event that was much closer to its own ideals and expectations.

All schools of architecture in Europe were invited to participate and 65 schools were actually involved. This initiative proved to be a real success since 75 projects finally entered the competition. The 17 countries represented were: Belgium, Bulgaria, Finland, France, Germany, Greece, Italy, Liechtenstein, Macedonia, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland and Turkey. The effort of the organizing committee was impressive and the people involved spent a great amount of time and energy in order to ensure the best conditions for the development of the competition: Those involved included: Prof.arch. Emil Barbu Popescu, PhD, the representative of AEEA/EAAE; Ms. Elena Hillard, the representative of the AG2R Agency; Alex Enibace (on a one year sabbatical from "Ion Mincu" University of Architecture and Urbanism, Bucharest, to Paris); and architect Constantin Vasilesco from the French AG2R Agency.

The reception of the design projects was on May 1, 2004 and the selection process took place in 2 stages. First, a jury composed by physicians, psychologists and sociologists made a selection based on social criteria. After that, the final hierarchy was established by an architectural jury composed of the following:

- Mario Botta Architect, President of the jury
  Professor, Academy of Architecture Mendrisio, Switzerland

- Jean-Michel Knop,
  Head of the Academic Education Department

Réflexions sur l'évolution de l'hébergement des personnes âgées

"*Réflexions sur l'évolution de l'hébergement des personnes âgées - l' Architecture pour le 3-ème age" est le premier concours international d'architecture organisé par AEEA/EAAE. Il s'est déroulé entre Septembre 2003 et Mai 2004 et fût financé par l'agence AG2R - une des plus importantes agences d'assurances françaises, qui a offert 62 000 euros pour l'organisation du concours et pour les prix. Dans le passé l'agence a financé des compétitions sportives (une équipe du Tour de France en cyclisme) ou des aventures solitaires (la traversée des océans), et aujourd'hui elle a été extrèmement enchantée de financer un événement beaucoup plus proche de ses propres idéaux et attentes.*

Toutes les écoles d'architecture d'Europe ont été invitées à participer et 65 écoles se sont effectivement impliquées. Cette initiative fût un réel succès avec 75 projets soumis, représentant 17 pays : Allemagne, Belgique, Bulgarie, Espagne, Finlande, France, Grece, Italie, Liechtenstein, Pologne, Portugal, République Macédoine, Roumanie, Slovakia, Suède, Suisse, Turquie. L'effort du comité d'organisation fût impressionnant et les personnes impliquées ont investi beaucoup de temps et d'énergie pour assurer le déroulement du concours dans les meilleures conditions:: le professeur Emil Barbu Popescu (Arch, PhD) représentant l'AEEA/EAAE; Mme Elena Hillard, représentant l'agence AG2R; Alex Enibace, détaché pour 1 an de l'Université d'Architecture et d'Urbanisme „Ion Mincu" (Bucarest) à Paris; l'architecte Constantin Vasilesco de l'Agence AG2R à Paris.

Les soumissions étaient dues avant le 1-er Mai, 2004 et le processus de sélection a compris 2 étapes. Premièrement, un jury composé de spécialistes en medicine, psychologie et sociologie a effectué la première sélection à base de critères essentiellement socials. Après quoi la hiérarchie finale fût établie par un jury d'architecture, composé de professionnels notables:

- *Mario Botta , président du jury
  Architecte, professeur, Académie d'architecture Mendrisio, Suisse*

- *Jean-Michel Knop, Chef du Bureau des Enseignements, à la Direction de l'Architecture et*

of the Architectural Heritage Head Office, Ministry of Culture, Paris, France

- Pere Riera Architect, Professor, School of Valles Sant Cugat del Valles, Barcelona, Spain

- John Berau Architect Professor, Liege, Belgium

- Emil Barbu Popescu Architect, Professor, University of Architecture and Urbanism, Bucharest, Romania

- Constantin Vasilesco Architect, AG2R, Paris, France

The students have been challenged to interpret different architectural programs, sites, cultures, mentalities, levels of development and education. The jury appreciated the quality of the projects, the level of theoretical approach and the particularities specific to each country and community that the projects reflected.

   The ceremony of announcing the awards took place on May 18, 2004, in the exhibition hall of the Maison Internationale in the Cité Universitaire de Paris, a venue of significant architectural value. The presence of Professor James Horan, President of AEEA/EAAE and M. Jean-Louis de Mourgues, CEO of AG2R honored the event.

The winners are:

1st prize (6000 euros):
- Project no. 64 - authors: Anna Gjureska, Dimitar Krsteski, Kalina Donevska, Ljupco Sackarovski - University S.S. Cyril i Methodius, Faculty of Architecture (Republic of Macedonia)

2nd prize (3000 euros each) ex-aequo:
- Project no. 37 - author: Adela Toma - "Ion Mincu" University of Architecture and Urbanism, Bucharest (Romania)
- Project no. 51 - authors: Hopfner / Schelcher - Ecole d'Architecture de Nancy (France)

10 mentions (500 euros each):
- Project no. 10 - authors: Nil Ece Beken / T. Erbil Ince - Gayi University / Faculty of Engineering & Architecture (Turkey)

du Patrimoine - Ministère de la Culture, Paris, France

- *Pere Riera Architecte, professeur, Valles Sant Cugat del Valles, Barcelone, Espagne*

- *John Berau Architecte Professeur, Liege, Belgique*

- *Emil Barbu Popescu Architecte, professeur, Université d'architecture et d'Urbanisme, Bucarest, Roumanie*

- *Constantin Vasilesco Architecte représentant d'AG2R, Paris, France.*

Pour les étudiants, le défi fût d'interpréter des différents programmes architecturaux, des sites, des cultures, des mentalités, des niveaux de dévelopement et éducation. Le jury a apprecié la qualité des projets, le niveau théorique et les particularités spécifiques à chaque pays et communauté que les projets reflètent.

   La cérémonie de remise des prix a eu lieu le 18 Mai 2004, dans le hall d'exposition de la Maison Internationale de Cité Universitaire de Paris, un lieu bien connu avec d'importantes connotations architecturales pour les professionnels. La présence du professeur James Horan, président de AEEA/EAAE et de M. Jean-Louis de Mourgues, délégué général d'AG2R a honoré l'événement.

Les lauréats sont:

1-er prix (6000 euros):
- *Projet no. 64 - auteurs: Anna Gjureska, Dimitar Krsteski, Kalina Donevska, Ljupco Sackarovski - Université S.S. Cyril i Methodius, Faculté d'Architecture (République Macédoine)*

2-ème prix (3000 euros chacun) ex-aequo:
- *Projet no. 37 - auteur: Adela Toma - l'Université d'Architecture et d'Urbanisme „Ion Mincu", Bucarest (Roumanie)*
- *Projet no. 51 - auteurs: Hopfner / Schelcher - École d'Architecture de Nancy (France)*

10 mentions (500 euros chacune):
- *Projet no. 10 - auteurs: Nil Ece Beken / T. Erbil Ince- Gazi University / Faculty of Engineering & Architecture (Turquie)*

- Project no. 13 - authors: Céline Jegourel / Hélène Nicodeme - ISA-Saint-Luc-Bruxelles (Belgique)
- Project no. 15 - author: Alberto Saez Rodriguez - Universidad Europea de Madrid (Spain)
- Project no. 16 - author: Sini Kukkonen - Helsinki University of Technology (Finland)
- Project no. 23 - author: Anca Mitrache - "Ion Mincu" University of Architecture and Urbanism, Bucharest (Romania)
- Project no. 25 - author: Florin Cristace - "Ion Mincu" University of Architecture and Urbanism, Bucharest (Romania)
- Project no. 27 - author: Mihaela Cosmina Dumitru - "Ion Mincu" University of Architecture and Urbanism, Bucharest (Romania)
- Project no. 32 - author: Ana Maria Marcu - "Ion Mincu" University of Architecture and Urbanism, Bucharest (Romania)
- Project no. 36 - author: Iulia Negoescu - "Ion Mincu" University of Architecture and Urbanism, Bucharest (Romania)
- Project no. 68 - authors: Andreas Heierle / Silke Schnidrig / Massimo Ferrari / Anna Andreachi - Academia di Architettura di Mendrisio (Switzerland)

The AG2R presented the results and the theoretical conclusions in the Senate of France, which confirms the success and the importance of the competition. The winning entries will be presented at an exhibition to be held in September 2004 on the occasion of the Days of Patrimony.

The competition is the first attempt of a contemporary generation of young architects to answer the challenges of the architecture for the 3rd and 4th age, which has become an important issue for European governments. ∎

- *Projet no. 13 - auteurs: Céline Jegourel / Hélène Nicodeme - ISA-Saint-Luc-Bruxelles (Belgique)*
- *Projet no. 15 - auteur: Alberto Saez Rodriguez - Universidad Europea de Madrid (Espagne)*
- *Projet no. 16 - auteur: Sini Kukkonen - Helsinki University of Technology (Finland)*
- *Projet no. 23 - auteur: Anca Mitrache - l'Université d'Architecture et d'Urbanisme „Ion Mincu", Bucarest (Roumanie)*
- *Projet no. 25 - auteur: Florin Cristace - l'Université d'Architecture et d'Urbanisme „Ion Mincu", Bucarest (Roumanie)*
- *Projet no. 27 - auteur: Mihaela Cosmina Dumitru - l'Université d'Architecture et d'Urbanisme „Ion Mincu", Bucarest (Roumanie)*
- *Projet no. 32 - auteur: Ana Maria Marcu - l'Université d'Architecture et d'Urbanisme „Ion Mincu", Bucarest (Roumanie)*
- *Projet no. 36 - auteur: Iulia Negoescu - l'Université d'Architecture et d'Urbanisme „Ion Mincu", Bucarest (Roumanie)*
- *Projet no. 68 - auteurs: Andreas* Heierle */ Silke* Schnidrig */ Massimo Ferrari / Anna Andreachi - Academia di Architettura di Mendrisio (Suisse)*

Par la suite l'Agence AG2R a présenté les résultats et les conclusions théoriques au Sénat de France, ce que confirme le réel succès et l'importance du concours. Les projets gagnants seront présentés dans une exposition organisée en Septembre 2004 à l'occasion des Jours du Patrimoine.

Ce concours est la première tentative de la génération contemporaine de jeunes architectes de répondre aux défis de l'architecture de l'habitat pour le troisième age, qui se présente comme un des problèmes majeurs des gouvernements Européens. ∎

EAAE/ARCC Confrence 2004
Dublin School af Architecture, DIT, Ireland, 2-4 June 2004

Report
EAAE President, James F. Horan

The EAAE/ARCC Conference whose theme was 'Between Research and Practice' was hosted by the Dublin School of Architecture at the Dublin Institute of Technology Ireland on 2/3/4 June 2004.

Just over one hundred delegates registered for the Conference which lasted for three days with an individual keynote speaker each day and a total of forty reviewed papers delivered. The keynote speakers were Chris Luebkeman, Director of Research and Development with Arup, Ciaran O'Connor, Assistant Principal Architect in the Office of Public Works and Prof. Brian Norton, President of the Dublin Institute of Technology.

Chris Luebkeman's introductory speech was full of dynamism and enthusiasm and described various examples throughout the Arup organisation which clearly showed how Research and Practice indeed turns out to be one in the same. His talk was accompanied by a sophisticated powerpoint presentation which underpinned and clearly illustrated the points he was making. The vigour of the presentation set the Conference off to a lively and enthusiastic start.

The keynote speech by Ciaran O'Connor took place on the second day and the venue for the Conference on this occasion was Dublin's Botanic Gardens. Ciaran O'Connor's keynote speech dealt with the research associated with the restoration of the Turner Curvilinear Range and the Palm House at the Botanic Gardens. The fact that the second day of the Conference took place alongside both of these restorations added an additional level of significance to Mr O'Connor's presentation. Following the keynote speech the delegates were afforded an opportunity to inspect these restored buildings firsthand.

On the third day Prof. Brian Norton, delivered an insightful keynote on energy conservation and sustainability and the links between the philosophy underlying this type of work and the education of architects.

Forty individual papers were presented by speakers from both the United States and Europe, covering areas such as Conceptualisation and Collaborative Methodology, Knowledge in Practice, Student to Architect: Learning Transformation, Sustainability and Building, and Approaches to Design Research, to name but a few.

Taking place within a few days of the 100th anniversary of the setting for James Joyce's Ulysses both the introductory speech by the President James Horan and the closing address by Sean O'Laoire of Murray O'Laoire Architects, principal sponsors of the Conference, contained many Joycean references, highlighting the city in which the Conference was held and bringing a literary slant to the occasion.

The Conference dinner was held in the Royal Irish Yacht Club Dun Laoghaire, designed in 1830 by James Skipton Mulvany and the oldest custom built Yacht Club in the world.

Guided tours of Dublin's contemporary and classical architecture were provided for delegates on Saturday 4 June. The close of the Conference coincided with the opening of the Dublin School of Architecture's End of Year Exhibition.

It is intended that some individual papers will be published in future editions of the News Sheet and the full proceedings of the Conference will be available before the end of the year.

Left to right: James Horan, President EAAE, Head Dublin School of Architecture, Sean O'Laoire, Murray O'Laoire Architects Principal Sponsor of the Conference and Fathi Rifki from North Carolina State University and President of ARCC.

EURAU 2004

European Conference on Research in Architecture and Urban Design

Report

Farid Ameziane and Stéphane Hanrot, Ecole d'architecture de Marseille-Luminy, France

The conference which took place in Marseilles from 12 to 14 May 2004 focused on the position of doctoral studies in architecture and addressed the harmonisation of doctoral programmes and degrees in architecture throughout Europe.

According to the number of participants (235) and papers (90 submitted for 50 accepted and 12 posters), the first European conference on the subject turned out to be a successful event. Moreover, it was a good place to get information on current developments in different countries (25 were represented) whereas discussions and debates were sound and interesting

Papers

Four sessions were organised. The opening session focused on doctoral studies in Europe (Belgium, Germany, Italy, Spain, Norway, Portugal). Indeed, some countries have specific doctorates in architecture (Germany, Italy, Spain, Greece, Sweden,...), others have not (France, Belgium). In the latter case of, architectural doctorates have to be hosted by another discipline. In some countries, doctorates are linked with research laboratories, in others not. Moreover, there is a wide range of administrative contexts and financing supports. Even when the status of the doctorate in architecture is clearly defined, as in Italy, many questions are raised about its definition and specificity. Will the European BMD homogenise all that diversity? Probably not. Practical co-operation and European networks only will introduce co-ordination.

Countries that have a specific doctorate in architecture, such as Italy, try to open research to multi-disciplinarity. Others, such as France, that have multidisciplinary doctorates in architecture claim to have a specific doctorate. This is an interesting paradox which shows that architecture has to be an open field of Knowledge and research as well, but needs to have its own identity as a discipline.

Then, four sessions were dedicated to different topics:

- Doctoral research and architectural projects,

- Architecture and education subjects

- The thesis : experiencing multi-disciplinarity

- Scientific research and professional stakes

The papers were a mix of practical experience of doctoral research and philosophical positions about doctoral research. It would probably have been more convenient to separate these two kinds of papers. Anyway, basic and useful information was gathered and proof was given on the richness of the architectural production and our collective ability to discuss and to build a reflective position on our own discipline and on our way to make research. The conference proceedings will present all this information.

Discussions

Many discussions addressed the position of design within research/ research by design. There is a global movement that promotes the participation of design in research.

To give room for design within research seems fruitful for research itself. But in this case design has to be considered not from the point of view of a personal creation, but as a way for discovering things about architecture and creating knowledge. Discussions about design in laboratories were very dense and the ones on the way to assess results of research by design as well.

Research by design is also a way to take into account the demand of practitioners to be helped with specific problems that they are concerned with, and to strengthen the link between research and practice. But, on that point, some researchers fear that such an evolution will make scientific research vanish into practise. Moreover, some participants think that introducing design in research protocols implies the negation of traditional scientific research. Some do not see the introduction of design in research as an enlargement of the field of architectural research but as its substitution to traditional fields of research.

To conclude, only a try could show the limits and the consistency of involving design into research. Anyway, the doctorate thesis could include such a

thing if it is clear that the project itself is not a research, but can help carry out research.

Some arguments were put forward about the scientific basis of architectural research which is, to certain people, too much referenced to physics or mathematics and then, not very convenient to our field. Some participants pointed out that, even in hard sciences, the question of scientific truth is still being discussed, and positivism is not the definitive reference in research. Therefore, we have to invent our own way to assess the results of our research.

The doctorate in design that is developed in the USA was not discussed very much. A. Picon, from Harvard, said that the American model drives to a hierarchy between a "super academic" doctorate (PHD) and a "sub-professional" doctorate (design doctorate). He considers it not to be good for the future and expects a unique doctorate-PHD that can include design.

Conclusion

Questions about doctorates in architecture did not find definitive answers in Marseilles, but it is a fact that doctorates in architecture do exist now throughout the European Community and above. Even if nobody is able to give a unique definition of such a doctorate and its topics, it is obvious that there is a research community which shares a common knowledge basis and common questions about architecture. The Marseilles conference showed the strength and the quality of architectural research and debate. It also showed the contexts where doctorates in architecture are being developed, and the necessity to experiment with new relations between research and design, and also between research and practice.

Acknowledgements

EURAU 2004 in a few figures

235 participants attended EURAU 2004.
 professors; researchers, PhD students and recent PhDs
25 countries were represented
 Algeria, Belgium, Brazil, Canada, Cyprus, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Italy, Northern Ireland, Norway, Poland, Portugal, Romania, Spain, Switzerland, Sweden, Tunisia, Turkey, the USA
62 communications
 50 papers and 12 posters
 Proceedings to be published by the end of October 2004. ∎

Teaching Construction in a Changing World

School of Architecture, National Technical University of Athens, Greece, 27-29 May 2004

Report on the Third EAAE-ENHSA Workshop

EAAE Council Member, Maria Voyatzaki

The EAAE-ENHSA Construction Teachers' Sub-network had its first workshop in May 2002.

Construction teachers from many European schools of architecture presented and discussed the content of the construction teaching and its role in the framework of European contemporary architectural education curricula. In May 2003, at the second workshop of the Network the discussion focused on teaching methodologies using as vehicle to approach this subject the key construction exercises taught in more than forty schools of architecture around Europe participating in the workshop. Both of these two workshops contributed to formulating a more or less clear view on the different contemporary versions of construction education offered to students by European Schools of Architecture. Both of these two workshops contributed to answer the question 'where we are' with regard to the teaching of construction and to the competences this teaching can ensure to our graduates.

The theme for the third workshop of the Construction teachers' Sub-network emerged from the question 'where we are going'. This question rose from the debates of the last workshop. It was agreed by the participants that such question could become an interesting platform to investigate the future of a competent construction education in Europe. A construction education sensitive to the unbelievably fast-changing values of our contemporary culture; responsive to the extremely fast transformations of our every day life and attitudes; alert to the incredibly fast development of technological possibilities and infrastructures; conscious of the tremendously rapid transformations of the logics and the ideas which generate contemporary architecture; attentive to an increasingly unstable labour market and a more and more specialised professional practice; informed about the amazingly big variety of totally new construction materials and techniques; aware of the rapid deterioration of the environment and of the imperative necessity for a built environment, less energy-consuming and more sustainable; but always sensitive to the traditional values of the act of building and insightful as well as respectful to the historic roots and to the cultural richness of the construction culture of a place.

'Visions for the Future of Construction Education: Teaching Construction in a Changing World' was the title of this workshop that took place in Athens

School of Architecture, Technical University from 27 to 29 May 2004. Its main objectives were to investigate the extent to which the teaching methods and practices we are actually applying to our schools to educate students on construction are able, to effective and efficiently cope with the new demands imposed by a fast changing world; to inspect whether with the construction education we offer them, our students are ready to handle successfully their professional life in a demanding, competitive and extremely unstable profession; to scrutinise if our teaching strategies, knowledge and methods are really so diachronic and time resistant as we think, or whether it seems necessary to re-think their values and objectives, to re-formulate their structure and contents and to re-structure the means and the techniques of their transmission. To reconsider the limits of our teaching responsibility in light of the not very rare remark that construction is far from being the favorite subject of our students, or in light of the not so rare frustration that governs our graduates when undervalued at the start of their professional careers due to lack of the necessary competences on contemporary building production.

The aim of the Third Workshop was to capitalize previously gained experience by nourishing it with the visions for the future of construction education in Europe. In other words the workshop aimed to facilitate the transition from present facts to future possibilities or from 'where we are' to 'where we are going'.

As a vehicle for this facilitation two parallel and complementary topics were proposed.

The first one concerned the expected profile of young architects after graduation which will allow them to confront the world of architectural practice in a changing society where common demands tend to be on constant reformulation.

The competencies and skills or essential requirements provided through construction teaching to effectively work in the real and changing world.

The second topic concerned the educational methods which will ensure the acquisition of these competences and skills. In other words the ways (teaching methodology as well as structure of courses) in which the competences and skills of a graduate can be ensured.

As in every year, the workshop was debate oriented. Participants were invited to contribute to the debates, to present their views, ideas, experiences and proposals on the two abovementioned topics.

The debates were organised in workshop dedicated to each of the two topics (competences and methods) in conjunction with the following four themes:

Session 1. The teaching of Construction and contemporary Architecture

- What should be the necessary competences and skills acquired through construction education that allow architecture graduates to be capable of following the attestations and changing trends of contemporary architecture, the architecture that charms the students of today?

- What should be the necessary educational methods and strategies to ensure competences and skills acquired through construction education that allow architecture graduates to be capable of following the attestations and changing trends of contemporary architecture, the architecture that charms the students of today?

Session 2. The teaching of Construction and the new materials and techniques

- What should be the necessary competences and skills acquired through construction education that allow architecture graduates to be capable of following the rapid development of the building industry in producing new materials and new construction methods respectively?

- What should be the necessary educational methods and strategies to ensure competences and skills acquired through construction education that allow architecture graduates to be capable of following the rapid development of the building industry in producing new materials and new construction methods respectively?

Session 3. The teaching of Construction and the Environment

- What should be the necessary competences and skills acquired through construction education that allow architecture graduates to be responsive to the sensitivities and consciousness of our society towards the environment, sustainability and energy conscious design?

- What should be the necessary educational methods and strategies to ensure competences and skills acquired through construction education that allow architecture graduates to be responsive to the sensitivities and consciousness of our society towards the environment, sustainability and energy conscious design?

Session 4. The teaching of Construction and the rare and traditional knowledge

- What should be the necessary competences and skills acquired through construction education that allow architecture graduates to be capable of encouraging the creative encapsulation and synthesis of particular knowledge deriving from the construction culture of a place to new construction logics and practices?

- What should be the necessary educational methods and strategies to ensure competences and skills acquired through construction education that allow architecture graduates to be capable of encouraging the creative encapsulation and synthesis of particular knowledge deriving from the construction culture of a place to new construction logics and practices?

Five keynote speakers enhanced the content and debates of the workshop. Namely, Dimitris Papalexopoulos, from Athens School of Architecture started off with a lecture entitled 'Teaching Construction for the Transformable', followed by a lecture entitled "Digital Tectonics - Design and Fabrication of Gridshell Structures", by Chris Williams from Bath School of Architecture and Civil Engineering, UK. The second day opened with Cyrille Simmonet's lecture ''New' Materials

and 'New' Architecture: New Uncertainty', from Geneva Institute of Architecture, Switzerland and closed with Ed van Hinte from the Hague, the Netherlands whose lecture was entitled 'Smart Building'. Last but not least, Bjorn Sandaker from Olso School of Architecture, Norway delivered a lecture entitled "Designing by making: Strategies for Developing Architectural Concepts by means of Process Skills".

Sixty two construction teachers from 19 different European countries participated in the event this year. The expected outcome of the workshop was to attempt a mapping -not necessarily a synthesis- of the visions for the future of construction education. Furthermore, it was expected that certain levels of consensus could be achieved in relation to some commonly agreed landmarks recognised within the subject-specific area of construction. In any case, this was the mission of a construction teachers' network to identify and record these landmarks. This way construction teaching in each school can select and combine the landmarks in different ways, by taking complementary or alternative options by following different paths. Last but not least the network was able to encourage diversity, while respecting schools' freedom and autonomy.

The Workshop's high note was the final day, where participants were guided to the Acropolis by Professor M. Korres from the National Technical University of Athens School of Architecture, a specialist-researcher in the Parthenon. The day went on with a tour of the Olympic Works and ended with a visit to the Temple of Poseidon at Sounion Cape. ∎

Participants at the workshop

Head, Department of Architecture

University of Manitoba

The Faculty of Architecture invites applications for the Head of the Department of Architecture beginning July 1, 2005. Position No: ABA 068.   The appointment will be tenured at the rank of Associate Professor.

Opportunity

The Faculty of Architecture seeks an inspiring individual who will articulate and advance the desires and collective vision of the Faculty and Department. Opportunities exist for an individual who seeks to work in a collegial and dynamic environment, and who is dedicated to the pursuit of excellence in teaching, scholarship and community involvement. The successful candidate will work with the Department to formulate pedagogical goals, shape the curriculum, and guide and promote existing and new research and partnership agendas.

The Person

Candidates for this position must possess a professional degree in architecture, as well as a post professional degree in architecture or related field. Eligibility for professional registration is an asset. Further, candidates must have demonstrated excellence in teaching design studios and core courses, and in supervising final projects and theses. A record of scholarship is essential, as is an understanding of the importance of 'design as research', the relationship

between materials and making, and the liaison among the academy, the design professions and industry. The successful candidate must be able to articulate an understanding of the importance of the studio environment for the cultivation of creative innovation. The candidate must be a team player, possess administrative experience, be approachable, and communicate with faculty, staff, and students.

The Department of Architecture

We are an energetic group of hard working and talented individuals who are deeply committed to integrating design education with an active scholarship culture. Our scholarship and pedagogy embrace materials and construction, digital technologies, urban design issues, and history and theory. Our ambition and commitment are evidenced by the central role we played in founding and constructing the Centre for Architectural Structures and Technology (CAST) *(http://www.umanitoba.ca/faculties/archit ecture/cast)*.

We are in the process of establishing, in close collaboration with the Faculty of Engineering, CAST-based, post professional architectural degree programs in the areas of Flexible Formworks, Digital Making, and Sustainable Architecture. Post-professional research and design programs are also being developed for an International Centre for Flood Architecture, and a Centre for Advanced Product Design. A Centre for Digital Formation will explore the interface of design and manufacturing.

The Department is committed to providing opportunities for regional studios, including working with aboriginal communities. Recent design studios have been offered in Europe, the Far East, and North and South America. Both

the Faculty and Department critically integrate the use of computers and other media in design teaching. The professional program in Architecture is fully accredited by the Canadian Architectural Certification Board (CACB).

The Faculty of Architecture and Community

The Faculty is based upon an undergraduate interdisciplinary foundation (Environmental Design) and four accredited professional programmes (Architecture, City Planning, Interior Design, Landscape Architecture). The Faculty is collaborating with Fine Arts and Music to design and build a Centre for Music Art and Design (CMAD) where multi-media collaboration will take precedence. Located in the vibrant and culturally diverse City of Winnipeg, the Faculty has developed significant outreach initiatives, including a downtown Design Centre. Winnipeg has a rich architectural history and a remarkable range of arts and cultural institutions. The City offers a high quality lifestyle and hosts the world renowned Royal Winnipeg Ballet, internationally acclaimed music culture, and highly regarded multi-cultural theatre.

Application Details

The University encourages applications from qualified women, members of visible minorities, Aboriginal peoples, and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. Additional information on the Faculty and Department is available at *http:/www.umanitoba.ca/faculties/archi-tecture*.

Applicants should submit their Curriculum Vitae along with a portfolio and teaching dossier and statement of pedagogical philosophy, and the names of three (3) referees.

Applications will begin to be considered by August 18th, 2004.

Interviews of short-listed candidates will occur in October and November, 2004.

Application materials, including letters of reference, will be handled in accordance with the "Freedom of Information and Protection of Privacy Act (Manitoba)."

Applications and inquiries should carry the reference

"Head of Architecture Search Committee"

and be addressed to

Dr. David R. Witty,
Dean,
Faculty of Architecture and Chair,
Head of Architecture Search Committee,
Faculty of Architecture,
201 Russell Building,
University of Manitoba,
Winnipeg, R3T 2N2,
Canada.

International Solar Cities Congress 2004

Daegu, Korea

14-18 November 2004

It is our great pleasure to host the 1st International Solar Cities Congress in Daegu, Korea. The event will enable the world to meet for the purpose of developing major policies for sustainable urban development. The Daegu Congress 2004 will be an opportunity to let the world know how important it is to establish effective urban programs and international standards for the use of renewable energy systems and high-efficiency energy technologies. International Solar Cities will be able to meet and develop a common agenda for our future. Welcome to Daegu, Korea!

Congress Intoduction

Title :
   International Solar Cities Congress 2004

Theme :
   Solar Cities for a Sustainable World

Period :
   Nov. 14 (Sun.)~18(The.), 2004

Venue :
   EXCO(Exhibition&Convention Center), Daegu, Republic of Korea

Participant :
   Approx. 700 people

Official Language :
   English (Simultaneous interpretationt)

Hosted by :
Daegu Metropolitan City, International Solar Cities Initiative(ISCI), International Solar Energy Society(ISES)

Further information:
www.solarcities.or.kr

Cho, Hae-nyoung

International Union of Architects "UIA 2005 ISTANBUL" Student Competition

1. September 2004

The XXII World Congress of Architecture of the International Union of Architects will convene in July 2005 in Istanbul and will be hosted by the Chamber of Architects of Turkey.

An international student competition with a UNESCO grand prize is being organized on this occasion.

The Scientific Committee of the Congress has chosen

"EXTREME"

CREATING SPACE IN EXTREME AND EXTRAORDINARY CONDITIONS as the theme of the competition.

The competition aims to provide an opportunity to the future architects to exercise their creative powers in the face of challenging conditions by designing spaces for different functions chosen by them at places which are extraordinary

in terms of their geographic location, topography, flora, climate, social, economical and political conditions.

- The competition will be launched on 1 September 2004.

- Final submissions will be in March 2005.

- The international jury will meet in May 2005.

For further information will be available after September 1st, 2004:
www.uia2005istanbul.org

Generative CAD Systems Symposium

Pittsburgh, PA, USA

July 12-14, 2004

Call for Participation

The 2004 International Symposium on Generative CAD Systems to be held at the School of Architecture, Carnegie Mellon University, Pittsburgh, PA, USA is designed to provide a retrospective review of research and development of generative models and systems in computer aided architectural design, over the course of the last 35 years as well as to foresee the future of the same.

The conference is organized by Dr. Omer Akin, Professor of Architecture, coordinated by the School of Architecture and

in honor of Dr. Ulrich Flemming, Professor Emeritus. This topic signifies several key ideas:

- The significance of generative design systems and their contribution to the improvement of design through automation.

- The contributions of many generations of researchers and system developers who, through their work, have literally changed the landscape of CAD in architecture and building engineering.

- The need for debate and discussion about the evolving generations of CAD research and application.

The Symposium will be held on July 12-14, 2004 and will be followed by a day of three Workshops on Computer Aided Performance based Architectural Design, Computer Aided Requirement Management and Generative Components, on July 15, 2004. Guided architectural tours will take place at the end of the symposium, on July 16th, 2004.

The keynote speakers
Steve Fenves
Charles Eastman
Ulrich Flemming.

Further Information:
http://weld.arc.cmu.edu/grads/G-CAD

Contact:
Omer Akin, Ph.D.
Professor of Architecture
Fellow of the Institute for Complex Engineered Systems Carnegie Mellon University Pittsburgh, PA 15213
412 268 3594 (ph)
412 268 7507 (fax)

Conference – The unthinkable doctorate. Discussing design-based research

Hogeschool voor Wetenschap & Kunst (W&K) Architecture Department Sint-Lucas, Belgium.

15-16 april 2005

Supported by Nethca (Network for theory, history and criticism of architecture) and USO-Built.

Call for papers

This colloquium is intended to unite academics and practitioners around the question of the doctorate in architecture, and particularly the more specific question of what might be a doctorate for architects who practice.
The question may be formulated in at least two parts:

- Under what conditions might the design work of an architect, formalized and formatted by him- or herself, be recognized as a doctorate?
- How might doctoral work be configured so as to help ground and further the architectural work of the author?

Doctorates in the "architectural sciences" (considered in their most general sense, including urbanism, urban design, and regional planning), in the various domains of construction, and in theory and history of architecture are currently recognized.

But a "doctorate in architecture" which is constituted from the practitioner architect's work itself – "architecting" – has not yet deeply been explored.

Doctorates that think through and reflect upon - by whatever graphic or linguistic means - architecture qua architecture in its various fields of operation, its eventual essence or eventual existence, its order, its structure, its ethics are even rarer. What is its field of application? What criteria are applicable to it? What options might be available, and how to identify potential candidates?
Such are the questions that participants in the colloquium, whether practitioners or scholars, are invited to try to answer, based on their own institutional or professional experience.
We hope in particular that some practitioners will be able to show how a veritable doctorate in architecture made by themselves can aid the development of their design work or their thinking and also what such a doctorate can bring to the intellectual community?

Abstracts should be maximum 600 words. The official languages of the conference are Dutch, French and English. Abstracts are preferably submitted in English. The organisers particularly welcome proposals based on architectural practice.

Invited Keynote speakers

- **Francesco Cellini**
  Faculty of Architecture of the 'Universita degli studi Roma Tré
- **Halina Dunin Woyseth**
  Oslo School of Architecture
- **Ranulph Glanville**
  Royal Melbourne Institute of Technology
- **Stephane Hanrot**
  Ecole d'Architecture Marseille Luminy

Timetable

- Submission of abstracts:
  15 June 2004
- Notification of acceptance:
  31 August 2004
- Submission of draftpapers:
  30 October 2004
- Comments and suggestions:
  15 December 2004
- Final version of the papers:
  31 January 2005
- Conference:
  15-16 April 2005

Organising committee

Johan Verbeke, Marc Belderbos and Marc Dujardin (Hogeschool voor Wetenschap & Kunst, Departement Architectuur Sint-Lucas)
Hilde Heynen (Katholieke Universiteit Leuven)
Bernard Kormoss (Maastricht Architecture Academy)

Conference secretariat

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  archb.sintlucas.wenk.be

For Further Information:

www.architectuur.sintlucas.wenk.be/nl/conference_the_unthinkable_ doctorate /index.htm

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WAS Conference

Welsh School of Architecture, Cardiff University, UK,

15-17 September 2004

Primitive

Keynote speakers include:

- Adrian Forty, Bartlett, University College London
- Andrew Freear, Rural Studio
- Hilde Heynen, Katholieke Universiteit Leuven
- Charles Jencks, Architectural writer and critic, London

- David Leatherbarrow, University of Pennsylvania
- Duncan Lewis, Scape Architecture
- Dalibor Vesely, University of Cambridge

A Conference Publication is planned. Preliminary discussions have been held with Routledge.

For further information:

www.cardiff.ac.uk/archi/primitive

Stephane Hanrot

Stephane Hanrot, the project leader for Research and Doctorates, has informed the EAAE Council that he will no longer be in a position to lead this project. The EAAE Council regrets his departure and expresses sincere thanks to him for the work he has done both as a Project Leader and as a former member of EAAE Council. The EAAE Council wishes him well and congratulate him on achieving Professorship.

James F Horan, President of the EAAE

EAAE News Sheet offers publication space

As the circulation of the News Sheet continues to grow the Council of EAAE has decided to allow Schools to advertise academic vacancies and publicise conference activities and publications in forthcoming editions. Those wishing to avail of this service should contact the Editor (there will be a cost for this service).

Yours sincerely
James F Horan, President of the EAAE.

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Toft, Anne Elisabeth
(News Sheet)

EAAE

The EAAE is an international, non-profit-making organisation committed to the exchange of ideas and people within the field of architectural education and research. The aim is to improve our knowledge base and the quality of architectural and urban design education.

Founded in 1975, the EAAE has grown in stature to become a recognized body fulfilling an increasingly essential role in providing a European perspective for the work of architectural educationalists as well as concerned government agen-cies.

The EAAE counts over 140 active member schools in Europe from the Canary Islands to the Urals representing more than 5.000 tenured faculty teachers and over 120.000 students of architecture from the undergraduate to the doctoral level. The Association is building up associate membership world-wide.

The EAAE provides the framework whereby its members can find information on other schools and address a variety of important issues in conferences, workshops and summer schools for young teachers. The Association publishes and distributes; it also grants awards and provides its Data Bank information to its members.

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European Association for Architectural Education
Association Européenne pour l'Enseignement de l'Architecture

EAAE Calendar / *AEEA Calendrier*

	09	2004	■	**7th Meeting of Heads of European Schools of Architecture** Chania / Greece	*7° Conférende des Directeurs des Ecoles d'Architecture en Europe* *Chania / Grèce*
27-30	**10**	2004	■	**European Symposium on Research in Architecture and Urban Design** Delft / The Netherlands	*Journees europeennes de la recherche architectur et urbaine* *Delft / Pay-Bas*
25-26	**11**	2004	■	**EAAE Prize Workshop 2003-2005** Copenhagen / Denmark	*L'Atelier Prix de l'AEEA 2003-2005* *Copenhague / Danemark*
27-28	**05**	2005	■	**EAAE Confrence** Leuven / Belgium	*Conference de l'AEEA* *Leuven / Belgique*

www.eaae.be