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

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NEWS SHEET

October/Octobre 2002

Bulletin 3/2002

64

Announcements/Annonces

The EAAE Prize 2001/2002

EAAE Workshop, Copenhagen, 22 - 24 November 2002

As finalization of the **EAAE Prize Competition 2001-2002** sponsored by **Velux** you are hereby invited to a workshop in Copenhagen:

Writings in Architectural Education: Research and results from research and/or new ideas implemented in architectural education.

On the basis of the 60 submitted entries for the competition the workshop aims to clarify and discuss new methods and challenges within the architectural education and the best experience with the coupling between research and education.

The jury will act as key persons at the workshop. The great insight from reading the many interesting entries has both provided material for a discussion of the challenges outlined for the architectural education and for a debate on the entries with the most interesting viewpoints and experience.

The jury consists of: Jean-Francois Mabardi (chairman), Michael Hays, Neil Leach, Jean-Claude Ludi and Carsten Thau.

Preliminary Programme:

Friday, November 22

- 12.00 Registration
- 13.30 Welcome by Sven Felding, Rector at The Royal Danish Academy of Fine Arts, School

- of Architecture and Herman Neuckermans, President of the EAAE.
- 13.45 Keynote speech: Jean-Francois Mabardi, Chairman of the Jury for the EAAE Prize.
- 14.30 Presentation by the Jury of the main issues brought up in the entries.
- 15.30 Presentation of selected entries.
- 19.00 Dinner at the Royal Danish Academy of Fine Arts, School of Architecture.

Saturday, November 23

- 9.30 Keynote speech by Professor Carsten Thau.
 Presentation of the architect Arne Jacobsen
 as exponent for a lifelong process with the
 motto "Research by Design"
- 11.00 Presentation of selected entries.
- 12.00 Lunch.
- 14.00 Presentation of selected entries.
- 16.00 The Jury's conclusion and the awarding of the EAAE Prize 2001-2002.
- 17.00 Reception in connection with the EAAE Prize 2001-2002 sponsored by Velux.
- 19.00 Dinner sponsored by Velux.

Sunday, November 24

Excursion to the exhibition 'Arne Jacobsen – Absolut Moderne' at the Louisiana Museum.



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EAAE

Member Schools of Architecture

AFFA

Membre Ecoles d'Architecture

Armenian Republic: Ereven, Institut d'Architecture et de Construction d'Everan • Austria: Graz: Technische Universität Graz • Wien: Akademie der Bildende Kunste • Wien: Technische Universität Wien • Belgium: Antwerpen: Hogeschool Antwerpen • Brussels: Institut Supérieur d'Architecture La Chambre • Brussels: Institut Supérieur Saint-Luc • Brussels: Intercommunale d'Enseignement Sup. d'Architecture • Brussels: Vrije Universiteit • Diepenbeek: Provinciaal Hoger Architectuur Instituut • Gent: Hogeschool voor Wetenschap & Kunst • Heverlee: Katholieke Universiteit • Liège: Institut Supérieur d'Architecture Saint-Luc • Louvain-La-Neuve: Université Catholique de Louvain • Mons: Faculté Polytechnique de Mons • Mons: Institut Supérieur d'Architecture Intercommunal • Ramegnies: Institut Supérieur d'Architecture Saint-Luc • Tournai: Institut Supérieur d'Architecture Saint-Luc • Bosnia: Sarajevo: University of Sarajevo • Bulgaria: Sofia: University of Architecture • Czech Republic: Brno: Faculty of Architecture • Prague: Technical University • Denmark: Aarhus: Aarhus School of Architecture • Copenhagen: The Royal Danish Academy of Fine Arts • Estonia: Tallinn: Tallinn Art Unitversity • Finland: Espoo: Helsinki University of Technology • Oulu: University of Oulu • Tampera: Tampere University of Technology • France: Charenton Le Pont: Ecole d'Architecture de Paris Val De Marne • Clermont-Ferrand: Ecole d'Architecture de Clermont-Ferrand • Darnetal: Ecole d'Architecture de Normandie • Grenoble: Ecole d'Architecture de Grenoble • Marseille Luminy: Ecole d'Architecture de Marseille • Nancy: Ecole d'Architecture de Nancy • Paris: Ecole d'Architecture de Paris-Belleville • Paris: Ecole d'Architecture de Parisla-Seine • Paris: Ecole d'Architecture de Paris-la-Vilette • Paris: Ecole Speciale d'Architecture ESA • Paris: Ecole d'Architecture de Paris-Villemin • Paris: Ecole d'Architecture de Paris-Tolbiac • Saint-Etienne: Ecole d'Architecture de Saint-Etienne • Talence: Ecole d'Architecture de Bordeaux • Vaulx en Velin: Ecole d'Architecture de Lyon • Versailles: Ecole d'Architecture de Versailles • Villeneuve d'Ascq: Ecole d'Architecture Lille & Regins Nord • Germany: Aachen: Reinisch Westfälische Technische Hochschule • Berlin: Hochschule der Künste • Bochum: Fachhochschule Bochum • Cottbus: Technische Universität Cottbus • Darmstadt: Fachhochschule Darmstadt • Dresden: Technische Universität Dresden • Essen: Universität-Gesamthochschule • Hamburg: Hochschule für Bildende Künste • Hannover: Universität Hannover • Kaiserlautern: Universität Kaiserlautern • Karlsruhe: Universität Karlsruhe • Kassel: Gesamthochschule Kassel • Stuttgart: Universität Stuttgart • Weimar: Architektur für Architektur und Bauwesen • Greece: Athens: National Technical University • Thesalloniki: Aristotle University • Ireland: Dublin: University College Dublin • Dublin: University of Technology • Italy: Ascilo Piceno: Facolta di Architettura • Aversa: Facolta di Architettura • Ferrara: Facolta di Architettura • Florence: Dpt. Progettazione dell'Architettura • Genova: Facolta di Architettura • Milan: Politecnico di Milano • Reggio Calabria: Universita Degli Studi di Reggio Calabria • Rome: University of Rome • Rome: Facolta di Architettura, Terze Universita • Siracusa: Facolta di Architettura • Turin: Politecnico di Torino • Venice: Instituto Universitario di Architettura •

Lichtenstein: Vaduz: Fachhochschule Liechtenstein • Lithuanian

New members accepted at the General Assembly of 6 September 2002 in Chania.

North Cyprus Eastern Mediterranean University, Famagusta

Ecole d'Architecture de Clermont-Ferrand, France

Zürcher Hochschule Winterthur, Switzerland

Izmir Institute of Technology, Turkey

Republic: Kaunas: Kaunas Institute of Art • Macedonia: Skopje: Universitet Sv. Kiril i Metodij • Malta: Masida: University of Malta • Netherlands: Amsterdam: Akademie van Bouwkunst • Amsterdam: Amsterdamse Hogeschool voor Kunsten • Delft: Technische Universiteit • Eindhoven: Technische Universiteit • Rotterdam: Akademie van Bouwkunst . Norway: Oslo: Oslo School of Architecture • Trondheim: Norwegian University of Science • Poland: Bialystok: Technical University • Gdansk: Polytecnica Gdansk • Gliwice: Technical University • Szczecin: Technical University • Warrsaw: Technical University • Wroclaw: Technical University • Portugal: Lisbon: Universidade Tecnica • Lisbon: Universidade Ludsiada • Porto: Universidade do Porto • Setubal: Universidade Moderna Setubal • Roumania: Bucharest: Inst. Architecture Ion Mincu • Clui-Napoca: Technical University • Iasi: Technical University lasi • Timisoara: University Polytechnica Timisoara • Russia: Bashkortostan: Bashkirsky Dom Regional Design School • Jrkutsk: Technical University • Krasnoyarks: Institute of Civil Engineering • Moscow: Architectural Institute Moscow • Serbia: Prishtina: University of Prishtina, Faculty of Architecture • Slovak Republic: Bratislava: Slovak Technical University • Spain: Barcelona: ETSA Universidad Politecnica da Catalunya • El Valles: ETSA del Valles • La Coruna: Universidad de la Coruna • Las Palmas: ETSA Las Palmas • Madrid: ETSA Madrid • Madrid: Universidad Europea de Madrid • Pamplona: ETSA Universidad de Navarra • San Sebastian: ETSA Universidad del Pais Vasco • Sevilla: ETSA Sevilla • Valencia: ETSA de Valencia • Valladolid: ETSA de Valladolid • Sweden: Göteborg: Chalmers Technical University • Lund: Lund University • Stockholm: Royal Institute of Technology • Switzerland: Genève: Ecole d'Ingénieurs de Genève • Université de Genève • Lausanne: Ecole Polytech. Fedérale de Lausanne • Mendrisio: Academia di Architettura • St. Gallen: Hochschule für Technik, Wirtschaft & Soziale Arbeit • Windisch: Fachhochschule Aargau • Winterthur: Zürcher Hochschule Winterthur • Zürich: ETH Zürich • Turkey: Ankara: Gazi University • Ankara: Middle East Technical University • Ankara: Yidiz University • Kibris: European University of Lefke • Istanbul: Istanbul Technical University • Izmir: Izmir Institute of Technology • Ukraine: Kiev: Graduate School of Architecture • Kiev: National Academy of Fine Arts • Lviv: Lviv Politecnical State University • United Kingdom: Aberdeen: Robert Gordon University • Belfast: Queen's University • Brighton: University of Brighton • Canterbury: Kent Institute of Art and Design • Cardiff: UWIST • Dartford: Greenwich University • Dundee: University of Dundee • Edinburgh: Edinburgh College of Art, School of Architecture • Edinburgh: University of Edinburgh • Glasgow: University of Strathclyde • Glasgow: Machintosh School of Architecture • Hull: Humberside University • Leeds: School of Art, Architecture and Design • Leicester: De Montford University • Liverpool: Liverpool University • Liverpool: John Moore's University . London: Southbank University . London: University College, Bartlett School . London: Westminster University • Manchester: Manchester School of Architecture • Newcastle upon Tyne: Newcastle University • Oxford: Oxford Brooks University • Plymouth: Plymouth University • Portsmouth: Portsmouth University

Editorial

News Sheet Editor - Anne Elisabeth Toft

Dear Reader

The members of the EAAE Council are happy to announce that the **EAAE Prize 2001/2002: Writings in Architectural Education** will be awarded in Copenhagen, Denmark, on Saturday 23 November 2002.

At the same time the EAAE wishes to take the opportunity to arrange a workshop from 22 to 24 November 2002 hosted by the **Royal Danish Academy of Fine Arts, School of Architecture,** Copenhagen.

The workshop will form the context of the presentation of the **EAAE Prize**, plus a number of debates on architectural education and the discipline of architecture.

The debates will among others take their starting point in some of the many themes being illustrated in some of the approximately 60 submitted entries for the **EAAE Prize Competition**.

On the front page of this EAAE News Sheet, EAAE Project Leader Ebbe Harder (Denmark) announces the preliminary programme of the workshop.

On page 6-8 the Nordic Academy of Architecture re-announces the preliminary programme of the 20th EAAE Conference: Four Faces of Architecture.

The conference, which is being organized by the Kungliga Tekniska Högskolan, School of Architecture, Stockholm, Sweden, will take place from 8 to 11 May 2003.

At the **General Assembly** of the **EAAE** on **6 September 2002**, EAAE President Herman Neuckermans (Belgium) announced that the **EAAE** will join the **ACSA** in their annual conference abroad, which will be held in Helsinki, Finland, in 2003.

The heading of the conference, which will take place 27 - 30 July 2003, is: **Contribution and Confusion: Architecture and the Influence of Other Fields of Inquiry**.

On page 9-10 you can read a preliminary outline of the above conference.

Cher lecteur

Les membres du Conseil de l'AEEA ont le plaisir de vous annoncer que le **Prix 2001/2002 de l'AEEA** "**Ecrits sur l'Enseignement de l'Architecture**" sera remis à Copenhague, Danemark, le samedi 23 novembre 2002.

L'AEEA organise à cette occasion un atelier du 22 au 24 novembre 2002 à l'Ecole d'Architecture de Copenhague, au sein de l'Académie royale des Beaux-Arts.

Cet atelier sera appelé à constituer le cadre de fond de la remise du **Prix de l'AEEA**, avec un certain nombre de débats sur l'enseignement de l'architecture et la nature de cette matière.

Les débats prendront pour point de départ quelques-uns des nombreux thèmes qu'abordent les quelque 60 projets présentés au **Concours de I'AEEA**.

Ebbe Harder (Danemark), Chef de Projet de l'AEEA, vous communique le programme préliminaire de cet atelier en première page du présent Bulletin.

L'Académie nordique d'Architecture reprend aux pages 6-8 le programme préliminaire de la 20ème Conférence de l'AEEA : Quatre faces de l'architecture.

Cette Conférence se déroulera du **8 au 11 mai 2003**, sous la houlette de l'Ecole d'Architecture de la Kungliga Tekniska Högskolan, à Stockholm, Suède.

A l'Assemblée Générale de l'AEEA du 6 septembre 2002, Herman Neuckermans (Belgique), Président de l'AEEA, a annoncé que l'AEEA s'unira à l'ACSA dans la conférence annuelle qui se tiendra à Helsinki, Finlande, en 2003.

Cette Conférence réunira ses participants du 27 au 30 juillet 2003 autour du thème "Contribution and Confusion: Architecture and the Influence of Other Fields of Inquiry" (Contribution et Confusion: L'Architecture et l'Influence d'autres domaines). Vous trouverez dans les pages 9-10 la présentation préliminaire de cette Conférence.



The **General Assembly** of the **EAAE** was as in previous years held in Chania, Greece, in connection with the annual **Meeting of Heads of European Schools of Architecture.**

EAAE President Herman Neuckermans is on page 37 going over the **Minutes of the General Assembly**, and on page 43 EAAE Project Leader Constantin Spiridonidis (Greece) briefly evaluates this year's **Meeting of Heads of European Schools of Architecture**.

Nur Caglar, Head of Department, Gazi University, Faculty of Engineering and Architecture, in Ankara, Turkey, contributes with a **Report** from the meeting. Her text can be read on page 39.

An important EAAE event in the spring was the third biennial **ARCC/EAAE Conference** which took place in Montreal, Canada, from 22 to 25 May 2002.

On page 13 you can read Lucie Fontein's **Report** from the conference. Lucie Fontein is an associate professor at Carleton University, School of Architecture, in Ottawa, Canada. She co-chaired the ARCC/EAAE conference in Montreal, Canada, together with EAAE Council Member Stephane Hanrot (France).

Keynote speakers at this conference were:

- Dr. Alberto Pérez-Gómez, Professor of History of Architecture, McGill University, Canada.
- Dr. Antoine Picon, Professor of History of Architecture and Technology, Harvard University, USA.
- Francine Houben from Mecanoo Architects, Delft. The Netherlands.

Dr. Antoine Picon's article Building Technologies, Imagination and Utopia can be seen on page 27 and on page 17 you can read the interview Architecture and Its Image, with Dr. Alberto Pérez-Gómez.

Other important EAAE-activities also taking place in the spring were two EAAE/ENHSA workshops:

• Education in Conservation

Tout comme dans les années précédentes, l'Assemblée Générale de l'AEEA s'est tenue à Chania, Grèce, conjointement avec la Conférence annuelle des Directeurs des Ecoles d'Architecture européennes.

Herman Neuckermans, Président de l'AEEA, nous communique en page 37 le compte-rendu de l'Assemblée Générale, et Constantin Spiridonidis (Grèce), Chef de Projet de l'AEEA, résume en page 43 le déroulement de la Conférence des Directeurs des Ecoles d'Architecture européennes.

Nur Caglar, Chef de Département de la Faculté d'Ingénierie et d'Architecture de l'Université de Gazi, à Ankara, Turquie, nous offre le **rapport** qu'il a rédigé sur cette Conférence. Ce texte est publié en page 39.

Un événement important de l'AEEA ce printemps dernier fut la troisième **Conférence biennale de l'ARCC/AEEA** teenue à Montréal du 22 au 25 mai 2002.

Lucie Fontein vous donne en page 13 un rapport de cette conférence. Lucie Fontein est professeur associé à l'Ecole d'Architecture de l'Université Carleton à Ottawa, Canada. Fontein a assuré en compagnie de Stéphane Hanrot (France), Membre du Conseil de l'AEEA, la présidence de la conférence de l'ARCC/AEEA à Montréal, Canada.

Parmi les principaux conférenciers, citons :

- Dr Alberto Pérez-Gómez, Professeur d'Histoire de l'Architecture, Université McGill, Canada.
- Dr Antoine Picon, Professeur d'Histoire de l'Architecture et des Technologies, Université de Harvard. USA.
- Francine Houben de Mecanoo Architects, à Delft, Pays-Bas.

Vous trouverez l'article du **Dr Picon** "Building **Technologies, Imagination and Utopia**" (Technologies de la construction, Imaginaire et Utopie) en page 27 et l'interview du **Dr Alberto Pérez-Gómez** sur le thème "**Architecture and Its Image**" (l'Architecture et son Image) en page 17.

Mentionnons aussi parmi les autres activités importantes de l'AEEA en ce printemps dernier les deux ateliers de l'AEEA/ENHSA:

 Education en Conservation du patrimoine architectural

• The Teaching of Construction in Architectural Education

On page 11 EAAE President Herman Neuckermans (Belgium) talks about the firstmentioned workshop that took place in Leuven, Belgium, on 27 and 28 April 2002, and on page 35 EAAE Council Member, Maria Voyatzaki (Greece) gives an account of **The Teaching of Construction in Architectural Education.**

This workshop was hosted by the Aristotle University of Thessaloniki, School of Architecture, Greece, and took place between 30 May and 1 June 2002.

• Enseignement de la Construction dans l'Enseignement de l'Architecture

Herman Neuckermans (Belgique), Président de l'AEEA, commente en page 11 l'atelier sur la conservation du patrimoine architectural qui se déroula à Louvain, Belgique, les 27 et 28 avril 2002, et Maria Voyatzaki (Grèce), Membre du Conseli de l'AEEA rend compte en page 35 de l'atelier sur l'enseignement de la construction.

Ce dernier atelier eut lieu les 30 mai et 1er juin 2002 à l'Ecole d'Architecture de l'Université Aristote de Thessalonique, Grèce.

Yours sincerely

Anne Elisabeth Toft

Sincèrement

Anne Elisabeth Toft

20th EAAE Conference

Stockholm, Sweden, 8 - 11 May 2003

Four Faces of Architecture

Preliminary Agenda (2nd Announcement)

The dynamics of architectural knowledge - from established postures to the impact of future demands in education and research.

Theory, practice, education and research - the four faces of architectural knowledge - will be mirrored into the four methodological areas of social sciences, natural sciences, humanities and the arts. By reflecting these main modes of production of knowledge into the four faces of architecture, the conference aims towards generating a matrix of ideas for discussions on future demands in education and research.

Through direct interaction between the conference as a forum, its physical environment, and the proposed programme, the Stockholm Conference will attempt to further develop the actual format of the meeting.

- The call for papers will result in a pocket size book, and a substantial website containing all accepted papers and invited contributions from among others the keynote speakers.
- The keynote lectures will be held in significant architectural spaces, themselves constituting important statements on the essence of architecture, and having some bearing on the subject matter of the conference.
- The plenary discussions on board the ferry between Stockholm and Helsinki will constitute a dynamic transition from Stockholm to Helsinki and back again, contributing to reflection on subjects raised in papers and lectures.

This way, presentations will be published in advance, with the explicit purpose of establishing a framework for discussion. Thus, the emphasis of the conference will be placed upon actual discussions, to be extensively documented and edited.

Call for Papers

Papers exploring possible attitudes towards new interrelationsships between the different faces of architectural knowledge and its development are invited.

Conference fee

The registration fee will be approximately 500 Euro. This covers the conference fee, guided tours, three dinners, one night at the Stockholm Hilton and two nights in single cabins on board the ferry Silja Europa.

Deadlines

- Abstracts before December 1, 2002
- Notification of acceptance before January 15, 2003
- Papers before March 1, 2003
- Papers will be evaluated by a joint Nordic scientific committee headed by Peter Kjær, Rector, Aarhus School of Architecture.
- Accepted papers will be printed, and the book will be distributed to participants approximately 2 weeks prior to the confrence.
- Papers and inquiries should be sent to: four.faces@arch.kth.se

Conference locations

- Stockholm Town Hall (by Östberg)
- Stockholm City Library (by Asplund)
- Skandia Cinema (by Asplund)
- Cultural Centre, Sergels Torg (by Celsing)
- Woodland Cemetery (by Asplund/Lewerentz)
- St Marks (by Asplund/Lewerentz)
- m/s Silja Europa

The Stockholm Conference is arranged as a joint Nordic venture, hosted by the Nordic Academy of Architecture. The Conference is administrated by the KTH School of Architecture, Stockholm.

For further information and registration:

www.four.faces.com

Preliminary Programme

Thursday, May 8, 2003 (Stokholm)	17:15-19:00	Parallel Workshops

13:00-15:00 Stockholm Town Hall (by Östberg) Departure for Helsinki (Silja Europa) 18:00

> Registration and reception 19:15-20:30 Plenary discussions

> > Moderator: Staffan Henriksson

Mikael Söderlund, Mayor of

Stockholm 21:00 Dinner

15:30-16:30 City Library (by Asplund)

Saturday, May 10, 2003 Guided tour

17:00-18:00 Skandia Cinema (by Asplund) 09:00 Arrival in Helsinki

> Lecture: Asplund-Lewerentz-Celsing 10:00-11:30 Guided tour in Helsinki

19:00-20:00 Cultural Centre, Sergels Torg (by 11:30-13:00 Lunch, Museum of Contemporary

Art (by Holl) Celsing)

Keynote lecture 13:00-15:00 Finlandia House (by Aalto)

20:30-23:00 Cultural Centre, Sergels Torg Guided tour

> Dinner Keynote lecture

15:30 Check-in on board the ferry to Friday, May 9, 2003

Stockholm

09:30-11:00 Woodland Cemetery (by 15:30-16:30 Lecture

> Asplund/Lewerentz) (at Silja Europa)

Guided tour 16.30-18.30 Parallel Workshops

18:45-20:00 Plenary discussions Keynote lecture

Moderator: Per Olaf Fjeld

20:00-21:00 Conclusion and closing session

Guided tour

21:00 Dinner Keynote lecture

13:00-15:00 Lunch

11:30-13:00 St Marks (by Lewerentz)

Sunday, May 11, 2003 15:00-16:00 Check-in and leasure time on board

the ferry to Helsinki

10:00 Arrival in Stockholm - end of

16:00-17:00 Keynote lecture conference





































 $Photos\ showing\ conference\ locations+Finlandia\ Hall,\ Helsinki\ and\ Museum\ of\ Contemporary\ Art,\ Helsinki$

2003 ACSA International Conference

Helsinki, Finland, 27-30 July 2003

Contribution and Confusion: Architecture and the Influence of Other Fields of Inquiry

At the General Assembly of the EAAE in Chania, Greece, 06.09. 2002 it was decided that the EAAE will join the ACSA in their annual conference abroad, which in 2003 will be held in Helsinki, Finland. Find hereby the preliminary outline of the conference. The call for papers will be published in the next issue of the EAAE News Sheet.

Plenary Session Speakers

- James Carpenter, Designer, USA
- Diane Lewis, Architect, USA
- Toshiko Mori, Architect, USA
- Mikko Heikkinen, Architect, Finland
- Juhani Pallasmaa, Architect, Finland

Conference Co-Chairs:

- Associate Professor Pia Sarpaneva, Virginia Tech
- Associate Professor Scott Poole, Virginia Tech

Thematic Statement

Throughout the twentieth century architects have attempted to translate ideas that have originated in other fields into works of architecture.

It would be difficult, for example, to explain the profusion of novel forms that emerged in the early years of this century without reference to particular movements in art.

But have ideas, formed in art and various other fields such as science, philosophy, engineering, linguistics, sociology and psychology advanced the art of building?

If so, in what ways have features, acquired from investigations in other fields, resolved questions or clarified situations essential to the specific nature of architecture and its intrinsic tasks?

Or, in contrast, have appropriated ideas and the desire for novelty marginalized fundamental aspects of the discipline of architecture?

See page 10 for a list of Topic Sessions

2003 ACSA International Conference

Helsinki, Finland, 27-30 July 2003

Topic Sessions

Thought, Language and Making

- Translating Knowledge from Other Fields of Inquiry
- The Limits of Language: What Can Be Said About Architecture?
- The Thinking Hand: Art and The Process of Making

The Material Cause

- Material, Memory and Imagination in Art and Architecture
- The Resistance of Matter in Art and Architecture
- Challenging Standard Uses of Material in Architectural Practice

The Lived World

- The Question of Duration: Making Time Present in Art and Architecture
- Experiential Space in Art and Architecture

The City as a Work of Art

- The Public Function of Art and the Contemporary City
- Arrivals and Departures
- $\bullet\,$ Urban Interiors: The Public Living Room

Questioning Disciplinary Boundaries

- Conceptual Art and Architecture
- Minimal Art and Architecture
- Land Art and Architecture

Avant-Garde

- The Influence of Other Disciplines on the Architectural Avant-Garde: A Search for Depth or a Crisis of Confidence
- Bold New Architecture: Pushing the Limit or Overlooking the Boundary

Image

- The Image in Art and Architecture
- Images of Architecture in Other Arts
- Research in Cognitive Science and the Image
- Theories of Vision in Contemporary Criticism and Their Influence on Architecture

Philosophy

- The Concept of the Tectonic and Building Art
- The Influence of Phenomenology on Architectural Thought
- Authenticity, the Arts, and the Task of Architecture
- The State of Ethics in Architecture

Interactions with the Other Arts

- · Architecture and Painting
- Architecture and Cinema
- Architecture and Photography

Crossovers and Collaborations

- Biology, Psychology and Sociology of Aging in Contemporary Architecture
- The Impact of Technological Innovation on Architectural Practice
- Architecture and Industrial Design

Nature

- Green Ideas and Architectural Practice
- Questions of Topology: Building in Landscape and Landscape in Building

Pedagogy

- The Influence of the Computer in Design Studio: The Question of the Image and Material Resolution
- Literary Discourse, Narrative and the Education of the Architect
- Adopting Concerns from other Disciplines: The Influence of Sociological, Economical, Political and Environmental Questions on the Design Studio

Doctoral Works in Progress Relating to the General Topic

Open Sessions Relating to the General Topic

Open Discussions with Invited Speakers

- The Finnish Architectural Policy
- Architectural Competitions in Finland
- Architectural Education and Research in Finland

EAAE / ENHSA Workshop - Education in Conservation in Europe

Leuven, Belgium, 7 - 8 June 2002

Report: 'State-of-the-Art' and Perspectives

EAAE President, Herman Neuckermans, Leuven, Belgium

The presence of the past is the day-to-day reality we are inhabiting in Europe. In most countries reuse of existing buildings is the predominant field in which architects operate.

How to cope with this historical context is tremendously important in order not to loose our memory. Conservation, re-use and rehabilitation merit special care and skilful interventions.

Hence education has to teach future generations how to cope with this historical architectural patrimony.

The workshop on education in conservation held in Leuven June 2002 was organised in order to initiate the debate on this subject, to start the ENHSA / EAAE network on theory and history; and primarily meant to identify topics for a broader conference on this subject next year.

The workshop was a joint initiative by EAAE, ENHSA and RLICC (Raymond Lemaire Centre for Conservation of Historic Towns and Buildings, KU Leuven).

More than 20 participants from Portugal, Italy, Slovakia, Germany, Bulgaria, Greece, Hungary, Finland, Poland and Belgium, as well as experts from ICOMOS and IICROM, have contributed actively to the workshop.

They presented the answers to the questionnaire pertaining to the 'state-of-the-art' and the future of education in conservation in their institution and country.

Summary of the questions:

- Describe your involvement in conservation
- How is conservation taught in your institution and your country?
- Qualify the orientation of the conservation programmes
- Qualify its level of discourse and its duration
- Entrance conditions
- Who are the teachers and what is their qualification?
- List the topics taught in sequence
- Which other subjects ought to be taught?
- What would you like to change?

- Which evolution do you (like to) see in education within conservation?
- Comments

Today a summary report has been prepared showing the following 'hot' topics:

- The availability of information and documentation has to be improved
- There is a need for standardisation of documentation and a clear terminology
- Teaching of history and conservation should be compulsory subjects in architectural education
- Specialists in conservation first need an education in architecture
- Proposal to create 2 working groups:
 - 1. Bachelor/Master level initiatives
 - 2. Advanced Masters level
- Situation in each country present at the workshop will be included in the proceedings.

The complete report will be published in the series of EAAE transactions on education.

It will comprise:

- Summary report
- Start of an inventory of initiatives all over Europe
- Reports prepared by the participants from 12 countries
- Collection of material, documentation, books
- Report including references to interesting publications (under construction)

ARCC/EAAE 2002 International Conference on Architectural Research

ARCC-EAAE Confrence, 22-25 May 2002, McGill University, Monteral. Quebec, Canada

0, Spirit of Research, are You There? / Esprit de la recherche es-tu là?

Stephane Hanrot, Conference co-chair

Organizing the bi-annual ARCC-EAAE conference is always a difficult task for those who take on the job. This year, the credit goes to Lucie Fontein, of ARCC, who - together with her team, the McGill School of Architecture, the Montréal University School of Architecture, and the CCA (Centre Canadien d'Architecture) - managed to organise a lively, edifying conference. Lively, thanks to the variety and quality of its events (tours, talks by invited speakers). Edifying, because the contributions by the attending American, Canadian, Australian and European researchers proved that research in architecture has many varied forms, and that it is a mistake to wish to reduce it to a single model. On one hand, it adopts the methods of physical sciences to work towards a sensitive interpretation and a feeling of comfort. On the other hand, the analysis of a residential scheme demonstrates that its high-quality building and landscape architecture can, through its principles of composition and its ordering, optimise the technical systems applied for sustainable development. Certain researcher-practitioners, on the basis of their own practice, endeavour to identify detailed ways and means of research specific to architectural firms for associating innovation and creativity. Others, more information technology oriented, develop models for information interchange and cooperative design procedures using Internet resources. As for the theoreticians, they debate more fundamental terms of an epistemology of architecture.

This diversity is not an anomaly, and we must assume it without any complex with regard to other disciplines. This is the specific nature of our subject of study: that it can only be understood if all its facets are taken into account. The merit of the bi-annual ARCC-EAAE conference is precisely that it brings together architectural research of different types and creates favorable conditions for unexpected cross-disciplinary interchange and cross-fertilisation. It leads each researcher to question their own specialism and to revive their curiosity. May this spirit last, and many thanks to Lucie Fontein and ARCC for once again creating the conditions for its success. The article that she presents in this EAAE News Sheet reviews in detail, and with humour, the activities, events and content of the conference.

La mise en œuvre de la conférence hi-annuelle ARCC-EAAE est toujours une tâche difficile à mener à bien pour ceux qui en assument la charge. Le mérite en revient cette année à Lucie Fontein, pour l'ARCC, qui a su organiser avec son équipe, la McGill school of architecture, l'école d'architecture de l'Université de Montréal, le CCA (Centre Canadien d'Architecture), un événement vivant et riche. Vivant, grâce à la variété et la qualité des évènements (visites, conférences invitées) qui ont ponctué son déroulement. Riche, parce que les contributions de chercheurs américains, canadiens, australiens et européens présents ont montré, à l'évidence, que la recherche en architecture est multiforme et variée et qu'il est illusoire de vouloir la réduire à un modèle unique. Ici, elle emprunte les méthodes des sciences physiques pour approcher une interprétation sensible et un sentiment de confort. Là, l'analyse d'un projet résidentiel démontre que son architecture bâtie et paysagère de qualité, peut, par ses principes de composition et son ordonnance, optimiser les dispositifs techniques mis en œuvre pour le développement durable. Certains chercheurs-praticiens, sur la base de leurs propres pratiques, s'appliquent à dégager des modalités de recherche propres aux agences pour associer innovation et créativité. D'autres, plus informaticiens, élaborent des modèles d'échange d'information et des procédures de conception coopératives utilisant les ressources d'Internet. Quant aux théoriciens, ils débattent de termes plus fondamentaux d'une épistémologie de l'architecture.

Cette diversité n'est pas une anomalie et nous devons l'assumer sans complexe envers les autres disciplines. C'est la spécificité de notre objet d'étude que de ne pouvoir être compris qu'au travers de multiples facettes.

Le mérite de la conférence bi-annuelle ARCC-EAAE est précisément de rassembler des recherches de natures différentes sur l'architecture et de favoriser des croisements et des fécondations inattendues. Elle conduit chaque chercheur à questionner sa spécialité et à remettre en jeu sa curiosité. Pourvu que cet esprit perdure et merci donc à Lucie Fontein et à l'ARCC d'avoir su créer à nouveau les conditions de son avènement.

ARCC/EAAE 2002 International Conference on Architectural Research

ARCC-EAAE Confrence, 22-25 May 2002, McGill University, Monteral. Quebec, Canada

Report

Lucie Fontein, Conference co-chair, Associate Professor School of Architecture, Carleton University, Ottawa, Canada

The Cat only grinned when it saw Alice. It looked good-natured, she thought: still it had very long claws and a great many teeth, so she felt that it ought to be treated with respect.

"Cheshire Puss," she began, rather timidly, as she did not at all know whether it would like the name: however, it only grinned a little wider. "Come, it's pleased so far," thought Alice, and she went on. "Would you tell me, please, which way I ought to go from here?"

"That depends a good deal on where you want to get to," said the Cat.

(Lewis Carroll, Alice's Adventures in Wonderland)

"It's like herding cats" is an expression that could describe the *ARCC/EAAE 2002 International Conference on Architectural Research* that took place in Montreal on May 22–25, 2002.

In ancient Rome the cat was a symbol of liberty; no animal is as opposed to restraint as a cat.

And, I would argue, so are architectural researchers - a more diverse and individualist group of people would be hard to find.

The third biennial *ARCC/EAAE Conference* was hosted this year by *McGill University*. While the theme of the conference was broad, dealing with the vast range of issues encountered in the field of architectural research, the papers were, for the most part, quite focused.

It is this particular blend of inductive and deductive trains of thought that characterizes these joint conferences. While grappling with and sharing strategies for architectural research, one is also exposed to topics and research methodologies that one might never encounter at a topic-defined conference.

What does define these conferences, however, is a serious regard for the role of research in architectural education.

What is the relationship of research to our teaching? To what extent does design constitute research? Can we define research protocols specific to the field of architecture? In these days of government cutbacks to education, when university research projects are seen as revenue opportunities, and when privately funded research projects are inevitably coloured by the funding agency

involved, what is happening to academic freedom in research?

There are times when one feels very much like a cat on hot bricks. We must be very careful to maintain integrity and independence in our work and not let the tail wag the dog.

Although the call for papers was extremely wide, the papers submitted fell into relatively few session themes, revealing a clear bias in current research interests: pedagogical/research theory and methods, digital media, environmental concerns, and cultural identity.

Notably, it was mainly the Europeans who supplied the "theoretical" and perhaps more polemical content, while the Americans tended to follow a more traditional research methodology.

It would be interesting to develop statistics on what we might call "curiosity-based" versus "funded" research and the types of questions that each raises. It would be a sad day indeed if it comes to the point where curiosity does kill the cat.²

In the future, to ensure a more even quality, we might insist that accepted papers situate their particular topic in a larger theoretical/ethical framework and articulate a clear position with respect to other research being done.

While the papers were quite varied, both in subject and in quality, the keynote addresses were nothing less than the cat's meow.³

The opening address, hosted by McGill University School of Architecture, was delivered by Dr. Alberto Pérez-Gómez, Saidye Rosner Bronfman Professor of the History of Architecture. In his paper, entitled Beyond Globalization: Priorities for Research and Education in Architecture, he challenged us as architectural educators to radically redefine the nature and objectives of architectural education.

He exhorted us to be critically aware of the enormous influence that digital media have on design, cautioning us against the recent "rhetorical instrumentality" that has simply resulted in new forms of "self-referential, structural determinism ... oblivious of cultural context and the experiencing body... disengaged from traditional ethical imperatives... Design cannot be dictated by functions, algorithms or any sort of compositional *mathesis*,

for the issues of architecture are never simply technological or aesthetic."

Instead, Dr. Pérez-Gómez suggested that architectural education emphasize the imagination in the effort to make poetic artifacts.

If architecture possesses its own "universe of discourse," it is a kind of poetic making which is both culturally specific and universal for the human imagination ... Over millennia it has seemed capable of offering humanity, through the corporeal imagination, a sense of existential orientation - far more than merely pleasure, or a technical solution to pragmatic necessity.

Engaging the fictional character of the discipline... thus becomes another crucial aspect of architectural education.

Out of the dynamic tension between everyday speech and poetry, hopefully will emerge an architecture embodying the "poetry of reason," fully respectful of cultural differences, yet capable of translation by others.

An inspiring lecture, it left us with the challenging task of translating such thinking into our curricula. Of course, there is no single solution, but in these times of technological enframing it is crucial that we continue to discuss and struggle to define the fundamental essence of our discipline.

This we did at the gala dinner, followed by an evening of snooker in the wonderfully Victorian setting of the University Club.

The juxtaposition, however, of serious architectural discourse and "stellar" snooker skills was enough to make a cat laugh.⁴

The second evening of the conference was sponsored by the *Ecole d'Architecture at the Université de Montréal.*

Antoine Picon, Professor of the History of Architecture and Technology in the Graduate School of Design at Harvard University, was the invited speaker for this event.

Dr. Picon also spoke to the issue of imagination, but in this case a social imagination, which he defined as "a system of images and representations of the natural and social order that is widespread among the members of a given society and culture."

From catacombs to catwalks, Dr. Picon traced the cultural perception of materials and structure, describing the relationship between the social imagination and the development of building technologies. This relationship, he argued, served the extant order but could also announce developments yet unseen. "Like social imagination, architecture is as much about the future, a future different from the present, than about the prevailing economical and social conditions."

In this "utopic" spirit, Dr. Picon concluded by raising the question of digital technologies and the new perspectives that digital media open up for the discipline of architecture and its practice.

The final evening of the conference, sponsored by *Public Works and Government Services Canada*, was held at the *Canadian Centre for Architecture*. *Francine Houben* of *Mecanoo Architects*, in Delft, The Netherlands, spoke on her research in the aesthetics of mobility.

Mrs. Houben's talk not only was challenging at the level of content, but also posed a direct challenge to us to participate in the first *Rotterdam Biennale*, at which she intends to mount a comparative exhibit of world cities and their aesthetic engagement with car travel. The talk itself demonstrated research strategies that her own office had used to analyze the aesthetic experience and implications of car travel for the Randstadt area of the Netherlands. (Others might choose perhaps, to compare the use of cat's eyes⁵ in different urban contexts.)

This talk certainly put the cat among the pigeons. Seen as a single-minded research enterprise, I would agree with a number of the conference attendees that this study misses many aspects of architectural engagement. But placed in the larger context of urban design research, this work raises some interesting questions about the undeniable role of the automobile in architectural and natural environments.

Again, three distinct and passionate voices. It is now up to us to see how the cat jumps. ⁷

The final session of the conference returned to the question of the bounds of the discipline of architecture, with a paper presented by the EAAE conference co-chair, *Stéphane Hanrot*.

This was followed by a lively discussion that participants at the first two ARCC/EAAE conferences in Raleigh and Paris would have recognized as a continuing and decidedly inconclusive narrative.

I believe there was general agreement, however, that we must never lose sight of the active and ethical position that each of us must take with respect to the research endeavour.

Finally, the cat was let out of the bag⁸ regarding the location and topic of the next ARCC/EAAE conference: Dublin, 2004: "Entre chercheurs et praticiens, quelle recherche architecturale?"

All this travel ... it's a dog's life!⁹

Notes

- 1. Like a cat on hot bricks: very uneasy.
- 2. Curiosity killed the cat: a story in which "the cat" followed "curiosity" too far.
- 3. The cat's meow; also the cat's pyjamas: something superlatively good.
- 4. Enough to make a cat laugh: incongruously ridiculous.
- 5. Cat's eye: trade name of a reflector embedded in the road to guide motorists.
- 6. To put the cat among the pigeons: to stir up trouble, dissension.
- 7. See how the cat jumps: see "which way the wind blows," awaiting the course of events before one expresses an opinion or supports a course of action.
- 8 To let the cat out of the bag: to disclose a secret.
- 9 To lead a dog's life: to be harried from pillar to post, to be nagged constantly, never to be left in peace.









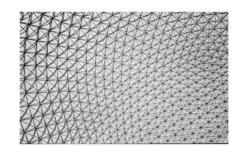


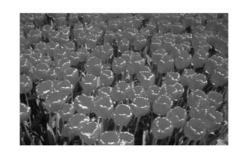


























Montréal, Canada. Photos by Anne Elisabeth Toft

Architecture and Its Image

Interview with Dr. Alberto Pérez-Gómez, 23 May 2002

Increasing globalisation has in recent years transformed our cities into physical expressions of global economies in which only traces of local culture remain. At the same time, the computer has accelerated the mass media into digital electronic communication, which in its tendency towards specialisation and individualisation has changed the mass society of the post-war period into a society, which increasingly consists of niche cultures.

Which consequences does this have for architecture and how does it affect our expectations from and our understanding of architecture? How do we actually foresee the future for architecture and which 'role' do we think will devolve upon us as architects? How do the architectural education and the academic environment deal with the current subjects of today, and is it at all capable of bringing forth architects that are able to solve the actual tasks?

The fading of cultural boundaries, the ever-increasing sophistication of technical expertise and the use of new and powerful media call for architects to reflect on the discipline and the meaning of their actions.

Dr. Alberto Pérez-Gómez - Professor of the History of Architecture at McGill University School of Architecture, Montréal, Canada - believes that one of the most important issues to tackle today is indeed how to reconcile a certain mode of production that has an inherent instrumentality and universality as well as the genuine local dimension of a specific culture built into it.

Dr. Alberto Pérez-Gómez was invited to participate as a keynote speaker in the *ARCC/EAAE 2002 International Conference on Architectural Research*, 22-25 May 2002.

Hosting the conference was McGill University School of Architecture, Montréal, Canada.

EAAE News Sheet Editor, Anne Elisabeth Toft interviewed Dr. Alberto Pérez-Gómez on 23 May 2002 during the above conference.

Yesterday you were a keynote speaker at the ARCC/EAAE 2002 International Conference on Architectural Research. What was the subject of your lecture: Beyond Globalization: Priorities for Research and Education in Architecture?

I tried to sketch a vision of priorities in architecture.

I did so not necessarily to exclude any of the many and very diverse topics that concern our colleagues here at the conference, but rather to understand what is really primary in architecture as a discipline.

I basically said a few words about my own work on the origins of modern architectural education – that is to say – school-based education in the beginning of the 19th century and the alternatives that started to develop around the same time.

My point is that, after having done some research on the topic, one can indeed find real alternatives to the way one does things today.

In my lecture I ended up with some preliminary conclusions that – as I put it – demand some radical revision of what we do in school and what we expect from practice.

I very briefly emphasised that school should not just simply reproduce practice; that the issue in school should definitely be to *educate* rather than to *train* the students; that the issue in school should be the discipline much more than the technology of architecture. It is an exposure to the possibility of 'making' *poetically* that is at stake and the development of language for an *ethical* practice that has to come from a historical understanding of the discipline. Indeed, I think that the school of architecture should be much more in line with the humanities than it is today.

With regard to practice I was envisioning the possibility of a more serious involvement of the practice around the world in a kind of continuing education. An education, which among other things would insist on the true local dimension of practice around the world, valorising language and oral communication.

Until today man's relationship with his environment has been determined by his idea of place or 'topos'. Since the Romans, when the crossing of the *cardo* and *decumanus* marked the topos of the Roman encampment, man has been defining place as the mark. Now, however, we are experiencing a change from the historically created locality to the anonymous system; an entropic state. The increased trans-national communica-

tion creates new conditions. In a way the world becomes more similar and at the same time increasingly diversified.

Is globalisation the main challenge for the architects of the future or is there an even more dominant question?

The problem seemed less critical a generation ago than it seems today. I think one of the most important issues to tackle today is *how* to reconcile a certain mode of production that has an inherent instrumentality and universality and the genuine local dimension of a specific culture built into it. I am not saying this is the *only* issue that we have to tackle today, but if our interest is indeed to communicate poetically and without offending others, I do think this is one of the most important questions.

A subject that you are noted for being very much occupied with since the 1980s is architectural representations. ¹

The arrival of new techniques of representation through history has had a crucial influence on the work of the architect and thereby also on the design of the built architecture.

Based on a 'reading' of analogous representation techniques and instrumental processes of former times, and the architect's use of these, you have written about new visualisation techniques attached to the digital media. You are among other subjects discussing how these media influence the actual design processes of the architects, where the digital media/technology can be included, both as analytical and generating tools as well as communicative statements in subsequent situations of propagation.

Architects have always worked in imaginary space and used representations. What do the representations do to our *expectations* from built architecture, and how do you think in this connection that the digital representation techniques or the digital 'simulations' have changed our relationship to and understanding of architecture?

That is of course a very complex question with many facets to it. On a certain level, the more recent 'state-of-the-art' techniques for representation that are used to explore issues in architecture are not any different from other forms of externalising ideas that probably have their origin – if I have to name an origin – in *Leon Battista Alberti's Lineamenta* ² and in the renaissance conception that somehow it is the responsibility of the architect to create images in his or her mind and then externalise them. Probably such a concern was not present before the renaissance. After that point,

however, the cultural context and the tools work together to transform the realities that architects work with. My argument has always been that a real turning point was the beginning of the 19th century when the work of architecture was conceptualised as something that could be fully notated – not unlike how a symphony by for instance *Ludwig van Beethoven* would be fully notated at the same time.

There is in fact a real analogy at work in music and in architecture.

It is only after the French Revolution and really not until romanticism and the beginning of the 19th century that you see the composer as someone who takes complete responsibility for a work of music; a work which is performed by others, but which is fully notated - even with metronome and modulation markings - by the composer. Previously the music was normally composed for some particular occasion and not rarely would the 'author' not only be the patron, but also - and as much – the musician.

The post-romantic work as it exists on a piece of paper has a kind of autonomy from the composer and the performer, but the work also exists autonomously from the *function* that is associated with the music.

Architecture went through a similar transformation in the beginning of the 19th century. The idea of *autonomy* marked the turning point.

It is interesting that one can look at two seemingly opposed categories and they both fit the model, so to speak - whether it is *L.E. Boullée*, who believed that the work of architecture should actually be like a painter's work - or *J.-N.-L. Durand*, who in a way wanted to be as much an engineer as possible rather than a painter, but who also believed that the role of the architect is to communicate on one sheet of paper a coordinated set of drawings.

The expectation – that this is indeed a *work* and that it is a full prediction of the thing or the building to come - was the same whether you had an artistic or a technical intention.

The computer and digital technology – however fascinating and complex all that may be – are in my opinion a development of the same paradigm. Following this, I believe that both the potentials and the limitations of these modes of representation are connected to this issue.

On one hand there is something wonderful and intriguing about having a work – architecture or music - that exists in its own right; a work that can be interpreted by somebody else, a work that you can delegate. On the other hand there is something very problematic about it, and there is always an

issue of interpretation that the architect or the composer does not control.

Engaging digital media does not escape these problems. In short, I think that it is very dangerous when these media are used to stand *naively* for the building, as if what you are doing is in a one-to-one relationship with what will be built. I think that it is a terrible misunderstanding, but unfortunately it happens all the time.

I do believe that the various modes of representation - digital or analogous – can be used *creatively*.

Because the digital media are so powerful, though, they tend to make us believe that this 'substitution' is even more likely. The way that these media are being used in offices around the world clearly shows that the world has not become richer architecturally because of them – on the contrary, I would say.

So, what are, in your opinion, the techniques or modes of representation that make 'sense' today, and how should they be used? Also, how important are these techniques and modes to the way we define and create architecture?

Well, from what I said, I do not really think that it is a question of one technique or mode of representation being better than the other. It is rather a question of *how* and *why* you use a technique of representation.

When it comes to the digital media and the computer, I do feel, though, that the use of the keyboard makes it more difficult for one to engage certain tactile dimensions and to be aware of the importance of the process. Somehow the computer does not valorise process – it is indeed very product oriented.

So, in my view, there are certain inherent difficulties in the use of these media. On the other hand, there are also advantages. They obviously allow time in representations, and facilitate formal novelty. However, without a critical position, there is a danger that the computer will impose – if I may use that term - its own architecture on the work.

Architecture is received tactilely and optically. The tactile side, however, bears no counterpart to the contemplation of the optical. Tactile reception is not so much a function of attention, but rather of habit. Although it is a general assumption that the architectural experience is bound to the architectural work – its here and now - and to the direct confrontation with it, we often today base our whole understanding and knowledge of architecture and architectural works solely on the 'reading' of visual representations. During the

20th century *photography* has – more than any other technique of representation –become a decisive factor for our relationship with and understanding of architecture. Is it at all possible, in your opinion, to capture, translate and transmit architectural experience via representations?

Do you mean photography specifically in this case?

Yes, I was specifically thinking of photography. However, architecture is the only art form – at least to my knowledge – that embraces almost all of our senses; so whether the representation is a drawing, a model, a photography, a computer rendering or something else – can it actually capture and transmit the quite unique and complex *experience* of architecture? Maybe the representation always transmits something else?

You are absolutely right. And, let me add, I think your question is very good.

(Pause) From a certain angle – and perhaps it is the most basic angle – it is true that architecture constructs its *meaning* as we encounter it in our everyday life through significant actions that used to be rituals but today could be other social programs.

It involves the whole body and it involves a kind of perception that is not necessarily the kind of perception that one associates with *aesthetics*. However - and this is where I think it gets very complicated; *because* the world is both given to us and it is also constructed by others, an intertwining of the natural and the cultural, so to speak – when we are born into a technological world we do not expect anything to be mysterious.

The fact that the *expectation* is that the world is clear and devoid of enigma is a problem when you think of how architecture always conveyed its significance. It always had to do with orienting us but also opening us up to our spirituality, which is precisely what we cannot understand.

It is therefore very striking that most architects are interested in photography and movies.

I think it is indeed because sometimes movies and images enable us to more easily get in touch with this enigma, this 'otherness'. That is why I also think the question is so intricate, because one senses these kinds of analogies where this enigma often appears more clearly in an image than it might in the built work. It seems for instance that Andrej Tarkovskij – to mention one of my favourite filmmakers – is sometimes able to compress what appears to be hours into one single image; something that you can almost touch, that is almost instantaneous and present.

In the end, though, *nothing* can substitute our experience of the built work. I do not think it is possible to reduce it. But, *because* of our expectations in the contemporary world, a good film about a building - which is of course very difficult to make, a work of art in itself - this kind of 'translation' might say more about the architecture than what it appears to you in your experience of it.

It is a paradox that has engaged many brilliant minds, among others *Maurice Merleau-Ponty* in his book *Phénoménologie de la perception* ³.

He says at one point that he wishes he did not have to write about perception because in a way there is something wrong with culture when what one says about perception is more interesting than perception itself.

Perception is our primary form of knowing and does not exist apart from the a priori of the body's structure and its engagement in the world. This "owned body" as Maurice Merleau-Ponty would say, is the locus of all formulations about the world; it not only occupies space and time but consists of spatiality and temporality.

As a phenomenologist I would say in the first instance that *nothing* substitutes my experience of a building. You cannot substitute it! You *cannot* render this experience in any other way because it is really for the body and it is in action – it is in what I *do* in it. However, because of the way we have constructed our culture we have this 'dilemma', which I think all architects recognise.

What you say makes me think of some of Walter Benjamin's writings on photography. I particularly think of The Work of Art in the Age of Mechanical Reproduction, in which Walter Benjamin among other subjects talks about the "aura" of things - including art - and how, in Benjamin's opinion, one cannot fully render this aura in a photograph. 4 The aura of a thing decays (German: verfallt) once you try to represent it. At the same time Benjamin positively claims - see in this connection also the text A Short History of Photography - that among other things the mediation itself and the technical reproduction technique of the photograph are constituting for new 'meanings' and that photography with its time lapses, enlargements, etc. enables us to learn about, what Benjamin himself calls, the optical unconscious ⁵.

That is correct. One thing is the medium but then of course it is also how you use the medium.

In his text *The Work of Art in the Age of Mechanical Reproduction*, Benjamin at one point talks about *close-ups*, and how close-ups de-familiarise the familiar and by doing that transcend the very limitations of photography that he speaks

about – for instance what photography *cannot* do in relation to painting. However, the point is that the medium itself allows for you to do other things. I think *this* is really the conversation that one has to keep in mind!

Today, with the introduction of digital imaging processes, we all know that photographs are highly 'coded' renderings. Yet, the myth of photographic truth to some extent still lives on.

Many historians and theorists argue that the emergence of photography and film in the 19th century represents a culmination of a long and complex technological and/or ideological evolution in the West, in which former methods of projection and drafting dating back to the renaissance including camera obscura gradually became the modern photographic camera. What we are dealing with here is a model of continuity which claims, that the renaissance perspective and the photograph are both an expression of the strive towards an objective equivalent to man's vision. Other theorists, however, such as Jonathan Crary, insist that this model indeed collapsed in the beginning of the 19th century, as the social, cultural and scientific environment at this time had already lived through the break with these conditions of sight or looking that the camera obscura model dictated ⁶.

What are your thoughts on this – and why has the myth of photographic truth been so dominant?

Answering in an either/or way to the question of what are the origins of photography and of the 19th century forms of representation is very problematic. I do not think you can say that there are no connections to the renaissance models – and not only to the renaissance models, but to earlier models as well. If you are in fact serious about it you have to trace the connections back to *Euclid's Optics*, because nothing in the renaissance perspective could have been possible without *Euclid's Optics*.

Clearly there is a discontinuity between what is called *perspectiva artificialis* in the renaissance and *perspectiva naturalis*.

Perspectiva naturalis is an early mathematics of how the light rays – if you imagine them travelling in a straight line – form a cone of vision. It allows you to realise that what you experience with your body is not identical to what you experience with your eyes, which means that already in Hellenic times there was a kind of awareness of these matters.

In the renaissance – whether you read *Alberti* or *Piero della Francesca's* treatise *De Prospectiva Pingendi* – the realisation of Euclid is never far

away. It is a different paradigm, however. What now matters is that *that* which is revealed – the vision, which is revealed – carries an ontological value and therefore has to be associated with mathematics. It has to be *constructed* and that is the origin of *perspectiva artificialis*.

Nevertheless the principle is the same. *Piero della Francesca* for instance talks about the law of proportional triangles. He does so to explain how that which is far appears small and that which is close appears large. This comes straight from Euclid, though. Therefore, epistemologically there is a continuity!

This continuity is not broken in the beginning of the 19th century. In fact what makes descriptive geometry possible is indeed this inheritance where the optical dimension is truly congruent with the construction. In the beginning of the 19th century it is finally made to work perfectly and the architect or the painter could claim that what is *represented* is what is *seen*.

The way I see it the emblem for this modern paradigm is not the *camera obscura* but rather the *camera lucida*. The *camera lucida* was an instrument that did not exist before the early 19th century. This instrument permitted you to look straight through an eyepiece and with a prism you were able to look down at the same time. The claim was that by operating this instrument you could draw *exactly* what appeared on your retina without being an artist. This claim and this whole idea are *truly* modern.

But, at the same time there is also continuity.

So, if I am to answer your question, I think the answer is neither the continuous diagram that you mention, a model which might suggest that if the renaissance painters had had a photographic camera they would not have painted and that it is all about a progress towards a more precise representation – nor is it a totally discontinuous history for I think there is indeed already in Greek times a subject. It is not the political subject that *Jonathan Crary* talks about - it is a subject of a more philosophical nature that negotiates the initial distance between the mind that thinks and the world out there.

So, to repeat, the answer is more ambivalent than either/or. Now, having said that you can of course repeat the second question – namely, why has the myth of photographic truth been so dominant? However, what is really important in my opinion is to understand that all the time you have to deal with this ambivalence.

You just very briefly explained to us how architecture went through a transformation in the 19th

century and that it was indeed the idea of autonomy and the fully notated work that marked the crucial turning point and the arrival of a new paradigm.

The 19th century was also the time of *positivism*, which - among other things - involved the belief that empirical truth can be established through visual evidence and it was also the time of the first photographic representations. There seems to be a connection!

Yes, I very much think so. In the beginning of the 19th century there is certainly this expectation that the geometry, the mathematics and the optics are synthetic – that they are one – and that finally we have come to a way to describe *that* which is out there *precisely* through descriptive geometry or *precisely* through these new methods of perspective. I think it really has to do with this question of notation that you could now use these systems to make a work that stood for the world.

I think that the problem for us 200 hundred years later is that some of the technologies that we use are still having built into them this capacity and this belief. Even though digital photography – the way you phrased your previous question – makes it fairly clear that what we are seeing has probably nothing to do with what is out there, the optical paradigm nevertheless still to some extend holds; we somehow expect it to be.

In my opinion, that is exactly what makes these tools dangerous.

Architecture is not only the built, but is to an equal extent an *expectation horizon*, stretched through what is said and 'written' about architecture, be it words, text, drawing, model, photography, etc.

Illustrated books on architecture have been published continuously since the sixteenth century. Thus, since then, the union of illustration with printed text has been a key element in the exposition and discussion of the formal vocabulary of architecture.

However, over the course of the last two centuries, Western culture has come to be dominated by visual rather than textual media. Text used to be the context of pictures, but today we experience to an increasing degree that pictures become the context of pictures – we understand pictures through pictures. This, of course, is central to how we represent, make meaning, and communicate in the world around us.

What do you think of the 'writing of architectural history' of today, where we are more than ever confronted with and reading architecture exclusively through the photographically or digitally sampled pictures?

What you state in your question is right. Somehow the picture suggests that the language is not important. The result is loss of language. Maybe the textural is on its way out – maybe it is not, it is difficult to say. Sometimes I do believe, though, that one struggles to put things in writing and then nobody reads them, because nobody has the patience. When I was young I used to read books from beginning to end – nobody does that anymore.

It is a very odd world that we live in. Perhaps the hope in all of this is the recovery of the oral dimension – of speech and face-to-face communication. When I was speaking about architectural education yesterday I emphasised – and maybe it sounds really conservative or even conventional – that it is indeed this *mode* that is the mode of teaching.

I believe it is through speech and in a dialogical condition of language, of speech, that one can really get at issues, and I think that is very important that we recognise that. If you mediate everything through Internet and everything becomes more or less like a discussion group on the web I do not think that it has the same value.

You say that perhaps the hope in all of this is the recovery of the oral dimension, speech and face-to-face communication. Talking about language - are we not always *linguistic* when we 'read' or interpret pictures or images?

The poetic image is not necessarily a picture – in fact it is a very provocative and problematic statement that *Paul Ricoeur* makes when he says that the imagination – even though it is connected to *imago* or image – is essentially linguistic; that it starts with words.

I know that for many people, not least architects, this is hard to swallow, but our world is linguistic. The world of humanity is linguistic – and language is indeed what makes us human.

Paul Ricoeur makes a very good point of this saying that without language you really have no image.

An *image* or a metaphor is always something, which is both inside and outside. A *picture* is not inside – it is outside, but what you really grasp are the words. It is through language - a linguistic interpretation - that you internalise that which is outside

Let me use an example to perhaps better point this out. When you say, to use *John Hawkes*' metaphor: *The sun is a blood orange*. – you can of course imagine the sun. The whole point or the message of the image, however, is actually linguistic.

I think it is a very important issue that we sometimes tend to trivialise the whole idea or notion of *image* because we associate it with 'all that stuff' – *pictures* - with which we are constantly bombarded.

However, the image is really about our own self-identification, it is the structure of our memory and all this is built of words. When you have a dream, for instance, you cannot have access to it unless you tell it. The moment you tell about your dream, however, you somehow feel that it has diminished. Nevertheless, without the words, without you writing it down or telling it to someone – the dream does not exist.

I think that most architects tend to unfortunately see themselves first and foremost as *visual* artists, which means that they overlook these issues or they do not take them very seriously. To me, however, language is a very important concern in the education of architects.

So you call for the architectural educations to make a point of developing the students' analytical abilities?

Yes, absolutely.

Architecture is not simply something represented – it is also a way of representing. The building itself is a mechanism of representation. Thus, the building is not simply represented in images but is a *mechanism* for producing images. For that same reason the building itself should be understood on the same terms as the media in which we often encounter it – drawings, photographs, writings, films, advertisements, etc.

Anyway, today it is difficult not to include mass media, when you think or talk about architecture – but what does it mean when something – this being architecture - is being mediated? In other words, what does mass media – and its context – do to that which it mediates?

First of all, I believe that the primary embodiment of architecture is indeed the built work. However, as I said before, the complexity of our present cultural situation makes it perhaps more possible now than ever that we find the architectural imagery - this mode of communication which is in fact about understanding limits - in other media. Architecture *reveals* limits for other modes of communication that are more closely connected to language.

Architecture sets the boundaries for language, but these boundaries can appear in many different media - film and literature - to mention a few. So, one could think of many embodiments of this notion of space and time as limit - as significant limit for human endeavour - that are in other media.

In every encounter with the 'other' or with the 'other's' words or works the person that encounters is translating and therefore needs to have a critical awareness of this operation.

You are absolutely right that the *context* of for instance a picture, a building or some words can change the meaning of the picture, the building or the words. This is in fact the realisation of the Russian filmmaker *Sergej Eisenstein* when he wrote about montage and how montage works in cinematography.

I think that you can do one of two things; you can either believe that we have a critical engagement with which we can understand or you can believe that we have no access to anything *real*.

I do not believe in the latter, though. Here, phenomenology to me is very important. I think phenomenology helps deconstruct this permanent scepticism that emerges from the realisation that everything is mediated, interpreted, contextualised and re-contextualised.

I believe that we have a pre-given, pre-reflective engagement with the world. We all have a body – and this matters.

There is a very famous experiment in phenomenology, which is an experiment of inverted vision. You put on a pair of special glasses that inverts your vision. The first few hours you feel terrible and you vomit, but after a short while – a day or two – your body acts in a perfectly normal way. This somehow proves that vision is very fragile.

It also proves, I believe, that there is something more basic that has to do with the structure of gravity and verticality – the structure of your body, so to speak – which remains there and which is primary, despite cultural differences concerning body image.

So, no matter how much mediation and no matter how many 'tricks', I think that in the end you have to have some confidence that what *appears* to be important is indeed important to you. Furthermore, with a bit of luck, what matters to you will also matter to other people.

You have already briefly mentioned the film medium in this interview. I would, however, like to ask a couple of amplifying questions regarding this *exact* medium.

A number of architects in the 20th century – among others the architects *Ray* and *Charles Eames* - were fond of using film recordings in connection with the registration and representa-

tion of architecture. Why were they fond of this medium – and how does this medium with its particular visual 'staging', in your opinion, affect our understanding of and expectation to phenomena such as for instance space, time and distance in architecture?

Machines modify perception – but at the same time there is something more basic.

We all know that for instance filmic codes undergo development constantly. Codes that are new and innovative after a while become old-fashioned and basically meaningless.

An example to use could be the film *Metropolis* by the German filmmaker *Fritz Lang*. You may appreciate this great film, but because today you can do so much more with the film medium than in 1927, when Metropolis was made, you also look at it as a historical curiosity.

However, with a work of art, although there is this dimension, there is certainly something else that is truly trans-historical and that I believe indeed speaks beyond all kinds of techniques and limitations of media. Again, it is a postulate, but one well defended by *George Steiner* against the ultimately absurd tendency of deconstructivism to homogenise everything ⁷.

The logic may tell you that everything is relative, but I think that one should grant that there are indeed distinctions. In the end, the bottom line is this mysterious *erotic* dimension of the work of art and *that* is something, which is impossible to paraphrase. Erotic encounters are erotic encounters - they are like *epiphanies* - and they have this capacity – no matter what you think about them - to transform your life.

Since moving images – film, video, etc. – are presented in narrative forms their meaning often lies in the sequence of images rather than its individual frames. Do you find film or video recordings particularly suitable for representing and communicating architecture?

The photograph by collapsing optics with geometry tends to objectify. It does not always do so but it certainly tends to objectify. It takes time out of the picture; it freezes the image. Obviously film and video introduce time back. The Russian filmmaker *Andrej Tarkovskij* argues that what the filmmaker really does is *to sculpt* in time.

So, in that sense – because film involves time like architecture involves time - I think there is in a way an inherent affinity between film and architecture. I do not find the same kind of relationship between film and photography or architecture and photography.

Images – including architectural images – gain meaning in many cultural arenas – art, commerce, science, etc. – to name a few.

In an era of globalisation images circulate in and across cultures all the time. When images move from one social realm to another they often acquire new meaning in that move.

Do you think that in the future we will at all be able to maintain a somewhat collective understanding of architectural quality and meaning?

(Pause) I think that the only way that I see this is again by embracing this seeming contradiction that emerges when you recognise that the only way to be understood by the 'other' is to create your own poetry.

Of course you are right - the way you put it that poetic images tend to be grasped differently by others and in fact even within your own culture. You create something but once it becomes public you have no control, you do not know how it will be received. In a sense you are not responsible for your own genius or failures - others are. So, it is always a question of translation, but I think the solution or the way out is not by somehow imagining some universal language, but rather by cultivating the possibilities of personal poetry - something that is specific. Paradoxically it is poetry, which is truly translatable - not prose. I am perfectly aware that what I suggest is not easy, but I do not think we have an alternative. For me that is the paradigm of architecture and human works.

You believe that ultimately architecture is about ethics and that architecture has an ethical function. How do we as teachers avoid teaching our students 'formulas' or 'strategies'? How can we prepare the students for the vast complexity of our time?

I was talking about some of these things in my lecture yesterday.

In professional education I think that teaching should weigh history and hermeneutics much more and I think that it is very important that the design studios are not too product-oriented.

The future of architecture in general is difficult to map, but I do think that despite all the things that seem so much more urgent – like solving political problems and the like – without architecture our world-civilisation does not make much sense.

I think the future of architecture is intimately connected to the future of a humanity that preserves the spiritual dimension, a humanity that acknowledges mortality as part of life, a humanity that acknowledges that *Eros* is sweet communion

but also bitter because you are never complete – you are always looking for the 'other'.

Acknowledging all this is incredibly difficult. It is the cross we bear from the beginning of time. I believe it is connected to architecture and without it, I think we will experience the end of architecture.

(Pause) I would very much like to think that humanity - as a spiritual entity - has a future, but I do not know! ■

Notes and References

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Biography

Alberto Pérez-Gómez was born in Mexico City in 1949. He obtained his undergraduate degree in architecture and engineering in Mexico City, did postgraduate work at Cornell University, and was awarded a Master of Arts and a Ph.D. by the University of Essex in England. He has taught at universities in Mexico City, Houston, Syracuse, and Toronto, at the Architectural Association in London, and was Director of the Carleton University School of Architecture from 1983 to 1986. He has lectured extensively in North America and Europe.

His numerous articles have been published in the Journal of Architectural Education, AA Files, Arquitecturas Bis, Section A, VIA, Architectural Design, ARQ, SKALA, A+U, Perspecta, and many other periodicals. His book Architecture and the Crisis of Modern Science (MIT Press, 1983) won the Alice Davis Hitchcock Award in 1984, a prize awarded every two years for the most significant work of scholarship in the field. He has also published two books of poetry in Spanish.

In January 1987 Pérez-Gómez was appointed Saidye Rosner Bronfman Professor of the History of Architecture at McGill University, where he is currently Director of the Graduate Program in the History and Theory of Architecture. From March 1990 to June 1993, he was also the Director of the Institut de recherche en histoire de l'architecture, a research institute co-sponsored by the Canadian Centre for Architecture, the Université de Montréal and McGill University, organizing many architectural conferences and events in Montréal during the last few years.

Pérez-Gómez is the author of Polyphilo or The Dark Forest Revisited (MIT Press, 1992), an erotic narrative/theory of architecture that retells the love story of the famous fifteenth century novel/treatise Hypnerotomachia Poliphili in late twentiethcentury terms. He is also co-editor of the series Chora: Intervals in the Philosophy of Architecture, which explores fundamental questions concerning the practice of architecture and examines its potential. A major book co-authored with Louise Pelletier, Architectural Representation and the Perspective Hinge (MIT Press, 1997), traces the history and theory of modern European architectural representation, with special reference to the role of projection in architectural design.

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Building Technologies, Imagination and Utopia

Dr. Antoine Picon, Harvard University Graduate School of Design, USA

Introduction

In France, architects often complain that the public is not interested in architecture and urban design. Now are architecture and urban design really interested in the public? In the past decades, architects and urban designers have seemed more often preoccupied with the internal debates of their disciplines, with the trends and fashions they generate among professionals, than with the more general political and social issues that they are related to. In the French case, it is, for instance, striking to observe how architects and urban designers have been absent from the political discussions regarding the city and its evolution. The same is true of subjects like the environment and sustainable development.

Such a situation is probably not a French specificity, although France is probably one of the countries where the indifference of the architects towards social issues is the more marked. At the dawn of a new millennium, the architectural discipline is often too self-centered. This kind of indifference is highly paradoxical, since architecture and its productions have never been as dependent on other fields ranging from the arts to the various technologies involved in the building process. Architectural education reflects this dependence or rather interconnection with the numerous subjects it encompasses. However, the lessons drawn from education are generally forgotten when the former students enter professional life.

There is a tendency among some architectural researchers to reproduce this indifference. Architectural history in particular has often been defined, in a restrictive way as the study of special, monumental buildings, or as an attempt to understand the procedures involved in their design, leaving aside all the dimensions that relate the architectural discipline to its social context. Strangely enough, given its subject, the history of building technologies has followed this path in many cases. This has led to detailed studies of structural evolution or developments in building techniques that do not take into account their broader social and cultural context. Such studies can be dubbed as internal, since they focus on the intrinsic logic of building technologies. Their lessons are of course fundamental, although their limited ambition

often lead to a divorce between their results and the more common questions raised by architectural history. For instance, the history of structural thought has seldom been connected with the evolution of architectural theory.

I would like to defend another kind of approach based on the study of the relationships between building technologies and their social and cultural context. In other words, I would like to consider here the history of building technologies as a branch of social and cultural history.

The relations between the history of building technology and social history can be apprehended in terms such as economical aggregates, statistics on labor, and the building industry. The only problem with this kind of approach is that it does not really bridge the gap between the architectural world and the rest of the academic community, because it does not interest architects but rather historians of economics or social historians. Adding a supplementary constraint, the cultural history of building technologies I am looking for should be of some interest for designers.

At this stage, social imagination can perhaps provide a possible mediation between what makes sense for architects and what historians of society and culture are concerned with. By social imagination, I mean what French historians call "imaginaire", namely a system of images and representations of the natural and social order that is widespread among the members of a given society and culture. These images and representations shape the ideals that emerge in this society. Social imagination is inseparably the extant order of things and being, and about the changes that should be brought to it. In other words, social imagination is the bearer of both an interpretation of the world and a project to transform it. Another important feature of imagination is that it ensures the coexistence of the apparently most heterogeneous things, acts and individuals. Thus social imagination is a necessary component of the complex maze of determinations that enables culture to providea coherence to the heterogeneous reality that it is confronted with.

For two reasons at least, architecture has definitely something to do with social imagination. The first one is the fact that social imagination plays a crucial role in the shaping of social ideals. Now, architecture has something to do with the social ideals of its time as *Peter Collins'* famous book, *Changing Ideals in Modern Architecture*, brilliantly demonstrates. By trying to give a built form to some of these ideals, architecture is clearly related to social imagination. Dealing with dimensions such as the biological analogy in the nineteenth century, Peter Collins' book can be interpreted as an attempt to relate architecture to the social imagination of the time. The biological model was indeed essential in the representations of nineteenth-century both natural and social order.

Social imagination is also about the capacity to overcome the heterogeneity of the world. Such a capacity plays an essential role in the design processes. Architecture can be defined through its power to encompass extremely diverse determinations. In this perspective, architectural imagination has something to do with social imagination. Architectural design is almost always an expression of social imagination.

In which ways are building technologies related to social imagination? The answer to this question is not as evident as when one deals with other dimensions of architecture like aesthetics or program. In the Vitruvian triad, beauty, utility, and solidity, solidity often seems the less permeable to cultural determinations. In the past decades, however, various attempts have been made to overcome the seemingly objective nature of building technologies. Dwelling on them, I would like now to follow some of the tracks they have opened to the historian of architecture.

First, I would like to deal with materials, or rather with the social construction of materials. For what recent studies have shown is that building materials, far from being always given by nature are actually the result of a social construction permeated with cultural notions.

Then I will turn to the notion of structure. We have become so accustomed to the notion of structure that we usually take it for something natural. There again, I would like to show how such a notion, at least in the French case, emerged in its modern form as a complex cultural construction. In order to do that, I will take a case study, namely the late eighteenth-century French churches and bridges that played a decisive role in the shaping of the notion.

In the past two centuries, architecture and engineering have been marked by a spectacular series of structural innovations. In a next step, I would like to relate structural inventiveness to social

ideals and even to utopia. In the case of engineering, the link between structural inventiveness and social ideals has been already emphasized by *David Billington* in his book, *The Tower and the Bridge*. One can go further and relate structural inventiveness to some utopian themes at work in the industrial society. More generally, building technologies bear the mark of ideals that often border utopia.

As a conclusion, I would like to evoke briefly the pending question of the so-called digital architecture and its meaning. With the computer, architecture is facing a complex challenge that threatens some of its most fundamental assumptions. What can be said about this challenge and the way it transforms the question of the relations between architecture and building technologies, on the one hand, social imagination and utopia, on the other?

The Social Constructions of Materials

For a positivist mind, materials certainly represent one of the soundest grounds in the history of architecture and building technologies. Their production and use seem to come under entirely objective factors, just as their properties that condition the type of architecture built with them. I am far from the intention to take a drastically reverse position. There are for sure objective factors at work in the history of materials. Now, cultural factors do also play a role.

A very easy way to be convinced of the importance of cultural factors is to pay attention to the changing definitions of what a material is that have been given throughout architectural history. For a nineteenth-century mind, the notion of material went with the idea of something relatively homogeneous, with a rather low degree of structural organization. Material was the raw substance from which structures could be designed and made. The diffusion of iron and steel played at the time an important role in this conception.

If one goes back in time, one is struck by the very different vision of materials that prevailed. If one takes the example of French classical architecture, that is to say French seventeenth- and eighteenth-century buildings, the notion of material covers an entirely different kind of reality. Material possessed a strong organic connotation. Wood, but also stone, were seen as the result of a natural process of growth. The case of stone has been studied by the historian of technology *André Guillerme* who has shown how stones were supposed to grow from earth and water like some kind of fruit. Practice went even further than theory. Here we have a wall typical of early eighteenth-century building in Nantes. If one pays closer attention

to the material used to reinforce masonry, one soon discovers that the ties are actually oxen leg bones. Animal bones could be considered as a material.

What that example tells us is that there was no strict demarcation line between the inorganic and the organic world, nor between the non-structural and the structural parts of construction. The bones had an organization at least as sophisticated as the masonry they helped to reinforce. There was no clear-cut distinction between what a nineteenth-century mind would later consider as a material and what he would define as a structure.

The changing nature of the definition of materials is useful in understanding something as puzzling as the way reinforced concrete, an assemblage that has clearly more to do with what we usually call a structure than with a mere material, was gradually seen as a material. Inventors and entrepreneurs such as *François Coignet*, and above all *François Hennebique*, clearly played a major role in this process by constructing a positive image of an entirely reliable substance, with easily determinable properties. The product that enabled Hennebique to build an empire from 1892 on, was however more a structure, with its columns and beams and their carefully designed reinforcements, than a material.

Today, we are perhaps confronted with the possibility of a new blurring between structure and material, because of the development of the so-called composite and smart materials that display a high degree of internal organization. Complexity is no longer confined to structures, as opposed to the relatively homogenous nature of materials. It is to be found at every level, from the microscopic organization of materials to the macroscopic assemblages designed by man. Hence, the fascination exerted on many designers by fractal geometry whose figures seem to rule the new world we are entering.

The various definitions given to materials throughout history have evident links with more general representations of natural and social order. The early modern vision was in accordance with the representations of the place of man in the creation that prevailed at the time. This vision must be taken into account in order to understand the realizations of the time. The absence of a clear-cut separation between the non-organic and the organic is for instance fundamental if one wants to avoid some rather common misinterpretation of the French formal gardens. Because of the relative indistinction between the inorganic and the organic, their strict geometry was not counternatural, as it has been often assumed by historians

and critics. The industrial-age conception clearly had something to do with the transformation of nature into something more passive, into a mere resource that man could work as he liked. In a similar way, the perspective of a new blurring of the notion of material is linked to the advent of the notion of information. In our world, information is everywhere, at every level, from the microscopic to the macroscopic level, from nature to society, from materials to fabricated structures. The development of composite and smart materials has to do with the vision of natural and social order that stems from this generalization of information.

Materials are socially constructed at various other levels. They emerge and diffuse through technological and economical processes. One of the keyissues involved in these processes is the stabilization of their properties. Iron truly became a building material after almost one century of trial and error attempts that aimed at giving it a reliable degree of strength that traditional iron parts did not possess except in domains like sword and canon making. Iron construction was inseparable from the batteries of norms and tests that framed its use. The same was true with concrete.

In the past decades, historians of science and technology have shown how the properties of artifacts are actually not entirely implied by their intrinsic nature. These properties imply a high degree of social construction. What does it mean for instance for a teddy bear to be safe for children? When one knows about the capacity displayed by children to use things in disconcerting ways it becomes clear that safety is a convention, a socially admitted convention. Safety for teddy bears, but also accuracy for missiles, are partly social constructions. In a Science Studies bestseller called Inventing Accuracy A Historical Sociology of Nuclear Missile Guidance, the historian of science Donald Mackenzie has demonstrated in a very convincing way that missile accuracy was almost always the result of a complex process of negotiation between experimental data, military strategies and political maneuvers. The properties of building materials are negotiated in a similar way. What does it mean to be resistant or brittle, to be fireproof or inflammable? These properties are always to some extent the outcome of an intricate process of normalization involving individuals and institutions, economical interests and visions. The best example is the gradual stabilization of reinforced concrete as a material. In this complex story that has been recently studied by scholars such as Cyrille Simonnet and Gwenaël Delhumeau in France, or by Réjean Legault in Canada, one is confronted with a complex set of experiments, economical and institutional strategies. A machine designed in the

1820s by the French engineer *Louis-Joseph Vicat* to define the hardness of concrete. Beside experiments, advertisement played an important role with an entrepreneur like *Hennebique*.

Experiments made by *Hennebique* on the strength of concrete beams were published in his company's journal, *Le Béton armé*. In France, the strategies of the State were also fundamental in order to understand the promotion of concrete against iron. French state engineers distrusted iron in which they had little expertise.

Other cultural factors also intervened. In France, the success of concrete was inseparable from a patrimonial vision of buildings. Concrete appeared as the true inheritor to stone, the only modern material that enabled the realization of truly permanent constructions, as opposed to iron which was always treated with suspicion by the homeowners. In his doctoral dissertation, Réjean Legault has pointed out other interesting cultural factors accounting for the time of the adoption of concrete by the Modern Movement, namely the links that were established very early on between the new material and photography. Since its use implied no specific form, contrary to iron, concrete needed an image. Hennebique, in particular, made extensive use of photography. At a certain point, this need for photographic images met with the modernist attitude towards built objects, with the ideal and abstract qualities they were looking for.

Materials are, largely, socially constructed, in relation to the prevailing representations of natural and social order. Leaving now this matter aside, I would like to turn to structure. There again, we will find social imagination at work in the development of the notion. This is especially clear in the French case, in the eighteenth- and early-nine-teenth century emergence of a structural attitude that will lead to subsequent rationalist doctrines such as *Viollet-le-Duc's* theory.

The Emergence of the Notion of Structure in Eighteenth - Century France

Historians of construction usually use the notion of structure as if nothing was more natural than to decipher the organization of a building in terms of structural and non-structural parts. Here I would like to argue that this is not the case, even if we can retrospectively analyze achievements like *Brunelleschi's* famous cupola as structural masterpieces. Actually, until the eighteenth century, at least in the French case, which is the one I know the best, there was nothing like a structural attitude, not only among architects, but also, more surprisingly among engineers.

The first reason I would like to invoke is that our notion of structure is based on the possibility of a discrepancy between the exterior appearance and the internal organization of a building. Although early modern architects and engineers often cheated in their constructions, using for instance hidden wood and even iron reinforcement, these practices were considered as a minor deviation from the rules of architecture and engineering. In the Vitruvian frame of thought that prevailed at the time, these rules postulated a profound harmony to be observed between the exterior appearance and the internal organization of the constructions. Moreover, the Vitruvian-based theories of architecture and engineering did not recognize a hierarchical order between what we now call structural and non-structural parts. Ornament in particular was as essential as pillars, arches or vaults.

The determination of the line of the volute of the ionic capital was for instance a fundamental subject for theorists. In such a context, a structural reading of buildings was of no true interest.

Another way to be convinced of the complexity and cultural character of the notion of structure is to pay attention to what was to become later a structure for an architect or an engineer. Everything in the world has an organization. A heap of sand is for instance a structure and physicists have become increasingly interested in its organization in the past decades. Now, for an architect or an engineer, it is not usually considered as a structure. Structure is synonymous with certain choices. It is not to be confused with all the possible internal organizations that are authorized by nature.

Structure is usually synonymous with an inspiration taken from nature, but it is based on some kind of selection among natural configurations. A structure presupposes a degree of visual complexity that prevents the heap of sand to be seen as structural. Now, too complex a device is often considered as an aberration since it seems adverse to structural reason. Structure is actually a compromise, a socially shaped compromise between the simple and the complex, the natural and the artificial. All these extremes being socially constructed, the same is true of the compromise negotiated between them.

In eighteenth-century France, the notion of structure gradually emerged from two types of experimental constructions. First came churches using freestanding columns instead of the massive pillars that had been traditional since the Renaissance. A series of churches were constructed according to this principle, like *Saint-Vaast of Arras* by *Contant d'Ivry*. The most famous was the church *Sainte-*

Geneviève, by *Soufflot*. These churches led to the abandonment of the Vitruvian frame of thought.

In parallel, bridges using much thinner piers than their predecessors conveyed new ideas regarding engineering and its objectives. These new ideas and objectives found their most perfect expression with the *Pont Louis XVI*, later renamed *Pont de la Concorde*, by the engineer *Perronet*.

Both types of construction had in common a concern for constructive performance that was adverse to the Vitruvian canon. Both found their inspiration in the lightness of Gothic construction, in its system of oblique thrusts that were counterbalanced by flying buttresses at the periphery of the construction. Freestanding column churches also had flying buttresses. From the start, the emerging notion of structure was placed under the aegis of a circulation of efforts that was neither too simple, not entirely vertical, neither too complex. Structure was inseparable from the ideal of circulation, a rational circulation of efforts in the construction.

This internal circulation of efforts was intended to foster another type of circulation, an exterior one. The freestanding column churches were supposed to bring a new spatial clarity to religious architecture. They were meant to promote a visual transparency that was related to changes in the perception of what was at stake in the collective gathering of the people. In traditional churches, with their heavy pillars, the crowd was not the essential part of the ceremony. In the new naves that enabled the people to see themselves as a collective being, the assembly became the true focus of attention. Thus, despite their function, the freestanding column churches were part of a broader evolution that has often been dubbed as a secularization of society, an evolution that would lead ultimately to the French Revolution.

Movement and circulation obsessed eighteenth-century culture. Nature was interpreted as a dynamic system, whereas social welfare was becoming synonymous with the general circulation of men, ideas, and commodities. Colonnades were interpreted by architectural theorists as in deep accordance with this dynamic conception, for the pleasure they gave was linked to the various perspectives they presented to a mobile observer. An aesthetics of mobility was emerging in relation to a social imagination of regulated movement.

The bridges were even more clearly in accordance with this ideal of regulated movement. For their function was to promote the circulation of men and commodities on their deck while enabling water to flow more easily under their enlarged arches.

The emergence of structural thought in eighteenth-century France was thus inseparable from the social imagination of the time. Beside circulation, other dimensions of social imagination were present in the affair. The replacement of the traditional pillars and arches by columns and lintels was for instance linked to a quest for spatial and structural clarity, a clarity well expressed by the ideal of the primitive hut. According to theorists, modern churches were not only Gothic. They were also returning to the archetype of architecture, the primitive hut built with four trunks supporting branches. This archetype had in its turn something to do with the analytical trend that marked the Enlightenment philosophy and science, with the desire to interpret their concepts and results as rational combinations of elementary statements.

Because of socially constructed nature, the emergence of structural ideals in eighteenth-century France was marked by tensions and contradictions. First, this emergence was accompanied by a tension between the visible and the invisible. Because of their daring nature, freestanding column churches made an extensive use of iron reinforcements. These reinforcements were hidden creating a gap between the appearance and the reality of the construction.

On a more theoretical standpoint, they were both inspired by Gothic lightness and oblique circulation of thrusts and by the desire to come back to the origin of architecture, that is to say the primitive hut and the Greek temple that was generally considered as its direct translation into stone. How could one be simultaneously Gothic and Greek? Eighteenth-century bridges bore the mark of the same kind of ambiguity. Last, these realizations were made of stone, a material the limitations of which seemed adverse to the kind of performance architects and engineers were looking for. Actually, the development of structural ideals was not a smooth process. It was once more the result of a complex negotiation between conflicting aspirations.

The subsequent development of structures has often been described as if it was linear, deprived of any kind of ambiguity. That is not the case in my opinion. Many examples can be invoked to support this statement. Thanks to the English historian *Robert Thorne*; we now know that the design and construction of the *Crystal Palace* was not as simple as it was usually described in books. In the past decades, historians of science have departed from the traditional vision of a body of knowledge and practice developing in a harmonious way, as the result of a progressive and linear intellectual conquest. Scientific production is much more complex, permeated by political and social concerns. History of building technologies,

history of structure is still in need of a similar redefinition of its scope and methods.

My objective is not of course to promote an irrational vision of building technologies and their development but to promote a more culturally oriented history of this development. This cultural point of view may also apply to some aspects of the history of sciences like strength of materials and structural mechanics. The intensive use of recipes based on proportions by Renaissance and seventeenth-century architects and engineers was for instance related to the general belief in an architectonic order of the world, the same belief that gave birth to the various speculations regarding the Temple of Jerusalem, the importance of which has been revealed by Joseph Rykwert. The replacement of this scientific frame by techniques based on variations and calculus bears the mark of the eighteenth-century interest in movement, circulation, and flow. There again, the story is never entirely rational, in the scientific sense, because of its receptivity to social imagination. The use of the theory of elasticity to model the behavior of stone arches in the nineteenth century cannot be properly understood if one does not take into account the impact of elastic theory not only as a limited tool but as a way to see the world in a more general light.

Structural Thought and Utopia

As I said before, an author such as *David Billington* has already pointed out the relation between structural thought and social ideals. In *The Tower and the Bridge*, he shows how realizations such as the *Eiffel Tower* and the *Brooklyn Bridge* were inseparable from the political and social concerns of their time. Both were manifestos for the nation that built them. Adopting a more general standpoint, I would like to stress the connivance between structural thought and some fundamental aspirations of the industrial age.

During the past two centuries, structural art, as Billington defines it, has been marked by a series of remarkable innovations. Iron construction has led first to the invention of new shapes. Concrete structures like shells have also contributed to broadening the spectrum of possible forms.

Spatial, tensile, inflatable and tensegrity structures have in turn brought new possibilities. The common denominator of all these innovations is hard to define in purely structural terms, although they are governed by some long term tendencies like the trend towards a greater use of tension instead of compression, a trend that was already stressed by *Fuller* as an essential feature of its century.

Beyond this kind of trend, structural thought has been generally characterized by its ambition to reconcile nature and technology, the primitive needs of man and the sophisticated tools of technology. The desire to reconcile such extremes is still here in contemporary technology. For instance, membrane structure specialists, like the engineer *Horst Berger*, often claim to be inspired by tents.

From the great exhibitions halls of the nineteenth century to realizations like the British Festival Skylon or the Centre Pompidou, great structural achievements have often aimed at being instruments of collective celebrations. In our societies, these celebrations were conceived as a necessary counterpoint of the individualistic turn of everyday life. In other words, structure was to reconcile also the individual with a collective spirit that former periods like the Middle Ages had possessed naturally. Such a perspective explains why the Crystal Palace, while resembling a giant glasshouse was almost immediately perceived as a kind a cathedral, the cathedral of the age of industry. Around mid-nineteenth-century, Viollet-le-Duc was among the first to theorize this new function of structure. It would later haunt the Modern Movement. Hence, the fascination of architects like Le Corbusier for liners, these giant, floating structures that enabled passengers to live both at an individual and a collective level.

Imbued with ideals of reconciliation between nature and man, the primitive and the civilized, the individual and the collective, structural thought has often come close to this extreme form of social ideal that is called utopia. I take here utopia in a much more general sense than the traditional meaning, forged by Thomas More, of a literary fiction depicting an ideal society located nowhere. A meaning still traceable in Swift's famous novel with its series of islands where the various episodes take place. From the nineteenth century on, instead of being nowhere, the ideal society depicted by utopia has taken a universal turn. The nineteenth- and twentieth centuries' utopia has been about a New Golden Age that would leave nobody untouched, an age of reconciliation between nature and man, between man and machine, but also between the individual and the community.

The connection between structural thought and utopia is evident in cases like *Buckminster Fuller* or the mega-structural movement, with their grandiose schemes that wanted to create the material and spiritual conditions of a New Golden Age. The utopian dimension is present in many other cases, in the seemingly modest attitude of *Jean Prouvé* for instance.

Let us not in passing forget that structural art is not the only building technology that has a connection with utopian themes and preoccupation. From central heating to air conditioning, the technologies of the "well-tempered environment", to speak like *Rayner Banham*, have also been imbued with utopian themes such as the desire to recreate an artificial Garden of Eden. In the past decades, these technologies have become increasingly important.

At the beginning of the 1960s, *Archigram's* members had foreseen this evolution with their projects abandoning progressively the mega-structural form to focus on issues of personalized environment.

Manfredo Tafuri had a poor opinion of utopia in architecture. He interpreted it as a symptom of the crisis that affected architecture in a capitalist society that no longer needed it. His argument was that in such a society, architecture could no longer contribute to changing things. Hence its retreat into grandiose utopian schemes in order to mask its impotence.

This kind of analysis starts from the assumption that utopia is necessarily non-realistic, that it is a kind of chimera outside the real world. There are other ways to consider utopia. Philosophers like *Karl Mannheim*, or more recently *Paul Ricœur* have shown its profound complementarity with ideology. According to them, where one of the functions of ideology is to conserve the extant order, the objective of utopia is to destabilize it in order to make it permeable to change. Ideology and utopia are two extreme expressions of social imagination.

As a social production, architecture is confronted with the same extremes: the desire to serve the extant order by conforming itself to its prescription and the project to alter it in some ways, to indicate the path for a possible evolution.

Architecture is usually both a tradition and a field of open possibilities. Technology, building technologies in particular, are in a similar situation. On the one hand, they reflect the existing conditions, on the other, they announce developments yet unseen. Their connection with utopia is as natural as their relation with current economic conditions.

Digital Architecture and Its Ambiguities

The development of the computer and the emergence of digital projects are giving a new importance to the relation between architecture, social imagination, and utopia. To conclude this lecture, I would like to evoke them briefly.

The computer has altered drastically the relation between architecture and technology. Until now, the technological dimension helped architecture to take root. It contributed to giving the discipline a tangible character through a constant tension between the spatial and the tectonic, to use *Kenneth Frampton's* terminology. Digital technologies convey an abstract connotation that may seem threatening.

Many of its proponents insist however on the possibility of a greater degree of articulation between design and realization, and on the physical quality that the computer can bring to architecture. From *Toyo Ito* to *Greg Lynn* and others, the risk of abstraction seems to find its counterpart in an almost sensual approach of form, light and texture.

Social imagination is without doubt present in the experiment conducted today in this field. Digital architects are full of references to a world populated by information, auto-organization processes, fields, flows, and folds. Their interpretation of society is permeated by the same kind of references. They share with other communities visions of immaterial communication, global village, roaming cyborgs. These visions can appear as frightening to some of us. They are nevertheless stimulating. They open new perspectives for the discipline and its practice.

The only true limitation I can see right now to these experiments is the often uncritical way in which many of the digital architects accept the world as it is, the absolute reign of liberalism and the rules of the market without questioning them seriously. I do not want to suggest here that we should necessarily come back to some kind of socialist criticism of the capitalist system, nor that the architects should reject the rules of the market. Now, is the desire to conform to the extant order enough for architecture? Like social imagination, architecture, as I said before, is as much about the future, a future different from the present, than about the prevailing economical and social conditions. With the computer, new possibilities are certainly arising. What is perhaps still lacking is utopia, or rather the desire for utopia. To raise this desire among young architects is perhaps among the most urgent tasks of architectural education and research.

See list of References on page 34

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EAAE / ENHSA Workshop - The Teaching of Construction in Architectural Education

Thessaloniki, Greece, 30 May - 1 June 2002

Report

Maria Voyatzaki, EAAE Thematic Coordinator, Construction

The EAAE Sub-Network on Construction in Architectural Education organized in the framework of the Socrates funded Thematic Network Programme, ENHSA (European Network of Heads of Schools of Architecture) its first workshop entitled The Teaching of Construction in Architectural Education: Current Pedagogy and Innovative Teaching Methods, between 30 May and 1 June 2002. The event was hosted by Aristotle University of Thessaloniki, School of Architecture, Greece and gathered fifty participants, representing thirty five European Schools of Architecture, who exchanged ideas and views on the subject.

The theme of the Workshop derived from the fact that in the current debate on reconstructing school curricula in order for schools of architecture to be integrated in the common European educational space as dictated by EU policies, the issue of redefining the position of the teaching of construction is an important one. It is suggested by a relatively recent school of thought of educators that the teaching of construction should be integrated with the teaching of design.

As the School of Architecture, at Aristotle University of Thessaloniki, has been discussing this issue in the perspective of restructuring its curriculum it hosted this Workshop initiated and put forward by the Thematic Sub-Network on Construction in Architectural Education as one of the EAAE and ENHSA activities.

The invitation was addressed to educators with genuine interest in the topic to discuss the conditions for the education of the subject by disseminating information and ideas on its teaching methods and pedagogy, so that it can be more effective for architecture students.

More specifically, the workshop aimed to identify the typologies of construction teaching, which would in turn allow for an insight to be gained into the parameters that give rise to the different typologies. It was expected that some first suggestions for improvement of current teaching methods and the overall pedagogy of teaching the subject would emerge from the Workshop and that proposals to improve the current condition would be put forward.

This first encounter was primarily a forum for getting to know people who share the same concerns and a platform which would set up the agenda for more encounters on work-on-progress to be scheduled.

The debates were formed around basic questions in relation to the teaching of construction. More specifically the programme included questions with key words such as:

• 'What and Why'

Participants discussed the content of construction teaching, the types of the themes chosen, the priorities set and the choices made, the principles governing the organisation of construction courses and the educational objectives when construction courses are designed.

• 'How'

Participants discussed the pedagogy of construction, not only the teaching methods in terms of effective knowledge transfer but also its synergy with other subjects that are part of a school curriculum, with emphasis on studio design teaching. The central question was whether construction could be taught in the design studio.

• 'Who'

Participants discussed the construction teacher's background and profile.

• 'When, to What Extent'

The discussion focused on the distribution of teaching in the duration of the studies of an architect. Participants discussed the time in a school curriculum in which construction should be introduced and elaborated on, and the extent to which this should happen. Moreover, discussions focused on how construction teaching could be related to and integrated with the teaching of other subjects in architectural education.

• Dynamics and Tendencies

In the last session there was an attempt to compile all other sessions in order to draw conclusions towards directions in which schools of architecture can move, emerging models that are or could be applied in the pedagogy of the subject, or ways of mapping these models. In the context of this discussion the future of the network of construction teachers and its future activities were also scheduled.

more on the pedagogy of construction was expressed. The participants left with the promise to meet again and the organizers of the event made a commitment to organize the next workshop in the spring of 2003.

Structure of the Workshop

The Workshop was structured around four parts. The first was the debates on the aforementioned themes.

The second was three stimulating keynote lectures on the subject. The first lecture was delivered by Jeremy Gould from the School of Architecture and Civil Engineering of Bath University, UK, entitled Poetry and Plumbing / Reality and Dreams. The second lecture was delivered by Cyrille Simonnet, from the Institute of Architecture, University of Geneva, Switzerland, entitled Construction and Illusion. The third lecture was delivered by Susan Dawson, the editor of the Working Details Handbook series of the Architects' Journal, UK, In Detail - How Architects Think About Construction.

The third part of the Workshop was an exhibition of two A0 posters produced by each participating school with a graphic output of students' work on construction.

Last but not least, the fourth part of the Workshop included an exhibition with the title In Detail - A selection of Architects' Working Details from The Architects' Journal' organised by Susan Dawson.

All four parts of the event, but most importantly the active participation and the constructive debates of the participants, raised very intriguing issues on the teaching of construction. A record of all discussions, posters and keynote speeches with an attempt to summarise all conclusions drawn will be published in **November 2002**.

The general feeling was that the Workshop was the beginning of a new era of people sharing the same professional interest and concern; that is the teaching of construction. It was generally admitted that this first Workshop which aimed to tackle all issues was necessary. However, the need for tieing the bonds with more workshops and for focusing

EAAE General Assembly / Assemblée Générale de l'AEEA

Chania, Greece, 6 September, 2002 / Chania, Grèce, 6 Septembre 2002

1. The minutes of the General Assembly on 4 September 2001 published in News Sheet #61 are approved.

2. Council structure

a. Professor James Horan, Head of the School of Architecture at Dublin Institute of Technology, is nominated vice-president i.e. president-elect. He will take over the presidency from September 2003. By that time the council will have elaborated a proposal for the future of the EAAE at its council meetings this fall and next spring. After that the proposal will be circulated to the EAAE members and submitted to the General Assembly next September.

The reflection will include;

- The philosophical Position and Mission Statement of the EAAE
- The activities of the EAAE
- The structure of the EAAE
- The financing and financial structure of the EAAE
- **b.** The chairman of the Nordic Academy of Architecture asks the council for an official clarification before the next GA regarding the relationship between the EAAE and other networks, organisations and institutions.
- **c.** P. Jokusch, former president of the EAAE, passed away in January 2002.

The list of former presidents of the EAAE has been reconstructed and looks as follows:

- Hans Haenlein (75-78)
- Herbert Kramel (78-80)
- Van Randen (80-82)
- Peter Jokusch (83-87)
- Nils-Ole Lund (87-91)
- Jean François Mabardi (91-93)
- Hentie Louw (93-96)
- Pierre von Meiss (96-97)
- Constantin Spiridonidis (97-00)
- Herman Neuckermans (00-03)

3. Finances:

The detailed balance for 2001 as well as the budget for 2002 are presented and approved.

The balance 2001 shows

Expenses:	101.750,20	Euro
Incomes:	145.484,80	Euro
The reserve sums up to:	43.734,52	Euro

The budget 2002 shows

Expenses:	92.050	Euro
Income:	156.003	Euro
The reserve amounts to:	55.000	Euro
in worst case scenario.		

The financial situation of the EAAE is improving, and this is mainly due to the benevolent effort of the joint council.

4. The membership annual fee will be discussed within the framework of the new structure of the EAAE at the next GA when James Horan takes

The following schools are approved as new members of the EAAE:

- North Cyprus Eastern Mediterranean University, Famagusta
- Ecole d'Architecture de Clermont-Ferrand, France
- Zürcher Hochschule Winterthur, Switzerland
- Izmir Institute of Technology, Turkey

New individual members:

- Duarte, Cristiane Rose (Brazil)
- Gökan, Koray (Turkey)
- Rifki, Fahti (USA)
- Rheingantz, P. A. (Brazil)
- Terzoglou, Nikolaos-Ion (Greece)

5. Activity report 2001-2002, and publications:

Activities:

- Follow-up 'Chania Statement' GA 2001 has been sent to ministries , rectors' conferences
- Council Meeting, Leuven, Belgium, 23 24 November 2001
- Case Studies Workgroup, Raleigh, North Carolina, USA, 5 - 6 Feburay 2002 (HN, JH, RF,...)
- Contact Meeting ACE/EU, Brussels, Belgium, 22 March, 2002(HN)
 Revision Directive

- Council Meeting, Paris, France, 16 17 March 2002
- ENHSA/EAAE Workshop, Thessaloniki, Greece, 30 May - 1 June 2002
 Education in Construction
- ARCC/EAAE, Montreal, Canada,

23 - 25 May 2002

Conference on Architectural Research

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

Education in Conservation

 ACSA 2002 International Conference, Havana, Cuba, 21 - 24 June 2002 (HN)

Architecture, Culture and the Challenges of Globalization

Publications:

- News Sheets, Editor: Anne Elisabeth Toft #61 (Chania Statement - English) #62 (Chania Statement - French) #63 #64 in the press
- CEMBUREAU pan-European inquiry published on eaae@eaae.be
- GUIDE Schools of Architecture in Europe Second edition e-guide forthcoming Editor: Leen Van Duin

Proceedings

Conference, Ankara, 2001
 Re-integrating Theory and Design in Architectural Education.

 Editor: Nur Caglar

EAAE/ARCC Conference, Paris, 2000
 Research and Architecture / Recherche et Architecture.

 Editor: Stephane Hanrot

6. EAAE prize:

The prize-winning ceremony will be held in Copenhagen on 22 - 24 November 2002.

The jury consisting of:

- J.F. Mabardi (chairman)
- Michael Hays
- Neil Leach

- J.C. Ludi
- Carsten Thau
- is looking at more than 60 entries.

7. EAAE e-guide:

Leen Van Duin who is in charge of editing the EAAE guide of schools of architecture announces the second edition on paper as well as on the website for this fall. All members of the EAAE willing to update their file are requested to send their contribution to **eaae-guide@bk.tudelft.nl** before November 4, 2002.

8. Future activities:

- Copenhagen, 22 24 November 2002
 EAAE Prize + Council Meeting
- Stockholm, 8 11 May 2003 Four Faces of Architecture
- Marseille, 2003 Doctorates
- ENHSA/EAAE Workshops (to be announced):
 - Education in Construction
 - Education in Urban Design
 - Education in Architectural Design
- Helsinki, 27 30 July 2003

ACSA 2003 International Conference (ACSA/EAAE joint event) Contribution and Confusion: Architecture and the Influence of Other Fields of Inquiry

- Chania, August September 2003:
 6th EAAE Meeting of Heads of European Schools of Architecture
- Dublin, May 2004 EAAE/ARCC joint research conference

EAAE President, Herman NEUCKERMANS Chania, 6 September, 2002

The 5th EAAE Meeting of Heads of European Schools of Architecture

Chania, Crete, Greece, 4-7 September 2002

Report

Nur Caglar, Head of Department, Faculty of Engineering and Architecture, Gazi University, Ankara, Turkey

The 5th Meeting of Heads of European Schools of Architecture took place once again in the city of Chania, Crete, from 4-7 September 2002. The theme of the meeting was Towards a Common European Higher Eduction Space in Architecture.

This successful international meeting, hosted by *The Center for Mediterranean Architecture*, took place in the *Main Arsenal*, a recently renovated shipyard located in the old Venetian harbour area. This building has had a second floor added to it and has been used in recent years as the Town Hall of Chania.

The meeting opened with the keynote lecture by *Emeritus Professor Dimitris A. Fatouros* from Athens, Greece. He is a painter and author who lives and works on the island of Hydra, Greece. As the reflections of the uniqueness and indescribable beauty of the island in his works have impressed art critics, he has been characterised as 'the painter of Hydra'.

One could not have expected a better opening address to the meeting. His lecture entitled *Who Cares?* gave much food for thought to the audience and promoted a great deal of discussion during and after the presentation.

A summary of the keynote lecture by *Professor Fatouros* is placed after this report.

The keynote lecture of the second day was entitled as *Thoughts on Architecture: The Defined and the Interminable* and was given by *Suzana* and *Dimitris Antonakakis*, who (as we learned from the warmly-given introduction by *Maria Voyatzaki*) are the most distinguished architects of Greece and call Chania their hometown.

They are both graduates from the *National Technical University*, Athens. *Dimitris Antonakakis* has been teaching at the same institute for 35 years. Since co-founding the architectural partnership *Atelier 66* in 1965, they have designed many important national buildings. Their work is influenced by *Aris Konstantinidis's* interpretation of vernacular forms.

The *Archaeological Museum* of Chios, characterised by a rigid grid-system and modern construction, is considered one of their masterpieces. As the lecture was structured with *Antonakaki's* thoughts on contemporary architec-

tural issues and a rich slide show of their professional achievements, the audience took the opportunity to learn a lot about their experiences.

The keynote lecture of the third day was given by *Dan Hanganu* from Montreal, Canada, and was entitled *Theory and Praxis*. Mr. Hanganu presented an overview of his thirty years of practice in the profession of architecture with particular emphasis on urban housing and related issues. The audience enjoyed the slides of his award-wining projects completed in Canada, Switzerland, Morocco, and Romania.

Both presentations were thought-provoking, and stimulated interest in the audience.

The 5th Meeting of Heads of European Schools of Architecture in Chania was the first meeting held within the framework of the ENHSA, the Sokrates Funded Thematic Network. The aim of this network is to support the European schools of architecture during the integration process in the common European Space for Higher Education. As a consequence, the second day of the conference started with the introduction of the official website of ENHSA within an overview of past and future Chania Meetings presented by Constantin Spiridonidis.

The following structure of the meeting was held over three days, each day addressing a set of aspects of the overall theme of *European Higher Education Space*, and gave all who attended three days of subject specific presentations, exhibitions, networking and fun.

This meeting was characterised by a wide variety of interpretations which continued to evolve and addressed the following issues and provided the opportunity for academics to share experiences with colleagues who have already taken the next steps forward.

- Curricula for Architectural Education in the Common European Higher Education Space
- Exchange and Collaboration between Schools of Architecture in the European Higher Education Space
- The European Higher Education Space in Architecture and the Professional and Institutional Context

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

In addition, the annual *General Assembly* of the EAAE took place in Chania within the framework of the 5th Meeting of Heads of European Schools of Architecture on Friday, 6 September 2002.

A retrospect report of the activities and initiatives of the last year was presented by *Herman Neuckermans*, President of the EAAE. One of the main subjects of the agenda was the nomination of the new EAAE Vice-President, *Professor James Horan*, who according to the statutes will become the next president from September 2003.

The meeting venue was excellent as usual. I believe all the attendants thoroughly enjoyed both the sessions and the social activities. The sessions were informative and interesting, and all the attendants gained a wider understanding of the *European Higher Education Space* concept and its reflections in the field of architectural education.

The program was designed so that the sessions were held during the day and evenings were arranged to explore the wonders of Chania. In the evenings dining was casual. Professors could meet to discuss research ideas and possible future collaborations, while they sampled some local delicacies of Chania.

Last but by no means least, *Maria* and *Dinos* deserve a loud "bravo" for the effort and time they put in to provide the continuity of these meetings.

The 5th EAAE Meeting of Heads of European Schools of Architecture

Chania, Crete, Greece, 4-7 September 2002

Who Cares?

Summary of Keynote Lecture by Emeritus Professor Dimitris A. Fatouros, Athens, Greece

The discussion will focus on four points:

- 1. Starting from the propositions of the 4th Meeting of ENHSA
- 2. A reminder
- 3. Axioms
- 4. Who cares?

1. Starting from the propositions of the 4th Meeting of the ENHSA

For a successful advancement of the ENHSA propositions, it is important to insist on a few clear main target-axioms and a few guidelines as well more than complete solutions.

2. A reminder

The ratio of the target-axioms comes out easily if we remember some points about the core of the architectural endeavour:

- The well known multi-interactive character of architecture and the resulting educational priorities.
- Architecture is a constituent of the sociocultural diversity, even the bio-diversity, of our human community and of the various processes involved. In this context architecture is related to cultural attitudes, uncertainties, conflicts and regulative consensus.

Insistence, repetition, long durations, creative interaction-dialogue and mental flexibility, creative openness and systematic and scientific knowledge are necessary as well for the educational processes of architecture, all of them used in two ways:

- In formal, conventional, terms: Studio + Scientific methods.
- In different terms: Implicit + Explicit approaches (*Corbu* "Espace implicite", 1946).

These terms, their content and explanations of course need careful use.

A complete, at least up to now, scientific (let's call it explicit) approach of the design/design aspect of architecture (that is, of composition or synthesis) does not exist. There are strong intentions, mainly by theoreticians and educators, for this kind of approach but there is not a complete or partial discipline. It is indicative how the relative approaches of the 1960s and 1970s not only did not succeed in helping the crucial core of the curriculum, but are also less discussed today. This situation supports the need of the studios for a more or less implicit approach.

The implications of this fact are obvious: Long, interactive and multi-dimensional basic studies, i.e. first of all, five-year periods at least.

3. Axioms

3.0. The way to proceed with the discussion of the future of the education of the architect needs, as it was mentioned, insistence mainly on some crucial target-axioms, because a detailed level of analysis and priorities may produce confusions, hesitations and disputes.

Following this statement, four axioms come out:

3.1. Four Axioms

Axiom a

The propositions of the 4th Meeting 5 years: 4+1 years or 3+2 years, where the subdivisions 4+1 or 3+2 specify only educational divisions of the curriculum.

Axiom b

Each one of the 4 or 3 year periods does not lead to any "lower" or "different" professional and/or academic grade or certificate.

Axiom c

The word/title architect/architecture is absolutely excluded from any title-term for the 4 or 3 years periods.

Axiom d

On a general approach the length and structure of the curriculum for the architectural education

must be compared to and respected equal to that of the field of medicine. Taking a step forward where specialization is necessary, as in medicine, this may start after the main body of 5-year courses.

4. Who Cares?

There are two basic difficulties:

- a: It seems that a large part of the architects do not care so much about this discussion. Their main concern is focussed on the danger that a very large number of people will use the title/term 'architect', with obvious professional and financial effects.
- **b:** The decision-makers, officials, bureaucrats, politicians, banking people, etc. are indifferent to the subject matter of this discussion. A good majority of them consider this discussion something like a play or a fight, a quarrel between artists or between rivals.

As was mentioned, a strategy, on one side, based on axioms may help to overcome these obstacles and on the other a systematic effort to enlarge the interest of the people involved. In this direction a well thought-out dialogue and information campaign with big and active European agencies of architecture, such as Calatrava, Foster, Libeskind, Nouvel, Siza, Piano, etc. looks important.

The 5th EAAE Meeting of Heads of European Schools of Architecture

Chania, Crete, Greece, 4-7 September 2002

Report

Constantin Spiridonidis, EAAE Project Leader, ENHSA

The 5th Meeting of Heads of European Schools of Architecture entitled Towards a Common European Higher Education Space in Architecture took place in Chania between 4 and 7 September with great success. The Meeting was supported financially by the Socrates Thematic Network Project ENHSA (European Network of Heads of Schools of Architecture) and was hosted in the newly refurbished listed building of the Centre for Mediterranean Architecture in the city's Old Venetian Harbor. The one hundred and twenty participants, who correspond to approximately eighty schools of architecture, cooperated for four days in this unique setting of Chania.

The Fifth Meeting was the continuity of the previous meeting with greater emphasis on points that led to important decisions and commitments made in the **Chania Statement 2001**: the importance and the role that the European cultural polyphony has to play towards the creation of an integrated area of architectural education in Europe, the necessity to preserve the five-year duration of the architectural education, the importance of ECTS towards the creation of an integrated area of architectural education in Europe, the necessity for the development of a European system of 'academic' evaluation and the assurance of quality of European programmes in the academic community.

With this set of agreements in mind, the programme of the Meeting was structured in four thematic areas. The first concerned the investigation in the possibilities for the definition of some directions of the content of architectural studies in Europe. The second area focused on the question of mobility and interuniversity co operations in architectural education in Europe. The third area focused on the problem of evaluation of school curricula and the importance of compatibility of schools of architecture in Europe. Finally, the fourth area dealt with the relationship between schools of architecture and professional bodies at national and international level.

All discussions were developed with the perspective to record approaches and views, to establish problems and note issues that have to be investi-

gated immediately for proposals to be put forward. With this aim the Meeting made the decision to form working groups which will elaborate on these issues in order to present at the next meeting working texts and proposals for decisions on the content of school curricula, the system of studies, their evaluation, and the relationship of schools of architecture with their immediate social and professional environment.

The exhibition **Greek Architecture of the 20th Century** was running in parallel with the Meeting in the **Centre for Mediterranean Architecture**.

Keynote speeches were delivered by **Professor Fatouros**, **Souzana** and **Dimitris Antonakakis**from **Atelier 66** and **Professor Dan Hanganu** from **Montreal University**, **School of Architecture**.





































Chania, Greece. Photos by Harald Gatermann

Digital Design - 22nd International eCAADe Conference

Austria, Graz - University of Technology, September 2003

Conference Theme

There is no question any longer whether the computer can be used as an effective tool in creating and producing architecture. However, drafting and visualisation are still the dominant applications in architecture. The power of the computer as a design tool and as a design stimulator has still to be fully exploited. Experiences within research communities show that the implication of computer applications in an early stage of the architectural ddesign process still seems to be limited. In times where architectural curricula are responding to contemporary education needs, the question of positioning computer related subjects demands a well-founded approach; an approach based on informed research,

knowledge of education and issues that impinge on how computers are involved in the design process.

Topic of interest for the 2003 eACAADeconference include but are not limited to:

- CAAD curriculum
- City modeling
- Collaborative design
- Design creativity
- Digital design education
- Design pedagogies
- · Design process
- Generative design
- Human-computer interaction
- Research, Education & Practice
- Innovation
- Precedence and prototypes
- Prediction and evaluation

Shape studies

- Virtual architecture
- Virtual reality
- Web-based design

Conference Venue

Graz University of Technology Faculty of Architecture Rechbauerstrasse 12

A-8010 Graz

Austria

www.tugraz.at

Conference Chair

Dr. Wolfgang Dokonal Graz University of Technology dokonal@stdb.tu-graz.ac.at www.tu-graz.ac.at

Conference Organization

bco

Blindengasse 46a

A-1080 Vienna

Tel: ++43 1 40 32 820 Fax: ++43 1 40 32 820 20

www bco co at

Important Dates

Call for papers:

October 1, 2002

Deadline for abstracts:

February 1, 2003

Notification of acceptance:

April 1, 2003

Deadline for full papers:

June 1, 2003

ISUF International Conference The Planned City?

July 3-6, 2003 Castello Svevo – Trani (Bari) - Italy

Debates on the contemporary city all

Conference Theme

point to the fragmentation of the traditional urban organism. The city's former unity appears now gone, with current forms and structures considered irrevocably dispersed. Changes in urban form parallel the transformation (and redeployment) of the disciplines that have historically been charged to interprete and design the urban environment The theme of this conference, The Planned City, is intended to guestion a possible return to the unified city while addressing the full complexity of the urban phenomena. The concept of the planned city opposes plans and projects (as unified rules) to gradual city building where life introduces infinite exceptions, variations, and transformations to the unavoidable rigidity contained in plans.

The structure of the conference includes the following thematic sections:

The planned city and its territory in history

- The Ancient city
- The Medieval city: Founded cities of the Renaissance
- The city of the Enlightenment
- Modern cities in theory and in practice

The cultural geography of the planned city

- Cities of North America
- Colonial cities of South America
- Cities of Northern Europe
- The planned city of the Mediterranean
- Cities of Islam

The theory of the New City

- The ideal city in ancient philosophies
- The city of God

- The contemporary city in architecture and in planning
- The contemporary metropolis: globalization and survival
- The future city: fragmentation and new organicity

Important Dates

Deadline for abstracts (300 words) and CVs:

December 30, 2002

Notification of acceptance:

Feburary 15, 2003

Deadline for full papers:

May 01, 2003

Organizing Committee and Conference Conveners:

Attilio Petruccioli, Conference Director Michele Stella, Conference Director

Scientific Committee

- Antonio Castorani
- Michael Conzen
- Claudio D'Amato
- Mauro Mezzina
- Giuseppe Strappa
- Anne Vernez MoudonJeremy Whitehand

Conference Venue

The conference will be held at the medieval castle in Trani, placed on the Adriatic coast, 40 Km north of the city of Bari, Italy.

Registration fee is 180 Euro

For further information, please contact:

Attilio Petruccioli Petruccioli@yahoo.com

ECLAS Conference 2003

Lisbon, Portugal,

23-26 October 2003

Subject

Landscape Architecture and Modernism: Exploring the Heritage and Learning the Lessons.

The objective of the conference is to discuss the content and meaning of the performance and achievements of our professsion in Europe between the 1930s and the 1970s. This time period only recently started to be explored within the European context. The recognition of the contribution of the acting landscape architects as a whole is not yet understood.

Presenters are invited to bring out the achievements in the different countries and the impact on today's practice of landscape architecture in Europe.

For organizational purposes we propose that the conference addresses three themes:

- Gardens
- Urban Design
- Landscape Planning

Conference Venue

Host Institutions High Institute of Agronomy, Lisbon Technical University Calouste Gulbenkian Foundation, Lisbon, Portugal

Contact Person

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New EAAE Vice-President



Professor James Horan, Head of the School of Architecture at Dublin Institute of Technology was nominated Vice-President of the EAAE i.e. president-elect on Friday 6 September 2002 (EAAE General Assembly, Chania, Greece).

CAAD Futures 2003

28 - 30 April 2003

National Cheng Kung University, Department of Architecture No. 1 University Road, Tainan, Taiwan

The Tenth International Conference on Computer Aided Architectural Design Futures.

CAAD Futures is a bi-annual conference that promotes the advancement of Computer Aided Architectural Design in the service of those concerned with the quality of the built environment. The conferences are organized under the auspices of the CAAD Futures Foundation.

For further information:

http://www.arch.ncku.edu.tw/cf2003

International Conference on Landscape Planning

Portoroz, Slovenia

Landscape Planning in the Era of Globalisation

8-10 November 2002

Objectives of the Conference

- Identify the effects of globalisation processes on landscape diversity
- Formulate methodological approaches in comprehensive planning for the implementation of sustainable landscape development

- Define the role of local communities in decision making and environmental management
- Outline the foundations of landscape planning methods as an essential component of environmental education at European universities

For further information:

www.bf.uni-lj.si/globalscape/globalscape.html

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EAAE Calendar AEEA Calendrier

2002		
22 – 24 11	EAAE Prize 2001/2002	Prix 2001/2002 de l'AEEA
	Copenhagen/Denmark	Copenhague/Danemark
24 11	EAAE Council Meeting	Réunion du conseil de l'AEEA
	Copenhagen/Denmark	Copenhague/Danemark
2003		
08 – 11 05	Four Faces of Architecture	Quatre faces de l'architecture
	Stockholm/Sweden	Stockholm/Suéde
27 – 30 07	Contribution and Confusion	Contribution et Confusion
	Helsinki/Finland	Helsinki/Finlande
Aug./Sept.	6th Meeting of Heads of European Schools of	6° Conférence des Directeurs des Écoles
	Architecture	d'Architecture en Europe
	Chania/Greece	Chania/Grèce

EAAE News Sheet

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EAAE interactive www.eaae.be

NEWS SHEET deadlines

#65 (**B1**/2003), Jan./*Jan.* 01/*01* #66 (**B2**/2003), Apr./*Apr.* 01/*01*

Contributions to EAAE News Sheet Contributions AEEA 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 email enclosure. Deadlines are announced in the News Sheets.

Les contributions au News Sheet sont toujours bienvenues. Elles doivent être envoyées à l'éditeur, qui décidera de leur publication. Contributions d'interêt: rapports de conférences, évenements à venir, postes mis au concours, et d'autres nouvelles en bref sur la formation architecturale. Les critéres à suivre sont: Les textes doivent être en Français et en Anglais, en forme d'un document de texte non formaté, qui peut être attaché à un email ou être envoyé en forme d'une disquette. Les dates limites sont publiées dans chaque bulletin.

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