



**ONLINE REPOSITORIES
IN ARCHITECTURE**
MACE INTERNATIONAL CONFERENCE

TEATRO PICCOLO ARSENALE
LA BIENNALE VENICE 20-21.9.2008

www.mace-project.eu/conference

venue

Teatro Piccolo
Le Corderie dell'Arsenale
La Biennale
Venice, Italy
free admittance

dates

20-21 September, 2008

schedule

Saturday: 8:30 am > 6:30 pm
Sunday: 8:30 am > 6:30 pm

Within the context of MACE (Metadata for Architectural Contents in Europe www.mace-project.eu), a European project supported by the European Commission, a two-day international conference, entitled "On-line Repositories in Architecture", has been organised in Venice during the period of the "11th International Architecture Exhibition" at La Biennale on 20-21 September 2008.

The conference will host 43 speakers from 15 different countries: Austria, Belgium, Brazil, Canada, China, France, Germany, Italy, Portugal, Spain, Switzerland, The Netherlands, USA, The United Arab Emirates and The United Kingdom.

Introduction

The MACE project is interlinking architectural repositories. Gaps resulting from autonomous design, implementation, funding, and maintenance are bridged by implementing conceptual tools (ontologies, glossaries, and standards), interfaces and metadata agglomeration. This happens in order to create innovative e-learning tools that can help expert users and laypeople to find, tag, acquire, use, and discuss contents from many architectural repositories that previously had limited accessibility.

The Venice conference, powered by Collaboratorio (Italy) and EAAE European Association for Architectural Education (Belgium) from the MACE project partnership, offers the opportunity to make MACE known to a wide public and, mostly, to summon educators, researchers, students, archivists, IT practitioners, and managers of major European architectural portals in order to share knowledge and experience, to convey approaches and research, to promote conceptual and technological tools, to search for common or integrated visions.

Conference attendants will also discuss how to classify, find, retrieve, tag, use and make available digital architectural contents, scattered over different websites, databases, and digital archives on the Internet.

Topics

The conference is structured around a series of presentations outlined in three sessions on the following themes::

› SESSION #1

E-LEARNING. Education: Teaching Architecture in the Digital Age

To a larger and larger extent learning objects become available via electronic means, in regular teaching environments as well as in learning modes, even and after graduation. Knowledge is often out of date in only five years and grows so fast that regular teaching in schools cannot cope with this knowledge boom in a comprehensive way. Therefore academic teaching evolves into teaching of principles, methods and attitudes, into a state of mind allowing lifelong learning (LLL). Universities, practices and industry all produce subjects for LLL. They are disseminated via conferences, short courses and more and more via e-learning formulas, as has been the case in a lot of universities for many years.

Today materials for e-learning - called learning objects - are prepared by specialists, somewhere on earth, disseminated via a means of electronic communication and shared amongst distant users. E-repositories play a role of growing importance in this context and this session of the conference focuses on the role of e-repositories in LLL in architecture.

This session offers the opportunity to discuss experiences and research many topics including the following:

- › Teaching and learning architecture using e-learning tools and/or digital resources
- › Teaching and learning attitudes triggered by digital environments
- › E-repositories for e-learning and life long learning purposes: how to structure their contents
- › Tools for navigating e-repositories
- › Tools for e-learning purposes
- › User cases within the e-learning architectural environment

Chairman: Mario Santana Quintero (Belgium)

Speakers: Antonino Saggio (Italy) - Stefan Apelt, Christian Prause (Germany), Mathias Casaer, Ann Heylighen (Belgium) - Susanne Schumacher (Switzerland) - Leandro Madrazo (Spain), Paul Riddy (United Kingdom), Luca Botturi (Switzerland) - Verdy Kwee (The United Arab Emirates) - Giovanni De Paoli, Nada El-Khoury (Canada) - Adriane Borda Almeida da Silva, Neusa Felix, Luisa Dalla Vecchia, Janice Pires (Brazil) - Vladimir Bazajac (USA), Ezio Arlati (Italy) - Andy Earl, Dr Carl O'Coil, Joss Winn (United Kingdom) - Francesca Torello, Marie Norman (USA)

› SESSION #2

ARCHIVES. Digital Architectural Archives: Preservation, Dissemination and Use

There are two kinds of digital archives: spontaneous archives, provided by contemporary architectural firms, which use computers throughout the whole design process, and the "old" paper archives, which are gradually being transferred to digital media in order to preserve them and to enhance their diffusion. Both these archive types may provide useful first hand information that has to be improved and opened to a large public of scholars, archivists, and professionals. Yet, opening these archives to the general public poses some problems. In spontaneous archives, each document (presentation, 2D - 3D drawings, animations, renderings, pictures, videos, texts, etc.) has its own format, which requires a specific program to open it; information contained in each document is frequently layered, in fact each file can contain texts, images, animations, pictures, hyperlinks, etc., all at the same time. Paper archives raise the following questions: the dilemma of which file format has to be used when transferring the information contained in the original paper document to the digital one; the problem of how to make the chosen file formats sustainable knowing that each year new ones blossom.

Finally, nowadays, neither paper or digital archives have any standards, or shared recommendations in order to classify and tag documents, nor advanced and powerful search tools capable of guiding users through a great deal of resources and information.

This session addresses the following topics:

- › Archiving standards
- › Navigation tools

- › Interfaces, searching and browsing tools
- › Interoperability
- › Dissemination and use of digital archives
- › User cases

Chairman: Alberto Giretti (Italy)

Speakers: Patricia Alkhoven (The Netherlands) - Riccardo Domenichini (Italy) - Florence Wierre (France) - Elena Triunveri (Switzerland) - Paola Ricco (Italy) - Emanuele Quintarelli, Andrea Resmini, Luca Rosati (Italy) - Hong Zhang (China) - Bernhard Franken, Berthold Scharrer, Suemri Vogel (Germany) - Sara Scapicchio (Italy) - Ina Blümel, Harald Krottmaier, Raoul Wessel (Germany).

› SESSION #3

WEBSITES. A European Network of Architectural Contents

Websites and portals devoted to architecture and websites of professional architects have a considerable amount of resources (pictures, renderings, 2D-3D drawings, details, texts, videos animations and information) continuously updated and enriched. However this material is often disorganised, poorly structured, not properly tagged, and has no advanced and coherent search systems enabling cross-referencing among the available documents. A lot of very interesting resources often remain inoperative and useless, lost in the abyss of often unknown databases. Moreover, very often each website is an isle on the Internet that does not communicate with its brothers and sisters, that remains alone affronting lots of difficulties to survive, renovate, update tools and generally look after the way content is provided and organised.

This session addresses the following topics and other related ones:

- › Organisation of contents of information, architecture and knowledge
- › Which content for what kind of people and purposes
- › Architectural portals and their goals
- › User communities and web 2.0
- › Implementation of virtual super-networks and impacts on the original repository

Chairman: Furio Barzon (Italy)

Speakers: Marco Brizzi (Italy) - Mieke Vullings, Naomi Schiphorst (The Netherlands) - John Jourden (USA) - Charles Ganz (Switzerland), world-architects - Juerg Meister (Austria) - Paolo Cancellato (Italy) - Francisco Agostinho (Portugal) - Stefan Boeykens (Belgium) - Mario Santana Quintero (Belgium), Alonzo Addison, Marta Severo (France)

KEYNOTE SPEAKERS

Derrick De Kerckhove, (Canada), Director of the McLuhan Program

Derrick de Kerckhove is the director of the McLuhan Program in Culture and Technology and Professor in the Department of French at the University of Toronto. He was an associate of the Centre for Culture and Technology from 1972 to 1980 and worked with Marshall McLuhan for over ten years as translator, assistant and co-author. He wrote "La civilisation vidéo-chrétienne" (1990), "Brainframes: Technology, Mind and Business" (1990), "The skin of Culture" (1995), "Connected Intelligence" (1997), "The Architecture of Intelligence" (2001). A consultant in media, cultural interests, and related policies, he has participated in the preparation and brainstorming sessions for the plans of the Ontario Pavillion at Expo '92 in Seville, the Canada in "Space exhibit", and the Toronto Broadcast Centre for the BBC.

21.09.2008, Sunday

9:00-9:30 am

Vicente Gualart (Spain), Institute for Advanced Architecture of Catalonia (Iaac)

Vicente Gualart (Spain) works in the confluence of architecture, nature and new technologies. He spent part of his time with research and educational projects as director of the new Institute for Advanced Architecture of Catalonia (Iaac), in Barcelona, that holds an international postgraduate program on architecture and urbanism working in many scales "from Bits to geography" (www.iaacat.com). In 2000 he co-directed with MIT's Media Lab

and other research centre, the Media House Project, the prototype of an informational house, based for the first time in distributed computation. He is co-author of the Metapolis Dictionary of Advanced Architecture (Actar), HiperCatalonia, or Media House Project. The Korean publishing house DD dedicates the monograph "Intelligent realities" to his work. Actar publishing house is preparing his new book "Media, Mountains and Architecture". He have given lectures in different Universities and Cities around the world as Princeton University, Upen, Architectural Association, UCLA, MIT, Space (Seoul), Taipei and others.

21.09.2008, Sunday

3:00-3:30 pm

OTHER EVENTS

During the conference MACE software for Everyville installation and MACE Book will be presented.

MACE for Everyville installation at La Biennale

The MACE software at La Biennale exhibition visualises the fabric connecting people, knowledge and artefacts in architecture. The installation transports the idea of a transformable, ever-changing interconnected mesh of contents, projects, people and media in an aesthetically pleasing way.

The installation provides background information for the entries of the Everyville student competition (<http://www.labiennale.org/en/architecture/everyville>). Selected entries are presented with media, descriptions, and metadata. Furthermore, the installation incorporates inspirational projects named by the winning groups; these are connected to MACE content and metadata. The installation now acts as amplifier, as the user can not only can explore a project and its media in detail, but reveal the relations to other projects. The evolving structure allows the user to understand the connections between different resources, and recognize where clusters of interest emerge. The visualization aims to make spectators aware of how metadata can be utilised to interconnect architectural resources, and how the overall understanding benefits from these connections.

Everyville 2008 is an initiative made possible by the collaboration of the Biennale with Gruppo Telecom Italia, which has placed its most innovative technology at the service of the competition and display of the winning projects. Software powered by newitalianblood.com and MACE. In collaboration with domus and Foscarini.

venue

Le Artiglierie dell'Arsenale
La Biennale
Venice, Italy

dates

from 11 September, 2008
to 23 November, 2008

hours

10 am - 6 pm, daily

MACE Book

During the MACE conference the book "Browsing architecture. Metadata and beyond", issued in English by IRB Publisher, will be presented.

"Browsing architecture" is about making digital collections of contents easily accessible that are highly useful in the broader context of regular education, e-learning and lifelong learning in architecture. The book is a collection of essays written by e-learning, digital library and web-based portal experts from all over the world. It gives an overview of the current state of the art of innovative, conceptual and technological e-learning tools, already made available to a large public. The published results simplify finding, tagging, acquiring, using and sharing digital architectural and engineering learning resources among experts and novice learners and teachers.

20.09.2008 Saturday

9:30-10:30 AM Registration of participants

10:30 AM OPENING

10:30-11:20 AM **Opening address: institutional greetings and explanation of the main topics to be discussed during the conference**

Chairman: *Herman Neuckermans*, EAAE Representative, MACE Dissemination Leader

Aaron Betsky (to be confirmed), Curator of "La Biennale di Architettura" 2008

Francesco Delogu, Curator of Everyville installation at La Biennale

Piero Torretta (to be confirmed), Vice-president ANCE (Italian Builders Association)

Massimo Colomban, President of VEGA Scientific Park, former President of Permasteelisa

Pilos Spyridon, EU Project Officer MACE

Francis Nordemann, EAAE European Association of Architectural Education President

Furio Barzon, Curator of MACE International Conference, Collaboratorio, MACE Partner

11:30-12:30 AM **MACE presentation: introduction to MACE project**

Martin Wolpers (Germany), Fraunhofer FIT, MACE Coordinator

Massimiliano Condotta, Università IUAV di Venezia, MACE Partner

Alberto Giretti (Italy), Università Politecnica della Marche, MACE Partner

Boris Müller (Germany), Fachhochschule Potsdam FHP, MACE Partner

Moritz Stefaner (Germany), Fachhochschule Potsdam FHP, MACE Partner

12:30-2:00 PM **Lunch break**

› SESSION #1

E-LEARNING. Education: Teaching Architecture in the Digital Age

Chairman: *Mario Santana Quintero* (Belgium), K.U.Leuven, MACE Partner

2:05-2:20 PM TEXTIDATTICA: Saggio Teaches Information Technology in Latin
Antonino Saggio (Italy), Università La Sapienza, Facoltà Ludovico Quaroni

2:25-2:40 PM MACE: Enabling Legacy Repositories
Stefan Apelt, *Christian Prause* (Germany), Fraunhofer Gesellschaft
Mathias Casaer, *Ann Heylighen* (Belgium), K.U.Leuven

2:45-3:00 PM INDEXED AND BROWSED: A New Didactic Approach Towards the Orders of Columns
Susanne Schumacher (Switzerland), Zurich University of Design

3:05-3:20 PM HOUSING@21.EU: Integrating Learning Spaces and Architectural Repositories
Leandro Madrazo (Spain), ARC La Salle, Universitat Ramon Llull, *Paul Riddy* (United Kingdom), KataliSys Limited, *Luca Botturi* (Switzerland), NewMinELab, University of Lugano

3:25-3:40 PM BEYOND DIGITAL REPOSITORIES: Architectural Information Presentation
Verdy Kwee (The United Arab Emirates), The United Arab Emirates University

3:45-4:10 PM **Coffee break**

4:15-4:30 PM TOWARDS USING DIGITAL MODELING SYSTEMS: The Context of E-learning
Giovanni De Paoli, *Nada El-Khoury* (Canada), CAD research group (GRCAO), University of Montreal

4:35-4:50 PM @GD: Keeping a Record of Learning Paths on Digital Graphics Representation for Architecture
Adriane Borda Almeida da Silva, *Neusa Felix*, *Luisa Dalla Vecchia*, *Janice Pires* (Brazil),

- 4:55-5:10 PM Universidade Federal de Pelotas
THE ARCHITECTURAL HERITAGE'S REPRESENTATION BY MODELS: The Contribution of Design Technologies from Interoperability to Simulation
Vladimir Bazajac (USA), Lawrence Berkeley National Laboratory, *Ezio Arlati* (Italy), Technical University of Milan
- 5:15-5:30 PM VIRTUAL STUDIO: A Digital Repository in Architectural Education
Andy Earl, Dr Carl O'Coil, Joss Winn (United Kingdom), University of Lincoln
- 5:35-5:50 PM GOING DIGITAL IN THE CLASSROOM: Lessons from the Integration of Wikis in an Architectural History Course
Francesca Torello, Marie Norman, (USA), Carnegie Mellon University
- 6:00-6:30 PM DISCUSSION CONCERNING THE APPLICATION OF MACE TOOLS FOR EDUCATION

21.09.2008 Sunday

- 8:30-9:00 AM Registration of participants
- 9:00-9:30 AM **KEYNOTE SPEECH**
Derrick De Kerckhove (Canada), Director of the McLuhan Program

› SESSION #2

ARCHIVE. Digital Architectural Archives: Preservation, Dissemination and Use

Chairman: *Alberto Giretti* (Italy), Università Politecnica delle Marche, MACE Partner

- 9:35-9:50 AM BUILDING UP DIGITAL COLLECTIONS: From Policy to Implementation
Patricia Alkhoven (The Netherlands), Netherlands Architecture Institute
- 9:55-10:10 AM THE ON-LINE CATALOGUE OF THE GIANCARLO DE CARLO ARCHIVES: An Attempt to Integrate Paper-Based and Digital-Born Documents
Riccardo Domenichini (Italy), Archivio Progetti IUAV
- 10:15-10:30 AM DIGITAL ARCHITECTURAL ARCHIVES: New Questions for New Archivists?
Florence Wierre (France), Centre d'archives d'architecture du xxè siècle/IFA, Cité de l'architecture et du Patrimoine
- 10:35-10:50 AM ELECTRONIC DOCUMENTS IN AN ARCHITECTURAL PRACTICE: Graphics Creation, Maintenance, Selection and Preservation
Elena Triunveri (Switzerland), Archivio del Moderno
- 10:55-11:10 AM IMAGE ARCHIVE: A Hybrid Structure for the Enhancement of Architecture Videos
Paola Ricco (Italy), iMage
- 11:15-11:30 AM THE FACETAG ENGINE: A Semantic Collaborative Tagging Tool
Emanuele Quintarelli, Andrea Resmini, Luca Rosati (Italy), FACE TAG
- 11:30-11:50 AM **Coffee break**
- 11:55-12:10 AM COMPUTER INTEGRATED BUILDING SYSTEM: Preliminary Thoughts

- 12:15-12:30 PM *Hong Zhang* (China), Tsinghua University
SAVE THE BUBBLE: The Architectural Archive in the Digital Age
Bernhard Franken, Berthold Scharrer, Suemri Vogel (Germany), B. Franken Studio
- 12:35-12:50 PM A CLASSIFICATION SYSTEM FOR CONSTRUCTION UNITS AND PRODUCTS:
Methodological Hypothesis and Application Testing on Pre-Modern Building
Sara Scapicchio (Italy), Università degli Studi di Napoli "Federico II"
- 12:55-1:10 PM PROBADO FRAMEWORK: A Repository for Architectural 3D-models
Ina Blümel, Harald Krottmaier, Raoul Wessel (Germany), German National Library
of Science and Technology (TIB)
- 1:15-1:45 PM DISCUSSION CONCERNING THE APPLICATION OF MACE TOOLS FOR DIGITAL ARCHIVES
- 1:45-3:00 PM **Lunch break**
- 3:00-3:30 PM **KEYNOTE SPEECH**
Vicente Guallart (Spain), Institute for Advanced Architecture of Catalonia (IAAC)

› **SESSION #3**

WEBSITES. A European Network of Architectural Contents

Chairman: *Furio Barzon* (Italy), Collaboratorio, MACE Partner

- 3:35-3:50 PM UNTIMELY CONDITIONS
Marco Brizzi (Italy), arch'it
- 3:55-4:10 PM MIMOA: An Interactive Architecture Guide
Mieke Vullings, Naomi Schiphorst (The Netherlands), MIMOA
- 4:15-4:30 PM ARCHINECT.COM: Making Architecture More Connected
John Jourden (USA), archinect
- 4:35-4:50 PM WORLD-ARCHITECTS.COM: The Premium Network for Selected
Charles Ganz (Switzerland), world-architects
- 4:55-5:10 PM NEXTRROOM: The European Hub for Contemporary Architecture
Juerg Meister (Austria), nextroom
- 5:10-5:30 PM **Coffee break**
- 5:35-5:50 PM THE LAFIS PROJECT: Managing Publicly Induced Data into a Scholar Environment
Francisco Agostinho (Portugal), Faculty of Architecture – Technical University Lisbon
- 5:55-6:10 PM A DATABASE OF ARCHITECTURAL REPOSITORIES: Criteria for Selection and Evaluation
Stefan Boeykens, Herman Neuckermans (Belgium), K.U.Leuven
- 6:15-6:30 PM CULTURAL HERITAGE REPOSITORIES: Digital Archives for Conservation and Management
Mario Santana Quintero, Alonzo Addison, Marta Severo (Belgium), R. Lemaire International
Centre for Conservation, University of Leuven / UNESCO World Heritage Centre
- 6:35-7:05 PM DISCUSSION CONCERNING THE APPLICATION OF MACE TOOLS FOR DIGITAL WEBSITES
- 7:15 PM **End of the conference**

About MACE

MACE, the European Initiative on Metadata for Architectural Contents in Europe, supported by the European Commission, aims at improving architectural education, by integrating and connecting vast amounts of content from diverse repositories, including past European projects and existing architectural design communities. With the creation of innovative e-learning tools mace will provide the community with services such as finding, acquiring, using and discussing contents that previously had only limited accessibility for small groups.

MACE Consortium

COLB Collaboratorio, Italy

DFKI Deutsches Forschungszentrum für Künstliche Intelligenz, Germany

EAAE European Association of Architectural Education, Belgium

FHP Fachhochschule Potsdam University of Applied Sciences, Germany

FIT Fraunhofer Institut für Angewandte Informationstechnik, Germany

IRB Fraunhofer Informationszentrum Raum und Bau, Germany

KUL Katholieke Universiteit Leuven, Belgium

HUM Humance ag, Germany

NAU Nautes srl, Italy

OUNL Open University Netherlands, Netherlands

POLIMI Politecnico di Milano, Italy

UNIVPM Università Politecnica delle Marche, Italy

IUAV University IUAV of Venice, Italy

UPC Technical University of Catalonia, Spain

For any further information see: www.mace-project.eu

Credits

International Conference on *On-line Repositories in Architecture*
Teatro Piccolo Arsenal - Venice, 20-21 Sept. 2008

organised by
Collaboratorio, Italy
EAAE European Association of Architectural Education, Belgium

produced by
MACE Consortium

supported by
European Commission, eContentplus Program

Scientific Committee
Herman Neuckermans, coordinator (EAAE, Belgium)
Markus Eisenhauer (Fraunhofer FIT, Germany)
Alberto Giretti (Università Politecnica delle Marche, Italy)
Erik Duval (Katholieke Universiteit Leuven, Belgium)
Markus Specht (Open University Netherlands, Netherlands)
Martin Wolpers (Fraunhofer FIT, Germany)
Mario Santana Quintero (EAAE, Belgium)
Ezio Arlati (Politecnico di Milano, Italy)

Curator
Furio Barzon (Collaboratorio, Italy)

Proceedings
Browsing architecture. Metadata and beyond

edited by
Matteo Zambelli, Anna Helena Janowiak (Collaboratorio, Italy)
Herman Neuckermans (EAAE, Belgium)

published and distributed by
Fraunhofer irb Verlag, Germany

www.mace-project.eu/conference

Secretary and contact
Anna Ewa Ruszkiewicz
Collaboratorio
c/o VEGA - Parco Scientifico Tecnologico di Venezia
via delle Industrie 15, 30175 Venezia Marghera, Italy
tel. +39 041 5093450 fax +39 041 5093711
anna.ruszkiewicz@collaboratorio.com