

Schedule eCAADe 2004 The Royal Academy, School of Architecture, Copenhagen

Preliminary Schedule, 7th of September 2004

80% Lecture 20% Discussion (~ 12 min. per Topic)
Laptops, connection for laptops and video-beamer are on site!

TUESDAY 14.09.2004

Afternoon Arrival / Registration of participants in Aud. 3 **School of Architecture, Holmen** from 15:00 - 18:00

WEDNESDAY 15.09.2004

Registration of participants in Aud. 3 School of Architecture, Holmen from 8:00

09:00 - 09:30	Aud. 2	Official Opening by Rector Svend Felding, School of Architecture at the Royal Danish Academy of Fine Arts
09:30 - 11:00	Aud. 2	Keynotes: Hitman and Max Payne to the rescue. About production of computer games and the transfer of game technology to CAAD. Thomas Jakobsen , Ph.D. Head of Physics & A.I. Development , IO Interactive Denmark Saku Lehtinen , Art Director, Remedy, IT-teacher, Helsinki University of Technology
11:00 - 11:30	Coffee_Break	

11:30 - 12:15	Aud. 2	Session A1: Virtual Environment and Participatory Design Chair: Andy Brown Page 11	
Computer Game Technology as a Tool for Participatory Design		<i>Carl O' Coill, Mark Doughty University of Lincoln, University of Lincoln, United Kingdom</i>	146
The Electronic Neighbourhood, A New Urban Space		<i>Steen Holmgren², Bjarne Rüdiger¹, Kresten Storgaard², Bruno Tournay¹, ¹Academy of Fine Arts, School of Architecture, ²Danish Building and Urban Research.</i>	76
Beyond the Reality Syndrome, Designing Presence in Virtual Environments		<i>Rivka Oxman, Orit Palmon and Patrice L. (Tamar) Weiss, Technion Israel Institute of Technology, Israel</i>	65

12:15 - 14:00	Lunch_Break
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14:00 - 15:30		Session B1: Virtual Environment 1 Chair: Rivka Oxman Page 43	
Curious Agents in Virtual Exhibitive Environments, Simulative Human-Computer Interaction		<i>Mao-Lin Chiu, Department of Architecture, Department of Architecture, National Cheng Kung University, Taiwan</i>	36
Dynamic Interactions Between Users and Information in a Co-existence Space		<i>Lai, Ih-Cheng and Chang, Teng-Wen, Department of Architecture, Chaoyang University of Technology, Taiwan, Graduate Institute of Architecture, National Chiao Tung University, Taiwan</i>	13
Interaction Methods for Architecture in Virtual Environments.		<i>Woessner, Uwe; Kieferle, Joachim; Drosdol, Johannes, High Performance Computing Center Stuttgart; University of applied sciences, Wiesbaden; DaimlerChrysler</i>	121
Interaction in architectural immersive applications using 3D video		<i>Silke Lang, Ludger Hovestadt, Federal Institute of Technology Zurich, Switzerland</i>	21
Surround Digital Audio in Architectural Animation and VR Environment		<i>Cagri Rona, Dr. M. Saleh Uddin, University of Missouri, Columbia U.S.A</i>	100

14:00 - 15:30		Session B2: Digital Design Tools 1 Chair: Jose P. Duarte Page 89	
Visual Design Thinking in the Design Process as Impacted by Digital Media		<i>Wael Abdelhameed, Faculty of Fine Arts at Luxor, South Valley University, Egypt.</i>	42
Design for Self Assembly of Building Components using Rapid Prototyping		<i>Larry Sass, MIT U.S.A</i>	35
Computer Aided Design Appraisal, A Modest Experiment		<i>Jelena Petric, Tom Maver, University of Strathclyde, UK</i>	125
Digital to Analog, Exploring Digital Processes of Making		<i>Frederick Norman, Auburn University School of Architecture</i>	61
Designing Design-Mediating Software The Development Of Shaper2D		<i>Miranda McGill, Terry Knight, Massachusetts Institute of Technology, USA</i>	147
Combine 3D Software and Remote Control to Progress Operating Simulation of Automatic Guided Vehicles		<i>Naai-Jung Shih, Chin-Hui Su, Department of Architecture, National Taiwan University of Science and Technology</i>	66

15:30 - 16:00	Coffee_Break
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16:00 - 17:15		Session C1: Virtual Environment 2 Chair: Nancy Yen-Wen Cheng Page 135	
Depth Perception in CAVE and Panorama		<i>Michael Mullins, Tadeja Zupancic Strojan , Department of Architecture and Design, University of Aalborg, Denmark; Faculty of Architecture, University of Ljubljana, Slovenia.</i>	69
The Desk-Cave, A Low-Cost Versatile Virtual Reality Design and Research Setup Between Desktop and CAVE		<i>Henri Achten, Joran Jessurun, Bauke de Vries, Technische Universiteit Eindhoven, The Netherlands</i>	134
Interactive Space Generation through Play Exploring Form Creation and the Role of Simulation on the Design Table		<i>Ava Fatah gen. Schieck¹, Alan Penn¹, Chiron Mottram¹, Andreas Strothmann², Jan Ohlenburg³, Wolfgang Broll³, Francis Aish⁴ 1:The Bartlett, University College London, 2:Linie4 Architekten, 3:Fraunhofer FIT, 4:Foster and Partners, London, UK</i>	118

Tangible Interfaces in Design Computing	<i>Hartmut Seichter, Thomas Kvan, Department of Architecture, The University of Hong Kong, China</i>	63
A Portable and Natural Interface to Architectural Virtual Environments	<i>Michael Knight and Andre Brown, School of Architecture, The University of Liverpool, UK</i>	145

16:00 - 17:00 | Session C2 : Digital Design Tools 2 | Chair: Kristian Agger | Page 173

Free-form ceramics, <i>Design and production of complex architectural forms with ceramic elements</i>	<i>José P. Duarte¹, Luisa G. Caldas¹, João Rocha²; ¹Instituto Superior Técnico, Portugal; ²Massachusetts Institute of Technology, USA, now at Universidade do Minho, Portugal</i>	137
Interactive Form Generation <i>Using multiple input devices</i>	<i>Ava Fatah Gen. Schieck, The Bartlett, University College London, UK</i>	110
Modulation and Mathematics in Generative Building Design	<i>Filiz Ozel, Arizona State University, USA</i>	62
Algorithmic Design: A Paradigm Shift in Architecture?	<i>Kostas Terzidis, PhD, Graduate School of Design, Harvard University</i>	56

18:00 - 19:00 | Departure to the Copenhagen City Hall by **City Bike**

19:00 - 20:00 | Reception at the **Copenhagen City Hall**

THURSDAY 16.09.2004

09:30 - 10:30	Aud. 2	Keynotes: Design Goals for Architectural Software Development and Related Educational Strategies By Robert Aish, Bentley Systems
10:30 - 11:00	Coffee_Break	

11:00 - 12:30 | Session D1: 3D Modelling: Model Design | Chair: Thomas Kvan | Page 209

Designing Spatial Sounds for Spatial Information Environments	<i>Gregory More, Jeremy Yuille, Mark Burry, Spatial Information Architecture Laboratory(SIAL), RMIT University, Melbourne, Australia</i>	68
Productive 3D building modeling	<i>Gerardo Silva, University of Santiago, Chile</i>	139
Caricaturing Buildings for Effective Visualization	<i>Grant G. Rice III, Ergun Akleman, Ozan Önder Özener and Asma Naz Visualization Sciences Program, Department of Architecture, Texas A&M University, USA</i>	34
Interactive Rind Modeling for Architectural Design	<i>Ozan Önder Özener, Ergun Akleman and Vinod Srinivasan, Visualization Sciences Program, Department of Architecture, Texas A&M University, USA</i>	54
3D Digital Space and People: Extents and Limitations of Integrating Human Figures in Architectural Animation	<i>M. Saleh Uddin and Mustafa Tutar, University of Missouri-Columbia, U.S.A</i>	115
Geometry in Highly Structured Design Spaces	<i>Teng-Wen Chang¹ and Robert F. Woodbury² ¹National Chiao Tung University, Taiwan, ²Simon Fraser University, Canada</i>	127

11:00 - 12:30 | Session D2: Digital Design Methods 1 | Chair: Henry Achten | Page 255

Interactive Patterns for Associating Ideas during Brainstorming	<i>Lai, Ih-Cheng, Graduate Institute of Architecture, National Chiao Tung University, Taiwan</i>	06
Repositories for Scientific Information Exchange An Overview on SciX-Pilots Related to CAAD	<i>Bob Martens, Vienna University of Technology</i>	02
Developing Architectonic Language Through Digital Observation	<i>Scott Gowans, Richard M Wright, University of Lincoln, Lincoln School of Architecture, United Kingdom</i>	133
Form Development with Spatial Character	<i>Ying-Chun Hsu, Robert J. Krawczyk, Illinois Institute of Technology</i>	41
A representational construct for sharing knowledge in design exploration	<i>Sambit Datta, School of Architecture and Building, Deakin University, Australia.</i>	55
Using Solid Freeform Fabrication for the Conceptualization and Corporeal Actualization of Architecture	<i>Thomas Modeen, Small-Architecture, United Kingdom</i>	98

12:30 - 14:00 Lunch_Break

14:00 - 15:30 | Session E1 : 3D Modelling: simulation | Chair: Bob Martens | Page 303

3D Crossover, From 3D Scanning to Digital Modelling, Rapid Prototyping and Physical Depiction	<i>Marc Aurel Schnabel, Thomas Kvan, Department of Architecture; The University of Hong Kong; Hong Kong, China</i>	27
Dynamical structural modelling, A collaborative design exploration	<i>Jane Burry, Peter Felicetti, Jiwu Tang, Mark Burry, Mike Xie, RMIT University, Australia</i>	148
Optimise urban daylight design using computational simulations	<i>Edward Ng, Department of Architecture, The Chinese University of Hong Kong, Department of Building, National University of Singapore</i>	01
Space, Light, Spirit: Using Computers as a Spatial Visualization and Design Exploration Medium	<i>Tina Sarawgi, The University of North Carolina at Greensboro, USA</i>	105
How to design colour schemes? Conceptual tools for the architectural design	<i>Dirk Donath, Christian Tonn, Bauhaus Universität Weimar, Germany, Faculty of Architecture</i>	150
3D Reconstruction of a Canaletto Painting	<i>Alberto Sdegno, University IUAV of Venice – Department of Architectural Design – Italy</i>	11

14:00 - 15:30 | Session E2: Digital Design Methods 2 | Chair: Martijn Stellingwerff | Page 349

Computer, Creativity and Unpredictability	<i>Alexander Asanowicz Technical University of Bialystok, Poland</i>	04
Something's Gotta Give - Architectural Animations	<i>Antonio Serrato-Combe, College of Architecture and Planning, University of Utah, U.S.A</i>	24
The Fragmented Eye, Cinematographic Techniques for Architectural Animations	<i>Rodrigo García Alvarado, Javier Monedero Isorna, Universitat Politècnica de Catalunya, Spain</i>	20
How useful is the digital sketch?	<i>Claire Hannibal, Andre Brown and Mike Knight, University of Liverpool School of Architecture and Building Engineering</i>	129
Quality Control in Visualisation Process	<i>Uffe Ientz, Aarhus School of Architecture, Denmark</i>	130
Stroke Sequence in Digital Sketching	<i>Nancy Yen-wen Cheng, University of Oregon, USA</i>	149

15:30 - 16:00 Coffee_Break

16:00 - 17:00 Annual General Meeting Aud. 2

19:30 - 23:30 The Conference Dinner Party, by boat to **Trekroner**

FRIDAY 17.09.2004

09:30 - 10:30

Aud.
2**Keynotes****Visions, Design and Collaboration in PLOT,**

by architect Julien de Smedt one of the two founders of the young architect office Plot (2001), well known from the public debate for it's challenging ideas a

10:30 - 11:00

Coffee_Break

11:00 - 12:30

| Session F1: Collaborative Design | Chair: Guillermo Vasquez de Velasco | Page 395

Microcontroller - Enhanced Physical Models for Architectural and Product Design	<i>Thomas Fischer, School of Design, The Hong Kong Polytechnic University, Hong Kong, China, Spatial Information Architecture Laboratory, RMIT, Melbourne, Australia</i>	07
The Architectural Envelope: an Assistant for Components Design Choices	<i>Giuseppe Pellitteri, Benedetto Colajanni, Salvatore Concialdi, Dipartimento di Progetto e Costruzione Edilizia - Università di Palermo</i>	116
Frames, Knowledge and Media An investigative study of frame systems within computer and paper supported collaborative design process	<i>Thomas Kvan, Song Gao, Department of Architecture; The University of Hong Kong; Hong Kong, China</i>	40
A Scenario Approach to Validate and Demonstrate the Tool Usefulness in Cooperative Design	<i>Halin Gilles*, Hanser Damien**, Otjacques Benoit***, Bignon Jean-Claude* *CRAI, UMR-MAP CNRS-Culture n°694, Ecole d'Architecture de Nancy, France. **Centre de Recherche Public Henri Tudor, Luxembourg. ***Centre de Recherche Public-Gabriel Lippmann, Luxembourg.</i>	80
How to construct an Audience in collaborative design The relationship among which actors in the Design Process	<i>Gianfranco Carrara, Antonio Fioravanti, Dpt. Architettura e Urbanistica per l'Ingegneria University of Rome „La Sapienza“</i>	111
Between Mediation and Making CIMSp: A Technoetic Modus Operandi	<i>Michael Jemtrud, Carleton Immersive Media Studio (CIMS) Carleton University, School of Architecture</i>	96

11:00 - 12:30

| Session F2: Digital Design Education: Information and Knowledge Management | Chair: Mark Earl | Page 443

Introducing The Elements of Computer Work Understanding what's in the box and how to get the most out of it	<i>Robert F. Woodbury*, Gwenda L. Braithwaite-Woodbury, *Simon Fraser University, British Columbia, Canada</i>	33
Managing Digital Resources for Design Education	<i>Jeremy J. Ham & Dr. Anthony Dawson, Deakin University, Australia</i>	26
The Notebook University Karlsruhe (TH) How to promote and support the education of architects and engineers via mobile networks?	<i>Claus-Jürgen Schink, Institute for Industrial Building Production (ifib), University of Karlsruhe (TH)</i>	71
Education of Professional Computing Competence in University	<i>Gintaris Cinelis, Kestutis Scevinas, Kaunas University of Technology, Lithuania</i>	52
Sharing Experiences in the Digital Preservation in Schools of Architecture	<i>Anetta Kepczynska-Walczak, Institute of Architecture and Urban Planning, Technical University of Lodz, Poland</i>	122
From pin-up to slideshow: Effects of changing media on 'crit' assessment	<i>Andrew Roberts, Cardiff University, UK</i>	29

12:30 - 14:00

Lunch_Break

14:00 - 15:45

| Session G1: Modelling: VR and planning | Chair: Joachim Kieferle | Page 479

Inter-related Scaled Models of the Built and Natural Environment: Merging CAD with Satellite Image Viewing	<i>Earl Mark, University of Virginia, School of Architecture, USA</i>	30
CityScope - analysing modern urbanism	<i>Pia Bille, Aarhus School of Architecture. Denmark</i>	119
Augmented Reality, Augmented Reality as Tool in Architecture	<i>Werner Lonsing, United States</i>	70
Visual simulation as a tool for planning education, Computer aided participation support	<i>Magorzata Hanzl, Stefan Wrona, Institute of Architecture and Urban Planning, Lodz Technical University and Faculty of Architecture, Warsaw University of Technology</i>	23
Comprehend the Term 'Info-City' A Comparison between Two Primary Cities in Taiwan	<i>Lan-Ting Clare Tseng, Feng-Tyan Lin, Graduate Institute of Building and Planning, National Taiwan University, Taiwan</i>	12
Performance Based Planning for High Density Urban Habitation	<i>Jin-yeu Tsou, Selina Lam, He Jie and Xue Yucai, The Chinese University of Hong Kong, Hong Kong</i>	38
Balancing Visual and Ecological Resource Reservation in Large-scale Recreation Area Planning Support on a GIS Platform A case study of the Wenzhou Ecological Park	<i>Jie He, Jin Yeu Tsou, Department of Architecture, The Chinese University of Hong Kong</i>	78

14:00 - 15:45

| Session G2: Digital Design Education: Research and Practice | Chair: Michael Mullins | Page 529

Changing Roles for (Multi)Media Tools in Design Assessing developments and applications of (multi)media techniques in design education, practice and research	<i>Jack Breen, Form & Media Studies section, Faculty of Architecture Delft University of Technology (TU Delft), Delft, The Netherlands</i>	123
Changing the Culture of Design Studio Reviews: The Use of Large Format Interactive Plasma Screens in Design Studio Reviews	<i>Guillermo Vasquez de Velasco, Texas A&M University, USA</i>	143
Pencil, Pixels and Pulp : A collaborative design studio with digital modeling and full-scale construction	<i>Beng-Kiang TAN, Department of Architecture, School of Design and Environment, National University of Singapore, Singapore</i>	117
dWall – Case of VDS Baghdad	<i>Jerzy Wojtowicz, University of British Columbia Ali Shakarchi, American University of Sharjah</i>	84

	<i>Minoru Takeyama, Musashino Art University, Tokyo, Japan</i>	
The Didactic Triangle <i>Using CAD, photography and descriptive geometry as educating tools with mutual influence</i>	<i>Harald Gatermann, FH Bochum University of Applied Sciences, Bochum, Germany</i>	144
Painting With Light	<i>Henrik Jensen, Academy of Fine Arts, School of Architecture, Denmark</i>	132
Using point cloud to inspect the construction quality of wall finish	<i>Naai-Jung Shih and Pin-Hung Wang, Department of Architecture, National Taiwan University of Science and Technology and Kao Yuan Inst.</i>	18

15:45 - 16:15 Coffee_Break

16:15 - 17:15 | Session H1: 3D City Models | Chair: Mike Knight | Page 579

Creating and Using Virtual Cities	<i>Wolfgang Dokonal, Bob Martens and Reinhard Plösch, Graz University of Technology</i>	22
City Simulator <i>A Multi-dimensional VR-Simulation Environment</i>	<i>Andreas Voigt, Bob Martens and Helena Linzer, Vienna University of Technology</i>	128
3D/4D communication tools for facilitators in public participation	<i>Martijn Stellingwerff^{1,2}, Annette Kuhk¹</i> <i>1. Hogeschool voor Wetenschap & Kunst, Sint-Lucas Architecture, Brussels, Belgium</i> <i>2. Form & Media Studies section, Faculty of Architecture, Delft University of Technology (TU Delft), Delft, the Netherlands</i>	109
Developing VR tools for an urban planning public participation ICT curriculum; the PICT approach	<i>Vassilis Bourdakos, DPRD, University of Thessaly, Greece</i>	91

16:15 - 17:15 | Session H2: Database Systems | Chair: Jonas af Klercker | Page 609

Two Approaches to BIM: A Comparative Study	<i>Magdy Ibrahim, Robert Krawczyk, George Schipporeit, College of Architecture, Illinois Institute of Technology</i>	60
The optimization of assumptions of the reconstruction of monumental objects of Romanesque and Gothic architecture <i>Computer aided archaeological and architectural research</i>	<i>Robert Barelkowski, Polish Academy of Sciences, Poznan Branch, Poznan University of Technology</i>	142
The GISMO project <i>complete integration of renovation and refurbishment of occupied buildings</i>	<i>Claus-Jürgen Schink, Institute for Industrial Building Production (ifib), University of Karlsruhe (TH)</i>	87
A 3D information system for the digital preservation of historical architecture	<i>Naai-Jung Shih, Chen-Yan Lin, and Chai-Yuan Liao, Department of Architecture, National Taiwan University of Science and Technology</i>	09

17:30 - 18:30 Closing Ceremony Aud. 2

SATURDAY 18.09.2004

Optional Architectural Excursion 10:00 -14:00