

## BIGE TUNÇER



Associate Professor  
Director, Informed Design Group

Architecture and Sustainable Design  
Singapore University of Technology and Design  
bige\_tuncer@sutd.edu.sg

## EDUCATION

Ph.D. in Architecture, The Architectural Information Map: Semantic modeling in conceptual architectural design, December 2009  
*Delft University of Technology, Delft, The Netherlands*

M.Sc. in Architecture, Computational Design, May 1996  
*Carnegie Mellon University, Pittsburgh, Pa., USA*

Bachelor of Architecture, June 1993  
*Middle East Technical University, Ankara, Turkey*

Middle and High School, June 1989  
*Tarsus American College, Tarsus, Turkey*

## ACADEMIC WORK EXPERIENCE

Associate Professor, since August 2012  
*Singapore University of Technology and Design, Singapore*

Visiting Scholar, August 2012 - June 2013  
*Massachusetts Institute of Technology, USA*

Visiting Professor, January - June 2011  
*Swiss Federal Institute of Technology Zurich (ETHZ), Switzerland*

Assistant Professor, September 2004 - July 2014  
*Delft University of Technology, The Netherlands*

Researcher (research and teaching), September 2000 - August 2004  
*Delft University of Technology, The Netherlands*

Research Fellow, September 1999 - August 2000  
*Delft University of Technology, The Netherlands*

Junior Faculty (research and teaching), July 1996 - July 1999  
*Swiss Federal Institute of Technology Zurich, Switzerland*

## AWARDS AND HONORS

American Institute of Architects (AIA) Education Honor Award for the course Smart Structures Lab, 2008.

Research fellowship awarded from Delft University of Technology, 1999.

Prix Ars Electronica honorary mention for the course Phase(x) in the category World Wide Web sites, 1999.

Best of 1998 Awards, “golden bunny” award for the course web site of the Chair for Architecture and CAAD (ETH Zurich) in the category “Website: content management and data architecture”, given by the Swiss design journal Hochparterre and the television newsmagazine “10 vor 10”.

Awarded a full scholarship by the Turkish Government for graduate studies in the USA in 1994.

Project in the second year architectural design studio selected and presented at PAPER Conference on Myth, Architecture, History and Writing, Auckland, New Zealand in 1991.

## SERVICE

Since June 2014: *ISO/TC 059/SC 13 "Organization of information about construction works" committee member*

Since December 2013: *Singapore BIM Competition judging panel member*, Singapore Building and Construction Authority (BCA)

Since February 2013: *Affiliated Faculty*, Lee Kuan Yew Centre for Innovative Cities, SUTD

January 2010 – March 2011: *Ph.D. research coordinator*, Department of Building Technology, Faculty of Architecture, Delft University of Technology

2009 – 2012: *Design Informatics representative*, Computation & Performance Research Program, Faculty of Architecture, Delft University of Technology

2006 – 2008: *Digital Design and Manufacturing research subprogram leader*, Department of Building Technology, Faculty of Architecture, Delft University of Technology

April 2006 – April 2008: *Assistant research nestor*, Department of Building Technology, Faculty of Architecture, Delft University of Technology

March 2006 – March 2008: *Liaison nestor*, Delft School of Design (DSD), Faculty of Architecture, Delft University of Technology

## COMMITTEE WORK

Since July 2013: Capstone Committee member, Singapore University of Technology and Design

Since April 2013: IT Evaluation committee member, Singapore University of Technology and Design

July - September 2013: Teaching Load and Academic Performance committee member

2010 – 2012: Member of Stylos Foundation Board, Faculty of Architecture, Delft University of Technology

2009 – 2012: Delft Center for Entrepreneurship Ambassador from Faculty of Architecture, Delft University of Technology

2009: Member of taskforce Ph.D. Policy, Faculty of Architecture, Delft University of Technology

2003 – 2007: Member of Standing Committee for Scientific Research (VCW) of the Faculty of Architecture, Delft University of Technology

2006: Member of taskforce Internationalization, Department of Building Technology, Faculty of Architecture, Delft University of Technology

2002 – 2006: Delft Ph.D. Association (PROMOOD) representative from Faculty of Architecture, Delft University of Technology

2000 – 2006: Design and maintenance of the IBouw workshop website

## RESEARCH

*Liveable Places: A Building Environment Modelling Approach for Dynamic Place Making*  
*September 2014 – September 2017, PI, Sustainable Urban Living, Ministry of National Development, Singapore, S\$ 2,000,000*

Partners: SUTD, A\*Star I2R, SingTel, Housing & Development Board (HDB), Urban Redevelopment Agency (URA), Infocomm Development Authority (IDA), Lee Kuan Yew Centre for Innovative Cities

This research investigates data collection on user and usage information on public spaces in residential new towns and develops a design system for the adaptive redesign of public spaces.

*LNG to district cooling*

*March 2014, Co-PI, Future Cities Lab, SEC, S\$200,000*

A feasibility study calculation and simulations of a district cooling grid reaching from the LNG terminal in Singapore towards the main island

*Optical Motion Tracking and Capture System*

*August 2013, Co-PI, SUTD-MIT International Design Centre Equipment, S\$400,000*

This grant enables the acquisition of optical motion capture equipment. The aim is to conduct visibility analysis and simulation on the urban neighbourhood scale.

*Building Environment Modeling (BEM) for the Adaptive Design of Public Spaces*

*March 2013, PI, Start-up research grant, funded by SUTD and SUTD-MIT International Design Centre, S\$100,000*

The goal of this research is to assess and increase the livability of high-rise high-density public housing environments. A Building Environment Modeling (BEM) approach is developed that combines BIM, GIS, and information modeling (ArcIMap) in order to create an integrated design environment that supports informed design decisions. Big data is fed into BEM, simulations and analyses resulting from this data are visualized in BEM.

*EU PEOPLE program on International Research Staff Exchange Scheme (IRSES) for Asian Urban Knowledge Network*

*Researcher, Work Package Heritage Conservation and the Environment 2012*

Urban Knowledge Network Asia brings together internationally recognized experts from all over the world. The research will concentrate on the material and immaterial aspects of a city's urban heritage, in relation to the growing urbanization in (Asian) cities. A networked information mapping approach will be used to collect and map information of a city to then recommend urban qualities for heritage sites and objects.

*Cultivating educational communities of practice in architecture*

*Active research*

This research is concerned with e-learning systems as complex adaptive systems. The two premises are: 1) Technical systems for e-learning cannot afford to neglect the social interactions of their users;

2) Considering the full 'life cycle' of information and knowledge is important. The research project considers information and knowledge in the context of situated cognition and situated e-learning, examines processes and methods to maintain and facilitate educational communities of practice, and describes technical developments that implement these constructs within architectural design studio education.

The Architectural Information Map (ArcIMap): Semantic modeling in conceptual architectural design

*Ph.D. Research, funded by Delft University of Technology, completed in 2009*

This research focuses on the acquisition, representation, sharing and reuse of design information and knowledge in the conceptual phase of architectural design. It targets the creation of situated digital environments where communities of architectural practice communicate and collaborate using this information and knowledge. The utilizable outputs of the research are the ArcIMap method and model, and the four prototype applications embedded in education and practice.

Design Map: Information modeling for the early phases of architectural design

*Principal investigator, funded by Department of Building Technology, Faculty of Architecture, Delft University of Technology, September 2004 - December 2004*

Design Map is a flexible and extensible content management system intended to be used at the early stages of design. It targets middle and small-size architectural offices. It has been used and evaluated at the architecture office Mecanoo.

InfoBase: A multimedia learning environment to support group work and discourse

*Workpackage leader, funded by ICTO - Delft University of Technology, August 2002 - December 2004*

The goal of the InfoBase project is to provide students with and teach them how to utilise a digital environment in which they can store, exchange and manage the information they collect and generate, individually and in group, and at their own initiative.

[ [www.bk.tudelft.nl/infobase/](http://www.bk.tudelft.nl/infobase/) ]

BLIP: Blob Inventory Project

*Joint project of Bige Tunçer, Tuba Kocaturk, and Martijn Veltkamp, 2002 - 2004*

This research project examines the mutual influences of initial architectural, structural and digital manufacturing related decisions on the evolution of free-form architectures. It uses a flexible and extensible framework that uses a semantic structure for the organization of information.

ICCS: A Tool Set for the Virtual AEC Company

*Funded by the Swiss National Science Foundation, July 1996 - July 1999*

Development of an information platform for communication and collaboration between all partners in the building planning, design, construction, and management processes. Partners: Chair for Architecture and CAAD, ETHZ (Prof. Gerhard Schmitt); ISS/IMAC – Structural Engineering and Mechanics, EPFL (Prof. Ian Smith); AI Lab, EPFL; CRB – Swiss Centre for Building Rationalization; SIA – Swiss Association of Engineers and Architects; AfB Amt für Bundesbauten – Swiss Federal Building Office; Zwahlen & Mayr SA, Aigle; ZRH Zoelly Rüeeggler Hostenstein Architekten AG, Zollikon-Zurich; ABB CMC Systeme AG; Amstein + Walthert AG; Allemand Jeanneret Schmid SA, Neuchatel

Urban Design Decision Support System

*Master's Project, Carnegie Mellon University, February 1996 - May 1996, advised by John Decker and Ramesh Krishnamurti*

Design and implementation of an Urban Design Decision Support System (UDDSS), a gaming environment for the multidisciplinary exploration of urban development. The system allows participants to make development proposals within a given urban context (hypothetical or real), and test the proposals against a set of criteria relating to environmental, economic, engineering, and institutional - policy constraints.

EDAT: An electronic design assistance tool for case-based representation of designs

*Funded by Carnegie Mellon University, September 1995 - March 1996*

EDAT (Electronic Design Assistance Tool) is intended to assist in precedent based design in the studio with the potential of expansion into the office setting. EDAT has been designed using object

oriented system development methods. EDAT was used in a design studio at Carnegie Mellon University, during Spring 1996 and Spring 1997.

## RESEARCH PROPOSALS

### *Future Cities Lab II (FCLII), Big Data Informed Urban Design, Responsive Cities Scenario*

Last stage of review, August 2015 – July 2018, PI, SEC and NRF, S\$45,000,000

This research develops a planning method informed by computational evidence, which allow the generalization of insights from the analysis of existing spatial configurations. This makes these results available for future planning by using them as a computational evaluation tool for planning proposals. Finally the analysis results from big data will be used for objective functions of a synthesis process by means of evolutionary multi-criteria optimization. Responsive Cities: Big Data Informed Urban Design

### *ICT-enhanced portfolios of intelligent design solutions to enhance liveability of high-density residential towns*

January 2014, PI, Land and Liveability National Innovation Challenge (L2 NIC), National Research Foundation and Ministry of National Development, Singapore, S\$ 5.000.000.

Partners: SUTD, A\*Star I2R, Housing & Development Board (HDB), Lee Kuan Yew Centre for Innovative Cities

### *Analysis of building energy use patterns and models for renewable energy efficiency technologies of residential and commercial buildings*

August 2013, Co-PI, King Abdullah City for Atomic and Renewable Energy (KACARE), USD \$14,800,000. Partners: Battelle, CSIRO, GARD Analytics, Massachusetts Institute of Technology, National University of Singapore, PE International, Philadelphia University, Re:Vision Architecture, Singapore University of Technology and Design, SRA International, Texas A&M University – Energy Systems Lab, White Box Technologies.

### *Improving Living for Elderly Residents Using Integrated IT Facilities*

August 2013, PI, Aging and the City program, Lee Kuan Yew Centre For Innovative Cities, SUTD, in collaboration with Andrew Yoong, ISTD, SUTD.

### *Inverse Urban Design*

April 2012, Collaborator, Swiss National Science Foundation, in collaboration with ETH Zurich (Prof. Schmitt, Anastasia Koltsova), TU Lisbon (Jose Beirao)

### *A model and method for integrated design generation and evaluation of sustainable buildings*

February 2011, Co-PI, Science Foundation of China, in collaboration with Chongqing University (Prof. Chu Dongzhu)

### *Computation and Performance: Development of an R&D roadmap for the integration of the aspect of performance into the next generation building design and planning software*

January 2010, Lorenz Center (international center for workshops in the sciences), Leiden University, € 22.515

### *ConceptDesign: Conceptual design and communication contract: how can we minimize the cost of decision making*

March 2006, Co-PI, Agence Nationale de la Recherche, France – programme “blanc”; coordinator: Université de Montpellier, France

### *LiveDoX: Living intelligent documents for knowledge sharing in complex multi-actor one-of-a-kind projects and processes, specific targeted research project*

April 2003, European Commission – FP6 programme – IST priority, € 2.482.000; coordinator: TU Delft

### *SmartDoc: Smart building design and construction documents, integrated project expression of interest*

June 2002, European Commission – FP6 programme – IST priority; coordinator: TU Delft

### *ECIS: E-documents for cultural information spaces, thematic network*

February 2001, European Commission – FP5 programme – IST priority, € 655.700;  
coordinator: TU Delft

## PROJECTS

Variomatic, Oosterhuis Associates, Rotterdam, November 2000  
Database design for a parametric housing design website.  
[ [www.oosterhuis.nl/variomatic](http://www.oosterhuis.nl/variomatic) ]

woonwerf.nl, DPI, Den Haag, and TRS Ontwikkelingsgroep, Rotterdam, June 2000  
Database design for an interactive residential development project website.

Journey into the Living Cell project, Studio for Creative Inquiry, Carnegie Mellon University,  
Pittsburgh, Pa., USA, June 1995 - August 1995  
Construction of 3D computer models and animations.

## REVIEWING

CAADRIA International Conference, reviewer, since 2013

Mimarlıkta Sayisal Tasarım Ulusal Sempozyumu, reviewer since 2013

Paper selection committee member, CAADRIA 2013, Singapore

Automation in Construction, reviewer, since 2011

ACADIA International Conference, reviewer, since 2011

Engineering with Computers, reviewer, since 2011

eCAADe International Conference, reviewer, since 2011

International Sustainable Buildings Symposium (ISBS), international editorial board member,  
since 2010

Design and Semantics of Form and Movement (DeSForM) International Conference,  
reviewer, since 2010

TMCE Symposium, international paper review panel member, since 2010

1<sup>st</sup> International Graduate Research Symposium, international scientific committee member,  
2010

International Journal of Architectural Computing (IJAC), reviewer, since 2009

METU Journal of the Faculty of Architecture (JFA), reviewer, 2009

CAAD Futures International Conference, reviewer, 2009

3<sup>rd</sup> CIB International Conference on Smart and Sustainable Built Environments (SASBE 09),  
technical committee member, 2009

International Conference on Innovation in Architecture, Engineering and Construction  
(AEC), scientific committee member, since 2005

Gazi University Journal of Science, advisory board member, since 2007

International scientific committee member, Joint International Conference on Construction  
Culture, Innovation, and Management, “Sustainable Development through Culture and  
Innovation”, 2006

Game Set & Match II International Conference, international scientific committee member,  
2006

International Structural Engineering and Construction Conference Series (ISEC), international scientific and technical committee member, since 2005

Design Computing and Cognition (DCC) International Conference Series, international advisory board member, since 2004

EuropIA International Conference Series, scientific committee member, since 2001

## PUBLICATIONS

### JOURNAL EDITORSHIPS

Tunçer B. and Stouffs R. (Eds.) (2015). Design to Fabrication, *Automation in Construction* (Special Issue Section).

*SPOOL - Journal of Architecture and the Built Environment* (Editor)

Beheshti R. and Tunçer B. (Eds.) (2005). Supporting Design Environments, *International Journal of Design Sciences and Technology* (Special Issue) 12(1).

### BOOK EDITORSHIPS

Stouffs R., Janssen P., Roudavski S. and Tunçer B. (Eds.) (2013). *Open Systems: Proceedings of the 18th International Conference of the Association of Computer-Aided Architectural Design Research in Asia (CAADRIA2013)*, National University of Singapore.

Sariyildiz S. and Tunçer B. (Eds.) (2005). *Innovation in Architecture, Engineering and Construction, Volume 1 - Innovation in Design, Engineering and Construction*, SOON, Rotterdam, The Netherlands.

Sariyildiz S. and Tunçer B. (Eds.) (2005). *Innovation in Architecture, Engineering and Construction, Volume 2 - Innovation in Technology and Management in AEC*, SOON, Rotterdam, The Netherlands.

Tunçer B., Ozsariyildiz S.S. and Sariyildiz S. (Eds.) (2003). *E-Activities in Design and Design Education*, Europa Productions, Paris.

Tunçer B., Ozsariyildiz S.S. and Sariyildiz S. (Eds.) (2003). *E-Activities in Building Design and Construction*, Europa Productions, Paris.

### DISSERTATION

Tunçer B. (2009). *The Architectural Information Map: Semantic Modeling in Conceptual Architectural Design*, Delft University of Technology.

### BOOK CHAPTERS

Tunçer B. and Sariyildiz S. (2011). “Bir Analiz Sunum Araci: Üç Sinan Camisi”, Sinan ve Çağı (ed. H. Mahiroğlu), TMMOB Mimarlar Odası Kayseri Subesi Yayınları, pp. 173-188.

Tunçer B. (2009). “Data exchange study”, *Multiplayer Design Studio* (eds. K Oosterhuis and T Jaskiewicz), China Architecture & Building Press, Beijing, China, pp. 14-18.

Kocaturk T., Tunçer B. and Veltkamp M. (2004). “BLIP: Blob Inventory Project”, *BLOB in the Faculty 2004* (eds. M. Eekhout et al.), Faculty of Architecture, Delft University of Technology, The Netherlands, pp. 34-37.

Sariyildiz S., Stouffs R., Çiftçioglu Ö. and Tunçer B. (2002). “Future ICT Developments”, *Ways to Study and Research* (eds. T.M. de Jong and D.J.M. van der Voordt), DUP Science, Delft, The Netherlands, pp. 377-383.

### REFEREED JOURNAL ARTICLES

Stouffs R. and Tunçer B. (2015, forthcoming). “Typological descriptions as generative guides for historical architecture”, *Nexus Network Journal: Architecture and Mathematics*.

Shin D., Aliaga D., Tunçer B., Müller Arisona S., Kim S., Zund D. and Schmitt, G. (2014).

“Urban sensing: Using smartphones for transportation mode classification”, *Computers, Environment and Urban Systems*.

Tunçer B. (2013). “A Digital Precedent Library for Classical Period Ottoman Mosques”, *Journal of Design Research* 11(4), pp. 351-371.

Kunze A., Burkhard R., Gebhardt S., Tunçer B. (2012). “Visualization and Decision Support Tools in Urban Planning”, *Springer CCIS Digital Urban Modelling and Simulation* (242), pp. 279-298.

Akar E., Öztürk E., Tunçer B. and Wiethoff M. (2004). “Evaluation of a collaborative virtual learning environment”, *Education + Training* 24(6+7), pp. 343-352.

Stouffs R., Kooistra J. and Tunçer B. (2004). “Metadata as a Means For Correspondence on Digital Media”, *ITcon* Vol. 9, Special Issue Digital Media Libraries, pp. 129-142.

Tunçer B., Stouffs R. and Sariyildiz I.S. (2002). “Document decomposition by content as a means for structuring building project information”, *Construction Innovation* 2(4), pp. 229-248 [Invited paper].

Zreik K., Beheshti R., Stouffs R., Tuncer B. and Ozsariyildiz S.S. (2002). “The building and construction eDocuments”, *International Journal of Design Sciences and Technology* 10(1), pp. 7-16.

Akin Ö., Cumming M., Shealey M. and Tunçer B. (1997). “An electronic design assistance tool for case-based representation of designs”, *Automation in Construction* 6, pp. 265-274 [Invited paper].

#### **REFEREED CONFERENCE ARTICLES**

Chaszar A. and Tunçer B. (2014). “Integrating User and Usage Information in a Design Environment”, *Rethinking Comprehensive Design: Speculative Counterculture, Proceedings of the 19th International Conference of the Association of Computer-Aided Architectural Design Research in Asia CAADRIA 2014* (eds. N. Gu et al.), The Association for Computer-Aided Architectural Design Research in Asia (CAADRIA), Kyoto, JAPAN.

Chong W., Yuen C., Huang S., Tuncer, B. (2014). “Iterative design of a sensor network for the evaluation of pedestrian facility design using agent-based simulations”, *IoT Mobility 2014*.

Zawidzki M., Nagakura T., Tunçer, B. (2014). "Preliminary Results of the Town Square Evaluation Method based on Digitized Plan Processing", *Proceedings of the Ninth International Conference on Engineering Computational Technology* (eds. P. Iványi, B.H.V. Topping), Civil-Comp Press, Stirlingshire, UK, Paper 92.

Koltsova A., Tunçer B., Schmitt, G. (2013). “Visibility Analysis for 3D Urban Environments”, *Computation and Performance - eCAADe proceedings* (eds. R. Stouffs and S. Sariyildiz), Delft, pp. 375-383.

Koltsova A., Tunçer B., Georgakopoulou S., Schmitt, G. (2012). “Parametric Tools for Conceptual Design Support at the Pedestrian Urban Scale: Towards inverse urban design”, *Digital Physicality - eCAADe proceedings* (eds. H. Achten et al.), Prague, pp. 279-287.

Albayrak C. and Tunçer B. (2011). “Performative architecture as a guideline for transformation: Defense Line of Amsterdam”, *Respecting Fragile Places - eCAADe proceedings* (eds. T. Zupancic et al.), Ljubljana, pp.501-510.

Tunçer B. and Sariyildiz S. (2010). “Facilitating architectural communities of practice”, *Future Cities* (eds. G. Schmit et al.), ETH Zurich, pp. 707-716.

Tunçer B., de Ruiter P. and Mulders S. (2008). “An experiment in multidisciplinary digital design”, *Architecture 'incomputro'* (ed. M. Muylle), Antwerp, pp. 659-666.

Tunçer B. (2007). “Modeling of knowledge for free form building processes”, *Sources of Architectural Form: Theory and Practice* (ed. H. Dashti), Kuwait University, Kuwait.

Tunçer B., Sariyildiz S. and Stouffs R. (2006). Arcimap : knowledge modeling for conceptual



building design, *Proceedings - Building on IT; Joint International Conference on Computing and Decision Making in Civil and Building Engineering* (eds. H Rivard, E Miresco, and H Melhem), Montréal, Canada, pp. 2015-2024.

Tuncer B. and Sariyildiz S. (2006). Design analysis network. In V Bourdakis & D Charitos (Eds.), *eCAADe 24 Proceedings of the 24th conference on education in computer aided architectural design in Europe : communicating space(s)*. Volos: University of Thessaly, pp. 206-214.

Tuncer B., Al-Ars Z., Akar E., Beintema J. and Sariyildiz S. (2006). Designmap: capturing design knowledge in architectural practice. In M Dulaimi (Ed.), *Conference Proceedings of The Joint International Conference on Construction Culture, Innovation and Management (CCIM)* (pp. 352-361). Dubai, UAE: BUiD.

Kooistra J., Hopstaken K., Stouffs R., Tunçer B., Janssen Groesbeek E. and Sjoer E. (2005). “Keyset: Conceptual, technical, didactic and strategic qualities of a ‘discourse browser’”, *Innovation in Architecture, Engineering and Construction, Volume 1 - Innovation in Design, Engineering and Construction* (eds. S. Sariyildiz and B. Tunçer), Rotterdam, The Netherlands, 353-364.

Stouffs R., Kooistra J., Tunçer B. and Akar E. (2005). “Design communication and collaboration”, *Design Research in the Netherlands 2005* (eds. H. Achten, K. Dorst, P.J. Stappers and B. de Vries), Eindhoven University of Technology, Eindhoven, The Netherlands, 85-94.

Stouffs R., Tunçer B., Janssen Groesbeek E., Kooistra J. and Sjoer E. (2005). “The use of metadata as a means to improve the quality of design: results from education”, *CAADRIA 2005 (Proceedings of the 10th International Conference on Computer Aided Architectural Design Research in Asia), Volume 2* (ed. A. Bhatt), TVB School of Habitat Studies, New Delhi, India, 503-509.

Tunçer B., Ciftcioglu Ö., Sariyildiz S. and Cumming M. (2005). “Intelligent design support”, *CAADRIA 2005 (Proceedings of the 10th International Conference on Computer Aided Architectural Design Research in Asia), Volume 2* (ed. A. Bhatt), TVB School of Habitat Studies, New Delhi, India, 436-446.

Kocaturk T. and Tunçer B. (2004). “Modeling Collaborative Conceptual Design in the Digital Age”, *Third International Workshop on Construction Information Technology in Education* (ed. A. Dikbas), ITU Press, Istanbul, Turkey, 149-163.

Kooistra J., Stouffs R. and Tunçer B. (2004). “Metadata as means for improving the quality of design”, *Cybernetics and Systems 2004* (ed. R. Trappl), vol. 1, Austrian Society for Cybernetic Studies, Vienna, 108-113.

Sariyildiz S., Ciftcioglu O., Tunçer B. and Stouffs R. (2004). “Knowledge of Cultural Analogy in Design and Design Education — Multiculturalism”, *Local Values in a Networked Design World - Added Value of Computer Aided Architectural Design*, DUP Science, Delft, The Netherlands, 91-104.

Stouffs R., Tunçer B., Janssen Groesbeek E. and Kooistra J. (2004). “Keyset: The Use of Metadata as a means to improve the quality of design”, *Third International Workshop on Construction Information Technology in Education* (ed. A. Dikbas), ITU Press, Istanbul, Turkey, 79-94.

Stouffs R., Engeli M. and Tunçer B. (2004). “Mediated discourse as a form of architectonic intervention”, *Local Values in a Networked Design World - Added Value of Computer Aided Architectural Design*, DUP Science, Delft, The Netherlands, 197-206.

Tunçer B., Çiftçioglu Ö., Sariyildiz S. and Cumming M. (2004). “Intelligent design support: an educational experiment in knowledge modeling”, *Third International Workshop on Construction Information Technology in Education* (ed. A. Dikbas), ITU Press, Istanbul, Turkey, 29-46.

Akar E., Tunçer B., Attema J. and Stouffs R. (2003). “Design and evaluation of a collaborative virtual space: InfoBase”, *E-Activities in Design and Design Education* (eds. B.

- Tunçer, S.S. Özariyildiz and S. Sariyildiz), Europa Productions, Paris, 3-12.
- Akar E., Andriessen J.H.E., Attema J. and Tunçer B. (2003). "Socio-technical evaluation of computer supported work and learning systems", *Human Computer Interaction: Theory and Practice, Part II* (eds. C. Stephanidis and J. Jacko), Lawrence Erlbaum Assoc., Mahwah, NJ, 834-838.
- Kocaturk T., Veltkamp M. and Tunçer B. (2003). "Exploration of interrelationships between digital design and production processes of free-form complex surfaces in a web-based database," *Digital Design: Research and Practice, Proceedings of the 10th International Conference on Computer Aided Architectural Design Futures* (eds. M-L. Chiu, J-Y. Tsou, T. Kvan, M. Morozumi and T-S. Jeng), Kluwer Academic, Dordrecht, The Netherlands, 445-454.
- Kooistra J., Stouffs R. and Tunçer B. (2003). "Metadata as a means for correspondence in design analysis", *E-Activities in Design and Design Education* (eds. B. Tunçer, S.S. Özariyildiz and S. Sariyildiz), Europa Productions, Paris, 19-28.
- Sariyildiz S., Ciftcioglu O., Stouffs R., Tunçer B. and Ozariyildiz S.S. (2003). "Information, communication and knowledge technology in the building sector", *E-Activities in Building Design and Construction* (eds. B. Tunçer, S.S. Özariyildiz and S. Sariyildiz), Europa Productions, Paris, 185-190.
- Sariyildiz I.S., Tunçer B., Ciftcioglu Ö. and Stouffs R. (2003). "An intelligent cooperation environment for the building sector, why?", *ISEC-02: System-based Vision for Strategic and Creative Design*, Volume 2 (ed. F. Bontempi), A.A. Balkema, Lisse, The Netherlands, 1559-1565.
- Stouffs R., Tunçer B. and Sariyildiz I.S. (2003). "InfoBase: a multimedia learning environment to support group work and discourse", *ISEC-02: System-based Vision for Strategic and Creative Design*, Volume 2 (ed. F. Bontempi), A.A. Balkema, Lisse, The Netherlands, 1751-1756.
- Zreik K., Stouffs R., Tunçer B., Ozariyildiz S. and Beheshti R. (2003). "Information modelling for improving communication in design and construction", *Digital Design: Research and Practice, Proceedings of the 10th International Conference on Computer Aided Architectural Design Futures* (eds. M-L. Chiu, J-Y. Tsou, T. Kvan, M. Morozumi and T-S. Jeng), Kluwer Academic, Dordrecht, The Netherlands, 63-72.
- Sariyildiz S., Stouffs R. and Tunçer B. (2002). "Vision on ICT developments for the building sector", *ACADIA 2000: Eternity, Infinity and Virtuality in Architecture* (eds. M.J. Clayton and G.P. Vasquez de Velasco), Association for Computer-Aided Design in Architecture, 11-18.
- Stouffs R., Tunçer B., Venne R.F. and Sariyildiz I.S. (2002). "InfoBase: a multimedia learning environment to support group work", *Construction Information Technology in Education* (ed. D. Rebolj), International Council for Research and Innovation in Building and Construction, Rotterdam, The Netherlands, 75-82.
- Stouffs R., Tunçer B. and Sariyildiz S. (2002). "WoonWerf.nl revisited: the potential of web-based design communication with future clients", *Design and Decision Support Systems in Urban Planning*, Eindhoven University of Technology, Eindhoven, The Netherlands, 240-250.
- Stouffs R., Tunçer B. and Sariyildiz S. (2002). "Empowering individuals to design and build collaborative information spaces", *Distributing Knowledge in Buildings* (eds. K. Agger, P. Christiansson and R. Howard), vol.2, Aarhus School of Architecture and Centre for Integrated Design, Aarhus, Denmark, 133-140.
- Stouffs R., Tunçer B. and Sariyildiz S. (2002). "Examples of web-based custom design in Dutch residential developments", *Distributing Knowledge in Buildings* (eds. K. Agger, P. Christiansson and R. Howard), vol.1, Aarhus School of Architecture and Centre for Integrated Design, Aarhus, Denmark, 148-155.

- Tunçer B., Stouffs R. and Sariyildiz S. (2002). “Cooperating on Architectural Analyses”, *eCAADe 20 [design e-ducation] Connecting the Real and the Virtual* (eds. K. Koszewski and S. Wrona), eCAADe and Warsaw University of Technology, Warsaw, 20-27.
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means for structuring building project information”, *Advances in Building Informatics* (ed. R. Beheshti), Europia Productions, Paris, 209-221.

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Papanikolaou M. and Tunçer B. (1999). “The Fake.Space Experience - Exploring New Spaces”, *Architectural Computing: from Turing to 2000* (eds. A. Brown, M. Knight, and P. Berridge), eCAADe and The University of Liverpool, Liverpool, UK, 395-402.

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Stouffs R., Kurmann D., Tunçer B., Mieusset K.H. and Stäger B. (1998) “An information architecture for the virtual AEC company”, *Product and Process Modelling in the Building Industry* (ed. R. Amor), Building Research Establishment, Watford, UK, 479-486.

Stouffs R., Tunçer B. and Schmitt G. (1998) “Supports for information and communication in a collaborative building project”, *Artificial Intelligence in Design 98* (eds. J. Gero, and F. Sudweeks), Kluwer Academic, Dordrecht, The Netherlands, 601-617.

Akin Ö., Cumming M., Shealey M. and Tunçer B. (1996). “An electronic design assistance tool for case-based representation of designs”, *Design Computation: Collaboration, Reasoning and Pedagogy, ACADIA Conference*, Tucson, Arizona, USA, 123-132.

## **NON-REFEREED ARTICLES AND REPORTS**

Knaack U., Techen H., Auer T., Bilow M., Badarnah L., Rietbergen. D and Tunçer B. (2008). *Workshop The Future Envelope, DSD presents Architectural Engineering*, Delft (May 6 - 2008, May 7).

Eekhout M. and Tunçer B. (Eds.)(2007). *Building Technology Research Programs Peer Review Evaluation*, January-April 2007, Department of Building Technology, Faculty of Architecture, Delft University of Technology.

Eekhout M. and Tunçer B. (Eds.)(2007). *Building Technology Research Projects, 31 December 2006*, Department of Building Technology, Faculty of Architecture, Delft University of Technology.

Tunçer B., Borgart A. and Turrin M. (2006). *Proceedings of Colloquium TU Delft Building Technology - IUAV Venice Architectural Construction*, 26-27/6/2006, Faculty of Architecture, Delft University of Technology.

Borgart A., Kocaturk T., Tuncer B. and Veltkamp M. (Eds.)(2006). *Proceedings of the First Free Form Design Colloquium*, IASS and Faculty of Architecture, Delft University of Technology.

Beheshti R. and Tunçer B. (2005). “Editorial: Information, communication and knowledge

technologies supporting building design and construction processes”, *International Journal of Design Sciences and Technology* 12(1), 7-12.

Tunçer B. and Kocaturk T. (2005). Women in Academia – “The Glass Ceiling”, *B-Nieuws* nr. 17, volume 2004-2005.

Tunçer B. and Veltkamp M. (2004). “The Bouwkunde Ph.D. Afternoon”, *Het Proefschrift: Journal for P.Hd. Students in Delft* Autumn 2004, 10-12.

Stouffs R. and Tunçer B. (2000). *Database ontwerp ter ondersteuning van Woonwerf.nl*, Technical report, Chair for Technical Design and Informatics, Faculty of Architecture, Delft University of Technology, June 2000.

Stouffs R. and Tunçer B. (1997). *Information architecture: presentation and representation*, Technical report, Chair of Architecture and CAAD, Swiss Federal Institute of Technology Zurich, April 1997.

## TEACHING

20.011: Building Information Modeling, Fall 2014

*Undergraduate Semester 4 Required Course, 9 credits*

*ASD, SUTD*

Building Information Modeling is designed to provide students with fundamental knowledge and basic practical skills of the planning and execution of Building Information Models. It is also aimed to offer opportunities for students to establish a basic understanding of those elements that impact the generation of a Building Information Model, including methods of communication, data creation, social, and economic factors between trades.

20.502: Design Computation in Architecture, Spring 2014

*Ph.D. Semester 1 Required Course, 12 credits*

*ASD, SUTD*

This course consists of a design exploration component and a seminar component. The design exploration component consists of formulating a design related issue or problem, and iteratively exploring this issue or problem using relevant and suitable computational tools and techniques. The seminar component consists of reading and discussing selected relevant texts.

20.007: Digital Design & Fabrication, Spring 2014

*Undergraduate Semester 4 Required Course, 9 credits*

*ASD, SUTD*

Digital Design and Fabrication investigates the transformation of conceptual design to production documentation and manufacturing within contemporary digital media. Situated at the threshold between virtual and physical, design information and architectural artifacts, it is comprised of both design computation methods and material fabrication technologies.

20.003: Introduction to Design Computation, Fall 2013

*Undergraduate Semester 4 Required Course, 9 credits*

*ASD, SUTD*

This subject aims to provide an understanding of the role computation can play in solving design problems. It also aims to help students to write small programs that allow them to accomplish useful design goals. In the end, this subject will provide a foundation in computing and design for more advanced subjects to come.

Chinese New Year Design Studio, Fall 2013

Chinatown Singapore decorations for the Year of the Horse

Simulating Urban Design Futures, Spring 2011

*Elective Course, 1 ECTS*

*Department of Architecture, Swiss Federal Institute of Technology*

Lecture on Design, Modeling and Simulation

Seminar Week: Future Cities Singapore, Spring 2011

*Elective Course, 1 ECTS*

A study trip to Singapore for 8 days. Responsible for the assignment of the course. Students create digital concept maps in groups expressing their findings and impressions on five topics: green, pedestrian life, construction, housing, and heritage.

AR0025: XXL Workshop, Spring 2011

*M.Sc. Semester 2 Elective Digital Design Studio, 12 ECTS*

*Course coordinator (on leave)*

*Faculty of Architecture, Delft University of Technology*

XXL is a multidisciplinary digital design studio that focuses on the design of a 24/7 economy reconfigurable stadium. Student groups of four work on individual designs where each group member assumes a role: architect, structural designer, cladding expert, and digital design manager. Each group also pays special attention to sustainability and adaptability.

CT5251-09, Faculty of Civil Engineering: Structural Design, Special Structures, Spring 2010

*M.Sc. Structural Design Semester 2 Required Course, 5 ECTS*

*Faculty of Civil Engineering, Delft University of Technology*

Computational Modeling lecture series

AR3AC010: CompArch Design Research Studio, Fall 2009, Fall 2010

*M.Sc. Computational Architecture Semester 3 Required Course, 12 ECTS*

*Faculty of Architecture, Delft University of Technology*

The design research studio of the third semester of the International Joint M.Sc. Program Computational Design and Fabrication Technologies in Architecture in collaboration with Department of Architecture, Middle East Technical University, Ankara, focuses on custom design models, methods and tools as well as new design paradigms in architecture, in a symbiosis of design and research. Both design and research are concerned with architecture and technology from three points of view: design, computation and theory.

AR3AC200: CompArch Digital Design and Fabrication Technologies, Fall 2009, Fall 2010

*M.Sc. Computational Architecture Semester 3 Required Course, 3 ECTS*

*Course coordinator*

*Faculty of Architecture, Delft University of Technology*

This course focuses on physical prototyping using digital fabrication technologies and accompanies the design research studio.

AR3AC045: CompArch Graduation Studio: Graduation Preparation, Fall 2009, , Fall 2010

*M.Sc. Computational Architecture Semester 3 Required Course, 15 ECTS*

*Faculty of Architecture, Delft University of Technology*

This course serves students to perform the initial research and analysis component of their graduation project, formulating and framing their design and research objectives.

AR4AC010: CompArch Graduation Studio, Spring 2010, Spring 2011

*M.Sc. Computational Architecture Semester 4 Required Course, 30 ECTS*

*Faculty of Architecture, Delft University of Technology*

This course constitutes the last semester of the program and students complete their graduation project and research thesis.

BK4070: Informatica II, Fall 2009, Spring 2010, Fall 2010

*B.Sc. Semester 4 Required Course, 3 ECTS*

*Course coordinator*

*Faculty of Architecture, Delft University of Technology*

This course is content-wise integrated with the fourth semester design studio and focuses on generative design using parametric modeling and scripting, and design presentation in conceptual and detailed design phases.

AR0960: Stand Up Architecture, Spring 2008

*M.Sc. Semester 2 Elective Digital Design Studio, 15 ECTS*

*Faculty of Architecture, Delft University of Technology*

Stand Up Architecture focuses on establishing fluency in digital design techniques. The elective

presents a limited design problem with the goal of introducing students to using parametric design tools and evaluation techniques as well as digital fabrication for a full design iteration loop.

AR0056: Design and Construction of Transformable Exhibition Pavilion, Spring 2008

*M.Sc. Semester 2 Elective Design Studio, 15 ECTS*

*Faculty of Architecture, Delft University of Technology*

This international design and construction studio between Delft University of Technology, Yildiz Technical University Istanbul, and Sarajevo University focuses on design and construction of a Flexible Exhibition Pavilion that can be transformed and reused for different purposes. It addresses issues of flexibility, design for disassembly and use of ICT in design and construction.

AR3Ae020: Design Theory, Fall 2007 – Fall 2010

*M.Sc. Architectural Engineering Semester 3 Required Course, 3 ECTS*

*Course coordinator*

*Faculty of Architecture, Delft University of Technology*

The Design Theory course focuses on theoretical issues of architecture and technology as the inseparably linked basis for explorations of building design and technological advances, and the field of fascination between these. The course intends to create an environment for critical discourse on selected subjects concerning technological architecture and enable the students to conduct research and write position papers.

AR3Ae010: Design Research Studio, Fall 2007

*M.Sc. Architectural Engineering Semester 3 Required Digital Design Studio, 12 ECTS*

*Faculty of Architecture, Delft University of Technology*

The Design Research Studio focuses on design as a collaborative enterprise informed by research findings drawn from the different disciplines. A particular emphasis is placed on the influence of engineering sciences of performance evaluation regarding to topics such as wind, light and energy and structural tectonics.

AR0651: XXL Design + Engineering + Management, Fall 2006, Fall 2007

*M.Sc. Semester 2 Elective Digital Design Studio, 15 ECTS*

*Digital Design Coordinator*

*Faculty of Architecture, Delft University of Technology*

The subject of this course is the design, computation, engineering, production and management of a horizontal large span building structure and cladding: a stadium. This design process is performed as a collaborative, multidisciplinary, and digital manner in groups of five students where each student has her/his own individual role and responsibility: architect, structural designer, cladding expert, digital design manager, and process manager.

ARX016: International SmartStructures Lab, Fall 2006

*M.Sc. Semester 2 Elective Digital Design Studio, 15 ECTS*

*Course co-coordinator*

*Faculty of Architecture, Delft University of Technology*

The Smart Structures Lab experimented in linking digital and physical design strategies and brought together students and faculty Delft University of Technology, University of Kassel, and University of Tennessee Knoxville.

AR1B100: Methodology, Spring 2005 – Spring 2009

*M.Sc. Building Technology Semester 1 Required Course, 2 ECTS*

*Faculty of Architecture, Delft University of Technology*

Lecture about Design Research Methodology, followed by a research formulation assignment

AR0315: Materia, Spring 2005

*M.Sc. Semester 2 Elective Course, 3 ECTS*

*Faculty of Architecture, Delft University of Technology*

Lecture and workshop about Information Modeling

AR0050: Mediated Discourse, Fall 2004

*M.Sc. Semester 2 Elective Course, 10 ECTS*

*Faculty of Architecture, Delft University of Technology*

Workshops about conceptual design thinking (information modeling), and conceptual design analysis (intelligent modeling), and mentoring of individual research and development projects of students

BK6810: A Turkish store in the Netherlands (Audio-visual production), Fall 2004

*B.Sc. Semester 6 Elective Course, 5 ECTS*

*Course co-coordinator*

*Faculty of Architecture, Delft University of Technology*

This course is a collaboration between TU Delft and Bilkent University (Interior Architecture Department, Ankara, Turkey). The purpose is to engage in cross-cultural design collaboration of students in the Netherlands and Turkey. In this study, students work together in groups to design a Turkish store in the Netherlands.

BKMVK05: Mediated discourse as a form of architectonic intervention, Fall 2003

*M.Sc. Semester 2 Elective Course, 10 ECTS*

*Course co-coordinator*

*Faculty of Architecture, Delft University of Technology*

This was a collaboration between TU Delft and METU (Industrial Design Department, Ankara, Turkey). At both universities students collaboratively developed a game for children aged 3-12 years old, using 3D modeling and rapid prototyping.

BKMVK21: Intelligent support for urban design, Spring 2003, Fall 2003, Spring 2004

*M.Sc. Semester 2 Elective Course, 4 ECTS*

*Course coordinator*

*Faculty of Architecture, Delft University of Technology*

The topic of this course is the application of methods and techniques from participatory design and computational intelligence into urban design and urban renewal. The knowledge model clarifies the relations between different aspects and allows the user to infer urban design principles from it. The students use these relations and principles in their own design for the selected site, up to the level of massing studies, and for the specification of functional entities.

BKM3AUE2: Emotive architecture, technical studies, data exchange, Fall 2002 – Fall 2006

*M.Sc. E-Motive Architecture Semester 3 Required Course, 3 ECTS*

*Course coordinator*

*Faculty of Architecture, Delft University of Technology*

The focus is on data exchange in the building industry with special attention to collaborative design.

BKB401: Small Public Building, Integral Design Project IV, Design Analysis Network, Fall 2002, Spring 2003

*B.Sc. Architecture Semester 4 Required Design Studio, 10 ECTS*

*Faculty of Architecture, Delft University of Technology*

A collaborative environment for the creation and presentation of architectural analyses is used by the students at the beginning of this design studio, which assists them in their formal and functional analysis of a precedent building, and later their own design. The result is a cooperative database that acts as an extensible library of analyses, and that is searchable through metadata.

Phase(x), Fall 1996, Fall 1997, Spring 1999

*Elective CAAD Course*

*Department of Architecture, Swiss Federal Institute of Technology*

Undergraduate elective course that focuses on abstract design concepts using the computer as a medium. In phase(x), the results of one phase and one author are taken as the starting point for the work in the next phase by a different author.

fake.space, Spring 1997, Spring 1998, Fall 1998

*Elective CAAD Course*

*Department of Architecture, Swiss Federal Institute of Technology*

Undergraduate elective course that focuses on architectural solutions and information architecture. Fake.space is a multi-author multi-threaded narrative which consists of individual nodes, created by different authors, dealing with different aspects of space.



## ACADEMIC SUPERVISION

### *Postdoc projects*

Advisor of Dr. Machi Zawidski, SUTD-MIT joint postdoctoral program, in collaboration with Prof. Takehiko Nagakura, MIT Architecture, Design Computation

Advisor of Dr. Laura Pedrinazzi, SUTD

### *Ph.D. projects*

Advisor of Ozgun Balaban, SUTD

Advisor of Ramanathan Subramanian, SUTD

Co-advisor of Anastasia Koltsova, ETH Zurich

### *M.Sc. projects*

Canan Albayrak, Faculty of Architecture, TU Delft, 2011

Ekin Damdere, Faculty of Architecture, TU Delft, 2010

Selen Ercan, Faculty of Architecture, TU Delft, 2010

Charles Sekanyambo, Faculty of Civil Engineering, TU Delft, 2009

Sander Mulders, Faculty of Architecture, TU Delft, 2008

Sehnaz Cenani, Istanbul Technical University, 2007

Vladimir Masinsky, Faculty of Architecture, TU Delft, 2006

Marcus Buijtenweg, Faculty of Architecture, TU Delft, 2005

Pepijn van Sandijk, Faculty of Architecture, TU Delft, 2004

Eric van der Himst, Faculty of Architecture, TU Delft, 2003

Mentor of graduation students from the Computer Science Department of Haagse Hogeschool, March 2003-March 2004

Advisor to M.Sc. students, ETH Zurich, Winter 1998-99, special focus on CAAD in the final architectural thesis projects

## PROFESSIONAL WORK EXPERIENCE

Part-time Architect, April 1994 - August 1994

*Project Studio of Middle East technical University, Ankara, Turkey*

Designer for the extension building to the Faculty of Architecture

Part-time Architect, June 1992 - April 1994

*HES Engineering and Consulting Company, Ankara, Turkey*

Worked on NATO projects in Turkey, acted as CAAD specialist

Part-time intern, September 1991 - March 1992

*Architecture and Planning Studio of Ayca Bilsel, Ankara, Turkey*

Worked on preservation and rehabilitation projects of historical sites in Turkey

Intern, June 1991 - October 1991

*MESA Housing Company, Ankara, Turkey*

Worked on projects of large scale housing schemes

## CONFERENCE AND WORKSHOP ORGANIZATION

*Women in Technology Workshops*, since July 2013, SUTD

Organizing committee member of *eCAADe 2013 Computation and Performance*, Delft

Session chair at various international conferences

Co-organizer of CAAD Futures 2011 Workshop *Open Systems and Methods for Collaborative Built Environment Modeling*, 4 July 2011

Co-organizer of *Autonomy of Architecture: The Impact of File-to-Factory on Architectural Practice*, Faculty of Architecture, Delft University of Technology, 11 June 2010 (collaboration with Jelle Feringa)

Participants: Kas Oosterhuis (TU Delft and ONL), Fabio Gramazio (Gramazio Kohler and ETH Zurich), Fabian Scheurer (DesignToProduction), and Philippe Morel (EZCT Architecture & Design Research)

Organizer of *Design Informatics Colloquium*, Faculty of Architecture, Delft University of Technology, 3 December 2009

Lectures by Sevil Sariyildiz (TU Delft), Gerhard Schmitt (ETH Zurich), Ramesh Krishnamurti (Carnegie Mellon University), Joop Paul (TU Delft and ARUP Amsterdam), Chimay Anumba (Penn State), Bauke de Vries (TU Eindhoven), Hielkje Zijlstra (TU Delft), and Patrick Teuffel (TU Delft and Teuffel Engineering Consultants)

Organizer of *Delft School of Design Program Architectural Engineering: Performance, Geometry and Materials*, September 2007 – May 2008 (collaboration with Ulrich Knaack)

Lectures by Hugh Whitehead, Foster & Partners; Charles Walker, Zaha Hadid Architects; Michael Weinstock, AA London; Kristina Shea, TU Munich; Klaus Daniels, ETH Zurich; Chris Williams, University of Bath; Fabian Scheurer, DesignToProduction; Werner Sobek, University of Stuttgart; Neil Thomas, Atelier One. Workshops organized by TU Delft researchers and specified guests: Space & Perception: Digital Manufacturing, by Oliver Tessmann (Bollinger & Grohmann, Frankfurt), Edgar Stach (University of Tennessee), Bige Tunçer and Paul de Ruiter; Computational Intelligence for Design Applications, by André Chaszar, Ozer Ciftcioglu, Bige Tunçer, Patrick Janssen (National University of Singapore), and Luisa Caldas (Technical University of Lisbon); Bridge Design in a Historical Setting, by Andrew Borgart, Michela Turrin, Bige Tunçer, Enzo Siviero (IUAV University of Venice), Massimo Majowiecki (IUAV), and Tobia Zordan (IUAV); The Future Envelope: The Product, by Ulrich Knaack, Daan Rietbergen, Lidia Badarnah, Thomas Auer (Transsolar Stuttgart), Holger Techen (FH Frankfurt), and Bige Tunçer.

Co-organizer of *Five Research Colloquia of the Department of Building Technology*, Faculty of Architecture, Delft University of Technology, January-March 2007

Co-organizer of *Free Form Design (FFD) Colloquium*, 28-29 September 2006, Delft

Chair of the *ELA9 International Conference: 9th EuroPLA International Conference of E-activities and Intelligent Support in Design and the Built Environment* held in Istanbul, 8-10 October 2003, organized as a collaboration of Delft University of Technology and Istanbul Technical University

Organizing committee member *Innovation in AEC (Architecture, Engineering, Construction) international conference*, held 15-17 June 2005 in Rotterdam, in collaboration with Loughborough University (UK)

Co-organizer of *TU Delft Faculty of Architecture PhD Students Afternoon Workshop and Exhibition*, March 2004

Organizer of two *IBouw (Informatica in de Bouw) workshops*, 22.6.2001 and 27.6.2003  
IBouw was a research collaboration between TU Delft CT, TNO Bouw, KU Leuven, TU Eindhoven, and Hogeschool voor Wetenschap en Kunst Sint-Lucas, Brussels.

## INVITED LECTURES AND STUDIO REVIEWS

*Information Architecture for Communities of Practice*

Public lecture at the Design & Computation Group (DCG) *Materials::Processes::Tools* lecture series, Department of Architecture, MIT, 15 February 2013

*Generative Performative Information Architecture*

Public lecture at the International Design Center (IDC), MIT, 1 November 2012

*Performative Architecture: Design Models, Methods and Tools*

Lecture at Chair for CAAD, Department of Architecture, Swiss Federal Institute of Technology, Zurich, 14 February 2011

*Architectural Information Maps*

Lecture at Chair for Information Architecture, Department of Architecture, Swiss Federal Institute of Technology, Zurich, 17 May 2010

*The Architectural Information Map, and Computational Architecture Semester 3*

Lecture at Department of Architecture, Middle East Technical University, Ankara, 18 December 2009

*Knowledge management and knowledge exchange methodology for interaction designers*

Lecture at Philips Design, Interaction Design Group, Eindhoven, 10 March 2005  
Together with Evren Akar and Ozer Giftcioglu

*Research at the Department of Building Technology, TU Delft, and InfoBase*

Lectures at Colloquium TU Delft Building Technology - IUAV Venice Architectural Construction, 26-27 June 2006

*Why (not) (wo)men?*

Lecture at Faculty of Architecture, Delft University of Technology, as part of a lecture series about "Women and Technical Sciences", 25 February and 4 March 2005

Guest design studio reviewer at various design studios at Department of Architecture, Middle East Technical University, since 2004

*Modeling Architectural Analyses*

Lecture at Department of Architecture, Middle East Technical University, Ankara, 20 March 2003

*ICT influence on Spatial Planning, Design, and the Built Environment*

Lecture at Department of Architecture, Bauhaus University, Weimar, 24 November 2000

*Visualizing Collaborative Structures: Teaching and Research Experiences*

Lecture at Department of Architecture, Middle East Technical University, Ankara, 26 November 1998.

## INTERVIEWS

Interview published in B Nieuws, Academic's Exchange, B Nieuws nr. 11, 26 April 2011

Interview published in Delta, 'You can't just add women, and stir', Delta nr. 17, volume 37 (26-05-2005)

Interview published in B Nieuws, PhD Students Afternoon blijkt hartverwarmend, B Nieuws nr. 15, volume 2003-2004

Interview published in Delta, Bright white, but not enough brown, yellow or red, Delta nr. 38, volume 34 (12-12-2002)

Interview published in Agenda in April 1999, the monthly journal of the Swiss National Science Foundation, as part of an interview series with researchers under the age of thirty

## MEMBERSHIPS

CAADRIA –The Association for Computer-Aided Architectural Design Research in Asia

eCAADe – Education and research in Computer Aided Architectural Design in Europe

DEWIS – Delft Women in Science

DRS – Design Research Society

IASS – International Association for Shell and Spatial Structures

ArchNet – Islamic Architecture Community

PROMOOD – Delft PhD Association, 2001-2008

Turkish Chamber of Architects, since 1993

## **TRAINING**

Our urban tools in Grasshopper and RhinoCommon eCAADe Conference Workshop, 13-14 September 2010

Rhinoceros Grasshopper training, Open Platform SmartGeometry workshop, 27-29 November 2009, Faculty of Architecture, TU Delft

HR Management course: “The human side of management: Interpersonal and managerial skills within the university,” Delft University of Technology, September – December 2007, organized in cooperation with the Association of Universities in the Netherlands (VSNU)

Various DEWIS (Delft Women in Science) trainings and meetings on career advancement, negotiation skills, conflict management and coaching since 2006

## **PERSONAL**

Languages: Turkish (native), English (proficient), Dutch (proficient), German (understanding)

Hobbies: Hiking, yoga, cooking, knitting