

## **AYSU BERK HAZNEDAROĞLU**

Assistant Professor  
Department of Architecture  
Faculty of Art, Design and Architecture  
Bilkent University, Ankara, Turkey

### **EDUCATION**

Ph.D. in Architecture, University of Michigan, Ann Arbor.	2012
Master of Science in Civil Engineering, Middle East Technical University, Ankara.	2006
Master of Science in Architecture, Middle East Technical University, Ankara.	2005
Bachelor of Science in Civil Engineering, Middle East Technical University, Ankara.	2003

### **ACADEMIC EMPLOYMENT**

<b>Assistant Professor</b> Department of Architecture, Bilkent University	2017 - ongoing
<b>Instructor</b> Department of Architecture, Bilkent University	2013-2017
<b>Teaching Assistant</b> Taubman College of Architecture and Urban Planning (TCAUP), University of Michigan	2008-2012
<b>Research Assistant</b> Taubman College of Architecture and Urban Planning (TCAUP), University of Michigan	2006-2012

### **PROFESSIONAL EMPLOYMENT**

Acarlar Construction Inc., Bulgaria Highway Construction Project, Ankara.	2005
Gama Holding, Qatar Embassy and Residence Project, Ankara.	2002
Ahsel Construction, Bag-kur Headquarter Building Project, Ankara.	2001

### **ARTICLES IN REFEREED JOURNALS**

Berk A., Giles H. "Quadrilateral Panelization of Freeform Surface Structures", **Automation in Construction**. Vol. 76, 36-44, April 2017.

Yanmaz A.M., Caner A., and Berk A. "Renovation of a Safety-Inspection Methodology for River Bridges", **Journal of Performance of Constructed Facilities, ASCE**, Vol.21, No:5, 382-389, October 2007.

## **ARTICLES IN REFEREED PROCEEDINGS**

Giles H. and Berk A. "Discretization Solutions for the Construction of Free Form Complex Surface Structures". Structures and Architecture. Proceedings of 2<sup>nd</sup> International Conference on Structures and Architecture, Guimaraes, Portugal. July 24-26, 2013. Paulo J.S. Cruz (ed.). CRC Press: Leiden. 2013, pp. 791-798

Berk A. and Ünay A.I. "Teaching Structures to Architecture Students: Examples from Bridge Design". Structures and Architecture. Proceedings of 1<sup>st</sup> International Conference on Structures and Architecture, Guimaraes, Portugal. July 21-23, 2010. Paulo J.S. Cruz (ed.). CRC Press: Leiden. 2010, pp. 870-876

Berk A., Örmeciöđlu H.T., and Akan A.E. "Cumhuriyet Donemi Tarihi Karayolu Koprulerinin Korunmasinda Bir Secim Yontemi Denemesi". Proceedings of 2<sup>nd</sup> Symposium on Strengthening and Preserving Historical Buildings and Cultural Heritage, Diyarbakir, Turkey. October 15-17, 2009. TMMOB Chamber of Civil Engineering. Kardelen: Ankara. 2009. pp 61-73

## **ARTICLES PRESENTED in REFEREED CONFERENCES**

Berk A. and Örmeciöđlu, H.T. "A Framework for Evaluation and Assessment of Proto-modern Bridges" in Istanbul Bridge Conference, Istanbul, Turkey. August 11-13, 2014.

Giles H. and Berk A. "Complex Surface Construction using Planar Quadrilateral Meshing" in IABSE-IASS Symposium, London, United Kingdom. September 20-23, 2011.

Örmeciöđlu, H.T. and Berk A. "An Inspection Method for Assessment of Proto-Modern Road Bridges" in IABSE-IASS Symposium, London, United Kingdom. September 20-23, 2011.

Caner A., Yanmaz A.M., and Berk A. "Remarks on Development of a Safety-Inspection Algorithm for River Bridges" in 7th International Congress on Advances in Civil Engineering, Yıldiz Technical University, Istanbul, Turkey. October 11-13, 2006.

## **OTHER PUBLICATIONS**

### **Ph.D. Dissertation**

"A Structural Basis for Surface Discretization of Free Form Surfaces: Integration of Geometry, Materials and Fabrication." University of Michigan, Ann Arbor, MI. December 2012.

### **M.Sc. Theses**

"Development of a Safety-Inspection Methodology for River Bridges." METU, Ankara. July 2006.

"Geometrical Analysis of Bridge Forms and Their Feasibility in Structural Design." METU. Ankara. May 2005.

## **INVITED LECTURES AND TALKS**

"Structures", Guest Lecturer for FA102, Faculty of Art, Design & Architecture (FADA), Bilkent University, Ankara, February 2020, July 2020, February 2021, July 2021.

"Structure and Structural Systems", Guest Lecturer for Arch202, Department of Architecture, Bilkent University, Ankara, February 2020, January 2018, April 2017

"Structural Forms: Form-Design-Construction", Guest Lecturer for Studies on Architectural Structures (graduate course), Department of Architecture, Middle East Technical University, Ankara, November 2018.

"Architecture & Structure: Structural Form", Guest Lecturer for Current Issues in Architectural Design (graduate course), Department of Architecture, Bilkent University, Ankara, April 2018.

"Thinking Structures", Guest Lecturer for Arch201, Department of Architecture, Middle East Technical University, Ankara, October, 2017

"Quadrilateral Panelization of Freeform Surface Structures", Faculty of Art, Design and Architecture, Bilkent University, Ankara, March 2017,

"Architectural Geometry", Faculty Lecture Series - Spring2014, Bilkent University, Ankara, March 2014.

## **DUTIES**

<b>Member of the Faculty Executive Board</b> Faculty of Art, Design and Architecture, Bilkent University	<b>2021 – ongoing</b>
<b>Member of the Graduate Program Committee</b> Faculty of Art, Design and Architecture, Bilkent University	<b>2021 – ongoing</b>
<b>Member of the Summer Internship Committee</b> Faculty of Art, Design and Architecture, Bilkent University	<b>2021 – ongoing</b>
<b>Member of the QME team</b> Faculty of Art, Design and Architecture, Bilkent University	<b>2019 – ongoing</b>
<b>Acting Chair</b> Department of Architecture, Bilkent University	<b>2019 - 2020</b>
<b>Member of the DAF Committee</b> Faculty of Art, Design and Architecture, Bilkent University	<b>2019 – 2021</b>
<b>Member of the Faculty Board</b> Faculty of Art, Design and Architecture, Bilkent University	<b>2018 – 2020</b>

<b>Member of Recruitment Committee</b> Department of Architecture, Bilkent University	<b>2017 – ongoing</b>
<b>Coordinator for Summer Internship Courses (Arch290, Arch390)</b> Department of Architecture, Bilkent University	<b>2017 – ongoing</b>
<b>Coordinator for Structure Courses (Arch231, Arch331, Arch332)</b> Department of Architecture, Bilkent University	<b>2015 – ongoing</b>
<b>Member of the Technical Committee</b> Department of Architecture, Bilkent University	<b>2014 – 2015</b>

### **THESIS SUPERVISED**

<b>Berin Barut, M.Sc. Thesis, Architecture, Bilkent University</b> Architecture and Cinema: Analysis of the Relationship between Narrative and Architectural Space in Christopher Nolan’s “The Dark Knight Trilogy”.	<b>9/2017 – 11/2020</b>
<b>Münevver Duygu Gökoğlu, M.Sc. Thesis , Architecture, Bilkent University</b> Revealing The Potential of Human-Centered Design in Architecture	<b>9/2017 – 03/2021</b>
<b>Naciye Kara, M.Sc. Thesis , Architecture, Bilkent University</b> A Survey on The Emotional Responses of Users to Building Forms: Focusing on Digitally Manipulated Curvilinearity,	<b>9/2018 – 09/2021</b>
<b>İrem Merve Makinacı, M.Sc. Thesis , Architecture, Bilkent University</b> Reflections of Form and Structure Relations on Sustainability Characteristics in Post-Expo Period,	<b>9/2019 – in progress</b>
<b>Beliz Sunsal, M.Sc. Thesis , Architecture, Bilkent University</b> Analysis of modular construction on the cases of emergency buildings.	<b>9/2019 – in progress</b>
<b>Nadide Pınar Oktar, M.Sc. Thesis , Architecture, Bilkent University</b> Structure-form Relationship of Freeform Surfaces: An investigation through Case Studies	<b>9/2020 – in progress</b>
<b>Khawaja Talha Ejaz, M.Sc. Thesis , Architecture, Bilkent University</b> Evolution of Form Finding Methods and corresponding Structural Efficiency of RC shell structures.	<b>9/2020 – in progress</b>
<b>Shahzeb Khan, M.Sc. Thesis , Architecture, Bilkent University</b> Thesis subject: Not determined yet	<b>9/2021 – in progress</b>

## **AWARDS/HONORS/GRANTS**

Shen Milsom Wilke Scholarship, University of Michigan, Fall 2012

U-M Graduate Teaching Certificate, University of Michigan, Winter 2012

Architecture Merit Award, University of Michigan, Winter 2009

Rackham Graduate Student Assistant Fellowship, University of Michigan, 2006 – 2008

## **MEMBERSHIP**

Turkish Association for Bridge & Structural Engineering. 2017 – ongoing

Building Technology Educators' Society (BTES) 2014 – ongoing

International Association of Shell and Spatial Structures (IASS). 2011 – ongoing

Turkish Chamber of Civil Engineers (TMMOB İnşaat Mühendisleri Odası) 2003 – ongoing