

AYSU BERK HAZNEDAROĞLU

Senior Lecturer
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

Senior Lecturer Department of Architecture, Bilkent University	2024 - ongoing
Assistant Professor Department of Architecture, Bilkent University	2017 - 2024
Instructor Department of Architecture, Bilkent University	2013-2017
Teaching Assistant Taubman College of Architecture and Urban Planning (TCAUP), University of Michigan	2008-2012
Research Assistant 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

Makinacı İ.M. and Berk A. "The Role of Structural System and Building Materials of World Expo Pavilions on Providing Sustainable Solutions for Post-Expo Use", Structures and Architecture A Viable Urban Perspective. Proceedings of the 5th International Conference on Structures and Architecture. Aalborg, Denmark. 6-8 July 2022. Marie Frier Hvejsel and Paulo J.S. Cruz (ed.). CRC Press: London, 2022.

Giles H. and Berk A. "Discretization Solutions for the Construction of Free Form Complex Surface Structures". Structures and Architecture. Proceedings of 2nd 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 1st 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., Örmecioğlu H.T., and Akan A.E. "Cumhuriyet Donemi Tarihi Karayolu Koprulerinin Korunmasında Bir Secim Yontemi Denemesi". Proceedings of 2nd 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 Örmecioglu, 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.

Ormecioğlu, 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, Yildiz 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

"Basics of Structures", Guest Lecturer for ARCH102, Department of Architecture, TEDÜ University, Ankara, May 2025.

"Structures", Guest Lecturer for FA102, Faculty of Art, Design & Architecture (FADA), Bilkent University, Ankara, February 2020, July 2020, February 2021, July 2021, March 2023, February 2024.

"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

Member of the Summer Internship Committee
Faculty of Art, Design and Architecture, Bilkent University

2021 – ongoing

Member of the QME team
Faculty of Art, Design and Architecture, Bilkent University

2019 – ongoing

Member of Recruitment Committee Department of Architecture, Bilkent University	2017 – ongoing
Coordinator for Structure Courses (Arch331, Arch332, Arch333) Department of Architecture, Bilkent University	2015 – ongoing
Acting Chair Department of Architecture, Bilkent University	2019-2020 & 2024-2025
Member of the Graduate Program Committee Faculty of Art, Design and Architecture, Bilkent University	2021 – 2025
Member of the Faculty Executive Board Faculty of Art, Design and Architecture, Bilkent University	2021 – 2024
Member of the DAF Committee Faculty of Art, Design and Architecture, Bilkent University	2019 – 2021
Member of the Faculty Board Faculty of Art, Design and Architecture, Bilkent University	2018-2020 & 2024-2025
Coordinator for Summer Internship Courses (Arch290, Arch390) Department of Architecture, Bilkent University	2017 – 2022
Member of the Technical Committee Department of Architecture, Bilkent University	2014 – 2015

THESIS SUPERVISED

Berin Barut, M.Sc. Thesis, Architecture, Bilkent University Architecture and Cinema: Analysis of the Relationship between Narrative and Architectural Space in Christopher Nolan’s “The Dark Knight Trilogy”.	9/2017 – 11/2020
Münevver Duygu Gökoğlu, M.Sc. Thesis , Architecture, Bilkent University Revealing The Potential of Human-Centered Design in Architecture	9/2017 – 03/2021
Naciye Kara, M.Sc. Thesis , Architecture, Bilkent University A Survey on The Emotional Responses of Users to Building Forms: Focusing on Digitally Manipulated Curvilinearity	9/2018 – 09/2021
İrem Merve Makinacı, M.Sc. Thesis , Architecture, Bilkent University The Role of Structural Systems and Building Materials in Sustainable Post-Expo Use of World Expo Pavilions	9/2019 – 08/2022
Beliz Sünsal, M.Sc. Thesis , Architecture, Bilkent University The Effect of Modular Systems on Spatial Design and Diversity: Analysis Through Constructed Modular Buildings	9/2019 – 08/2022

Nadide Pinar Oktar, M.Sc. Thesis , Architecture, Bilkent University **9/2020 – 07/2023**
Structure-form Relationship of Freeform Surfaces: An investigation through Case Studies

Khawaja Talha Ejaz, M.Sc. Thesis , Architecture, Bilkent University **9/2020 – 08/2023**
Evolution of Form Finding Methods and corresponding Structural Efficiency of RC shell structures

Gölce Erincik, M.Sc. Thesis , Architecture, Bilkent University **9/2022 – 06/2024**
Comparative Analysis of Low Carbon Wall Materials for Thermal Comfort in Urban Mid-rise Apartments: A Simulation-Based Study in Istanbul

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