"Conceptions of Design in a Culture of Simulation"

February 16, 2009
12:30 - 2:00pm
Room 3-133

Yanni Loukissas

Visiting Lecturer
Department of Architecture
College of Architecture, Art, and Planning
Cornell University

Abstract
Design is a system of relationships in flux. Increasingly, design practitioners negotiate a place for themselves within this system by using digital simulations to mediate their professional relationships. These simulations are spaces of exchange; they bridge between design practitioners and their audiences. This talk explores the way that people connect through simulations, during the process of design. Case studies are drawn from the project history of Arup, a global design and business consultancy. Over the past sixty years, Arup has expanded into new domains of work by creating simulations to suit new audiences: architects, regulators, curators, developers, and insurers. My study of simulation builds on a history of scholarship by writers like Lewis Mumford, Sherry Turkle, and Peter Galison, who examine how cultures define themselves through the technologies they use and the way they use them. The contribution of my work is to illustrate how designers use simulations to establish the professional relationships and the conceptual distinctions that define their work. In this talk, I explain new distinctions in design enabled by simulations: between the prescriptive knowledge of building codes and the projected knowledge of simulations, between the intent of form and its performance, and between the identity of the scientist and that of the designer. These conceptual juxtapositions and others underlie efforts by practitioners at Arup to make a place for themselves in design. There is an implicit metaphor in use at Arup, that simulation is a kind of theatre. By probing this metaphor, we can learn to appreciate the practice of simulation as a balance between immersive and analytical ways of engaging audiences. Creating a valid simulation at Arup, like creating a successful theatrical performance, is all about connecting with your audience in the right way.

Bio:
Yanni Alexander Loukissas teaches design theory and studio with a focus on computational methods at Cornell's Department of Architecture. He has written and lectured extensively about the culture of computation in architecture and related fields. His latest publication, "Keepers of the Geometry," is an ethnographic essay about information technologies and professional identity in architecture offices that will be released by the MIT Press in 2009, as part of an edited volume

entitled Simulation and its Discontents. He is currently working on a book based on his dissertation, Conceptions of Design in a Culture of Simulation, which tracks the evolving meaning of design at Arup, a global design and business consultancy. He also practices as a design and technology consultant. Most recently, he worked with Small Design Firm on an art information and wayfinding system for the Metropolitan Museum of Art in New York City. He holds a PhD in Design and Computation and a Master of Science in Architecture Studies, both from MIT, as well as a Bachelor of Architecture from Cornell.