05 >> Connecting Digital Representation
Chairs: Lisa Tilder, Frederick Stacy Norman

New Media
Lisa Tilder, Frederick Stacy Norman

Architecture, technology and representation
How do architectural representation paradigms shift in an increasingly digital age?

As digital technologies and connective systems begin to redefine traditional notions of place, space and time, how might architecture itself transform? Over the past century, extreme conceptual and spatial transformations have come about in relation to the introduction of mechanical reproduction, computer graphics and redundant systems, however architecture and representation have remained somewhat constant. This is evident in the continuity of traditional architectural representation methods that draw primarily from renaissance models - though the original impetus from which such projection methods evolved no longer bear the same significance to culture.

In a cultural landscape in which newly defined models of transience, connectivity, and place offer up new paradigms for exploration, how might architectural representation change? How do contemporary models of communication, mass production, distribution and imaging influence the conception and production of architecture? How might hybrid models influence architectural production, from pre-manufactured housing to consumer products, brand identity to mass-market advertising? How might raster and vector models inscribe paradigms for popular culture?

Below are three aspects of contemporary representation that explore emerging connections between architecture, media, representation and culture: Drawing, Modeling + Fabrication, Graphics + New Media >>

Drawing
Whether handcrafted, computer-translated or computer-generated, drawing provides us with abstraction capable of communicating architectural design ideas. With the increase in digital media and availability of computer graphics applications and hardware, the medium of the drawing is changing. With a change in mediums analogous to digital, should that impose a change in how we draw, what we draw and the intended use of a drawing? Will the two-dimensional flattened image give way to intelligent three-dimensional digital models for construction?

Modeling + fabrication
Digital media is providing an opportunity to return a sense of materiality to an immaterial realm. The relationship between architectural design and production are brought closer together given the fluidity and accuracy of digital tools. Computer-aided design and computer-aided fabrication processes provide the means for architects to create new forms of architectural practice and challenge traditional methods of project delivery.

Presentation graphics + new media
As computing technologies have begun to be absorbed into the popular realm, the general public has become acclimated to an inundation of media. Relationships between architect/client may be facilitated by the use of popular or experimental media such as television, computer games, and the web. Architects might look to popular media for techniques of communication to the general public – the AIA advertises through television commercials, the U.S. Army via computer games, for example.

As methods of representation change, architecture’s definitive boundaries transform. Relationships between disciplines may join more readily, forging collaborative partnerships. Students now enter architectural education and the profession from a technologized generation: as students become more facile and familiar with digital tools and environments, they begin to effect representational changes in both education and the profession from the bottom up. How might all of these changes underway impact the profession and education?

Lisa Tilder is an Assistant Professor of Architecture at the Ohio State University Knowlton School of Architecture, where she teaches architectural design, computer graphics and seminars that address the relationship of technology, design and representation. As an educator and architect, Tilder’s work pursues the critical relationship of technology to architecture and culture through various means: web-based projects, interactive constructions and installations, competitions and building projects.
Frederick Stacy Norman is an Assistant Professor of Architecture at Ball State University. He is the site chair for the ACADIA22 Conference2003 in Indianapolis. Frederick was also co-chair of the 2002 digital design exhibition: http://www.Bsu.Edu/dde. Professor Norman is the recipient of the 2003/4 Paul Rudolph Visiting Assistant Professor, Auburn University, School of Architecture.