

David L. Phillips

Associate Professor of Urban & Environmental Planning

"Learning to Cross the Street"

Over the past several semesters students in planning and I have been engaged in community research focusing on what "place" is like when viewed from the perspective of "less independent" citizens. We have "Mapped the Landscape of Aging" and have explored how well "persons with disabilities" are served by the way our communities, transportation and housing are structured. One underlying theme is: "If we plan our communities to be livable for those who are less independent, they will be communities that will be more livable for all citizens." Analytic maps using census, transportation, land use and administrative data help us understand the shape of the landscape for these neighbors. Some of the problems and complementary relationships suggest that we need to learn to cross the street and get to know our neighbors.

Earl Mark

Associate Professor of Architecture and Chief Technology Officer

"Animated Design Sketching"

Animation and special effects tools have recently become accessible in a way that can spontaneously serve the role of a design sketch medium. Transformation of architectural forms, materials and related natural elements can be captured quickly, in some cases abstractly and in other cases more realistically. Design problem solving can also be served by animation that expresses rhetorical themes, an equivalent in moving images of a provocative thumb nail drawing that invokes concepts related to a design project. A few tutorial examples developed for and some related work taken from design studio production will be discussed. Recent exhibition work will also be referenced in this presentation.

Faculty Research Symposium VIII

02.01.08

Moderator: Phoebe Crisman

1:00PM Dean Karen Van Lengen
Welcome

1:10PM Phoebe Crisman
Agenda and Procedures

1:15PM Kirk Martini
"Dynamic Lessons"

1:45PM Sheila Crane
"The Battles of Algiers"

2:15PM Jeana Ripple
"Exploiting the Joint: Rule-Based Design & Material Resistance"

2:45PM Break

3:00PM Charles Menefee
"Minimum House/ Maximum House"

3:30PM David L. Phillips
"Learning to Cross the Street"

4:00PM Earl Mark
"Animated Design Sketching"



Phoebe Crisman (Moderator)

Associate Professor of Architecture and
Director, *The Learning Barge Project*

Kirk Martini

Associate Professor of Architecture

“Dynamic Lessons”

The presentation concerns the *Arcade* computer program, developed at the School of Architecture for teaching concepts of structural behavior. *Arcade* will be discussed with respect to the broader topic of the role of software in changing the way that people think -- not only students, but also professors, which is far more difficult because it involves transforming deeply-rooted perspectives. Concerning teaching, *Arcade* is designed to promote interaction among people, rather than replace it: a feature that distinguishes it from many other educational software packages. Concerning transforming conventional thinking, the program breaks strongly with the traditions of structural education because it uses advanced structural theory (non-linear dynamics) to teach elementary topics (particle and rigid body statics). Traditional structural education adheres to the principle that the level of theory in computation tools should match the phenomena under study. Finally, the presentation will discuss how working with the program has changed the author’s perspective concerning structural fundamentals, and the potential for broader change in structural education in engineering and in architecture.

Sheila Crane

Assistant Professor of Architectural History

“The Battles of Algiers”

This presentation begins by reconsidering the iconic images of urban violence portrayed in Gillo Pontecorvo’s 1965 film, *The Battle of Algiers*. In Pontecorvo’s hands, the architecture of the Casbah in Algiers was framed as an active structuring device of conflict that marked the collapse of clear boundaries between civilian and military, home front and battlefield, that has since become an ubiquitous characteristic of contemporary violence around the globe. Pontecorvo’s celebrated depiction of the Algerian war for independence also alluded, however, to a generally overlooked struggle that was then being waged on the periphery of Algiers, one repeatedly described as “the battle for housing.” By examining the design and subsequent occupations of two sprawling housing complexes designed by French architect Fernand Pouillon, I consider

[Crane cont.]

how housing became a weapon of war designed to rewrite everyday life through strategies of containment, segregation, and surveillance as well as how similar strategies were used to distinctly different ends by these buildings’ inhabitants. The radical extension of military violence into domestic space might then be understood as a significant legacy of colonialism whose effects are still palpable in an era when, as architect Eyal Weisman has recently observed, “the city has become no longer the locus, but the apparatus of warfare.”

Jeana Ripple

Lecturer in Architecture

“Exploiting the Joint: Rule-Based Design & Material Resistance”

This presentation considers rule-based design as a tactile exploration. Drawing on the work of Gottfried Semper, who considered the joint to be the fundamental unit of the art of building, I will explore simple physical observations that form the basis of responsive, variable environments. By referencing the tactile properties of material assembly, computational power and human articulation extend the joint into performative systems traversing multiple scales of potential. These resulting variable systems offer insights into the creation of gradient conditions of occupation and efficient flexibility in our built environment.

Charles Menefee

Associate Professor and Director of Architecture

“Minimum House/ Maximum House”

America’s building patterns, particularly for medium and low density housing, are unsustainable, devouring space and raw land not to mention a host of other resources natural and otherwise. While architects and designers are being held responsible for this problem, in fact building and landscape architects are directly involved in less than five percent of the nation’s construction activity. Can we use less? Almost certainly. Will Americans give up what most consider the ultimate American dream [if not birthright] – the single-family house on acreage? Over their dead bodies. But perhaps yes if new models offer the sense of space, extension, and privacy that is, I would argue, at the root of the current perceived need for space. The design problem is then this: to minimize the use of resources while maximizing the sense of connectedness to place and privacy – to actually make less be more.