LANDSCAPE INFRASTRUCTURES
Emerging paradigms, practices and technologies reshaping the contemporary urban landscape
Symposium - October 25, 2008 - Speaker Abstracts

Infrastructural Urbanism
Stan Allen, Princeton University SAA
New urban practices are emerging today at the intersection of geography, politics, ecology, architecture, and engineering. Among these, landscape urbanism has acquired a privileged standing as a discipline capable of synthesizing the expertise from a number of related fields. The term first appeared in 1996, and its emergence and development have been well documented. Today, there exists a catalog of practitioners and projects, an extensive literature, and a series of academic programs devoted to the subject. A fully fledged sub-discipline has appeared. The emergence of landscape urbanism, along with the development of the protocols of digital design, must be counted one of the most significant developments in the field in the past decades. To move forward from this strategic juncture, it is worthwhile to take stock of both the accomplishments and limitations of the landscape urbanism approach, and to propose alternatives that complement and extend its potentials.

Redefining Infrastructure
Pierre Bélanger, University of Toronto CLR
According to a national report on brownfields redevelopment titled Recycling America’s Land, more than 400,000 sites with real or perceived environmental hazards dot the American landscape today. That legacy is estimated to be worth more than $2 trillion in devalued property. Underlying this legacy is a major network of post-war infrastructures - airports, harbours, roads, sewers, bridges, dikes, dams, power corridors, terminals, treatment plants—that is now suffering major decay from lack of repair and maintenance. In revisiting a series of milestone events in the history of North America, this brief introductory presentation draws a cross-section through the industrialization and urbanization of North America during the 19th and 20th centuries to track how the necessity for infrastructure emerged from accidents, crises, failures and disasters. By examining a series of patterns and shifts across the continent, the underlying objective is to redefine the conventional meaning of modern infrastructure by amplifying the biophysical landscape that it has historically suppressed, and to reformulate landscape as a sophisticated, instrumental system of essential resources, services and agents that generate and support urban economies.

Doing More with Less
Julia Czerniak, Syracuse School of Architecture, UPSTATE
A shrinking city is not necessarily dying. Unlike many post-industrial cities within the American Rust Belt which have been shrinking for decades, Syracuse, New York is finding that reductions in population do not mean losing the possibility of active urban life. This paper discusses two large infrastructural projects underway in the city which are both public/private collaborations between the City of Syracuse, Syracuse University and Onondaga County: the Syracuse Connective Corridor and the Onondaga Creek Green. The Connective Corridor is a 1.5 mile signature strip of transit-based urban landscape connecting University Hill with downtown Syracuse, linking the city’s cultural venues and leveraging zones of investment. The Onondaga Creek Green is a 6.5 mile ecological and recreational system that will link four emergent urban communities to the educational and recreational facilities and ecological potentials of the creek, now a channelized system receiving over one trillion gallons of untreated wastewater annually from the cities aging combined sewer overflow (CSO) system. These two projects suggest new strategies for working in Rust Belt cities which maximize the use of vacant land, acknowledge the competing interests of stakeholders, require less area, fewer resources, and less control.

Public Water Works
Herbert Dreiseitl, Atelier Dreiseitl
Where are the spaces in your city where children can experience the qualities of water and interact with it freely? A drop of rain travels immense distances. As it falls from the heavens it is received in the earth’s plane where we humans live - which for most of us is a city. Urban stormwater and rivers are a direct link to the natural environment. With a bit of creativity, the urban infrastructures we build for them can sustain public places with excellent open space and thereby enrich the cultural and social quality of our cities. Urban public space is the true seat of democracy. Herbert Dreiseitl will present a series of liveable city projects which demonstrate the deep connection between water and people, and that creative urban stormwater management is a tool for rediscovering cultural value in our modern cities.
Dynamic Infrastructure
Kristina Hill, University of Virginia
Urban infrastructure systems became centralized and fixed in place during the 19th century. They were extended using essentially the same strategies to support suburbanization during the 20th century. Critical maintenance has been deferred, at the same time that higher performance standards are needed to respond to climate change and address regional social priorities. Both the sheer spatial extent of this extensive infrastructure and new performance challenges necessitate a radical reconsideration of these fundamental spatial and temporal strategies. What elements should be fixed in space or time, and which should be flexible? This presentation considers how urban infrastructure systems can be different if they are shaped by flows over time, not fixed in place, and if they are decentralized to create hybrid systems that thoroughly incorporate biophysical elements, in order to enhance both performance and adaptability. Runoff water systems, flood control systems, transportation systems, food systems, and infrastructure that supports biodiversity are used as examples.

Energy Landscapes
Michael Jakob, Université de Genève
Inquiring into the way that energy changes the shape of the world, this presentation lays the base foundation for the discourse on energy and how it is central to industrialized society. Highlighting a realm that for too long, has been hidden from our eyes, the presentation reveals the landscape and the infrastructure of how energy is produced and where it is distributed. Using examples from the architecture of power stations to hydroelectric dams, Jakob sheds light on the increasing awareness of the toll that energy has played on the shape of urban regions into what may be considered the next golden age of energy infrastructure.

The Decentralization of Urban Infrastructure
Nina-Marie Lister, Ryerson University School of Urban & Regional Studies pLandform
With the recent deterioration of 20th century infrastructure, new challenges are facing city planners and administrators regarding the future sustainability of conventional approaches to urban infrastructure. The predominance of mono-functional engineering is being challenged by the emergence of a systems-based approach to urbanism and environmental design. A systems-based perspective of living systems rests on the central tenets of complexity and uncertainty, and necessitates flexibility, anticipation and adaptation rather than prediction and control in specialized urban planning and management. What are the implications of this new perspective? This presentation examines these challenges in the context of adaptive systems design and planning with a horizon on emerging strategies from cities around the world.

New Natures / New York
Kate Orff, Columbia University SCAPE
This will be a lecture in two parts. In the first part I will discuss how the term landscape infrastructure helps to redefine design practice and the idea of site. I will look at New York City as a case study, and show the work of F.L. Olmsted and Robert Moses through the lens of a landscape infrastructural perspective. I will talk about the work of SCAPE as scaled-down/sectional infrastructural site works and edge retrofitting within this context. In the second part, I will speculate on how the term landscape infrastructure is helpful to refocus designers more broadly questions of nature and urbanism and to address climate change, the urgent social and environmental question of our time.

Swamped: Projects in Two Delta Landscapes
Jane Wolff, University of Toronto
Ecology and infrastructure are two sides of the same coin, and their relationship raises questions that designers can’t ignore. How can we develop terms to understand places shaped in equal measure by natural process and cultural intervention? How can we sustain our intense inhabitation of landscapes in flux? And how can design define, articulate, and argue for ways to connect landscape systems, public consciousness, and the political process? I’ll talk about two projects, one intended to provoke and frame public discussion about the contested landscapes of the California Delta and the other meant to offer practical suggestions for rehabilitating a devastated neighborhood in New Orleans. These projects’ scales, constituencies, methods, and manifestations are different, but their goal is the same: to arrive at a durable landscape.