

Water, Infrastructure, Geopolitics Urban Systems Management, Resource Flow, and the Networked City-State

***SCIArc FRESH URBS / Vertical studio Spring 2006
Professors: Juan Azulay, Moji Baratloo, Ed Keller***

'Water, water, everywhere... nor any drop to drink...'
Rime of the Ancient Mariner, Coleridge

Contemporary urban design has to deal with an ever more complex network of landscapes- and of global concern today is water as a resource. Control of water, protocols for its use, and an evaluation of the overall influence of water infrastructure on urban morphology will be a key factor for socio-political formations over the coming decades. The impact of these factors on urban use patterns, as well as developing architectural, urban and political morphologies has not been adequately studied. This studio will undertake a groundbreaking study of the urban, technological and political paradigm shifts taking place today and propose urban morphologies based on a new range of networks only coming into being in this decade.

SITUATION

As we enter the second decade of the twenty-first century, one thing is clear: a general economy ever more powerfully dominates global relations, and this economy subsumes all political, passionate, and imaginative systems. Partly emerging out of a set of constraints that have energy and resource management as their prime concern, and partly an evidence of the residual artifacts of an old school geopolitic- [one that still thinks nation states are the primary arbiter for both global, political and personal agency]- as global citizens we are facing both a potential crisis of unprecedented dimensions, but also the opportunity for rapid response, growth and change at a pace never before possible.

As has been well rehearsed in both recent and canonic C20 political theory, the nation-state as a political and economic assemblage resembles more and more a fiction useful only for maintaining the traces of archaic and dispensable political structures. However, cutting across these evaporating lines, one sees that- as literally hundreds of millions of people constitute a global migratory population, with little regard for the traditional boundaries of town, city and nation- there are new opportunities for thinking the infrastructures of urban morphology.

This new constituency, migratory and ever more technologically enabled, underscores the need for a profound rethinking of how we understand basic biopower systems- in cities, and across much larger regional/global landscapes.

Together with this runs a set of concerns oriented towards resources. Biopower management is no longer the domain of local or national instruments of law. Emergent social, political, and economic bodies can affiliate literally overnight, and develop new strategies and tactics for program invention, landscape control, and indeed resource use. The implication is that the new, global, networked city is more than just a disintermediated cultural field that individuals can coopt for new forms of 'play', but indeed offers unprecedented opportunities for rampant resource consumption- or, if cities prepare- unprecedented chances to channel the energy of resource use such that cities re-evolve into the organs for social and political equity that they have occasionally been throughout history. Our research will study the connections between these new political bodies, the presence of water as a resource, and the consequent changes in urban form. Factors include climate change, global warming, rising ocean levels and changing ocean currents, the ever increasing need for fresh water that is not energy intensive to acquire [witness

***FRESH URBS / Vertical design studio Spring 2006
Professors: Azulay, Baratloo, Keller***

recent research into new methods for desalination], etc.

As one example of the paradigm shift taking place, recent actions by individual cities to adopt the Kyoto Protocol, completely independent of their host nation's actions on Kyoto, point to a new kind of global association emerging, that dissolves previous fixed relations and reestablishes cities as networked mini-states with the power to organize global agency. [eg. the dozens of US cities connected through 'Local Governments for Sustainability']

Our research will be based on the hypothesis that we can identify new forms of system and network in cities today, and develop proposals for globally viable urban organs and morphologies.

TRAVEL and COLLABORATIONS:

This studio will be offered under the auspices of the Fresh Urbs program, and will admit up to 8 additional students as a vertical design studio. Students will have the option to join a two week trip to Brisbane Australia [with Baratloo and Keller] and participate in a collaborative dialog with Queensland University and the Columbia University GSAPP there. Students who remain in Los Angeles will continue working on their projects here with Juan Azulay.

Guest Workshops/Talks:

Matt Coolidge [LA]

Perry Hall [NYC/LA]

Ben Bratton [LA]

others TBA

NEW MAPPING, NEW SYSTEMS, NEW EMERGENT BODIES

Tech and Method

The studio will use a conventional stable of digital tools to conduct research and analysis: Illustrator, Photoshop, Maya, 3Dstudio, etc. Google Earth will be a significant research, assembly and presentation tool. Students will shoot digital video in both HighDefinition [1080i] and Standard Definition for their documentary work. A short film will be produced during the semester and will support other forms of documentation and analysis. Studio work will be compiled in a format useable by the Google Earth community. Additionally, software such as Netlogo, Processing, and Surface Evolver are suggested for use during the diagramming process.

Projects will begin with intensive research into site conditions and systems behavior, studying material and organizational dynamics- drawn both from the real world, from cinematic examples, and tested in computer simulations and analysis. This initial work with an intensive diagramming process will ultimately yield a set of documents- maps, diagrams, and notational systems- that will drive the design work. Several workshops in diagramming processes- will anchor this component of the research. As part of this process, students will shoot digital video of city systems/infrastructures- yielding short digital films that will be a first round rehearsal for a 'drift cinema' documentary process to be deployed during site visits in Australia. Those students in the studio who travel will function as a documentary team during the Australia trip site visits in March.

Upon return from Australia, the studio will channel research work, analysis, and documentation into a choice of site and a design response for the site. The second half of the semester will be primarily design oriented. Keller is teaching two spring 2006 GSAPP workshops, one on diagramming, and one on 'drift cinema', which will provide an opportunity for students to focus their studio research.

FRESH URBS / Vertical design studio Spring 2006
Professors: Azulay, Baratloo, Keller

SITE INFORMATION TO BE ADDED: JUAN

Bibliography/Filmography:

[all readings are excerpts or chapters, except where noted]

TECHNE- Tectonic and Organizational

The New York Waterfront: ed. Kevin Bone

City of Quartz, Dead Cities: Davis

Organizational Space: Easterling

Critical Path, B. Fuller

Once Upon a Time in the West : Leone

Manhatta : Sheeler + Strand

CONCEPT

Means Without End: Giorgio Agamben

Geopolitical Aesthetic: Jameson

Practice of Everyday Life: deCerteau

The Accursed Share: Bataille

Fire and Memory: Fernandez-Galiano

A Thousand Plateaus: Gilles Deleuze + Felix Guattari

Psychogeographies of Water and Landscape

Taking Measures Across the American Landscape: Corner + MacLean

Crying of Lot 49: Pynchon

Red Desert: Antonioni

The Kingdom, Element of Crime: Lars von Trier

Delicatessen, City of Lost Children : Caro + Jeunet

Mulholland Drive: Lynch

Stalker: Tarkovsky

Apocalypse Now : Coppola

The Return : Zvyagintsev

Repo Man : Alex Cox

Fitzcarraldo : Herzog

Beau Travail : Denis

The Last Wave : Weir

Bright Future: Kurosawa

Systems Behavior, Material Controls

1000 Years of Non Linear History: Manuel DeLanda

Emergence: Johnson

Hypersea: McMenamin and McMenamin

Smart Mobs: Howard Rheingold

Empire, Multitude: Hardt and Negri

Cymatics, Hans Jenny

Syriana: Gaghan
Chinatown: Polanski
Heat: Mann

Lessons of Darkness: Herzog
Videodrome, Crash: Cronenberg

Scenarios: Past, Present and Future

Modernity at Large: Arjun Appadurai
Electronic Disturbance, other texts: Critical Art Ensemble
Diamond Age: N. Stephenson
UBIK: Philip K. Dick
Transmetropolitan: Warren Ellis
Shockwave Rider: J. Brunner
Dune : Frank Herbert
Koyanisquatsi : Reggio
Apu Trilogy : Satyajit Ray

Playtime : Tati
The Day After Tomorrow : Emmerich

ONLINE resources: Links list TBA

SEMESTER SCHEDULE

Weeks 1-4: mapping: follow the line thru the city/sites/themes

__Walk the line, fly the line, construct precise sections and maps/diagrams along the line, film the line, googleEarth fly the line.

YIELD [1/4 review]:

__set of sections, short films, Google Earth paths, diagrams , maps
presentation analysis, Mappr and locative media documents.

Weeks 5-7: work with sites and themes.

__Add'l documentation/analysis of site[s], generate first concept for project

YIELD [1/2 review]:

__Project concept, site work, maps targeted into project

TRAVEL TO AUSTRALIA:

On site documentation, repeat LA work but at second location

[prepare Google Earth paths in advance, shoot them]

Bring analysis to Aust, and produce documentary as nomadic production teams during trip. HDV/DV/Laptops/etc

Weeks 8-11: 3/4 review: Second round of analysis, projects, sites.

Project design continues

Weeks 12-14, to FINAL REVIEW

project design in site

completed documentaries

Google Earth information uploaded to user community