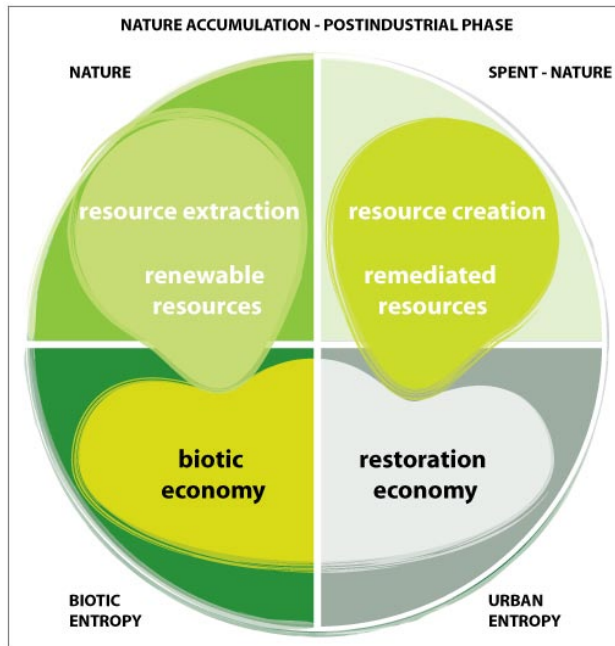

SPENT NATURE / RESTORATION ECONOMY / OAK POINT, SOUTH BRONX



"Nature vs. Spent-Nature" as Accumulation Strategy

CIEE E4260: Urban Ecology Studio

Monday: 1:00 to 4:00 (Discuss)

Wednesday: 2:00 to 4:00 (Discuss)

Instructors:

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Meeting Places: Not fixed but will be announced in advance of each meeting time.

SUMMARY: This studio will explore redevelopment of the Oak Point industrial waterfront in the Hunts Point neighborhood of the South Bronx. The program will explore the issue of a new generation of "industry" in New York City, related to the transformation from a biotic-based economy to a restoration-based economy; and from renewable to remediated resources, using as a base line a feasibility study for an **eco-industrial park** at Oak Point developed by **Sustainable South Bronx (SSBX)** and the **Greenworker Cooperative**. As well, this investigation will be coordinated with the goals of the NYC2030 Plan as developed by the Mayor's Office of Long-Term Planning and Sustainability.

NATURE ACCUMULATION - POST INDUSTRIAL PHASE: We envision a certain continuity of use, moving from the present period of industrial abandonment to a period of remediation integrated with research and development; and then to a third period of sustained new industry driven by spin-offs from the remediation technology. This strategy prioritizes gaining a new "industrial" base for New York after many decades of neglect – one that is capable of hybridizing productive reuse of remaining industrial sites with a future urban restoration industry. This future is intertwined with infrastructure, or more precisely, with urban micro-infrastructure related to waste disposal, energy production, and natural

resources (especially water). All will have to be largely self-sustaining in the urban context, evoking entirely new concepts of what urban “production” actually means.

RESTORATION ECOLOGIES AND ECONOMIES: The highest possible forms of production and their corollary high levels of remediation can point toward the option of **new forms of “industry,”** and specifically new urban industry that can integrate with the remediation process itself. This trajectory engages what has been popularly described as a new field of “restoration ecology” and is frequently corollary with degraded urban contexts - and therefore has the potential to generate a new urban “restoration economy” [1]. The restoration economy is becoming a key component in the reinvention of urban economies, as restoration science moves from built fabric to the urban “natural” environment following the logic that degraded urban ecosystems may actually provide more economic opportunities than detriments. [2] Involved are emerging new forms of “nature” as resource, including the “spent nature” of brown fields and waste. The concept of nature as “accumulation strategy” is expanding to include redefinition of nature itself, such that degraded and consumed materials and environments are no longer seen as a liability but rather as a powerful new frontier of capital accumulation - such that “nature is increasingly if selectively replicated as its own marketplace.” [3]

1. The restoration economy concept is well-summarized in: Storm Cunningham. *The Restoration Economy. The Greatest New Growth Frontier*, San Francisco: Berrett-Koehler Publishers, Inc., 2002.
2. The economics of the new eco-enterprise is well analyzed in Herman E. Daley and Joshua Farley, *Ecological Economics. Principles and Application*, Washington DC: Island Press, 2004.
3. On the historical shift in environmental capitalism see also: Leo Panitch and Colin Leys, *Coming to Terms with Nature. Socialist Register 2007*, London: The Merlin Press, 2006. Of particular interest is the essay by Neil Smith on “Nature Accumulation Strategy,” pp. 16-36.

NEW YORK CITY 2030: With the PLANYC 2030 a common “umbrella” has recently been created under which every neighborhood has to stand in order to ensure City’s future. At the same time **NYC’s identity is based on diversity** – cultural, economic, physical that each neighborhood contains and thus any intervention that takes place needs not only to be integrated in the City’s overall strategy, but firstly needs to be aligned with the particular neighborhood’s needs. The complete goals list of PLANYC is found at <http://www.nyc.gov/html/planc2030/>

HUNTS POINT, SOUTH BRONX: Hunts Point is a distinctive neighborhood of NYC located in Bronx Community District 2, a 2.1 square mile area of the South Bronx. The population of Community District 2 is about 50,000 of which 42% receive public assistance (AFDC, Home Relief, Supplemental Security Income, and Medicaid). Hunts Point is home to the largest food distribution center in the world. Over 800 industrial businesses, employing over 25,000 workers, are located on the peninsula. However, in the past due partially to crime and businesses perceptions of the local residents a lot of the commerce in the area has not translated into job opportunities for local residents. At least 65% percent of the residents speak a second language and 22% are foreign born. Local industry and the approximately 60,000 truck trips per week they depend on contribute in part to the asthma rates among children under 14. The New York City Department of Planning recommends a minimum of 2.5 acres of parkland per 1000 residents. Due to its historically industrial nature, Hunts Point and the rest of the South Bronx have around 0.5 acres of parkland per 1000 people.

OAK POINT: The site is one of the largest undeveloped parcels of land in all of New York City. It is located in the western corner of the Oak Point rail yard next to Bruckner Boulevard, across the river from Rikers Island. Sustainable South Bronx (SSBX) in collaboration with Green Worker Cooperatives prepared a study that questions City's plans to build a new jail, and the owner's plans to build a 1,075-megawatt power plant, and **suggests the creation of an Eco-Industrial Park.** An industrial recycling

facility that would siphon off reusable building construction materials such as scrap metal, glass, and plastics that normally get sent to a landfill with the rest of the waste flow passing through the borough. The complete proposal for the Oak Point Eco-Industrial Park is found at <http://www.ssbx.org/documents/SSBxEco-IndustrialFullFeasibilityStudy.pdf>

PROGRAM: Under this context students teams of architects and engineers are asked to develop a comprehensive design proposal for the site. Each design proposal should aim to:

- Innovate a pioneering eco-industrial design program
- Enhance Economic Development / Create job opportunities
- Restore Environmental Conditions / Minimize environmental impact
- Improve efficiency / Utilize multi-modal transit Infrastructure
- Support adjacent uses / Incorporate the site context
- Provide Recreational Facilities / Open access to the Waterfront

At the same time we suggest that each proposal incorporate the PLANYC objectives in a critical way that will open the discussion about City's future. The following list is a compilation of PLANYC's objectives that may be related with our site. Any interpolation is welcome.

Open Space: Reclaim underutilized waterfronts, make existing sites available to more New Yorkers, reimagine public realm.

Brownfields: Provide incentives to lower costs of remediation.

Water Quality: Pursue proven solutions to prevent water from entering the System, provide incentives for green roofs.

Congestion: Build/expand transit infrastructure, promote other sustainable transit modes.

Energy: Reduce NYC's energy consumption, expand city's clean power supply

Air Quality: Reduce road vehicle emissions; reduce emissions from buildings; pursue natural solutions to improve air quality.

Climate Change: Incorporate climate change concerns into the planning process

STUDIO ORGANIZATION: This studio is a collaboration between GSAPP, SEAS and Sustainable South Bronx – who will serve as the Studio's client. Technical knowledge will be shared through joint seminar sessions and various forms of design collaboration are encouraged between architecture and engineering students. The Earth Institute's Urban Design Lab will provide additional input.

TENTATIVE SCHEDULE The Course Schedule below is for both SEAS and GSAPP students. Note, the activity on Friday is " Studio" for the GSAPP students in Avery. The engineering students are welcome to use this time for collaboration, in addition to the scheduled times on Monday and Wednesday. The schedule and meeting places WILL change...

Day	Date	Activity	Place
Wednesday	9.05.07	Introduction for Engineers	834 Mudd
Friday	9.07.07	Introduction for GSAPP students	Avery
Monday	9.10.07	Site Visit: meet 120 & Amsterdam 1pm	Bus
Wednesday	9.12.07	Lecture: PLANYC Presentation	834 Mudd
Friday	9.14.07	Studio	Studio
Monday	9.17.07	GIS Tutorial	TBA
Wednesday	9.19.07	Work on Case Studies	Studio
Friday	9.21.07	Studio	Studio
Monday	9.24.07	Pin-up: Case Studies	TBA
Wednesday	9.26.07	Lecture: Cynthia Rosenzweig Climate Change	834 Mudd
Friday	9.28.07	Studio	Studio
Monday	10.01.07	Pin-up: Material Flows & Site Strategies	TBA
Wednesday	10.03.07	Lecture: Dickson Despommier Urban Farming	834 Mudd
Friday	10.05.07	Studio	Studio
Monday	10.08.07	Pin-up: Initial Site Designs	TBA
Wednesday	10.10.07	Lecture: Karsten Millrath Re-thinking waste flows	834 Mudd
Friday	10.12.07	Studio	Studio
Monday	10.15.07	Pin-up: Engineering Tools & Designs	TBA
Wednesday	10.17.07	Lecture: Steve Cohen Environmental Policy	834 Mudd
Friday	10.19.07	Studio	Studio
Monday	10.22.07	Studio: Prepare for Mid-Term	Studio
Wednesday	10.24.07	Mid-Term Review	Avery
Friday	10.26.07	Critique of Mid-Term: Architects	Studio
Monday	10.29.07	Critique of Mid-Term: Engineers	644 Mudd
Wednesday	10.31.07	Lecture: Gail Suchman Environmental Justice	834 Mudd
Friday	11.01.07	Studio	Studio
Monday	11.05.07	Off (Election Day Holiday)	--
Wednesday	11.07.07	Studio	Studio
Friday	11.09.07	Studio	Studio
Monday	11.12.07	Studio	Studio
Wednesday	11.14.07	Studio	Studio
Friday	11.16.07	Studio	Studio
Monday	11.19.07	3/4 Review	Avery
Wednesday	11.21.07	Critique of ¾ review: Engineers	834 Mdd
Friday	11.23.07	Off (Thanksgiving Holiday)	--
Monday	11.26.07	Studio	Studio
Wednesday	11.28.07	Studio	Studio
Friday	11.30.07	Studio	Studio
Monday	12.03.07	Studio	Studio
Wednesday	12.05.07	Studio	Studio
Friday	12.07.07	Final Review	Avery
Monday	12.10.07	Wrap Up/Archiving	644 Mudd