

Bridgeport Thinkbelt

Advanced Studio IV focuses on the question of architecture beyond its own envelope, and the possibility for engagement with larger territories and environments. Urbanism introduces the possibility of uncertainty rather than stability, and a focus on systems rather than objects. These insights can also, in turn, inform architecture itself. The studio will explore design through a sequence of different scales, probing and facilitating the dialogue between urbanism and architecture. Working in the post-industrial, waterfront context of the Bridgeport, Connecticut, this studio will propose a dispersed and open campus that envisions new economies for Bridgeport and a new relationship to the water.

Bridgeport

Bridgeport, located at the mouth of the Pequonnock River, was first inhabited by the Paugussett, an Algonquian-speaking nation, prior to European colonialization starting from the middle of the 17th century. Its port and harbor on the Long Island Sound were critical for its early commercial development, which initially focused on farming, fishing, whaling, and shipbuilding. With the establishment of the New York New Haven railroad line in 1848, the city industrialized and became a center for manufacturing machinery, corsets and other garments, munitions, and eventually helicopters. Dupont, General Electric, and Remington were all once headquartered in Bridgeport.

By the 1970's, with the de-industrialization of the U.S. economy, many of Bridgeport's jobs disappeared. The loss of manufacturing left brownfield sites, abandoned buildings, and environmental contamination. Exclusionary housing policies and white flight to the suburbs caused the city's population to decline and become more racially segregated. Despite nearly 20% growth in the region in the last 50 years, Bridgeport's population has decreased by 10% since 1970. In this sense, Bridgeport is not unlike other post-industrial cities in the Northeast such as Newark, Trenton, or New Haven. Lately, Bridgeport has struggled with a negative cycle of declining property values and increasing property taxes. Bridgeport is the largest city in Connecticut, the wealthiest state of the United States, yet nearly 20% of its residents live in poverty and its average per capita income is around \$21,000.

Nonetheless, with its advantageous position along 1-95 and the Northeast commuter rail corridor between New York City and Boston, the Regional Plan Association projects that in the future Bridgeport might become a regional job center for a new green economy, building on its existing urban fabric and downtown. The waterfront of Bridgeport has already been identified as both an opportunity for change and a part of the city which, by necessity, needs to be re-imagined due to its exposure to rising sea levels and climate change. Our site will be located within the Bridgeport WOZ (Waterfront Overlay Zone).

Campus

As a type, the campus is, by definition, compound. It therefore provides an ideal platform to examine the relationships between buildings. Our interest is in neither the ivy tower of higher education nor the idealized world of academic pursuit situated in a suburban or pastoral landscape. Educational institutions have come to recognize that an open engagement with and diffusion into the city, along with its diversity of ideas and people, may advance their own underlying pedagogical and institutional

agendas. In this sense, the urban campus as enclave (e.g. McKim, Mead, and White’s 1894 Morningside Heights masterplan for Columbia University), may also no longer be appropriate as a model. Now, the campus is increasingly blurred as a public / private entity that absorbs an expanded program, including medical and research facilities, scientific labs, and innovation and technology incubators. Sharon Haar has noted, “education [is now more] directly connected to... the post-industrial knowledge economy.” In this sense, as Pier Vittorio Aureli notes, Cedric Price’s Potteries Thinkbelt (1966)— a proposal to convert a derelict industrial region and its railroad infrastructure to a post-industrial region through a decentralized and mobile educational network—seems prescient. Learning from this, we might consider the campus as a dispersed ensemble of components that will operate together with larger territories, environments, and economies. As it considers the introduction of an MGM casino as a supposed urban and economic catalyst, the Bridgeport Thinkbelt may also provide a counter-narrative for the future of the city.

The semester will be organized into three phases:

I. Knowledge Precedents (2 weeks)

As a prelude, we will start by examining our own discipline. The studio will start with the analysis of selected “knowledge” precedents—20th century and early 21st century architectural examples including kindergartens, schools, university buildings, and laboratories—that embody or claim certain ideological and pedagogical agendas vis-à-vis their spatial hierarchies, organization, circulation, structure, façades, and mechanical systems. Each student or team will select a precedent, develop original drawings and models, become an expert, and take what they need. While those selected buildings are specific responses to certain contexts, places and times, we will attempt to extrapolate attributes that can be transferred to other sites, programs, and conditions. What is the relationship between ideology and form? How can architecture learn? What can we learn?

Bauhaus Dessau	Walter Gropius	1926
Openluchtschool, Amsterdam	Johannes Duiker	1930
Hunstanton Secondary Modern School	Alison and Peter Smithson	1954
Montessori School, Delft	Herman Hertzberger	1960 - 2009
Richards Medical Center	Louis Kahn	1962
University of Brasilia ICC	Oscar Niemeyer	1962
Yale School of Architecture	Paul Rudolph	1963
Main Building of the Polytechnic, Otaniemi	Alvar Aalto	1964
École d’Art et d’Architecture, Chandigarh	Le Corbusier	1965
Simon Fraser Academic Quadrangle	Arthur Erickson	1967
Facultad de Arquitectura de Sao Paulo	Joao Batista Vilanova Artigas	1968
Berlin Free University	Candilis, Josic, Wood	1974
CIEP Schools	Oscar Niemeyer	1982
Educatorium	OMA	1997
Zollverein School of Management and Design	Kazuyo Sejima + Nishizawa	2006
Fuji Kindergarten	Tezuka Architects	2007
Kanagawa Institute of Technology	Junya Ishigami	2008
Nantes School of Architecture	Lacaton & Vassal	2009
Leutschenbach School, Zurich	Christian Kerez	2009

II. Urbanism (3 weeks, prior to Midterm)

Looking closely at Bridgeport, we will analyze and draw its existing urban conditions and systems. Historic development, urban form, built fabric, land use, infrastructure, transportation and circulation,

water, landscape, environment, and social and economic analysis will be collectively examined by the studio. Urban research is intended to be generative, i.e. leading to specific insights and potential design directions. Students will elaborate the program of their campus and establish a proposed urban massing. Scale comparison, superimposition, figure-ground, and prototypical sections will be important techniques and representational devices. Equally important to the physical distribution or pattern of buildings is the overall narrative behind the intervention, and its programmatic components and relationships. At this scale and with limited time, the suppression of detail may enable the development of a polemical position relative to the larger territory, and a vision for the future identity of Bridgeport.

III. Three Buildings (8 weeks, after Midterm)

The primary emphasis of the studio is the design of a set of three interrelated buildings, approximately 10,000-50,000 square feet each, located along the Bridgeport waterfront and situated within an urban campus proposal established prior to the Midterm. The buildings will be located on different sites with different programs, potentially taking on different forms as such (bar, tower, mat, etc.). Architectural insights from the Knowledge Precedents, independent of site or program, will be abstracted to be adaptable to different circumstances. Without denying the role of intuition in the design process, a rigorous relationship between the Knowledge Precedent and new building, or operation, should be proposed.

A key motivation for the premise of multiple buildings is to design not a singular or isolated intervention, but rather an archipelago or network of related parts. In this sense, we are interested in systems rather than objects. Needless to say, a convincing degree of architectural specificity is expected (spatial hierarchy, structure, circulation, facades, materiality, etc.) and physical models will likely help achieve this. Program may include classrooms, research labs, incubator spaces, administrative offices, libraries, auditoria, recreation spaces, cafeterias, as they are relevant to each student or team's broader narrative. With the articulation of these buildings at one scale, the overall urban campus may also evolve at another scale.

Ultimately, the ambition of the studio is dialectic and two-fold: 1. envisioning a new identity for Bridgeport's waterfront based on actual conditions and realities, proposing new economies and systems for the city, and developing a physical structure based on learning, and 2. articulating a relationship between architectural form and ideology, history, and pedagogy, independent of context.

Notes

- The studio meets for desk crits on Monday and Thursdays from 1:30-6:30pm.
- There will also be a weekly all-studio session on Wednesdays from 3:00-5:00pm.
- A trip to Bridgeport, CT will be arranged in January or February.
- A detailed schedule with pin-ups, reviews, and requirements for presentations will be distributed at the beginning of the semester.
- All studio work will be compiled into a book summarizing the studies and outcomes of the semester. Given the range of different precedents, sites, and ideas explored, it is expected that students coordinate their work into a shared template, format, visual language, etc. so that the knowledge can be presented coherently as a single body.
- Work, including model photographs, will be submitted to a Google Drive.
- Teamwork and collaboration is encouraged. Students may work independently or in teams of two.

Readings

Aureli, Pier Vittorio. "Labor and Architecture: Revisiting Cedric Price's Potteries Thinkbelt." LOG 23 (Fall 2011): 97-118.

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Bridgeport Regional Business Council. BGreen 2020: A Sustainability Plan for Bridgeport, Connecticut. 2011. <http://library.rpa.org/pdf/BGreen-2020.pdf>

City of Bridgeport, Connecticut. Masterplan of Conservation & Development: Bridgeport 2020. March 2008.

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City of Bridgeport, Connecticut. Bridgeport Briefing Book: An Overview of the Park City. July 2015.

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City of Bridgeport, Connecticut. Waterfront Master Plan. January 2017.

http://www.bridgeportct.gov/filestorage/341650/341652/346105/342427/20170221_Waterfront_Bridgeport_Plan_combined_report_med.pdf

Hussey, Kristin and Lisa W. Foderaro. "In Bridgeport, Property Values Plummet, but Taxes Soar for Some." The New York Times. October 10, 2016. <https://nyti.ms/2dNzV47>

Regional Plan Association. The Fourth Regional Plan. 2017.

<http://library.rpa.org/pdf/RPA-The-Fourth-Regional-Plan.pdf>

Sasaki. The Parks Master Plan: Executive Summary 2011.

http://www.bridgeportct.gov/filestorage/341650/341652/342204/Bridgeport_Executive_Summary_Parks_Report_2012Sasaki_spreads_for_web.pdf

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Website: https://resilientbridgeport.com/pdf/Final_Presentation.pdf