Columbia University GSAPP

A4104 Advanced IV; Scales of Environment Studio M. Arch

500 Avery: M, Th (1:30-6:30pm), W (3:00-5:00pm) Spring 2020

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Design for Obsolescence:

Dual Futures of Parking Decks, Prisons, Zoos

(*Version 1/13/20)*

Residential Houses in Former Baseball Stadium (Osaka, Japan)

Questions

The studio will explore the concept of *dual futures* that require designing for two building types that transform from one to another. In our societies of continual change, an intended program is often outlasted by the building itself, raising questions about how we define architectural completion. Can designing for a state of continuous incompletion become a final architectural act? In our societies of change – with climate, programs, and even sites –when is architecture ever truly "complete"? The studio's *near futures* will involve building types that are common today but are hypothesized to become obsolete in the future. The *distant futures* will require adapting the original types to a future program of education.

The Hudson Valley is a rural region that has historically intertwined nature with industry. Local agricultural, river and rail industries are as much part of its history as the romanticism evoked in the Hudson River School landscape paintings. Today, the Hudson Valley is not a pastoral place, but instead a rural hybrid intermingled with suburban shopping malls, contaminated former industrial sites and old infrastructure. The studio's starting point is to investigate the region's history and its future risks and opportunities. The site will be a high voltage power line corridor that is a green loop connecting Newburgh to Highland Falls. Three programs to be

selected by the students will prompt designing for near and distant futures, connected to each other by a *shared state of architectural incompletion*.

This studio is not based on adaptive reuse. Instead, it is about simultaneously designing for two programs from the outset, prompting questions about what qualifies learning and progress in a region with a complex relationship to change itself-- whether from environmental or social forces. Each site also prompts the idea of a *second nature*; in which architecture and nature are not in opposition but function as extensions of each other – with architecture as an extension of nature and vice-versa.

Challenges

Students will be challenged to design for incompletion, adaptability and multiplicity. The three near future programs to be selected are radically different from each other. Each program will transform from the first program—either a parking deck, prison or zoo-–into a program for a future form of learning: machine learning, restorative justice or environmental ethics. Each student will research and define a future learning program. The studio argues that each project's near future will become obsolete as it is disrupted by social or technological change (autonomous cars, criminal justice reform, environmental ethics). This argument challenges the fixity of architectural programs and prompts designs that are adaptable to multiple futures.

The studio argues that the future of learning is not limited to humans teaching humans; it will involve learning with and by others. Humans will necessarily learn to co-exist with other-than-human species. Machine learning will require humans to teach and subsequently be taught by machines. In other words, learning will occur between humans, other-than-human species and machines. Students will design for adaptable and tailored learning in a future of autonomous cars, restorative justice or ethical environments. These future forms of learning will be born of a parking deck, prison, or zoo.

Each of the original programs will transition into a future learning program that is predicated on obsolescence. For example, the parking deck will become obsolete as car ownership declines in a future of ride sharing and autonomous cars. In the future, parking decks can be adapted to become facilities to "teach" autonomous cars to drive. In another example, a future without traditional prisons will involve restorative justice centers built to rehabilitate prisoners. Lastly, a zoo will be designed to meet society's current needs but eventually become an "unzoo," bringing together humans and other-than-humans in a new co-existence.

Where We Will Work

Students will select sites along a high voltage power corridor in the rural areas surrounding Newburgh. This corridor hosts a range of natural habitats; ironically, it is the result of the required utility easement around electricity infrastructure. The studio imagines a future in which the above ground transmission lines will be replaced by below ground lines and the corridor will be developable. The Champlain Hudson Power Express plan proposes to bury a 1,000 mega-watt clean energy power line adjacent to the waterways from the US-Canada border to the New York metro area. Within this context, a future is imaginable in which the above ground energy infrastructure would become obsolete. The studio imagines that sites along the corridor can be designed to meet the current needs of their communities while transforming over time to the needs of future communities.

How We Will Work

The studio will be conducted as an open workshop in which conversation and criticism between students is required. Working in groups of two or three is encouraged but not required. Students will design for one of three programs, thus allowing for parallel discussions between classmates. Expanding the boundaries of the architecture discipline will be integral to the studio methodology. The students' work will be trans-disciplinary in their nature and will be influenced by conversations with the social sciences, arts and sciences. A series of trans-disciplinary discussions will be integral to each student's project.

Schedule

Every Monday we will meet as a group. The format and size of group will vary during the semester—studio pinups, group workshops, small reviews, etc. The locations for each Monday session (one on Thursday) are as follows:

1/23 in Ware, 2/3 in 200 Buell N, 2/9 in 200 Buell N, 2/26 (tbd), 3/9 in 200 Buell N, 3/23 in 504 Avery, 4/6 in 300 Buell S, 4/13 in 504 Avery, 4/20 in 504 Avery.

Adv. IV Wednesday Session: Richard Pluntz Lecture (January 29th)

Adv. IV Wednesday Session: Joshua Jordan Workshop/ Lecture (February 5th)

Project 01: Designing for Adaptability (Review on February 10th; 2 weeks)

Simultaneous research of site regions, adaptability case studies and the proto-design for a near future scenario. The research and design will establish an argument towards the project site and its surroundings. This work must be iteratively explored for its potential in formulating a concept argument towards the project.

Site Visit: Tour of Electricity Corridor (Visit on 2/17 to be confirmed)

Adv. IV Wednesday Session: Joshua Jordan Workshop/ Lecture (February 12th)

Adv. IV Wednesday Session: Studio Exchange Pinup 1 (February 19th)

Adv. IV Wednesday Session: Dilip da Cunah (February 26th)

Project 02: Mid-review (2 - 6pm on March 5th, 3 weeks; Ware)

Each student will present at the mid-review the research and the design proposal for both near and distant futures on their site. The proposals will be based on innovative strategies that allow for transformation from one building type to another. The proposals should clearly and precisely define the project's argument relative to both site and program.

Adv. IV Wednesday Session: Julia Watson (March 11th)

Spring Break (March 16th – 20th)

Adv. IV Wednesday Session: Kate Orff (April 1st)

Adv. IV Wednesday Session: Studio Exchange Pinup 2 (April 8th)

First Final Review

Adv. IV *First final review on April 20th, 3 weeks, location TBD*

Second Final Review

Adv. IV *Second final review (2 - 6pm on April 27th, 1 week; 115 Avery)*