Columbia University GSAPP

A4105 Advanced Studio V M. Arch

600 Avery: M, Th (1:30-6:30pm), F (3:00-5:00pm) Fall 2019

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Studio T.A.: Ivy Wang

Being-With: Coexistence at a Planetary Scale

(*Ver. 8/26/19)*

Questions

This studio, part of the GSAPP Buell Center's "Public Works for a Green New Deal" initiative, expands the boundaries of what are typically considered to be "public" and "works." Rather than public, the studio proposes publics: designing for multi-species, both human and non-human (animals, insects, plants), coexisting in the built and natural environments. Works are not limited to architectural, infrastructural, or technological scales, but must also include the planetary scale (biosphere, climate, global warming) in the face of extreme climate change. Rethinking public works as multi-species at both architectural/infrastructural and planetary scales, the studio proposes ecological imaginaries in response to the recently passed US House Resolution 109, commonly referred to as the "Green New Deal."

The studio questions two commonly held assumptions about the environment: incremental hierarchies of scale and the self-sufficiency, or individualism, of the human species. Both assumptions need interrogation by the design disciplines in response to the climate emergency. The studio site, along coastal Louisiana, is home to many human and non-human communities. Each species lives at a physical scale according to their own habitat (house, marsh, oil rig) but they have profound impacts at a planetary scale (biosphere, Gulf of Mexico, gas/ oil network). Speculating on a carbon-free climate future in coastal Louisiana requires

students to design at both habitat and planetary scales, while avoiding thinking in binary terms of environmental relationships—human vs. animal, society vs. nature, organism vs. environment, even wild vs. domestic. The studio commits to a different view: that architecture is an extension of the environment and, conversely, that the environment is found within architecture. Rather than thinking either/or, students will design for a state of "being-with"— multi-species co-existence as climate action and envisioning ourselves as a part of, not separate from, the environment.

Designing for multi-species encounters at extreme scales of the environment is the foundation of the studio.

Description

The studio will travel to New Orleans and coastal Louisiana to experience the effects of global warming firsthand. Every six hours, the Louisiana coast loses the equivalent of a New York City block to rising water. Students will meet with and learn from communities co-living, or being-with, non-human species—namely, Creole and Vietnamese fishing communities who live in interdependent relationships with aquatic species (fish, shrimp, and oysters). The studio travel will also provide an opportunity to tour oil and gas industries that would be most resistant to any future laws and regulations resulting from the Green New Deal.

Students will be tasked with designing the studio's expanded idea of public works, with programs such as a research lab, housing, nature reserve, prison, port, or even a decommissioned oil rig. Avoiding binary relationships, students will design for two extreme limits of scale. Design will occur simultaneously at an architectural/infrastructural scale and at the planetary scale (climate, ocean, wetlands, etc.). For each architectural/infrastructural proposal, a planetary-scaled design at least 10,000 times the project size will concurrently be developed. The work of the studio will collectively envision a terrapolis, with the planet and architecture designed together for a carbon-free climate future.

Architecture as Extension of the Environment

In the face of extreme climate change, the studio adopts a seemingly counterintuitive position: envisioning *architecture with fewer boundaries* as an essential strategy for drastically reducing carbon emissions. The interior environment of architecture is inextricably linked to the outdoor spaces of cities and landscapes. Designing for multi-species encounters in architectural programs is important for addressing the full impact of global warming. Students will design architecture and nature that are not in opposition but function as part of a continuum—with architecture as an extension of the environment, and vice versa. The studio will have a key specialist, climate engineer Erik Olsen (TransSolar), who will provide important insight to the students' projects.

Multi-Species Co-living

One of the studio's prompts is the design of public works that promote coexistence with non-human species. An example is our coexistence with pigeons, who have a long past of co-domesticating with humans. Throughout history, there have been many instances of humans being-with pigeons, from raising homing pigeons to maritime navigation pigeons; perhaps the best example is Project Sea Hunt. A US Coast Guard project in the 1970s, Sea Hunt involved using pigeons in chambers affixed to the underside of search helicopters. The pigeons communicated with pilots by "pecking," signaling that objects had been sighted during a search. Other examples of non-human species exhibiting intelligent behaviors are dolphins

that accompany sailors lost at sea and plants communicating with each other aboveground and below. The studio aims to loosen the boundary of where "it" ends and "we" begin.

Project Site / Studio Travel

The project site will be a large region of coastal Louisiana that includes Terrebone and Lafourche parishes. The studio will travel to coastal Louisiana by way of New Orleans from September 28th to October 2nd. Travel will include visits to research facilities, design studios, flood infrastructure, fishing communities, and oil/gas ports. We will meet with research scientists, architects, planners, fishermen, and port officials. The travel will provide students with knowledge of both human and non-human communities, as well as the impact of extreme scales related to rising water levels. Students will be required to rent cars (some students will drive) and take a boat tour, as this is the best way to visit the coast.

How We Will Work

The studio will be conducted as an open workshop in which collaboration between students is highly encouraged. Students will design for sites of their choosing, thus allowing for parallel discussions between classmates. Expanding the boundaries of the architecture discipline will be integral to the studio methodology. Students' work will be transdisciplinary in its nature and influenced by the social sciences, arts, and sciences. A series of transdisciplinary discussions with sociologists, climate scientists, and artists will be integral to each student's project. In particular, Erik Olsen from TransSolar will provide valuable insight from the perspective of climate engineering.

Schedule

In general, the studio will meet as a group on Mondays in varying formats of collective work—pinups, workshops, talks. The following rooms have been reserved Mondays from 1:30 – 6:30pm throughout the semester:

9/9 - 409 Avery, 9/16 - 300 Buell North, 9/23 - Ware, 10/7 - Ware, 10/14 - Ware, 10/21 - 504 Avery, 10/28 - 300 Buell South, 11/11 - Ware, 11/18 - Ware, 11/25 – Ware

Thursday, 9/5: First day of studio (Avery 409), bring your portfolio (digital or print), assign Project 1

Thursday, 9/19 (2 weeks): Project 1 Review (location TBD), assign Project 2

Saturday, 9/28 – Wednesday, 10/2 (5 days): Studio travel to New Orleans and Louisiana coast

Thursday, 10/24 (3 weeks): **Mid-review** (Buell 300S & 300N)

Monday, 10/28: **Cross-disciplinary review** (Buell 300S), assign Project 3

Monday, 11/5: Election holiday (no studio)

Thursday, 11/11 (2 weeks): Project 3 review

Monday, 12/2 (2 weeks): **1st Final review** (409 Avery)

Monday, 12/10 (1 week): **2nd Final review** (115 Avery)

Studio References:

- Aronoff, Kate. "With a Green New Deal, Here's What the World Could Look Like for the Next Generation" in The Intercept, Web, 5 December 2018.
- Battistoni, Alyssa. "Living, Not Just Surviving" in Jacobin, Web, 15 August 2017.
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- Fleming, Billy. "Design and the Green New Deal" in Places Journal, Web, April 2019.
- Gissen, David. Subnature: Architecture's Other Environments. Princeton Architectural Press. 2009
- Haraway, Donna. Staying with the Trouble: Making Kin in the Chthulucene. Duke University Press Books. 2016
- Latour, Bruno. Down to Earth: Politics in the New Climatic Regime. Polity. 2018.
- Misrach, Richard. Orff, Kate. Petrochemical America. Aperture. 2014
- McHarg, Ian. Living with Nature. Whiley. 1995
- Morton, Timothy. Hyperobjects: Philosophy and Ecology After the End of the World. University of Minnesota Press. 2013
- Roesler, Sascha. Kobi, Madlen. The Urban Microclimate as Artifact: Towards an Architectural Theory of Thermal Diversity. Birkhauser. 2018