

Unlocking Abundance: Editing the Existing

"if architects only work with what is existing, then we/they will never create anything new"

This studio aims to prove the opposite is true; showcasing that while in the past, creativity was defined as the spark that ignites something entirely new, we are at an inflection point. Our planet is suffering under our continued need for "newness". If newness provides the only definition of creative spark, we will continue to extract, ravage and exploit our planet for resources. We will continue to throw things away. Our linear lifestyle will remain, by default, the definition of the creative mind.

What if, instead, we start with all that we already have? What if creativity is defined and celebrated by the ability to make the ugly beautiful, the useless useful and the abandoned loved?

In a climate changed and changing world, architects must learn to more deeply engage with existing material, deconstruction techniques and logistics, design for disassembly and re-configuration, and the planning for a building's maintenance. Moving architecture away from the stylistic value of a finished object, and toward an ongoing, process oriented endeavor, it must immerse itself with both the lineage of our material past and the future of its continued value.

"We find ourselves in a time of reckoning, at an inflection point for humanity. What we will inflect toward is not clear. It has not yet been determined how much global temperature will increase, how much sea levels will rise, how we will adapt to the inevitable and prevent the worst, or how we will treat each other amidst it all. Set aside your resignation and nihilism. There is a wide range of possible futures."

What If We Get It Right? Visions of Climate Futures | Ayana Elizabeth Johnson

"In a more substantial manner than is already the case, architecture should be understood as an open system comprising elements that permit repeated and renewed arrangement, rather than an immutable opus to which any successive change in principle results in a perceived decline in quality. We should no longer ask what we want to have, but instead, what we can achieve with what we already have. Small, precise interventions are required, as well as inventive proposals. What we need is real creativity."

More than a Mine - Existing Buildings as a Material and Cultural Resource | Christian Holl in
Building Sorted by Type - Circular Construction Methods

The students will be asked to design with the available materials from three donation sites: They will be provided with Matterport scans, material take-off spreadsheets and toxicity reports for each of them.

1. Durst Organization | Bank of America Building | Year Built: 1987 | Address: 114 West 47th St, NY
2. The Hunter Bellevue School of Nursing | SPARC | Year Built: 1954 | Address: 425 E 25th St, NY
3. Former Worker Housing | Year Built: 1910 | Address: 19 Frost Street, Brooklyn

THE STUDIO FORMAT

Exercise 1 - Material Audit

Students are asked to identify three materials from the donation sites, and trace these through the building, identifying locations, quantities and deconstruction logistics. The goal of this exercise is to think through, document and diagram the viability of their extraction, potential re-manufacture and reuse, in order to determine the output of such processes.

Exercise 2 - Design for Disassembly

Select one of the three materials identified in Exercise 1 and design one repeatable, aggregatable system that is useful in our built environment using it. Design this system or field for maintenance and disassembly, thinking through how it comes apart, how component pieces can be reused again in the future, and / or how the system encourages incremental maintenance. Examples include: stairways, doorways, walls, ceilings, slabs or furniture elements.

Exercise 3 - Architecture

Using the design from Exercise 2, other materials identified in Exercise 1, material systems invented by your studio peers and potentially other natural material supplementation, aim to work towards the design of a mixed used building at two adjacent implementation sites - 17 and 19 Frost Street in Brooklyn, New York.

Both sites currently contain existing buildings. One is a single story, masonry manufacturing building dating back to 1940. This building shall remain. The other is a wood framed building dating to 1910. This building shall undergo deconstruction - in whole or in part - as decided by the

individual. Its material will be used alongside donation sites 1 and 2 above to define a new structure, alongside the existing building at 17 Frost, to contain space for manufacturing, retail and housing. The configurations of these programmes can be defined by the individual, within the zoning constraints of the combined lots.

THE SCHEDULE (draft, subject to change)

Thursday and Friday 1-5PM

Ruth and Bobby to alternate weeks

09/10: First Day of Studio | Introductions

09/11: About Material Audits | Exercise 1

09/17: Desk Crits

09/18: Exercise 1 Pin up | Exercise 2

09/24: About Design for Disassembly | Desk Crits

09/25: Desk Crits

10/01: Desk Crits

10/02: Exercise 2 Pin up

10/08: Brooklyn Trip | Visit Donation Site(s) | Deconstruction Lesson w/ CO Adaptive
Deconstruction Lead

10/09: Brooklyn Trip | Visit Implementation Site | Framing Lesson w/ CO Adaptive Lead Carpenter

10/15: About Drawing with Reuse | Desk Crits

10/16: Desk Crits

10/22: About Embodied Carbon Analysis | Desk Crits

10/23: Desk Crits

10/29: Desk Crits

10/30: Mid Review / Progress Pin up

11/5: Desk Crits

11/6: Desk Crits

11/12: Desk Crits

11/13: Desk Crits

11/19: Desk Crits / CO Adaptive Lecture

11/20: Progress Pin Up

11/26: Thanksgiving, No Studio

11/27: Thanksgiving, No Studio

12/03: Desk Crits

12/04: Desk Crits

12/10: Final Review

Deliverables:

Life Cycle Analysis (LCA)

Embodied Carbon Analysis

Deconstruction Drawings

Building System Diagrams and Component Details

Disassembly Diagrams

Digital Site Model

Floor Plans

Building Sections

Building Elevations

Renderings

Reference Material:

To be shared at first class meeting

Precedent Studies:

To be shared at first class meeting