Tools for Show is a technical and conceptual exercise in copying. While the architectural discipline has traditionally been concerned with the one-off, unique and custom work, this class is exploring techniques of replication, versioning and scalability. In the age of digital reproduction, the authenticity of an object or experience is validated through relentless dissemination. Taking into account digital media as well as the impact of physical full scale replicas, Tools for Show is exploring the multiplication of objects, bodies and spaces as a creative process in itself.

The class format is hybrid between rigorous technical coursework and a theoretical investigation into questions of copying. Weekly readings accompanying practical assignments, guest lectures and field trips will accompany technical demos and workshops. Ultimately, the goal is to work with emerging tools in a critical and open ended way. Rather than formulating a prescribed path of working with a certain software, the goal is develop a curiosity and methodology of working with a ever changing set of emerging tools and techniques.

A4968-1 and A4969-1
200 BUCELL HALL
Thursday 11 AM – 1 PM
THESIS

What does it entail to tell stories about objects in novel ways? How can we change the reading of something through its display?

Currently, 3D scanning is used for purposes of site documentation and data collection, with a growing industry invested in recreating the real, from historic preservation to the real estate business to AI startups. This class is interested in 3D scanning as a process and its potential to drive and change design methods. It gives an introduction to practical scanning methods that can be applied in everyday situations, while speculating on the possibilities of 3D scanning for the discipline at large. The goal is to enable new ways of looking at existing architectural artifacts, through digital representation methods such as the point cloud, the textured mesh and the X-ray. Translating these back into physical space includes techniques such as color 3d printing, milling and painted casts. The final projects will form a collective exhibition of drawing types and models.

The process of copying is one of reductions, additions and transformations. Even the most meticulous copies can be uncovered as fakes. In this course we are interested in what happens in these processes of translation, and how one object can become richer and more multi-layered through showcasing it through various media.

Constantly working between the physical and the digital, the class emphasizes a deep understanding of methods of re-production, or how to transition between various states of the same object.

“If media is understood as the multiple means of storing and transmitting information, then the copy must be understood as its total manifestation.”

Ines Weizman
SCHEDULE

RADICAL REPLICAS

Week 1 - Intro - Architecture and Authenticity - Laser scanning
Week 2 - Photogrammetry introduction and demo
Week 3 - Site visit and on-site scanning session
Week 4 - desk crits
Week 5 - Mesh optimization, Mesh painting with Mudbox
Week 6 - Mid term

POTENT PROTOTYPES

Week 7 - Creating physical prototypes
Week 8 - Site visit and scanning session
Week 9 - Photogrammetry 2.0 - complex and large scale models
Week 10 - Desk crits
Week 11 - Final exhibition planning, design session
Week 12 - Final Exhibition

PREREQUISITE

A familiarity with 3d modeling, including Rhino and 3dsmax modeling is preferred but anyone is welcome. The course content is scalable and will work for different levels of experience.
GRADING

The final project of this class will be a collaborative effort - we will make an exhibition together which requires students to effectively communicate and work together. In that sense grades are as much determined by collaborative effort as by individual performance.

40% Grades are based on class participation, including discussion of readings
30% weekly assignments
30% the quality of the final project

BIBLIOGRAPHY

- Mario Carpo: The Alphabet and the Algorithm
- Winy Mass: Copy Paste: Bad Ass Copy Guide
- Inside the White Cube: The Ideology of the Gallery Space
MOODBOARD