

June 2022

Emily White: Thesis Studio Prospectus

The thesis year is situated in between an end and a beginning. It is the end of your undergraduate education and the beginning of whatever you do next. It is an opportunity to reflect critically on what you have learned, consider which ideas resonate with you, and project yourself into the future. What are the issues that matter? How will you communicate them? What do they look like?

While the priorities and methods of architecture are always evolving, the work we do remains deeply rooted in visual communication- drawing, modeling, and image making. Questions related to representation will be the shared territory of this studio. Within this, each student will identify individual questions that propel their thesis. Research will be conducted through reading, looking, drawing, describing, debating, and traveling.

This studio will look back in order to move forward. Together we will develop an understanding of architecture's disciplinary identity with respect to representation and establish some key points in its evolution. Architecture's epistemological definition has changed over time. Long ago, it was understood as an art of building. Later, as an intellectual project that was conveyed through drawings. In the 18th century, architecture was classified as one of 5 related "fine arts."^{1,2}

At present we are more invested in crossing disciplines than organizing them into neat categories, yet architecture's allegiance to the fine arts is evident everywhere- our culture of working in studios, our shared tools for image processing, the situating of departments of architecture within schools of The Arts.³ Stan Allen describes late 20th century links between architecture and the visual arts:

The deep historical and conceptual affinity between drawing and design is well-documented. It is registered in Alberti's theory of lineaments and elaborated through a long history of descriptive geometry and projection.In the '80s and '90s, discussions of representation also provided an important point of contact between architecture and advanced critical theory in art history and the visual arts. "Representation" is at once a category of technical operations specific to architecture as a discipline (questions of drawing, projection, and descriptive geometry as described by [Robin] Evans and others) and, at the same time, a conceptual template to understand the production of meaning in architecture.⁴

Our point of departure will be the question of how architectural meaning is embedded in the conceptual template of representation⁵ The whole thesis adventure- including the studio, seminar, exhibits, conversations, and visual artifacts- will begin with articulating our various individual positions relative to this question.

1. The five fine arts were architecture, painting, sculpture, music, and poetry.

2. Parcell, Stephen. *Four Historical Definitions of Architecture*. McGill-Queen's University Press, 2014.

Parcell offers a survey of prevailing tendencies and debates among theologians, philosophers, and academics as they have classified and re-classified architecture from Antiquity until late modernity. This narrative originates in Western Europe. How does it compare to other narratives?

3. We have a unique vantage point from which to discuss architecture's allegiance to the fine arts. At Cal Poly, our Department of Architecture is not housed in a school of the arts, nor is it housed in the same college as any art-related major. Ours is a polytechnic university, whose lineage is distinct from the studio art based pedagogical model of the École des Beaux-Arts. In "The Battle between Polytechnic and Beaux-Arts in the American University," Michael J. Lewis outlines the situation (*Architecture School: Three Centuries of Educating Architects in North America*. Joan Ockman, ed. MIT Press, 2012):

"Formal architecture education came to the United States in two distinct forms: The French system of the École des Beaux-Arts, which treated architecture as a fine art, and the German Polytechnical model, which treated it as a technical science. While each system did address both the aesthetic and technical aspects of building, they placed the emphasis differently: the French student architect stood closer to the world of painting and sculpture, and the German to the world of engineering. As both models were imported into North America during the second half of the nineteenth century, they created what had not previously existed: an academic architectural culture."

4. "Thinking in Models." Log 50. Model Behavior, by Stan Allen. Anyone Corporation, 2021, p. 19.

5. Jennifer Bonner asserts this simply as "a representational project IS an architectural project" in the talk [Emerging Issues in Architectural Representation](#).

Studio: In Translation
ARCH 481, Fall 2022
Mondays, Wednesdays, Fridays 9:10-2

The studio will participate in an existing disciplinary conversation about drawings, images and models as the site of architectural ideas. Some contemporary thinkers argue that the image is supplanting the drawing as the currency of contemporary architectural practice. This is not just a theoretical position; as students are well aware, it is possible to envision, detail and build buildings exclusively from information extracted from digital models presented as pictures on a computer screen. But even as an architecture of digital objects and images is increasingly possible, there has been a resurgence of enthusiasm for drawing, and specifically for techniques of projection, in late 20th century and contemporary discourse. Why is this, if drawing's value is not exclusively linked to construction? And at the same time, how do real and imagined material characteristics continue to inform architectural work- drawn, built, and modeled?

There are 3 goals in the Fall studio. First, we will begin to unpack the many and nuanced ways representational mediums, formats, and techniques intersect with issues of culture, environment, and economy. And for the moment, let's stick with Stan Allen's description of representation as a conceptual template, not a subject in itself.

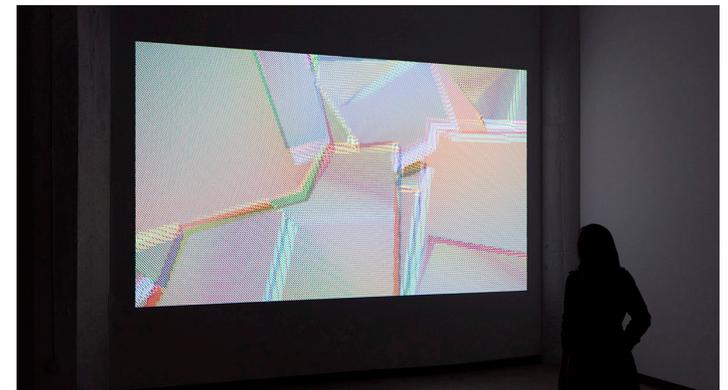
Our second goal is, simply, to develop individual, personal, and tightly focused questions to frame the thesis argument.

Our third goal is to explore the way ideas expand in translation across different mediums. Michael Young considers the diminishing distance between "real" and "fictional" in architectural representation in "One or Many Mediums." He argues for a plurality of media:

As often noted, architects do not make buildings; they create representations. Architectural representation consists of drawings, renderings, verbal instructions, photography, numeric calculations, simulations, text, models, etc. Recent years have also seen the adaptation of film, animation, and other new media models of technology. From our stance in the early-twenty-first century, it seems a folly to preach that one type of architectural mediation is more real than another... There is no single medium on which to base the specificity of the discipline. Architecture should exploit its entire available media to propose ways in which the world can be made other. ⁶

In this spirit, we will embark on a series of medium-specific exploratory exercises in which ideas and methods of representation will coalesce in parallel. ⁷

6. "One or Many Mediums" in The Estranged Object - Young & Ayata. Michael Young. Graham Foundation, 2015.



7. Sol LeWitt (top image: Wall Drawing #260, All Combination of Arcs from Corners and Sides; Straight, Not Straight, and Broken Lines, 1976) helps start a conversation about translation. His wall works, numbering in the thousands, were (and still are) produced by a studio assistant following LeWitt's written instructions. In this model, the artist's "work" is articulating an idea that will be executed by another person. Authorship is situated in the development of a process that is one and the same as a conceptual project.

Casey Reas (bottom image: Still Life (RGB A), 2016) is an artist who developed the open-sources programming language Processing for the visual arts. His project [Software Structures](#) cites LeWitt's wall drawings as a catalyst. The project explores the relevance of conceptual art to digital art, starting with literal implementation of LeWitt's text-based drawing instructions through software.

Seminar: Representation, Authorship, and Environment
ARCH 492, Fall 2022
Wednesdays 2:10-5

The goals of the seminar are to establish a framework for thinking about architecture's past, present and future in relation to visual culture- both its dominant and non-dominant narratives- and to empower students to position a thesis argument within this framework.

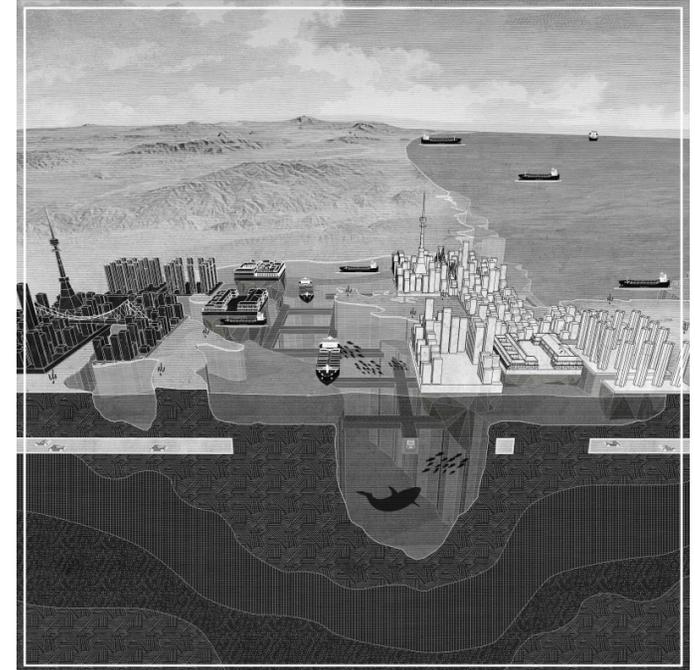
The work of the seminar is both collaborative and individual. As a group, we will define terms, summarize the ideas of others, suggest affinities, and critique each other's written work. The written thesis is an individual endeavor, but one that links a personal position to existing conversations in architecture and culture; it is an argument. Each student's argument will be developed through formulating questions, testing working methods, and producing visual and text-based artifacts.

Readings, writings, visual analysis, and discussion will be organized into three units. First we will work together to understand architecture as a set of ideas, research, and systems. We will familiarize ourselves with some current positions on the overlaps of architecture and visual culture.

Next, we will look at the development of- and challenges to- the idea of a singular author or lone creative genius. Readings will address how the value of originality has changed over time, how collective models of practice have developed, how ideas about distributed authorship relate to ownership, and the role of architectural mediums in these dynamics.

Finally we will engage the subject of "environment" through its representation. Readings will address "carbon form" in its conceptual and literal manifestations, the problem of scale as it relates to representing environmental phenomena, and comparisons among historical and contemporary methods humans use to manage the environment.

Each student will map their intellectual affinities and interests- trajectories that support, expand, or clarify their argument. And, because a thesis is an argument, each student will also be responsible for understanding and articulating the positions of their intellectual antagonists.



8. Rania Ghosn and El Hadi Jazairy, *After Oil*, 2016.

In their series "After Oil," Rania Ghosn and El Hadi Jazairy use the architectural section to relate geography, geology, commerce, and animals. They describe their drawings as speculating on "forms of living with legacy technologies, such as oil fields, on a damaged planet. After Oil...reveals the embeddedness of the fossil fuel extractive industry in the Persian Gulf and imagines the far-ranging effects of an economic relationship that only considers the exchange value of the Earth."

About me

Before joining the faculty of Cal Poly in 2015, I practiced and taught architecture in Los Angeles. I was a principal and co-founder of the architecture firm, Layer, run with partner Lisa Little from 2009-2013. Our work included commissioned projects and research-based installations that have been published and exhibited nationally. Some of my recent projects are Wavelength, a permanent installation in the Fort Lauderdale International Airport; Horns; Commodity, Plumpness, Delight; and 3-4-6 House, a nail-laminated timber cabin in San Luis Obispo.⁹

I have taught design studios at the Southern California Institute of Architecture (SCI-Arc), USC, Woodbury University, and the University of California, Berkeley. My professional experience prior to forming Layer includes work as a project designer for Testa + Weiser and other architectural practices based in Los Angeles, New York and Dubai. I have a B.A. with a major in Architecture from Barnard College, Columbia University and an M.Arch. from the Southern California Institute of Architecture (SCI-Arc).

Before joining thesis, I taught and coordinated the first-year design studio sequence at Cal Poly. My favorite thing about teaching first year is working through super basic but wide-reaching questions with students, for example: Why is everyone suddenly allergic to symmetry? What shape is a good shape? When is it done?

These kinds of questions make their way into my teaching, creative practice, and scholarship, which is focused on relationships between architectural representation and material research. I am interested in how material properties emerge in drawings and digital models, and whether, in design, we are fundamentally thinking in 2 or 3 dimensions. One of my priorities, related to both practice and teaching, is maintaining an international perspective on design while working and teaching in a small city.

I look forward to working with you! In the meantime, if you have any questions, I am happy to answer them.

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9. 3-4-6 House, model, 2021 (Emily White and Casey Benito with Erica David and Elliot Robinson)