

# OF THE ETERNAL AND THE EPHEMERAL

## THE PHENOMENON OF TIME IN ARCHITECTURE

The process of building, like the decay of what has been built, represents an intermediate state, the “no longer” and the “not yet”. This provisional nature refers to a transitional state and the expression of time - whether intentionally or unintentionally.

The paradox of using the forces of nature to delineate an existing thing against the transience of everything natural, challenges architecture to examine its relationship to nature.

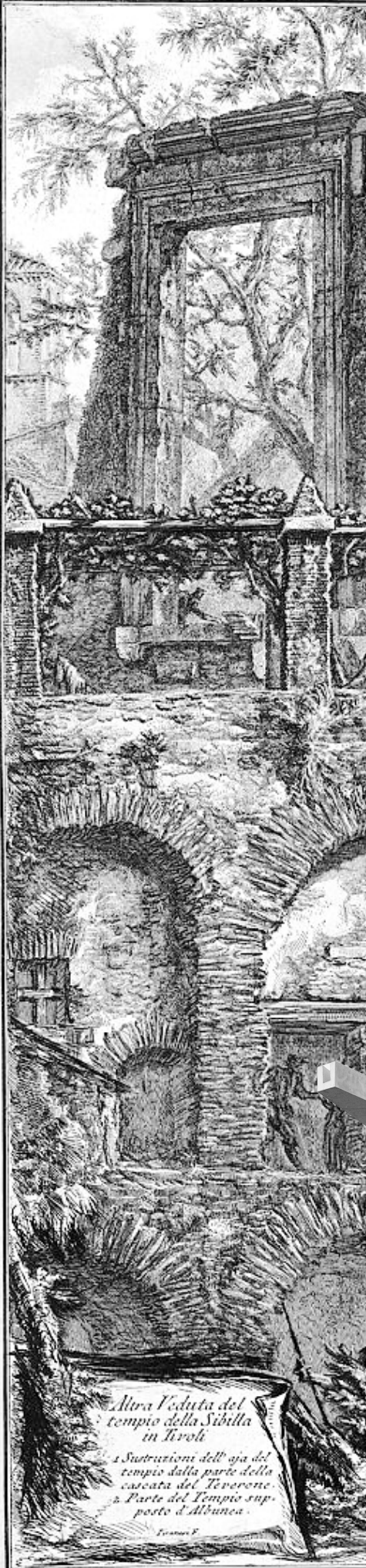
From the picturesque as ruin and the grotesque as ornament, we will investigate the contradictions of the architectural and artistic concept of nature.

This phenomenon has fascinated architects and artists since romanticism and has characterized our culture in multiple facets.

We cannot defy time, but we can express it, utilize it, take advantage of it, politicize it, challenge it, or embrace it.

We will study works from Piranesi to the Antivilla and may work as individual or in teams of two.

Project propositions will be developed and defined by each author.



ARCH 672 Arch Design VII 'Propositions'  
Mondays and Thursdays 1-6

Fall 2024

Prof. Lars Gräbner

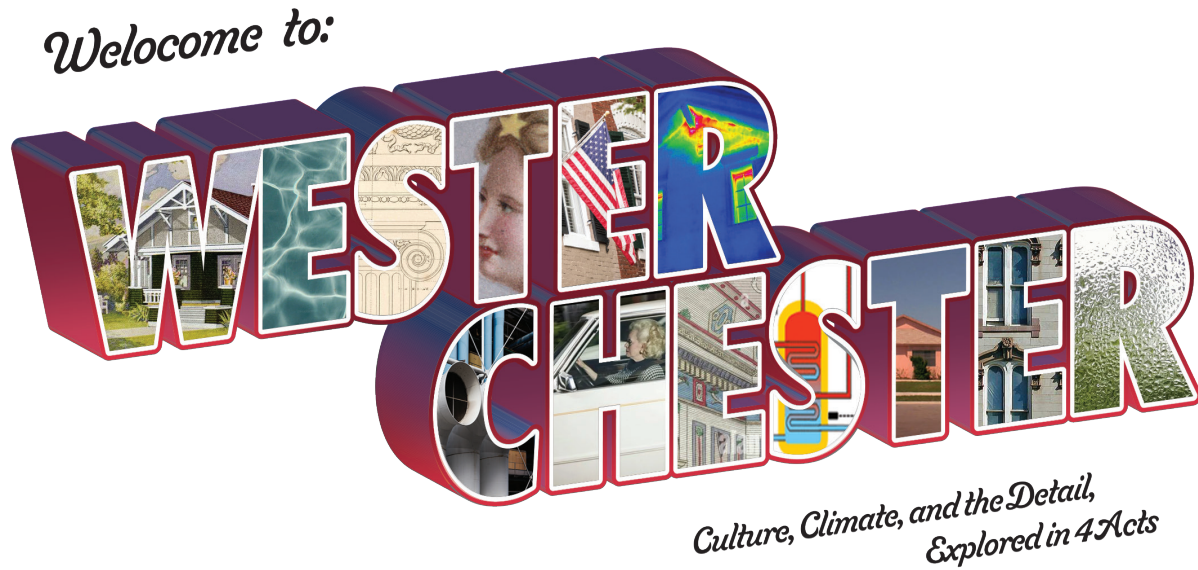
No travel is planned.

*Altra Veduta del  
tempio della Sibilla  
in Tivoli*

*Le Sustruzioni dell'aja del  
tempio dalla parte della  
cascata del Tevere.  
Parte del Tempio sup-  
posto d'Albunea.*

*Piranesi F.*





The role of architectural detailing today is often one of concealment. Have you ever noticed that we try to hide a lot of things within a wall? We don't seem to like the messiness of all the active-systems technology that makes our buildings inhabitable. All of this hiding allows for a slight of hand, to draw your attention away from what is really happening. Instead of being a driver of the project, detailing is often an afterthought. However, given architects choose what to express and what to hide, detailing is highly political.

As a setting for this course, we will use the fictional (and climate fluid) American town of Westerchester as a backdrop to explore many issues linked to the embodiment of the American dream. In this context, the mis-direction detailing affords is often co-opted as a structural and political technique that underpins many of the challenges facing the US today: increasing inequality, systemic racism, climate change, housing unaffordability, among others. We design cities that cannot function without a car, buildings that would mold and rot without constant energy use, and homes that are designed for an ideal that most people can't meet, let alone afford. While architects are not in a position to offer policy solutions to these many issues, the act of detailing can be an effective political tool for a broader public engagement.

One of the biggest instigators of this noted architectural shift toward details of concealment is the widespread adoption of the rainscreen as the dominant construction method in the US and Northern Europe. The rainscreen requires that the aesthetics of an exterior cladding layer mask the internalized functional performance of the wall. It also has the effect of rendering its exterior homogenous, or disconnected. That is, climate can be instrumentalized as a representational ideal of performance, not necessarily responsive to context, let alone the current existential crisis. This shift to a representational materiality of architecture (and of climate), establishes a purposeful misreading, leaving an unresolved tension between these actors.

This course will use the detail as a site of investigation to intersect the expression of techno-performative issues of climate and building science with the formal agendas of popular culture vernaculars and futurisms.

The town of Westerchester will serve as a stage set as we play out our detailing investigation in four acts:

#### **ACT I - HOT TAKES:**

as an initial investigation, it will confront prevailing design ideologies through sports-take debate as a means to identify our own positions on detailing and material expression. Students will derive a representative kit of detail parts relating to both technology and cultural considerations (active systems, passive systems, popular vernaculars, popular futurisms) and use them to populate a generic digital model of Westerchester's town center.

#### **ACT II - COLD CUTS:**

as an introductory tutorial, it will utilize emerging technology workflows to establish both representational and fabrication based methods for designing new architectural materials

#### **ACT III - DRY RUN:**

as a group fabrication exercise where students will construct a detail enclosure to interact with a designed climate machine. Effectively as an architized version of a typical highschool chemistry experiment, students will use art practice techniques to compose scenes of engagement between artifact and environment.

#### **ACT IV - WET DETAILS:**

as a final design exercise, students will develop an expanded "wet" detail, which embraces the messy reality of intersecting contextual forces. These slippery details will inform the selection of a climate expanded program to be placed within the cultural fabric of Westerchester. Details, Plans, and Visualizations will be formatted into a catalog house advertisement type hybrid drawing.

# The Architecture of Objects

*Le Cose dei Buoni Ricordi*

Exercises in Design + Making. Cooking + Eating.

F2024 Arch 672 Graduate Proposition Studio

Mick Kennedy mickk@umich.edu



Through the design of furniture and objects, this studio will explore ideas and construct work that is pursuant to larger and more integrated architectures. And we'll do the same with how we make, share and enjoy food.

Individually and collectively the studio will design and fabricate the furniture and objects to shape a communal pop-up Cafe--which will host our *Pranzo di Ferradicembre*--A Mid December Lunch--at semester's end.

To inform our contemporary design learning, the studio will revisit the work of the Italian designer, architect, designer and polymath Gio Ponti and the artist Piero Fornasetti, epitomized by their masterpiece, the Casa Lucano, popularly known as *La Casa di Fantasia*.

## Acrobatic Experiments Between Volumes, Lines, and Surfaces

Our studio focus will be on three overarching themes of *volumetric proportion*, *line* and *surface*.

The design of each object will engage a different set of material and fabrication processes and the integration of a range of levels of craft focused on the seminal architectural questions of surfaces, joints, tectonics, proportions form and space. And of equal importance: their use both singularly and in combination.

As the studio goal is to exercise your processes of design and also your design of processes, our work will be very concerned with the drawings that take place between design and fabrication: the *Translations from Drawing to Building*.



To construct our Cafe, you will be tasked, individually and collectively, to design and fabricate a set of objects from this proposed list of architectural objects, fabrication processes and uses:

**Serving Trays:** For serving chocolate kisses.

**Tables (of Contents):** Of Steel, Stone, Concrete, Wood. Structure, Tectonics.

**Seating:** For Siting, Sitting, Posing, Perching, Engaging.

**Recipes:** Your Specialties of the House.

**Plates:** Slip cast ceramics for your Specialties. Form, volume, surface, section.

**Lunch and Conversations.** With our Guests and One Another.



Eat With Your Eyes



**3 x 3 + 6 = Pink Chickens**

*We are designers. We need to be willing to run at 4 am... when no one knows we're running. We're comin' ready.*

*The studio will increase your skills, range, and confidence in design. Each of you will design four domestic worlds. Let's say house'ishes, or, more accurately, the kinds of relational properties that structure domestic environments. Three house'ishes at 3 weeks each, and one at 6 weeks... periscopes up for pink chicken sightings. We will start with the same 'kind' of house, a three weeker, an **Assembled/ Appropriated** House (made from downloaded digital models); Two of the other houses, two three weekers, will be selected by each of you from a menu that is roughly: a **Critical Fragments** House (an indeterminate evidentiary field, reconfigurable, 'fast'); a **Hybrid House/ Garden/ Landscape House**; and a **Drawing Type(s)** House (a house that is generated through drawing conventions). The fourth house, the six weeker, **Domestic Restraints** will be framed in relation to American artist Matthew Barney's 'Drawing Restraints' work and his provocation that muscular development and creative growth occur through forms of resistance. Like Barney, each studio member will design a house that is subjected to conceptual obstacles and site induced resistances to acquire strengthened spatial muscles and innovative domestic fiber. Here, you might design a house that 'makes, remakes and unmakes itself', situated on an 'iceberg'; or you might work on a house through the conceptual lens of 'spatial ventriloquism', that is situated on the site of the now 'erased' Berlin Wall, for example. In addition to producing thick visualizations of your work, a designed and **highly finished physical construct**, not a model, will be produced by each member of the studio.*

*We will also vary the kinds of sites (we'll refer to them as situations), that are possible to carry out spatial research and design. We'll move between **abstract situations**, let's say the x, y, z coordinate system; to '**representational situations**, an image of a painting, for example, to '**real situations**. While there are others, these variations will enable an enlargement of what kinds of situations are possible to work with in our beloved discipline. Equally, we will consider material states as digitally generated, coded, and 'real', optimizing the possibilities of representation.*

*The houses are diverse in intent and content and will require each of you to be off-center. But, in the larger scheme of things, the house'ishes are simply vehicles for several key learning objectives including producing very **high quality** work, everyone; **developing a discipline** (different for each house) for working on a piece of work; **broadening the conceptions** by which architecture can tickle the cultural imaginary; stretching and **expanding your formal and material vocabularies**; optimizing the virtues of **working at different speeds** by generating large amounts of work in differing time frames; **inventive programmatic thinking** and development; **expanding the representation** (manual, digital, composites, hybrids) and **methodological** (14 design methods will be introduced, some worked with) **means** by which you believe work can be produced; and, perhaps most importantly, to have **fun!!***

*We know a house when we're in one. But a house is not a thing. Typologically, yes, but relationally, no. In **Pink Chickens**, we will consider 'it' an assembly of relations, temporally structured, of which an architectural expression is part of the story. We will get under the metaphorical hood of the typology, moving between structural and specific learning, looking to become more effective cultural agents. We will operate like a versatile think-tank, **looking for the most invested, curious and motivated student cohort**. We will capitalize on rifts and complete explosions in educational assumptions. We will augment, reroute and if necessary, abandon values inscribed in architectural education, from who's included to what's accepted, and how things are learned. We will nurture multiple value structures, intense curiosities, and a pleasurable intense collective studio culture. Conceptual, methodological, and representational broadening and metaphorical amateurs, detectives and acupuncturists lie nearby.*

*Design is a complex phenomenon. When the bell rings, where will you be. We're comin' ready... **pink chickens** and all.*





"Negotiating Fields," images developed using Midjourney - Text to Image AI, and Blockhood - Video game developed by Jose Sanchez

ARCH 672 PROPOSITIONS STUDIO

# NEGOTIATING THE CITY

This studio is an introduction to urban simulation as a design tool. The course will be both technical and theoretical, connecting notions of programming and simulation with the nature of computer modeling and ecological perspectives towards non-human agents. The studio will provide a series of technical tutorials for developing simulations within the Unity3D game engine environment, inviting students to collaborate to develop an interactive urban simulation game.

The study of complex adaptive systems in architecture has been characterized through a shift toward formalism, in which simulations of flocks and swarms become techniques for complex geometrical modeling. Such approaches fail to harness the opportunity of developing an ecological awareness around the possible interactions between systems within a design domain. The simulation of ecologies relies on key concepts such as feedback loops and interdependence between actors. Such actors can be identified as both humans and non-humans. An object-oriented framework enables each actor to establish interactions with other actors without a hierarchy.

The simulation of an ecosystem requires defining agents as species and their interactions within an environment. As a design class, this course will expand the notion of species to include the built environment. By modeling interactions between digital entities, it is possible to give rise to emergent phenomena: intelligence as collective behaviors that might be considered unexpected from the

FALL 2024 - 1pm - 6pm Mondays and Thursdays  
INSTRUCTOR: JOSE SANCHEZ - JOMASAN@UMICH.EDU

behavior of an individual agent but arise once certain informational thresholds are crossed.

This class will provide the theoretical foundations to understand complex phenomena by modeling networks of interactions inviting students to design models that operate as ecologies.

In this course, students will explore the development of urban simulations through a hands-on approach that begins with the creation of physical prototypes in the form of board games. These prototypes serve as a foundational tool for understanding the complexities of urban transactions and interactions between various constituencies. By simulating these dynamics in a tangible, analog format, students will gain insights into the mechanics and challenges of urban design. The course will then guide students through the iterative process of translating these prototypes into digital formats, ultimately developing multiplayer video game simulations using Unity 3D. This methodology emphasizes the importance of both physical and digital modeling in capturing the complexities of urban environments, preparing students to create interactive experiences that reflect on urban trade-offs between different constituencies.

**KEYWORDS:**

**Simulation, Programming, Ecologies, Object-oriented thinking, Interdependence, Simulation, Models, Emergence, Complex Adaptive Systems, Interactive Systems, Boardgames, Video games**





## *Mavericks, the Multitude, and the Mesa*

Within the canons of western mythology and societal practice(s), the landscape construct of the desert has been positioned as a place in which outcasts, heretics, and visionaries have been voluntarily and involuntarily displaced in order to repent, reconcile, and imagine possible worlds. In America, since the time of its settler colonization, the desert has also been a territory of extreme cultural experimentation – consumer, technological, military, utopian, environmental...

At the geological edge where the Sonoran Desert meets the Colorado Plateau, this studio will engage three subjects in search of a social, conceptual, material and systemic proposition:

- (i) the Mavericks: renegade disciplinary and adjacent figures whose work and ideas have defined trajectories of design possibility within this terrain.
- (ii) the Multitude: cultural groups assembled and formed within the political and socio-economic landscape of actors and agents that shape the southwest.
- (iii) the Mesa: constructed landforms and landscape constructs that structure potential engagement with the land and its species.

A series of team-based research projects during the early semester will introduce students to a range of design research methodologies and projects that will structure dialog within the studio and enable students to position and develop team-based propositions catalyzing individual obsessions across a range of scales within the frameworks and territory set forth for the studio.

We are anticipating that the studio will travel to the Sonoran Desert DTW→PHX Oct 11-17 2024  
Student costs for this trip are anticipated to be approximately \$800 USD.

**Faculty Advisor: Geoffrey Thün**

**ARCH672/UD722 Propositions Studio: F24 Mon, Th 13:00-18:00 EST**

**Office Hours: Tues: 08:00-10:00 EST**



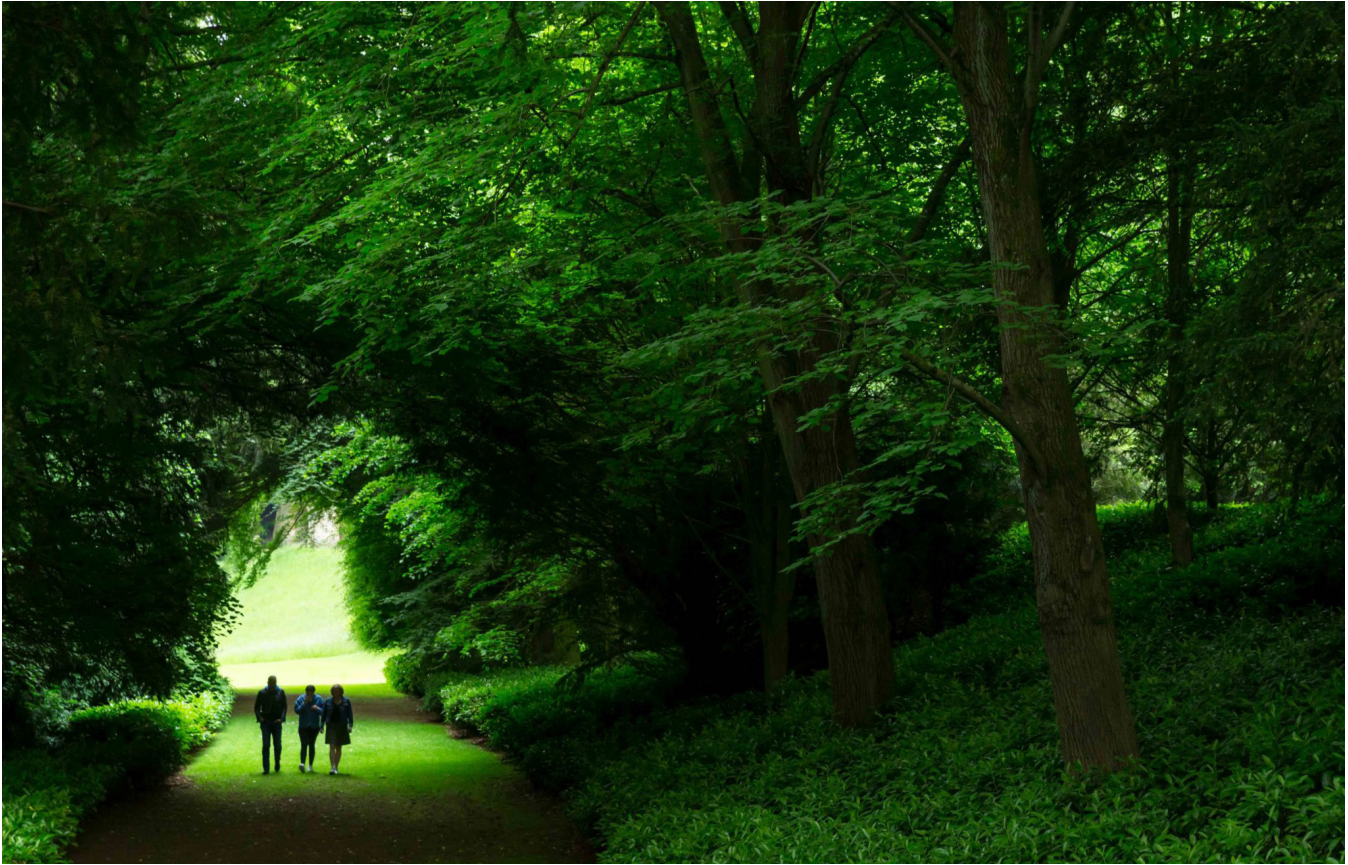


Photo: Iwan Baan, Roucham, England in "Atmosphere Anatomies\_On Design, Weather, Sensation by Silvia Bendito.

# In Praise of Shadows \_Designing for Comfort in Times of Heat

*"In making for ourselves a place to live, we first spread a parasol to throw a shadow on the earth, and in the pale light of the shadow, we put together a house."*

Jun'ichirō Tanizaki, *In Praise of Shadows*

*"In time preceding the modern high-rise grid city, thermal comfort was attained by seeking inspiration from practices deeply embedded in local customs and experience. Climate is, first and foremost, the product of a deeper cultural bond with the land. Until recently this principle resulted from countless trials and errors on ways of living, working and relaxing in extreme climatic conditions. For our current needs, it makes little sense to rely on mechanical means to solve all our heating and cooling problems. Rather, we should trust our senses as we adapt to rapidly changing climates."*

Christophe Gidot, *"Breathing Shades of Design"* in *Atmosphere Anatomies, On Design Weather and Sensation* by Silvia Benedito

Over the past 150 years, the combustion of coal, oil, and gas has continuously released heat-trapping gases into the atmosphere, driving up average global temperatures and setting heat records. Nearly everywhere around the world, heat waves are more frequent and longer lasting than they were 70 years ago. The problem is further exacerbated by increasing industrialization, deforestation, and the removal of natural habitats to make way for new urban developments. This disproportionately affects poorer and marginalized communities, making them more vulnerable to extreme heat.<sup>1</sup> Neither energy-efficient glazing nor LEED certificates will insulate humanity from the effects of the climate crisis; instead, architects must be responsible towards the sites they are asked to build in, imagining new forms of architecture and environmental care that include more-than-human worlds.<sup>2</sup> With the increasing urgency to address the climate emergency, there is a serious need for designers to consider the local climatic context and energy resources for their work and tackle the sources of pollution and damage rather than mitigating their consequences. This requires significant efforts towards re-wilding, afforestation, biodiversity conservation, and environmental stewardship.

*In Praise of Shadows* seeks to explore the concept of 'Shadows' as a crucial element in architectural and urban space making, aiming to create spaces that offer comfort and relief from rising heat. We will utilize "Shadows" as a narrative tool to represent environmental performance, as well as atmospheric qualities that address more imaginative dimensions of world-making. Passive building systems, productive landscapes, and water infrastructure will be of equal interest, along with experience through the senses and aesthetic reception, such as beauty, pleasure, and delight.

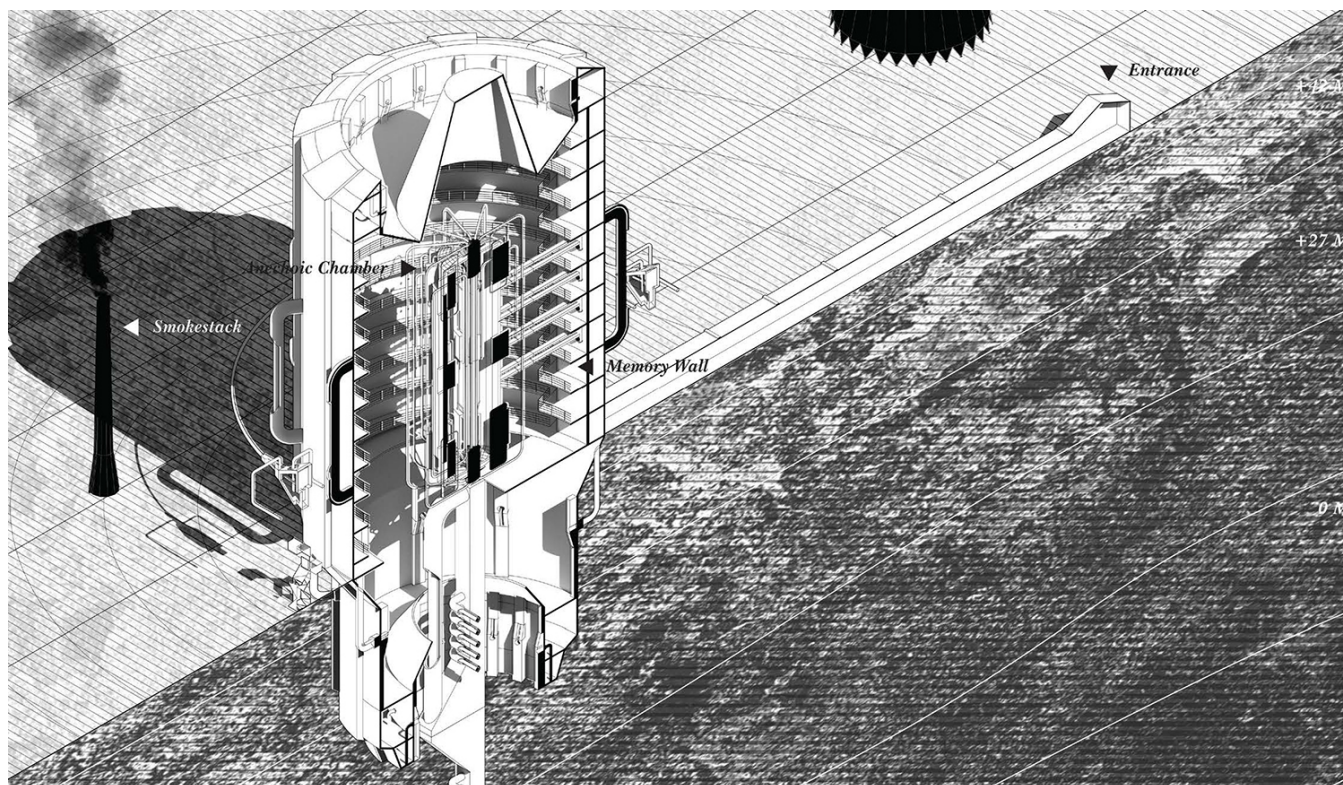
We will conduct research into the historic, cultural, economic and political contexts of landscape, hydrology, wildlife, climate and atmospheres and will work on the design of 'Shadows' in various scales from the material scale to urban interventions. Students will individually develop their own body of research in relation to the studio topic that will inform the scope and scale of their final project.

The studio will include a three-night, mandatory trip to New York City, NY.

<sup>1</sup> The New York Times, "This is inequity at the boiling point" by Somini Sengupta, August 7, 2020  
<sup>2</sup> Offsetted by Cooking Sections, "Trees have no value", 2022



## Adapt UP: Designing for Climate Change in the Upper Peninsula



Marco Nieto, Autopsia in Abstentia in Reassembling the Earth Studio, 2019.

Michigan has garnered media attention as a potential "climate haven," a refuge for those seeking respite from the intensifying impacts of climate change within the United States. Yet, the Upper Peninsula—representing 30% of the land area and home to only 3% of the state's population—remains largely absent from these discussions. With its humid continental climate, rocky terrain with rolling hills, expanses of contiguous forestland, and redeveloping infrastructure, the Upper Peninsula poses unique challenges and opportunities that have yet to be fully explored. This studio offers a chance to re-imagine the Upper Peninsula, not just as a destination for domestic climate migrants, but as a region where design can thoughtfully respond the necessities of a changing world while integrating the needs of diverse species, infrastructures, and cultural practices.

The studio will take a multifaceted approach to envisioning the future of the region, exploring design interventions at multiple scales and through various lenses. From the redefinition of traditional homes and residential units to the design of ritual sites connected to afterworlds, from the re-imagining of transportation infrastructures to the creation of spaces for companion species, and from the revitalization of resource-rich areas like copper mines to innovative agricultural practices—we will engage in a comprehensive rethinking of what it means to design for a changing climate in the Upper Peninsula.

We will select one site out of a set of identified places within Michigan's Upper Peninsula. The initial task is to conduct an in-depth study of the chosen site, focusing on its physical characteristics, ecological systems, historical and cultural significance, and existing infrastructure. We will then propose an issue/position/strategy that re-imagines the site through one or more of the following lenses:

- Home: Residential environments in response to climate adaptation
- Afterworlds: Spaces honoring life, death, memory and indigenous ritual practices
- Resources: Agricultural and mining landscapes for responsible climate futures
- Companion Species: Spaces fostering connections between humans and non-humans
- Infrastructure: Transportation networks and pathways for climate-adaptive futures

Building on the initial framing, we will identify and address a specific climate change-related issue impacting our site. This could range from rising water levels, shifts in biodiversity, to challenges in resource management, among other potential climate impacts. We will conduct a thorough analysis of how this issue influences our site, examining both immediate and long-term effects. As a last step, we will propose collectively a comprehensive and interconnected vision, out of site-specific interventions, that address evolving climate challenges while setting the groundwork for long-term environmental systems across the Upper Peninsula.





# THE RIVER WHISPERS

## OF BIRDS, TREES, TEMPLES, AND THEIR PEOPLE

ARCH 672 / UD732 PROPOSITIONS – UNIVERSITY OF MICHIGAN TAUBMAN COLLEGE – FALL 2024 – MON/TH: 1 TO 6 PM

Nurtured by the perennial waters of the Tamiraparani River, the Tirunelveli District is a well-known migratory bird corridor and a nesting colony for local aquatic birds. The mature Banyan, Marudhu, and Neem trees and the many forests and wetlands punctuating the region provide a thriving habitat. Every year, the bountiful monsoon redraws the fertile Tamiraparani riverbanks, with the temples and the sacred rituals as the memory markers of a landscape always in shift. This riverine ecosystem is also the home to an endless constellation of small towns and villages that have historically cultivated and worshiped land and water and the many forms of life they sustain. The Tamiraparani, "river of red leaves," was considered holy in the Ramayana and the Mahabharata Sanskrit books, and well known for its pearl, fishery, shell, and other trades.

Recognizing the distinctive socio-ecological values of these natural and cultural landscapes, the Thirupudaimarudur Bird Conservation Reserve (TBCR) was created in 2005, the first of its kind in India. The bird habitat is located within the confines of the temple of Naarambunathar of Lord Shiva and Goddess Gomathi and the adjoining village. Overseeing the confluence with the Gadanathi River, the village comprises 430 households whose primary occupation is agriculture. Villagers coexist with a rich mosaic of habitats within a primarily riparian landscape rich in species of birds, amphibians, fishes, smaller mammals, trees, and grasses. Testimony of the archeological importance of the site, the 14th-century-old Naarambunathar-Gomathiammal temple contains scripts and inscriptions, pictures of birds carved in stone, and wall murals marking a site of historical importance that Kings traveled for rituals and war.

Working toward the conservation of biodiversity, the protection of historical heritage, and the prosperity of the local communities, the Ashoka Trust for Research in Ecology and the Environment ([ATREE](#)) is currently developing a study on the concept of eco-tourism as part of conservation and awareness strategy for TBCR. Based at the Agasthyamalai Community Conservation Centre ([ACCC](#)) in Manimutharu, the team is conducting community-based research and environmental education activities. The study contemplates (1) Water management, (2) Conservation Initiatives that engage local communities, and (3) Socio-economic activities supporting local livelihood.

This MArch + MUD interdisciplinary research studio will work collaboratively with ATREE to study and document the landscape values of the Tamiraparani River in the Thirupudaimarudur Bird Conservation Reserve and the surrounding region. Our investigations will inform a design framework for an interpretation center supporting the regional eco-tourism initiative. The semester will require a sustained commitment to collaborative work and co-design methods.

This studio section will engage in fieldwork in the second week of October, around Fall Break. We will stay at the ACCC ([map it!](#)) and participate in a series of site visits and activities led by our community partner, ATREE. While not required, participating in the trip is highly encouraged. This studio section has a lab fee of \$600 and the Architecture Program has preliminarily approved a travel stipend of \$1,500 per student. We will be frugal and travel modestly to stay on that budget.

For more details, you can email me: María Arquero de Alarcón, Associate Professor of Architecture + Urbanism, at [marquero@umich.edu](mailto:marquero@umich.edu)