

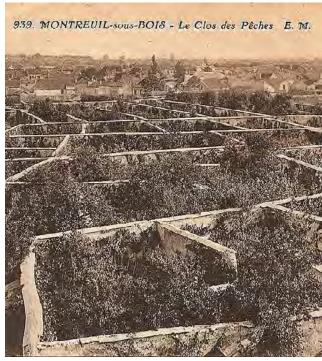
Apologies to the cover of "Axis Bold as Love" (1967), the second album by the Jimi Hendrix Experience

This course studies the emergence of American youth culture. It begins in the 1950s with the Beats, a bohemian counter-culture that set the stage in its challenge to establishment 'high' culture. The baby boom meanwhile gave rise to alternative youth culture played out primarily in a consumer culture focused on expendability and "fun;" the art world it responds with POP. Political protest movements, beginning with the Civil Rights Movement of the 1950s, created yet another powerful cultural current. Ultimately, these threads and evolving world circumstances come together in the liberation movements and hippie counter-culture of the 1960s. From the 1950s through the early '70s, this course exams the impact of radical change in shaping alternative cultures in the arts and architecture. This is an advanced lecture course that can be taken for either history or PE credit. The requirements will be suited to the kind of credit the student requests.

Syracuse University School of Architecture ARC 500: Professional Elective, Spring 2022 W 2:15 - 5:05, Slocum 401 Joon Ma, jma157@syr.edu

Home-Grown:

architecture as an environmental medium for plants and humans.







The Ark Residence - P.E.I, Canada 1976

Overview

Like humans, plants are sensitive to their environments: from a house plant to a greenhouse-produced tomato, light, heat, and water levels are controlled to sustain them. However, unlike HVAC systems for humans that are untethered by the amount of energy we use for thermal comfort, vernacular and contemporary architectural systems for plant life are highly resourceful and efficient. These systems work with the natural elements - air, heat, water, and earth - and modify material, structural, and mechanical properties to create an optimal environment. With the impact of climate change, the seminar argues for a return of architecture as an environmental medium. The objective of the class is to design architectural elements that can change our daily habits in coordination with the environment.

The seminar is organized in three parts, Survey, Prototype, and Application. In Survey, we will examine the material culture, structural logic, and spatial organization of vernacular and contemporary architectural mediums for plant growth, processing, and storage from different parts of the world. Then, in Prototype, we will develop an architectural system based on our research to be implemented into a design proposal in Application.

The methodology of the seminar is to help students identify architectural opportunities in their research. Throughout the semester, we will engage with a wide range of disciplines from history of science, engineering, environmental science to anthropology to situate ourselves in the broader discourse of the relationship between ecology, culture, and design. We will read, discuss, make models, and draw to create a collective body of knowledge as a class.

Debris

Myths, Minutes, and Materials

Course Instructor Time Location ARC 500, Spring 2022 Leen Katrib | Lkkatrib@syr.edu Wed 12:45 – 3:35 PM Room 404, Slocum Hall





An iteration of Gordon Matta-Clark's Garbage Wall (1970)

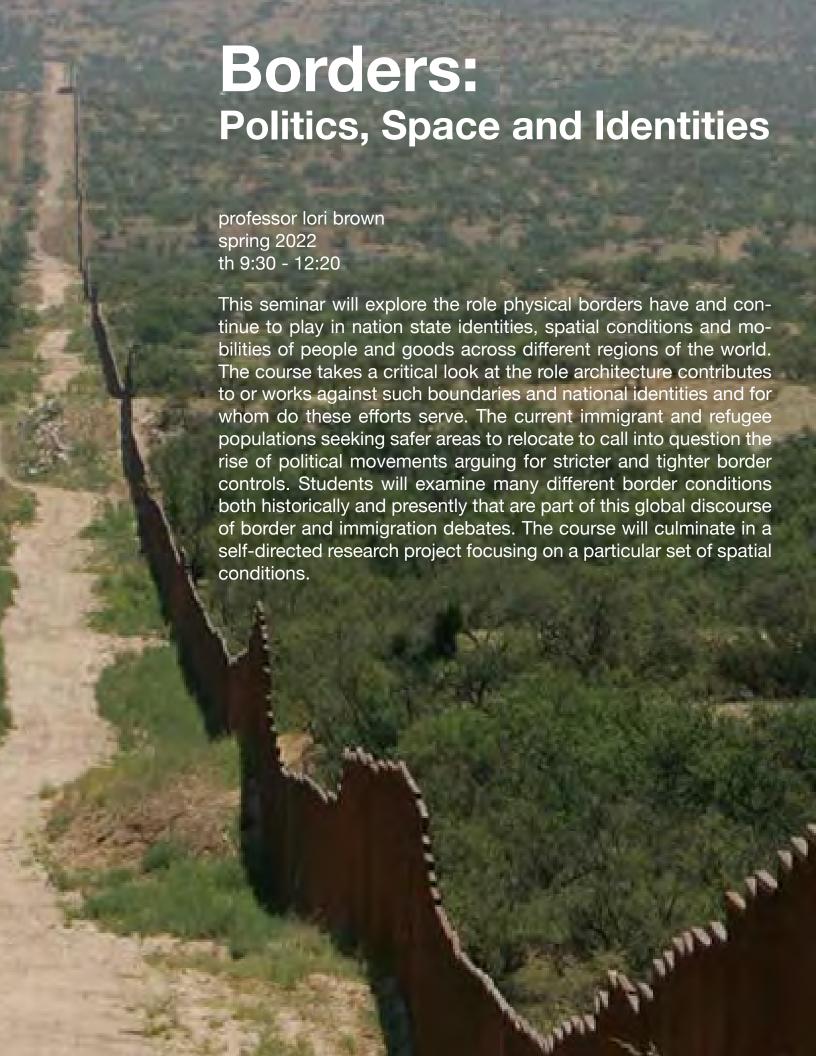
All Things Strange And Beautiful, by Rosamond Purcell. Inspired by Ole Worm's *Museum Wormianum*. Photo by Jens Astrup.

This production-based seminar will focus on curating and building the Harry der Boghosian Fellowship Exhibition opening at Slocum Hall at the conclusion of Spring 2022.

Centered around uncovering a pattern of university campus expansions that has been discreetly materializing since 1950, this exhibition-making seminar will challenge students to curate constellations of material and immaterial debris that have lingered—or been erased--in the aftermath of demolitions and evictions of communities-of-color brought upon by the expansions. The seminar will inherit and build upon archival research, historic documentation, and audio-recorded interviews produced during the Fall 2021 Boghosian research and historiography seminar, entitled "Excavating the University Campus."

Students will fully collaborate with the Boghosian Fellow to engage a variety of media and skills that will be part of the exhibition, including: curation, model-making, video editing, editing a booklet of transcribed interviews, procurement of archival material, and website building. As such, this production-based seminar will require rigorous output outside of scheduled class time.

Though not required, it is highly recommended that this seminar be taken with a complimentary material-based VC Studio in Spring 2022 that will focus on designing an archive of debris. However, enrollment in this seminar is not contingent on enrolling in the VC Studio. Enrollment in the Fall 2021 seminar is not required for enrollment in this production-based seminar.





Living otherwise: Rethinking the Architecture of the Collective

Syracuse Architecture / Professional Elective / Spring 2022 / Wednesdays / 2:15-5pm / Seminar Room 307 / Instructor: Assistant Professor Marcos Parga, mparga@syr.edu

Dwelling space has been, and probably will continue to be, a highly contested space.

The economic, the political, and the social coalesce around it, and the tensions between these three forces have been shaping the material construct of our homes throughout history.

The current domestic landscape is characterized by an increasing gap between, on the one hand, the rise of major demographic shifts in most industrialized countries - that results in the production of new forms of cohabiting, and on the other hand, the reassuring and often celebrated clichés of traditional family life - and ideological blanket that hides the structural changes that society undergoes. This means that, while the housing market all too often continues to replicate old stereotypical mono-functional urban developments of the post-war era, more and more people are actually living in very different circumstances, and "exceptions" have become the norm.

The current housing crisis thus is not only a crisis of scarcity and affordability, but also a crisis-lack of collective subjectification models and enabling spatialization strategies (polyvalence and empowerment): domestic living is both ideologically supported and de facto challenged by the current economy, a paradox that leads us to perceive as already obsolete most of the contemporary spatial configurations that prescribe our life in common.

So, if given the actual strain of resources and land, and the dissociation between provided living space and current socio-economic conditions, houses as we know them today will no longer be economically or ecologically viable, what should take the place of these inherited dwelling structures that dictate and confine? And how alternative urban living environments will look like in order to enable and support?

This Seminar is based on the premise that this crisis is a unique call for a radical reinvention of the idea of housing and explores the current renaissance of collaborative forms of living and the architectures that emerge from them as a possible answer for those questions.

Since the advent of industrialization, collective living has come to reference a distinctively different and unique way of life considered unconventional for many. This marginal condition allowed these experiences to play a significant role in the overall history of housing by providing the opportunity for reflection: over the last 150 years, collective living models have been witnesses to their era, revealing a great deal about how each epoch perceived lifestyles, lived together, operated their households, understood property and ownership, and excluded or integrated productive/reproductive labor into their cohabitation spaces. In doing so, they became critical antidotes to the fundamental logic of our capitalistic society, challenging existing gender, biopolitical and territorial hierarchies.

This elective will look closely at those historical models that often included a critique of the prevailing conservative ideas of living and housing, and revealed social processes through spatial expressions. From the French social utopias of the 19th century and the Garden Cities of early modernism, to hippy communes and squatter movements of more recent decades, the aim is to reveal how these previous experiences inform contemporary cooperatives, autonomous housing projects and architectures of sharing that are emerging across the world as an important part of a seismic shift towards a socially responsible architecture that seeks to respond to the key social challenges of our time.

The course will be a combination of lectures, reading discussions, project presentations and reviews, and will culminate in a proactive investigation into housing alternatives and urban futures conducted from a tangible perspective, evaluating the role of architects in the redefinition of a new form of life together, and the importance of the architectural expression in giving consistency to the political claims of ways of living *otherwise*.

Spring 2022 Professional Elective Tu/Th 11:00-12:20 Room 101

Latent Spaces; Artificial Intelligence + Architecture

This elective will introduce you to synthetic ways of seeing in an age of planetary scale computation, combining reading, research and image making to explore the 'latent space' of artificial intelligence. Readings will situate 'artificial intelligence' within a broader cosmology of social, political and economic issues as well as connecting machine learning more directly to contemporary architectural discourse around the role of computation, parametrics and more broadly, issues of genus loci, authenticity and representation.

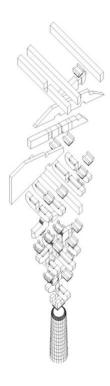
We will utilize open-source machine learning tools to create architectural images. Through the creation and interrogation of these synthetic images, we will question the role of the architect in an age of synthetic intelligence, experimenting with new design processes that suggest the role of the architect as one of curator and editor of language, data, prompts and outputs, as opposed to one of independent creative genius. Iterative experimentation with these tools will better equip us to understand the transformative and creative role that machine learning may play in the future of architectural discourse.

Through these readings and exercises, we will also engage issues of diversity, equity, inclusion and accessibility that are inherent in machine learning, from developing an understanding of the potential advantages to populations previously disenfranchised by the traditionally high barriers to entry in the discipline to the potential bias and exclusion implicit in the dominant methods of machine learning data collection that exist today.



ARC 500: Provincializing China: A History of Chinese Architecture Associate Professor Lawrence Chua, PhD

MW 3:45-5:05PM



This lecture course traces the development of Chinese architecture from Neolithic societies at Bànpō to the "urban villages" and megacities of the present. It is divided into six chronologicallybased modules that look at 1) the early development of architecture from primitive societies to the downfall of the Han dynasty 漢朝 (220CE) 2) Buddhist influence 三國到五代十國 from the 3rd to 6th century CE 3) The period of **standardization and refinement** 宋朝 from the 7th to 14th century 4) the **Míng and Qīng dynasties** 明朝和清朝 from the 14th to 20th century 5) the **"Modern"** era 現 代 and 6) Contemporary China 新的中國. This structure seeks to critically examine the relationship between the concept of China as a continuous civilization and how that continuity has been expressed in architectural form. Methodologically, the course integrates techniques of formal analysis with questions of political economic history in order to create an understanding of the importance of architecture, landscape, and urban planning to the idea of "China," the relationships between building practices in the Chinese nation, "Greater China," and the Chinese diaspora, and the very notion of a singular Chinese architecture. Particular attention will be paid to how Chinese architectural history has been framed in order to consider the ways Orientalism, modernism and reform, historicism, formalism, Marxist historical analysis, critical regionalism, and globalization have shaped the way we understand China and its architecture.

^{*}Drawing by Jun Cao

Course Description | October 2021

20th C. Architecture via Koolhaas

Historical | Cultural | Contextual Connections between 20thC + OMA



Outline

This course is structured as a hybrid seminar-lecture format combining lectures with in-class discussion, debate and presentations. The course is dedicated to exploring the relationship between architectural form – which it takes very seriously - and architecture's focus on lineage, language, culture and context with a dedicated focus on the relationship between the significant examples of the Architecture of the 20^{th} Century and the architectural work, thought and production of the Rem Koolhaas.

The course is committed to the development and expression of **informed opinions** about the quality of works of architecture, about the overall body of work of an architect and about the *worthiness* of specific buildings especially with regard to the formal and cultural development of the work as it relates to its broad spectrum of influences. This course is constructed for students with a foundational knowledge of or *at least a dedicated interest in* the history of Western architecture from the Renaissance to present day as a lens for examining and understand works of the 20th C. This jurisdiction of knowledge and intellectual discourse will provide the foundation for deeper study of otherwise iconic models of influence. The course is essentially about judging the diverse qualities, significance and sophistication of a collection of works of architecture form the 20th Century [with a focus on Le Corbusier, Wright, Koolhaas and related works], the translations of these ideas in the work of Rem Koolhaas and in the process the development of skills of critical thinking, analysis and *discernment*. To do this, to study Koolhaas, Le Corbusier and the highlights of 20th C. Modernism, we will also look back at the historical periods hat these works operated in response to, translated and transformed including Renaissance and Classical models - i.e. linking the past with the future.

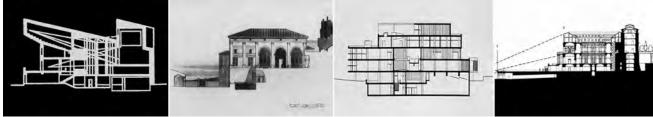
Our ambition is not to produce scholarship in the *traditional academic sense* but instead it is about the acquisition and development of the tools requisite for an advanced notion of formal/architectural literacy - one that informs an appreciation of architectural quality and supports the ability to produce clear, informed and nuanced judgements about the value of works of architecture.

The seminar is interested in the form, expression, organization, and typological variants found internal to the work of architecture as well as the impact of architecture's inextricable link to societal contexts. The course presupposes those forms are generated by a vast range of ideas and intentions that will be identified, analyzed, critiqued, and evaluated. A tactic inherent in this proposition is the notion of debate, the ability to build bodies of evidence and make an intelligent and informed case that might employ a variety of tactics to support a provocation such as, *Wright is better than Kahn, Koolhaas is Corbusian in what ways, Le Corbusier's Urban propositions inform Koolhaas' Dystopic visions how, etc.*

The course will require readings, discussion and the making of speculative drawing constructions that will result in two distinct entities – the practice of informed critical conversation and the crafting of analytical and illustrative documents, drawings and or models.

20th Century Architecture via Rem Koolhaas

ARC 500 | Professional Elective | Theory | M + TH 9:00 AM - 1:00 PM | professor: Richard Rosa



Melnikov, Raphael, Le Corbusier, Vignola

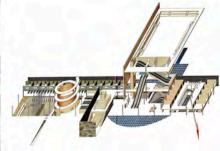
To provoke a spirited dialogue of debate and assessment, we will employ a standard comparative method. We will compare either two works of architecture by two architects or will compare complete bodies of work by two contrasting but related architects. We will embrace architecture's role within the multi-dimensional tapestry that defines cultural context exploring the codependency between form and content, i.e. what has been described as the symbiosis between *Move and Meaning*¹. While it is understood that an expertise in the history of architecture is necessary as this knowledge serves as the foundational basis for invention and meaningful progressive advancement within the discipline, the course is not a history course and does not attempt to imitate one. That said, our work depends on knowledge that the history of architecture provides to architects about the intellectual and artistic practices of architecture - knowledge that is critical for the practice of architecture today and that resonates with particular timeliness in a globalized world where questions of both identity and inclusion are so prevalent.

We will focus throughout the course on pairs of central figures that represent coexisting foundational points of view and will scrutinized the work relative to that which is common and that which is in opposition. This will be facilitated through a structured forum for discussion and a platform for intelligent, informed disagreement. I will make presentations on pairs of architects punctuated by group discussion. Later in semester student groups will make debate formatted presentations supported by constructed documents, graphic and otherwise, that support the group's contentions and speculations. Student production will include readings as well as the making of analytical documents such as three-dimensional models of the studied, discussed and contested works form the 20th Century.

This seminar/lecture course is concerned with developing one's ability to read architectural ideas and content through the material manifestation of form as well as through the abstraction of architectural convention. Fundamentally, this is an architecture course aimed at equipping students with the ability to identify and decipher architectural ideas embedded within the conceptual and material elements of architectural thinking and making. We aim to understand the constitution of ideas that are pervasive in the development and evolution of Western Architecture and the intellectual discourses that this suggests. Lectures will discuss an extensive array of architectural strategies with an emphasis on typological, linguistic and cultural lineages. There will be a particular focus on morphological tendencies, effects of transformation, transfiguration and deformation, the idea of tracing the implied typological ideal, cosmological context and notions of the free plan vs. raumplan. Twentieth-century modernism will be highlighted and cross-referenced with examples from a wide-range of historical periods and with Koolhaas.

The intention is that students will be able to identify and comprehend formal concepts present in various works of architecture, will be able to verbally convey the ideas and tactics endemic to the conceptual and formal construction of a work and will be able to describe, analyze, and compare architectural, contextual and formal qualities in various works from various media such that one can engage in acts of critical discernment.





Painting as Instrument of Architecture II

Constructing Surface, Symbol, Structure and Space

decoding the formal-spatial-symbolic riddle embedded within the decoy of imagery



Morandi, Nicholson, Vermeer, Richter

If one sees two or more figures overlapping one another, and each of them claims for itself the common overlapped part, then one is confronted with a contradiction of spatial dimensions. To resolve this contradiction one must assume the presence of a new optical quality. The figures are endowed with transparency: that is, they are able to interpenetrate without an optical destruction of each other. Transparency however implies more than an optical characteristic, it implies a broader spatial order. Transparency means a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity. The position of the transparent figures has equivocal meaning as one sees each figure now as the closer, now as the farther one.

Gyorgy Kepes, Language of Vision

Premise

In this course **students will paint weekly** for the duration of the course, making small and medium canvases studying ideas of composition, structure, color, content, simultaneity, superimposition and the concept of palimpsest. We will construct paintings that explore tactics of abstraction in the recording and transmission of architectural, environmental and figurative content. We will work in a variety of media with a focus on acrylic paint for its ease of workability and fast drying effect. We will combine drawing, painting, collage and a range of compositional strategies to construct paintings that explore the multi-dimensional relationship between 2D + 3D space. We will work quickly in order to allow for the development of a body of work which will allow for the advancement of both technique and concept. We will study historical and modern periods, the relationship between formal order and symbolic imagery, the French analytique, the role of drawing in painting and relationship between architecture and painting with a focus on twentieth-century painting.

Class will meet on Wednesdays with each class meeting beginning with a lecture delivered by the professor followed by a discussion session and critique of the student's painting work. We will become familiar with a carefully curated collection of painters and will engage in some level of analysis of the works of these painters as a parallel activity to the literal making of our own paintings. This will act as a symbiotic and mutually reinforcing experience that will impact how we expand our ability to see, to compose and to combine conceptual rigor with liberated intuition.

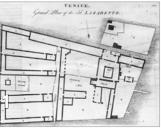
Context

Expertise in the relationship between architecture, painting, and sculpture has served as an established foundation for the architect and the artist since antiquity. Theoretician/philosopher/architect *Vitruvius* writes of painting in his *Ten Books on Architecture*. For the architect of the Italian Renaissance, painting is an almost mandatory endeavor – an idea highlighted by Alberti's notable treatise, *'On Painting'*. If surveyed, most would split on the question, "what was Michelangelo's profession: painter, sculptor, or architect"...and Le Corbusier's statement, *"The basis for my intellectual production has its secret in the uninterrupted practice of painting"* reveals the value that the act of painting can have on the conceptualizing, visualization and manifestation of architectural material and thought. Historically, painting and architecture have been produced as a largely private visual language – that is, the spatial ideas, proportional systems, ordering principles and visual devices that provide the armature for narrative content have, for the most part, operated as hidden, veiled, or perceptually suppressed systems. We will investigate these ideas both intellectually and optically in an effort to advance our comprehension, to evolve our ability to read the work and most importantly, to each develop our own individual oeuvre of paintings focusing on technique, composition, spatial complexity the *expression of a visual language* that allows for works that operate as compound optical propositions in opposition to the notion of the reductive caricature of art and architecture as a one-liner. If nothing else, we will luxuriate in paint, color, line and shape.

INFECTIOUS ARCHITECTURE

designing against contagion

ARC500 / SPRING 2022 M/W 3:45-5:05PM Slocum Hall Room 404 instructor TARAPEARSON

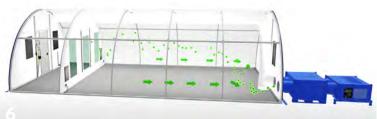














COURSE DESCRIPTION

As we continue to navigate the COVID-19 pandemic, we collectively confront devastation in our midst. Life as we knew it—or "The Before Time"—has been transformed by illness, death, and fear across every scale of life.

We must shift our focus away from pandemic-driven doom-scrolling and redirect our attention to extracting lessons from the chaos. Deadly pathogens have tormented humanity since its inception and will do so indefinitely. The difference between microbes and humans, however, is that humans have the capacity to learn and act with intent. We learned from the Black Death, we learned from (and eradicated!) Smallpox, and we are learning from COVID-19.

This seminar will operate with a positive mindset. We will examine case studies spanning from the early-modern period through today and consider how different types of pathogens have driven architectural, landscape, and infrastructural innovations. We will study the evolving popular beliefs and scientific knowledges that have impact(ed) the use and design of space, and we will explore many of the social, economic, and political issues at play during each respective epidemic.

The importance of interdisciplinary research and collaboration cannot be emphasized enough in the pursuit of advancements in architectural designs so inextricably linked to public health. As such, students will be introduced to the fundamental aspects of infectious disease, epidemiology, and the complex, déjà-vuinducing nature of public health policy and education.

CONCEPTS & CASE STUDIES

(Subject to modification)

Quarantine's Origin Story

14-17th c. Lazaretti design, use, and change; Responding to Recurring Plague Epidemics in Italy

Early Modern Hospitals

- London's Smallpox Hospital, 18th c.
- New York's Renwick Smallpox Hospital, 19th c.

From Miasma to Germ Theory: Impacts on the Built Environment in the Domestic and Public Sphere

Evolutions in infrastructure, landscape, and mass housing design: 18-19th c.

- Yellow Fever in Memphis and New Orleans, U.S.
- Cholera in England and India

"Healthy" Architecture in the 20th c.

- Tuberculosis' Impact on Domestic and Public Life
- Sanatoriums in the U.S. and Western Europe

21st c. Infection, Globalization, and Fear: **Responding During Crisis**

- "Amerithrax" biological attack, NYC, 2001
- Ebola Outbreak, West Africa, 2014-16

21st c. Hospitals, Laboratories, Deployable Medical Shelters, and Morgues

Representations of Disease in 20th-21st c. Media

- WWII-era Anti-Venereal Disease Propaganda
- 1980s AIDS Crisis Propaganda,
- Films (Outbreak, 1995 and Contagion, 2011)

Unknown. Ground Plan of the Old Lazzaretto. Venice, Italy, 14thc

Unknown. Ships used as smallpox isolation hospitals, No Date. Juan Manuel Blanes. Portion of: Yellow Fever. Oil. 1871.

World Health Organization. Cote d'Ivoire declares first Ebola outbreak in more than 25 years. 14 August 2021.

Unknown. "The temporary tent hospital maintained by the U.S. Marine Hospital

Service at Franklin, Louisiana, during the yellow fever epidemic of 1898." U.S. National

Library of Medicine (NLM). 1898.

Negative Pressure Isolation Shelter. Screenshot of Video. BLU-MED. 2021.

Rogelio V. Solis/AP. "Five intensive care beds, part of the 32-bed Samaritan's Purse

Emergency Field Hospital, are set up in one of the University of Mississippi Medical Center's parking garages Jackson, Mississippi." 17 August 202



ARC 555- Intro to Building Information Modeling (BIM) Tuesdays: 6:30-9:30 Slocum computer lab

This course will give the student an in-depth look at Building Information and how it is used for coordination, visualization and production in the architectural field. The primary software will be Autodesk Revit. The area of emphasis will focus on how well students can produce buildable construction documents while being able to relay their design through perspectives, isometric views, and data output such as door and window schedules. Once complete the students will be competent in the use of Revit and the understanding of Building Information Modeling. This class will be live, interactive hands on training, in both the built environment and the specific technical skills required to achieve competency in the field of BIM. Each area of Revit will be covered as it relates to architectural building systems such as wall systems, floor systems, roofing systems, and stairs/ramps. Also, this class will cover structural systems, and the relation of architecture to mechanical, electrical and plumbing (MEP) systems. The class deliverable will consist of each student creating a building model on their own. This model can be commercial or residential. It can be a real building, or a made up design of the student's desire. Grading will be judged by the construction documents produced. Plans, elevations, sections enlarged dimensioned details are the most important. Effort plays a critical role, as does classroom attendance and participation. Reading material is Revit Architecture No Experience Required. As always, this will be furnished for free by the instructor.



ARC 558- Advanced Building Information Modeling (BIM) Wednesdays: 6:45-9:45 Slocum computer lab

Following the Introduction to BIM course, this course takes a deeper dive into the inner workings of BIM and Revit. This course is intended to expose the students to the collaborative environment that is now taking place, and is a demand throughout the industry using Building Information Modeling software. To start the course we will review legal documents that outline a BIM project that serves as a reference to specific terminology, project guidelines and BIM protocols. This course also covers advanced modeling techniques needed to really make Revit work for an architect. Because most firms are fully on Revit, it is a prerequisite that new hires not only know the program, but know it well. This course will give SoA students a unique opportunity to gain an upper hand in the workplace. We will start with learning how to operate in a model within a collaborative, multiuser environment. Then we will learn parametric design using advanced family creation. Phasing (renovation) will be next followed by creating design options. We round is all off with creating massing elements and non-linear wall, roof and floor systems.









Perriand, Le Corbusier

furniture fabrications

histories, materials, forms

At the beginning of the twentieth century, as waves of political and social change swept the globe, the arts sought new, foundational significance and novel expression. A generation of artists and designers cast aside nineteenth century eclectic stylings in pursuit of socially liberated and intellectually grounded relevance. Within this context, early modern architects turned to furniture design to experiment - at least it seems so for many. We see this in Corb, and Aalto, and Mies, and etcetera. Perhaps these designers saw potential for more-direct explorations of relationships between purpose, material, and form in furniture – a relevance for art in the everyday, an antidote to styling.

Starting with the middle-late nineteenth century Arts and Crafts movement, and focusing on twentieth century modernism, this seminar will examine changing relationships between form, material, and purpose in furniture design. Particular attention will be devoted to seminal designers including: Rietveld, Breuer, Aalto, Gray, Perriand, Prouve, and the Eames. Throughout, we will seek to understand design as developed with *material specificity* – material choice, fabrication technique, material-specific configuration, and joinery. To contextualize our analysis, design work will also be considered from other vantage points - its historic, art-historic, and, even, design pedagogy situations and settings.

Additionally, this course will include design work. Mid-semester, following extensive presentation and discussion of modern furniture design history and analysis, course-mode will shift with the assignment of a prototype design project. Each student will develop a furniture design, from research, through maquette and mock-up, and, hopefully, to completed full-scale prototype.

Class Meetings

Meetings will include lectures, discussions, seminar presentations, and design reviews. Later in the semester, meetings will shift to shop-based prototype fabrication.

Coursework

Design (and fabrication) of a furniture prototype will be the primary coursework for this seminar. Factoring resource availability and costs, as well as shop access, material and fabrication limits will circumscribe this assignment. Additionally, working in pairs, students will make one select-topic seminar presentation to the class. Topics may include: joinery mock-ups, digital models of assigned furniture, case study analyses, etc.

Objectives

The primary goals of this course are twofold: First to introduce students to the work of a range of twentieth century furniture designers, and to develop understandings of their work in relation to material, fabrication, and historical context. And, second, to help students develop new detailed design capacity informed by the interpretive frameworks outlined in the lectures.

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Constructing Surface, Symbol, Structure and Space

decoding the formal-spatial-symbolic riddle embedded within the decoy of imagery



Morandi, Nicholson, Vermeer, Richter

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Context

Expertise in the relationship between architecture, painting, and sculpture has served as an established foundation for the architect and the artist since antiquity. Theoretician/philosopher/architect *Vitruvius* writes of painting in his *Ten Books on Architecture*. For the architect of the Italian Renaissance, painting is an almost mandatory endeavor – an idea highlighted by Alberti's notable treatise, *'On Painting'*. If surveyed, most would split on the question, "what was Michelangelo's profession: painter, sculptor, or architect"...and Le Corbusier's statement, *"The basis for my intellectual production has its secret in the uninterrupted practice of painting"* reveals the value that the act of painting can have on the conceptualizing, visualization and manifestation of architectural material and thought. Historically, painting and architecture have been produced as a largely private visual language – that is, the spatial ideas, proportional systems, ordering principles and visual devices that provide the armature for narrative content have, for the most part, operated as hidden, veiled, or perceptually suppressed systems. We will investigate these ideas both intellectually and optically in an effort to advance our comprehension, to evolve our ability to read the work and most importantly, to each develop our own individual oeuvre of paintings focusing on technique, composition, spatial complexity the *expression of a visual language* that allows for works that operate as compound optical propositions in opposition to the notion of the reductive caricature of art and architecture as a one-liner. If nothing else, we will luxuriate in paint, color, line and shape.



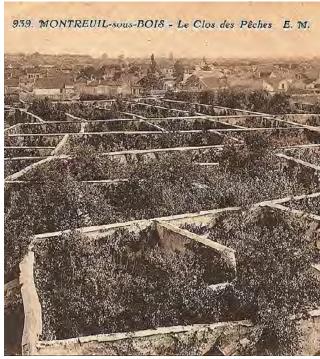
Apologies to the cover of "Axis Bold as Love" (1967), the second album by the Jimi Hendrix Experience

This course studies the emergence of American youth culture. It begins in the 1950s with the Beats, a bohemian counter-culture that set the stage in its challenge to establishment 'high' culture. The baby boom meanwhile gave rise to alternative youth culture played out primarily in a consumer culture focused on expendability and "fun;" the art world it responds with POP. Political protest movements, beginning with the Civil Rights Movement of the 1950s, created yet another powerful cultural current. Ultimately, these threads and evolving world circumstances come together in the liberation movements and hippie counter-culture of the 1960s. From the 1950s through the early '70s, this course exams the impact of radical change in shaping alternative cultures in the arts and architecture. This is an advanced lecture course that can be taken for either history or PE credit. The requirements will be suited to the kind of credit the student requests.

Syracuse University School of Architecture ARC 500: Professional Elective, Spring 2022 W 2:15 - 5:05, Slocum 401 Joon Ma, jma157@syr.edu

Home-Grown:

architecture as an environmental medium for plants and humans.







The Ark Residence - P.E.I, Canada 1976

Overview

Like humans, plants are sensitive to their environments: from a house plant to a greenhouse-produced tomato, light, heat, and water levels are controlled to sustain them. However, unlike HVAC systems for humans that are untethered by the amount of energy we use for thermal comfort, vernacular and contemporary architectural systems for plant life are highly resourceful and efficient. These systems work with the natural elements - air, heat, water, and earth - and modify material, structural, and mechanical properties to create an optimal environment. With the impact of climate change, the seminar argues for a return of architecture as an environmental medium. The objective of the class is to design architectural elements that can change our daily habits in coordination with the environment.

The seminar is organized in three parts, Survey, Prototype, and Application. In Survey, we will examine the material culture, structural logic, and spatial organization of vernacular and contemporary architectural mediums for plant growth, processing, and storage from different parts of the world. Then, in Prototype, we will develop an architectural system based on our research to be implemented into a design proposal in Application.

The methodology of the seminar is to help students identify architectural opportunities in their research. Throughout the semester, we will engage with a wide range of disciplines from history of science, engineering, environmental science to anthropology to situate ourselves in the broader discourse of the relationship between ecology, culture, and design. We will read, discuss, make models, and draw to create a collective body of knowledge as a class.

Debris

Myths, Minutes, and Materials

Course Instructor Time Location ARC 500, Spring 2022 Leen Katrib | Lkkatrib@syr.edu Wed 12:45 – 3:35 PM Room 404, Slocum Hall





An iteration of Gordon Matta-Clark's Garbage Wall (1970)

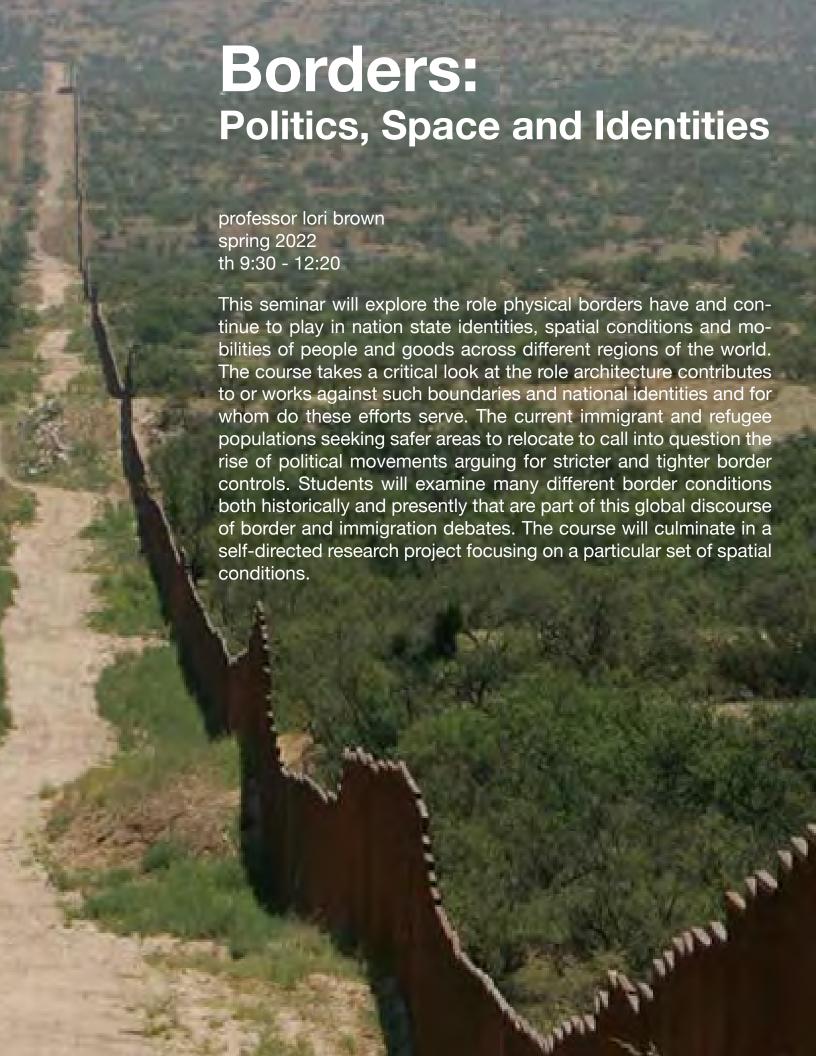
All Things Strange And Beautiful, by Rosamond Purcell. Inspired by Ole Worm's *Museum Wormianum*. Photo by Jens Astrup.

This production-based seminar will focus on curating and building the Harry der Boghosian Fellowship Exhibition opening at Slocum Hall at the conclusion of Spring 2022.

Centered around uncovering a pattern of university campus expansions that has been discreetly materializing since 1950, this exhibition-making seminar will challenge students to curate constellations of material and immaterial debris that have lingered—or been erased--in the aftermath of demolitions and evictions of communities-of-color brought upon by the expansions. The seminar will inherit and build upon archival research, historic documentation, and audio-recorded interviews produced during the Fall 2021 Boghosian research and historiography seminar, entitled "Excavating the University Campus."

Students will fully collaborate with the Boghosian Fellow to engage a variety of media and skills that will be part of the exhibition, including: curation, model-making, video editing, editing a booklet of transcribed interviews, procurement of archival material, and website building. As such, this production-based seminar will require rigorous output outside of scheduled class time.

Though not required, it is highly recommended that this seminar be taken with a complimentary material-based VC Studio in Spring 2022 that will focus on designing an archive of debris. However, enrollment in this seminar is not contingent on enrolling in the VC Studio. Enrollment in the Fall 2021 seminar is not required for enrollment in this production-based seminar.



Spring 2022 Professional Elective Tu/Th 11:00-12:20 Room 101

Latent Spaces; Artificial Intelligence + Architecture

This elective will introduce you to synthetic ways of seeing in an age of planetary scale computation, combining reading, research and image making to explore the 'latent space' of artificial intelligence. Readings will situate 'artificial intelligence' within a broader cosmology of social, political and economic issues as well as connecting machine learning more directly to contemporary architectural discourse around the role of computation, parametrics and more broadly, issues of genus loci, authenticity and representation.

We will utilize open-source machine learning tools to create architectural images. Through the creation and interrogation of these synthetic images, we will question the role of the architect in an age of synthetic intelligence, experimenting with new design processes that suggest the role of the architect as one of curator and editor of language, data, prompts and outputs, as opposed to one of independent creative genius. Iterative experimentation with these tools will better equip us to understand the transformative and creative role that machine learning may play in the future of architectural discourse.

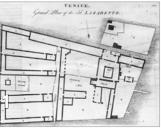
Through these readings and exercises, we will also engage issues of diversity, equity, inclusion and accessibility that are inherent in machine learning, from developing an understanding of the potential advantages to populations previously disenfranchised by the traditionally high barriers to entry in the discipline to the potential bias and exclusion implicit in the dominant methods of machine learning data collection that exist today.



INFECTIOUS ARCHITECTURE

designing against contagion

ARC500 / SPRING 2022 M/W 3:45-5:05PM Slocum Hall Room 404 instructor TARAPEARSON

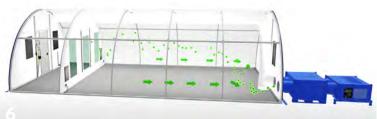














COURSE DESCRIPTION

As we continue to navigate the COVID-19 pandemic, we collectively confront devastation in our midst. Life as we knew it—or "The Before Time"—has been transformed by illness, death, and fear across every scale of life.

We must shift our focus away from pandemic-driven doom-scrolling and redirect our attention to extracting lessons from the chaos. Deadly pathogens have tormented humanity since its inception and will do so indefinitely. The difference between microbes and humans, however, is that humans have the capacity to learn and act with intent. We learned from the Black Death, we learned from (and eradicated!) Smallpox, and we are learning from COVID-19.

This seminar will operate with a positive mindset. We will examine case studies spanning from the early-modern period through today and consider how different types of pathogens have driven architectural, landscape, and infrastructural innovations. We will study the evolving popular beliefs and scientific knowledges that have impact(ed) the use and design of space, and we will explore many of the social, economic, and political issues at play during each respective epidemic.

The importance of interdisciplinary research and collaboration cannot be emphasized enough in the pursuit of advancements in architectural designs so inextricably linked to public health. As such, students will be introduced to the fundamental aspects of infectious disease, epidemiology, and the complex, déjà-vuinducing nature of public health policy and education.

CONCEPTS & CASE STUDIES

(Subject to modification)

Quarantine's Origin Story

14-17th c. Lazaretti design, use, and change; Responding to Recurring Plague Epidemics in Italy

Early Modern Hospitals

- London's Smallpox Hospital, 18th c.
- New York's Renwick Smallpox Hospital, 19th c.

From Miasma to Germ Theory: Impacts on the Built Environment in the Domestic and Public Sphere

Evolutions in infrastructure, landscape, and mass housing design: 18-19th c.

- Yellow Fever in Memphis and New Orleans, U.S.
- Cholera in England and India

"Healthy" Architecture in the 20th c.

- Tuberculosis' Impact on Domestic and Public Life
- Sanatoriums in the U.S. and Western Europe

21st c. Infection, Globalization, and Fear: **Responding During Crisis**

- "Amerithrax" biological attack, NYC, 2001
- Ebola Outbreak, West Africa, 2014-16

21st c. Hospitals, Laboratories, Deployable Medical Shelters, and Morgues

Representations of Disease in 20th-21st c. Media

- WWII-era Anti-Venereal Disease Propaganda
- 1980s AIDS Crisis Propaganda,
- Films (Outbreak, 1995 and Contagion, 2011)

Unknown. Ground Plan of the Old Lazzaretto. Venice, Italy, 14thc

Unknown. Ships used as smallpox isolation hospitals, No Date. Juan Manuel Blanes. Portion of: Yellow Fever. Oil. 1871.

World Health Organization. Cote d'Ivoire declares first Ebola outbreak in more than 25 years. 14 August 2021.

Unknown. "The temporary tent hospital maintained by the U.S. Marine Hospital

Service at Franklin, Louisiana, during the yellow fever epidemic of 1898." U.S. National

Library of Medicine (NLM). 1898.

Negative Pressure Isolation Shelter. Screenshot of Video. BLU-MED. 2021.

Rogelio V. Solis/AP. "Five intensive care beds, part of the 32-bed Samaritan's Purse

Emergency Field Hospital, are set up in one of the University of Mississippi Medical Center's parking garages Jackson, Mississippi." 17 August 202



ARC 555- Intro to Building Information Modeling (BIM) Tuesdays: 6:30-9:30 Slocum computer lab

This course will give the student an in-depth look at Building Information and how it is used for coordination, visualization and production in the architectural field. The primary software will be Autodesk Revit. The area of emphasis will focus on how well students can produce buildable construction documents while being able to relay their design through perspectives, isometric views, and data output such as door and window schedules. Once complete the students will be competent in the use of Revit and the understanding of Building Information Modeling. This class will be live, interactive hands on training, in both the built environment and the specific technical skills required to achieve competency in the field of BIM. Each area of Revit will be covered as it relates to architectural building systems such as wall systems, floor systems, roofing systems, and stairs/ramps. Also, this class will cover structural systems, and the relation of architecture to mechanical, electrical and plumbing (MEP) systems. The class deliverable will consist of each student creating a building model on their own. This model can be commercial or residential. It can be a real building, or a made up design of the student's desire. Grading will be judged by the construction documents produced. Plans, elevations, sections enlarged dimensioned details are the most important. Effort plays a critical role, as does classroom attendance and participation. Reading material is Revit Architecture No Experience Required. As always, this will be furnished for free by the instructor.



ARC 558- Advanced Building Information Modeling (BIM) Wednesdays: 6:45-9:45 Slocum computer lab

Following the Introduction to BIM course, this course takes a deeper dive into the inner workings of BIM and Revit. This course is intended to expose the students to the collaborative environment that is now taking place, and is a demand throughout the industry using Building Information Modeling software. To start the course we will review legal documents that outline a BIM project that serves as a reference to specific terminology, project guidelines and BIM protocols. This course also covers advanced modeling techniques needed to really make Revit work for an architect. Because most firms are fully on Revit, it is a prerequisite that new hires not only know the program, but know it well. This course will give SoA students a unique opportunity to gain an upper hand in the workplace. We will start with learning how to operate in a model within a collaborative, multiuser environment. Then we will learn parametric design using advanced family creation. Phasing (renovation) will be next followed by creating design options. We round is all off with creating massing elements and non-linear wall, roof and floor systems.









Perriand, Le Corbusier

furniture fabrications

histories, materials, forms

At the beginning of the twentieth century, as waves of political and social change swept the globe, the arts sought new, foundational significance and novel expression. A generation of artists and designers cast aside nineteenth century eclectic stylings in pursuit of socially liberated and intellectually grounded relevance. Within this context, early modern architects turned to furniture design to experiment - at least it seems so for many. We see this in Corb, and Aalto, and Mies, and etcetera. Perhaps these designers saw potential for more-direct explorations of relationships between purpose, material, and form in furniture – a relevance for art in the everyday, an antidote to styling.

Starting with the middle-late nineteenth century Arts and Crafts movement, and focusing on twentieth century modernism, this seminar will examine changing relationships between form, material, and purpose in furniture design. Particular attention will be devoted to seminal designers including: Rietveld, Breuer, Aalto, Gray, Perriand, Prouve, and the Eames. Throughout, we will seek to understand design as developed with *material specificity* – material choice, fabrication technique, material-specific configuration, and joinery. To contextualize our analysis, design work will also be considered from other vantage points - its historic, art-historic, and, even, design pedagogy situations and settings.

Additionally, this course will include design work. Mid-semester, following extensive presentation and discussion of modern furniture design history and analysis, course-mode will shift with the assignment of a prototype design project. Each student will develop a furniture design, from research, through maquette and mock-up, and, hopefully, to completed full-scale prototype.

Class Meetings

Meetings will include lectures, discussions, seminar presentations, and design reviews. Later in the semester, meetings will shift to shop-based prototype fabrication.

Coursework

Design (and fabrication) of a furniture prototype will be the primary coursework for this seminar. Factoring resource availability and costs, as well as shop access, material and fabrication limits will circumscribe this assignment. Additionally, working in pairs, students will make one select-topic seminar presentation to the class. Topics may include: joinery mock-ups, digital models of assigned furniture, case study analyses, etc.

Objectives

The primary goals of this course are twofold: First to introduce students to the work of a range of twentieth century furniture designers, and to develop understandings of their work in relation to material, fabrication, and historical context. And, second, to help students develop new detailed design capacity informed by the interpretive frameworks outlined in the lectures.



Living otherwise: Rethinking the Architecture of the Collective

Syracuse Architecture / Professional Elective / Spring 2022 / Wednesdays / 2:15-5pm / Seminar Room 307 / Instructor: Assistant Professor Marcos Parga, mparga@syr.edu

Dwelling space has been, and probably will continue to be, a highly contested space.

The economic, the political, and the social coalesce around it, and the tensions between these three forces have been shaping the material construct of our homes throughout history.

The current domestic landscape is characterized by an increasing gap between, on the one hand, the rise of major demographic shifts in most industrialized countries - that results in the production of new forms of cohabiting, and on the other hand, the reassuring and often celebrated clichés of traditional family life - and ideological blanket that hides the structural changes that society undergoes. This means that, while the housing market all too often continues to replicate old stereotypical mono-functional urban developments of the post-war era, more and more people are actually living in very different circumstances, and "exceptions" have become the norm.

The current housing crisis thus is not only a crisis of scarcity and affordability, but also a crisis-lack of collective subjectification models and enabling spatialization strategies (polyvalence and empowerment): domestic living is both ideologically supported and de facto challenged by the current economy, a paradox that leads us to perceive as already obsolete most of the contemporary spatial configurations that prescribe our life in common.

So, if given the actual strain of resources and land, and the dissociation between provided living space and current socio-economic conditions, houses as we know them today will no longer be economically or ecologically viable, what should take the place of these inherited dwelling structures that dictate and confine? And how alternative urban living environments will look like in order to enable and support?

This Seminar is based on the premise that this crisis is a unique call for a radical reinvention of the idea of housing and explores the current renaissance of collaborative forms of living and the architectures that emerge from them as a possible answer for those questions.

Since the advent of industrialization, collective living has come to reference a distinctively different and unique way of life considered unconventional for many. This marginal condition allowed these experiences to play a significant role in the overall history of housing by providing the opportunity for reflection: over the last 150 years, collective living models have been witnesses to their era, revealing a great deal about how each epoch perceived lifestyles, lived together, operated their households, understood property and ownership, and excluded or integrated productive/reproductive labor into their cohabitation spaces. In doing so, they became critical antidotes to the fundamental logic of our capitalistic society, challenging existing gender, biopolitical and territorial hierarchies.

This elective will look closely at those historical models that often included a critique of the prevailing conservative ideas of living and housing, and revealed social processes through spatial expressions. From the French social utopias of the 19th century and the Garden Cities of early modernism, to hippy communes and squatter movements of more recent decades, the aim is to reveal how these previous experiences inform contemporary cooperatives, autonomous housing projects and architectures of sharing that are emerging across the world as an important part of a seismic shift towards a socially responsible architecture that seeks to respond to the key social challenges of our time.

The course will be a combination of lectures, reading discussions, project presentations and reviews, and will culminate in a proactive investigation into housing alternatives and urban futures conducted from a tangible perspective, evaluating the role of architects in the redefinition of a new form of life together, and the importance of the architectural expression in giving consistency to the political claims of ways of living *otherwise*.