

**Advanced
Synthesis
Option
Studios**

30/-

F20/S21



*Biographical note on Alvin Baltrop
1948-2004*

Baltrop was a Black photographer in New York whose extensive work describing the structures and life on the Hudson Piers was only celebrated after his death. His Pier Photographs, 1975-1986, were exhibited at Gallerie Buchholz in '08. For this exhibition Douglas Crimp wrote,

'Ultimately, though, the complexity of Baltrop's legacy resides not only in the record his photographs provide of utopian and dystopian occurrences, but also their evidence that the moment in Manhattan's history when we could so thoroughly reinvent ourselves was as precarious as the places where we did it.'

More recently the Bronx Museum exhibited 250 of his photographs in an exhibition between Aug 2019 - Feb 2020 and the work was critically acclaimed in essays and a published catalogue.

*cover image
Alvin Baltrop, West Side Piers NY
1975-86
photograph*

*above
Alvin Baltrop, Hudson Piers NYC
1975-86
photograph*

With the arrival in August 2020, of our new Head of School, Omar Khan, we are making some adjustments to the framing of the ASOS. Each semester we plan to initiate an overarching concept which will intersect with each studio syllabus. The studio agenda could either interpret, reformulate or dissent from the title. The idea is that we will create a larger colloquy between studios. These cross studio conversations will be scheduled as a part of the mid review and final review process.

The keywords for Fall'20 and Spring'21 will be PROPINQUITY and PRIVACY. We plan discussions in mid semester and a colloquy after final reviews to gather positions/findings/oppositions.

The themes for the 21/22 academic year will be developed in the Spring'21 and will be included in the ASOS CATALOGUE issue in June 2021. The Instructors for the 21/22 ASOS studios are listed below, (see p4).

The studio selection process happens before each semester (in July for Fall and in December for Spring) At these points the expanded and updated catalogue is published for the following semester. We send an invitation email to each student from B.Arch 4th+5th yr and M.Arch 2nd yr, who then complete a preference form.

Mary-Lou Arscott AADip RIBA
Studio Professor and Associate Head
School of Architecture
Carnegie Mellon University
mlarscott@cmu.edu



F20 Propinquity_

The underlying spatial concept here is of “nearness” which is a relational measure and not fixed. There is room to explore notions of measure in architecture - from metrics and formal rules to their social and cultural implications. Cannetti’s well known formulation that a crowd only forms when the social barriers of touch are transgressed. Implications for apartness include issues of race, ethnicity, alterity, and othering. Each studio will take a different attitude to the intersection of issues of propinquity to their studio agenda.

Design for Social Justice

Unearthed MACRO

Art of Environmental Control

Boreal Lamination

Commoning the City

Transformation of Waste

Other Side of the Tracks

Landscape of Disease and Health

Bill Bates

Liza Cruze

Gerard Damiani

Jeremy Ficca

Stefan Gruber

Hal Hayes

Christine Mondor

Nida Rehman

_studio rosters

BILL BATES

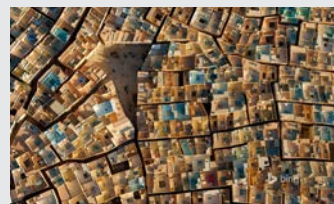
Design for Social Justice

Andrew Chong	B.Arch 2021
Edward Fischer	B.Arch 2021
Taylor Latimer	B.Arch 2021
Alyssa Mayorga	B.Arch 2021
Lukas Hermann	B.Arch 2022
Samuel Losi	B.Arch 2022
Taisei Manheim	B.Arch 2022
Carly Sacco	B.Arch 2022
Clara Zhao	B.Arch 2022
Sean O’Connor	M.Arch 2021
David Suchoza	M.Arch 2021

LIZA CRUZE

Unearthed MACRO

Owen Haft	B.Arch 2021
Martin He	B.Arch 2021
Grace Hou	B.Arch 2021
Stephanie Huang	B.Arch 2021
Leah Kendrick	B.Arch 2021
Jacky Tian	B.Arch 2021
Minghao Yang	B.Arch 2021
Emily Edlich	B.Arch 2022
Veronica Hernandez	B.Arch 2022
Shanice Lam	B.Arch 2022
Robert Rice	B.Arch 2022
Steve Wang	B.Arch 2022



GERARD DAMIANI ***Art of Environmental Control***

Harry Branch-Shaw	B.Arch 2021
Christoph Eckrich	B.Arch 2021
Gil Jang	B.Arch 2021
Hsiao Tyng Peck	B.Arch 2021
Louis Suarez	B.Arch 2021
Alexander Wang	B.Arch 2021
Joanne Chui	B.Arch 2022
Adam He	B.Arch 2022
Xindi Lyu	B.Arch 2022
Ellen Zhu	B.Arch 2022
Rin Namkoong	M.Arch 2021
Varun Shah	M.Arch 2021



STEFAN GRUBER ***Commoning the City***

Cassandra Howard	B.Arch 2021
Longney Luk	B.Arch 2021
Clover Chau	B.Arch 2022
Sharleen Devjani	M.Arch 2021
Bingjie Sheng	M.Arch 2021
Sameedha Mahajan	MUD 2021
He Su	MUD 2021
Yashavi Tulchiya	MUD 2021
Yiya Wang	MUD 2021
Xiaoran Zhang	MUD 2021



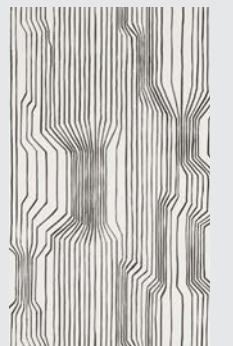
CHRISTINE MONDOR ***Other Side of the Tracks***

Grace Ji	B.Arch 2021
Claire Koh	B.Arch 2021
Jessica Kusten	B.Arch 2021
Daniel Noh	B.Arch 2021
Isabella Ouyang	B.Arch 2021
Steven (Zeyin)Fei	B.Arch 2022
Isabella Giammatteo	B.Arch 2022
Jenna Guo	B.Arch 2022
Yuxin Huang	B.Arch 2022
Vishaka Nayak	B.Arch 2022
Shariq Shah	B.Arch 2022
Olivia Werner	B.Arch 2022



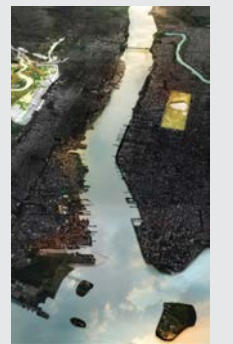
JEREMY FICCA ***Boreal Lamination***

Tanvi Harkare	B.Arch 2021
Michael Longo	B.Arch 2021
Jacob Moskowitz	B.Arch 2021
Brandon Smith	B.Arch 2021
Juhi Dhanesha	B.Arch 2022
Emmanuelle Father	B.Arch 2022
Paul Greenway	B.Arch 2022
Mike Fanjie Jin	B.Arch 2022
Sarah Kang	B.Arch 2022
Sean(Han) Meng	B.Arch 2022
Mohammed Rahman	B.Arch 2022
Liu Lu	M.Arch 2021
Min Liu	MAAD 2021



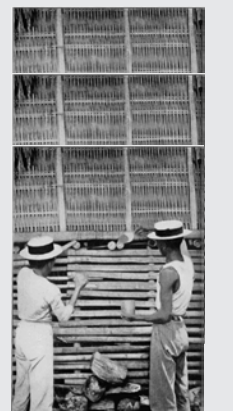
HAL HAYES ***Transformation of Waste***

Shirley Chen	B.Arch 2021
Fallon Creech	B.Arch 2021
Cathy Dong	B.Arch 2021
Vanshika Gandotra	B.Arch 2021
Romi Jin	B.Arch 2021
Yoo Jin Kim	B.Arch 2021
Jonathan Liang	B.Arch 2021
Rachel Lu	B.Arch 2021
Curran Zhang	B.Arch 2021
Kimberlyn Cho	B.Arch 2022
Jasmine Lee	B.Arch 2022
Yingying Yan	B.Arch 2022



NIDA REHMAN ***Landscape of Disease and Health***

Vincent DeRienzo	B.Arch 2021
Colleen Duong	B.Arch 2021
Kirman Hanson	B.Arch 2021
Jihee Kim	B.Arch 2021
Ryu Kondrup	B.Arch 2021
Alejandra Meza	B.Arch 2021
Emmanuel Nwandu	B.Arch 2021
Swetha Tulluri	B.Arch 2021
Carmen Yu	B.Arch 2021
Zehui Li	M.Arch 2021
Zhecui (Doris)Zhang	M.Arch 2021
Cheng Zhou	M.Arch 2021



S21 Privacy_

Transparency was the modernist assault on privacy. Wright famously said of Johnson's Glass House: "I don't know whether I'm supposed to take off my hat or leave it on." The inside outside dichotomy is fundamentally gone now with the transparency afforded by digital technologies- all is outside including domestic life. Is there anything that resists this transparency? Or is this the new opportunity with privacy a casualty or something in need of reconceptualization?

<i>Radical Food</i>	Sarosh Anklesaria
<i>Borderline, Clothesline</i>	Mary-Lou Arscott
<i>M.Arch/ B.Arch thesis</i>	Heather Bizon/ Sarah Rafson
<i>Design Build, Thoreau's Cabin</i>	Liza Cruze
<i>Lithopic House</i>	Dana Cupkova
<i>Co-operative Housing</i>	Stefan Gruber
<i>Smoketown</i>	Hal Hayes
<i>Commoning the City</i>	Jonathan Kline
<i>Intensivity</i>	Trevor Patt



F21 theme tbd_

<i>Design Build</i>	Liza Cruze
<i>xxxx</i>	Gerard Damiani
<i>Thickness_ potentials of hempcrete</i>	Jeremy Ficca
<i>Commoning the City</i>	Stefan Gruber
<i>xxxx</i>	Hal Hayes
<i>xxxx</i>	Christine Mondor
<i>xxxx</i>	Nida Rehman
<i>xxxx</i>	TBD
<i>xxxx</i>	TBD

S22 theme tbd_

<i>Moving Image Studio</i>	Mary-Lou Arscott
<i>xxxx</i>	Josh Bard
<i>xxxx</i>	Dana Cupkova
<i>Design Build</i>	Liza Cruze
<i>Co-operative Housing</i>	Stefan Gruber
<i>Theatre Studio</i>	Hal Hayes
<i>Commoning the City</i>	Jonathan Kline
<i>xxxx</i>	TBD visiting Thomas professor
<i>xxxx</i>	TBD visiting Kalla professor

DESIGN FOR SOCIAL JUSTICE

Mending the Urban Fabric WILLIAM BATES

“Cities have the capability of providing something for everybody, only because and only when, they are created by everybody.

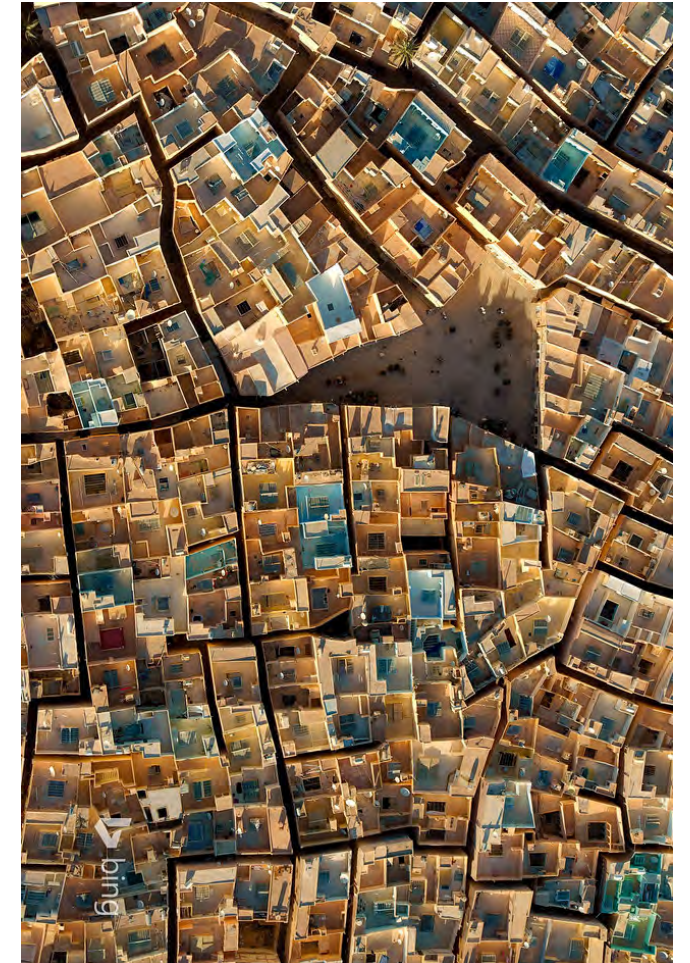
Jane Jacobs



Background

Does quilt-making inform future visions of urban design and internal neighborhood decision making? What does this woman's stitch work tell the architect about life in her community? Could her design skills help her and her neighbors take on the reinvention of their neighborhood blocks? Current protests around brutal policing and the disproportionate toll of a pandemic highlight the holes in our cities' "urban quilts" caused by systemic racial injustice and disinvestment.

*Right Beni Isguen,
Ghardaia, Algeria,
image by Alimuthuja,
2014*



*Left Rosie Lee Tomkins, quilt maker,
image from Roberta Smith article
NYT 6/29/2020
Above Sandborn Fire Insurance Map
Downtown Pittsburgh 1904, from Library of
Congress.*

Context

This studio will investigate the mechanisms that impede environmental self-determination and social-political empowerment in historically disenfranchised communities. The emphasis will be on process and analysis of community engagement and leveraging the potential for citizen ownership of the built environment and the systems that support it. The quilt in the image above is symbolic of community diversity and organic design that reflects community culture and history. It can also represent the urban grid which might look different if organically designed from within instead of by external forces. The students will be challenged to cultivate unbiased listening skills to understand the needs and desires of communities that may only understand protest as a vehicle of change. The studio will be forced to look for the invisible forces and systems that promulgate helplessness and hopelessness. How can the architect make "invisible" citizens recognize the decision and policy-making power within their own ranks to make themselves and their built environment more visible and resilient. This will require an evaluation and analysis of previously failed attempts to "fix" problems in these built environments.

Program

The students will be ultimately tasked with designing a process to prevent physical and social demolition and wholesale gentrification of disenfranchised neighborhoods. The final process design should provide a design opportunity that would be transformative for neighborhood self-preservation.

The thesis is to explore new ways to elevate social-justice design for the benefit of citizenry expectations for future development. This is about designing a process of listening, learning and synthesizing as a preamble to design intervention.

Exploration of different facets of design beyond its physical aspects will be encouraged.

The reading material is intended to help the student recognize political and financial systems, policies that underlie all decisions around the built environment. Students will be challenged to contemplate potential attitudinal shifts to change community perceptions of powerlessness. The studio product will seek to design sustainable change theory that might serve as a catalyst for social good and justice and enable citizens to mend the threadbare quilt of their neighborhood grid without surrendering to tax driven gentrification.



Above Black Lives Matter march Mt Lebanon, June 2020, photo William Bates

References

The research work of the students will be built upon the ideas embodied in the following books about invisible communities.

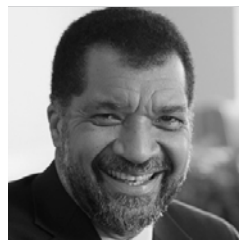
-*Know Your Price: Valuing Black Lives and Property in America's Black Cities* by Andre Perry, PhD

-*Root Shock: How Tearing Up City Neighborhoods Hurts America, And What We Can Do About It* by Mindy Fullilove, MD

-*The Color of Law: A Forgotten History of How Our Government Segregated America* by Richard Rothstein

-*Design for Justice* 6/26/20 video presentation by Bryan Lee, AIA

-*The Gardens of Democracy: A New American Story of Citizenship, the Economy, and the Role of Government* by Eric Liu, JD + Nick Hanauer



Above View of Carrie Furnace from Rankin Housing. from Hamilton Spectator Report 4 Carrie Furnace.

propinquity_

The theory of Propinquity Effect was formulated on the value of proximal relationships between individuals. However it's conceivable that the theory might apply at a larger scale between distinct neighborhoods.

The "urban quilt" analogy allows us reconsider the torn intra- and inter-community relationships within the context of a city. Historic racism has systematically isolated select city neighborhoods and deprived them of the shared benefits of an equitable society.

Unearthed MACRO

An agricultural campus on Hazelwood Green

LIZA CRUZE

“Center of Life is looking to be proactive in protecting the interests of the people who are on the verge of being forced to move. Unearthed is how COL brings the existing community to the table. Unearthed is how COL ensures that current residents attain the skill sets for jobs of the future. Unearthed is how leaders will emerge from a community once devoid of opportunity.”

-Neil Martin, Business + Compliance Manager, Center of Life



propinquity_

A train track separates Hazelwood from the abutting Hazelwood Green, a 178 acre brownfield where a Jones and Laughlin steel complex once stood. The site is primed for a scale of development that will deeply affect the neighborhood and its residents. Unearthed, a new state-of-the-art aquaponics campus conceived of by the Center of Life organization and the focus of this studio, aims to leverage the propinquity between the development and the community to ensure the latter's active participation in the economic growth of the area.



LEFT: Industrial greenhouse, Netherlands,
ABOVE LEFT: Jones & Laughlin Mill,
ABOVE RIGHT: Hazelwood and Hazelwood
Green

Site

Hazelwood's story is a familiar one in the Pittsburgh region. Like many local communities that were built around steelmaking, it thrived in the early part of the last century but was already in decline by the 1980's. The coke and steel mill were finally shut down in 1998 and more than 900 people lost their jobs. By then only 6,000 residents remained in the neighborhood, and, with the tax base eroded, Hazelwood suffered from disinvestment.

In 2002 four foundations joined forces to create Almono LLP, which purchased the vacant mill site and began to prepare it for development. They recognized that such a large plot of land uniquely situated in close proximity to CMU and the University of Pittsburgh, key players in the region's innovation economy, could raise the competitiveness of the region and serve as a model for sustainable economic development. Multiple plans have been created in the past 18 years and many challenges have been faced, but optimism is high that real progress is being made, with anchor tenants already being housed in the recently renovated Mill 19 and planning and marketing continuing for a mixture of office, light manufacturing, limited retail, and residential uses. The endowments consider this to be a place-based initiative and are working closely with neighborhood organizations. "The real challenge," says Grant Oliphant, president of the Heinz Endowments, "is how do you do economic redevelopment in a community in an equitable way that doesn't drive out the very people who should benefit from it?" One way, suggests the Greater Hazelwood Neighborhood Plan, is to maximize resident opportunities associated with Hazelwood Green.



Client and Program

Center of Life was founded in 2002 by the Rev. Tim Smith, twenty years after he joined the community and committed to its long-term empowerment. The organization's mission is to "provide families and youth with the life skills, education, training, and resources necessary to be strong and to make their communities strong." COL offers a number of programs for youth, including KRUNK Movement, a production company that engages young singers, musicians, dancers, and videographers. Uneathed was the brainchild of Neil Martin as he sought to expand KRUNK's reach to non-artistically inclined students, but the idea has since gained momentum and both the scope and the scale of the project have expanded significantly.



TOP: The Eden Project, Cornwall UK, Grimshaw Architects, 2001
 LEFT: Tangshan organic farm, China, ARCHSTUDIO, 2016
 RIGHT: Plenty vertical farm, Compton, LA 2020



CONTINUATION

This is a two-part studio, with a "planning and design" focus in the fall and a "build" focus in the spring. Students who enroll in the fall ASO are not obligated to sign up for the Spring and visa-versa.

COL now envisions Uneathed as an environmentally sustainable campus located on an acre of land on Hazelwood Green centered around a large aquaponics/ hydroponics facility that is complemented by terra-farming plots, educational facilities, a market storefront, and possibly lodging. It is to serve as a learning space, a job training space, a research lab, and an event venue. It will also be a place of business, producing organic fruits and vegetables and selling directly to consumers and through local wholesalers, securing profits and financial independence for the organization. "At Uneathed's most basic function, high-quality food is being grown to feed those who are hungry," COL writes. "At its highest form, Uneathed is a culture exporter with functions that bring people to its farms and gives them the knowledge and experience to make change." This studio will work with COL to envision the architectural form of Uneathed and will produce materials that the organization can use for marketing and fundraising as they move forward with establishing a place for and by the Hazelwood community on Hazelwood Green.



THE ART OF ENVIRONMENTAL CONTROL

A Home is not a House

GERARD DAMIANI

Technology made large populations possible; large populations now make technology indispensable.

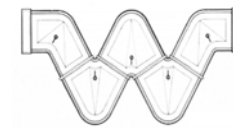
Joseph Krutch



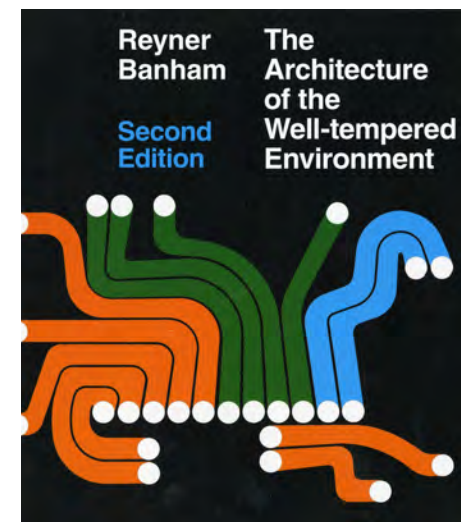
Background

In 1969 the world was in crisis while the role of technological innovation was evolving at a rapid pace with the development of the Apollo Space program. Today, we too are in crisis with issues of racial and social inequality, Covid-19, an increasing world population and an infrastructure ill-equipped to serve it while the technological advancements of SpaceX have led to the first privatization of human spaceflight. We engage technology every day in the buildings we inhabit with little regard to how they work. Many take these systems for granted with an expectation that they just exist for our use and comfort. This under appreciated closeness to building systems suggest a need for a greater understanding of their particular origins, reliance on advancements and potential futures. This studio looks at the history of building systems, what advancements have taken place in their evolution and speculates on where they might lead us in our changing world.

propinquity_



We engage technology every day in the buildings we inhabit with little regard to how they work. Many take these systems for granted with an expectation that they just exist for our use and comfort. This under appreciated closeness to building systems suggest a need for a greater understanding of their particular origins, reliance on advancements and potential futures. This studio looks at the history of building systems, what advancements have taken place in their evolution and speculates on where they might lead us in our changing world.



Above, Published by Architectural Press, 1969

Context

In 1969 Reyner Banham wrote *The Architecture of the Well-Tempered Environment* which constructed a history of the advancements of mechanical devices and systems for modern buildings with an understanding that they were an integral part of a building's critical formation, however, he also found these technological themes were absent from many of the intellectual, cultural and societal discourses of the time. Banham suggested that the symbolic and performative importance of building systems would evolve and take the place of traditional architectural forms providing new associative cultural meanings as the traditional ones would begin to wane.

Left, Restless Sphere by Coop Himmelb(l)au, 1971,
Middle, V Helmet Portable Living Room by Walter Pichler, 1967,
Right, Small room prototype IV by Walter Pichler, 1967

Program/ Project

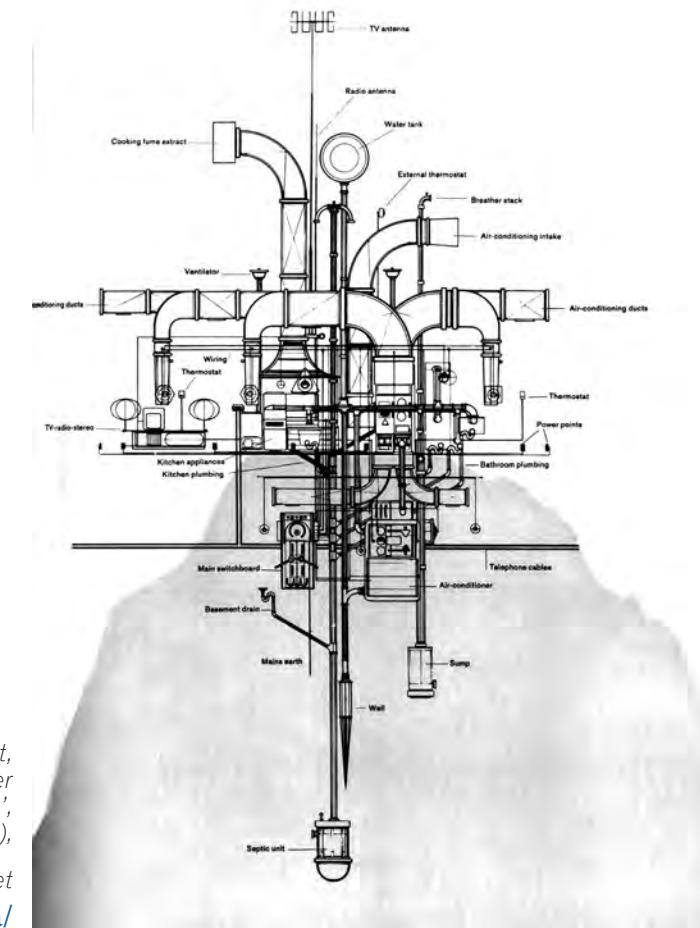
This ASO starts where this book ends as it will be a research-based studio utilizing web-based research to continue the history of the technological environment to the present day. Today we live in a hypertechnological society which is no longer a fiction. This ASO will research and evaluate the evolution of the well-tempered environment leading to our present cultural condition while making speculations for on how technology participates in society's future. The goal of this studio is for you to gain an awareness of technological innovation in building and its related mechanized peers such as the automotive, aviation and tech industries through research, readings and lectures.

The semester will begin with each student being given a chapter from *The Architecture of the Well-Tempered Environment* with an expectation that it will be used to construct a speculative continuation of its history to the present. Once a constructed narrative has been produced and reviewed through a series of Zoom sessions with our faculty, each student will speculate on the future of *The Architecture of the Well-Tempered Environment*.

In second half of the semester the ASO will transition to the development of an architectural project -- a mini-thesis that originates from an article titled "A Home is not a House" published in *Art in America* #2, 1965 where Reyner Banham starts with the following proposition:

"When your house contains such a complex of piping, flues, ducts, wires, lights, inlets, outlets, ovens, sinks, refuse disposers, hi-fi reverberators, antennae, conduits, freezers, heaters – when it contains so many services that the hardware could stand up by itself without any assistance from the house, why have a house to hold it up?"

Included in the article, six drawings were produced by the French architect/ artist François Dallegret describing an anatomy of dwelling which showed a network of cables, tubes and domestic items ranging from the TV antenna to the septic unit.



Right. Francois Dallegret,
Anatomy of a Dwelling, from Reyner
Banham, 'A Home Is Not a House',
Art in America(April 1965),

the website for Francois Dallegret
<http://www.arteria.ca/>

Learning Objectives

This studio provides a platform to speculate that the shift to technology has rarely followed function as suggested in the Modernist period. As part of the final review each student will include six meticulous drawings which describe their interpretation of the anatomy of the dwelling along with a collective presentation on their speculative continuation of *The Architecture of the Well-Tempered Environment*.

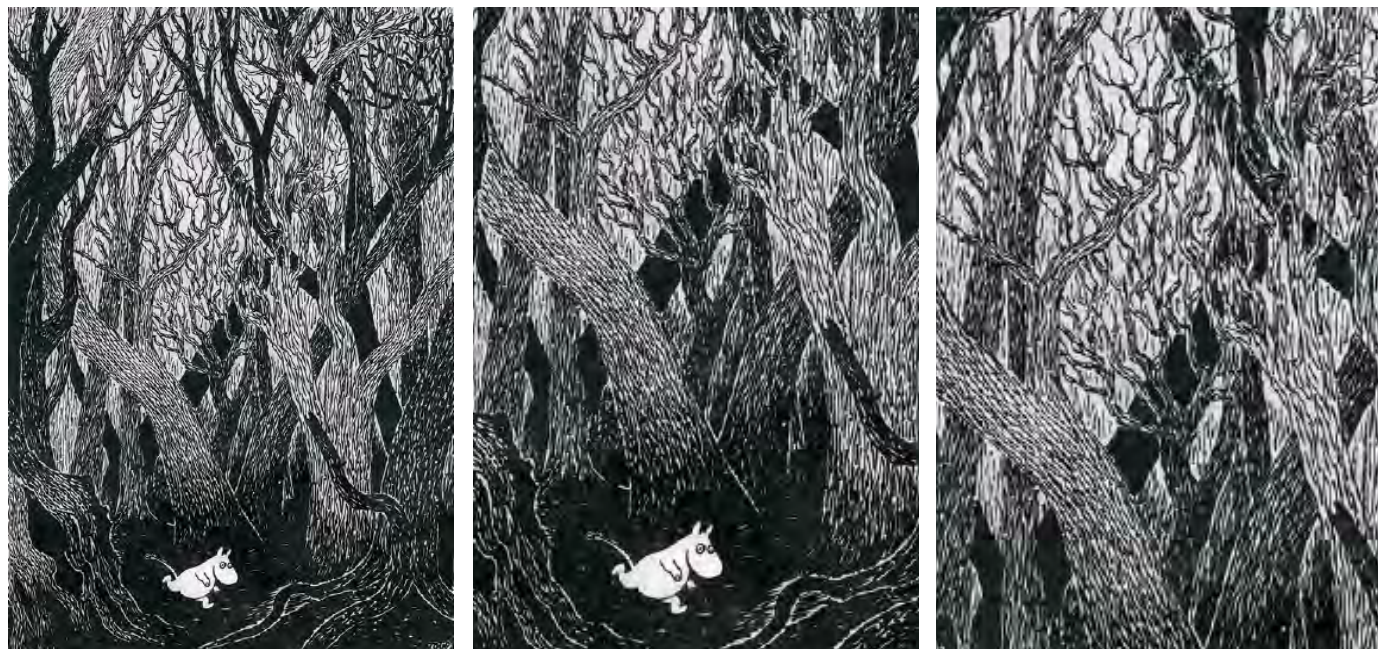
Three critical deadlines will be;
faculty review 1, faculty review 2 and pre final review.

BOREAL LAMINATION

JEREMY FICCA

While we are drowning in this Age of Information, we are starving for wisdom.

Julia Watson



Background

This studio focuses upon architectures of wood to explore the affordances of urban mass timber construction. It merges research of building techniques with investigations into the aesthetic, sociopolitical, and psychological potential of a predominantly timber architecture. A mixed-use design project sited in Helsinki, Finland juxtaposes a cultural institution with local services through a new home for the Design Museum Helsinki along with a community supermarket and post office. As a research-based studio, students will study contemporary methods of timber construction to understand possibilities for new spatial and structural typologies. The studio will explore a range of sources, across media to understand the design culture of Finland from the established global brands of Artek and Marimekko to current reinterpretations of indigenous material practices.

The culture and identity of Finland is inextricably linked to the boreal landscape and with it, the forest. The Kalevala, a poem of collected folklore and oral traditions, describes a creation story tied to the forest. Finland's 'Right to Roam' mandates unfettered nationwide access to wilderness on privately owned land. A culture of self-sufficiency and material resourcefulness linked to the indigenous Sami populations of northern Finland is as important an aspect of Finnish identity as cosmopolitan Helsinki.

Propinquity_

The fall ASO theme of propinquity, or nearness, will be explored through studio topics of Interiority, Programmatic Heterogeneity, and Material Affect. Students will be challenged to address the following prompts through their design proposal.

Interiority - How might delineations of building interior and associated protection from the Finnish winter respond to the challenges of physical distancing brought on by the pandemic? How might the typical interiority of galleries be reconceived to foster new connections to the city?

Programmatic Heterogeneity - What is the collective identity and urban presence of a project that places seemingly distinct programs in direct proximity to one another?



*left images: Moomins
Tove Jansson (circa 1960's)*

*top image: ColoRing Aalto Stool, Artek
Jo Nagasaka (2019)*

Materiality

Material Affect – How is the materiality of wood revealed and experienced? How might the warmth and tactility of wood inform material strategies?

Exploration of mass timber requires a comparison with longstanding building practices to understand timber's affordances and the prospects for hybrid techniques and typologies. For the better part of the past 125 years, from the Chicago School to the global metropolis, "modern" construction has relied upon increasingly industrialized, carbon intensive practices. This is perhaps no more evident than with steel and concrete, the materials of choice for construction across much of the globe. Concrete and steel were the perfect materials to render modern ambitions of growth and progress. They accelerated urban migrations, produced new typologies, supported new modes of spatial and material expression, and when combined, performed like no other material.

As we come to terms with the consequences of unchecked growth and consumption, the environmental impact of longstanding material practices requires greater scrutiny.

The urgent need to reduce carbon emissions within the building industry is reshaping material agendas. Over the past decade cross laminated timber has emerged as a viable alternative to structures typically rendered in concrete and steel. Mass timber directs attention toward the forest and its material flows. Stretching from western Alaska to northeastern Russia, the boreal forest constitutes the largest volume of coniferous tree stock on earth. The forests that have long supported the production of pulp and peat are viable sources of fir, spruce, and pine used in the production of mass timber building elements.

The forests of Finland illustrate many of the

opportunities and challenges associated with mass timber. While Finland is comprised of nearly 75% forested land, a percentage that continues to outpace the rate of harvesting, close inspection of Finland's forests reveals a highly managed landscape resulting from decades of bog draining and tree planting. While routine forest thinning has limited forest fires, when compared to neighboring Russia, the rate of climate change is accelerating more rapidly through the far northern hemisphere, leading to higher risks of fire and disease. The environmental impact and benefits of timber construction is highly contingent upon an array of factors from the forestry practices that support the growth of a sapling to distance between the forest and the construction site, to the lifespan of the building and the sequestration of carbon. Despite these complexities, the benefits of mass timber merit greater exploration.



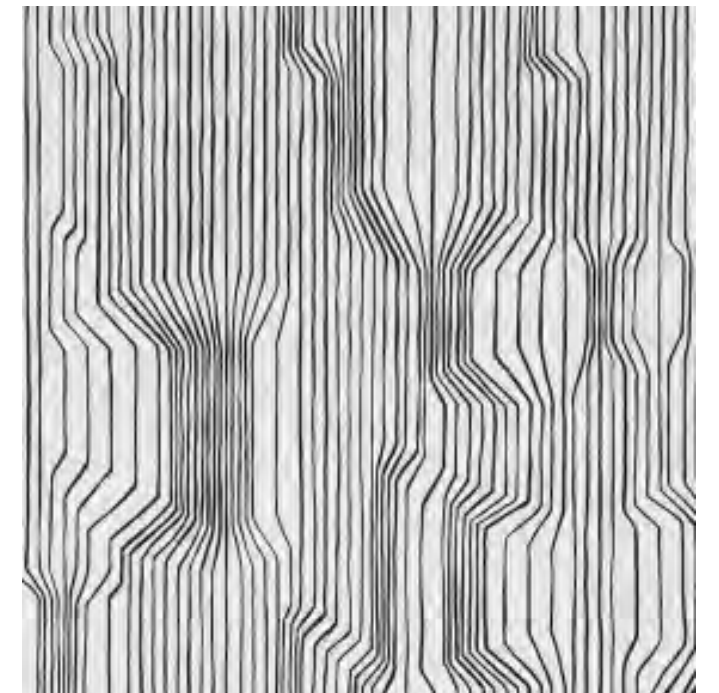
Site

The project is sited on the western edge of Kasarmitori Square in Helsinki's Kaartinkau-punki district and is within short walking distance to the South Harbor and the Esplanadi. The site is currently occupied by a low-rise building dating to the early 1960s. Originally constructed as a design exhibition center and automobile service facility the building currently houses a supermarket, post office, and fast food restaurant. Underground parking is located beneath the square and is accessed from within the existing building footprint. The existing structure is not protected within the Helsinki masterplan and may be altered, removed, or preserved.

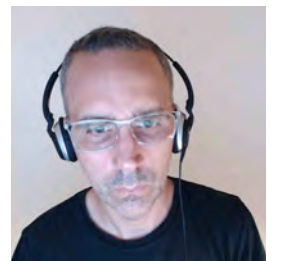
Studio Structure and Schedule

The semester will be structured around an initial phase of research and discourse focused upon techniques of mass timber and Finnish design culture and materiality. Weekly lectures, readings, and films will supplement student group research. Concurrent to the research phase, students will explore spatial and structural logics based upon timber systems of frame and plate. (approximately 4 weeks) The design project will include a preliminary phase of virtual site research and programming, followed by project development that will conclude prior to Thanksgiving break. (approximately 9 weeks). The final two weeks of the semester will focus upon the development of a cohesive representational narrative, followed by the final review. (approximately 2 weeks)

While much of the work produced will be digitally based, the studio will prioritize digital modes of physical output such as 3d printing to augment "paperless" processes. Students will work in teams during the initial research phase and will be encouraged to work with a partner during the design project.



left image: Kullervo's Curse, Akseli Gallen-Kallela (1899)
top image 1: Kasarmitori Square (circa 1960s)
top image 2: Marimekko line print



COMMONING THE CITY

Negotiating Top-Down +Bottom-Up Urbanism

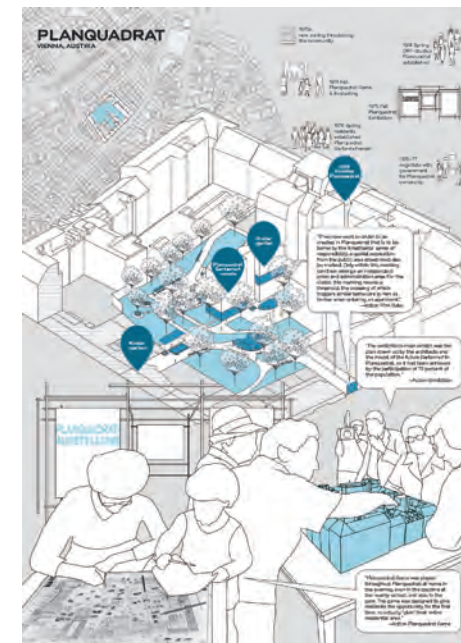
STEFAN GRUBER
JONATHAN KLINE

“If we can’t come together, we will all fall apart.” *Graffiti protesting gentrification*



Background

This two semester research-based-design studio is focused on the bottom-up transformation of cities and explores how designers and planners can tap into the self-organizing behavior of cities in order to empower citizens to claim their right to the city. The first semester, taught by Stefan Gruber provides a theoretical framing and collective case study research as stepping stone toward the development of an individual design thesis proposal. The second semester, taught by Jonathan Kline, will support students in developing their individual projects culminating in an exhibition at the Miller ICA Platform. This year-long studio is required for all second year Master of Urban Design students and open to 5th year BArch students and MArch students. For ASOS students the studio is an opportunity to pursue a yearlong thesis within a structured research context exploring urban commoning. Jonathan Kline's fall seminar 'Urban Design Methods and Theories' is a co-requisite to this class.



Above: Display of *An Atlas of Commoning* at Miller ICA (Photo: Margaret Cox) and case study drawing on *Planquadrat Vienna* by Yilun Hong.

Right: Discussion of *Commoning the City* studio with Teddy Cruz and Fonna Forman as part of the 2019 *Design for a Commons Transition Symposium* (Photo: Christina Brown)

Research

The commons are emerging as a key concept beyond the binaries of public and private space for tackling the challenges of the contemporary city: How to build community resilience in the face of systemic and growing inequity? How to design with finite resources in the face of accelerating environmental crisis? How to articulate common interests despite splintering social ties? And how to find agency as architects given the scope of these wicked problems? Here commoning is understood as a set of practices dealing with the production and self-governance of shared resources and spaces beyond contemporary forms of domination, such as class, gender or race. The studio's research continues to feed into the long term traveling ifa-exhibition and publication project “An Atlas of Commoning” in collaboration with ARCH+. This year, we will focus on conceptualizing neighborhoods as commons, with a particular scrutiny towards contemporary notions of community in relation to the school wide theme of propinquity.

Propinquity_

Ever since urban designer Mel Webber's famous essay on “community without propinquity” in 1964, the role of physical places in building community has been contested. In this studio we will interrogate the notion of propinquity, against the backdrop of today's crisis of belonging that is fueling social and political polarization, and ripping contemporary societies apart. Exploring both the spatial and social dimensions of propinquity, we will ask what agency designers have in building community today? We will scrutinize how concepts of community continue to be burdened by a

nostalgic and totalizing discourse in which the adversarial roles of “us versus them” play out in the moral registers of right and wrong. But how else can we articulate individual interests in such a way as to constitute common ground? Building on Chantal Mouffe’s framing of the political as pluralistic agonism, we will study how democracy in general, and sustainable and resilient communities in particular, depend on diversity, the encounter of differences and the ongoing contestation and redistribution of power. In “Design for Diversity” Emily Talen describes how the separation and segregation that has come to characterize American cities goes against the basic underlying ethos of American idealism – a pluralistic society rooted in a notion of human equality. If, against the odds of decades of spatial sorting and social division, we believe propinquity still holds a role in designing resilient and sustainable communities, it will require reviving the city as a political project.

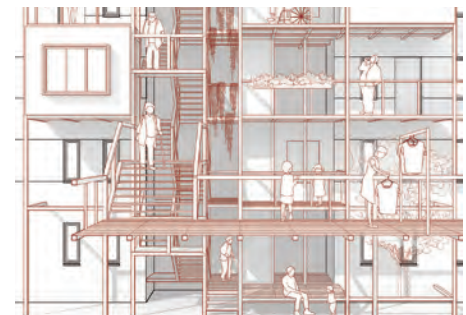
Program

Fall: Design-based Research

During the fall semester the studio will study theories and practices of commoning through readings, interviews and case study research. The collective research, documented in a shared graphic format will be intertwined with the development of an individual thesis proposal on how commoning might transform a neighborhood community and site of their choosing. Throughout the semester the articulation of a thesis will evolve through research, verbal and visual modes of reflection and production.

Spring: Research-based Design

Building on our collective research, the spring studio will focus on developing individual thesis and design proposals exploring issues of urban commoning. For the project students will be expected to take a personal position and formulate a thesis, expressed and explored through design. The site, program and general parameters of the project will be determined during the fall, allowing students to gather data and base materials over the winter break. Thesis projects will culminate with an exhibition and review in the Miller ICA Platform and the creation of a final thesis book.



Left from top to bottom:
Yilun Hong, MUD '20
Srinjoy Hazra, MArch '20
Abhinav Singh, MUD '20
Rachel Park, BArch '20.

Right clockwise from top left:
Sujan Das Shrestha, MUD '19
Chi Zhang, MUD '19
Ernest Belamy, MUD '18
Paul Moscoso Riofrio, MUD '18



Learning Outcomes

In this studio you will develop skills for documenting, analyzing and critically evaluating precedents that act as catalyst for the bottom-up transformation of cities. You will learn to contextualize these spatial practices, and ultimately your own design practice, within a broader social, political and economic discourse. As you begin to better understand the forces at play in shaping the built environment and in turn how buildings shape us, you will learn to both question and sharpen the agency of architecture and reflect on alternative more collaborative modes of design and radical imagination. You will further experience how what is often conceived as binary opposition between theory and practice, thinking and acting, can in fact be intricately linked and lead to invigorating synergies. The hypothesis here is that every reading of an urban milieu is also projective, every reflection on what is, entails a projection of what could be, in short a latent design project for an alternate possible future. Utopia is typically thought of as something that lies in the future. Meanwhile in our research on practices of commoning, we will see that everyday utopias are in fact all around us. Accordingly, in this studio we will explore research based design as glance back to enact a future vision.



TRANSFORMATION OF WASTE

Net positive speculations of
the C 21st

HAL HAYES



“We must open up our eyes
And seize and rend the veil
Of smoke which man calls Order.
Pollution is a necessary result
Of the inability of man
To reform and transform Waste...
The Transformation Of Waste
Is perhaps the oldest
Preoccupation of Man,
Being the chosen alloy
He must be reconnected...
At all cost inherent.
Within us is the dream
Of the alchemist to create
From the clay of Man,
And to re-create
From (the) excretion of Man
Pure, and then soft,
And then solid gold.
All must not be Art,
Some art we must
Disintegrate,
Positive (Entropy)
Must exist.”

Patti Smith, 25th Floor

Sustainable Megastructure: NYC Gansevoort Peninsula/Pier 52-53 Redevelopment

This studio is about architecture concept and design methodology. A semester-long theoretical project for a complex high density development on the Hudson River in Manhattan will be the vehicle for our study. Growing populations and economies increasingly stress our environment. The waste products of industrial civilization cause both pollution that affects our health and climate change, resulting in rising sea levels and increasingly severe weather. These factors collide in the New York City waterfront where storm surges cause damaging flooding around marine transfer stations which export the city's 20,000 tons of daily waste to remote disposal facilities. Yet these areas are among the most desirable development sites in one of the planet's most vibrant megacities. Students will develop design theses exploring how these environmental imperatives can be addressed by harnessing the economic opportunities of development.

Challenge

This studio will challenge the student to address the full range of complex, interrelated design issues of a new major marine transfer station combined with large, dense mixed use program. Students will explore structure, infrastructure systems and building morphology on a grand scale, with major new program integrating with already existing buildings, systems and environments.

Foundation

Students will explore concept & design methodology through a lens of 20th century & contemporary conceptual theory and development strategies. Student teams will build a foundation of research into design speculations, studying successful and unsuccessful historic precedents from the futuristic visions of Antonio Sant'Elia through the unbuilt megastructures of Paul Rudolph and the contemporary theories and projects of Rem Koolhaas, James Corner | Field Operations, Bjarke Ingels Group and others.

Discussion

Studio discussion and design will primarily address;

- Massive Density & Complexity; design and context issues of megastructures, supertalls, groundscrapers, symbiotes/parasites etc.,
- Theory & Concept; historic, contemporary and futurist theories and rationales for the development of megastructures.
- Sustainable Systems Integration; transportation, water conservation/recycling, power generation, waste upcycling, and other systems.

Students will test and expand their conceptual and technical design skills in all key areas, with particular focus on exploring



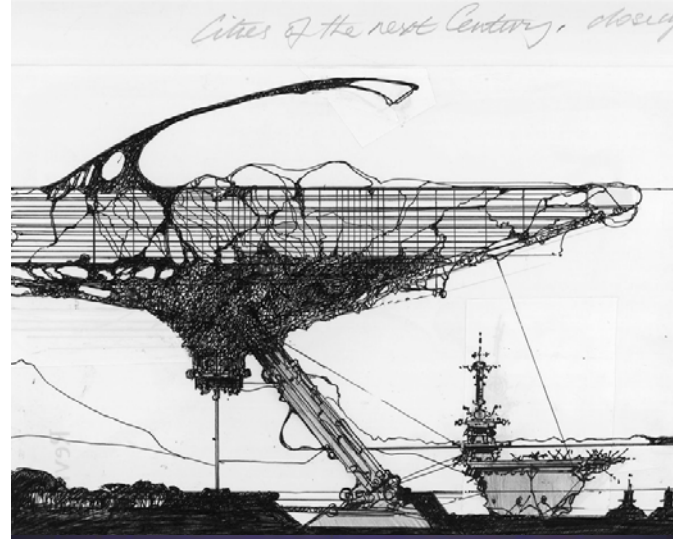
issues arising from architectural, structural, infrastructural and mechanical systems at very large scale and extreme complexity.

Site +Program

The site is the Gansevoort Peninsula/ Hudson River Piers 52 & 53. Students will develop the program to create a unique project which may, or may not, be related to other student projects.

Lectures

Studio lectures will address relevant architecture and urbanism theory from 1920s Futurism and Post-War Modernist Urban Design to Rebuild By Design and current planning & development trends, as well as iconic designs of New York and local precedents including the Time Warner Center, Riverside South Master Plan, the seminal 1969 Plan for New York City, Central Park, and the Gridiron Plan.



Media

This studio will emphasize the use of hand sketching, physical models and iteration of design, research and analysis at varying scales and degrees of resolution. Students must also expand their mastery of digital and parametric tools for both analysis and conceptual/ morphological design development.



IMAGE CREDITS
 page 1
 Marsha P. Johnson (Left) and Sylvia Rivera (Right), Gay Pride Parade, New York City, 1973
 Photo by Leonard Fink,
 page 2
 TOP to bottom
 Untitled, ca. 1980-1989, Photo by Jeff Cowen
 BIG U proposal for Manhattan by BIG Architects
 Pier analysis, James Corner Field Operations
 Pier for Barry Diller 2020, Thomas Heatherwick
 page 3
 TOP to bottom
 Hudson River NY, Google earth recolored Hal Hayes
 Cities of the next Century, Archigram 1964
 Bronx Digester Eggs 2013, Ennead Architects
 page 4
 aerial view proposal , New Jersey NY

Propinquity_

We will begin by stepping back a few decades to explore the exceptionally vibrant social and cultural milieu of the lower west side of Manhattan in the late 20th century, which was first pioneered by primarily Black and Latinx LGBTQ people. This marginalized community found a safe space at the margins of the island, largely overlooked by the mainstream society which rejected them and unpatrolled by the police who mistreat them. They embraced the juxtaposition and interaction between the “unsightly” light industrial waste disposal and meat packing uses, the remote waterfront location, and the large, flexible loft spaces. They patronized the all-night eateries serving the blue-collar workers, some of whom became unexpected friends and allies, and established the first semi-permanent venues supporting the nascent drag and Ballroom scenes, which flourished.

As awareness of this dynamic demi-monde filtered through to mainstream society, they were followed first by night clubs and restaurants and then by galleries and venues catering to artists, celebrities and wealthy “high society” who were drawn like moths to a flame. Slowly at first, and then with increasing rapidity, real estate investment followed these “trendsetters”, and as property values rose the traditional uses and rich counter-culture were supplanted by development largely for the ultra-rich. The High Line, a linear urban park repurposing the elevated railroad that served the industries, was conceived at this time; it is a paradox that a concept which glorified a relic of the industrial past and embraced the preservation and repurposing of its physical legacy, much as the original pioneers had done, was the nail in the coffin of that demi-monde that was the midwife of its creation. Development has become increasingly and primarily comprised of luxury residential towers designed by a Who’s Who of international starchitects.

The proximity of both leisure and residential users, and the aversion of those users to the process of waste disposal, was the death knell for the Department of Sanitation’s Gansevoort Marine Transfer Station, occupying a waterfront site coveted by the Hudson River Park, which was itself assembled from pier structures formerly supporting Manhattan’s shipping industry, which were completely relocated to industrial and low-income areas of Brooklyn and Newark. The Gansevoort’s garbage destruction facility, marine transfer station, salt shed and maintenance garage have already been demolished, and a proposed new marine transfer station handling all of Manhattan’s recycling is now in jeopardy.



Methodology Weeks 1-5

Students will begin work in teams in an intense and challenging pre-design exercise to understand the site, learn about similar projects from the past, current development and future possibilities, determine minimum and maximum development requirements, conceive several alternative design frameworks and common basic requirements for individual work to follow.

- Analyze the existing site and identify key design opportunities & issues .
- Develop alternative programmatic and performative goals.
- Learn design and planning methodologies to effectively address complex projects.
- Balance the needs of project parameters as an interdependent network of autonomous systems.
- Professionally document their individual and group work and for publication.

Methodology Weeks 6-10

Students will conceive and define unique project/research proposals, building on the group work and alternative concept frameworks from the first third of the semester. Collaboration between pairs or groups of students to create a hypothetical development context for the entire site are encouraged. Individual projects will be further defined from proposal, development and confirmation, and may be based on the entire site and program or distinct separate components.

- Form collaborative groups of students with compatible design and development goals and priorities.
- Individually define a concept design for the project in concert with your collaborators’ development of their project definitions based on the complex site, context and programmatic design parameters.
- Develop & evaluate your concept definition with individual and groupbased project goals and criteria.

Methodology Weeks 11-15

Students will fully develop their project concept designs.

- Explore alternatives and iterations at all levels of concept and design development.
- Prioritize design development by conceptual hierarchy, with the overall design developed conceptually, key elements developed schematically and iconic/seminal spaces designed in detail.
- Professionally document their individual and group work for publication.

THE OTHER SIDE OF THE TRACKS

housing, territory, & othering

CHRISTINE MONDOR

Hence the primary importance for using this time of imposed isolation in order to »describe«, initially one by one, then as a group, what we are attached to; what we are ready to give up; the chains we are ready to reconstruct and those that, in our behaviour, we have decided to interrupt.

- Bruno Latour, *Where to Land After the Pandemic?*



Cities consist of simultaneous and contested territories where the very act of building community precipitates an act of excluding that which is the other. This studio, named Other Side of the Tracks, will define and challenge the condition of otherness that is inherent in or created by urban environments. We will look through the lens of housing design and policy, extract the positions afforded by capital, and will explore the relationships that arise through the design, creation, stewardship, and control of dwelling units and settlements.



IMAGES

[left] Sign, German welcome culture, *seven resist*

[above] Floodplain housing scenario, *evolveEA*

[below] Species proxemics.

context

Territory is marked through physical elements, acts, or occupation and is distinguished by areas of agency and control. Architecture is an enabler of these territories, marking boundaries, edges, centers, and conditions. Architecture directly or indirectly expresses values and through language of space and form.

While focused on the local, this studio is shaped by conversations on globalization, power, identity, and resources. We will look to contemporary critique of spatial production, such as Latour's artistic Critical Zone collaborations, as well as the lived experiences of local housing advocates to relate a theoretical framework to tangible actions.

The studio setting is a river town that is separated from its shoreline by railroad tracks and has little access or relationship to the river. Over a mile of riverfront industrial sites were recently vacated and raised the possibility of new construction. Without critical examination, the river amenity and the cost of new construction sets up a somewhat predictable dichotomy between the haves and the have nots, each on their own side of the tracks.

propinquity

The department ASOS theme, propinquity, is applicable to both our subject and our methods. Proxemic theory describes the physical and personal territories that we create and is the foundation of how we control space and construct identity. We will build on a theoretical study of proxemics, use situational awareness of current events, and take advantage of our individual locations, whether on campus or remote, to develop analysis methods that inform our housing proposals and future projects.



program and methods

This studio will use the program of housing, civic spaces, and infrastructure (specifically stormwater infrastructure and hydro generation), to challenge the expectations of conventional development. We will have a primer on proxemic theory and analysis methods and we will study housing form logics as they relate to social, economic, and ecological influences. We will look to current events and our diverse situations to learn, and will contextualize short term spatial patterns within the long term evolution of spatial use and development.

Through readings, discussions, and a series of exercises, we will examine questions such as:

For whom and by whom is housing being created?

How is identity established and reestablished?

What role does desire play in defining the urban program and structure?

How do architecture and spatial practices contribute to (in)equitable relationships?

What level of indeterminacy is needed for the design of infrastructure versus the design of architecture?



Select readings:

The Problem of Othering: Inclusiveness and Belonging. **Powell & Mendenian**.

Journal of Architectural Education (JAE). Othering. **Theodore & Southcott**, eds. 74:2.

10 stories of collective housing: graphical analysis of inspiring masterpieces. **Fernandez Per, Aurora.Vitoria-Gasteiz**, a+t architecture Publishers, 2013.

Home: a short history of an idea. **Rybczynski, Witold**. 1987.



IMAGES

[[left] C. Th. Sorenson. Naerum Allotment Gardens, Denmark. 1948.

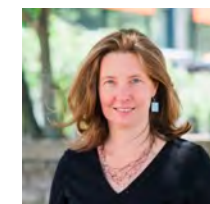
(left) C. Th. Sorenson. Circular House Settlement, Brøndby, Denmark. 1963

[[left & above] Lundgaard & Tranberg. Student housing, Denmark. 2006.

learning outcomes

In addition to skills and competencies expected of ASOS studios, students are anticipated to:

- apply proxemic theory to the analysis of spatial definition of current events; through the speculative design of housing; and through analytical writing or a narrative to support their work.
- develop analytical methods related to occupancy, territoriality, and behavior theory, applicable to housing and other uses.
- be able to identify key drivers of urban housing, including program, materials, context, economics, and policy.
- challenge the designer's role in the creation of domestic space in the context of agency, control, and definition of identity.
- develop experimental methods of representation and analysis to show quantitative and qualitative understanding of their subject and will explore the generative possibilities of analysis methods.

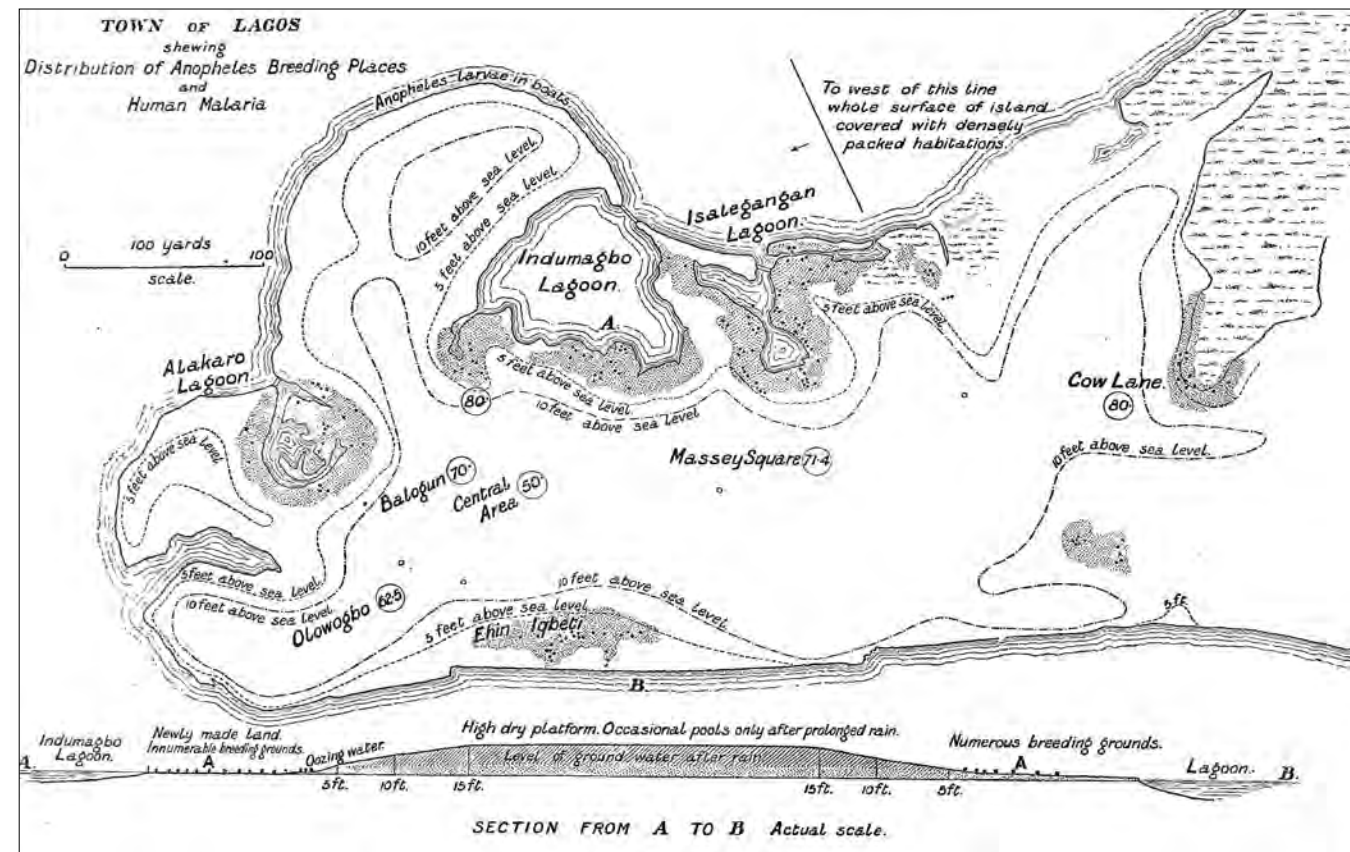


LANDSCAPES OF DISEASE AND HEALTH

NIDA REHMAN

'To a great extent the history of architecture is an attempt to control contamination and its more or less subtle racial codings.'

[Eyal Weizman 2020](#)



Description

This advanced research-based studio will critically interrogate the role of architecture as an actor in the histories and geographies of disease. Architecture has long been imagined and deployed in efforts to [control and contain](#) the transmission of pathogenic agents (and the human and nonhuman bodies that might carry them). In the histories of hygienic modernity and (colonial) urban planning, the design of sanitary spaces and infrastructures, such as cordon sanitaires, cantonments, parks, modernist towers and so on, has often relied on [social and racial constructions of purity and filth](#) and on a racialized calculus of "[valued and disposable lives](#)". More broadly, the design and form of the built environment is a crucial factor in the [transmission of viral infections](#) and in producing [highly uneven landscapes of vulnerability](#) and [exposure](#). Yet, we may also consider how spatial formations of [care and community wellbeing](#) are being leveraged within efforts to transcend the racialized and classed enactments of biopower. Drawing from the history of medicine, medical anthropology, and critical geography the studio will explore how vectors, miasmas, quarantines, disease surveillance, hygiene, social distancing, and containment become architectural and how they are entangled in housing policies, urban planning, infrastructure development, architectural modernism, territorial delineations, spatial aesthetics, and landscape designs. Students will be asked to closely study the social histories of disease in selected cities, to identify particular challenges relative to the ongoing COVID-19 crisis (in light of these histories), and to take positions in response that foreground possibilities for radical care, health justice, and ecological resilience.



Above
Social distancing in Islamabad, March 25 2020. [Source](#).

Left
Map of Lagos 1900. Source: Reports to the Malaria Committee, Third Series, 1900

Propinquity, porosity, and placement

SoA's Fall 2020 ASOS theme, "propinquity", quite precisely captures the spatial relationships that concern epidemiologists. Patterns of infectious disease transmission are reliant on the proximity and porosity of human and nonhuman bodies as agents, hosts, or vectors of disease. Distance and [disentanglement](#) are thus key instruments of public health. Yet the term "social distance", while seemingly as novel as the virus that has given it contemporary significance, points to the ways in which epidemiological and medical practices have always been [embedded in political histories of class and race](#). We will thus pay close attention to the ways in which hygienic borders are inextricable from social borders, as forms of [separation or exclusion](#), as well as from territorial borders, which determine the capacity of certain populations (and viruses) [to move freely](#) versus others that are [already always contained](#).

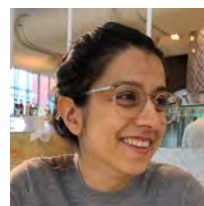
Issues of proximity and distance are also significant to the culture and methodology of the studio. We will strive to take seriously the physical, emotional, economic, and logistical challenges that its members might be facing (individually and collectively) at this time. Given the impossibility of grounding the studio's concerns and program in a site which we can visit collectively and the high likelihood of everyone not being able to meet face to face during the semester we will strive to formulate a methodology attentive to our own (dis/mis-)placements and the necessity for forging new forms of togetherness.

Means and methods

Working at a distance from each other and most likely sequestered in more or less private spaces, we will need to rethink the notions of site and program in this studio. Rather than a predefined action or intervention in a particular place, the studio will engage in critical textual analysis and research weaving them into the creative and visual practice of the studio as a methodological stance. Alongside theoretical literature, each student will be assigned a book on the urban and social history of disease in a particular city, and will be asked to reconstruct "sites" through their close reading of stories, events, and spatial histories. By conceptualising architecture broadly and non-exclusively, students will delve into their readings of these sites to consider the ongoing urban and spatial reconfigurations in light of COVID-19 and develop design responses that help envision and strengthen community and collective infrastructures for health.



Left
Square 2, Novena, Singapore, 30
June 2020. Photo by Berny Tan via
[@tape_measures](#)



Learning outcomes

To demonstrate an understanding of key arguments, concepts, and theoretical positions on the historical, political, and spatial relationships of architecture and disease;

Build a critical awareness of the uneven socio-ecological implications of the design and form of the built environment;

To critically assess existing architecture and urban design strategies that address the intersection of issues such as epidemiological dynamics, disease ecologies, care and health geographies, housing and rent, decarceration and abolition, density, infrastructure, public space etc. in response to plagues and pandemics;

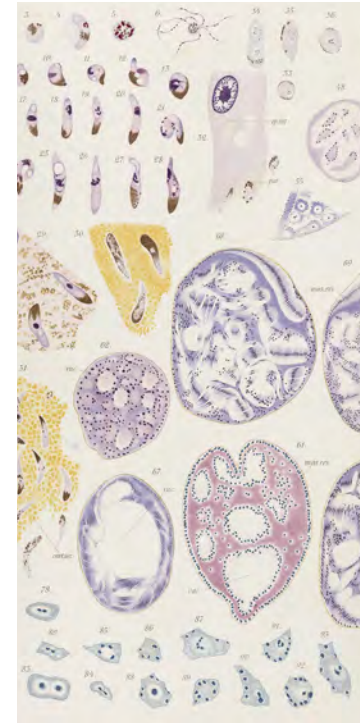
To explore experimental methodologies for reading, representing, drawing, and proposing action in selected sites that are attentive to the political ecologies of disease in historical and contemporary contexts.

Working remotely and with care

Studio culture has long been premised on the assumption that designed products reflect the process. While correct, this understanding has also contributed to habits and behaviours that create inordinate amounts of physical and mental stress, exclude less privileged groups, and maintain an ableist, sexist, classed, and racial hierarchy in studio spaces. Just as we try to build a socially-distanced but rich space for collective thought, conversation, and work, we will remain mindful of the health and others needs of all members of the studio. We will strive to recalibrate and unlearn our ingrained expectations about production and to re-center our shared responsibilities towards each other and our wider communities.

Inclusion, citation, positionality

Building on SoA's [renewed commitments to social justice and inclusion](#), in this studio we will pay close attention to issues of racism, social injustice, and coloniality (both in the spaces we study and in the ways that we do it). We will be deliberate in our citational practices to recognise and celebrate the work of scholars, designers, and planners normatively excluded in the production of knowledge and space. We will observe critical reflectivity towards our own intersectional privileges and positionality when engaging with the studio's themes, while creating a collective space for conversation that is respectful of each other and those whom we engage.



Above
Illustrations of parasites that cause
malaria. Cross-section, by Giovanni
Battista Grassi, 1901. Source:
Wellcome Images

Below
Unknown author "Bamboo House
Supports Sealed With Cement to
Prevent Entrance of Rats (Manila
Plague Campaign)". Source: [Visual
Representations of the Third Plague
Pandemic](#)

Radical F O O D

from the global to the gut

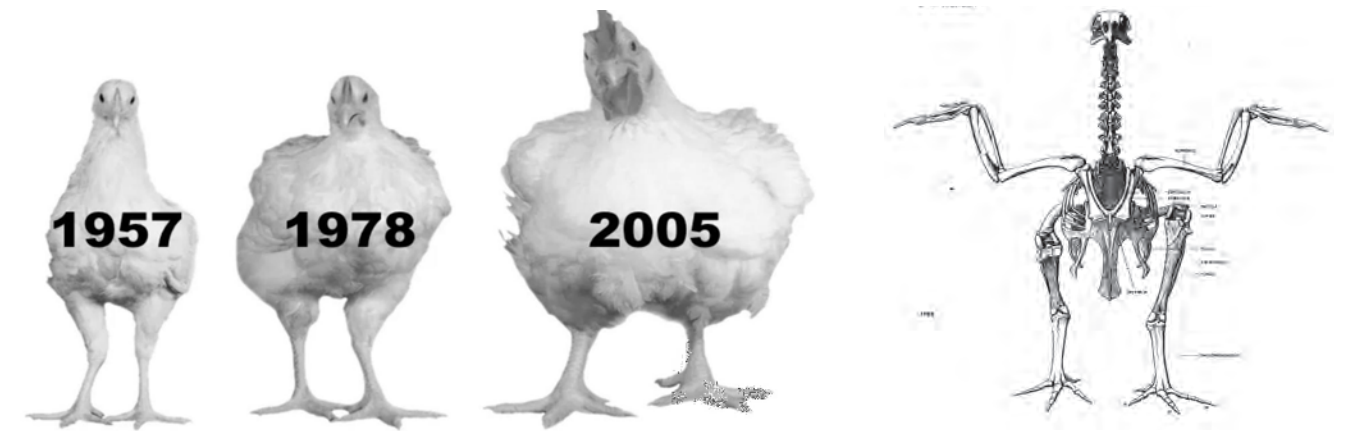
SAROSH ANKLESARIA

The way we eat food has changed more in the past 50 years than in the previous ten thousand.

- Michael Pollan, *Food Inc.*

With 23 billion alive at any one time, humans have made engineered chicken the most numerous vertebrae (not just bird) on the planet – a poignant symbol of the Anthropocene. Its distinctive bones undoubtedly become fossilized markers of the time when humans reigned the planet.

- Carys Bennet, *Broiler Chicken as a signal of a human reconfigured biosphere*



Top
The Chicken of Tomorrow Project
Above
Meat Dress, Diller Scofidio + Rendfro
Left
Nest We Grown, Shigeru Ban

Background

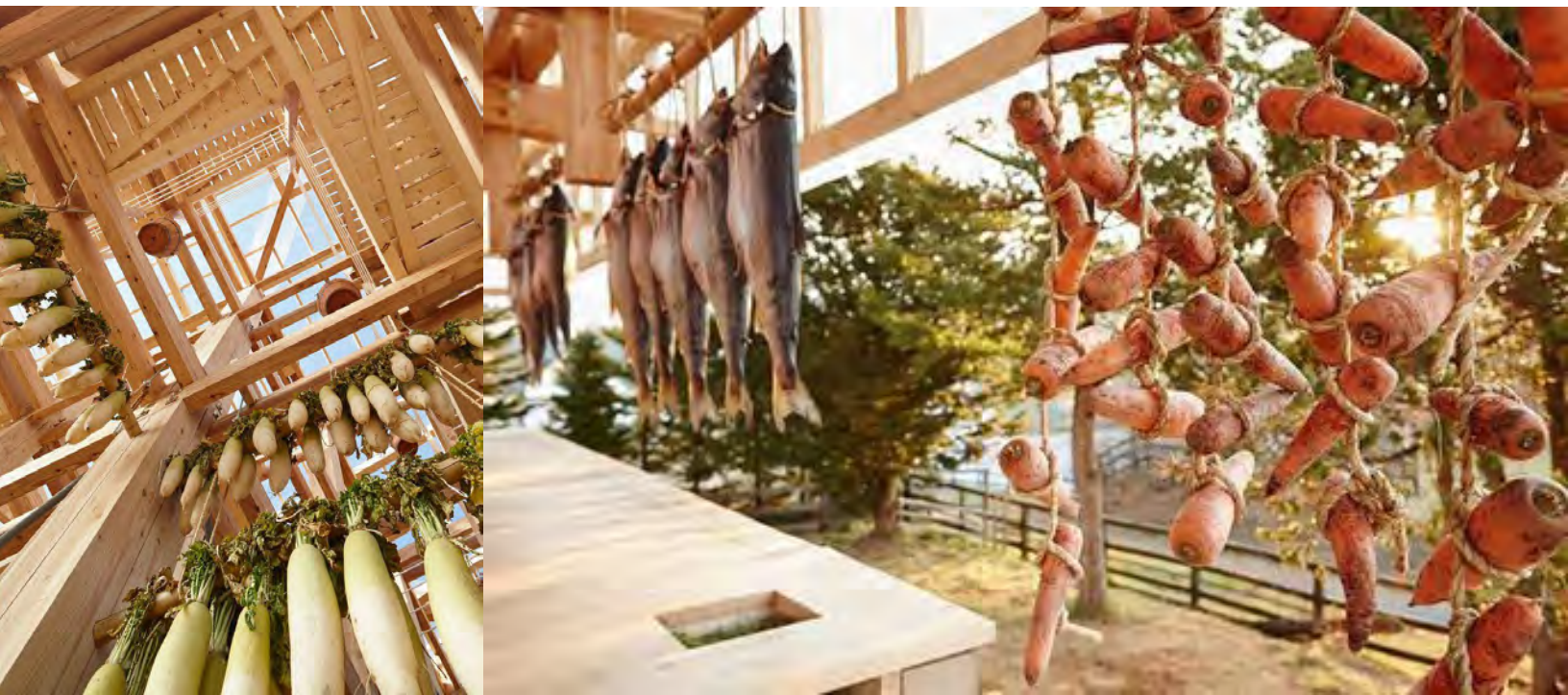
The architectures in service of the modern-day industrial agriculture are paradigmatic constructs of the Anthropocene. The literal and ontological entanglements between the two implicate ecology, technology, territory, the farm, the city, inequity, food and the gut. The global food production industry or big AG is an incredibly unsustainable practice from production and transport to consumption and waste. The abundance produced by industrial agriculture, its promise of endless food security, comes at a steep cost to the global climate, ecological cycles, biodiversity, rural communities, and plays a central role in the hegemonic influence humans now wield over the planet. Industrial agriculture covers 40% of the planet's inhabitable land, accounts for 70% of all freshwater use, and produces more greenhouse gases than any other human activity.

Yet the dystopia of planetary agriculture has its beginnings in the techno-utopian project of modernity. Both modern architecture and industrial agriculture were both sold to the public as technological miracles. The factory and the grain silo are embedded in modernism's romance with the machine and its aesthetics. Mechanization invented or transformed an entire typology of architectures related to the farm: the ancient granary became the grain elevator; the barn became the factory shed and the dairy plant; the slaughter house became the livestock factory, meat processing plant or Concentrated Animal Feeding Operations (CAFOs).

If the industrial-agricultural complex at the turn of the century was celebrated and fetishized as the technological sublime, inspiring modernist architectures, it has now gone completely missing from accounts of contemporary architecture and visual culture, relegated to a private, censored realm of production, aided and legalized through "Ag-Gag"

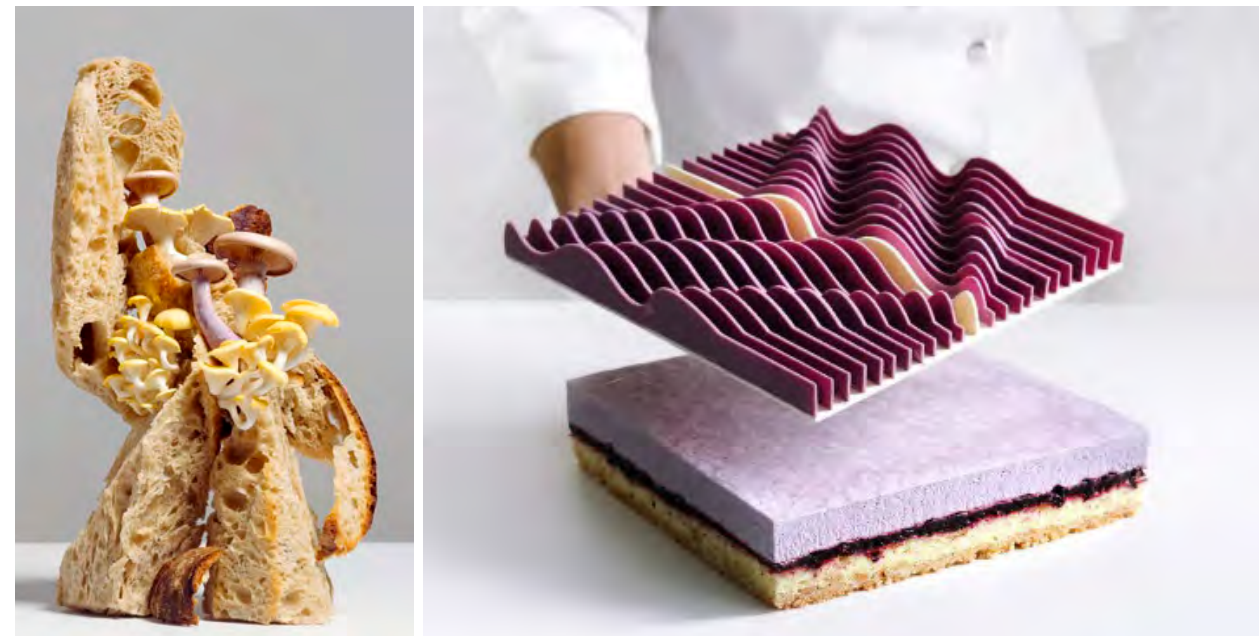
Privacy_

What modes of sociality exist around the production, preparation and consumption of food and how are these expressed across a scalar gradient of privacies - from the gut to gustation, from the pantry to the communal kitchen? How does architecture, foster, violate and transgress these?



Context

Pittsburgh offers a rich landscape to investigate the socialities of food for a dying planet. Nearly one in seven residents of Allegheny county are food insecure, which means that they do not have access to enough food to lead a healthy, active life and the prevalence of food deserts forces them to make poor choices that hugely affect their long-term health. Yet, Pittsburgh also has an extremely vibrant food scene. It was the 2019 Food City of the Year and home to some of the most cutting-edge research on food systems, agriculture and artificial intelligence. The studio will plug in to and collaborate with these resources, making connections with non-profits that operate in the Allegheny county, like Just Harvest and the Greater Pittsburgh Community Food Bank.

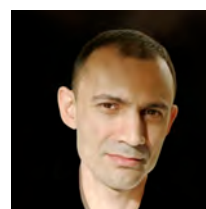


Learning Outcomes

1. to critically examine architecture as a manifestation of social, ecological and planetary consequences, especially in its relationship to agriculture and food.
2. to consider the homologies between food systems and architecture - from the sensorial to the social; considering energy, reuse, equity, circularity, degrowth.
3. to develop a speculative agenda for a project that stitches together local, technological and hybrid modes of considering the socialities of food across scales.
4. to gain familiarity with the writings of Bruno Latour, Donna Haraway, Gayatri Chakraborty Spivak, Judith Butler, Sara Ahmed, Timothy Morton and others, in framing questions of ecology, feminism, planetarity and their implications for design research.

Far Left
Food sculpture, Artist Ewan Frodin,
Above
Geometric, Kinetic Tarts by Dinara Kasko
Top Right
Modular Chocolate, Flavor mixing concepts
by Universal Favorite
Right
Regen Village, Effekt Architects

A NOTE ON INCLUSIVITY
The studio is committed to draw upon references from a majority of BIPOC, female, subaltern and post-colonial practices.



Statement

The goal of the studio is to unpack the analogous relationships between the futures of food systems and architecture, to situate these as counter arguments to the industrial-agricultural complex and use the context of Pittsburgh as a laboratory for these experiments.

The studio will explore the principles of kinship, circularity, degrowth and planetarity, to ask what new rituals, practices and architectures can emerge around the socialities of food.



CLOTHESLINE BORDERLINE

decolonizing the body

MARY-LOU ARSCOTT

'to foreclose that vulnerability, to make ourselves secure at the expense of every other human consideration is to eradicate one of the most important resources from which we must take our bearings and find our way'

Judith Butler, Precarious Life, 2006



Background

This studio will examine the politics, economics and sustainability of the protective layer of textiles that we place on our human bodies. There are alarming statistics about all aspects of the clothing industry; the mountains of discarded clothes, the industrial/financial complex exploiting low paid workers, the oceans of water used in agricultural systems and manufacture supporting unstoppable demand for new fibres, the pollution of water courses in bleaching and dyeing of textiles. The studio will collectively examine the current research on these issues from a global perspective. Additionally the studio will look at the history of fabric manufacture in relation to colonial power and with reference to theoretical texts by J. Butler and S. Ahmed, will establish principals to shape attitudes towards our bodies and to the cleaning and repair of its coverings. The Clothesline-Borderline Studio takes on a radical analysis of attitudes to domestic life, to gender and to capitalism.



Privacy_

Privacy is the overarching framing for all the ASO studios in the S21 semester. It is a highly influential border between the visible and the unseen, private aspects to life. Culturally privacy is negotiated or denied through a relations of power and wealth. Why are bathroom stalls so short in the USA? How do we understand the dynamic where young women in East Africa are coerced into selling sexual favors in order to purchase feminine hygiene products and so be able to attend high school? Is the observation while washing and hanging out bedsheets or inner garments a territory for revelation and presumption.? The framing of privacy will be examined in relation to the construction of taboo and shame. With this rich reference the studio projects will contribute to the colloquy of ideas at mid and end of semester.



Context

This studio will evolve an analysis of the action of laundering domestic textiles with reference to wide cultural histories. The research will also be supported by the life experiences of members of the studio. Variable global and seasonal availabilities of water, sun and wind will generate a series of potential strategies in a micro spatial examples. A range of design typologies will be described, referencing the political nuances of collectivity and privacy, social equity and ecological impact.

Left
Laudrette, Los Angeles 2015
Top
Dyeing process, Silk and Willow, New Paltz, New York, 2020
Below
Werner Bischoff, Silk dyeing, Kyoto, 1951

Program

The design proposals in response to the examination of the topic of laundry will be developed with each student individually. The design could be in a fictional context or engaged in a real scenario. The proposition could range from a foundational view on dressing (clothes design) or devising a laundry system (social/building design) or engage in a manufacturing or technical innovation. Whichever focus is used, the outcome must be evident of a critical position, be analysed in explicit political, theoretical and environmental terms.



Above
Dibyangshu Sarkar, 2012 A Hindu pilgrim
dried saris in the wind, Sagar Island, West
Bengal

Learning Outcomes

1. to demonstrate a critical understanding of the interrelation of global patterns of contemporary and historic clothing markets; including raw material production, labor supply and energy consumption.
2. to use an ecological framing for a typological gazeteer of the details of laundering.
3. to develop a speculative proposition which uses social/material/cultural systems design, to pose an innovative and ethical argument.
4. to be familiar with the theoretical positions from the writing of M. De Certau, J. Butler, b. hooks and A. Lorde and be able to cite the counter positions embedded in your own design proposition.



INCLUSIVITY
The studio is committed to drawing references from at least 50% BIPOC and female writers, artists, architects and thinkers.

Production

This studio focuses both on the broad implications of the clothing of our bodies as well as the patterns of daily rituals. The designs produced within this framing might be micro or macro, might be gestural, systemic or structural. The studio will ask for experimental work in written, drawn, animated, stitched, woven and modeled forms.

Studio environment.

The topics that we're covering in this class are often difficult, not just intellectually but emotionally. While we expect there to be rigorous discussion and even disagreement in the course of our class discussions, you should engage in discussion with care and empathy for the other members in the studio. Critically examining and assessing our most basic assumptions and values is one of the tasks of the architect. You can have the courage to face the uncomfortable and we will work together to establish a classroom environment that is supportive of taking these intellectual and emotional risks.



Above
Kheng, Bamboo clothes lines,
Singapore, 2010

Below
F. Trovatten, Rooftop in Puebla City,
Mexico, 2018



M.ARCH THESIS

Graduate Independent Thesis Collective Studio

HEATHER BIZON

“Disposition, in common parlance, usually describes an unfolding relationship between potentials. It describes a tendency, activity, faculty, or property in either beings or objects—a propensity within a context.”

Keller Easterling, Extrastatecraft



Graduate Thesis, Master of Architecture

An architectural thesis is a proposition. A proposition that results from a critique and re-examination of the role of architecture as a critical participant in the conditioning of (public) space. A thesis demands that the student take a position and have something to say, something to contribute to the ongoing discourse in the widening sphere of architecture.

In this studio, students are expected to engage and develop a wide range of interrelated capacities, including critical thinking, analytical writing and reflective design production; ranging from building construction, design research, emerging technologies and materiality, social issues, landscape, urbanism, spatial perception and methods of conceptual thinking.

Thesis culminates with a presentation and public exhibition of a holistically-researched architectural proposition. Marking the transition between academic and professional practices, the thesis project is an opportunity to define an individual position relative to the discipline of architecture.



IMAGE ABOVE
Alexandra Arènes, Atelier SOC
(www.s-o-c.fr)

IMAGE LEFT
Kacper Kowalski, *Secondary Effects*, 2005

Organization

The M.Arch thesis studio will be conducted to support each individual student's independent thesis through both readings, discussion groups, and collective exchanges. As a cohort, the studio will interrogate broader sets of collective questions that concurrently inform thesis research. Through a series of "Thesis Talks," students will reflect and collectively frame issues and topics relating to their theses. Outside critics and guests will be invited to participate and engage to encourage broad discussion.

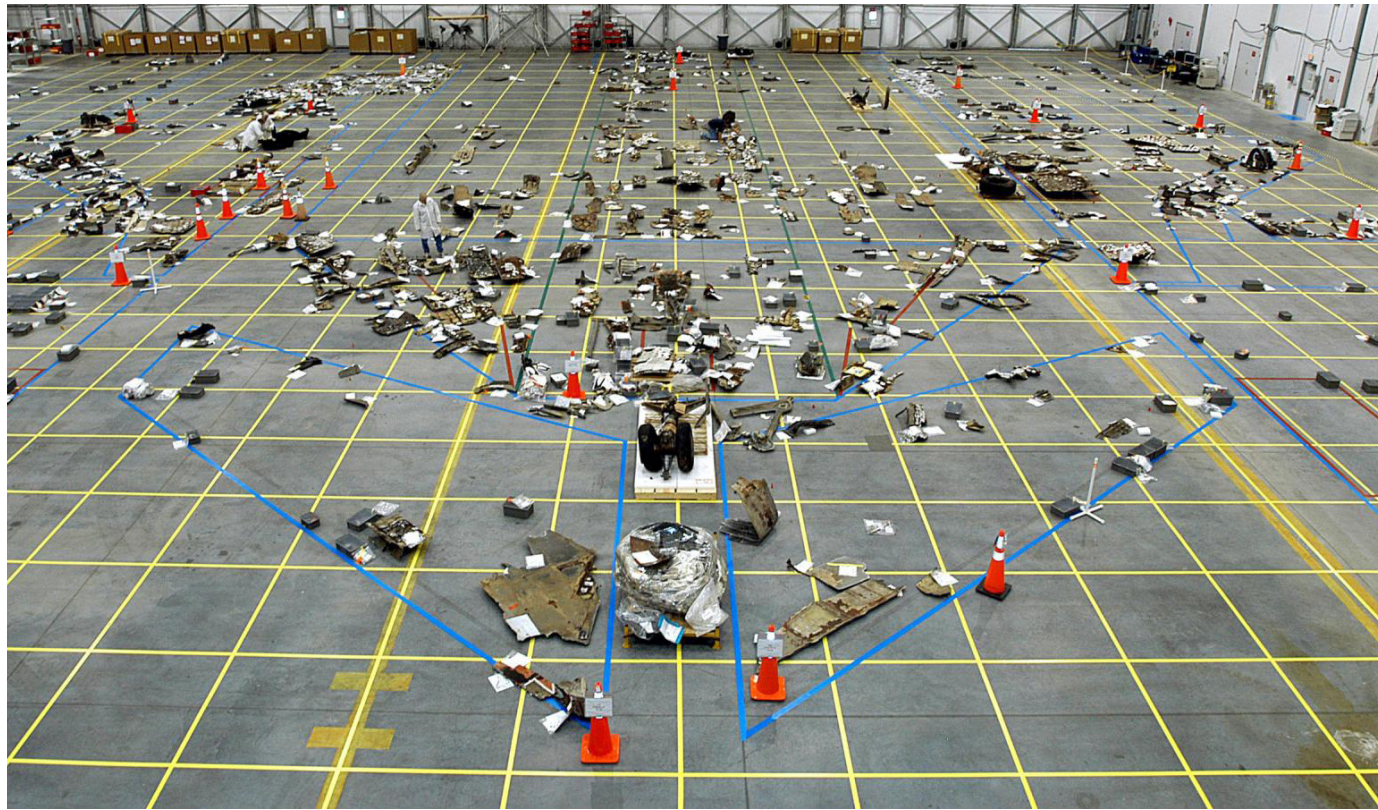
Design Research & Representation

Architecture is a cultural project that contributes to a developing understanding of how tradition and identity affect our built environment. An architectural argument is supported not only through the design and research, but through the expression of the idea through representation and presentation. As such, this thesis based studio will focus heavily on the representation of each student's thesis.

The thesis projects will be fully represented through sets of architectural representations. It is necessary for a cultural practice such as architecture to deeply investigate questions of aesthetics. How architects have made aesthetic arguments through a variety of different mediums is of crucial importance for the discipline of architecture.

Exhibition & Symposium

An architectural thesis demonstrating such creative understanding would be able to sustain critique at various levels of interpretation and enquiry. In a symposium-like forum to consider, debate, and dispute emerging questions in architecture, students will present and exhibit their thesis projects to the public. Students will articulate, propose, and defend their ideas and positions on architecture as well as engage with professionals as peers and colleagues.



Learning Outcomes

The course is designed for students to produce a semester long, studio based project. The course will hinge around the transition from the prerequisite thesis seminar to the articulation of the architectural argument into a design proposition.

- Articulate a clear argument; translate the design ideas into cohesive design based argument.
- Leverage verbal, written, and visual forms of communication to describe complex ideas.
- Transition research based design to projective design processes.
- Understand how the choice of design media, method and representations relates to your thesis topic.
- Development and execution of design methodology.
- Production of final materials for the Thesis Exhibition and Symposium.

IMAGE ABOVE
Hangar at Kennedy Space Center in Cape Canaveral, Florida, March 7, 2003, photo © NASA/Getty Images n NASA crash investigators place debris from the Space Shuttle Columbia onto a grid on the floor of a hangar.

IMAGE RIGHT, TOP
Philipp Schaerer, Bildbauten, 2012

IMAGE RIGHT, CENTER
Bernd and Hilla Becher, "Typologies"

IMAGE RIGHT, BOTTOM
Keith Krumwiede, Atlas of Another America: An Architectural Fiction



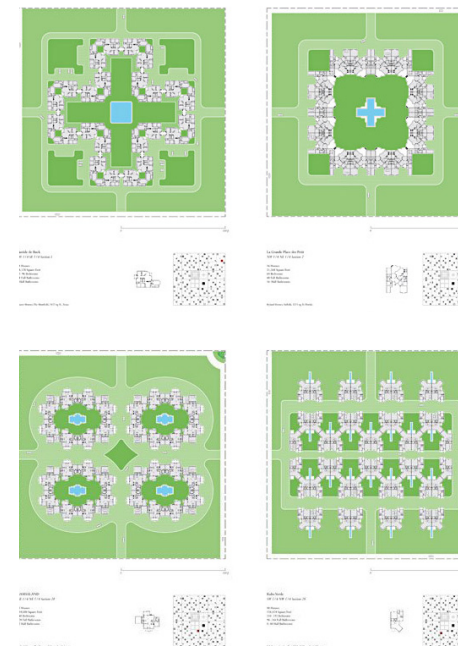
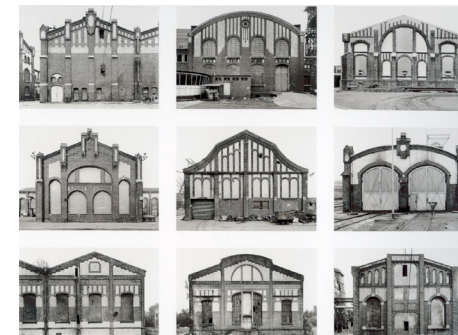
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Gage, Mark Foster ed.; Aesthetics and Politics; 2018



BArch THESIS

Critical Inquiries,
Observations, and
Provocations through
Architecture

SARAH RAFSON

“Choose carefully the site of rebellion.”

—Terence van Elslander

“Writing a thesis requires a student to organize ideas and data, to work methodically, and to build an ‘object’ that in principle will serve others. ... With time, a writer becomes more astute and knowledgeable, but how he uses his knowledge will always depend on how he originally researched the many things he did not know.”

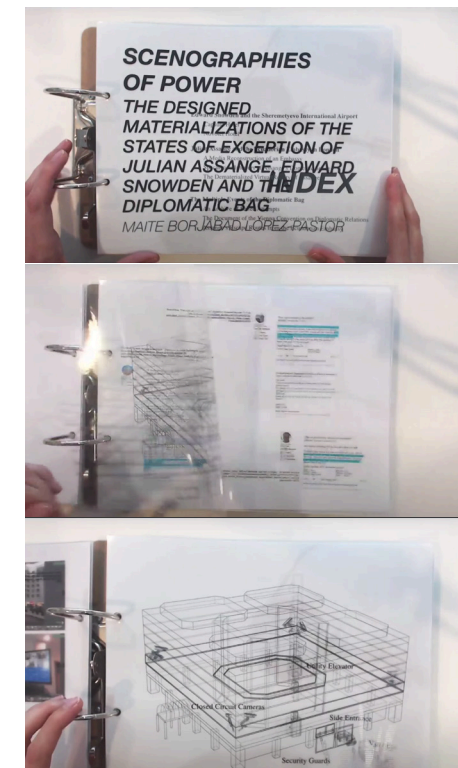
—How to Write a Thesis, Umberto Eco, 1977

Background

What is a thesis? There are many different answers to the question depending on who you ask.

This course is an opportunity to create a project entirely your own; original research through design. With guidance from a carefully selected group of advisors and mentors, you have the chance to deepen your engagement with architecture on your own terms, exploring a topic you are passionate about. Informed by your unique background and perspective, your thesis will contribute something new to the architectural discipline through a thesis book and exhibition.

Thesis projects may be particularly beneficial for students who wish to specialize or pursue further research after graduation, but for any student the studio will offer the chance to develop a project that you will carry with you throughout your career.



2016 thesis book by Maite Borjabad Lopez Pastor, for her project entitled “Scenographies of Power: The Designed Materializations of the States of Exception of Julian Assange, Edward Snowden, and the Diplomatic Bag.” Borjabad’s thesis, completed as part of the Critical, Curatorial and Conceptual Practices in Architecture at Columbia University GSAPP, examined how architecture materializes political apparatuses and legal frameworks. It later became an exhibition at the Casa Encendida in 2017.

Privacy_

All architecture is political. An important aspect of this thesis studio is understanding how your project engages with networks of power, and the many ways you as a designer might intervene. In regards to privacy, for example, how might an architect provide cover for the vulnerable or increase transparency of authority? In framing an impactful thesis, you will carefully examine a particular social, economic, political, or cultural context and articulate your stance on privacy as part of your intervention.

Context

In defining your thesis project, you are also defining a place for yourself in the architectural landscape. You are testing ways of working, and modes of engagement. To that end, part of the semester is devoted to reviewing existing design and research related to your chosen topic, including published writings and built work. You will critically reflect on the work of others, and also practice self-reflection in order to build a sense of creative autonomy. You will be working under the guidance of dedicated, trusted advisors, but the project is ultimately your own. Throughout the process of completing a thesis, you will strengthen your skills in writing, research, time management, organization, and communication, which will be invaluable throughout your career. At the end of the year, you will be rewarded by having completed a personally, intellectually, and aesthetically satisfying project that will also reap dividends after graduation.

Program

Class time will be devoted to:

- Developing a thesis exhibition and publication
- Desk critiques to ensure the timely development of your work
- Group discussions to review project milestones, requirements, and ideas
- Reviews with advisors and outside critics to refine design projects and exhibition design strategies
- Independent design, research, and writing



Learning Outcomes

- Refining research skills in architecture and design
- Developing and expressing a critical outlook and perspective on architecture practice
- Designing and installing an exhibition of work
- Writing, editing, and designing a thesis book that compiles the outcomes of the research and design process
- Sustaining and managing a long-term independent project
- Polishing verbal and visual presentation skills

The Installation view of Fulfilled, an exhibition and symposium at Ohio State University curated by Ashley Bigham and designed by Outpost Office in February 2020. The exhibition explores the role of architecture in a culture shaped by excessive manufacture and assuagement of desire—from warehouses, suburban homes, cardboard boxes, shopping malls, to shipping containers and material life cycles.



A selection of spring 2020 SoA BArch thesis projects. From top—Designing Pro-Compassion: Conceptualizing Destigmatized Spaces for Independent Abortion Providers (Alina Kramkova), Superimposed Landscapes: Adapting the Community Garden Model to Vertical Urban Landscapes (Cotey Anderegg), RE_VISION: A Resource for Community Organizers + Housing Advocates (Alison Katz & Alex Lin), too little TOO MUCH: Looking at Existing Sensory Therapy Practices to Inform Spatial Experience through an Expanded Definition of Access (Michael Powell). See more on the online thesis exhibition, "System Reboot?," at thesis.soa.cmu.edu.



Design/ Build

Thoreau cabin

LIZA CRUZE

“If you have built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them.”

- Henry David Thoreau, Walden



privacy_

Thoreau was the quintessential champion of solitude and is exceptionally quotable on the topic of privacy:

“I find it wholesome to be alone the greater part of the time. To be in company, even with the best, is soon wearisome and dissipating. I love to be alone. I never found the companion that was so companionable as solitude.”

“I had three chairs in my house; one for solitude, two for friendship, three for society.

“Nothing makes the earth seem so spacious as to have friends at a distance; they make the latitudes and longitudes.”

“I would rather sit on a pumpkin, and have it all to myself, than be crowded on a velvet cushion.”

TOP Balloon frame house, USA, c1900
LEFT Thoreau's cabin, Walden Pond, MA

Background

Chatham University's Eden Hall Campus, designed by Mithun architects and completed in 2015, was conceived as a showcase of sustainable practices. It is home to the Falk School of Sustainability & Environment and serves as a living laboratory with a hands-on approach to learning that is supported by its farmland, apiary, orchard, and greenhouses. The campus is net-positive, generating more energy than it uses, and has integrated water management and treatment systems.

Eden Hall is located on 388 acres of woodlands. It has long been part of Chatham University's Master Plan to build a series of small, off-the-grid “Thoreau” cabins to offer visitors a glimpse of the direct and essential experience of the forest that Thoreau describes in Walden.

Design/ Build

In this studio we will consider Thoreau's essay—so much of it about his own design/build experience—in today's context. Collectively, we will design a cabin to meet the high standards of sustainability set by Eden Hall. After a round of prototyping, testing, and design development, the studio will create a set of construction documents and shop drawings. Covid and funding allowing, we will begin building the cabin at mid-term, with construction continuing into the summer or fall as required.

Co-requisite

This studio has a nine credit co-requisite, 48-358 Cabin Building Systems, which is also open to CEE students. Its focus will be on the building systems for the cabin that is being developed in the parallel studio. Topics include energy performance (e.g. production, renewable energy systems, passive and active ways to achieve efficiency, and modeling); integrated structural and engineering systems (e.g. building envelope, water treatment and management, heating and cooling systems, and electrical and lighting systems; and sensing for monitoring and control.

The class will have a team-based format that is hands-on and lab-oriented rather than a seminar structure, and it will contribute directly to the build part of the studio.

IMAGES opposite
TOP Tham & Vindegard
MIDDLE Snohetta
BOTTOM Olsen Kundig



MWF 1.30-4.20



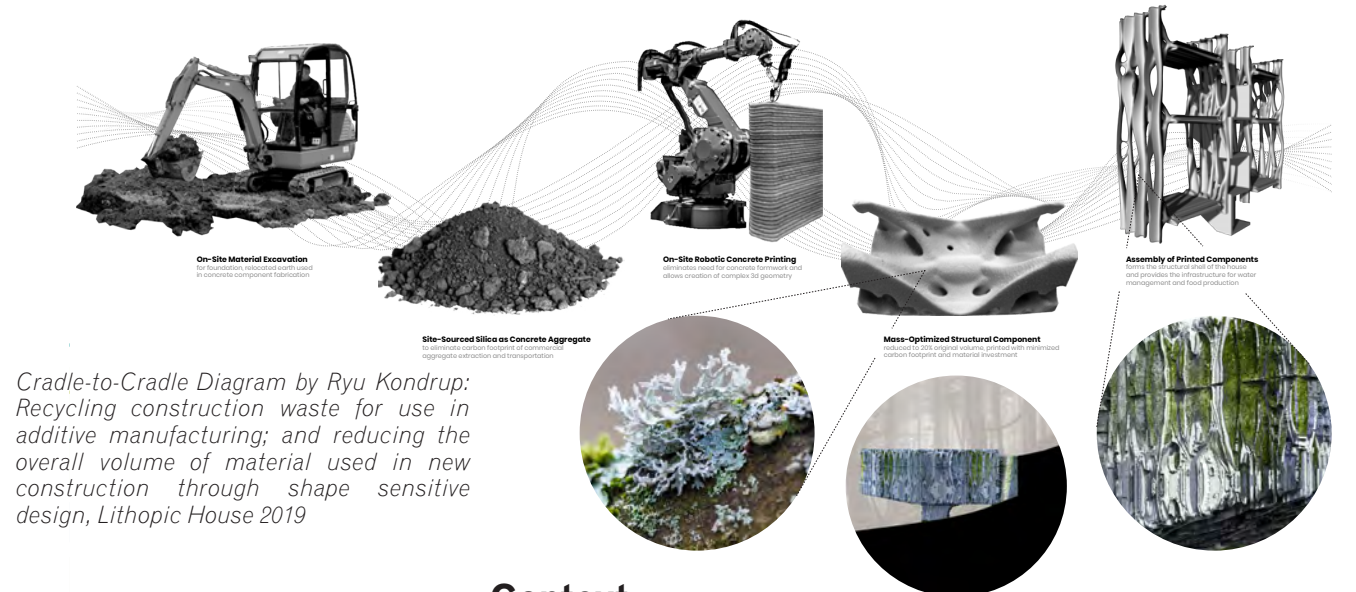
LITHOPIC co-HOUSE

*LITHOP = Living Stone
**HOUSE = "Here and Now" Competition

Ecologies of Shaping Waste and Earthen Matter Dana Cupkova

"The major problems in the world are the result of the difference between how nature works and the way people think."

Gregory Bateson



Cradle-to-Cradle Diagram by Ryu Kondrup: Recycling construction waste for use in additive manufacturing; and reducing the overall volume of material used in new construction through shape sensitive design, Lithopic House 2019

Context

Below: "The 1924 Ennis House, designed by Frank Lloyd Wright: The reinforced concrete blocks were all hand-cast on the premises using the site's own sand. Wright had a lifelong interest in periodic personal reinvention and in developing regional architecture while using local materials. His passion was closely tied to his ceaseless desire for technological innovation and, sometimes paradoxically, his interest in creating affordable housing for the middle class."



Above: "A small turf house in Fellabær, Iceland: Icelandic turf houses are the product of a difficult climate, offering superior insulation compared to buildings solely made of wood or stone, and the relative difficulty in obtaining other construction materials in sufficient quantities. Turf, or earth acts as thermal mass, making it easier to maintain a steady indoor air temperature and therefore reduces energy costs for heating or cooling."

The ambition of this studio is to examine architecture that inquires into embodied energy as a primary inspiration for formation of matter. Promoting a shift away from purely data driven rationales, the desire is to engage in the design framed by environmental ethics and sensory subjectivities as part of our collective aesthetic and ecological experience. Environmental aesthetics and aesthetics of nature are branches of philosophy that study appreciation of the world at large as it is constituted not simply by particular objects but by environments themselves. **Environmental empathy** is rooted in the concepts of otherness and difference. Design grounded in environmental empathy leads to more diverse paradigms in the redistribution of resources, new forms of co-shared domesticity, as well as social equity within our collective urban space, while being closely entangled within its ecological functions. We will seek to engage the notion of ecological attunement beyond the environmentalist paradigm, questioning the implication of binary logic between objects and environmental ethics.

Background

Building upon concepts of **material ecologies**, **circular waste-streams** and **synthetic natures** this studio is loosely based on the competition framework announced by The American Institute of Architects (AIA), Custom Residential Architects Network (CRAN) knowledge community: *HERE+NOW: A House for the 21st Century International Student Design Competition*. Students will be strongly encouraged to enter their studio project for the competition. Administered by the Association of Collegiate Schools of Architecture (ACSA) and sponsored by AIA CRAN, this program is intended to provide architecture students, working individually or in teams, with a platform to

explore residential architecture and residential architectural practice:

“According to the US Census, over 920,000 units of single family housing were completed in 2014. Many of these houses were built speculatively, as a generic prototype independent of context. Historically, Residential Architecture has represented a direct expression of culture and context, with local, vernacular elements informing the stylistic preference of the time. While the exterior of a house presents a more individualized image of its owner(s), the underlying design elements speak to broader cultural ideas of domesticity and family. Technological innovation, both in materials and systems, continues to advance the level of energy efficiency and resiliency in homes designed and built today. This competition challenges students to envision a house for HERE+NOW: informed by context, culture, and vernacular, but fully embracing 21st century technology and ideas of domesticity.”

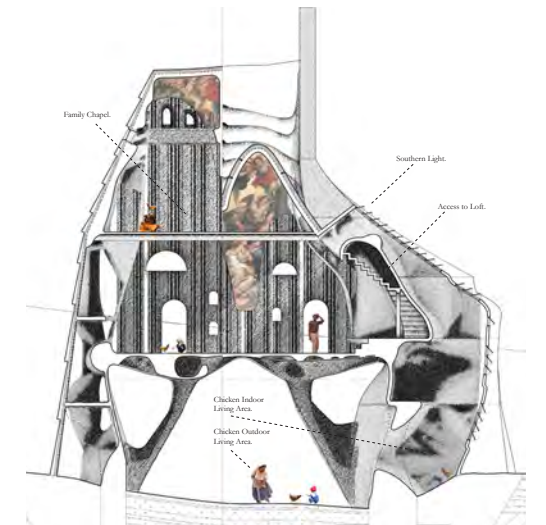
Program

Lithopic House is a co-House. It is rooted in concept of entanglement between shared ecological, social and spatial systems. Lithopic (Living Stone) co-House studio will negotiate physical prototyping with digital environments, while considering material ecologies of earthen composites central to design. Grounded in a potential of construction waste recycling through direct binder-jet printing this **cradle-to-cradle** method would reduce CO2 levels by reducing the volume of new architectural materials, as well as offset waste streams heading to industrial landfills. Shaping printable components for minimal material use aligned with structural and ecological potential is coupled with a desire to integrate new landscape and biomass directly into the architectural form, function and experience. Lithopic co-House will investigate the role of shape-factor in formation of architecture conceived out of local soils and granular waste-streams. The goal is to explore coupling of thermal pathways



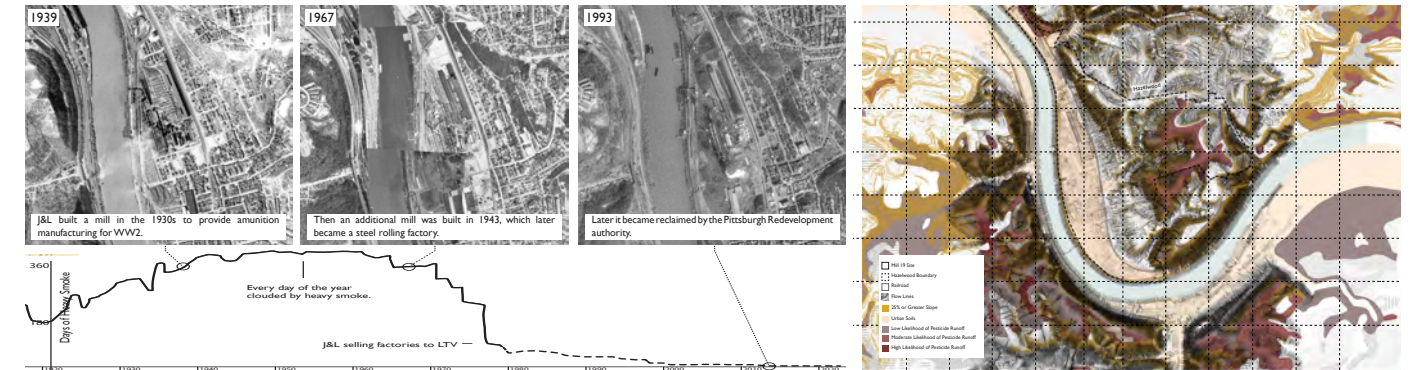
Above: (a) Alexander Wang + Longney Luk with a modular plug-and-play prototype of a sand print by Gil Jang; (b) Diagram of landscape integration strategy for Chicken House by Longney Luk and Louis Suarez, Lithopic House 2019
Left: GAN strategy in search for features that enable biomass integration into architectural form.

with biomass in the design of architecture. This studio will engage in computational shaping techniques relative to architectural component strength, structural flow and overall ecological potential. Such workflow is based in research into embodied energy of recycled construction waste that offers cues relative to volume to shape distribution of the composite material through use of additive manufacturing. Early state prototyping will lead into developing a specific design strategy for a house.



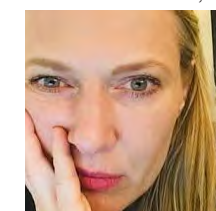
Chicken House proposal and component shaping strategy by Longney Luk and Louis Suarez, Lithopic House 2019

Hazelwood Site History and Pollution Patterns



Lithopic co-House will find its home within the vertical topography of Pittsburgh's neighborhood Hazelwood, which is prone to frequent landslides. Along with shifting and contaminated soils, Hazelwood's primary inhabitants belong to a racially diverse, under-served, economically and socially vulnerable demographic. The aim of this studio is to develop cross-scale connections between the households and landscape stabilization. Uncovering site's history and pollution patterns that are deeply-rooted in its current environmental conditions will help us engage with contemporary community concerns to better understand diverse needs and varied design potentials.

Above: The timeline above shows a history of visible air pollution mapped to the site history and map of soil contamination in Hazelwood area, illustrating underground conditions: soil quality relative to slopes, runoff, combined sewage outflows, and lead exposure; by Cupkova's MFI Research Team, 2019



Learning Outcomes

Computational processes profoundly impact our understanding of the world, and precipitate new forms of human awareness, empathy and interactions with the built environment. This studio will actively engage emergent technologies, material prototyping, and testing, in context of their impact. We will engage a non-figurative description of fictional objects and landscapes as a method for understanding thermodynamic behavior. Rather than relying on traditional simulation feedback we will explore image to form modeling techniques through GAN (Generative adversarial networks) experiments and engage structural analysis feedback in effort to reduce architecture's ecological footprint on this planet.

COOPERATIVE HOUSING

NEIGHBORHOODS AS COMMONS

STEFAN GRUBER

**How will we live post-covid19?
How will we live post-oil? And how
will we live post-capitalism?**



Background

The worldwide stay-at-home-orders in response to Covid19 have launched the single largest and most radical experiment in scrutinizing prevalent notions of domesticity and housing. If life under lockdown has demonstrated our collective ability to change everyday habits, it has also exposed the inadequacies of our houses for addressing contemporary challenges. But as with many other systemic societal flaws the pandemic has laid bare, the housing crisis has been long in the making. Architecture imaginary continues to be burdened by the binaries of private versus public space, although they no longer reflect today's social behaviors and relations. The modernist division between work and life, production and social reproduction, are rooted in superseded gender policies and normative ideas of nuclear families. And the very idea of isolated single-family homes as lowest common denominator of the American Dream is fundamentally at odds with dwindling resources and the accelerating climate crisis. But most and for all, the structuring of social relations and urban life around the concept of home ownership and regimes of private property are at the root of growing inequity and social polarization. These challenges urge us to radically questioning how we live, how we access and distribute resources, what and how we produce and consume, and how we care for our individual, community and planetary well-being. In response, this studio will explore the design of affordable cooperative housing as a means for communities to pool resources and lead a more self-determined life based on collective governance and shared ownership. The collective sum of the studio's housing proposition aim at reimagining neighborhoods as commons.



Privacy

In response to the school-wide theme, this studio will deconstruct privacy as a bourgeois concept that continues to define contemporary notions of domesticity. On the one hand, we will explore privacy in relation to narratives of freedom and the liberation of individuals from collective ties, who unhindered by outdated attachments dedicate themselves to cultivating a diversity of lifestyles. Meanwhile, individualization is fueling social isolation and what is widely referred to as a loneliness epidemic. On the other hand, we will study privacy's ties to contemporary forms of domination: the dispossession and commodification of land on which capitalism is founded, the racism by which BIPOC have often been deprived of home ownership and building equity, and gender discrimination by confining women to unpaid domestic labor in the privacy of single family homes. Thus, we will challenge the distinctions between private and public space: The home is no longer a place of intimate privacy, but the site of everyday activities including productive labor and public communication. Conversely, the center of communal and political life is not only to be found on the square or streets. The domestic sphere is not limited to house the familiar, but is often the site for the encounter of differences and controversies, while domestic activities are increasingly spilling into the public sphere and challenging prevalent ideas of spatial boundaries.

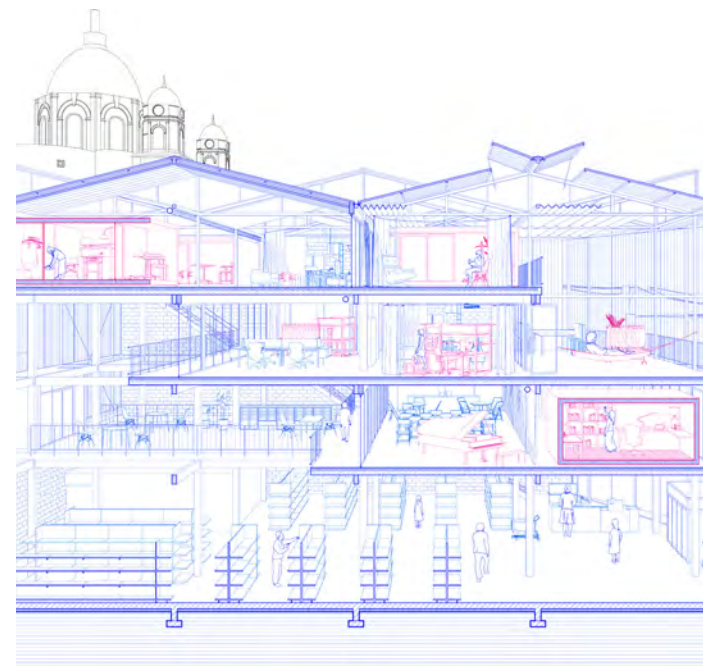


Left: Yokohama apartments by ON design
(Photo: © koichi torimura)
Top right: City in the Making, Rotterdam by
Stealth.unlimited
Bottom right: The Essex Apartments, San
Diego by Ted Smith & Others

Program

The studio will take "a proposal" by Hans Widmer and the 2000-Watts society as its starting point. According to the 2000-Watts society model each earthling is allotted a fixed primary energy budget of 2 kWh. This entails our individual and shared energy for housing, mobility, food, goods and waste, including embodied energy. In "a proposal" writer Hans Widmer (also known as p.m. and author of bolo'bolo) lays out how such lifestyle menu would have to look: 20m2 of private living space, 2.5m2 of communal space (or 1250m2 in a microcenter), no cars, no flights, 6km by train per person/day, 15kg of meat per year (4.3kg beef, 7.6kg pork, 3.2kg fowl), 70l water per day... While these constraints seem extreme, they are not farfetched: only in the 1960s did Western cultures meet these targets. More recently, the pandemic has constraint our lives to a much more local footprint and reduced our energy consumption accordingly. But while our habits can change overnight, the re-designing our homes will require more time and thought.

The studio will test the implications of the 2000-Watts society for Pittsburgh by envisioning new typologies of collective living and working. More specifically, we will develop proposals for low-rise high-density limited equity housing cooperatives in which the ground floors serve as mixed use community facilities. Each student or team will work on one of a series of distributed sites across a Pittsburgh Neighborhood as part of a Community Land Trust. Together, these housing interventions will form a network aiming at building community resilience and more local, self-sufficient and circular economies. Thus, the studio will work both at an architectural scale on individual housing projects and at an urban scale as a group, reframing the neighborhood as commons.



Above left: S20 project Hugh Lee
Above right: S20 project by Deepthi Ganesh
Right: Collage with case study model and diagrams of Odenbergerstrasse 56 by Yeong-Il Jo, proto-typology collage by Hugh Lee and floorplan by Fon Euchukanonchai



Learning Outcomes

- You can situate your design work in the context of broader social, ecological and economic transformations and find design agency beyond dominant forms of practice. Your goal isn't merely to adopt contemporary best practices, but to prepare and transform architecture practice for the future.
- You understand the fundamental organizational principles of housing and can translate these into developing new typologies.
- You adapt your design to the specificities of an urban context and consider your design impact on community wellbeing and resilience.
- You recognize the impact of architecture within the overall metabolism of cities and inform design decisions based on resource efficiency.

SMOKETOWN

The Other Great Black Renaissance. An Alternate-Reality August Wilson Center

HAL HAYES

“Black Pittsburgh once had an impact that rivalled the far larger black worlds of Harlem and Chicago. Smoketown tells the extraordinary story of the people and forces that made the black population of the city, for a glorious stretch of the twentieth century, one of the most vibrant and consequential communities of color in US history. From the 1920s to the 1960s this community created a miraculous flowering of social and cultural achievement.” *Mark Whitaker, Smoketown*



“You have to be taught to be second class, you’re not born that way.” *Lena Horne*

Précis

This studio will be based in an alternative history where Pittsburgh’s Lower Hill District was not bulldozed, the heart of its black community was not eviscerated, and the collapse of its industrial economy did not drive a large segment of that population away. Instead, the physical, social and cultural fabric of the Hill District is intact and continues to thrive, partaking fully in the Pittsburgh Renaissance.

We will study this community as it existed before the abject failures of urban renewal through research in comparative urbanism, the music of its vibrant jazz venues, the journalism of its nationally renowned newspaper and the plays of August Wilson, “The Bard of a Broken World.”



IMAGE CREDITS
 LEFT Pittsburgh Area and freeways laid over Hill District 1965
 TOP Elks Ball, Penn Sheraton Hotel 1962, Charles “Teenie” Harris
 RIGHT Pittsburgh Crawfords @ Forbes Field, 1945, Charles “Teenie” Harris

Projects

Two design projects will challenge students to create richly meaningful narrative concepts that embrace this history and rekindle the embers of the Hill's heyday through architectural interventions at real sites.

The August Wilson House Amphitheater. The first six weeks will be devoted to the design of an amphitheater in the back yard of the childhood home of Pittsburgh and Black America's greatest playwright. Dubbed "The Bard of a Broken World" by Mark Whitaker, Wilson conceived the Century Cycle of 10 plays, one in each decade of the 20th Century, several of which were set in this very backyard. Abandoned during his life, it is now a local landmark. A design team including SoA's UDBS addressed the stabilization of the structure and possible concepts for future development and programming.

New Granada Performance & Community Center. The remaining 10 weeks will be devoted to the design of a new mixed-use center with multiple performance venues, including the renovation of this 1000-seat theater and the Savoy Ballroom jazz club, which were the hub of Hill District social and cultural life. Also a local landmark, a master plan has been completed by Evolve EA, led by SoA's Christine Mondor.



IMAGE CREDITS
 ABOVE LEFT August Wilson House
 LEFT New Granada Theatre
 OPPOSITE
 TOP Piano Lesson, Signature Theater 2012
 MIDDLE King Hedley II, Theater Royal
 Stratford East, 2019
 BOTTOM Radio Golf, Goodman Theater
 2006



August Wilson's Pittsburgh "Century Cycle"

This ten-play series documents the Black experience in the twentieth century. All but one are set in the Hill District. Students will select one play to use as a preliminary framework in the development of their design narrative.

Gem of the Ocean (2003) – 1900s. Citizen Barlow enters the home of the 285-year-old Aunt Ester who guides him on a spiritual journey to the City of Bones.

Joe Turner's Come and Gone (1988) – 1910s. The themes of racism and discrimination come to the fore in this play about a few freed African American slaves.

Ma Rainey's Black Bottom (1984) – 1920s. Ma Rainey's ambitions of recording an album of songs are jeopardized by the ambitions and decisions of her band.

The Piano Lesson (1990) – 1930s. Brother and sister Boy Willie and Berniece clash over whether or not they should sell an ancient piano that was exchanged for their great grandfather's wife and son in the days of slavery.

Seven Guitars (1995) – 1940s. Starting with the funeral of one of the seven characters, the play tracks the events that lead to the death.

Fences (1987) – 1950s. Race relations are explored again in this tale which starts with a couple of garbage men who wonder why they can't become garbage truck drivers.

Two Trains Running (1991) – 1960s. Looking at the Civil Rights movement of the sixties, this play details the uncertain future promised to African Americans at the time.

Jitney (1982) – 1970s. Jitneys are unlicensed cab drivers operating in Pittsburgh's Hill District when legal cabs won't cover that area, the play follows the hustle and bustle of their lives.

King Hedley II (1999) – 1980s. One of Wilson's darkest plays, an ex-con tries to start afresh by selling refrigerators with the intent of buying a video store. Characters from *Seven Guitars* reappear throughout.

Radio Golf (2005) – 1990s. Aunt Ester returns in this modern story of city politics and the quest from two moneyed Pittsburgh men to try and redevelop an area of Pittsburgh.

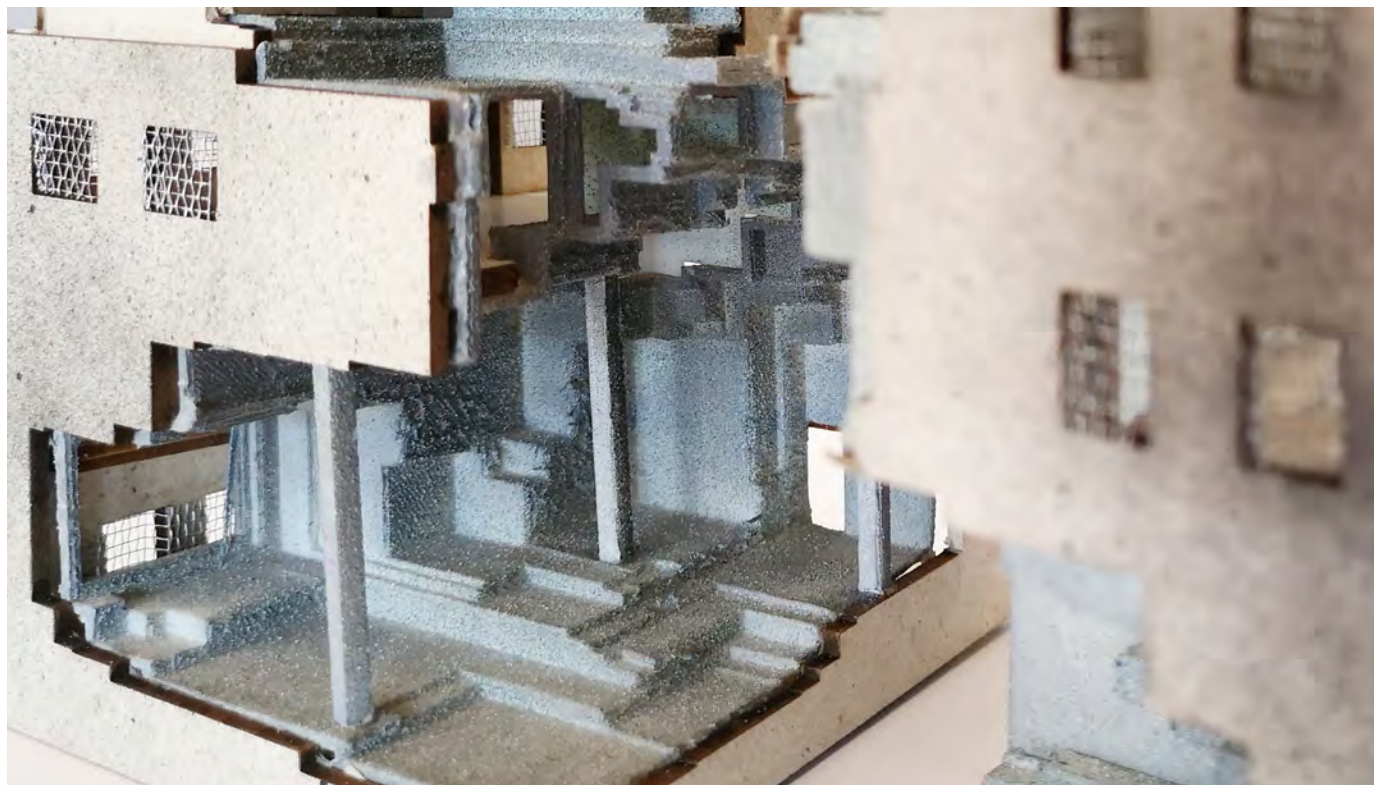


INTENSIVITY

Constructing Privacy on the Edge of the Urban.

TREVOR RYAN PATT

Architecture is an interface that enables an everyday participation in the domain of the urban.



Background

An intensive property is one that is not dependent on the size of the sample or system, but localizes within small samples the same way as in macro units.

This studio argues that urban properties are similarly intensive and can be identified on at any scale, even those smaller than a building. In particular, we will work on the thickening this moment between architecture and urbanism by identifying and analyzing urban forces and focusing them in concentrated moments on the threshold between interior and exterior.

Privacy

Public space, is not in itself oppositional to privacy. That a space is accessible or even visible to the public does not preclude private activity, introspection, or rituals. These moments occur all around the city, though spaces dedicated to them are becoming increasingly rare. A common example was the phone booth, where private conversation could be held in direct view and immediate proximity with the flows of public life. In this case, it is the material assemblage of a particular room-like space that constructs a social privacy, even when used for purposes other than its primary intention.



With the current reconsideration of distanced isolation in public spaces, it is perhaps time to think more seriously about how private activity can be more actively supported in our cities.

Context

This studio will examine architecture as an urban interface, with particular emphasis on how the transparency, materiality, permeability, poché, and visibility of the building skin mediates an urban moment. These moments are conceived to embody and intensify qualities that are otherwise diffuse, expanding to be occupiable and providing a place for specific activities to adhere in contrast to the diffusion and heterogeneity of the public realm.

This may occur as an eruption of a private room from the interior out into the city as Haus-Rucker-Co's Balloon for Two, or in the opposite direction as an irruption of a sidewalk space into the volume of the building, or more subtly as an interstitial band that insinuates itself between exterior and interior (like SANAA's Toledo Glass Pavilion).

Although it is a free-standing object, Didier Faustino's One Square-Meter House, illustrates how a combination of precise spatial configuration and material effect can transform something like a domicile into an engagement with a public plaza while preserving the privacy of its occupants. The construction of a similar engagement will be key to the success of this studio. We do not want to simply provide an escape from the city, but to invent spaces of privacy interface with the city itself.



Above:
Bruce Gilden. *New York*, 1979. (detail)
Stuart Franklin. *Children playing in a vandalised phone box*. Salford England, 1986. (detail)

Left:
Student project: Chia Sheng Wei for a spatial intervention into the urban fabric of a Guangzhou village, 2019.

Assuming sufficiently detailed site data can be acquired, the studio will likely operate in the old quarter of Hoàn Kim, Hanoi. This neighborhood is a dense and congested area composed mostly of a unique, local building typology of tall, narrow façades. While a great deal of daily life takes place on the streets and sidewalks, there is little support for these activities from the built environment.

Program

Design projects will focus on a space for one or two people, the exact program of these designs will be defined individually as a translation of a broader urban quality also measured at the large scale.



Learning Outcomes

Conducting and critically instrumentalizing urban analysis;
Familiarity with assemblage urbanism thought and the sociomaterial construction of space;
Designing at cross-scalar outputs including fabrication of large-scale sectional models.

Above, Left to Right:
Haus-Rucker-Co, Balloon for Two, Vienna, 1969.
Didier Faustino, One Square-Meter House, Paris,
SANAA, Glass Pavilion, Toledo, 2006.

Right:
A wall surface fabricated with variable depth and porosity, sculpted around. The joining technique is loosely hinged and has elements of a textile in its materiality, but the surface is rigid enough to be self-supporting.

