

**Spring 2018**  
**Professional History Electives**

ARC	SEC	REF#	TITLE	CH	DAY	TIME	ROOM	PROFESSOR	PREREQUISITE/NOTES	PE/HIST
435	1	41540	Islamic Architecture	3	MW	12:45-2:05	SLOC 101	Henderson	Crosslisted with HOA 389 and ARC 735	HIST/PE
500	1	34149	Little Utopias: Architecture...	3	TTh	11:00-12:20	SLOC 101	Goode		PE
500	3	34198	Spaces of Exception	3	W	9:35-12:35	SLOC 325	Harkema		PE
500	4	34172	The Other Place	3	W	12:45-3:35	SLOC 404	Zhang		PE
500	5	34207	Slits: Tracked and Compressed	3	TTh	9:30-10:50	SLOC 004	Bernal		PE
500	6	34232	Material Marcel	3	MW	2:15-3:35	SLOC 307	Stenson		PE
500	7	34240	Design as Research	3	T	9:30-12:20	SLOC 401	Sanin		PE
500	8	40800	Spatializing Data	3	W	2:15-5:05	SLOC 325	Krietemeyer		PE
500	9	34235	Google Street View	3	TTH	11-12:20	SLOC 307	Profeta		PE
500	10	34216	Advanced BIM	3	W	6:45-9:35	SLOC 014	Wing	Pre-Req: ARC 555	PE/TECH*
500	11	34217	Window Problem	3	T	9:30-12:20	SLOC 325	Louie		PE
500	12	34233	Mediated Environments	3	W	9:30-12:35	SLOC 401	Bartosh		PE
500	13	41745	Architecture of Court Society	3	MW	12:45-2:05	HL 111	Bedard		PE/HG
500	14	41754	Party Favors	3	W	12:45-3:35	SLOC 401	Corso		PE
500	15	41755	Constructing in the Anthropocene	3	M	2:15-5:05	SLOC 401	Larsen		PE
500	302	34210	Regionalism and Modern Architecture	3	MW	3:45-5:05	SLOC 101	Henderson		HIST/PE
555	1	34234	Intro to BIM	3	T	6:30-9:20	SLOC 014	Wing		PE/TECH*



## Mediated Environments | VR & AR in Architecture

Amber Bartosh | Spring 2018 | W 930-1230

*Our fine arts were developed, their types and uses were established, in times very different from the present, by men whose power of action upon things was insignificant in comparison with ours. But the amazing growth of our techniques, the adaptability and precision they have attained, the ideas and habits they are creating, make it a certainty that profound changes are impending in the ancient craft of the Beautiful. In all the arts there is a physical component which can no longer be considered or treated as it used to be, which cannot remain unaffected by our modern knowledge and power. For the last twenty years neither matter nor space nor time has been what it was from time immemorial. We must expect great innovations to transform the entire technique of the arts, thereby affecting artistic invention itself and perhaps even bringing about an amazing change in our very notion of art.*

*-Paul Valéry, Le Conquete de l'ubiquite (1928)*

The emergence of new media in the form of interactive and hybrid reality tools enables the creation of new virtual content and opens up possibilities for the the augmentation of physical conditions in ways which have previously been unavailable to us as designers. Like the many technological innovations which have proceeded them, their capacity to inform the design process and design product should be interrogated both optimistically and critically. In this course we will be exploring the potential of hybrid reality tools and evaluating their capacity and limitations in creating immersive, interactive *environments* – *a.k.a. mediated environments*.

- Hands on experience with multiple augmented, virtual and hybrid reality design and representations tools including Augment, spherical rendering for Google Cardboard, Unity, and the HTC Vive VR system.
- Critical analysis of the role of digital technology in the evolution of art & architecture and an evaluation of how saturation of imagery, programming, and ubiquitous computing have shaped and will continue to mold the practice and discipline.
- An exploration of the capacity and role of data in contemporary society -how we as designers create it, use it, and represent it – and how new hybrid reality tools support and demand novel techniques for making data spatial and experiential.
- A developed awareness of the layers of virtual content which already inform our physical environments and how media offers an expanded material palette to architects.



## The Architecture of Court Society

Professor Jean-François Bédard

Throughout the Early Modern period, court society was simultaneously a political structure and a cultural institution. The princely courts were the primary arenas in which the high nobility upheld the prestige of their rank. Along with political and economic power, the nobility dictated the cultural aspirations of the social elites. Architecture and the fine arts were part of a larger material culture that included all manner of luxury goods (furniture, tapestries, objets d'art, decorative objects, dress, and even ornamental food) and played a key role in the display of power.

This seminar will examine the material and visual evidence left by court societies, keeping architecture, garden art, and decoration as its focus. Classes will be structured along the calendar of events and activities—but also the ideological concepts—that regulated noble living. Topics addressed will range from *Étiquette* and Religion to Festivities and Death.

# Slits...tracked and compressed.

## “A pan over alternative realities”

ARC 500 / M005

Syracuse University School of Architecture

Prof. Ivan Bernal / [ibernal@syr.edu](mailto:ibernal@syr.edu) / Slocum 308F/ 443-4103

Slocum 004/ 3 credits/ Tuesday and Thursday 9:30 to 10:50 AM

Office hours: By appointment



<http://www.aupremierplan.fr/category/blog/page/5/>

Slits, “tracked and compressed” explores the “**pure**” concepts (but not the techniques) of both slit scanning photography and slit scanning in cinematography as a way to expand on the notion of temporal non-spatial relationships among objects, and the deformations created by positioning added apparatuses between the subject and the viewer. By disassociating the relationship between space, time, movement, distortion, and viewer, the students would explore animations techniques as generative tools to produce a five minute animated **pan** over an **elevation**. Looking for opportunities to stretch, exaggerate, distort, mutate and transform the subject, the scene, the sequence and the time, with the goal to produce alternative realities.

Using a single camera technique “the tracking”, students will produce short clips using the unexpectedness of the **left to right** movement of the camera as a way to introduce slow but drastic changes to the scene with the purpose of creating a narrative. The camera movement is not related to the passing of time, it is simply the lense by which the story is told, eliminating any temporal connection between the viewer and the sequence, and allowing the exaggeration of time in the scene to be read independently from the speed of the camera.

The clips will document “**Change**” as the main character of the story, tracking its evolution as the pan moves over. The class will use this set up as a way to explore **animated behaviors** in topics such as:

**Real to abstract:** textures, graphics and metrics.

**Faux Histories:**, erosion and decay.

**Built to Nature:** the non-manicured nature of nature.

**Densification and occupancies:** emerging forms of living.



# Party Favors

ARC 500 Spring 2018  
Wednesday 12:45-3:25pm  
Instructor: Greg Corso



Nick Cave, Soundsuit

The course will operate at the intersection of design and fabrication and will facilitate an investigation in digital design thinking, fabrication techniques/tools, and the relationship between materiality, assembly, and the design process. As a main objective of the course students will prioritize making and iterative fabrication to work through design problems.

The semester will be focused on the fabrication of an object (assembled from parts) and its material effects. The precedent and vehicle for this investigation will be an abstraction of the candy filled children's game, most commonly referred to as a pinata. By utilizing the design protocols of these artifacts (formal features, sectional volume/composition, surface articulation, color) in conjunction with fabrication strategies, efficiencies, and techniques, the course will re-imagine the precedent as an abstract architectural object. Over the course of the semester students will work in small group/pairs utilizing digital and analog tools (cnc mill, vacuum former, 3d printer) to design, fabricate, and represent a novel response to the architectural implications of the "pinata."

Students in the course should be prepared to spend \$100-200 each in material.

# Little utopias: the architecture of progressive pedagogies in the 20<sup>th</sup> and 21<sup>st</sup> centuries

ARC 500 M001 Spring 2018 / Prof. Terrance Goode



Maryann Thompson, *The Children's School* (Stamford, CT)

Freferlik-Fritzer, *elementary school* (Bad Blumau, Austria)

This seminar will examine school buildings designed for the “learner-centered” or “child-centered” pedagogical theories and practices that have emerged between the beginning of the 20<sup>th</sup> century and more recent decades.

The best-known of these are the pedagogies of Maria Montessori, Rudolf Steiner (the Waldorf Schools) and the Reggio Emilia pedagogy of Loris Malaguzzi (Reggio Emilia). The Open Classroom movement that emerged in the 1960s is also important in this context. These pedagogical philosophies have been especially important at the kindergarten and primary school levels, on which the course will focus. This has occurred globally but has been especially influential in the United States and Western Europe.

Because these pedagogies generally place great value on learners’ agency in determining where, how and with whom they interact as they learn, their spatial settings are correspondingly multivalent, transformable and adaptable. As we will see, this has inspired some exceptional works of architecture within the typology of children’s learning environments. The socio-spatial issues raised, and the design tactics used to address them, also have broader applicability to many other building types as well as parallels within current architectural discourse. These issues will also be examined within the seminar.

The primary work of this seminar will be the analysis of exemplary school buildings designed during the last two or three decades. The goal of this analysis, performed by teams of students, will be to identify the formal strategies by which the buildings were organized, and the ways in which these formal strategies also embodied the spatial implications of the pedagogical practices and goals of each. These studies will all be produced in a coordinated graphic format and will be collated into a booklet by the end of the semester, which will be distributed to course participants, and will ultimately form the basis of a web site and potentially a traveling exhibition.

There will be four kinds of meetings in this class: discussions of readings that provide theoretical grounding for the course; instructor presentation of architectural case studies organized as an historical overview; meetings with individual project teams; and interim and final reviews of each team’s case study analysis.

Herman Hertzberger, *De Evenaar school* (Amsterdam, Netherlands)

70 N Architects, *kindergarten* (Tromsø, Norway)



# SPACES OF EXCEPTION

## Interventions within Existing Conditions

Spring 2018 | Asst. Professor Harkema | Wednesdays, 9:30am - 12:30pm

*"There is no such thing as a universal architecture of resistance. It is always particular, responding to the specifics of a place and time. To write about it, to advocate it, and especially to create it, one must choose the precise point of its pressure on a given situation. For this reason, an architecture of resistance is transient, impermanent, even ephemeral, because situations change, and with them the very need for resistance."*  
- Lebbeus Woods

*Exception:* (n) an instance or case not conforming to the general rule<sup>1</sup>, a deviation from a given system or context that in turn heightens the awareness or reveals the limits of the norm

### Introduction:

The intention of this course is to investigate strategies of intervention within existing conditions. To begin, we will question the conventional notion of 'public', how it occurs within the urban context. This will entail a study in representation – modes of perceiving, drawing, and mapping 'publicness' – to build an understanding of 'public' as a space of exception. This line of inquiry will then continue as an investigation of strategies for exception within various contexts, through the analysis of a collection of precedent architectural projects.

This inquiry will explore the agency of design as a means to resist or deviate from a status quo. Considering a broad survey of existing buildings and projects, from the formally autonomous to the contextually discrete, students will identify architectural design tactics for analysis, interpretation, and future application.

The intention is not to merely point out instances of "otherness", but rather to distill viable and compelling strategies for making new exceptions, forming new instances of publicness and making alternate futures of the built environment vivid.

### General Course Structure:

Investigations in Publicness / 4 weeks  
Spaces of Exception / 4 weeks  
Strategies for Intervention / 4 weeks  
Final Exhibition Production / 3 weeks

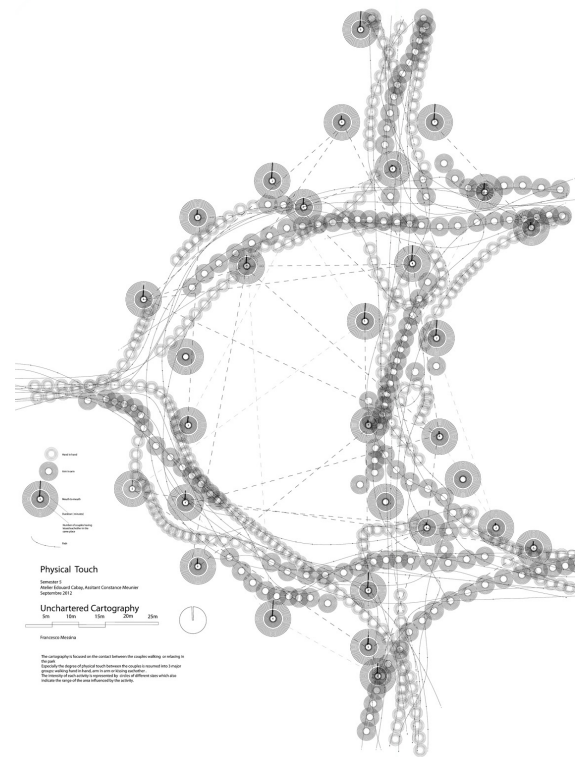


Figure 1 Francesco Messina, "Physical Touch" map of public space, from "Uncharted Cartography", Edouard Cabay Atelier, 2012

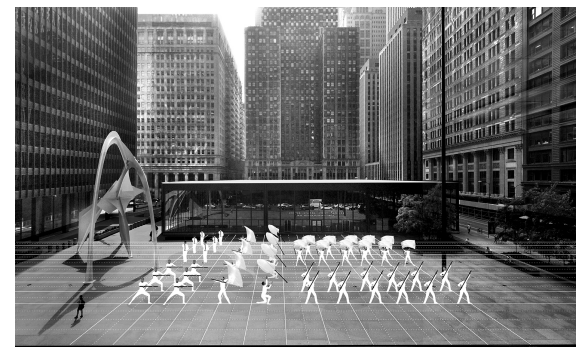


Figure 2 Bryony Roberts + South Shore Drill Team, "We Know How to Order", 2015



Figure 3 Absalon, Living Cell No. 1 (For Paris), 1993

### Course Description:

The foundation of the course will be a critical analysis and experimentation with design and representation strategies as uncovered through analysis of precedent architectural projects. Coursework will include weekly reading assignments and discussions. Working through analytical drawings and animations, 2d and 3d projective studies, and narrative representation techniques, the collective body of work will become the content of an end-of-semester exhibition and digital publication.



Figure 4 Rodolfo Lanciani, Map of Rome, 1907

### Notes on Exception:

An exception is a deviation from a given system or context (social, political, formal etc.), an instance or case not conforming to the general rule.<sup>1</sup> The notion of exception offers a critical, untapped potential to architecture as methodology for resistance. The term "exception" is a loaded one, having established connotations within architectural theory and discourse. These we will inevitably consider and confront as needed. Philosopher Giorgio Agamben describes a state of exception as the transcendence of the rule of law at times of political crisis, simultaneously enabling systems of authoritative power and the agency of oppressed groups against it.<sup>2</sup> Architect Pier Vittorio Aureli describes exception in the context of the built environment as a spatial condition inflicted by autonomous objects (buildings) that produces difference within a given environment.<sup>3</sup>



Figure 5 Schaum/Schieh, "Blow Up The Wall!", 2017

As a deviation within the vast, neutral homogeneity of built environment, the exception acts as an architectural form of resistance. This course will seek to establish a discourse around this potential, with a focus on critical analysis and visual representation as modes of operation.

*"An act can only take place in a field already crowded with other endeavors and their consequences, a crowd with which the new entrant immediately interacts, overlaps, interferes."*

- Jane Bennett

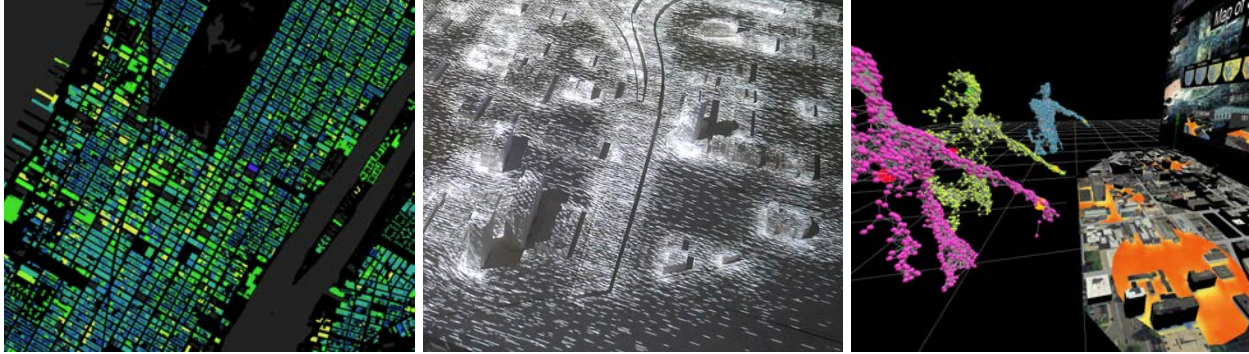
<sup>1</sup> "Exception", <http://www.dictionary.com/browse/exception>, accessed 10/02/17

<sup>2</sup> Giorgio Agamben, "The State of Exception", Chicago: University of Chicago Press, 2005

<sup>3</sup> Pier Vittorio Aureli, "The Possibility of an Absolute Architecture", Ch. 4: Architecture as a State of Exception, Boston: MIT Press, 2011



# Spatializing Data: Visualizing Futures



Instructor: Bess Krietemeyer, Assistant Professor / Director, Interactive Design and Visualization Lab (IDVL)  
Time / Location: Wednesdays, 2:15-5:05pm, Slocum 325 or SyracuseCOE / IDVL\*

How can we leverage data visualization to reveal current conditions and discover future opportunities for more socially and ecologically resilient cities? How do we collect and visualize data about our built environment to communicate these opportunities to a wide audience? What insights do architectural designers generate that not only create awareness but inspire alternative solutions? This course explores how visual, spatial, and analytical thinking creates new approaches toward seeing, understanding, and envisioning our world. This course is part of a larger initiative, in collaboration with the Milton J. Rubenstein Museum of Science and Technology (MoST) and NOIRFLUX, to develop knowledge and tools to educate the wider public about the critical use and interpretation of data across fields in architecture, urban design and planning, and the humanities.

The course covers various data visualization methods, with a focus on how to work with data, by creating narratives of existing and future conditions in our built environment. It provides an introduction to spatial and temporal visualization techniques, data collection and mapping, and geographic information systems to study and create useful, meaningful, and compelling data visualizations. Through the use of tools ranging from Adobe Illustrator, to Rhino, to open-source GIS software and open data, students will learn how to critically use mapping techniques and geographic data for spatial analysis and representation. Through in-class workshops, design charrettes, discussions, and presentations, students will gain a better understanding of how these tools and data can be leveraged to analyze, represent, and study past, present, and future architectural and urban phenomena.

The course is structured in two phases: The first is an introduction to data visualization techniques, mapping theories, and case studies in architecture and urban planning, and provides a series of tutorials for data collection, mapping and analysis. The second phase focuses on a group design project for the remainder of the semester: the development of data visualizations for an interactive museum installation at the MoST featuring the city of Syracuse, whereby students will have the opportunity to design the user experience and observe user feedback with their designed content.

\*Depending on the weekly topic and deliverables, the course will either meet in Slocum Hall or take place at the Syracuse Center of Excellence Interactive Design and Visualization Lab, where students will have access to interactive visualization technologies for design prototyping.



## Whats-the-Problem-with-the-Window-Problem<sup>1</sup>

*“First of all, on the surface on which I am going to paint, I draw a rectangle of whatever size I want, which I regard as an open window through which the subject to be painted is seen.”*

*- Leon Battista Alberti, On Painting*

**Whats-the-Problem-with-the-Window-Problem** one might ask? Ever since Alberti's description of perspectival **painting** as a window-in-the-wall the canvas and its' architectural support have been put in direct conversation. Since its inception as single-point perspective—Alberti's metaphorical window—has been a point for looking into modern painting, architecture, and moving-image technologies. Focusing our eyes on the philosophical window as an apparatus that foreshadows the thick plane where **Illusion meets Material**, as well as, the moment where the **Window meets the Wall**, and by proxy, the malleable limits of **Art and Architecture**.

**Whats-the-Problem-with-the-Window-Problem** is a research and drawing seminar that continues the Windows' legacy of interpretations that shape Architectures' physical and representational limits. Over the course of the semester students will study theories that frame the Windows alignments with Art and Aesthetic movements – **from Perspective to Abstraction to Pop to Post-Digital**. Each one staking a claim towards how Architects deploy representations on both wall and canvas (drawings, pictures, film, photography etc) to engage physical material with media. From Hatch to Texture, Line to Vector, or Point to Pixel, the plane of the metaphorical window props up the representation techniques architects deploy in their work. And in the best cases materializes to become the work itself. Expanding the role of images from representing the “real” to now constructing **another reality**.

While the pace and consumption of an image is fast, this class will slowly parse through key identities of the Windows and resituate them through technologies available in the present. While a Problem has many interpretations, over the semester **3 Workshops** will reframe the area of inquiry in the course. Each Workshop will consist of a combination of **digital drawing and 2.5D models** informed by **readings** and **lectures** on Windows. As a final outcome the students will design an **Image-Object** in the spirit of the transdisciplinary Windows they've read and seen.

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<sup>1</sup> While the realities of pictorial art may end at its' frames (from art to architecture, and, the canvas atop the wall), in recent years Alberti's ceaselessly regurgitated proto-window now signify many other things. For more knowledge on this plane of intersection you can: Google endlessly, take this class, read The Virtual Window by Anne Friedberg, and read *Alberti's Window* by Joseph Moscheck in Grey Room.



**Assistant Professor:** Daniele Profeta    **Meeting Times:** Tue. & Thu. 11am 12:20pm

**Office Hours:** Room 306C - time TBD    **Room:** Slocum Hall 307

**Class:** ARC 500 - M009    **Course Website:** [www.360streetviews.com](http://www.360streetviews.com) (WIP)

### **Course Description:**

*Google Street View* can be understood as one of the most ubiquitous contemporary modes to navigate our built environment: immersed in a multi-perspectival digital bubble, we orient ourselves through a series of Geo-tagged, algorithmically edited, composited images, temporarily displacing ourselves to a *familiar place* as a way to organize our daily life, or to a yet *unexplored landscape* we are planning to visit. Through the interface of our browser or mobile device we begin to inhabit an *environment* that, in as much as it claims to objectively portray 'your world. like you've never seen it', it is actively transforming our understanding as well as our relationship with the built-environment. In this course students will consider the space of Google Street View as a *site* to expose present realities as well as to speculate on the possible futures of our contemporary cities. Working through techniques of photogrammetry, advanced digital modeling and animation, students will design *punctual*, and yet *immersive* animated environments: a series of small-worlds as a collective speculation on our contemporary landscape.

### **Disciplinary Focus:**

Immersive Videos, Animation, Narrative Based Projects, Photogrammetry, Surveying Technologies.

### **Class Deliverables:**

Students, working in groups, will be assigned a series of exercises throughout the semester leading towards the final assignment of a three to five minutes 360 video.

### **Class Structure:**

Predicated upon the idea of Research through Practice, the class meets twice a week, and it is organized around a series of Tutorials and Workshops that will introduce the students to photogrammetry as a surveying technology, advanced digital modeling and texturing, digital animation as well as video compositing. These will be paired with Lectures that will allow the students to acquire a critical position towards the material encountered.

### **Selected Reading List:**

Kurgan, Laura "Close Up at a Distance: Mapping, Technology & Politics" (Zone Books, 2013)  
Presner, Todd et al. "HyperCities: Thick Mapping in the Digital Humanities" (Harvard Press, 2014)

**Design as research:**  
**CIAM, TEAM X, METABOLISM.**  
**The city of architecture**

These 3 groups are representative of some of the most important research work done by the avant-garde movements in the mid XX century. Their members are amongst the most recognized names in modern architecture, such as; Le Corbusier, Gropius, the Smithsons, Tange and Maki; as well as less well-known names, such as De Carlo, Candillis and Bakema.

Their aim was to radically re-define our understanding of the city, to create new tools methods and paradigms for modern urbanism and for architecture's role in it.

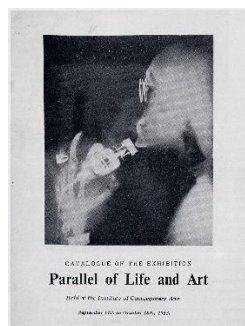
They all, share an interest in new forms of understanding the emergent social and political conditions of the time: post war reconstruction, social democracy, welfare state etc.

Their "project" was to fundamentally re-configure and re-invent the city itself and its role and relation to emergent forms of production and social organization.

The seminar proposes to look at the work produced by these groups, not simply as formulas or final products, but rather as research, that is, as evidence of design as a form of research and knowledge. The seminar will look at original texts, and selected projects from these groups as evidence of this processes.

The period framed by these groups defines not only one of the most prolific periods in architectural history but also one of the most engaged with issues of politics and the construction/definition of the social sphere as a condition of the modern subject. Arguably they expanded the field of urbanism and architecture by exploring new methodologies that in many cases were informed by developments in other disciplinary fields from anthropology to science, from sociology to systems theories etc. Equally important is the research in new technologies and modes of production as well as the fascination with the emerging field of popular culture, from science fiction to the use of mass communication tools and images in the exploration of new forms of urbanity.

We will look at original texts, manifestos, and selected projects in order to un-pack them, a "look in reverse", not towards the result but towards the premises, references, methods and process that may allow a new reading and give us maybe a new possibility of looking at these works; not as an archeology of the recent past but as part of the dynamic history of the discipline and its engagement with the city and the political sphere.



Francisco Sanin

Wednesday 12:45 pm room 307



*Description* - From the start, and throughout his long and prolific career, Marcel Breuer developed form with particular material specificity. Spanning across furniture, houses, and large civic and institutional projects, Breuer projected design from an intimate and rigorous understanding of material properties. Indeed, for Breuer it seemed form followed material. The primary objective of this seminar will be the close analysis of material configuration and character in this influential architect's design work – beginning with the details. To contextualize our analysis, Breuer will be examined from multiple vantage points, including: european history, architectural history and theory, 20th C design education, work with collaborators, and through the multiple stages of his practice. Particular focus will be devoted to his furniture and residential design work.

It will be a contention of this course that built works of architecture are simultaneously conceptual-formal constructs and material artifacts. And further, that as artifact, the primary presence of a work's form is inevitably material. It follows that the projection of architecture in material terms, and its resolution in detailed assembly, all falls within the purview of design. In this regard, Marcel Breuer's design production is a veritable text book. Breuer's designs display a didactic, yet supple materiality of form. Close inspection reveals manifold lessons in "making" architecture.

*Instruction and Assignments* - Class meetings and coursework will include:

- Illustrated lectures by the instructor
- Assigned reading to be completed before specified class
- A short (1,250 word) research paper identifying, describing, and contextualizing a select design work of Marcel Breuer. Due at mid-term. (Alternate formats possible, subject to instructor approval.)
- An in-depth visual/material exploration of same Breuer work, including: analytic diagrams, and physical and/or digital modeling.

*Objectives* – After successful completion of this class, students are expected to demonstrate:

- Familiarity with the design production of Marcel Breuer.
- Familiarity with the art-historical context of Breuer's work.
- Ability to analyze Breuer's furniture and architectural designs for material use, assembly, and form vocabulary.

*Evaluation* – Seminar participation and coursework will be weighted as follows:

- 20% attendance, preparation, discussion participation
- 30% research paper
- 50% graphic and material analysis

# The Other Place: Ghosting Unspoken Nothings

Course  
Time  
Location  
Instructor

ARC 500 SEC M004 – Spring 2018  
Wednesdays 12:45pm – 3:35pm  
Room 404 Slocum Hall  
Linda Zhang – lzhang69@syr.edu

## Course Description

*'It [history] is a palace of unsaids, lingering with hushes, everyone hurtling through it and uncertain how they got there, moving from pain to ecstasy, from boredom to purpose.'*

- Rob Goyanes, "A Palace of Unsaid" in e-flux Journal #85, September 2017

*'To live is to be haunted...We are always caught up in invisible and intangible webs of the past, of the Other, of the future, of death. Our existence is therefore always in-between, defined of course by the materiality of our present being, but also by this immaterial flux that surrounds and situates us.'*

- Elisabeth M. Loevlie, "Faith in the Ghosts of Literature. Poetic Hauntology in Derrida, Blanchot and Morrison's Beloved" in Religions Journal, July 2013

History and identity are as much constituted by presences (of memories, monuments, and commemoration) as they are composed of absences (of omissions, repression, amnesia, gaps, the accumulate silences). These silences make up the Other of history. Hovering just beyond the here and now, lurking in its shadow, is an unseen necropolis, underbelly, or doppelgänger. Behind every spoken utterance, lies its unspoken silences. Every place has its Other, its unspoken Real, its unspoken nothings.

In this seminar, we will explore how to make sense of the pile up of omissions, willfully ignored or simply forgotten in time. Rather than embarking on the endless (and impossible) task of reifying all that has been silenced and marginalized, we will investigate and explore ways in which to introduce the unspoken Real into our physical reality. Moving beyond the endless substitutions played out in our built environment, this seminar explores possibilities that moves beyond the paradigm of reification (which problematically and necessarily implies repression elsewhere).

Through the material process of image transfer and the theoretical notion of "ghosting" we will explore how these silences can "touch down" upon our present reality to disrupt and destabilize the experience the here and now. The seminar explores both how to evoke and trigger something that is not-there and uses the silence of the not-there to question how new realities can be formed.

A ghost always has a foot in both doors. By definition, it exists not fully in the realm of the living nor in the realm of the dead, but simultaneously in both. Ghosts mediate between the here and now, and the beyond (the other doppelgänger of the present). They are a surplus which should not be there. They are uncanny, not eerie. Where eerie is experienced through the presence of absence (aka the absence of something), while the uncanny is experienced through a presence in what ought to be absence (aka a surplus where there should be absence). We will explore material loss and fuzzy unsharpness of image transfers to negotiate between present reality and the other Real beyond reality.

## Learning Objectives

Students will begin with site research and analysis working with both archival materials as well as field research and recordings. Students will define and discover the real and unreal dimensions of their site. In addition to readings, students will use the technique of image transfers (acetone and matte medium) to work through and understand the theoretical material of the course. After a series of small assignments, students will produce large scale transfer paintings, which will be a part of the Boghosian Fellowship exhibition in the Spring.

## Prerequisites

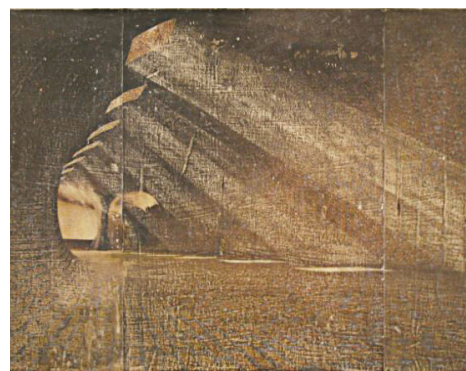
This seminar targets upper level undergraduate as well as graduate students. Previous experience photoshop and rendering is required. Experience with watercolor and acrylic painting and/or mixed media is recommended but not required.

This seminar is a complimentary research component to a VC Studio in spring, which will focus on the process of ceramic slipcasting. It is highly recommended that the two courses be taken together, however, enrollment in the studio is not required to take this seminar.

## Image Transfer Sampler



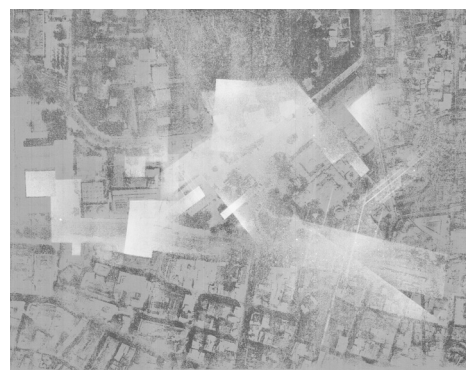
Matte medium image transfer on wood, over painted in acrylic  
© Linda Zhang



Matte medium image transfer on wood, with sanding  
© Linda Zhang



Matte medium image transfer on wood, over painted in acrylic  
© Linda Zhang



Acetone image transfer on gray paper, and spray painted  
© Linda Zhang

## **ARC 555- Intro to Building Information Modeling (BIM)**

Class meeting time will be conducted **Tuesdays** in the Slocum Computer lab 6:30-9:20 PM

This course will give the student an in-depth look at Building Information and how it is used for coordination, visualization and production in the architectural field. The primary software will be Autodesk Revit version 2016. The area of emphasis is how well students can produce buildable construction documents while being able to relay their design through perspectives and isometric views, and data lists such as door and window schedules. Once complete the students will be competent in the use of Revit and the understanding of Building Information Modeling.

The class is conducted as an instructor-led, step-by-step examination of each area of Revit as it relates to architectural building systems such as wall systems, floor systems, roofing systems, and stairs/ramps. Also, this class will cover structural systems, and the relation of architecture to mechanical, electrical and plumbing (MEP) systems.

The class deliverable will consist of each student creating their own model on their own. This model can be commercial or residential. It can be a real building, or a made up design of the student's desire. Grading will be judged by the construction documents produced. Plans, elevations, sections enlarged dimensioned details are the most important. Effort plays a critical role, as does classroom attendance and participation.

Reading material is Revit Architecture No Experience Required. This will be furnished for free by the instructor.

## **ARC 500- Advanced BIM and 3D Design using Revit**

### **Section M010**

Class meeting time will be conducted **Wednesdays** in the Slocum Computer lab 6:45-9:35 PM

Building on the fundamentals learned in the Intro class, this course prepares the student for Revit production in a live firm, sharing live models in a wide area network capacity. The students will learn how to set up projects for their firms, and how to work with other trades in the BIM spectrum. In-depth instruction on how to model custom content will be a main area of focus as well as reconstruction, design options and of course free form massing and curtain systems. Once this course is completed, our students are ready to work in any firm, big or small using Revit. Also, this course allows the students to adding potential BIM coordinator to their resumes.

This course will be instructor led, with more lab time allocated to students working on file sharing, custom content, and collaboration with other students. The class will have a stand-alone project that the students can work on as a group, or as individuals. The focus is on the students' understanding of multi-user, collaborative model sharing, as well as development of phasing plans and custom content.

This course will be accompanied with the use of Lynda.com courseware which is provided through the University



# CONSTRUCTING in the ANTHROPOCENE

OBJECTS | ENVIRONMENT | SPECULATION | VISUALIZATION

Professor Julie LARSEN  
ARC 500 Prof. Elective



Vivek Njanappilly, FA 2013

## INTRODUCTION

Course: ARC 500  
Prerequisite: NONE  
Required: Yes  
Credits: 3

M @ 2:15-5:05  
Space: 404 SLOCUM

Instructor: Julie Larsen  
Assistant Professor  
email: [jmlarsen@syr.edu](mailto:jmlarsen@syr.edu)

## DESCRIPTION

*"While visualization is normally carried out by the agent of an action, the Anthropocene is a human-created machine that is now unconsciously bent on its own destruction, a purposiveness without purpose." In Visualizing the Anthropocene, by Nicholas Mirzoeff*

The Anthropocene is a new geological age, characterized by long-term climatic change and the commencement of significant human impact, as a result of industrialization, on the Earth's geology and ecosystems. And if the Anthropocene is a human-created machine, is it possible for this planetary machine to be rendered visible with purpose? If so, what commentary can 'Constructing' in the Anthropocene make in the wake of destruction and decay of our planet, and can we speculate a foreseeable future (good, bad or ugly)?

This P.E. will focus on the design, fabrication and representation of objects in response to the Anthropocene.

Digital technology and fabrication of objects have evolved from being mostly representational tools to having significant impact on the environment and architecture as a material practice. How can we define aesthetic and formal outputs of the Anthropocene through digital and material making? The notion of objects as fixed forms is obsolete and will be replaced with objects that are emergent and responsive to their environment. Short exercises will focus on form, speculation, and ecologies (water, earth, energy, resources, etc.) that define new interpretations of 'Constructing in the Anthropocene'.

## COURSE OBJECTIVES AND EXPECTATIONS

This seminar is an experimental, professional elective focusing on representational tools, digital fabrication, and material investigation in response to environmental changes we face today. The class is comprised of lectures, readings, lab sessions, pin ups, and group discussions. The students will research historic, current and future practices of digital technology and ecologies within the Anthropocene to help construct and represent their objects. Students should gain an understanding of how to translate digital and material artifacts into environmental representations. Digital and analog techniques (both modeling and representation) will be used to speculate on the impact of an object's aesthetic within a particular environment. Emphasis will be placed on an iterative process and methodologies for working from the digital and material form making to sophisticated representations of objects in particular environments.

## REQUIREMENTS

Digital proficiency in Rhino/Maya/etc. is recommended. There will be tutorials offered for those who need assistance with projects.

## SAMPLE READINGS

Mirzoeff, Visualizing the Anthropocene  
Gissen, Subnature  
Turpin, Architecture in the Anthropocene  
Combs, Perry, Computational Ecologies: Design in the Anthropocene  
Bonneuil, The Shock of the Anthropocene  
Graham, Climates: Architecture and the Planetary Imaginary