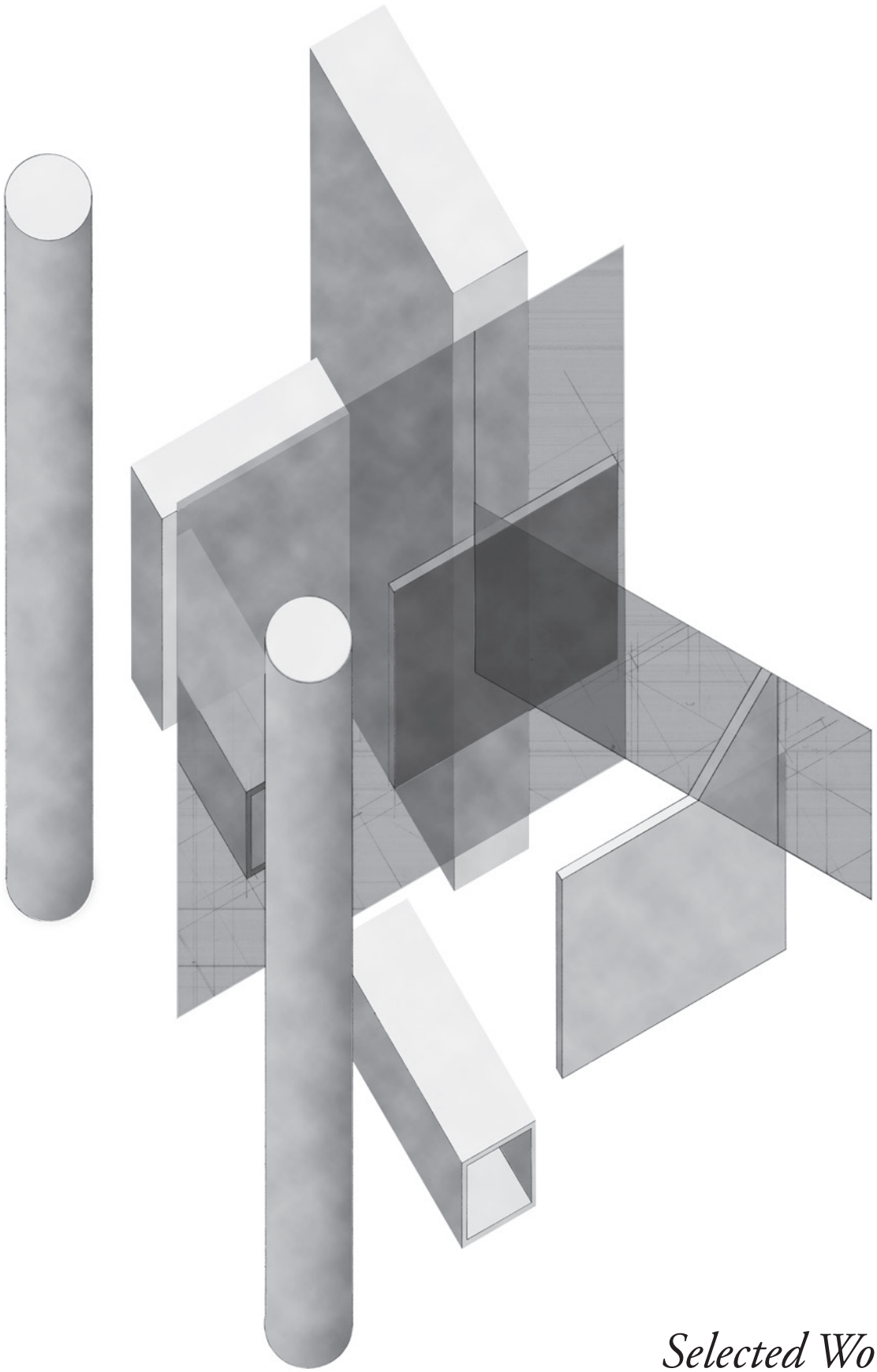


Selected Works

Adam Burke

Adam Burke

17 Harvard St. | Apt. 3
Somerville, MA | 02143
phone | 540_878_0102
email | aburke3@vt.edu

Education

School of Architecture + Design | Virginia Tech | Blacksburg, VA
Bachelor of Architecture Honors Scholar | Summer II 2016
Thesis: Surface, Ambiguity, and the Creation of Virtual Space

National Outdoor Leadership School (NOLS)
July 2010
- A three week course focused on development of leadership skills, wilderness survival, and rock climbing in Wyoming

Honors

At The Nexus Award at ICAT Day 2016
- For Dense Space installation at the Moss Center for the Arts
- Exemplifies work “at the nexus of engineering, arts, and design.”

2016 Student Initiated Research Grant | Virginia Tech | Blacksburg, VA
- For Transient People installation
- In collaboration with Alex Bala and Chris Pritchett

2014 Lucy & Olivio Ferrari Annual Scholarship
- Virginia Polytechnic Institute and State University

2011 Pamplin Leadership Award
- Virginia Polytechnic Institute and State University

Professional Experience

Adjunct Instructor | VirginiaTech | Blacksburg, Virginia
Fall 2016 - Summer Session II 2017
- Co-taught courses for undergraduate students studying architecture, landscape architecture, interior design, and industrial design
- Co-led students in independent research project

Summer Academy Teaching Assistant | Virginia Tech | Blacksburg, VA
Summer Session II 2016
- Worked directly with incoming students in a studio environment
- Critiqued the conceptual development of student work
- Presented tutorials and assisted students with printing, scanning, photography, and Photoshop
- Compiled a lobby exhibit of student work

Inside Architecture Instructor | Virginia Tech | Blacksburg, VA
June 27 - July 1, 2016
- Worked with a group of high school students to assist in their development of a series of projects that explored ordering principles at a variety of scales
- Assmbled an exhibition of student work and our photographic documentation of process work

Professional Experience Cont.

John S. LaMonica, AIA Architect | Marshall, VA
2010 - 2012, 2014, 2015 | Summer and Winter Breaks
- Assisted in preliminary design, site documentation, estimation, and CD production for residential additions, renovations, and farm structures

Rutlage Farm | Marshall, VA
Summer 2013
- Documentation farm houses for historic district applications
- Preliminary assessment for the construction of a bridge
- Stream analysis to assess the ecological impact of the bridge

Teaching Experience

Qualifying Design Lab (ARCH 1116) | Virginia Tech
Summer Session II 2017
- Foundation Design Lab for students transfering into architecture, landscape architecture, interior design, or industrial design from another major.

Foundation Design Lab (ARCH 1015, 1016) | Virginia Tech
Fall 2016, Spring 2017
- An immersive, interactive learning environment focused on inquiry, experimentation, discovery, and synthesis for students studying architecture, landscape architecture, interior design, and industrial design
- The design lab develops self-reliance and self-critique, opens intellectual horizons, and challenges students to continually expand and deepen their aesthetic judgment and critical understanding.
- Studies are undertaken in two and three dimensions across multiple scales.

Textile Space: Design Related Media (ARCH 3514/5116) | Virginia Tech
Spring 2017
- Focused on intense exploration and discovery through fabrication with emphasis placed on the generation and manipulation of space, form, and experience with textile materials.
- The material is investigated through prototyping and the production of constructs at multiple scales.

Service

Digital Mentorship Collabrative (DMCO) | Virginia Tech | Blacksburg, VA
Fall 2015 - Spring 2016
- Student led digital technology workshops

Proficencies

Auto CAD	Analog Model Building	Adobe Suite
Rhinoceros / V-ray	Wood / Metal Shop	Hand Drafting
Max/MSP	Revit	Photography

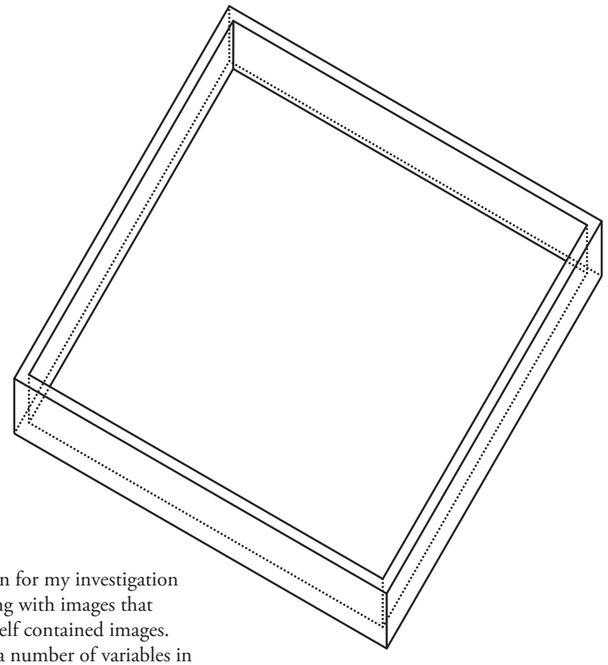
Letters of Recommendation Available Upon Request

Contents

Undergraduate Thesis

Surface, Ambiguity, and the Creation of Virtual Space

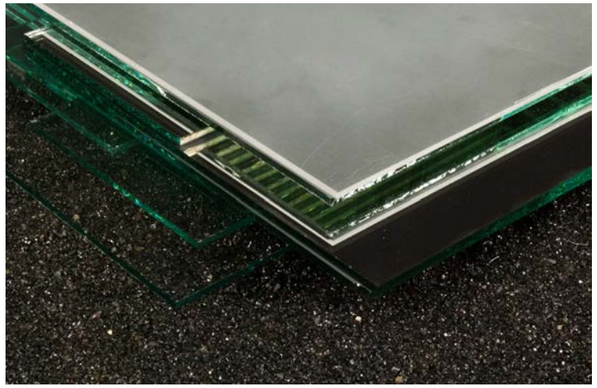
Fall 2015 - Spring 2016



The black box is a context-less site and the origin for my investigation into virtual spaces. However, instead of operating with images that began outside of the site, it operates only with self contained images. This reduction of material associations isolated a number of variables in order to explore some defining features of virtual spaces.

In its most rudimentary form an I/O device has some input which is then put through some set of rules in order to produce a functional output. The investigation was set up to function like a simple computing device. The inputs were a set of planes of varying degrees of opacity and reflectivity that were introduced to begin generating virtual environments. The outputs were processed in the form of photographs of the various scenarios. The process became self reflexive as the mirrored planes began to gather more space.

The space of the reflection became a locus of investigation as new outputs were discovered through iterative constructions.



Bas Princeton, *Trail House, walkable model*, 2009, Part of exhibition Unknown Territory, Museum De Paviljoens, Almere (NL), Collection Plancius, Photograph (accessed 7.31.16)

Model designed by Anne Holtrop

The Production of the Real

The praxis of architecture demands the generation of models. Typically these models are digital or physical three dimensional models, paired with a set of construction documents. Their production is predicated on the later production of the "real" artifact which supposedly lies somewhere outside the lineage of the model. In this hierarchical structure the models are used to move the gesture and logic of the architect into a physical entity that the practice of architecture demands. However, this hierarchical ordering of the "real-ness" is not absolute.

Models are simply devices generated for the purpose of study. The model takes many forms: photograph, sculpture, paper scraps, mock-ups, etc. Each medium has its own particular affordance, but all have the potential for placing their user within the realm of study. When the user understands the model as real it sets up a different hierarchy of use. The user interacting with the model is operating in the realm of study, gesture, and logic, rather than in the realm of building.

In his essay *Models are Real*, Olafur Eliasson suggests that, "Rather than seeing model and reality as polarised [sic] modes, we now view them as functioning on the same level. Models have become co-producers of reality." This paradigm shift has already manifested in small ways within art and architecture practices, as well as in many commercial applications (e.g. Google Maps, Oculus Rift, and Facebook, Second Life) in which the model is functional and no less "real" than the supposed reality that it is abstracting.

In the realm of architecture this model/reality dichotomy blurring has been addressed directly by the architect Anne Holtrop in his *Trail House*. The house is conceived of as a full scale study model where there is no intermediary between the speculation and realization phases of the project. As a result of this conceptual position all the other models used in the development of the project are treated with the same level of hierarchical reality as the - so-called - final model. This subtle but important shift in the location of "real" reality within our subjective hierarchy leads implicitly to

Models are Real by Olafur Eliasson from *Models Edited* by Emily Abruzzo, Eric Ellingsen, and Jonathan D. Solomon, New York 2008, pp. 18-25, 18-19

Thomas Demand, *Bathroom*, 1997, consulted online at http://www.matthewmarks.com/new-york/artists/thomas-demand/selected-works/#/images/3/ (accessed June 30, 2016)

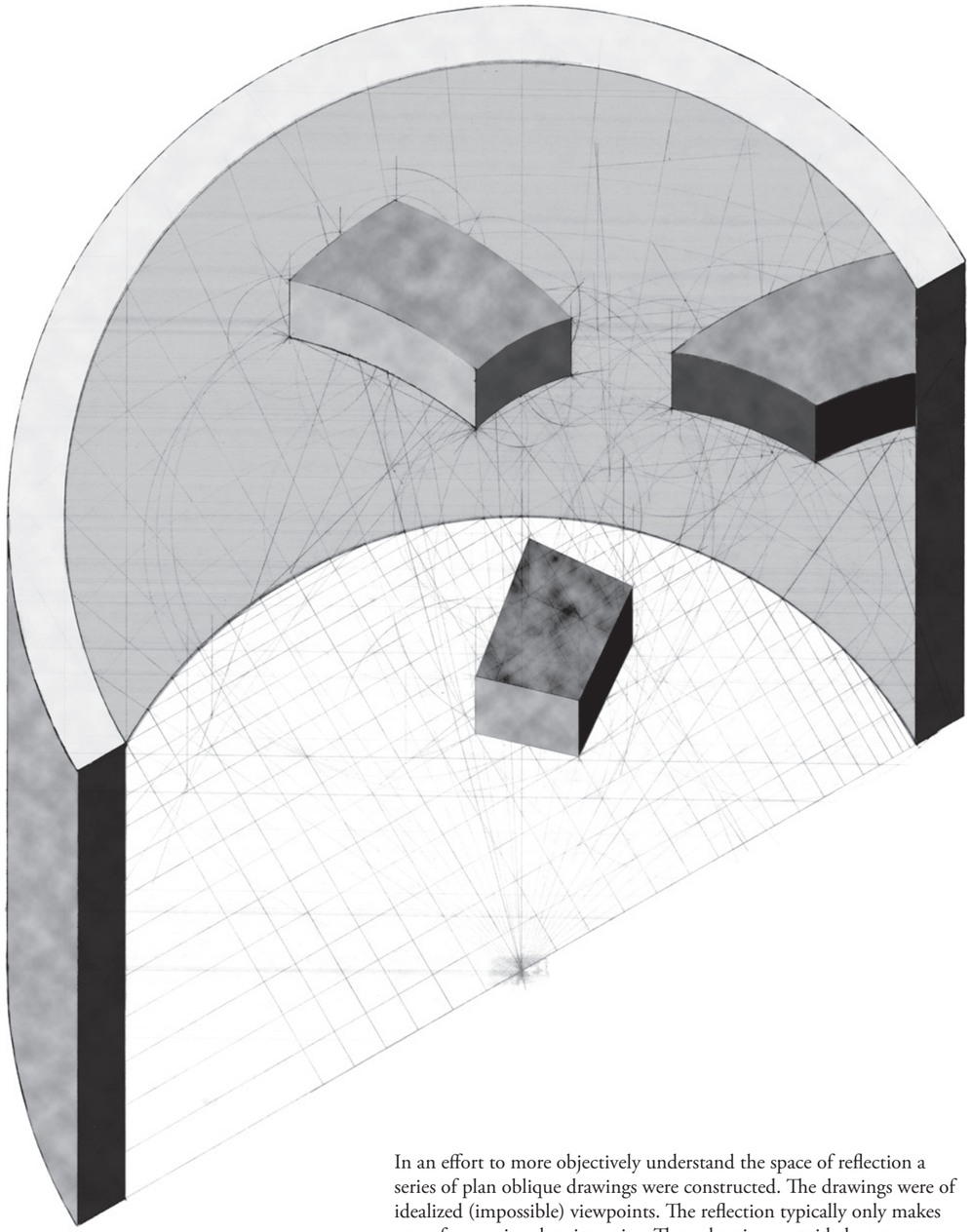
either the total dissolution of the real or the concretion of all models as real. This indistinct barrier between phases of study is enabled in Holtrop's case by extending the logic of the construction of the *Trail House* from studio scale to full scale without an intermediate break in the treatment of material and construction. The extension of logic seems, at first, like a brutal action. However, it treats the existing parametric construction paradigm with a great deal of transparency that is lacking in many projects that pretend to stand within the realm of tectonic formalism but end up painting themselves in bizarre masks of pseudo-logic. A prominent example of the masks of pseudo logic are the false brick facades pasted to a large number of homes in suburban developments.

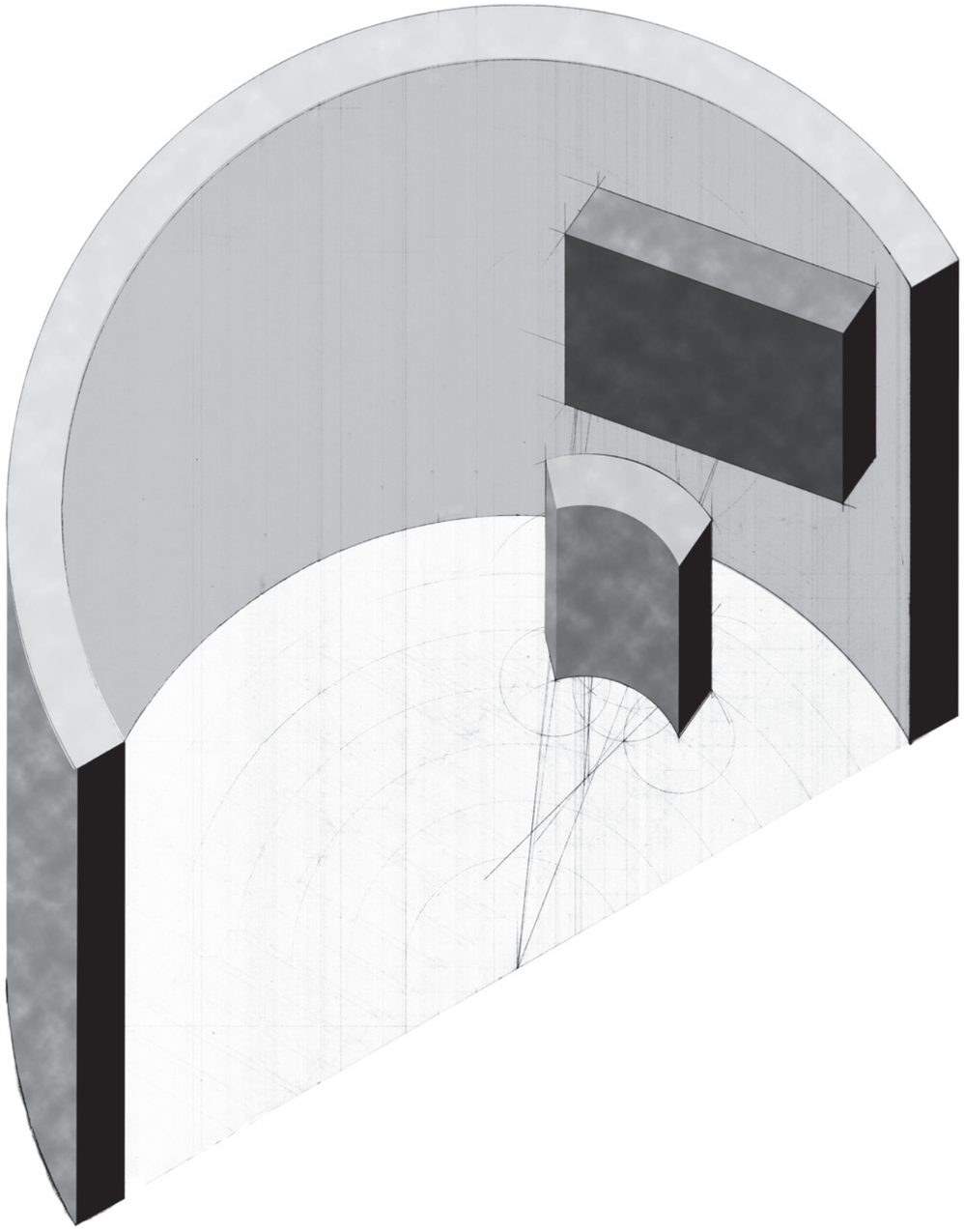
Eliasson does not see this shift as a horrific disruption to our psyche, rather, he suggests,

> "This condition does not represent a loss, as many people, deploring the elimination of unmediated presence, might think. On the contrary, the idea that the world consists of a conglomeration of models carries a liberating potential, as it makes the renegotiation of our surroundings possible. This, in turn, opens the potential for recognition of the differences between individuals. What we have in common is that we are different. The conception of space as static and clearly definable thus becomes untenable - and undesirable. As agents in the ceaseless modeling and remodeling of our surroundings and the ways in which we interact, we may advocate the idea of a spatial multiplicity and co-production."

The world is already mediated on many levels of interaction. If this is taken as a fact the "renegotiation of our surroundings" becomes possible, even desirable, when we recognize the potential for restructuring the models we exist within.

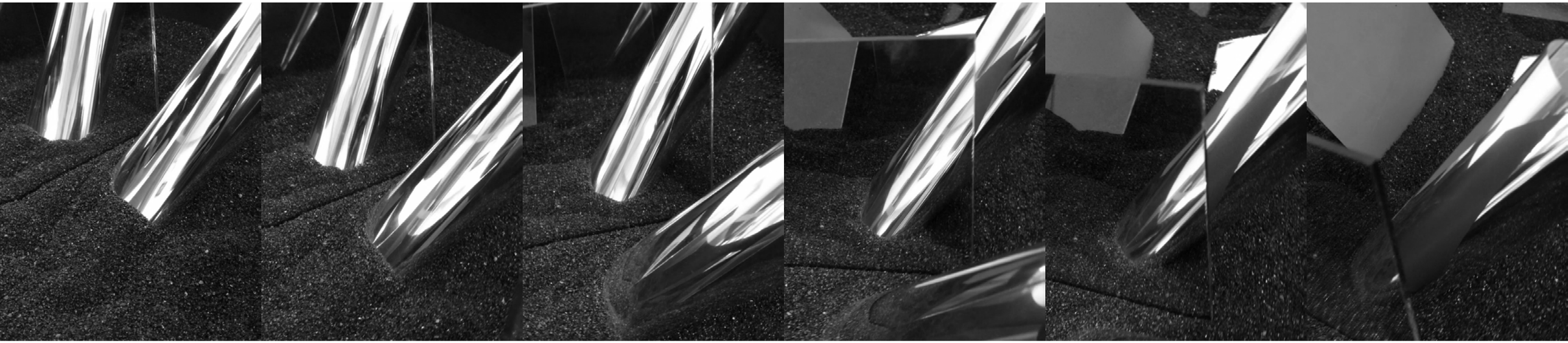
When the artist Thomas Demand undertakes his constructions, he extends the model into the realm of the photograph. For him, the photograph is the model. The photographs are the result of an extensive process where environments and objects are simulated with paper, achieving an uncanny dematerialization. The paper model generated is ultimately disposed of in favor of the superior reality of the photograph. The paper model is a falsification, but the photograph moves the work into a medium deeply linked with reproduction of reality. A contradiction set up by the medium generates ambiguous perceptions. The viewer is placed in a position in which they must engage with the logic of the construction, rather than the phenomenal attributes of the photograph as an aesthetic object. In opposition to this way of working is the work of the photographer Ansel Adams who explicitly attempts to produce the least mediated reality possible. Demand needs the mediation to become subtly apparent in order for the model to become operable. Once it becomes operable the user becomes implicitly engaged in the study as a conceptual operation.





In an effort to more objectively understand the space of reflection a series of plan oblique drawings were constructed. The drawings were of idealized (impossible) viewpoints. The reflection typically only makes sense from a singular viewpoint. These drawings provided new ways to engage the mechanical properties of reflective surfaces.

The right drawing is a view of the object viewing itself and the left drawing is from a possible infinite perspective.

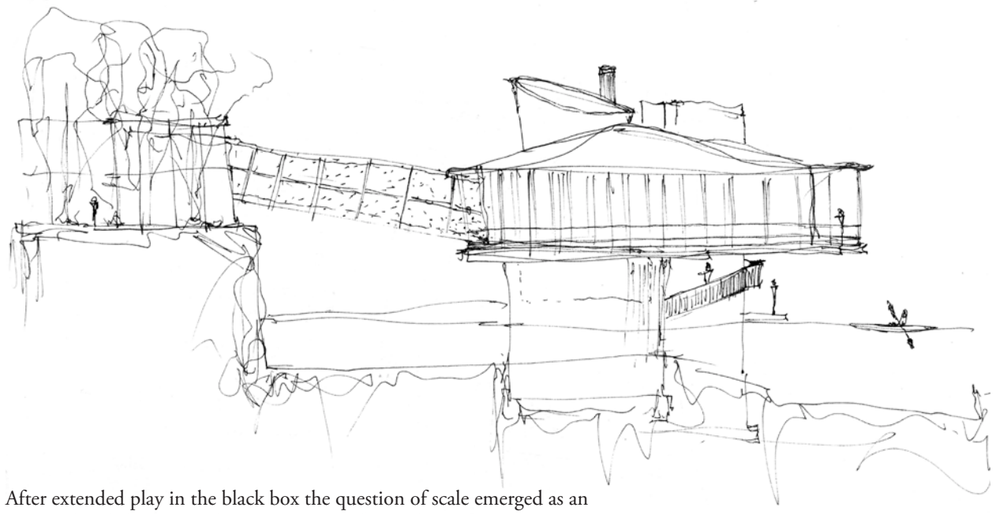


The phenomenal sequence refers to the experience of moving through space. It is an attribute that is particular to architecture. The sequence consists of three characteristics: memory, immediate perception, and speculation. These three characteristics work in concert to build a full conceptual understanding of space. In order to study the phenomenal sequences of the scenarios short videos were created to document the space.

Stills were captured from the videos at regular intervals to study some possible sequences. The selected sequences highlighted various potentialities of the constructs. The selections explore the virtualization of material and depth. The most successful sequences explore the full range of virtual material transformation and engage fully the ambiguious characteristics of the surfaces.

The primary defining feature of the virtual spaces was a high level of material ambiguity. This appeared when there was a conflation of near and far as well as material distortions made possible my the reflective surfaces and tricks of visual continuity.

The construction of ambiguious situations is analagous to the photographs of Thomas Demand. He used the material qualities, in conjunction with photographic practice to develop highly ambiguous scenes, challenging the perception of scale and materiality.

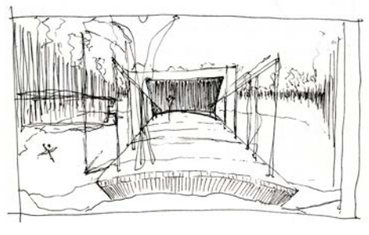


After extended play in the black box the question of scale emerged as an unconsidered element in the construction of virtual space.

The program of a public pool located in an abandoned quarry near Radford, VA was developed in order to drive some of these questions.

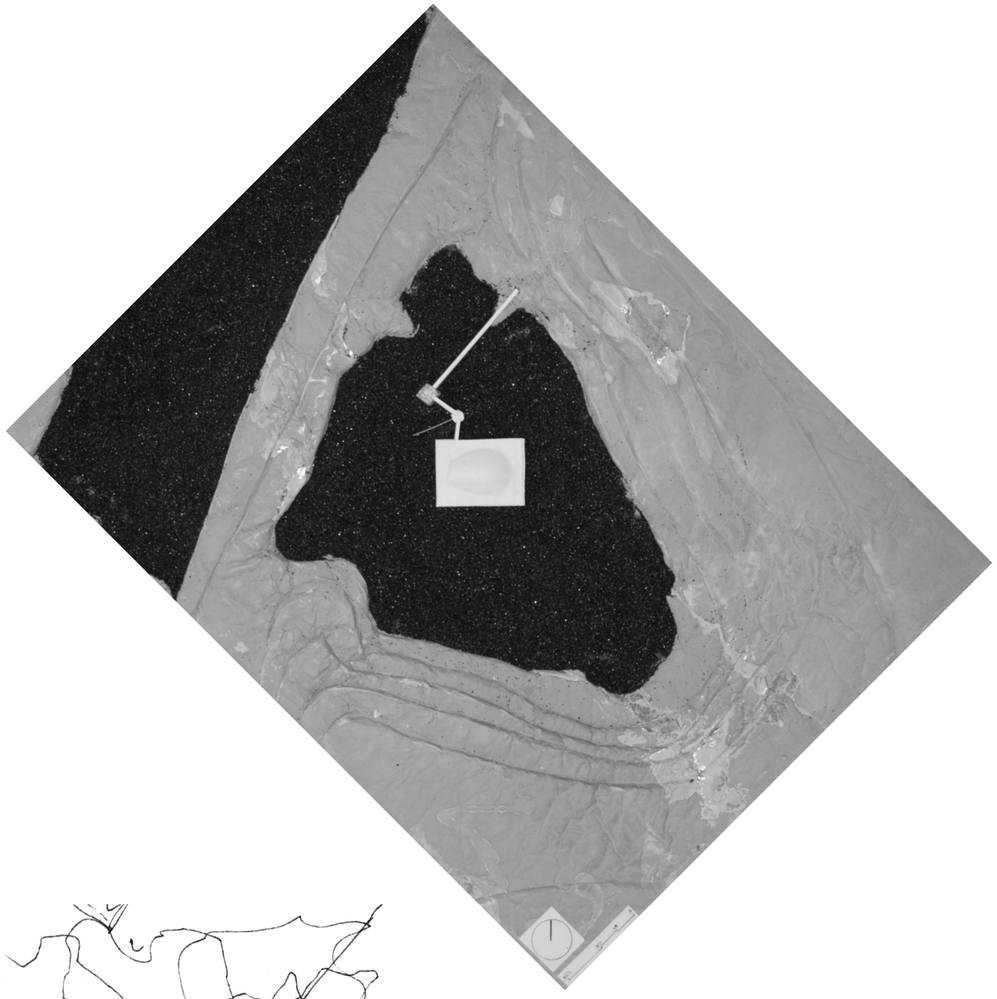
The pool itself floats in the quarry lake and is accessed via a series of bridges. It is a pool within a pool. A liquid island. It takes on an ambiguous role in this position, generating questionable validity for its own existence. Its form is the result of deformations initiated by the formal demands of the program. The lap pools initiate the gesture of movement that ripples out and manifests in the skin of the floor and roof planes. The pool is enclosed by mirrored glass panels that allow an unobstructed view out into the “natural” landscape but prevent those outside from gaining visual access into the aquatic environment. This visual divide sets up the “nature” around the pool in a false frame that highlights the artificiality of both the situation of the quarry and the pool itself.

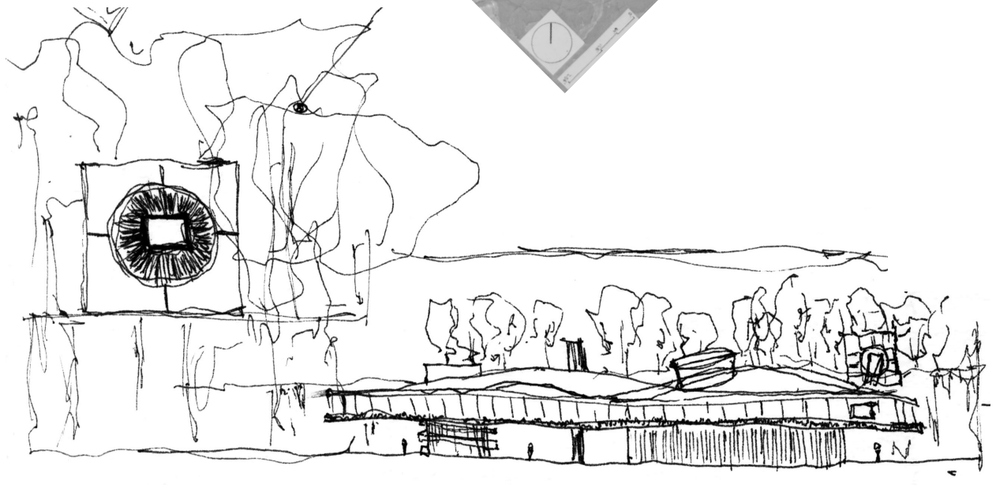
Situated on the path between the parking area and the pool is a changing facility accessed through large rubber doors. The changing area that looks inward to an aquatic courtyard fronted by mirror glass to protect the privacy of the swimmers on the opposite side of the court. It performs the inverse function of the mirrored pool enclosure. Instead the focus is inward and upward/downward, an abrupt and disorienting shift from the initial horizontal encounter with the landscape.

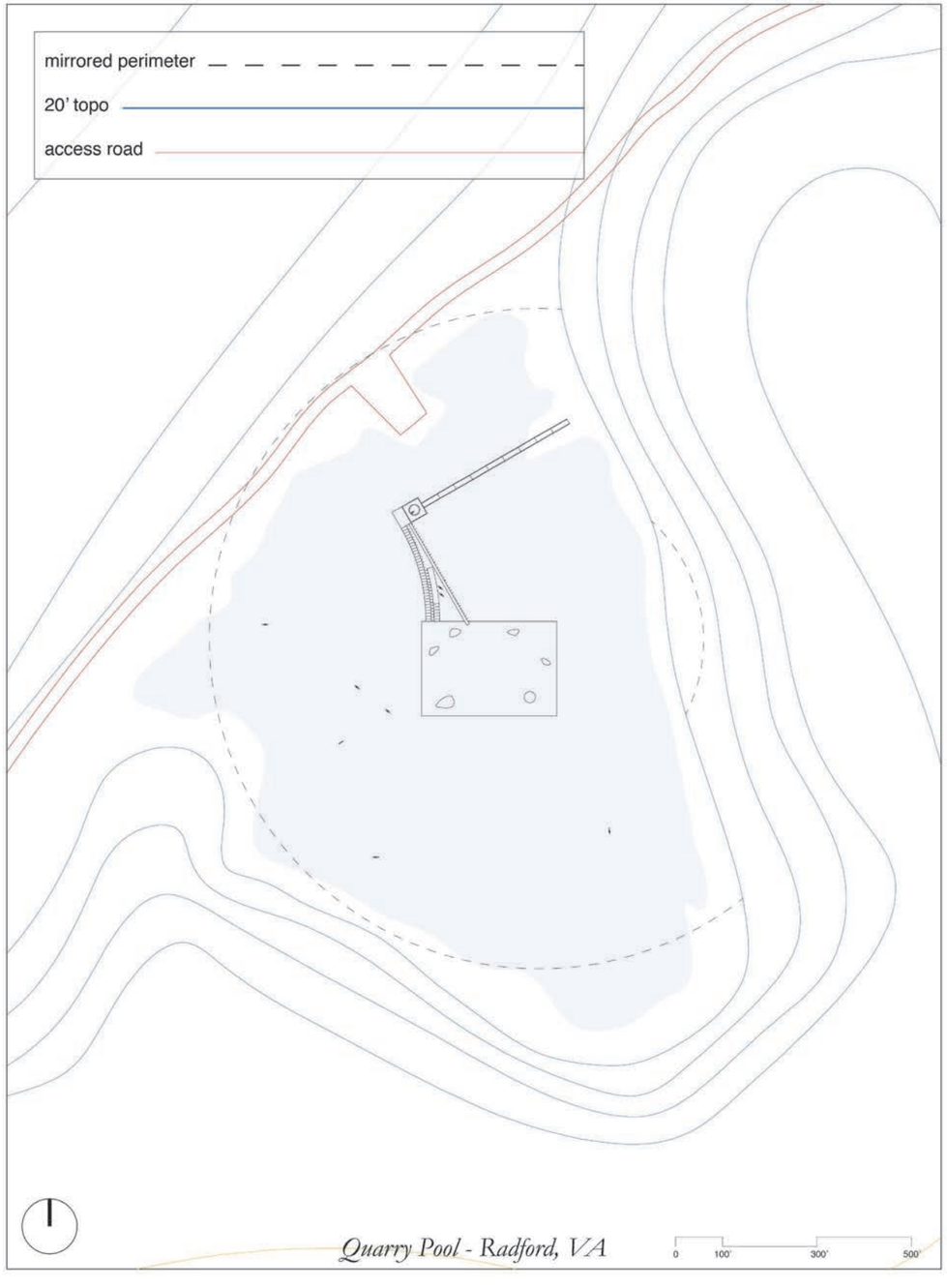


Upon moving from the changing facility towards the pool there is a junction with a path leading to the undulating rooftop of the pool where an artificial landscape has been constructed.

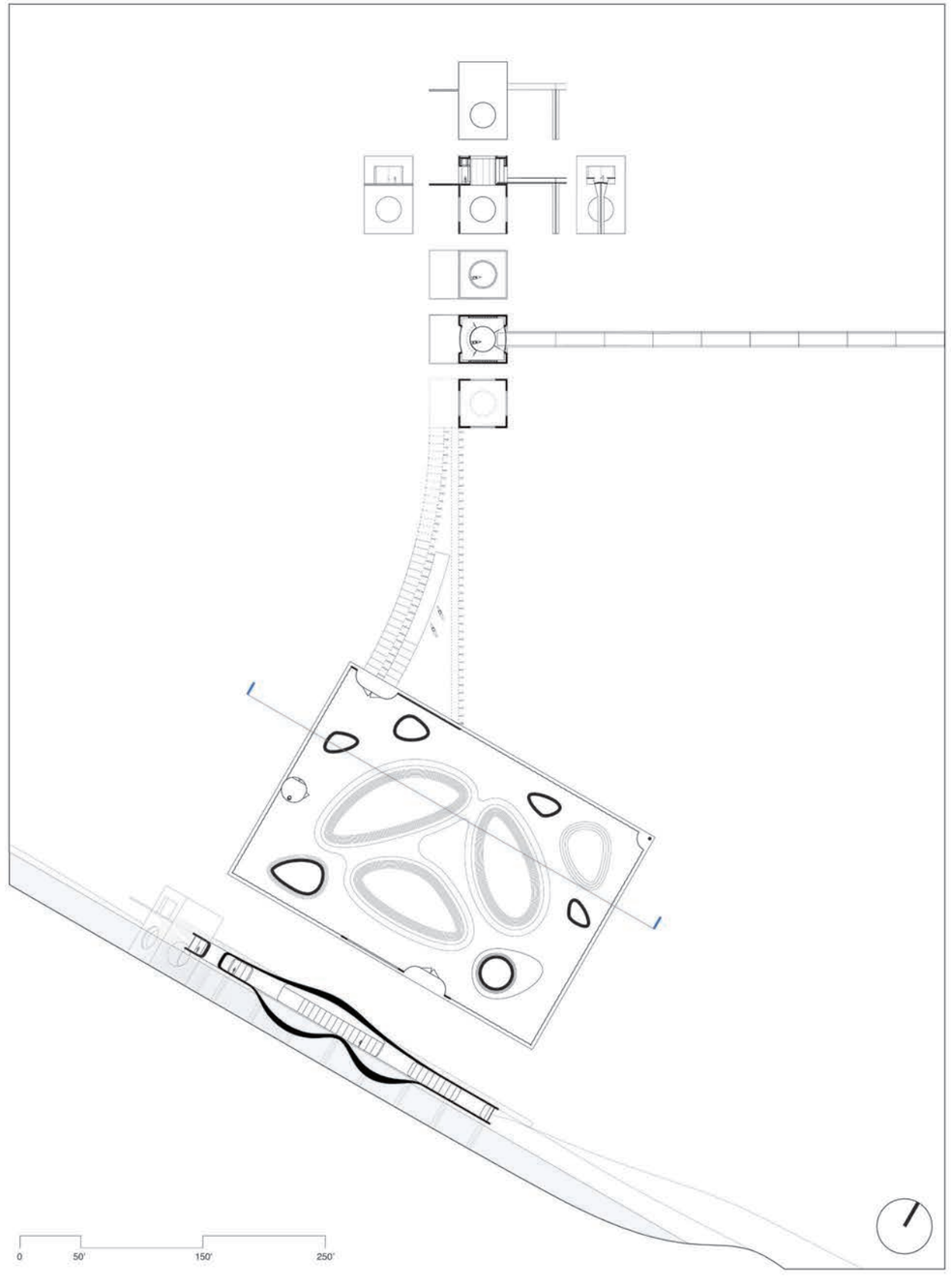
Surrounding the entire complex is a reflective wall that redirects distorted views inwards, back into the pool, doubling the encounter with the landscape and eliminating the viewer from the infinite feedback generated in the parallel reflections.







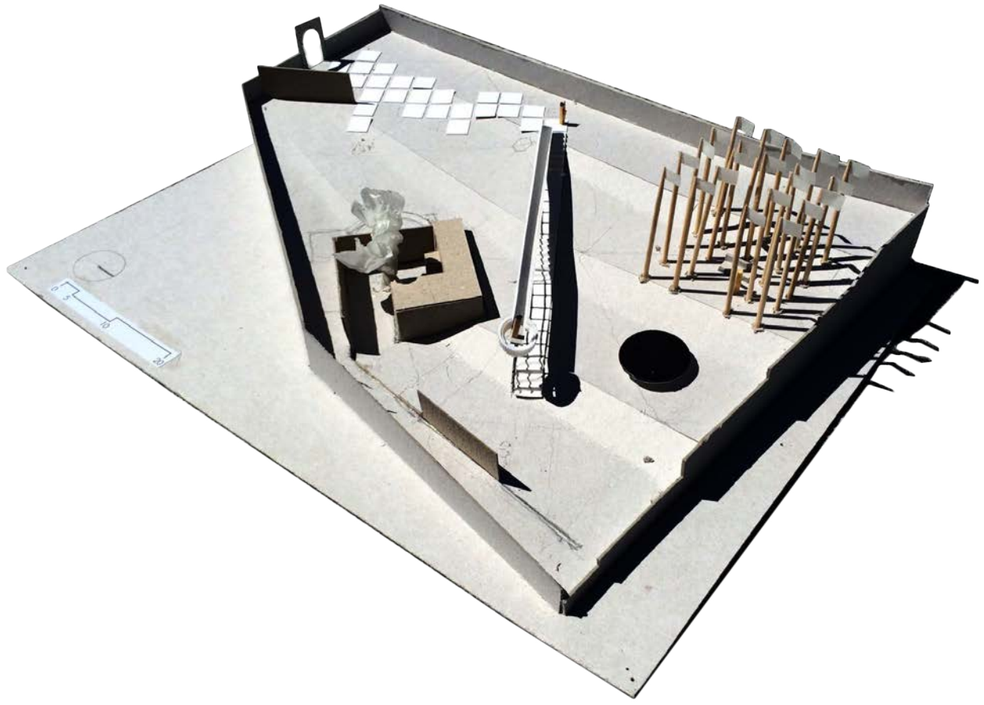
Quarry Pool - Radford, VA



l'archivio

Archive of Etymology in Riva San Vitale, Ticino, Switzerland

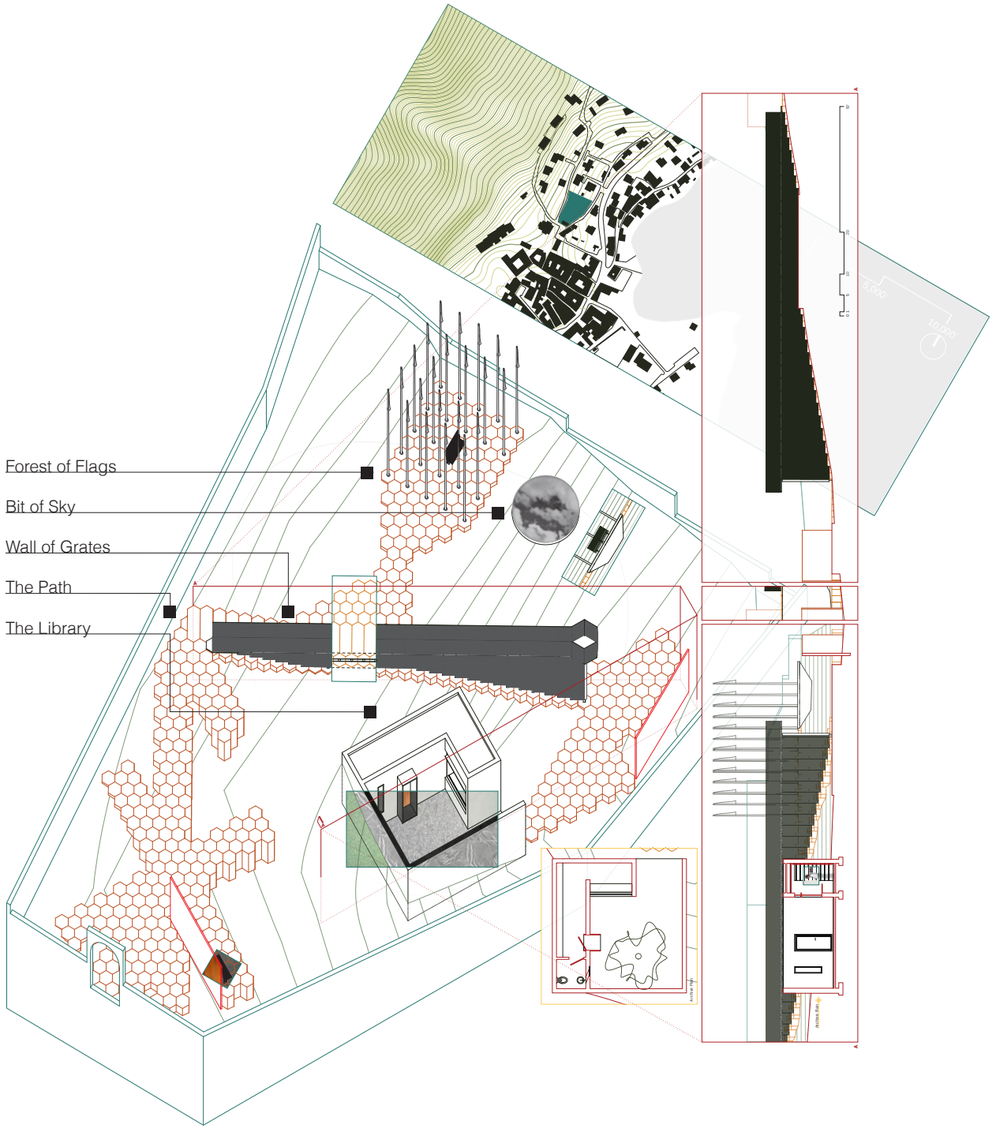
Spring 2015



Located in Riva San Vitale, Ticino, Switzerland, the archive of etymology is a complex of follies constructed from infrastructural materials observed throughout the various cantons of Switzerland.

The complex centralizes around a small library containing books that trace the development of language within the Swiss Confederation.

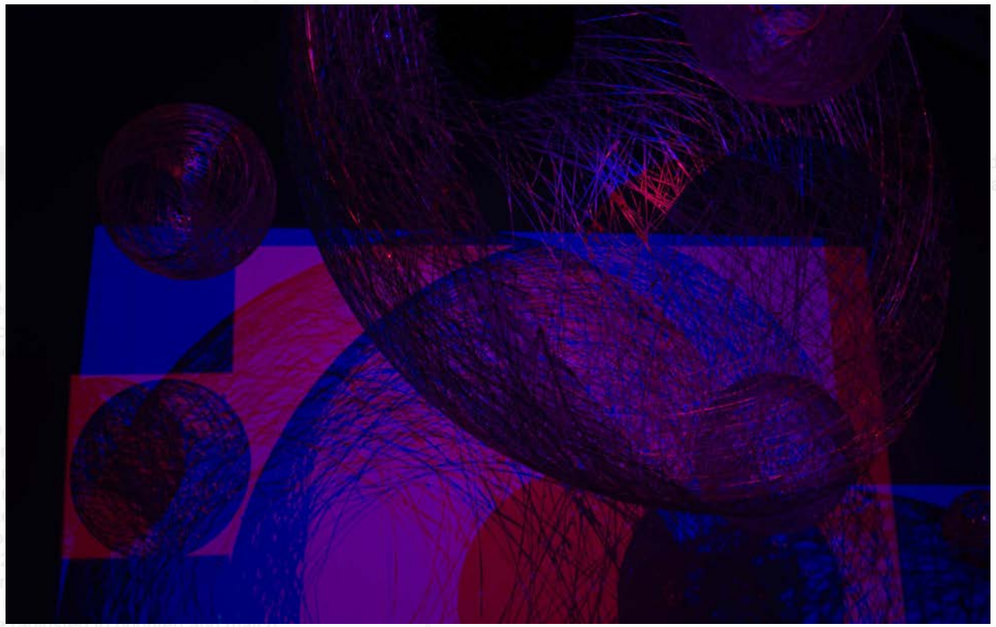
The material and formal choices of the project set up a framework that examines the connections between the proposal and surrounding (local, regional, and global) economic and cultural contexts while simultaneously leveraging the distinct phenomenological characteristics of infrastructural materials (flag poles, corrugated steel ground retention system, and steel grating) with a false naivete about their typical use in order to produce novel scenarios.



Research and Installations

Dense Space + Dense Space Il'Mobile

Fall 2014 - present

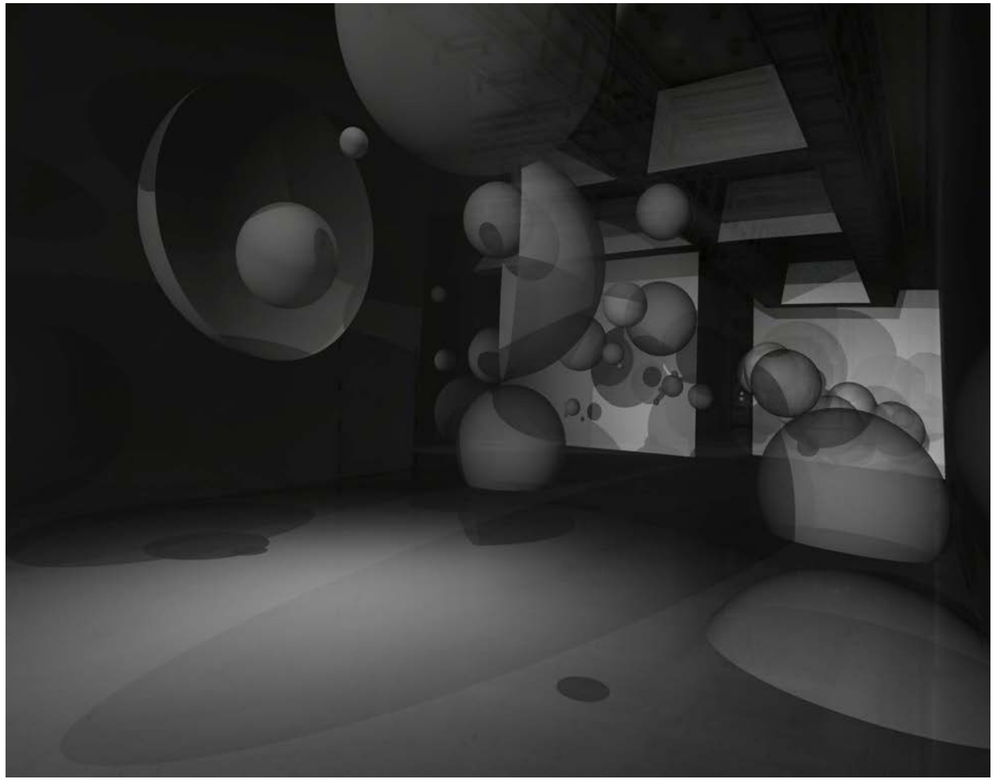


Dense Space at Moss Center for the Arts

Dense Space + Dense Space Il'Mobile is the current iteration of a spatial investigation utilizing textile materials, anaglyph lighting, and digital systems together to produce reconfigurable environments that challenge normative perceptions of space. I have been responsible for developing the software and hardware that controls the movement of the mobile in response to space weather data from currently orbiting satalites. Additionally, I have been collaborating with Professor Zellner on the design development of the project including the development of tooling and techniques for fabricating large open weave fiberglass spheres.

Dense Space Il'Mobile will be exhibited at the Smithsonian Museum of Natural History during the 2017 ACC Creativity Conference. Dense Space has been exhibited at the Moss Center for the Arts in Blacksburg, Virginia for ICAT Day and won the At The Nexus Award which exemplifies work at the nexus of engineering, arts, and design and will continue to be exhibited in Roanoke, Virginia at the Science Museum of Western Virginia.

Previous iterations of the project (Nets 2.0 and Nets) used computer controlled lighting to activate the installations in response to poetic interpretations of local weather data. I was responsible for fabrication and lighting control using the graphic programming interface Max/MSP.



Faena Art Center Competition Proposal

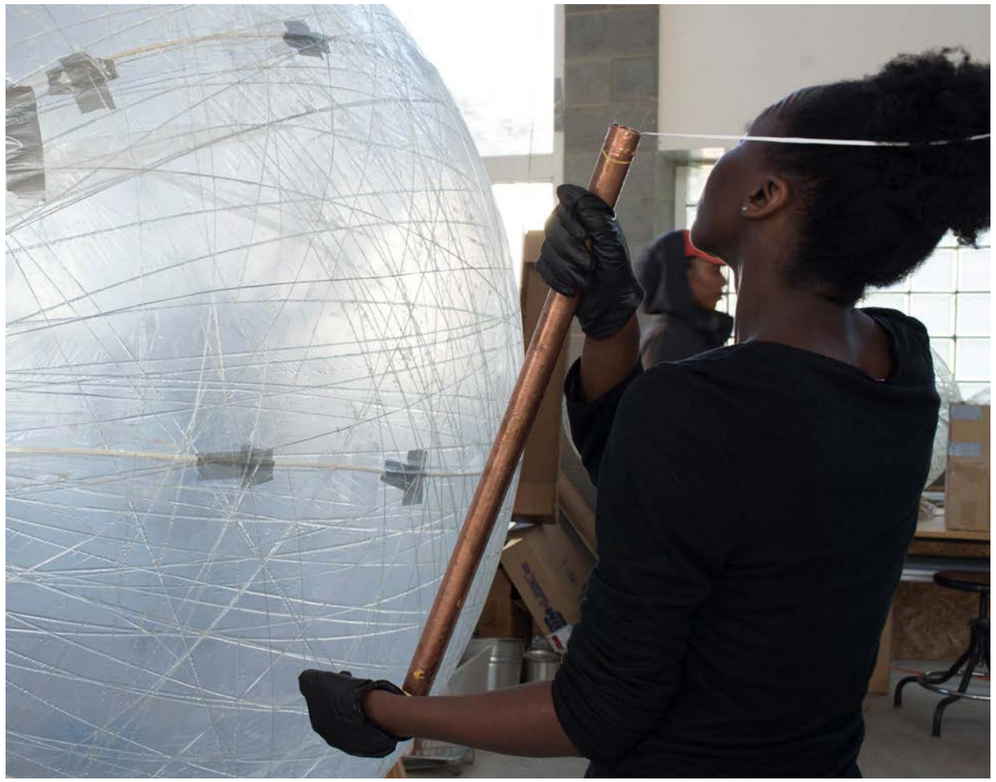
The manufacturing of the glass fiber spheres begins with the assembly of rings that anchor the strand of single end roving glass fiber.

Next, an inflatable bladder is suspended on a rotisserie and covered with a PTFE sheet that releases from the epoxy used to coat the fiber.

The sphere is then wrapped manually, using techniques adapted from industrial filament winding processes.

The glass fiber is run through a bath of epoxy contained in a hand-held gun and wound onto the rotating mould until the desired density is reached.

It is then left to cure for a week before being removed from the mould and cut.



Photographic Studies

Spring 2015

Tools for Seeing

These photographs are not documents.

They are tools for seeing.

These series are motivated by a search for critical density – a moment of equilibrium in the world – even if it exists for only a fraction of a second.

These photos are selected from a semester long study conducted while living in Riva San Vitale, Ticino, Switzerland.

List of Plates: Section I

An interest in layering and compositional doppelgangers guides this investigation. The images begin to examine recurring patterns in our architectural environment.

Brion Cemetery
San Vito d'Altivole, Italy
Carlo Scarpa

San Giovanni Battista, Highway A11
Florence, Italy
Giovanni Michelucci

Brion Cemetery
San Vito d'Altivole, Italy
Carlo Scarpa

MAXXI Museum
Rome, Italy
Zaha Hadid

Sant'Ivo alla Sapienza
Rome, Italy
Francesco Borromini

San Giovanni Battista, Highway A11
Florence, Italy
Giovanni Michelucci

Duomo di Siena
Siena, Italy
Giovanni di Agostino

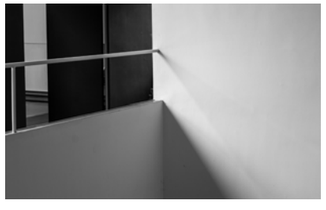
The Tempietto of San Pietro
Rome, Italy
Donato Bramante

San Carlo Alla Quatro Fontane
Rome, Italy
Francesco Borromini

San Giovanni Battista, Highway A11
Florence, Italy
Giovanni Michelucci

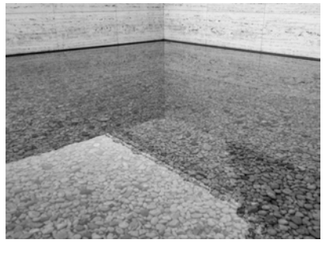
List of Plates: Section II

Ambiguous situations drive oscillations in perception. This series focuses on a search for simultaneous depth and flatness.

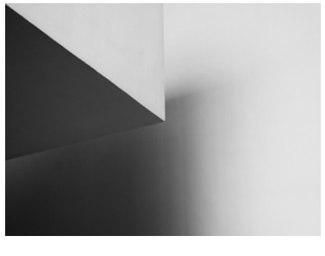


Villa La Roche
Paris, France
Le Corbusier

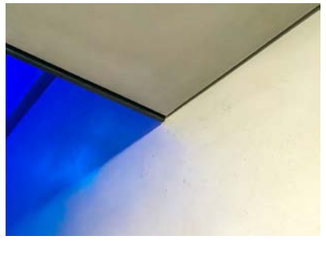
Barcelona Pavilion
Barcelona, Spain
Mies van der Rohe



Barcelona Pavilion
Barcelona, Spain
Mies van der Rohe



Villa La Roche
Paris, France
Le Corbusier



Punta della Dogana
Venice, Italy
Tado Ando

Barcelona Pavilion
Barcelona, Spain
Mies van der Rohe

Casa Milà
Barcelona, Spain
Antoni Gaudí

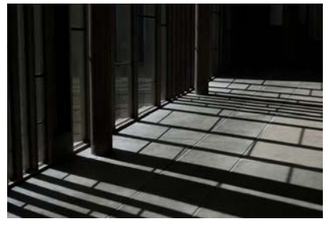
Pluto and Proserpina
Jeff Koons

Caixaforum
Madrid, Spain
Herzog & de Meuron

Horse Stable
Granada, Spain

List of Plates: Section III

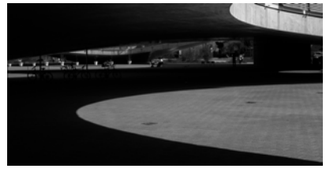
Frames in frames define this set. There is a continued interest in the flattening of depth and abstraction of shadow which takes on the role of both figure and ground.



Sainte Marie de La Tourette
Éveux, France
Le Corbusier

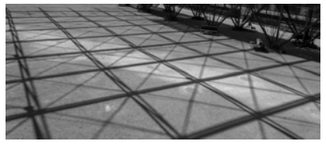
VitraHaus
Weil am Rhein, Germany
Herzog & de Meuron

Jewish Museum
Berlin, Germany
Daniel Libeskind



Rolex Learning Center
Lausanne, Switzerland
SANAA

Vitra Fire Station
Weil am Rhein, Germany
Zaha Hadid



MFO Park
Zurich, Switzerland
Burchardt + Partner AG / Roderschall

Sainte Marie de La Tourette
Éveux, France
Le Corbusier

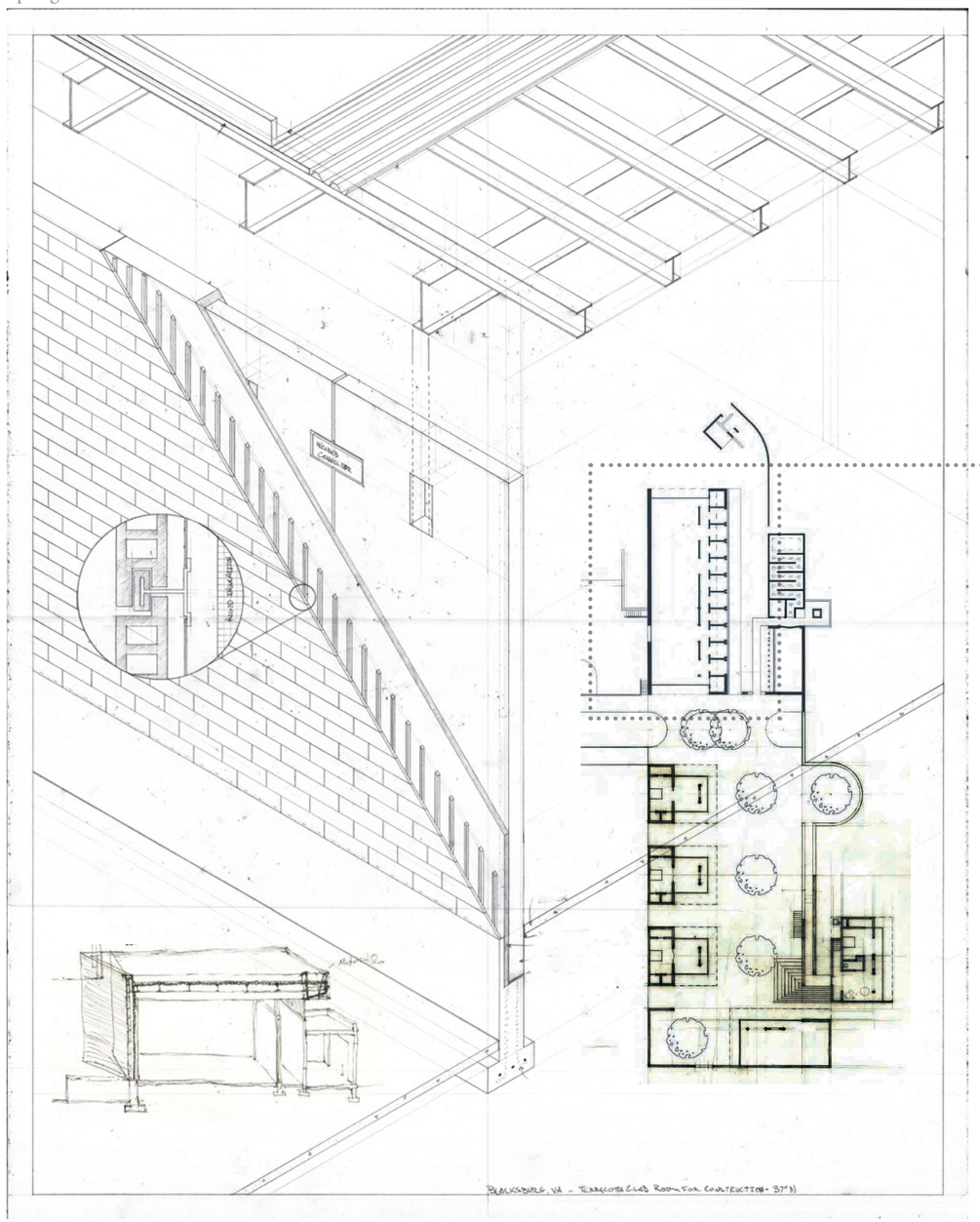
Alcázar de los Reyes Christianos
Córdoba, Spain

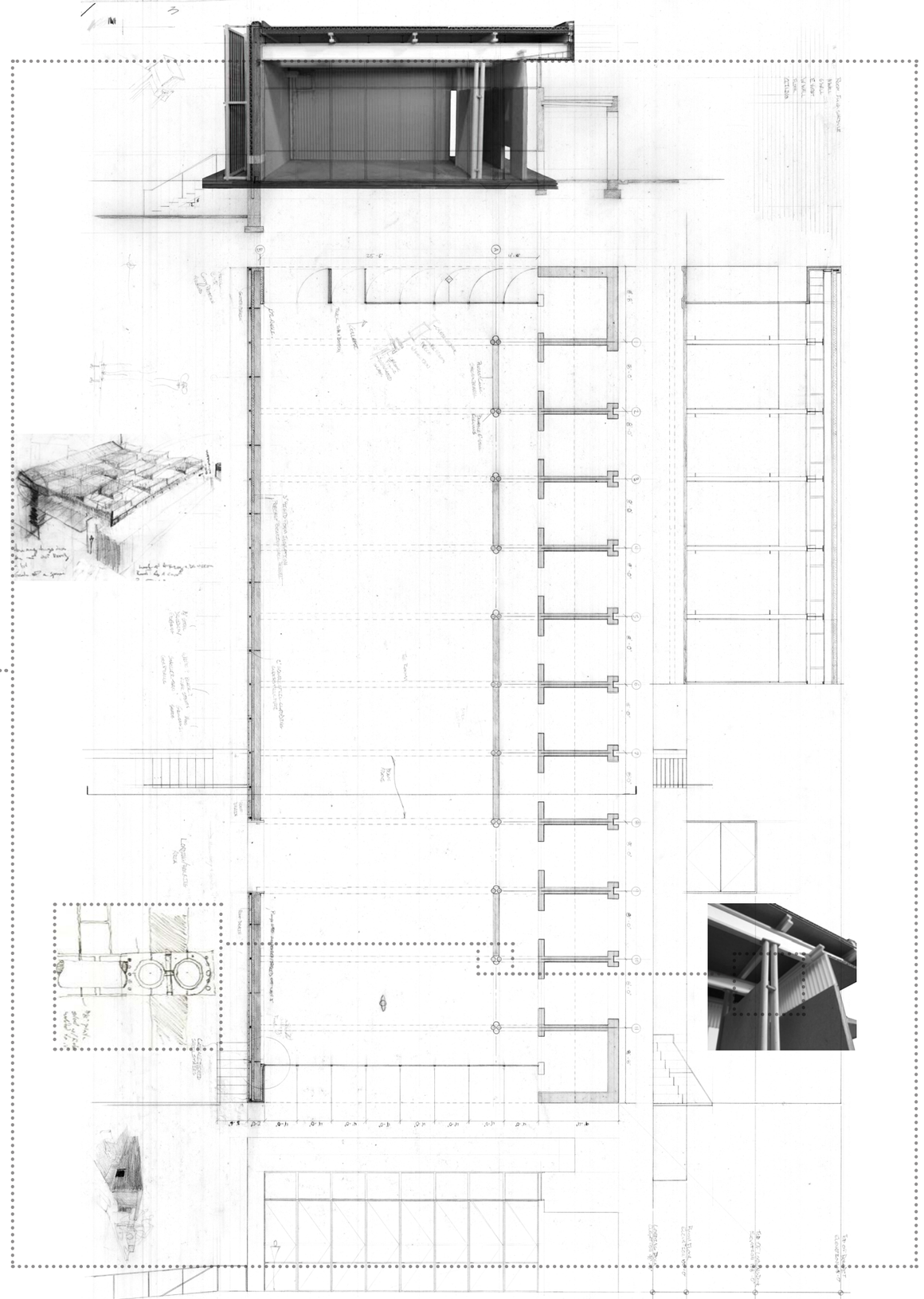
Sainte Marie de La Tourette
Éveux, France
Le Corbusier

Third Year Projects

Spring 2014

Room for Construction





Third Year Projects

Spring 2014

Residence for Students + Faculty

Student Residence

Student Residence

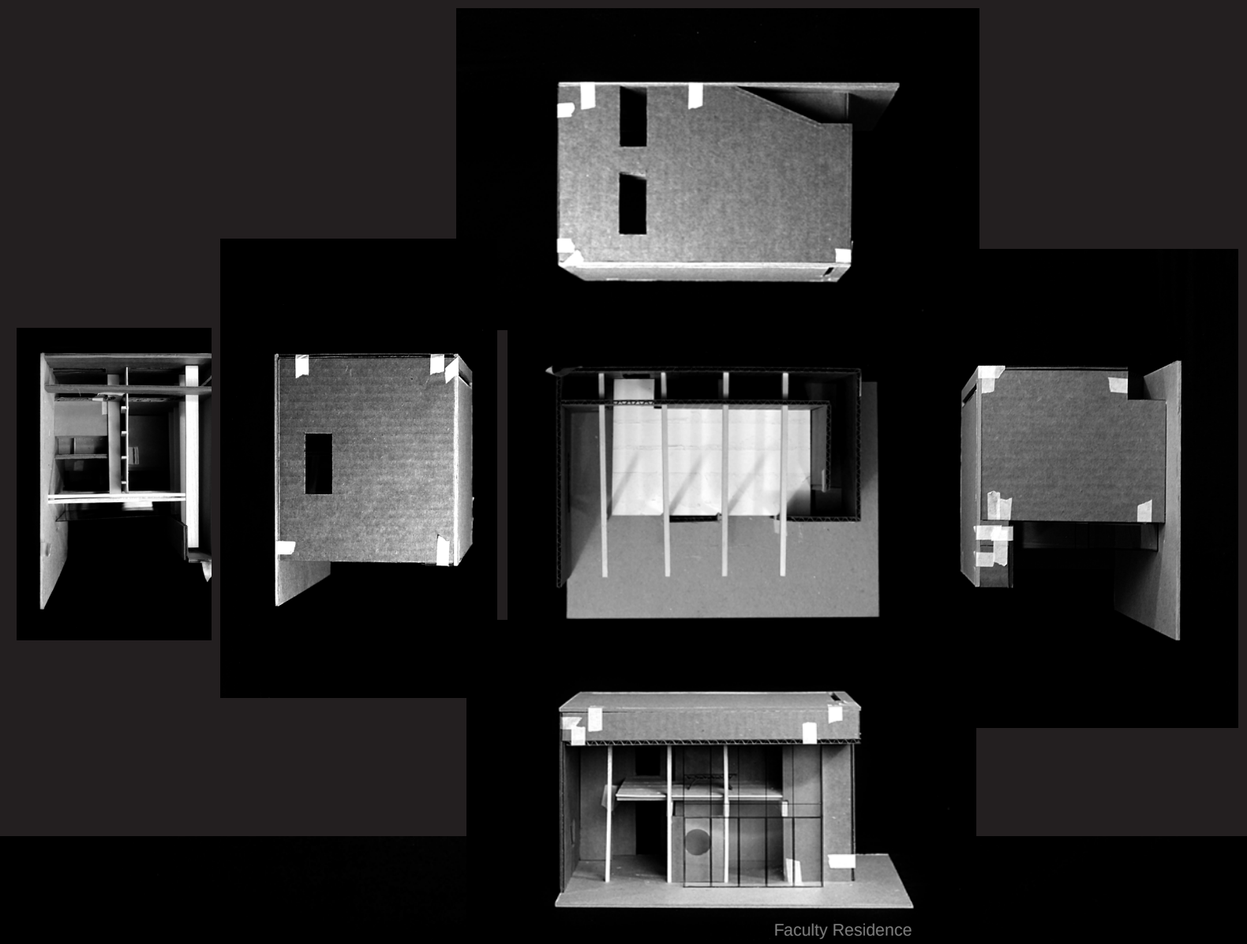
Student Residence

Faculty Residence

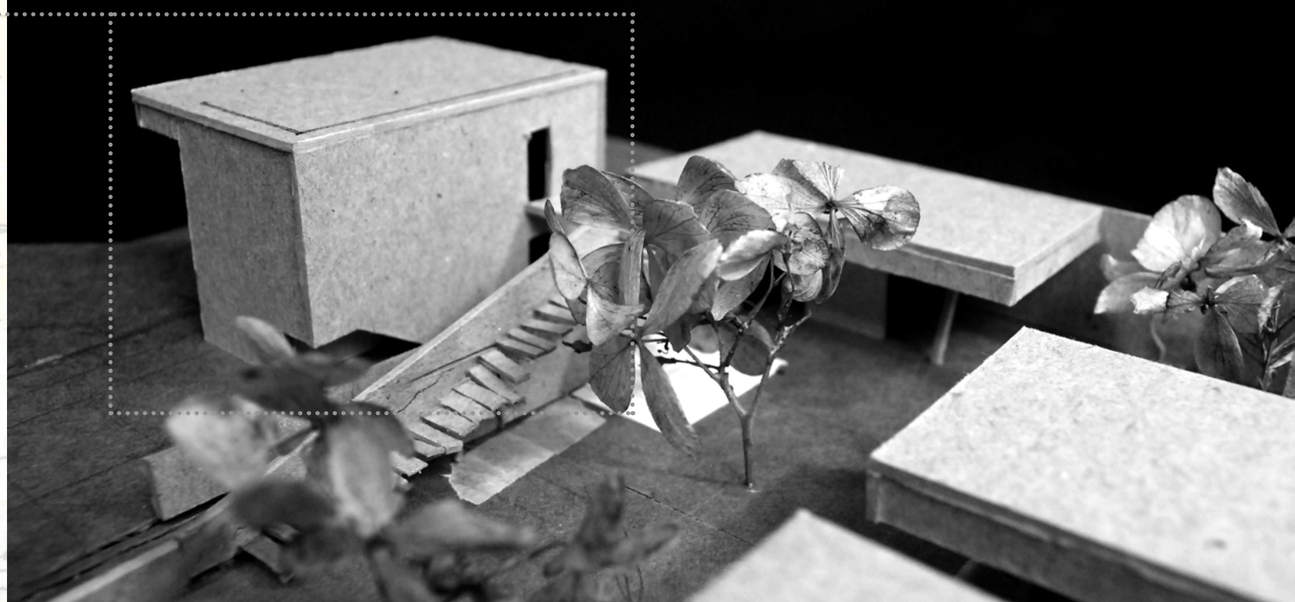
Dining Area

The Residence for Students + Faculty is a complex consisting of three student residences and one faculty residence. There is a shared dining area at the south end of the site. Upstairs in the Faculty residence is an open area for meeting with students, accessible through a separate entrance.

The residences are in place to serve the Room for Construction, an area for large scale architectural experiments.



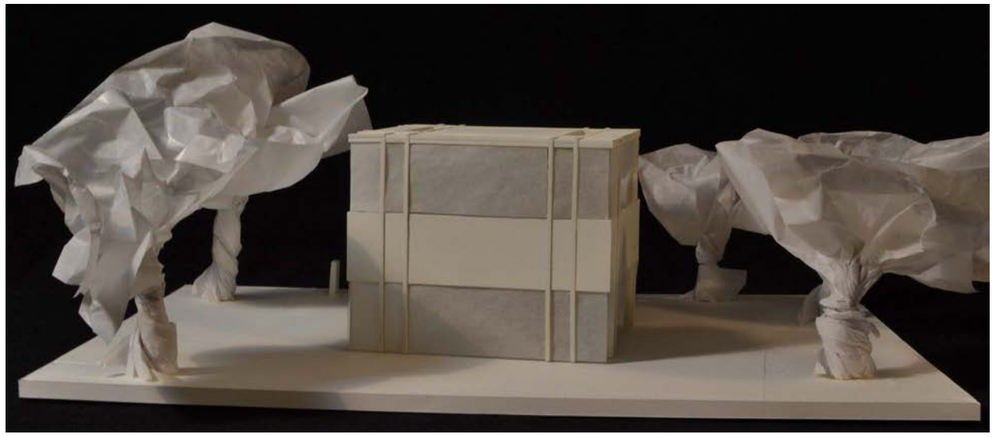
Faculty Residence



Second Year Projects

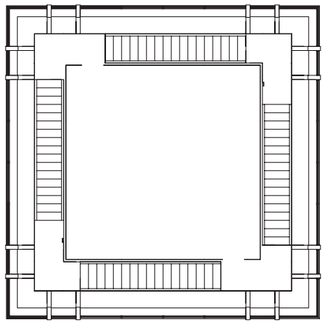
Artist Residence

Fall 2012

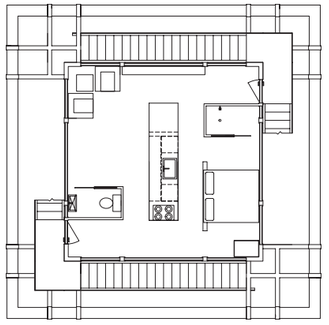


The House for a Painter is constructed as a rectangular prisim suspended within a larger rectangular prisim. The suspended object, accessed by double-helix staircases, contains the bathroom, bedroom, and kitchen.

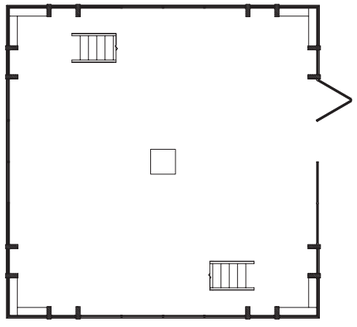
The space around the object is open except for a stationary cabinet in the center of the ground floor, creating a fulcrum for circulation. The building was conceived without a specific site and is intentionally non-directional. There are external fabric shades to adjust the light and recieve the shadows from adjacent trees.



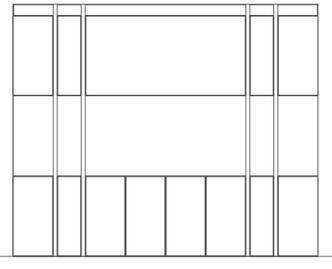
Observation Platform



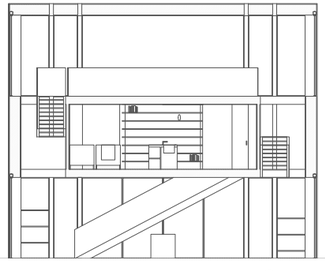
Living Area Plan



Ground Plan



Elevation

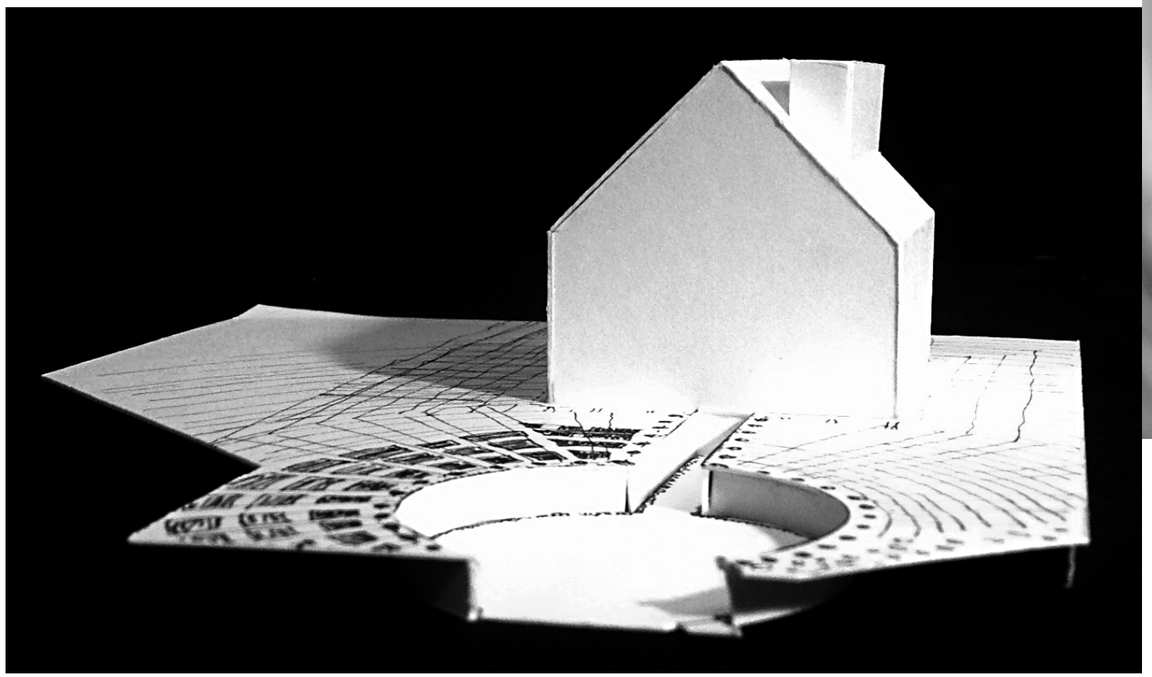


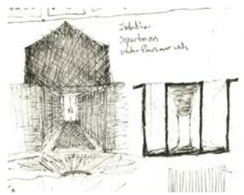
Section

Second Year Projects

Gallery in a Suburban Neighbourhood

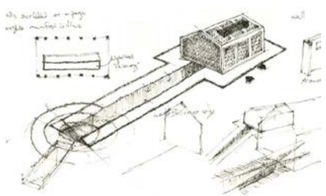
Fall 2012

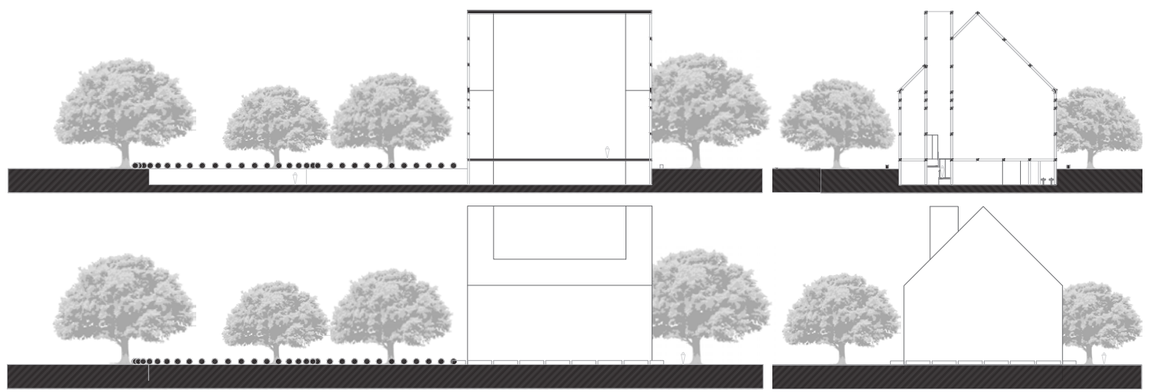




The Art Gallery in a Suburban Neighborhood is based on the archetypal house form. It is a steel frame building clad with a translucent membrane. The entrance is below grade, accessed via a ramp leading to a large circular depression where the visitors reorient themselves to the axis of the building.

Circulation within the building is directed through an outdoor "chimney" which contains a ramp up to the gallery floor. The "chimney" also functions as an element to circulate around within the gallery space.





Teaching Appointments

Foundation Lab Adjunct Instructor, Virginia Tech, Blacksburg, Va

Fall 2016 - Spring 2017

Foundation Lab in the Virginia Tech School of Architecture + Design is a year long course combining students from the disciplines of architecture, landscape architecture, interior design, and industrial design. Fundamental skills and principles are taught during this course. The students undertake individual investigations cast as open ended studies, employing a variety of media including technical drawing, photography, physical and digital modeling, and hybrid constructions.

The open ended projects focus on the notion of the study as an ongoing series of experiments, rather than a goal oriented approach seeking a predetermined outcome. Allied creative practices, such as the practice of mise en place taken from culinary practice, are introduced as a way to approach the lab. This practice, for example, operates under the assumption that, with the appropriate skills and tools in place, increasingly complex and challenging studies could be undertaken. In this context, design is neither parameter driven, nor a laissez-faire practice awaiting divine inspiration. Rather, it is an open process of play through material.

Shown here are a few examples of student work.