

# SYRACUSE ARCHITECTURE

THESIS 2015



Editor in Chief  
**Michael Speaks**

Editor  
**Benjamin Farnsworth**

Thanks to  
**Jean-François Bédard**  
**Julia Czerniak**  
**Terrance Goode**  
**Mark Linder**  
**Jonathan Louie**  
**Kyle Miller**  
**Mary Kate O'Brien**  
**Tim Stenson**  
and to all our thesis advisors

Graphic Design  
**Common Name**

**Syracuse University**  
**School of Architecture**  
**201 Slocum Hall**  
**Syracuse NY 13244**  
**(315) 443-2256**  
**soa.syr.edu**

Syracuse Architecture Thesis 2015  
is published by Syracuse University  
School of Architecture

Copyright © 2015  
Syracuse Architecture

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopy, record, or any other information storage and retrieval system, without prior permission from the publisher.

All reasonable attempts have been made to contact the copyright holders of the images used in this publication. If you hold the rights to an image that has been used without permission, please contact the editor and a formal acknowledgement will be printed in the next issue.

**Founded in 1873, the Syracuse University School of Architecture consistently ranks among the best schools of architecture in the nation.**

**The reasons most often cited are our committed and diverse faculty, our number and variety of study abroad opportunities, and our nationally-accredited, professional degree programs, which provide students with the technical skill and the cultural knowledge necessary to practice in an increasingly competitive global marketplace.**

**The studio experience, at the core of our programs, focuses on the intense exploration of the creative process, supported by the most challenging approaches to history and theory in the context of the technologies that inform the future of our field. The School provides a highly innovative environment for design education in which students benefit from extensive one-on-one communication with dedicated faculty in formal reviews and informal interactions.**

**To prepare students for a world shaped by globalization, the School of Architecture offers study abroad**

**semesters in London and Florence at our University centers staffed by full time architecture faculty. Students also have the opportunity to spend a semester at the University's Fisher Center in New York City, a state-of-the art facility opened in 2013. Shorter study abroad programs are available in locations such as Taiwan, Turkey, Japan, China, and India. The School also brings world-class practitioners and educators to teach and lecture at our home campus, as demonstrated by our visiting lecture series featuring renowned architects and designers, and our visiting critic program in which internationally recognized professors lead studios on campus.**

**Over the past decade, the practice of architecture has undergone dramatic change, placing the architect, once again, at the center of some of the most defining issues of our time. Syracuse Architecture has not only kept pace with these changes, but our faculty, staff, students, and alumni have led and continue to lead the effort to make a better world through the design of better buildings and cities.**

# Syracuse Architecture Thesis 2015

## Table of Contents

18	Jean Ahn
20	Abdulrazzak Nezar Alanjari
22	Carolyn M. AuClair
24	Eric Baker
26	Leslie Carolina Baz
28	Nathanael Bengio
30	Anastasia Benko
32	Brianna Blackaby
34	Nikole D. Cabrera
36	Andrew M. Cardinale
38	Cara Cecilio
40	Lorraine L.M. Chan
42	Kristen Charters
44	Thorfun Chutchawanjumrut
46	Becky Cohen
48	Ryan Douglas DeSilva
50	Heather M. Dela Cruz
52	Alison Marie Dobbertin
54	Patrick Dodson
56	David J. Domke <i>M. ARCH</i>
58	Chao Dou
60	May Usama Dussadeevutikul
62	Nolan R. Ediger <i>M. ARCH</i>
64	Lauren M. Festa
66	Alyssa Francis
68	Nathan Geller <i>M. ARCH</i>
70	Adriana Ghersi
72	Matthew Jordan Gins <i>M. ARCH</i>
74	Garrett Goodridge
76	Adam Michael Gottlieb
78	Morgan K. Graboski
80	Joshua J. F. Graham <i>M. ARCH</i>
82	Adrianna Griffith
84	George Guarino III
86	Alexander Guzman
88	Hasan Hachem
90	Alexa L. Hansford
92	Dana Hareli
94	Zachary Harwin
96	Mark Hernandez-Cornejo
98	Christina Hoover
100	Rossitza Iovtcheva
102	Briana N. Jones
104	Ebony Jones
106	Francisco Jung
108	Nilay Akbas & Gamze Kahya <i>M. ARCH</i>

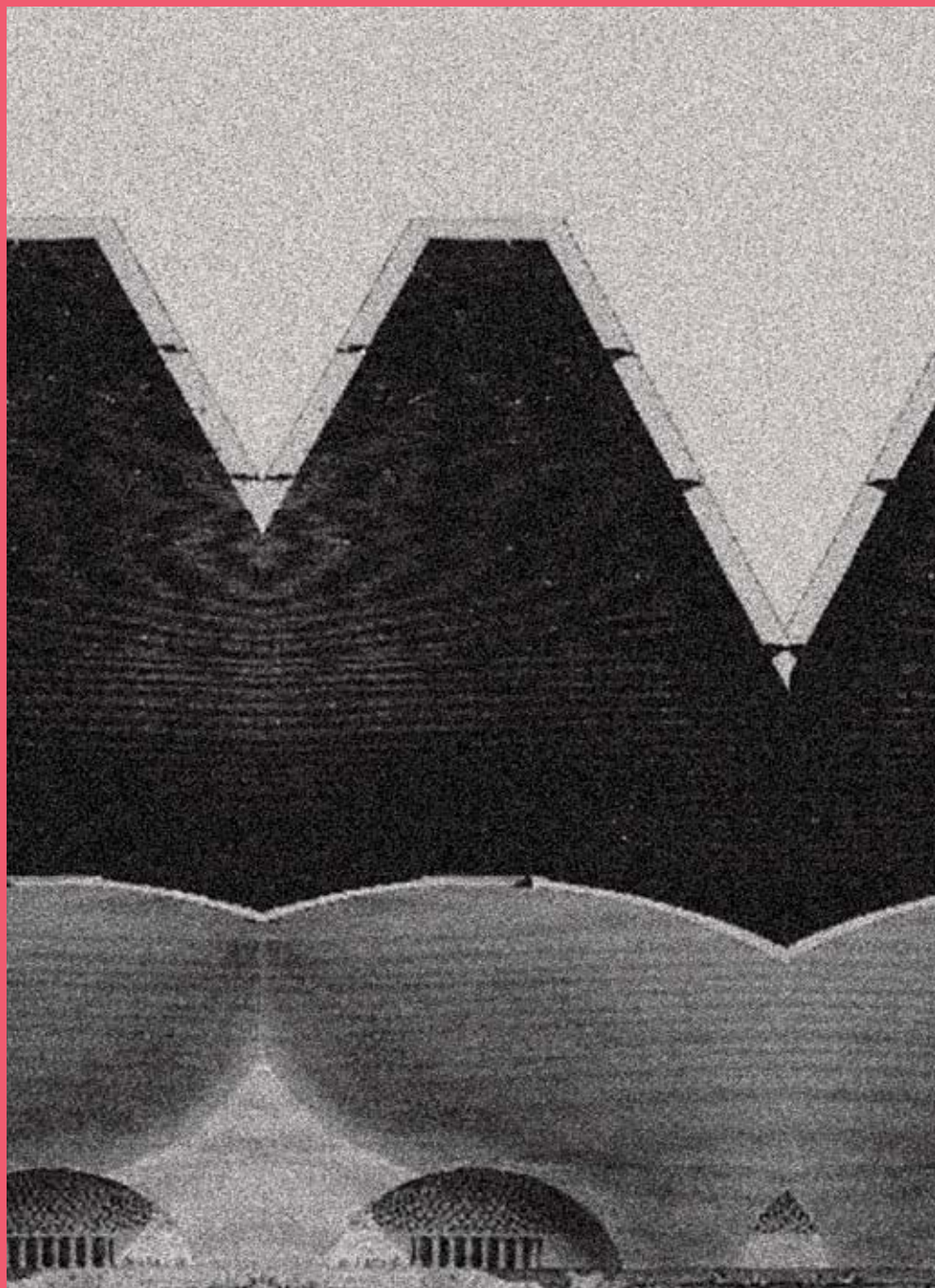
110	Sam Michael Kallman
112	Holly Kang
114	Om al-Hoda Kassim
116	Kenny Y. Kim
118	Matthew Kiwior
120	Cesi Kohen
122	Samantha Kudish
124	Kanyalak Kupadakvinij
126	Shakera Kyle
128	Kwang-Min Lee
130	Seung Ah Lee
132	SaDe' Lewis
134	Mengru Li
136	Emily S. Lodato
138	Yundi Lu
140	Andrea K. Macias-Yañez
142	Alexandra Theoni Mantzoros
144	Sara Minsley
146	Robert A. Moldafsky
148	Tiffany M. Montañez
150	Leandro Cortes Montaña
152	Douglas Moskowitz
154	Anna Murnane
156	Sai Prateek Narayan
158	Robert Nishigawa
160	Andrea Novazzi
162	Jessica Obregon
164	Ann O'Connell
166	Steven O'Hara
168	Uche Okoye <i>M. ARCH</i>
170	Megan L. Rand
172	Marco Antonio Ravini
174	Alex William Robbins
176	Kurt Rogler
178	Linsay Royer
180	Tyler Rump
182	Nate Russell <i>M. ARCH</i>
184	Kaan R. Sanalan
186	Stephanie Y. Shen
188	Adrienne Sheriff
190	Chaewan Shin
192	Julia A. Slater
194	Rebecca Soja
196	Allie Sutherland
198	Danielle Foisy & Taskina Tareen
200	Wei-Ni Ting

202	Simon Tse
204	Crystal Tzau
206	Gergana M. Tzolova
208	Carola Vega
210	Guillermo L. Fortuno Vela
212	Vinh Van Vo
214	Michaelle Williams
216	Kaitlin Wolfe
218	Emily E. Wutz <i>M. ARCH</i>
220	Seok Min Yeo
222	Mark Zlotsky



**Nate Russell**

**Ladies and Gentlemen We Are Floating  
in (Form and) Space**



**Seok Min Yeo**

**Crazy Long:  
A Sticky Landscape Infrastructure**



# Michael Speaks

As the 2014/2015 academic year draws to a close, it is worth taking a moment to reflect on the impressive range of activities undertaken by Syracuse Architecture during the last 12 months.

The University's new campus framework plan is being driven forward by Steve Einhorn, a Syracuse Architecture alum and member of the SU Board of Trustees. Professor and Associate Dean Julia Czerniak and I have been working very closely with him and Boston-based Sasaki Associates on the framework plan and anticipate its completion sometime this summer. This semester, Scott Bishop from Stoss Landscape Urbanism in Boston and Gina Wirth from SCAPE Landscape Architecture in NYC led Visiting Critic studios focused on issues targeted by the plan. It's gratifying to have faculty and students involved in a project that will shape the University's future development, and a great example of the way in which our Visiting Critic Studios contribute to the School's energy and vitality. This series of intense, project-focused studios is taught by practicing architects or professors visiting from other cities and other schools. This semester, in addition to Scott and Gina, we welcomed Syracuse Architecture alum Katherine Hogan and her partner Vincent Petrarca from Raleigh, NC-based Tonic Design/Tonic Construction.

The importance of our Visiting Critic Studio series is just one indication of the School's recognition

of the need to expose students to a greater variety of academic and professional design experiences including, and especially, exposure to other design cultures around the United States and the world. Our students and the wider community have been exceptionally fortunate this year to welcome a host of brilliant lecturers to Slocum Hall as part of our lectures series. Recent speakers include Bjarke Ingels, founder of BIG in Copenhagen and New York City, David Tseng, professor of architecture and dean of the College of Humanities and Social Sciences, National Chiao Tung University, Taiwan and two Syracuse Architecture alums, Nicole Dosso, director at SOM in New York City, and Marlon Blackwell, distinguished professor and department head at the Fay Jones School of Architecture at the University of Arkansas. We have also reintroduced the practice of inviting a distinguished speaker to give our convocation address. Last year, Martha Thorne, associate dean at IE School of Architecture and Design in Madrid/Segovia and executive director of the Pritzker Architecture Prize, delivered the convocation address. This year, Richard Gluckman, FAIA, principal of award-winning Gluckman Mayner Architects in NYC and Syracuse Architecture alum and board of advisors member, will deliver the convocation address.

At the Syracuse University Fisher Center in New York City, studios and classes led by Professor Angie Co,

go from strength to strength. Since September last year, the Center has hosted a variety of Syracuse Architecture events including a symposium on the architectural implications of the work of philosopher Graham Harman which was accompanied by a graduate student exhibition of work produced in Professor Jean-François Bédard's "Speculative Realism" seminar. This summer, we will launch a new three year summer project in NYC called "Gentrification Lab," led by Rotterdam-based firm ZUS.

Our studio programs in Florence and in London led, respectively, by Professor Richard Rosa and Professor Francisco Sanin continue to offer students semester-long opportunities to experience life, architecture, and learning in these great European cities. Also, this spring, thirty students travelled for ten days to Rosario, Argentina to work on an urban design project — a trip made possible as part of the Rubin Global Design Studio, sponsored by Syracuse Architecture alum and board of advisors member, Todd Rubin and the Rubin Family Foundation. We have also run a studio focused on "urban villages" at the Low Carbon City development in Pingdi, near Shenzhen, China — and just last month, the School signed a memorandum of understanding with Shenzhen Institute of Building Research to develop a number of research and design projects over the next several years.

This summer, we plan a major update of our fabrication facilities in Slocum Hall. We also look forward to developing the Harry der Boghosian Endowed Fellowship program, a new faculty fellowship made possible by Paula der Boghosian to honor her

brother Harry der Boghosian, a 1954 graduate of Syracuse Architecture. Paula's gift is the largest in the school's history by a living donor.

As always, we continue to teach the fundamental design skills the School is known for, but we also aim to help students develop their own understanding of design intelligence. It is this — above all things — that will enable the next generation of Syracuse Architecture alums to innovate, and to add value to the professional offices, the energy and resource management firms, and the governmental and non-governmental bureaus for and with whom an increasing number of our students aspire to work.

The theses documented in this book are a testament to the School's outstanding faculty and staff and — through their dedication and hard work — to the range of techniques, positions, and pedagogies our students are exposed to during their time here. The thesis project offers students an opportunity to think about where they have been, where they are, and where they are going. For the wider School community, it is a wonderful way to bring a successful spring semester to an end. But perhaps more importantly, the conclusion of the School's capstone thesis class offers a moment to pause, and to ponder the ways in which every one of our graduating students has synthesized her or his unique design DNA while at Syracuse Architecture.

Dean  
Professor



# Julia Czerniak

## The Map & the Territory

Thesis is undeniably the most invigorating work of one's education here at Syracuse Architecture, marked by both moments of clarity and crisis. Students are empowered by their autonomy to imagine and envision projects and, inadvertently, over a nine-month span, something crucial also emerges — a map both of the discipline of architecture and their place within it.

The analog of mapping is useful. Maps, as we know, represent space based upon how we value and perceive it. Maps are both objective recordings and subjective readings, they can be produced individually or collectively, and they can bias the real or the imaginary. Maps also suggest territory — making visible both its physical attributes, such as buildings and landforms, as well as its abstractions, such as property lines and political boundaries.

In this context, the territory is the discipline of architecture. The map, a mental construction that shadows the production of the thesis project itself. At first this map is no doubt driven by what students glean from years, through the program's core, of directed and dedicated education and experimentation. Over time, however, these disciplinary maps are flavored by each student's interpretation of thesis ambitions and their valuing of its outcome. In the projects gathered here one can see various preoccupations centered on architecture's autonomy and its

internal concerns — such as space, form, process, technique, effect, appearance and performance. Equally evident are projects which bias the impact of external contingencies on architectural production itself, like that of climate change, social inequity, economic imbalance, political challenges and real estate development. Both sets of concerns fundamentally alter the topography of disciplinary maps.

As thesis year unfolds and students get clearer about, and more willing to stand up for, their interests and focus, they can unilaterally eliminate distractions (my project is not about that!). Maps are kind in this way. They enable one to generalize and reduce complexity. What students ultimately represent in their mental maps, which no doubt is made visible in their final projects, is certainly an index of emerging values. Crucial here, however, is what happens next. Valuing leads to acting. These young minds will be transforming the disciplinary territory of architecture for years to come. We all look forward to this, as of yet, unmapped territory.

Associate Dean  
Professor

# Tim Stenson

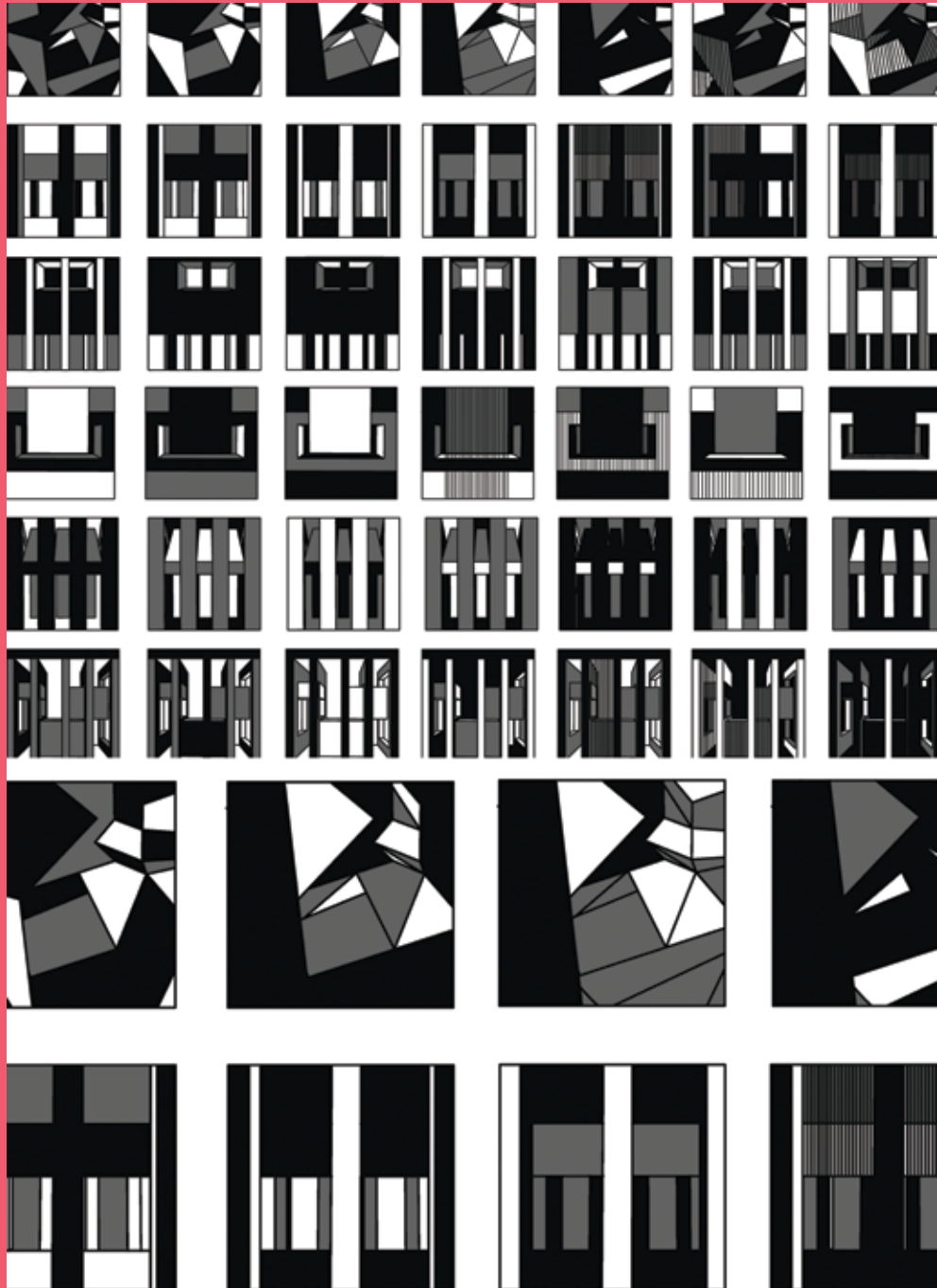
From first studios, and continuing throughout our creative careers, architectural design is pursued through a vehicle we call “the project.” This mode, or way of doing, is so ingrained in what we do, so common-everyday, that its fundamental importance goes largely unmentioned — it is taken for granted. Project work encompasses process and content — methodological and intellectual parameters, also critical review. And, projects have to be produced — that we cannot escape. These four aspects are nested, sometimes overlapping, sometimes clear enough, but other times one piece or another can get surprisingly out of focus, even hard to find. The synergy, or magic even, in this nested and overlapping constellation of frameworks and operations comes from its interconnectedness. Ideas and insights gained here, say in the design articulation of project form, open up new possibilities there, in the larger intellectual argument — and certainly vice-versa. In addition, the power of the project derives from the fact that it is simultaneously an open-ended intellectual exploration, and tangible production — in the form of drawings, images, models of a coherently resolved design proposal.

That's the magic of the project. The madness stems from the fact that it is so personal and we quickly become fully invested. In fact, it can be hard for others to credit the extreme lengths we will go to, the levels of stress we will willingly

endure, all for the sake of a project — our project. Unfortunately, or fortunately, this madness seems to propel the project as much as it batters the author. The project, this multivalent way of doing, has the extraordinary potential to focus, challenge, draw forth, and ultimately manifest the full breadth of one's creative and intellectual capacities (and sometimes some that you didn't even know you had), bringing them to bear on the design production at hand.

Associate Professor  
Chair of the Undergraduate  
Program

Stephanie Y. Shen  
Shadow Structure



Andrea K. Macias-Yañez  
Blind Spot



# Jean-François Bédard

To the aspiring architects at the *École des Beaux-Arts*, the *montée en loge* was a daunting enterprise. As part of a pedagogical model structured around *ateliers* (studios) and *concours* (competitions), the Parisian architecture school required students to isolate themselves in cubicles (the *loges*) to generate *esquisses*, preliminary schemes that the competition's jurors required students to develop in strict adherence to their initial concepts. Without the support of their tutors or of books that might yield precedents relevant to the competition's brief, the *logistes* relied on their wits alone to succeed.

The following thesis projects are the culmination of a pedagogical system far different from that of the *Beaux-Arts*. Nowhere would one find *loges* in Slocum Hall. Yet, like their predecessors, Syracuse Architecture's students depended on their own creative skills to develop, over the past academic year, the self-generated projects known as architectural theses. Resulting from long work hours, intense critiques, and endless revisions, these theses illustrate the wide range of interests that captivate young architects today. Without the benefit of the certainties that comforted the apprentices at the *Beaux-Arts*, Syracuse Architecture's graduating students embraced their own agendas to prepare themselves to the challenges of the rapidly changing landscape of contemporary architectural practice.

Associate Professor  
Chair of the Graduate Programs

# Mark Linder

For nearly four decades theses have been produced at Syracuse Architecture, and one thing has not changed: thesis serves as a bridge between the rigors and strictures of a comprehensive professional education and the imagined but unpredictable opportunities for creative pursuits afterwards. While that general motive has remained constant, the character and objectives of our students' projects have changed drastically. Thesis was initiated as a test of students' general competency across the subject areas of the curriculum, but now it is most often pursued as a focused research investigation devised to suit the interests of each student and to draw upon the expertise of the faculty. By necessity and by desire, students and faculty have continually and collectively reinvented the kinds of work undertaken within the generic nine-credit-hour, two-semester framework of the thesis project. Each year, with varying degrees of talent, earnestness, and idiosyncrasy, thesis projects find new ways to assess the state of a rapidly changing discipline and to test students' capacity to engage it — a capacity which is only as strong as the faculty's ability to understand and explain the current challenges of architectural practice and, through their teaching, to construct the conditions for students to acquire the requisite skills, insight and knowledge. Thesis is as much a test of each student's ability to achieve what s/he can imagine as

the most compelling possibilities of architecture today, as it is a measure of the vitality and efficacy of the School and its ability to deliver on its mission. What we are ultimately striving to achieve is not always clear to us as we work and learn day to day, week to week, semester to semester, year after year in studios and on reviews, at exhibits and public lectures, in core courses in history, theory and technology, through global travel or academic advising, or in the varied activities of student organizations. Even if many theses never realize that clarity, the collection of projects inevitably defines the range and level of aspirations that the School has instilled in its students. The work produced as theses, precisely because it is when we are most speculative, most ambitious and most demanding, serves as an annual reality check for our presumptions about how to educate architects and to produce architecture. If theses prove anything, it is that we believe architecture has a future, and because we do, whether desperately or fervently, the projects in this catalog are successful to the degree that they both reassure and perplex us.

Associate Professor  
Thesis Prep Instructor, Fall 2014

# Terrance Goode

A Syracuse Architecture design thesis is most basically comprised of a vehicle — some form of design problem — and a claim or set of claims made in regard to that vehicle. The assessment of the individual thesis generally is based primarily on the extent to which the vehicle successfully embodies or illuminates the claim, and secondarily on the degree to which the claim itself addresses substantive discursive issues rather than problem-solving alone.

Beyond these and a few other basics discussed below, the heterogeneity of the work documented in this book demonstrates the difficulty of categorically describing the concerns and approaches of the design thesis at Syracuse University in 2015. The descriptive task is made a bit easier by a glance at what the thesis has been and how it has evolved; this will be the goal of these notes.

The design thesis has been a mandatory conclusion to the Syracuse Architecture's professional degree curricula since the mid 1960s. During this time its perceived role has changed significantly, from a means of demonstrating professional competence to a vehicle for speculating about the very nature of architecture. The intellectual territory occupied by the thesis has expanded correspondingly during this time as well, from investigations of the individual work of architecture and its relationship to urban form primarily arising from the teaching and writings of Colin Rowe (the influential figure at Cornell's architecture school

who was either a teacher or former colleague of a significant number of Syracuse faculty members in the 1970s through the 1990s), to the incorporation of knowledge and issues from many disciplines including landscape architecture and landscape urbanism; human geography and socio-spatial theory, to name some of the primary influences.

These changes mirror the larger trajectory of the School of Architecture beginning with the leadership of dean Werner Seligmann, who gave the thesis its centrality and significance within the School's curricula beginning in the late 1970s, through the tenures of Bruce Abbey and Mark Robbins as deans and Randall Korman and Arthur McDonald as interim deans, to that of our present dean Michael Speaks. Under Dean Seligmann, who had been both a student and colleague of Colin Rowe at Cornell and for whom the promise of modern architecture remained undimmed yet unfulfilled, a fundamental concern of the School and of the thesis was the reconciliation of the Modern architectural artifact with the traditional European city. Dean Speaks, who was Director of the Metropolitan Research and Design program at the Southern California Institute of Architecture and dean of the School of Architecture at the University of Kentucky before coming to Syracuse in 2014, has brought a knowledge of contemporary philosophy, notably the discourse of speculative realism and an awareness of the

contemporary city as a node in a globalized network of capital and information flows to the School, and these concerns have been increasingly manifested in thesis topics especially as the student body has become itself increasingly cosmopolitan.

The thesis at Syracuse has always unfolded over two semesters. Traditionally, the first of these has been devoted exclusively to preparatory research while the second has been devoted exclusively to design. A conceptual firewall protected these two phases from the perceived threat of cross-contamination; "research" was understood as a period of impartial factual investigation, unprejudiced by a designer's proclivities, while "design" was understood as the direct architectural embodiment of the knowledge produced by that research without consideration of the opportunities raised by discoveries of gaps within it.

Here again, there have been changes over time, reflecting larger transformations within the discourses of architecture and its pedagogy as practiced by a new generation of educators. Over the past two or three decades, architectural knowledge and its application in the design process have increasingly become understood to be less linear and more recursive and rhizomatic than a previous generation of practitioners, theoreticians and educators would have liked to admit, looping back on itself and involving loosely-networked areas of knowledge drawn from many disciplines. The sharp division between "research" and "design" previously inscribed within the organizational structure of the thesis has become increasingly blurred,

leading to a much wider range of investigative tactics and techniques becoming available to current thesis students than in the past. Indeed, these tactics and techniques are now admissible as the subject of the thesis themselves: in recent years, thesis projects have addressed computationally-driven fabrication techniques as well as the images by which architecture is so often experienced in contemporary life.

Finally, it should be noted that the design thesis also reflects the transformations that have occurred within architecture as a discipline and a profession during the past few decades. In many respects these transformations have been somewhat faintly telegraphed. Others have had a vivid impact, in particular the emergence of computation as a tool in the design, fabrication and construction of buildings and their constituent components as well as the increasing recognition that architecture can and must contribute to environmental remediation and sustainability.

The manifestations of these changes have appeared cumulatively, not sequentially and the most recent approaches have by no means entirely superseded their predecessors. Among the 100+ thesis projects included in this book can be found designs for individual buildings, urban territories and interrogations of the architectural image. In this regard, the Syracuse Architecture design thesis synoptically encodes what the School of Architecture has been, what it is now and possibly what it may become.

Associate Professor  
Thesis Prep Instructor,  
Spring 2015



## An Extension for Boston City Hall Plaza Restoring Communal Activity with a Mixed-use Building

JEAN AHN

The relationship between a city's civic center and its outer neighborhoods should not be one of estrangement, but rather a symbiosis of multiple programs that make for continuous and robust communal activity.

While enabling the conduct governmental affairs, city halls and their associated outside spaces also need to accommodate public rallies and other community events. These sorts of use often contribute to the creation of an iconic image of a city's center — and the city itself.

This thesis proposes that a city's civic center should become a locus for the celebration of everyday life. Prior to its redevelopment, Scollay Square in Boston was an undesirable area choked with traffic and a lack of open public space. During the 1960s this area was flattened and replaced by Kallmann McKinnell & Knowles' brutalist new government center and plaza, better known simply as Boston City Hall.

Currently, Boston City Hall and its associated plaza are disconnected from

adjacent neighborhoods due to their scale and exclusively governmental uses. This programmatic singularity and figural solitude generate a stark contrast between Boston's government center and the adjacent downtown areas — places that exhibit a dense mixture of multiple programs.

This thesis contends that Boston City Hall and its associated plaza require a new programmatic and figural intervention in order to achieve a desirable continuum of human activities.

Accordingly, this thesis proposes the creation of a series of smaller scale buildings — a strategy intended to merge the presently distinct urban fabric of the Boston's government center with the neighboring city blocks.

A new city hall extension will bridge the contrast between the larger, newer structures and the neighboring smaller, older buildings while seeking to provide a multipurpose performance space and exhibition center along with new space for supplementary governmental operations.



## Compact Community Reintroducing the Human Scale in Architecture

Kuwait City's obsession with the LARGE is a phenomenon that warrants a response. This thesis — Compact Community — operates as a critique of monumentality and responds to the problem that Kuwait has with large public spaces failing to act as catalysts for social exchange.

Public space, particularly that which is designated as such in city master plans (physically open and “accessible” space, parks, squares) is rooted in an idealized, Western understanding of the *res publica*. In a city like Kuwait City, the imposition of this sort of public space has never been able to fulfill its ambitions which can, in any event, be seen as incompatible with the city's nature and culture.

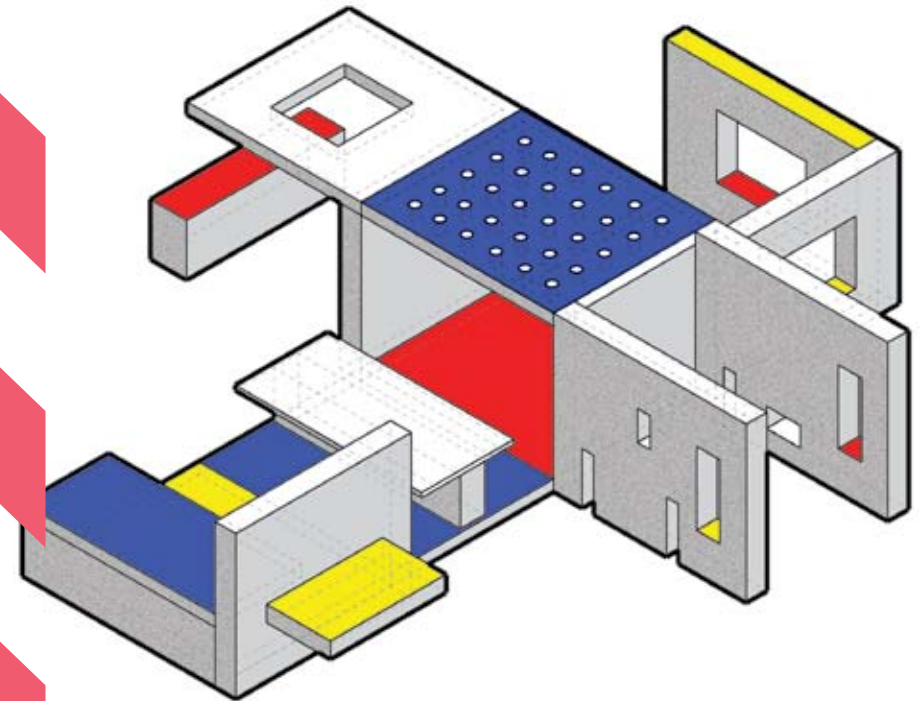
Compact architecture isn't necessarily defined by a specific

squarefootage, but rather deals with issues that large architecture does not.

This thesis proposes the creation of a third category of spaces between those designed for living and working, aiming to achieve social interaction, sensorial engagement, and a better sense of community through physical, visual, and sensory connections. These connections are achieved through different surface treatments and conditions. By designing “compactness,” a new typology of space is introduced in Kuwait City and integrated into the Al Sawaber residential community creating moments of sharing, interaction, and engagement.

The proposal is driven by a concern for social relations, wastefulness, the clash between luxury and community, and an argument for a more sensual and modestly-scaled architecture.

# ABDULRAZZAK NEZAR ALANJARI





## Roc, Interrupted

### The Obsolescence of Infrastructure

“Roc, Interrupted” proposes that urban transportation infrastructure cannot continue to be approached through the same lens of singularity. These city, state, and federally subsidized initiatives have become inefficient and outdated less than sixty years post implementation. This thesis suggests that these antiquated, arterial roadways must be reused and leveraged as dual functioning entities: as a connective tissue between civic fragments/downtown districts, and also as an armature, that introduces new programs and encourages flexibility for future developments.

The context is Rochester (Roc) a shrinking city located in Upstate New York with a population of approximately 210,000. The chosen site is a sunken expressway in the downtown city center known as the Inner Loop. December 2014 marked the start of the City of Rochester’s Inner Loop East infill project,

reaffirming the Loop’s imminent demise as a roadway. The ambitions of “Roc, Interrupted” are to rebrand the primary function of the Loop: no longer viewed as an underutilized artery severing the urban fabric as a singular, sunken route, but as a means to re-stitch the surrounding districts and to re-inscribe the edge of the Loop. In its present state there is a conflicting duality to the Loop: while a portion is critical to local and regional traffic, a majority is obsolete. The segment in use is reinforced by its connection to the I-490 thruway, and averages over 20,000 cars per day. The area of intervention of this project is a reaction to the mile and a half that services less than 8,000 vehicles in the same amount of time. Divided into three districts: business, campus, and entertainment, “Roc, Interrupted” leverages *megaform* as a means of reconnection and monument.

# CAROLYN M. AUCLAIR



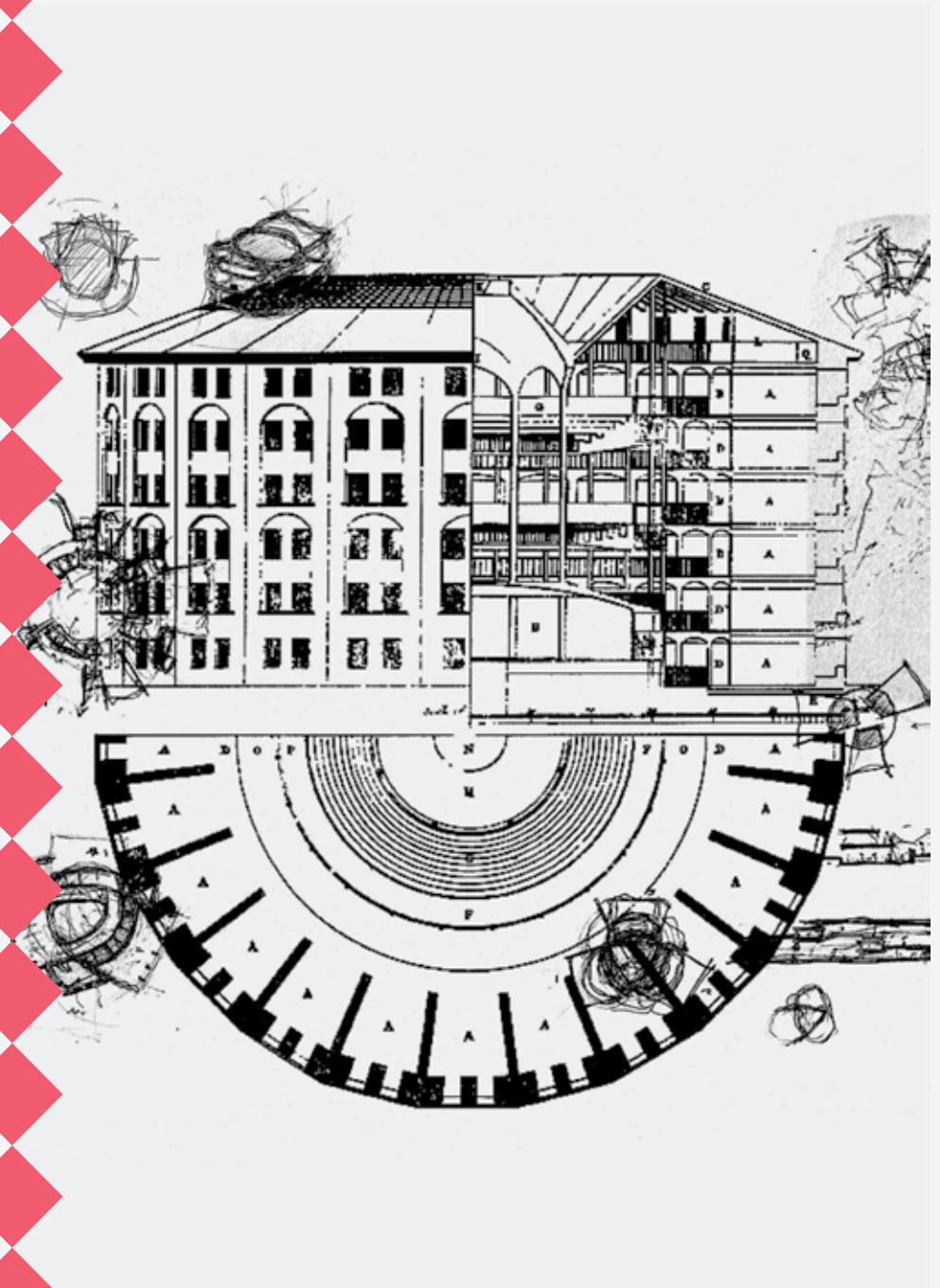
The historical evolution of the school typology focused on efficiency and expansion at the expense of balancing learning with disciplinary needs. The spatial organization of modern schools revolves around a network of classrooms that are linearly attached to a central corridor. The 19<sup>th</sup> century marked the beginning of sharp growth in enrollment. As schools were forced to increase in size, learning and discipline became confined to individual classrooms, leaving the space of the newly created corridor undefined and unsupervised, leading to problems of internal disorder.

Currently, the media coverage on school violence has become more focused on outside violence such as shootings, and is less concerned with larger problems of internal disorder. Confined to the space of the classroom, the teacher has little influence regarding discipline within the space of the corridor. Predicted by the writings of Michel Foucault, schools have found it necessary to establish order within these undefined spaces through use of security measures such as cameras. While Foucault's writing describes the overarching gaze of the camera as "panoptic," these security measures have had little effect on internal disorder within schools.

Once present in the panoptic ideas of Jeremy Bentham, the architecture of the current school typology does not

promote direct communal relations between staff and students. These ideas represented a collective group of individuals who through their awareness of each other's presence, identified themselves as a collective whole, therefore establishing a set of values determined by the actions of one another. Bentham's idea of a "hierarchy of gazes" was adopted in institutions as a means to promote social order and surveillance. Later theorized by Foucault solely as a means to establish power and order, Bentham ideas of self-betterment and value no longer have a significant role in school design.

A new typology is necessary that removes undefined space and establishes communal relations among students and staff within all areas of the school. By directly integrating shared spaces within clusters of student classrooms, communal relationships are created, therefore re-establishing Bentham's ideas of communal value and self-betterment while also establishing a collective hierarchy of supervision. As a result, individuals are held more accountable spatially for their actions. The increased connection between program and individuals removes the undefined spaces of violence and disorder that have developed within schools and instead creates a communal connection of spaces.





## Communicative Wall Transmutation of Form and Movement

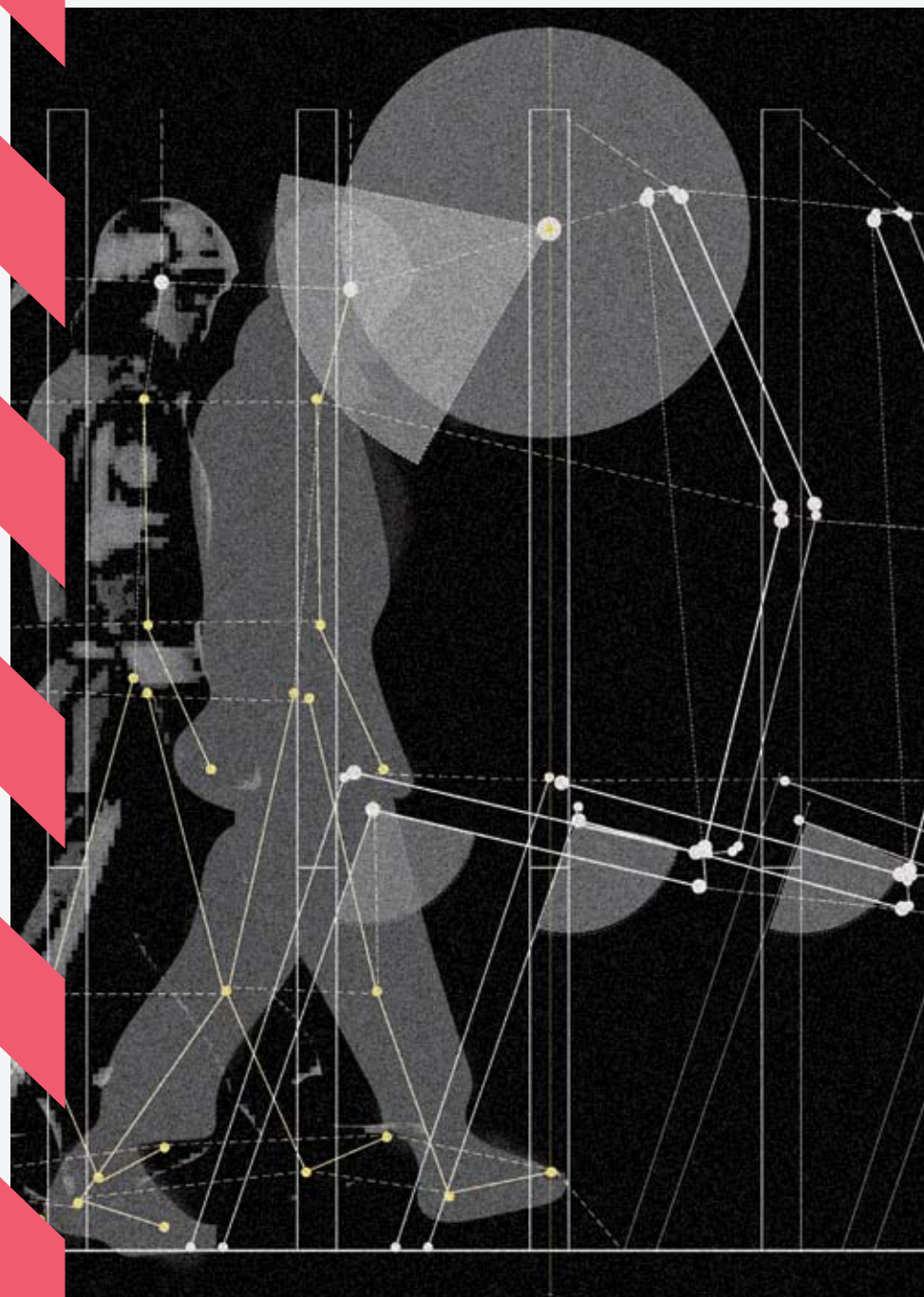
Technology is changing the nature of walls. Historically, walls have functioned primarily within a spectrum that runs from wall as “solid boundary” to wall as “permeable membrane.” Within these boundaries, walls can form a glass atrium or a palace fortress: one facilitates public space, exposing information through its transparency; the other protects those within its walls and limits information leaked to the outside through its opacity. Indeed, walls are most often made to separate, blocking communication between those on either side. The prototypical wall is an opaque, mute barrier. However, a wall conceived as a mediator to communicate between users challenges the muteness of the wall.

Through investigating the possible interactions and inflections that take place between a building’s walls and a building’s users, a system is devised and

fed by kinetic information. The relationship between the user and the wall is symbiotic; the more kinetic information fed to the wall, the more the wall can evolve and develop animal-like qualities. The user can interact with the system and alter the wall by engaging with it; the wall becomes self-aware and responds to stimuli from all sides.

Live visual media inputs of users’ movements feed a responsive surface through a system that translates visual information into a kinetic language. The interchange between the user and the wall is visualized as a series of ribs that rise and fall like a breathing beast, with appendages that respond to movement. The system translates movement, captured by live web camera feeds using Firefly, Grasshopper, and Arduino to control living wall prototypes that become transmuted chimeras of human form and movement.

# LESLIE CAROLINA BAZ



## Curated Disorders A Dada Experiment

Through the redeployment of architectural ornamentation this thesis seeks to curate a series of formal disorders via the disruption of the fundamental elements of a modern home: A Dada architecture.

This thesis curates these formal disorders through the manipulation of Adolf Loos' Tzara House in Paris, France robbing these elements of their functionality and refashioning them to form a new category of architectural ornamentation. The resulting architecture is free as a "space of functions" rather than a "function of space." It is an architecture one can drift through at the mercy of his or her curiosity; no longer bounded nor subdued by the efficiencies of consumer capitalism.

"Curated Disorders" is intended to operate as a Dadaist experiment that seeks to fuse the lessons of architectural modernism with Dadaist, Surrealist, and

Situationist methods of contradiction, psychoanalysis, and the *dérive* in order to study new relationships between occupier and occupant.

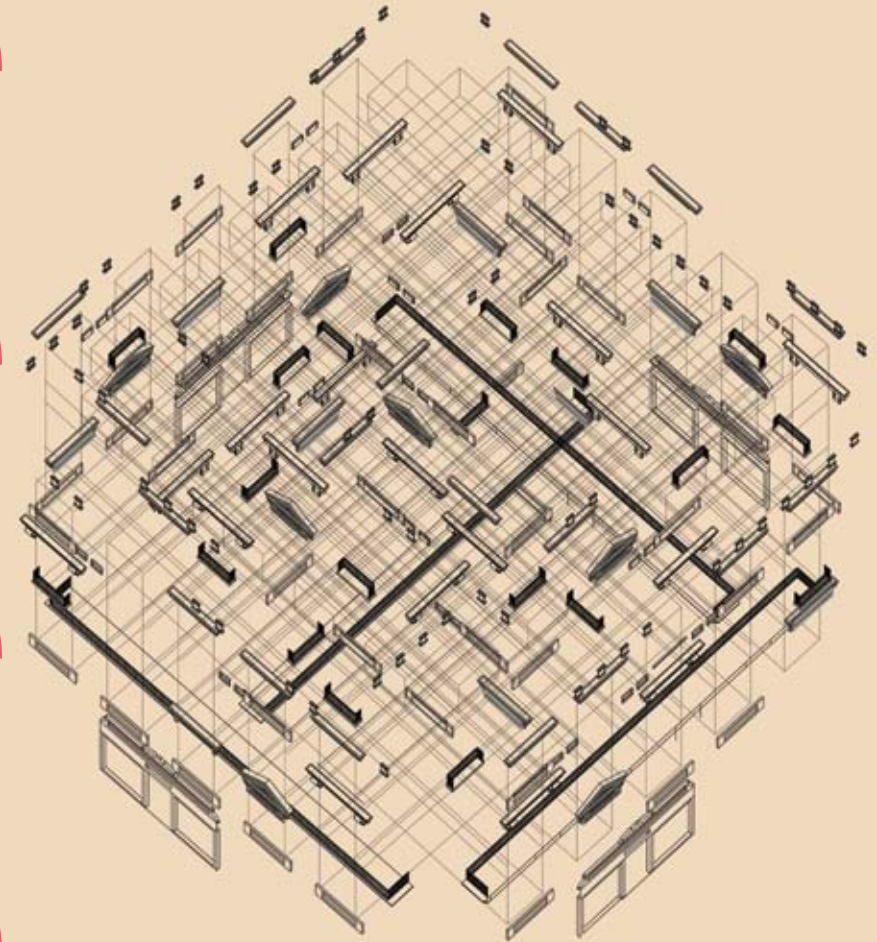
Explaining the essence of Dadaism, art historian Giulio Carlo Argan claimed that "an artistic movement that negates art is a contradiction: Dada is that contradiction."<sup>1</sup>

This thesis contends that an efficient architecture that negates efficiency is a contradiction. Curated Disorders is that contradiction.

This thesis intends to relate the history of Dadaist techniques to contemporary architectural practices and in so doing, proposes a building typology composed of curated elements that are paradoxical to our understanding of them: Curated Disorders.

<sup>1</sup> Walkscapes: Walking as an Aesthetic Practice, Francesco Carreri, p.116

# NATHANAEL BENGIO



Religious shrines manifest themselves in a number of ways, but most share qualities of a constructed sense of spirituality. To achieve this, shrines combine ideas of locality, object accretion, user interaction, and iconicity. Translating these terms into an architectural language, the design of a spiritual object must incorporate specific notions of site, texture, experience, and landmark. Leveraging these powerful characteristics allows one to design spaces of greater emotional resonance and spiritual engagement, regardless of religion, which can be appreciated as part of a daily ritual.

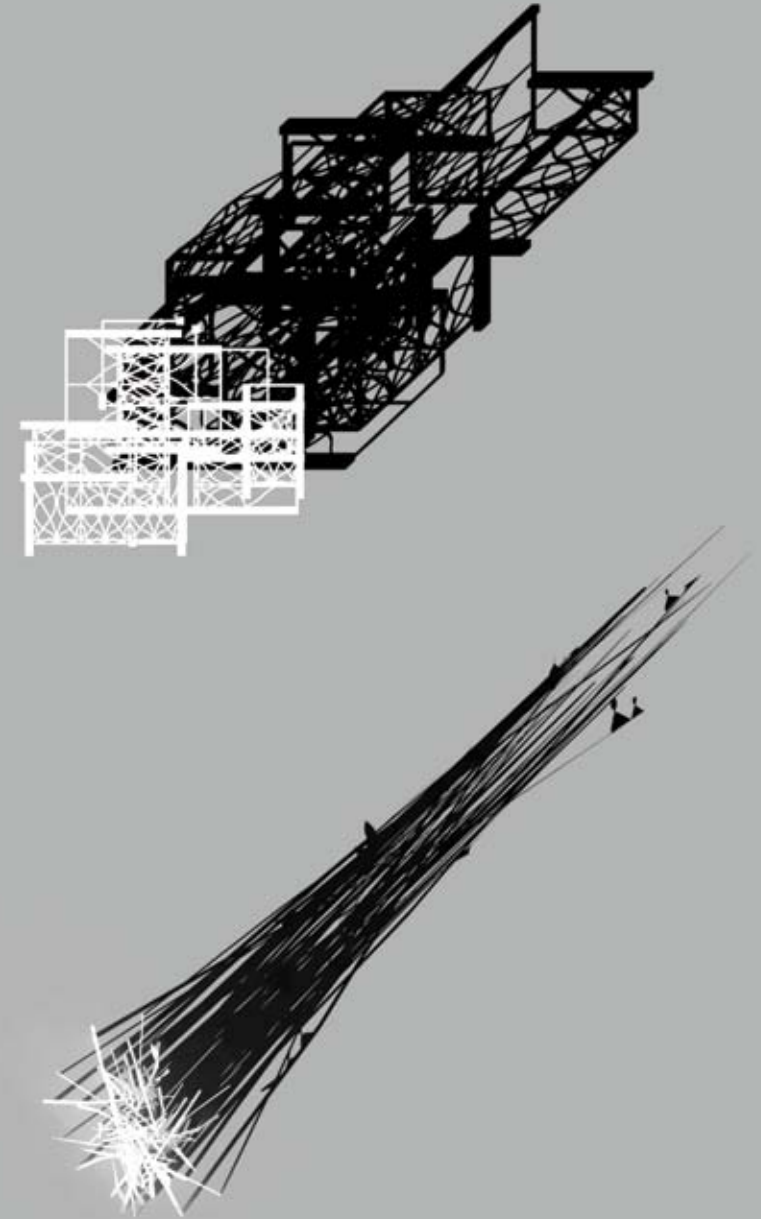
Shrines are intricate landmarks or sites of worship built by the worshippers themselves. Because of this personal relationship between the user and the shrine, it is important that the construction materials are not only related to the surroundings but also reflect the user's personality and rituals. For example, in the Uyghur shrines of China, stacked sticks with colored scarves mark burial sites along a pilgrimage path; the more sticks and flags marking the site, the greater the devotion. Across multiple typologies, the tradition of shrine-making involves a direct relationship between the amount of objects used in its creation and the worshiper's devotion.

To many religious followers, shrines become a daily object of faith embedded

with ritual. Although a shrine's origin is religiously based, this thesis project, "Urban Ritual," argues that the qualities of a shrine can be extended into a non-religious use and become a reminder to residents and visitors to treasure their neighborhood as they perform their daily rituals.

"Urban Ritual" specifically aims to accent residents' everyday urban rituals in the Bronx, New York. Within the Bronx, location based trends become apparent within the specificities of culture, urban infrastructure, and interaction between people. While the population is largely Latino, the daily rituals of the residents are linked more specifically to locations and specificities within the Bronx, rather than dictated by their ethnicity. The project leverages these daily routines architecturally, so that they might transform the urban fabric of the Bronx and highlight its inherent character.

Grounded by the case study of the shrine, the project remains focused on the pursuit of beauty through materials that are thought to be everyday and banal, but are also inherently tied to the community for which the shrine is built. By emphasizing five sites along the Grand Concourse, an urban pilgrimage path is created that both enhances current routines and fosters new everyday rituals.





We have a natural connection with living things. Nature is something within which we flourish, so having it be more a part of our lives is critical, especially when we live and work in built environments.

— Richard Ryan

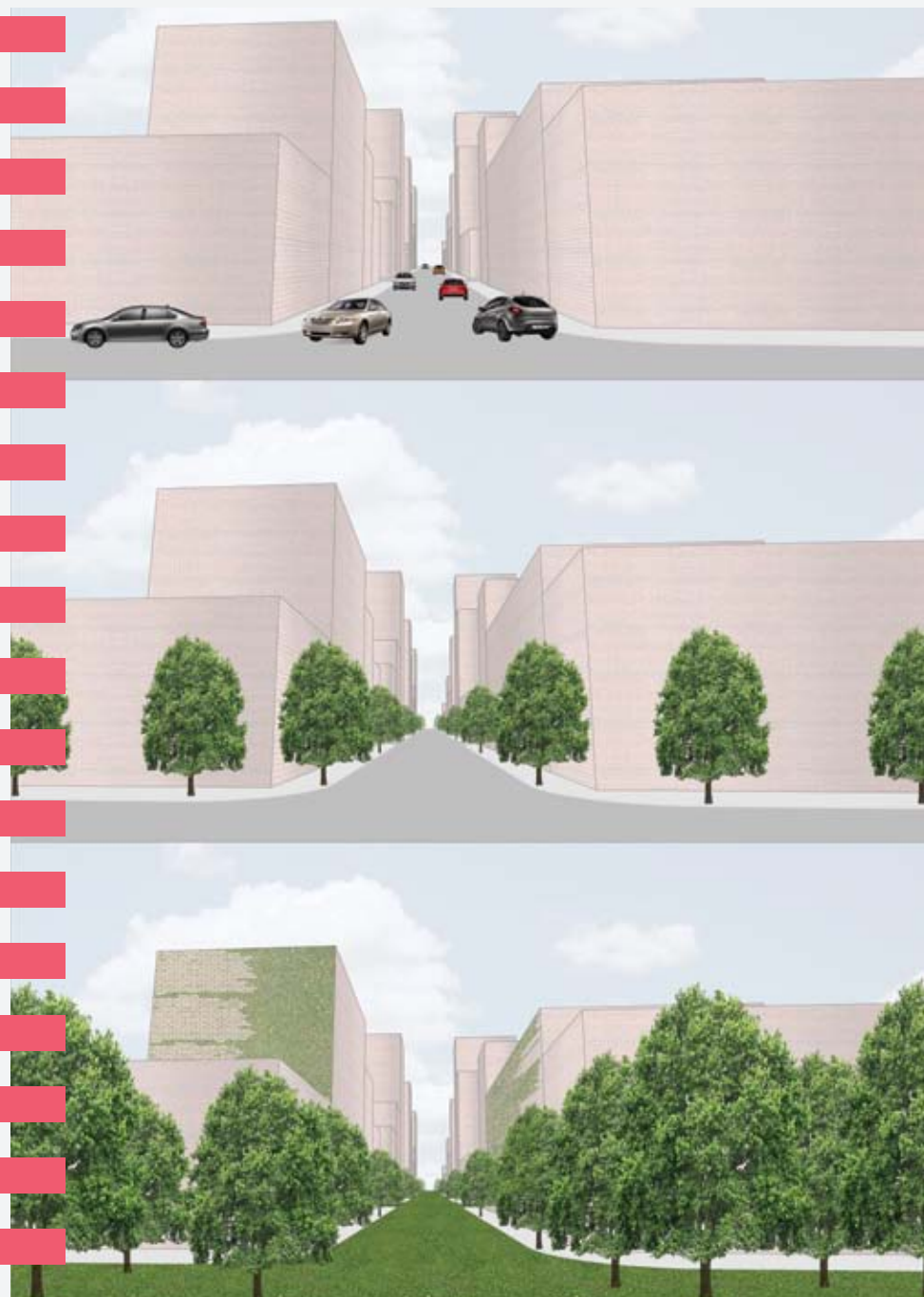
There is little argument among scientists that physical and visual contact, or a simulated image of the natural world, is beneficial for the human psyche. It has been demonstrated that natural settings inspire positive emotions and lead to a reduction in anger, pain, and stress — a biophilic response. Directed Attention Fatigue is characterized by distractibility, impatience, irrationality, and irritability produced by a lack of contact with nature.

An understanding of the effect of typical urban housing environments on occupants may be achieved by researching ways that the human body and mind benefit by access to (or lack of) other living systems. Studies examining Attention Restorative Theory and the links between the human mind and natural systems have found that residents of high-rise residential units with views of “natural” elements — the sky and vegetation — will have increased and focused attention, be more effective, more relaxed, and less distracted than those without such access. Thus,

humans have a biophysical need to be in contact with the natural world.

As the population and density of our urban areas increase, dedicated green spaces including parks, community gardens, and even terraces with planters, are ever more important to the health of urban dwellers. These spaces, devoted to various forms of “the natural,” are significant buffers against the stress produced by city life. Designers must understand the biological human requirement for the natural world in order to generate innovative proposals for the configuration of both private and public spaces that are healthy and restorative.

The average American spends roughly fifteen hours a day inside his or her home resulting in a detached relationship among human beings and other living systems, especially in urban environments. To address the imbalance, this project integrates natural elements and the cityscape by employing biophilic principles in the design of urban housing to provide healthful residential habitats for city dwellers. By incorporating elements of water, earth, sky, sunlight, and flora in the design of high density, urban housing, even residents of the most densely populated cities will be sheltered in more healthful environments.



Cities that are extremely prone and vulnerable to flooding require innovative architecture that can provide improved community livelihood and resilience through water-adaptive strategies that are site specific and user-accommodating.

This thesis is an experiment meant to re-imagine fluvial edges as thickened places of habitation. These interventions must exist on land, on the edge, and in the water, acting as a system of infrastructure to spread excess water out, absorb it, and capture it to release it later when necessary.

The site for this work is Colombia. In the last two decades, the country has experienced extreme flood events due to climate change — increased precipitation, storm intensity, and sea level rise. In 2010 and 2011, 93% of Colombia's municipalities were inundated as a result of La Niña. La Mojana, one of the areas most affected, lies at the intersection of two of Colombia's largest rivers, the Magdalena and the Cauca. This thesis is situated in Magangué, nicknamed the "River City," which lies approximately 200 km north of the point where the rivers meet, amongst a topography of marshes and wetlands, precariously surrounded by water on almost all sides.

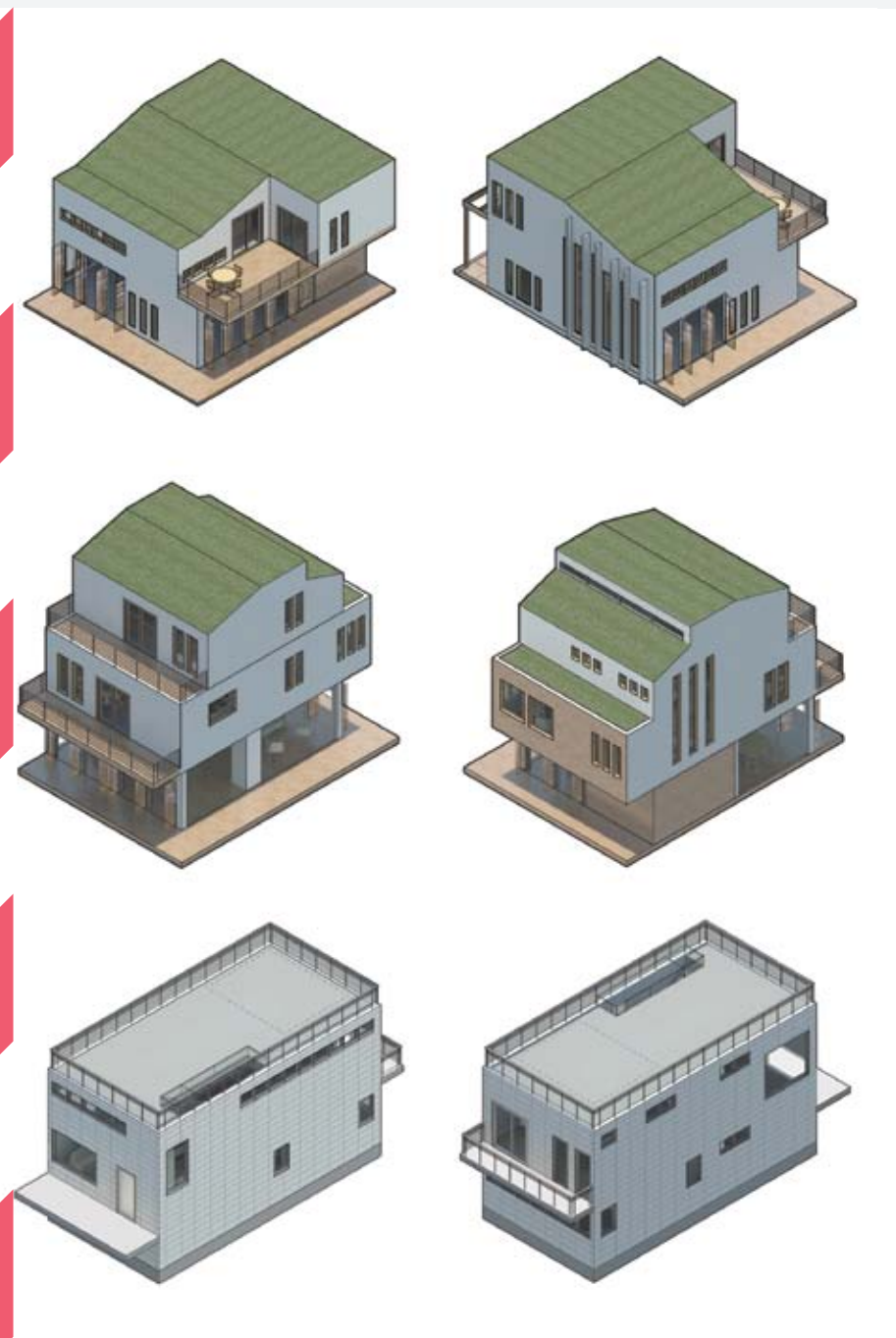
During flood season, "people do not leave their homes, instead they adapt their houses, building temporary wooden floors on top of existing ones, or moving

up to the second floor if they have one, and 'normal' living goes on."<sup>1</sup> In order to reconcile the relationship between the built and natural environment, the proposed solution requires the integration of water into the overall design. The outcome is a community that can better withstand flooding, recover quickly, and continue on with its daily routines while the population maintain their respectable livelihoods.

The various water-adaptive strategies in this project respond to site by involving both floating and floodgate technology. They are not only site specific by catering to the existing context, but the units also take into account the local practices and characteristics of Colombian culture. In addition, residents are able to manipulate the space inside units to fit their lifestyle. The flexibility of the system allows change, accommodating public and private programs as well as reconfigurations that mitigate water, sunlight, and natural ventilation.

In essence, "guided by the latent ecological, social, and economic conditions [of Magangué]... and the positive and vital element of cultural heritage," this thesis hopes to embody "a living architecture [that evolves as people do] and [expresses their] way of life."<sup>2</sup>

<sup>1</sup> Bas Smets, Director of Strategic Planning for the Housing Corporation of Antioquia, La Mojana  
<sup>2</sup> Henry Klumb and his approach to housing projects in Puerto Rico described as Latin American Modernism.





## Mediating the Urban Surface

### An Integration of Architecture, Landscape, and Infrastructure

Sunnyside Yard in Queens, New York and the viaducts that cross it are examples of single-use infrastructure that exist for purely utilitarian purposes. These urban voids lack the ability to foster urban form and human activity. Such spatial conditions create a disconnect between the zones or neighborhoods at the edges. This is noticeable in the differing texture of the urban fabric and the land-use patterns within each of these neighborhoods. The southern district, along Skillman Ave., remains mainly industrial while the northern district, along Jackson Ave., is being rapidly developed into a residential and commercial neighborhood. These opposing neighborhoods are active at different times of the day, leaving spaces underutilized when they are not active. People, traffic, and goods are in constant motion, moving from one zone to the next, never stopping. An urban intervention built over or in conjunction with the rail yard needs to have the potential to accommodate this range of fixed and changing circumstances. These circumstances can include shifts in the local economy, residential population, cultural activity and even the simple shift from daytime to nighttime use. This multivalent proposal would host an array of program such as jobs, housing, markets, restaurants and other amenities all while the train yard below continues to function.

By deploying a complex platform that hosts dynamic conditions over and integrated into the rail yard, an urban architecture can reverse the segregated

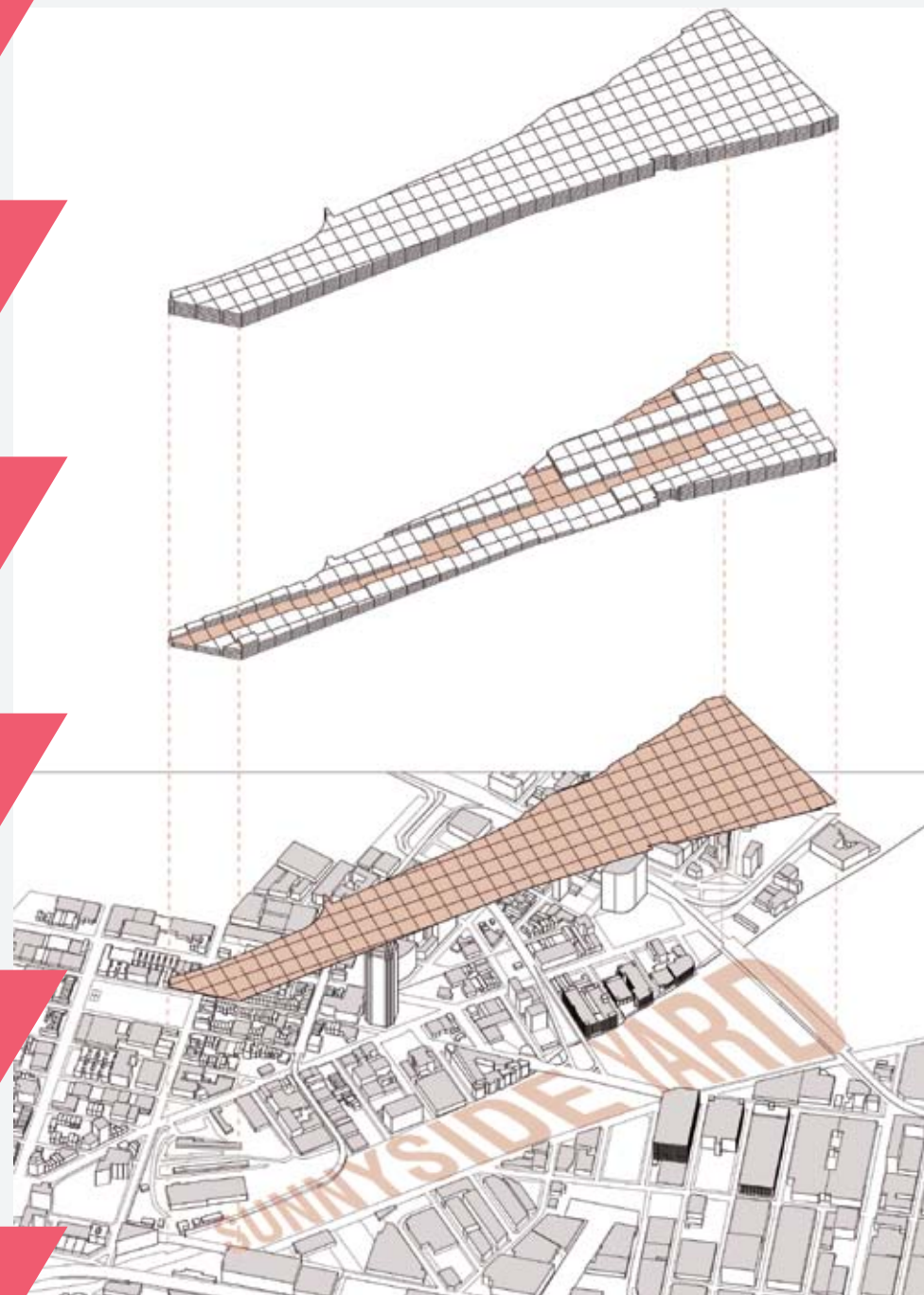
condition brought on by the isolating presence of the rail yard while serving as a mediator of spatial, social, temporal and economic conditions between these diverse communities.

Benefits would include, but not be limited to the following:

- 1 An enhanced deployment of public space through the maximization of urban space, urban structures and a mixed program of uses that would activate this new environment.
- 2 The increase in the variety of programs and activities as the city requires.
- 3 The increase in the variety of spatial conditions and arrangements for uncertain futures and flows.
- 4 The revitalization of the pedestrian ground plane both on the introduced surface and in the adjacent neighborhoods it adjoins.

This thesis argues that an intelligent hybridization of architecture, infrastructure, and landscape can result in improved and dynamic social, cultural and economic circumstances that can reshape the urban fabric and maximize the use of public space. Through its many layers, this intervention reimagines the way in which social interaction and pedestrian flow occur in these areas of the city that are currently underutilized and underinhabited.

# ANDREW M. CARDINALE





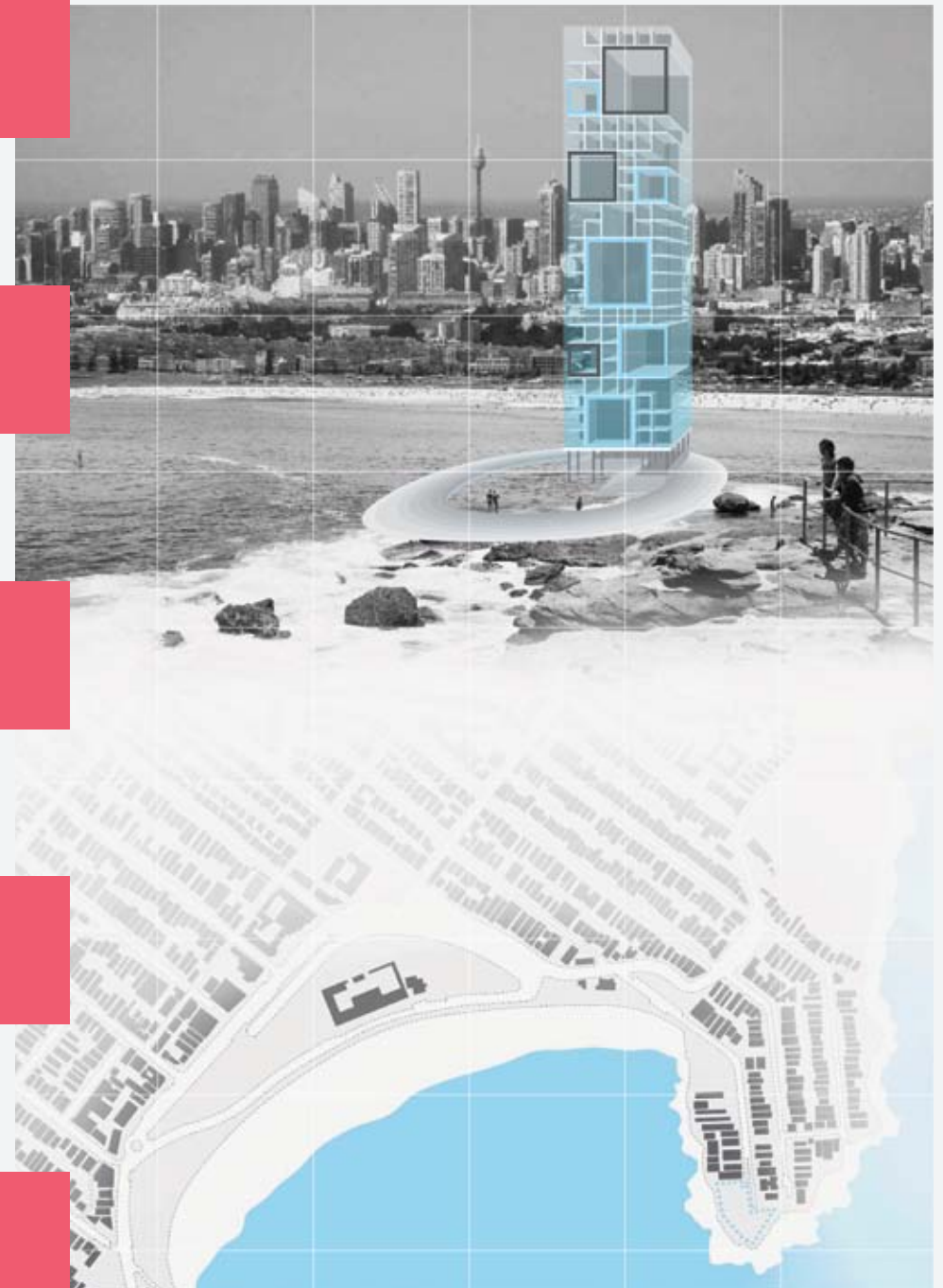
## Challenging Privatness: The Re-Introduction of the Urban Bath House

The reintroduction of an architecture which integrates the culture of bathing with the culture of socializing is an opportunity to conceptualize a new form of contemporary public space through a rich historical typology. Public architecture of the modern metropolis has lost the concept of bath house. The loss of collective bathing practices in globalized cities represents the transition towards ideas of suburbia and the privatization of space, abandoning a unique environment which facilitates public appearance. Instead, the privileged architecture of the spa has become the most prominent typology hosting leisurely bathing practices. The spa reinforces the division of classes through exclusivity and the prohibitive costs induced by the establishment. The bath house, however, necessitates public nudity and thus has the potential to neutralize social hierarchy such as in the ancient Roman “thermae” and disappearing Japanese “sentō.”

In many cultures, the bath house prioritizes and celebrates water in a physically and psychologically experiential manner. The form of its architecture stimulates the experience, a result of the society which produced it. The space is designed both perceptually and functionally, from the inside to outside through sensorial vignettes. Therefore, the bath house finds its essence in the space and materiality (or mass), and the water which unifies the two. In addition to the formal qualities of the bath house, the values of different civilizations are expressed by the inclusion of hybrid

programmatic elements — spaces for libraries, lecture halls, restaurants, and many more additive functions of public program. Through an analysis of historical precedents, it is clear that the institution became a place of social gathering beyond the ritual bath.

The culture of bathing literally and metaphorically strips away social status. Embedded in the activity of bathing is the intrinsic act of replenishing the mind, body, and spirit. The process can be closely linked with ideas of mental work, physical exercise, and personal leisure, in which the water becomes an oasis for one to contemplate and meditate. Without trying to imitate and replicate historical models of bathing practices, creating a new type of bath house in a context of relevant bathing culture requires a specific site. Sydney, Australia is a coastal city that deals with issues of urban density and waterfront architecture. Although there exists little influence of the public bath house, there is a culture of public interaction with water — in particular the reoccurring ocean pools carved from natural stone topography. Bondi Beach, as a highly populated site, can introduce a public bath house as the threshold between the tourist-heavy beach and the local residential surroundings. The project aims to challenge the bathing and spa culture of Bondi Beach, using water as the apparatus for public programming to connect the beach and city.



# Excuse Me, Are You Waiting to Go? Integrated Sanitation System of a Protracted Refugee Camp

17 Years: The average duration of a refugee camp

57.3%: Zaatari refugee population under 18 years old

560: Number of trucks that enter Zaatari for water and sewage distribution

Water distribution and sewage collection are major concerns in the daily operation of a refugee camp. The refugee camp is usually established as a temporary entity, while its toilets and sewage system are considered as permanent entities. Due to the disconnection between the permanent needs of the refugees and the temporary provisions made for them, daily rituals have been rendered implicitly inconvenient. It is the architect's role to mend this disconnection.

This thesis is situated in the current and expanding Zaatari Refugee Camp in Jordan, co-hosted by the United Nations High Commissioner for Refugees and the Al Marfaq Municipality. The current water delivery and sewage system is a linear sequence, where clean water and sewage are distributed and collected daily by trucks to and from external sources, leading to a high cost of operation. Even without the responsibility of

hosting refugees, Jordan is facing severe challenges regarding the scarcity of water.

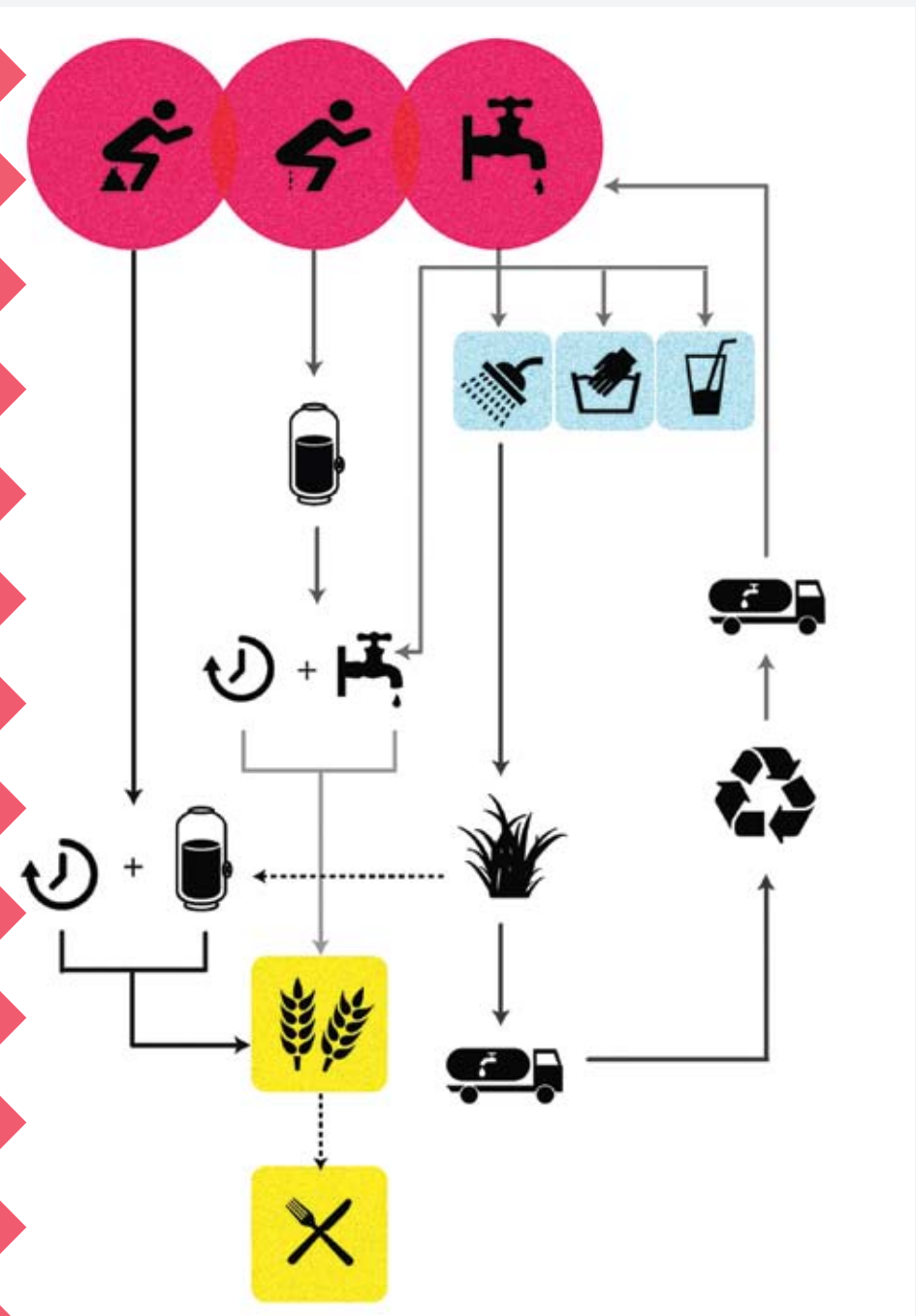
The aim of this thesis is to work with the problem, instead of eliminating the refugee camp completely. Accordingly, this thesis proposes to reorganize the linear sequence into a self-sustaining, closed looped water and sewage system, with on-camp source and destination stations.

Existing communal toilet modules (source stations) will be replaced with a new type of toilet module. The new communal toilet is not merely a point of collection but also a social activator, providing fertile grounds for existing food and therapeutic farming, which also provides a new educational learning experience for children.

The introduction of an on-camp wastewater recycling and treatment plant will generate potable water from camp sewage. The purpose of this program is to reduce reliance on external water sources.

The ultimate goal of the thesis is to utilize and merge existing activities into a communal complex, enhancing civic spaces with improved infrastructure, to achieve a self-sufficient water and sewage network for the camp.

# LORRAINE L.M. CHAN



Architecture has traditionally been designed for people with five fully functioning senses, and the discourse continues to privilege architecture's visual appearance rather than its ability to be appreciated by our remaining four senses. However, this thesis contends that the architectural needs of deaf people (acknowledging this group's complex and multiple needs) might be speculated upon to produce an architecture that sets its sights beyond the visual, to include conditions that call for a more nuanced understanding of our senses of hearing and touch.

The engagement of multiple senses may provide deaf people with a more comprehensive understanding of their surroundings. An architecture for deaf people may incorporate the non-visual to enhance the overall experience of both deaf and hearing people; by so doing, our perception of architecture might expand to encompass its visual qualities understood in correlation with its ability to impact upon our other senses.

Deaf people have often been judged based upon their inability to hear. Historically, deafness was wrongly equated with a lack of intelligence. These misunderstandings led to the division of the hearing and deaf communities. With the more recent push for minority civil rights, the awareness of the needs of deaf people and the ways in which deaf culture can positively challenge the assumptions of the hearing community has expanded to include new discourse around the evolution of an architecture for the hearing impaired.

"Beyond Vision" seeks to understand the visual, aural and tactile needs of the deaf community through the form, orientation, and materiality of a deaf/hearing community center adjacent to the existing Rochester School for the Deaf.

Designed to suit the needs of both deaf and hearing K-12 students, this proposed community center seeks also to encourage student engagement with natural world within both the building, and the surrounding site.





## The Zoological Paradox

### Activating Zoo Architecture Through The Integration of Behavioral Enrichment Methodologies

Neck twisting. Bar-biting. Self-mutilating. These unsettling symptoms of “zoochosis” are exhibited by zoo animals under conditions of stress, depression, frustration, and boredom. Despite a century’s worth of attempts to enhance the quality of zoos and to justify their existence, zoos continue to neglect the animals’ physiological and psychological welfare.

Zoos do not evolve with time.

“Naturalistic” exhibits and expansive enclosures are features that exist only to please the eyes of human visitors. These “enhancements” do little to address the persistent issue of the abnormal yet repetitive behaviors displayed by the animals. While humans have the means to voluntarily escape stressful conditions, zoo animals are fixed in their single unchanging, static enclosure. Furthermore, zoos’ banal and monotonous ways of educating visitors continue to misrepresent and generalize animals’ natural behaviors.

A visitor remains a spectator.  
An animal remains a mere spectacle for show.

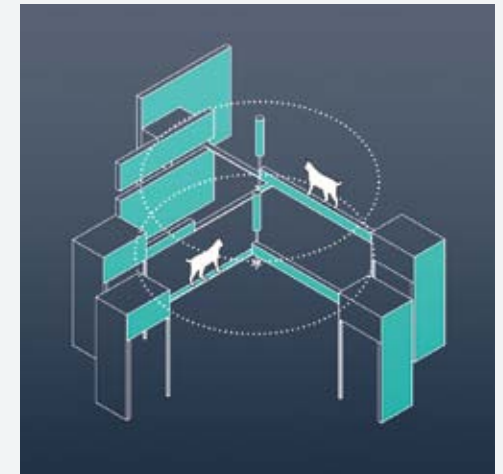
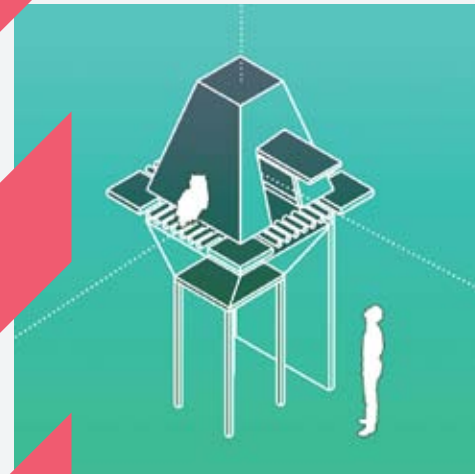
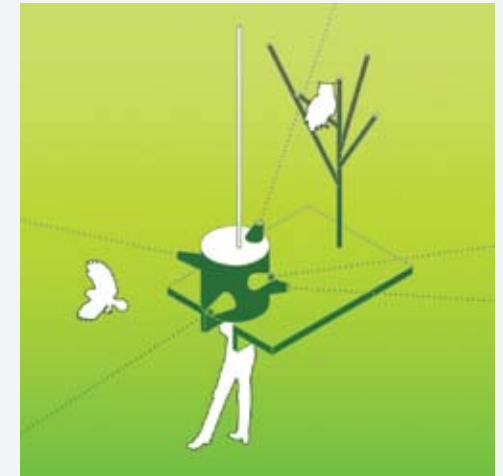
Through on-site field investigation, studies of animal behaviors, and Jon Coe’s zoo enrichment principles, this thesis proposes that zoo architecture should prioritize the needs of the animals by incorporating behavioral

and environmental enrichments into its design. Enrichments refer to the process of providing the appropriate behavioral and environmental stimuli that foster the animals to exhibit their own natural behaviors.

Adapting Jon Coe’s strategies and Heini Hediger’s concept of territory as precedents, “A Zoological Paradox” proposes the reimagining of the zoo typology by integrating existing enrichment methodologies, as well as allowing human visitors to interact and engage in the process of enriching the animals’ well-being. Through strategies of introducing choices and novelty to the “Animal Folly” enclosure, and allowing a visitor’s participation, the reimagined zoo offers the animals a sense of freedom within captivity; a temporary relief from stress within their confines. A continuous network of “corridors” replaces conventional enclosures; reflecting each animal’s territorial pathways and further providing a sense of choice and freedom.

Shifting the visitor’s role from a mere spectator to an active participant not only enhances his or her experience at the zoo, but also reshapes the perception that these enrichments are what really matter. Rather than a “naturalistic facade,” enrichments become the most crucial component for animals born and raised in captivity. A visitor’s notion of the zoo may be defamiliarized, but an animal’s well-being is addressed and enhanced.

# THORFUN CHUTCHAWANJUMRUT



## Post-POPS

### A New Narrative for Privately Owned Public Space in New York City

Contemporary urban life is synonymous with movement, speed, and connectivity. The flow of capital, people, labor, and information in globalized mega-cities such as New York City indicates — so we're are told — an advancement of our collective culture. These brave new urban citizens live on the verge of a perpetual present, deluged by a ceaseless stream of data...

But in amongst this narrative of a compliant and efficient populace lie pockets of potential perturbation.

Privately Owned Public Spaces (known as POPS) are a unique feature of New York City's system of public urban parklands.

Conceived in 1961, POPS were intended to perform as public amenity spaces, the *quid pro quo* being that, in return for the designation of a portion of a given site as POPS, the city's private developers were able to obtain permits for the construction of bonus square footage — among other zoning concessions. POPS continue to exist in some of the city's most upscale commercial and residential districts, and — according to the Department of City Planning — are intended to provide “light, air, breathing room and green space to ease the predominately hard-scaped character of the City's densest areas.”

Since 1961, 16 million square feet of new private for profit space has been

built in exchange for the designation of 3.5 million square feet of plazas, arcades, and other outdoor and indoor POPS.

Vague zoning requirements paired with unmonitored owner conduct has resulted in the proliferation of austere designs and hopeless spaces. The city's first POPS zoning amendment in 1975 elevated expectations by requiring amenities like benches and trees to be included within any proposal. Follow-up amendments still attempt to reconcile the relationship between a succession of uninspiring POPS (we might think of them as McParks), and the aspirations of the city's citizenry.

Zuccotti Park at Broadway and Liberty Street in lower Manhattan is a peculiar case of POPS, since it is one of few such spaces to be physically detached from its “parent lot,” and one of the few to occupy a complete city block — a block made famous when the “Occupy Wall Street” movement made Zuccotti Park its temporary home. Consequently, the owners of Zuccotti Park are now permitted to enforce a curfew and restrict the park's use to lunchtime eating and quiet conversation.

This thesis proposes a new post-POPS narrative for Zuccotti Park as a truly public piece of New York City's rich tapestry of shared, accessible, and commonly-owned parkland infrastructure.

# BECKY COHEN





After the turn of the last century and the United States industrial revolution, the implementation of the mass production of various mechanisms, from war machinery to cars began on the assembly line. So-called “taylorization” created an optimal industrial efficiency through the use of assembly lines and through the study of the human range of motion. Large industrial buildings and infrastructure sprang up across the United States to feed these new systems of development.

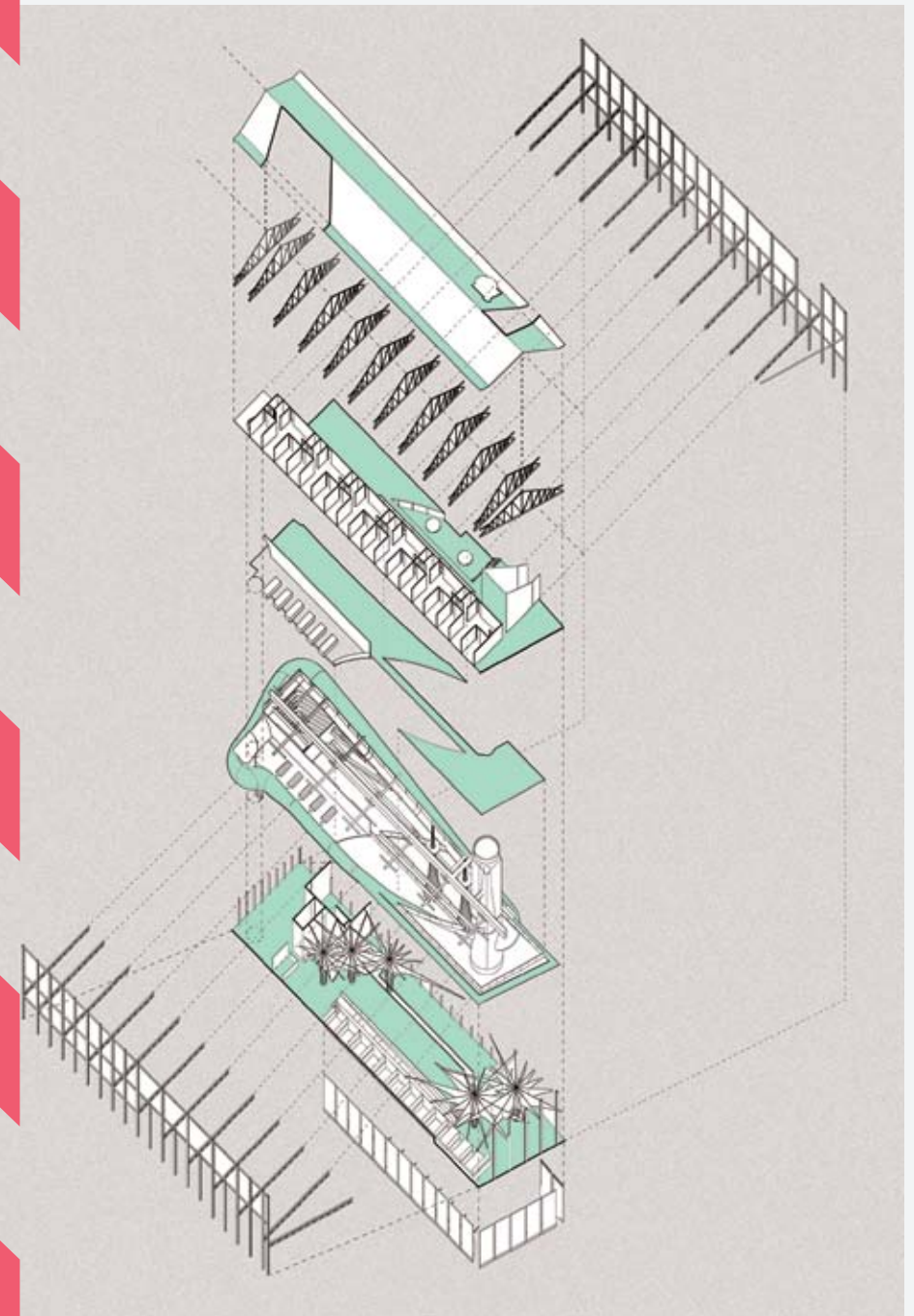
Today, a substantial proportion of these factories and industrial buildings are left empty and unused, lacking the activation they once had as the facilitators of manufacturing and developers of products. Today, our individual energy needs and consumption have become a catalyst in our every day lives. Energy is harnessed in objects we interact with every day from hybrid electric cars, to sustainable and LEED certified buildings, that enable us as humans to live our lives more proficiently and sustainably.

This revolution is rooted in componentry assemblies, systems, and energy consumption. With this in mind, the need for a standard of adaptive building re-use is apparent, given the salvageable generic skeletal state of old industrial buildings. This thesis envisions the need for a new building envelope, which harnesses the energy of utilities of program and negotiates them between the natural climate (exterior) and ideal climate (interior).

Energy produced and supplied to power industrial kitchens accounts for the largest wastage of energy per square foot of floor space than any other building type. Not only energy, but the food products themselves are wasted, and thrown away. Energy — whether it is the food we eat to power us through the day, or heat recycled from a commercial kitchen — can be harnessed in a variety of ways. However, the potential of waste to provide new sources of energy is currently underestimated.

Both passive and active design strategies need to work together to allow for more dynamic, open, energy efficient spaces that can be used for future study and progression of building systems technology. Systems can no longer be implemented as objects in a box consuming and wasting energy. They must become part of the overall construct, interacting with the individual needs of program and its users.

This thesis proposes to develop and apply sustainable energy strategies driven by the needs of yet commercial kitchens within the context of adaptive re-use of buildings. Spatializing systems within the framework of building envelopes will minimize energy usage, promote smarter holistic building design; but most importantly, teach culinary students sustainable strategies related to the growth, use and reuse of food as it pertains to the consumption and production of energy.



## Active Density

### Stimulating the Urban Domain in High-Rise Social Housing Developments

Thought to be a more modern and forward looking approach to urban housing, the typological model of the “tower in the park” sought to relieve the perceived congestion of the typical perimeter urban block and replace it with modern apartment towers arranged in a larger, landscaped setting. This strategy has proved to be detrimental for a number of reasons, including:

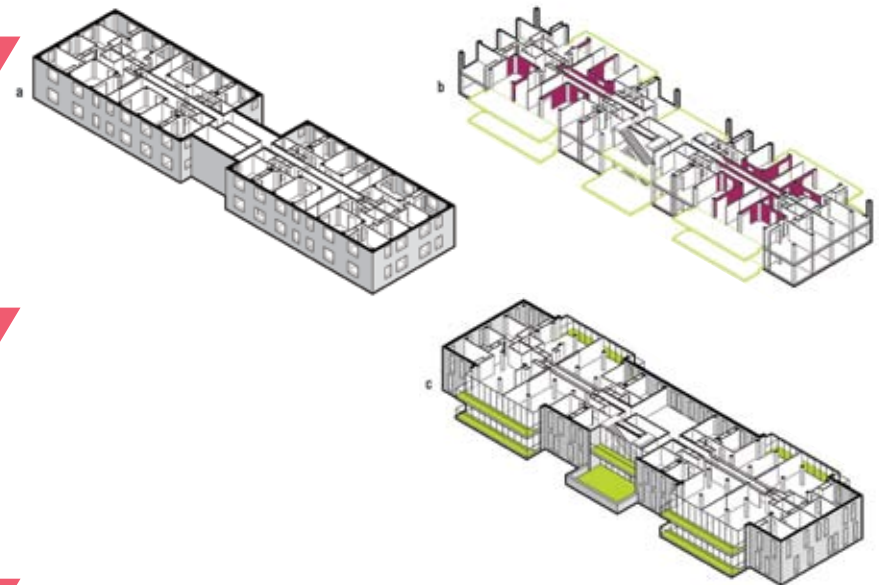
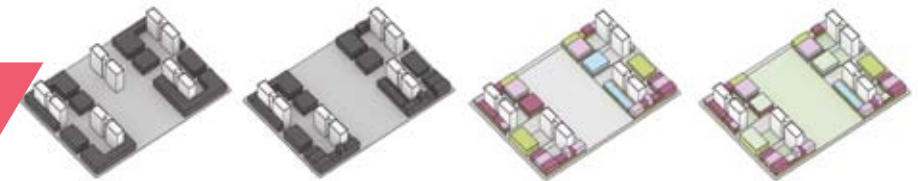
- 1 The monoculture of occupancy in housing blocks that isolate themselves from the rest of the community and create programmatic “dead-zones.”
- 2 The economic and social consequences to the community of housing economically challenged families in one area.
- 3 Increased criminal activity due to the internal configuration of the blocks that force residents to enter their homes inside the block.
- 4 Green spaces largely devoid of public use and the conversion of open space into off-street parking lots.

I would argue that through adaptive reuse and strategic interventions, it is possible to restore the lost amenities of a mixed-use perimeter block while preserving existing higher density towers. The net benefits would be:

- 1 The activation of the urban terrain through the addition of much needed amenities for the community such as a daycare center, an after-school program, and a small business incubator that fosters local businesses.
- 2 The addition of mixed-income housing units and the renovation of the housing towers will increase living standards while preventing the displacement of current residents.
- 3 The restoration of the street wall and reactivating the ground plane as a catalyst for creating a richer public domain.
- 4 An increase in pedestrian activity and the construction of low-rise, high-density structures that will extend public space into the built environment and promote a safer community through the creation of “defensible space.”
- 5 The creation of a public green space that is attractive and encourages use.

While architecture will not singularly solve the social problems that arose from the creation of these “towers in the park,” it is my contention that through the combination of the benefits of both high-rise and low-rise structures it will be possible to provide residents with amenities that lead to new cultural and economic opportunities that will foster an interactive and diverse urban community.

# HEATHER M. DELA CRUZ



## Urban School reForm Sublimating Education into Daily Civic Life

The urban public school is in crisis. In the 21<sup>st</sup> century we have yet to reform the bounded and centralized school model; one of queues, rigid spatial/temporal organization, and restricted learning in a continuously supervised environment. The general failure of the public school system within the American city is compounded by the need for new skill sets that refocus educational priorities on the ability to communicate, think critically, and embody creativity — skills that are becoming ever more crucial in the globalizing culture and economy. The urban public school awaits a critical re-formation that can architecturally and ideologically address these shortcomings.

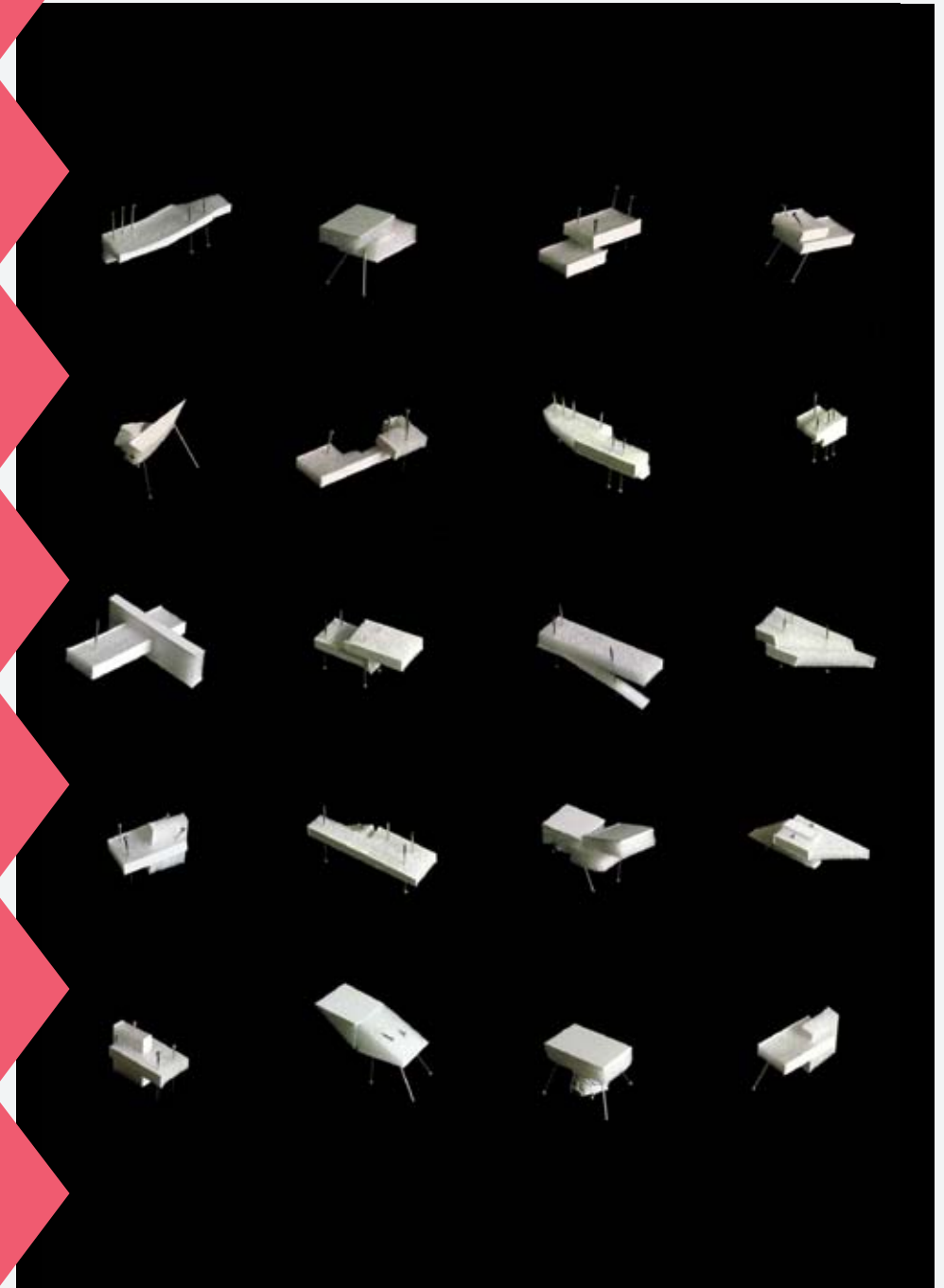
In “Theory of the Avant Garde,” Peter Bürger postulates that the de-institutionalization of art allows it to sublimate into the daily life of the urban bourgeoisie. Exposure to art in this diluted and more relatable manner makes art a welcome part and partner of daily urban life.<sup>1</sup> This thesis takes dispersal and sublimation as critical tools to conceptualize an alternative model to secondary education in

the city. Through the de-institutionalization of the school, systematic decentralization and collage allow the public grade school and the city to become intertwined. Operating through the urban fabric, the city becomes the classroom for the school.

In the city of Rochester, municipally-owned properties are mapped as potential sites of intervention, possible locations for fragments of the school. Typical school programs such as the classroom, athletic courts, and cafeteria are distributed across the vacant lots, and collaged with adjacent public buildings to produce new public space and a distinct architectural network across the urban landscape. Visual connections between school structures assist students and reinforce academic/architectural presence within the city. This opportunistic dispersal is intended to aid in preparing students for the challenges of global culture through the integration of learning with the urban culture.

<sup>1</sup> (Bürger, Peter. *Theory of the Avant Garde*. Frankfurt: Suhrkamp Verlag, 1974)

# ALISON MARIE DOBBERTIN





## STIMULATE

### Synesthesia and Classroom Design

Images of one sensory realm feed further imagery in another modality. Images of presence give rise to images of memory, imagination and dream...an architectural space frames, halts, strengthens and focuses our thoughts, and prevents them from getting lost.

— Juhani Pallasmaa

Sensory intake is the foundation of our cognition, providing external information to further expand our consciousness. In the 1970s, windowless schools emerged as a means of saving energy and increasing students' ability to focus. Subsequent studies have shown that such adjustments resulted not only in a decrease in test scores, but also in an increase in student frustration and aggression. If increasing natural light and providing basic acoustic design dramatically changes the classroom environment for the better, what else is possible? Pallasmaa writes, "The current overemphasis on the intellectual and conceptual dimensions of architecture contributes to the disappearance of its physical, sensual and embodied essence...this reductive focus gives rise to a sense of architectural autism, an internalized and autonomous discourse not grounded in our shared existential reality." Synesthesia, the collaboration of senses to interpret environments, recognizes the importance of sensory experience, learning, and focus.

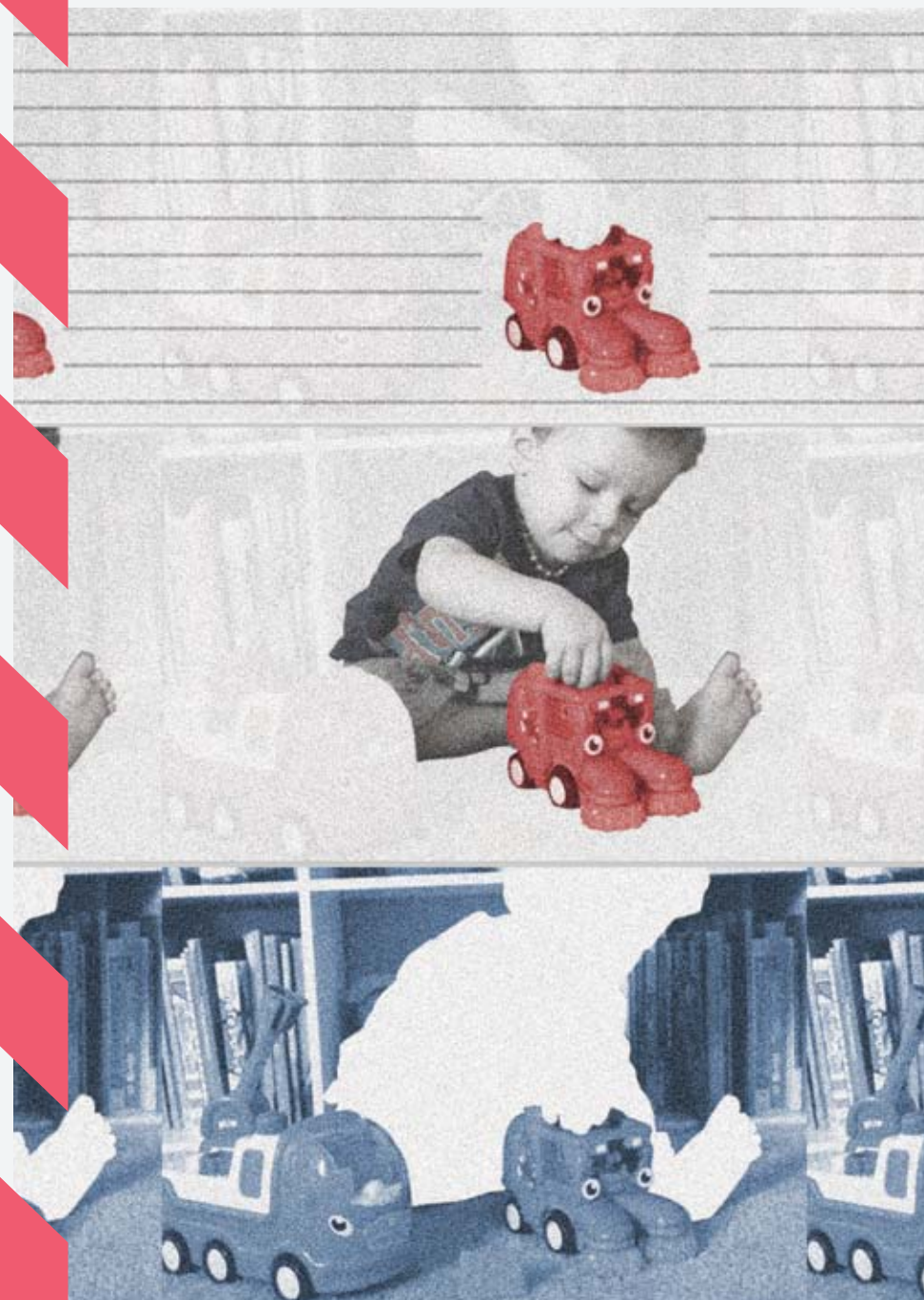
Have you ever doodled to help yourself focus? Fidgeted? This is a form of

compensation to aid our ability to focus. It can be very difficult to maintain your focus for a whole day. While learning, children struggle to extend their attention spans. Child development experts refer to the need for an 'Attention Restoration Theory' (ART). While children are in class, they drain their direct-attention when they focus on a lesson or a task. ART determined that natural stimuli such as wildlife, plants, etc., are capable of regenerating direct-attention.

Attention restoring and enhancing materials are also used by students with ADHD, Sensory Processing Disorder, and autism. Whether it's a balance ball chair, or a compression vest, focus aids rely on specific sensory stimulation. These devices exemplify a type of synesthesia known as the cross-modal analogy; a balancing of the senses to reach a state of calm concentration.

STIMULATE recognizes synesthesia and proposes the formation of new sensory analogies to provide a spectrum of different qualities within one classroom. Plant life, and other natural phenomena provide the greatest variance of stimulation. Inspired by these aspects of nature, STIMULATE proposes the creation of a spectrum of spaces that both enhance and restore direct-attention. This landscape of stimuli forms a context for learning, integrating synesthesia with the perpetual exchange of new lessons, ideas, and activities.

# PATRICK DODSON



## Raise the Row

### A New High Density Residential Typology

To accommodate rapidly growing urban populations, high density residential architectures are required. This thesis aims to explore the scalar relationships between density and urban form that translates the nineteenth century Philadelphia row house typology — the predominant and historically significant, cultural, and formal urban housing tradition — into a new, high density residential housing type for Philadelphia.

Currently 54% of the world's population lives in urban areas; by 2050 this proportion is expected to increase to 66% with a rapid influx of 2.5 billion people. This swift population upsurge means cities around the world will face numerous challenges in meeting the needs of their urban inhabitants, including housing, infrastructure, transportation, energy, and employment, as well as for basic services such as education and health care. In addition to an increasing population, family demographics are shifting. It is expected that by 2050, single person households will amount to one third of all American households. New housing must satisfy this cultural shift by providing a greater number of units and improved unit size diversity for varying household demographics.

The Philadelphia row house has continually been adapted to support the city's diverse range of block sizes and configurations making up 70% of the city's current housing stock. In the context of a rapidly growing urban population, the row house has limited applicability in establishing urban density through the mediation of population to building. The single family row house traditionally mediates urban density at a one to one ratio of household to housing unit. Any escalation of urban density is accomplished through an increase in units, a decrease in unit size, or a combination of the two. These methods, conventionally applied horizontally, intrinsically link and limit minimum unit size and maximum row length to current block size and city boundaries, severely constraining the city's maximum supportable density and population. To accommodate projected future urban populations, the city can no longer expand horizontally; it must be repositioned vertically.

This project proposes to re-imagine the traditional row house typology as a vertical superblock that reinforces the city grid and maintains the significant neighborhood open space traditions of the original founders, while meeting the demands of an increasing population.

# DAVID J. DOMKE





## Library Public-ness Bridging the Digital Divide

CHAO DOU

Are our public libraries dying?

Can libraries meet the needs of the digital age?

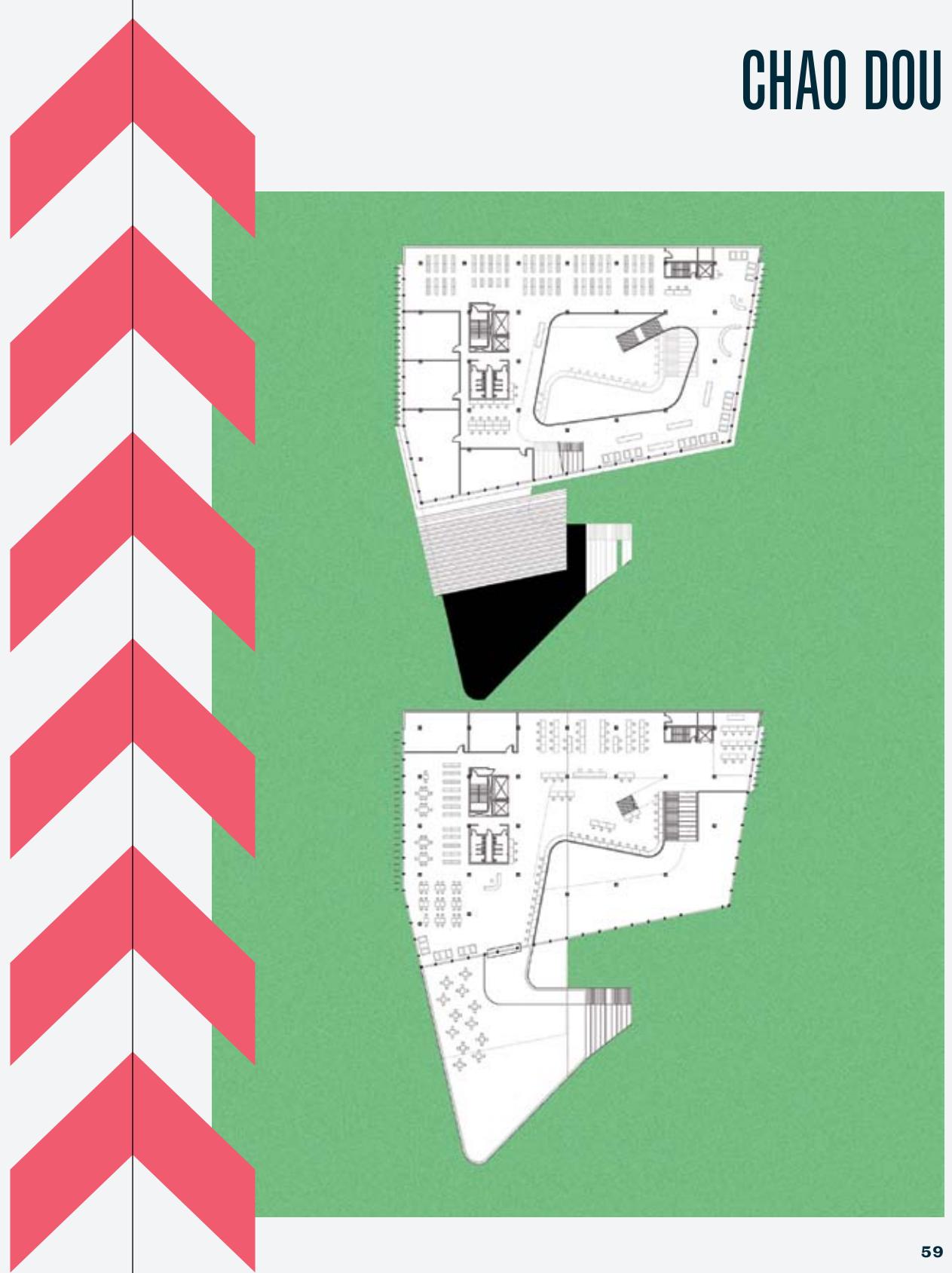
Have the card catalog, the Dewey Decimal System, and the analogue encyclopedia been consigned to the museum?

For most middle-class Americans, the ability to access information through their mobile networks, home broadband connections, or via their PC at work has become an uncommented-upon aspect of their everyday lives. But this is not the case for America's poorer communities such as those that surround downtown Syracuse, NY. America is home to a "digital divide."

This thesis contends that the bricks-and-mortar public library must continue to deliver on its core mission of providing free access to information — for everybody.

To achieve this aim, the 21st century public library must be ever more accessible, inviting, and flexible.

This thesis proposes that the current public library in downtown does not properly serve the needs of the city's citizens. Accordingly, this thesis investigates the creation of a new public library for downtown Syracuse, and seeks to provide a means of bridging the digital divide, providing ready access to digital information for the many and the few.



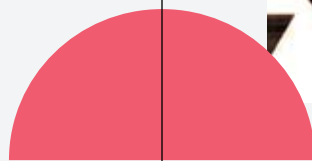
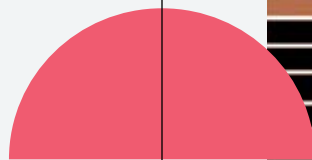
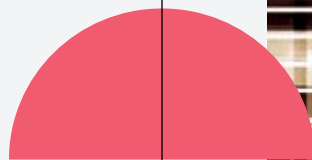
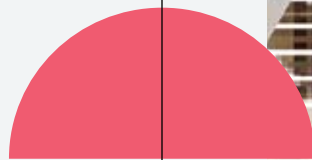
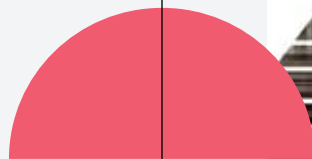
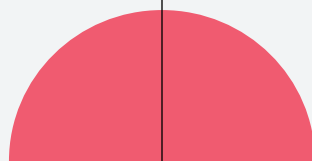
## Technological Pastoralism A Future Repurposing of Urban Infrastructure

“Technological Pastoralism” is both highly efficient and delightful. It requires an architecture that heals the divide between metropolitan life and nature. As opposed to an urbanism that aspires to the logic and appearance of landscape, this project aims to offer a more subtle pastoral delight that might exist within the context of hyperefficiency.

We are living in a capitalist world that has transformed nature into resources and urban space into investments. But we can make better informed decisions to minimize the impact on our scarce resources with advanced technology and data collections. The urban policies are very helpful in motivating developers to pursue sustainable projects in exchange for tax incentives. More and more public attention is being paid to raising our building standards to avoid hurting our ill-managed planet.

This project imagines New York City in the year 2030. It envisions a repurposed Port Authority Bus Terminal as a site for the pursuit of a pastoral ideal in a form of a new typology for tall buildings in a complex urban context. This project conjoins a unique set of programs that allows for the building to reveal its pastoral potential, while also imagining the mega city as a platform for efficiency.

# MAY USAMA DUSSADEEVUTIKUL



## Second City The Urban Gap

“Second City” is a formal, optical, and programmatic experiment of occupation to promote radical social interactions in the city through intervention in the “urban gaps.” These exist as unbuilt, underutilized, and under-programmed spaces within all cities: the alleyway, surface parking lot, grassy interlude, median strip, and the space beneath an elevated freeway. These spaces and surfaces are the opportunities for intervention. The project envisions a second city constructed within, and between, these ignored “leftovers;” a new layer, set of stimuli, internal passage, social experiment, visual kaleidoscope, and land of delight.

“A simple cut or a series of cuts acts as a powerful drawing device able to

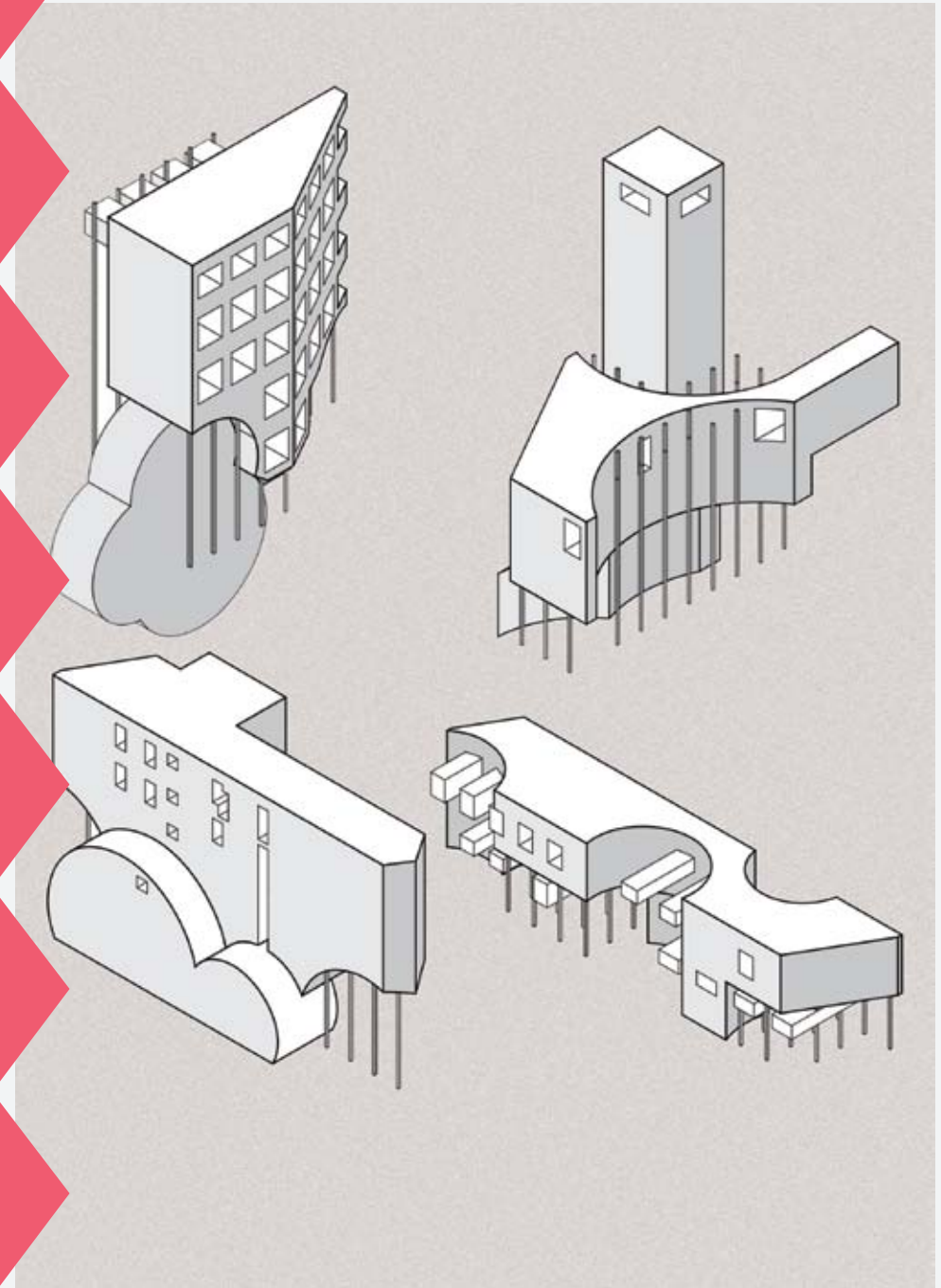
redefine spatial situations and structural components.”<sup>1</sup>

Among the dozens of “gap spaces” in Syracuse, four interrelated properties in the downtown Armory Square district are the site of experimentation. Influenced by physical adjacencies, visual and spatial connections, formal operations, transform the initial autonomous (fill, grid) of each “urban gap.” Each site mixes common programs of daily life with radical programs of urban recreation and leisure. Spatial narratives, optical exchange, tactics of shock, the use of the uncanny, and the unfamiliar<sup>2</sup> construct and reconstruct the city.

<sup>1</sup> Gordon Matta-Clark, *Bingo*, 1974.

<sup>2</sup> Bernard Tschumi, *Six Concepts*, 1994.

# NOLAN R. EDIGER





## Living on the Edge Landform Resilience in East Boston

Through the synthesis of architecture and landscape embedded with layers of soft infrastructure, the resilience of an urban waterfront is enhanced. This project addresses the social, ecological, and urban vulnerabilities that come with the increasing risk of sea level rise and storm surge that the Boston Harbor Estuary faces, and asks, what role can architecture play here?

Resilience is an ecological concept. In design, it is the ability of an urban landscape to absorb disruption and facilitate change, while still maintaining a robust identity. With an “in the water,” “on the edge,” and “on the land” approach to resilience along an East Boston waterfront in the Boston Harbor estuary system, this project uses soft infrastructure systems as well as landform buildings created through architecture and landscape to slow the water, spread it out, absorb it, capture

it, and allow the community to live with it. Soft infrastructure encourages a gradient edge between the land and sea, as opposed to the hard edge that exists with the current infrastructure systems in place.

The program of a resilience center on the site serves as a way to engage the community with the threat of rising sea levels through education and office facilities, as well as providing a location to double as an emergency evacuation center. The community of East Boston is particularly vulnerable due to its identity as a low-income neighborhood. An MBTA ferry terminal supplements the emergency evacuation center, providing an added source of public transit. A commercial space opens up to the public square, and a recreation building along the city of Boston's Harborwalk creates an opportunity for the public to engage with the waterfront park.

# LAUREN M. FESTA



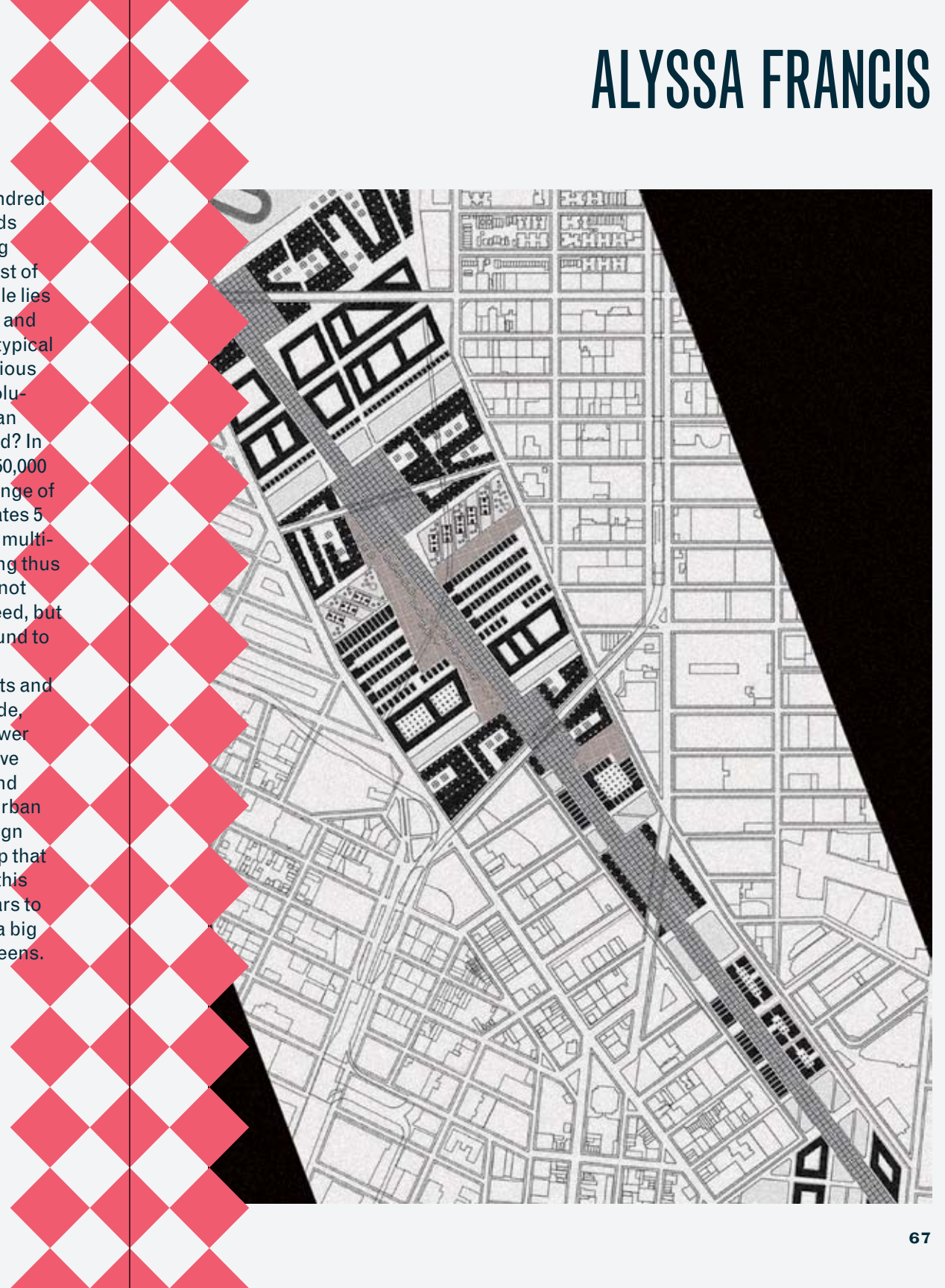


The motorist's necessity and/or indulgence in city driving and parking have always presented the double dilemmas of urban traffic and car architecture. If only panhandlers and squeegee kamikazes have managed to capitalize on traffic, there is at least a long history of car architecture that has squeezed some interesting design opportunities out of the dirty work of racking and stacking cars into the dead "junk-space" poche of deck space. From Bertrand Goldberg's Marina City corn cobs to BIG's Mountain Dwelling and Herzog and de Meuron's 1111 Lincoln Road showcase, most parking notables have been above grade. When below grade, parking is usually a tricky retrofit or expensive excavation operation. But what about parking as urban land fill?

At eight million square feet, Sunnyside Yards is the largest undeveloped parcel and "urban sink hole" in New York City. Meanwhile, daily commuters and NYC residents create a parking demand that exceeds the city's streets, lots, and decks. Projections for growth, especially in Queens, of 18% by 2032 will only catapult this already unmet demand. Although New Yorkers pride themselves on mass transit use, wealthy New Yorkers love their weekend vehicular

escapes. The two mile by nine-hundred foot gaping hole at Sunnyside Yards already separates the thriving Long Island City to the north from the rest of Queens. Further, this huge sink hole lies between the inbound Connecticut and Long Island commuters and their typical Manhattan destination. Isn't it obvious that the car as urban landfill is a solution begging to be tried in this urban sink hole to re-establish the ground? In fact, Sunnyside Yards could hold 50,000 cars over just one level. With its range of depths, the site easily accommodates 5 times that number of cars in some multi-story fashion of deck space. Parking thus conceived as urban land fill could not only fill the void and the parking need, but further re-establish the urban ground to knit a divided Queens.

By identifying current hub points and looking at projected growth at grade, major high-density arteries and lower density spaces can stitch and weave across this urban car fill. The fill and stitch of parking landfill as a new urban ground generator are the first design reciprocity. The stitch and build-up that follows are the virtual potential of this urban sink hole just begging for cars to fill its lots. Sunnyside Yards need a big park — a car park — to remake Queens.





Consider Rem Koolhaas' five theorems of Bigness:

- 1 Beyond a certain critical mass, a building becomes a Big Building. Such a mass can no longer be controlled by a single architectural gesture, or even by any combination of architectural gestures.
- 2 Issues of composition, scale, proportion and detail are now moot. The "art" of architecture is useless in Bigness.
- 3 In Bigness, the distance between core and envelope increases to the point where the façade can no longer reveal what happens inside. The humanist expectation of "honesty" is doomed.
- 4 Through size alone, such buildings enter an amoral domain, beyond good or bad. Their impact is independent of their quality.
- 5 Together, all these breaks — with scale, with architectural composition, with tradition, with transparency, with ethics — imply the final, most radical break: Bigness is no longer part of any urban tissue.

It exists; at most, it coexists.  
Its subtext is *fuck* context.<sup>1</sup>

Koolhaas argues for the importance of a theory of Bigness, and declares that once architecture expands beyond a certain scalar threshold, it is no longer possible to have a contextual relationship with its surroundings.

In contrast, Graham Harman's vicarious causation provides a theory of containment regarding objects leading us to conclude that the only way that the architectural object can relate to the city in which it is situated is through a level of bigness.<sup>2</sup>

"Big Urban Things" uncomfortably nestle in-between these opposing viewpoints and present a new understanding of context, determined by an infinitely fluctuating set of relationships. It is not that no context exists, but rather a big context exists.

A Big Urban Thing refashions context in its own image.

A Big Urban Thing is ultimate context.

"Big Urban Things" presents itself in building form through the redesign of the Pentagon on the island of Manhattan. Throughout the design process, experiential qualities, are prioritized over collections of contingencies (by which architectural design is too often justified) as a means of influencing the creation of formal tectonics and internal strategies. By prioritizing these qualities, new opportunities are created for architecture at a large scale, able to relate to its surrounding context, and to the city as a whole.

1 Koolhaas, Rem. "Bigness, or the Problem of Large." In *SMLXL: Office for Metropolitan Architecture*, Rem Koolhaas, and Bruce Mau, 499-502. 2d ed. New York, N.Y.: Monacelli Press, 1998.

2 In response to a question regarding architecture's relationship with the city while giving a lecture at Architecture Exchange in London, UK (June 22, 2013) Graham Harman states "...many of the relations of containment — one object in another — that you might think are real might not be. It might be that, maybe the house isn't part of the city. Maybe the house is part of the block and the block is part of the city." By extending this statement to its logical conclusion, architecture can only relate directly to the city through an increase in scale.





## A Catalyst for Consolidation Rethinking Live-work in the Arts Industry & Arts Districts

# ADRIANA GHERSI

Recent studies support the view that the presence of live-work accommodations in a neighborhood helps to build strong, safe communities. Paradoxically, live/work housing can also lead to social isolation resulting in the degradation of the professional ecosystems it was designed to engender.

Specifically, in the art world, live/work environments such as those adapted to former industrial buildings have generated weak, unconsolidated urban art environments. The short-lived nature of some art districts is an example of this, where real estate pressures compromise the potential of these neighborhoods. Emerging artists, commonly known by the industry as “art under 10k” (90% of the industry), end up being displaced, resulting in an endless cycle of failure for the majority of the industry.

Thus, by merely placing a live-work, mixed-use infrastructure into an art district there is no guarantee that a future consolidation of the art ecosystem will take place. Likewise, while art incubators can jump start creative activities, they lack the character and attractiveness that art districts naturally generate. Ultimately, none of these programmatic solutions provide all of the functions required to enable substantive connections/interactions to take place, resulting in the inability of such neighborhoods

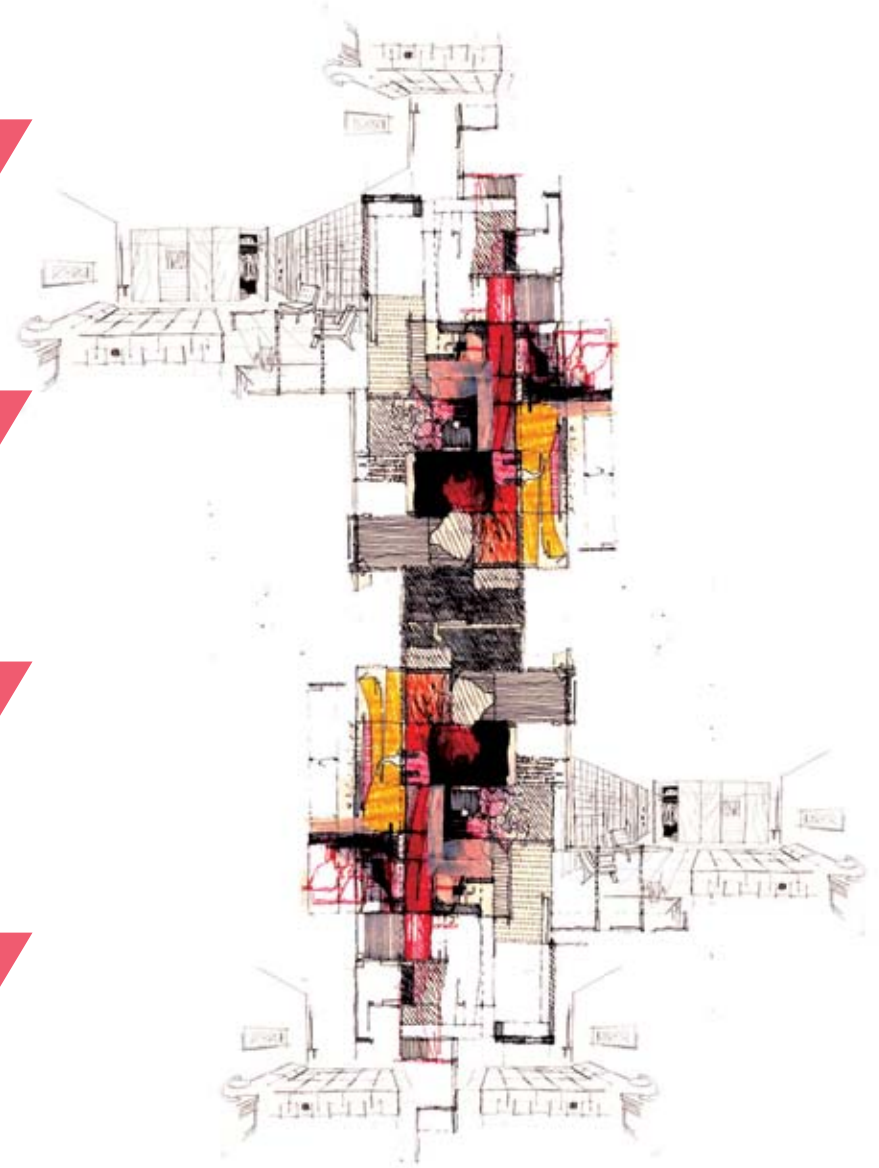
to sustain the live/work ecosystem that 90% of the art industry needs.

It is my contention that a careful reconceptualization of the artist's live-work environment could enable the consolidation of both the arts district and the live/work ecosystem.

A carefully orchestrated architecture can integrate the live-work with the programs/spaces necessary to promote the three types of interactions/connections and discourage the tendency for these environments to devolve into any other function.

Living, working, and collaborating in the same integrated environment engenders attachment to and pride in that place, resulting in the enrichment of both the quality of one's place of living and place of work.

As a demonstration of this principle, I am proposing an intervention prototype designed to consolidate and preserve the essence of the art districts by preventing emerging artists' displacement. This new live/work/collaborate typology strives to aggregate positive outcomes from different approaches to similar uses. The result will be to improve what is currently an inherently deficient typology. The test site for this intervention is the emergent arts district of Wynwood in Miami, Florida.



## Form Follows Fantasy Fragile Care Facilities and Teenage Dreams

In recent years, a new building/campus type has evolved to serve the needs of critically and terminally ill patients. It is known as a Medically Fragile Nursing Facility. These MFNF's aspire specifically to cater, beyond what hospitals might provide, to newborn through 21-year-old patients, whose livelihood requires equal attention to both intensive medical care and childhood itself. These patients might include those confined to a wheelchair with cerebral palsy, mobile but requiring constant congenital heart disease monitoring, those with limited movement due to chronic lung and respiratory disorder, or even those completely confined to their rooms. Since living with a severe illness means that death's specter is ever present to these young lives, the attention to what passes as a childhood is critical and in need of attentive care.

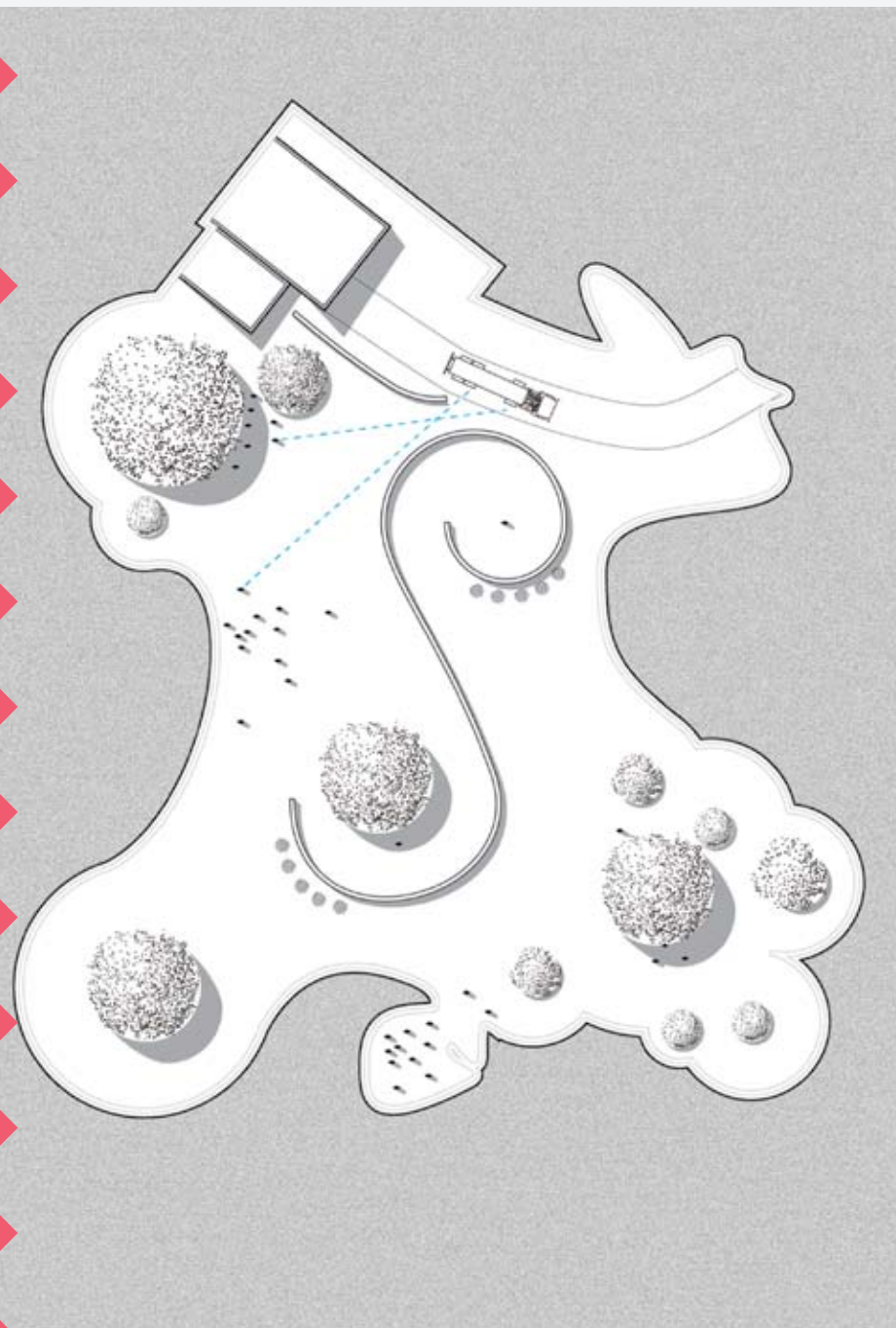
Before Medically Fragile Nursing Facilities, children with life threatening illnesses were treated and/or confined to three separate facility types: the hospital, the home, and the school. These new facilities provide specialized educational, social, and clinical environments within or adjacent to campus living quarters. However, having brought all the needs of the patient to one secure place, the life of the critically ill patient is still confined within the perimeter of the site. This thesis contends that while ensuring the safety and health of patients is the functionally critical dimension of a Medically

Fragile Nursing Facility, the real architectural concern is permitting the inherent childhood fantasies, which make life worth living, to thrive rather than be subservient to the clinical necessities.

We usually associate places of fantasy with wondrous locations such as Disneyland or movies such as Avatar. Nevertheless, what must not be overlooked are the daily fantasies we construct to make it through reality. A fantasy for a 5-year-old could be becoming a fireman or driving a monster truck, while that of a 16-year-old could be going on a hike, performing in a play, or simply mustering up the courage to ask out their crush. Similarly, the fantasies of a caregiver may be to raise their child in a healthy environment, where it is safe for them to play and conquer personal challenges. The paradox of these facilities is that they typically overlook simple, yet monumental, childhood fantasies by catering more to the fantasies of the caregivers, who seek out the aid of a MFNF.

How can architecture allude to a childhood fantasy and inspire the imagination of the patient? What if the service road was leveled in particular locations to give younger patients glimpses of life-size Tonka trucks? What if hallways turned into bridges that were elevated over the scenic landscape? What if common every-day spaces could turn into a stage for one's starring debut? How can form follow fantasy?

# MATTHEW JORDAN GINS





## Obsolete Architecture Revitalization along a Spectrum of Utility

This thesis project confronts the gradually increasing portion of the built environment that is becoming obsolete. A quote that perfectly frames this issue is, "Everything that is static is condemned to death; nothing that lives can exist without transformation..."<sup>1</sup> Where death implicates impermanence, transformation insinuates the potential for revival. With these views in mind, this thesis project mines the potential significance of obsolete architecture by uncovering the embedded historical, material, and spatial richness of these structures in an attempt to reassign cultural and architectural value.

Rather than approaching the project as an opportunity for conventional adaptive reuse, this project speculates on the placement of the obsolete at the midpoint of a spectrum of utility and pushes it towards both the useless and the useful. This project exploits the fact that obsolete architecture is essentially caught in limbo between being nonexistent or being occupied and active, between dead or alive.

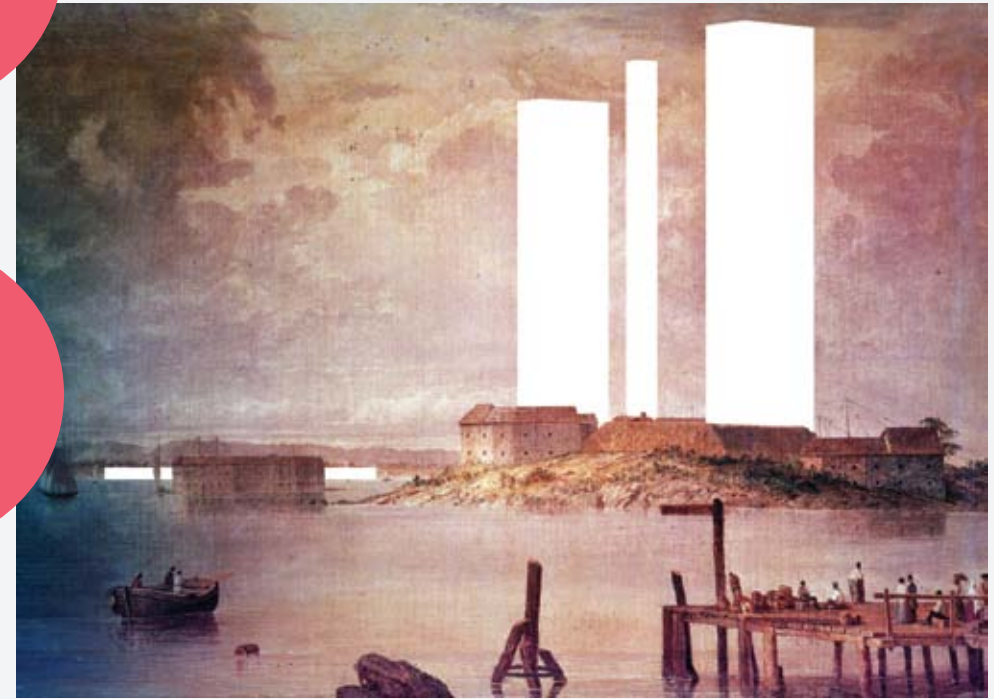
The naval fortification presents a unique example of obsolete architecture. Ironically, the naval fort is defined as

being not only a military stronghold but also something that is unsusceptible to outside influence. Today, most forts are considered defunct or abandoned and are, at most, recognized as historical artifacts. An artifact, by definition, is something that is deemed to be culturally relevant. As such, the artifact should be regarded as something that continually contributes to contemporary culture.

As a way of facilitating this reintegration into society, this project speculates on the agency of the radical intervention and adopts the delivery technique of narrative. Obsolescence cannot be rectified without also taking into account its impact. Thus, this project uses narrative as a device to develop the relationship between the radical intervention and obsolete architecture. The vitality of the forts, one representing the useless side of the spectrum and the other representing the useful, is dependent on revitalization. Accentuating a binary of usage and highlighting contrasting experiences reinvigorates obsolete architecture, which in turn prevents its death.

<sup>1</sup> Spuybroek, Lars, and Nio Maurice. "The Strategy of Form." V2 (1996).

# GARRETT GOODRIDGE





## The Catalog Home A Transformable Module

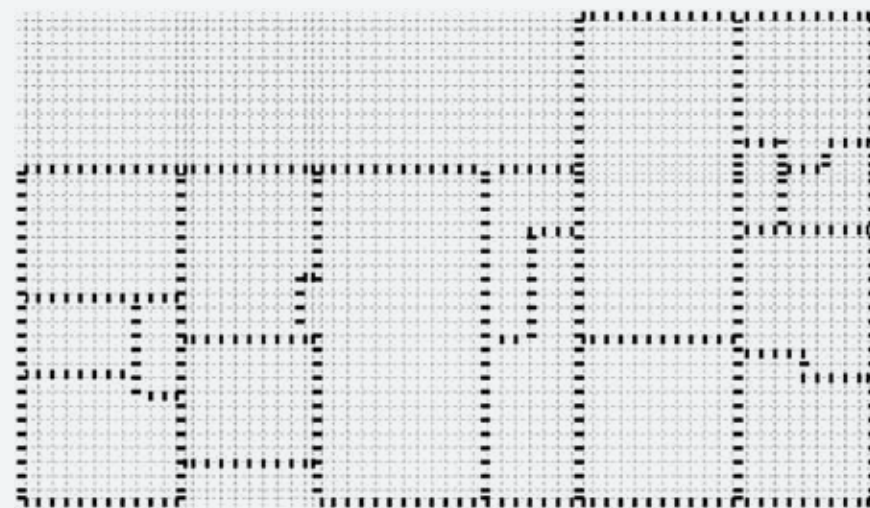
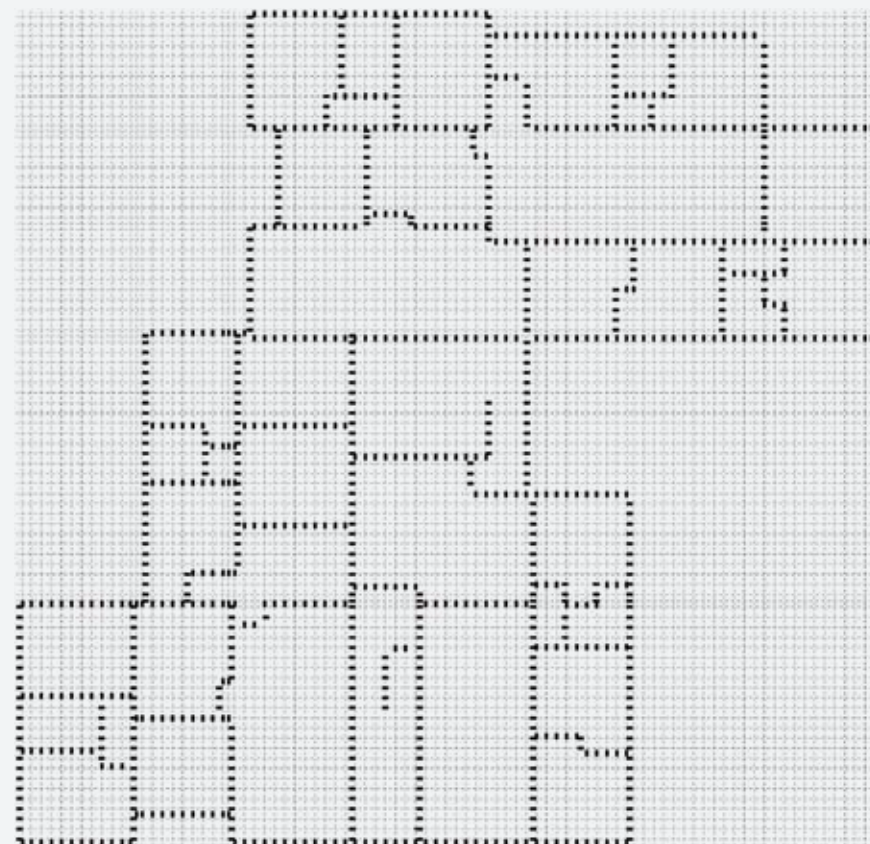
The traditional American single-family home is made up of individual wooden elements that together create a decisive method for producing space, an autonomous grid. Each specific member that goes into the making of a house operates within a definitive set of rules that results from structural restraints on building materials. This system of construction, composed of regularized pre-fabricated elements, allows the individual parts that go into a home to be reordered and manipulated into a multitude of new forms. By utilizing these unseen structural grids to guide the redeployment of wooden studs, it becomes possible to create homes that have blurred boundaries by merging multiple houses into one collective mass.

The rise in popularity of the single-family home in American society can be tied to two major events that occurred at the turn of the 20<sup>th</sup> century. The mechanization of assembly processes, and westward expansion both led to the rapid production and implementation of kit homes in newly settled regions of the country. One company that was essential to the advancement of these kit-of-part homes was Sears, Roebuck, and Company. The different homes introduced by Sears

provided an individual with the plans and structural pieces needed to build a single-family home. All Sears catalog homes were planned and constructed, within a standard structural grid that is governed by the spacing and location of the wooden studs.

Grids are inherently present in all of the homes put forth by the Sears Modern Home Department and can serve as a way to develop new multi-family housing forms from a once popular single-family housing system. Acting as an autonomous element for the creation of residential space, the latent grids that organize structural elements in Sears catalog homes can be manipulated so that previously separate homes can be fused as one. Wood framed construction creates a field of studs that when altered relative to another home or homes creates new housing layouts produced from a preexisting set of parts. The resulting hybrid homes allow for higher occupancy levels and increased material efficiency on a single site than a single-family home. As the Sears catalog home is repeated and transformed, the resulting homes adopt a special new layout that is dictated by the way homes are joined together.

# ADAM MICHAEL GOTTLIEB



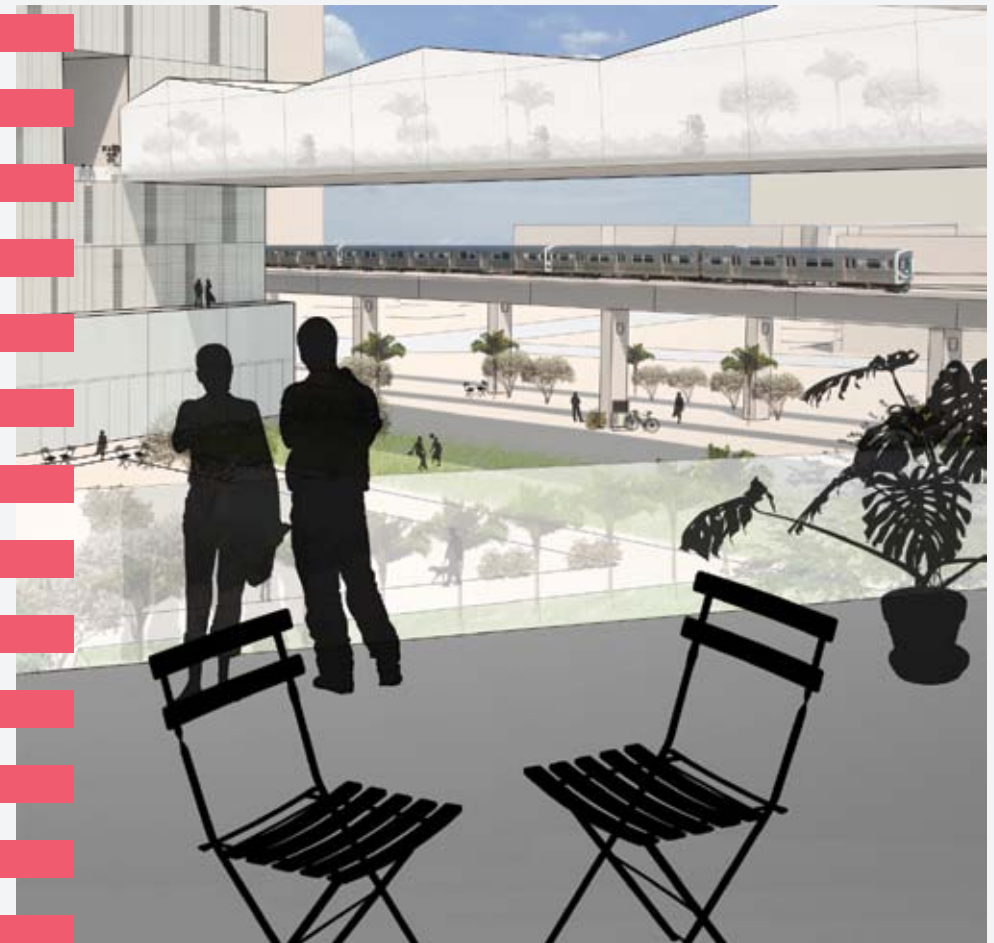
## Housing for Introverts Reconnecting Urban Millennials

As the housing market and related demographics have changed over the last several decades, smaller and younger households are being pushed out of the market. The millennial generation presents a major shift in household make-up, and is part of this smaller, younger and marginalized group. Additionally, this is a generation that has grown up with technology. They are more connected, and, paradoxically, more introverted, preferring to text rather than talk face to face. Also significant, this generation, my generation, has witnessed the greatest crash and burn of the housing market in recent history. All this leads to unique needs for housing: Millennials prefer to rent, not buy; they don't usually own cars; and they are drawn to urban centers.

Incorporating smaller, flexibly designed units and integrating social

spaces into larger multi-unit aggregations, my thesis aims to reengage millennials into the social context, while also providing affordable housing options. Social spaces will range in size and scale from shared living rooms and outdoor terraces to public plazas at the ground level. Furthermore, sited in an urban area in Miami's West Brickell neighborhood, this new housing project for millennials engages its urban situation in ways complementary to the needs of this demographic. Providing a range of commercial spaces at ground level to engage pedestrian traffic, the project invites the larger public to interact with the resident population. With housing units situated atop this base, residents will have choices regarding the scales of space and types of social interaction they choose to indulge in.

# MORGAN K. GRABOSKI



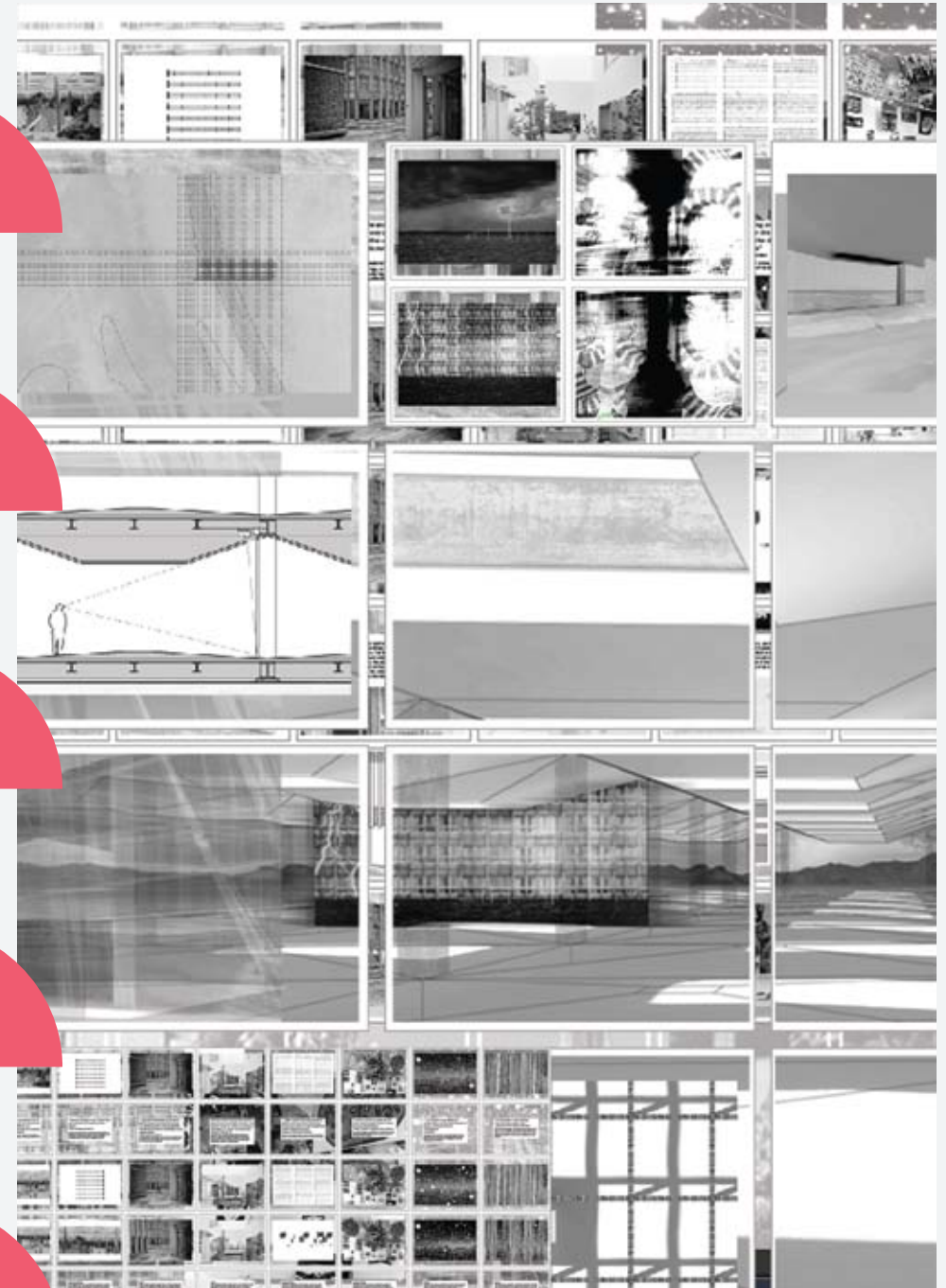


A field is an organizational method or a theoretical construct in which complex relationships between disparate conditions can be actualized. A field is a critical lens and a generative technique. To design a project as a field means context, design, and technique are parallel conditions. The legibility of these layers must be precise but not explicit, with each influencing the other at varying moments.

The project has produced a field. To some it may be a complex image, and to others a charged network. The content of this field creates a catalytic screen when overlaid. A historical context appears as a range of works, all of which pursue the opportunities of neutral, repetitive, and anonymous

conditions. Primary examples are found in the projects and writings of Alison and Peter Smithson, Rem Koolhaas, and John Cage. This context includes land art, immersive installations, musical performances, urban sprawl, and natural spaces. The visual and diagrammatic techniques of the field transform the material into a new condition from which an architectural proposal emerges.

The museum of projected materials is a field for fields. It holds no expectation of completion. An image of plan, of section, of rendering, all demonstrate conditions of the design, but not the project. The project is the field: a context, proposal, and device. The field is a technique. The field is an architectural proposal. The field is a field.





## Wasted in Syracuse

### Revaluating the Syracuse University Steam Plant

# ADRIANNA GRIFFITH

Infrastructural facilities create waste — by-products that are perceived to have no other potentials for use. This waste can be seen as territorial (land that becomes devalued and vacant due to its adjacency to industry), as lost energy (though the emission and loss of heat, exhaust, gas, water, etc.) and as spatial (the result of single use structures that are internally oriented).

Rethinking waste in a contemporary city can create a more activated and productive urban environment through the introduction of public programs and green infrastructures.

These strategies will:

- 1 Make vacant land a more integrated part of the social development.
- 2 Reorient single use architecture that as internally driven program to interact with its surroundings.
- 3 Direct wasted byproducts towards the functioning of new programmatic elements as well as make it visible to the public.

This thesis aims to revalue these aspects of waste within the city of Syracuse. Vacant land accounts for 8.8% (3,600 parcels of land and 1,700 buildings) of the city of Syracuse. In the Southside, the area where the Syracuse Steam Plant is located, 8.9% of the area is comprised of residential and commercial vacant

land and buildings, the third largest of the 8 neighborhoods.<sup>1</sup> Over 75 parcels within a half-mile radius of the steam plant are vacant. Vacant land is often associated with negative attitudes — increased crime, public health risks, and poverty. As a result, little economic and social investment by the public and local governments is contributed. Added proximity to industry and infrastructure contribute to the devaluing of these sites. Emissions of gas, exhaust, heat, water, etc. from the processes associated with these facilities impact their local conditions and environment further. The steam plant emits 56,439 metric tons of energy per year according to the EPA. CO<sub>2</sub>, water, carbon monoxide, NO<sub>x</sub> and SO<sub>x</sub> make up the visible plume that dissipates in the sky.<sup>2</sup> The steam plant is an internalized building focused on steam generation and does not enable engagement with the surrounding neighborhoods, which include public housing and a park. More attention is given to the standardization and technical efficiency of their internal components making their interaction and engagement with the public limited. Extending public program into the existing plant and bring the processes within the plant to the surrounding neighborhood will foster new interactions between two currently separate conditions.

<sup>1</sup> City of Syracuse. "Current Land Use Patterns", Syracuse Land Use and Development Plan. 2015.  
<sup>2</sup> EPA. 2013 Greenhouse Gas Emissions from Large Facilities, Syracuse University Steam Station. <http://ghgdata.epa.gov/ghgp>





## Contemporary Sacred Tectonics A Center for Assisted Dying in Montreal

# GEORGE GUARINO III

Generations of architects have examined, experimented with, and established ideas of sanctity in architecture. Contemporary sacred architecture builds upon these lessons, providing grand scale, light from above, and other tropes of sacredness. This thesis seeks to produce a contemporary sacred space that moves beyond these expectations through the synthesis of ideas both tangential to, and at the center of our discipline.

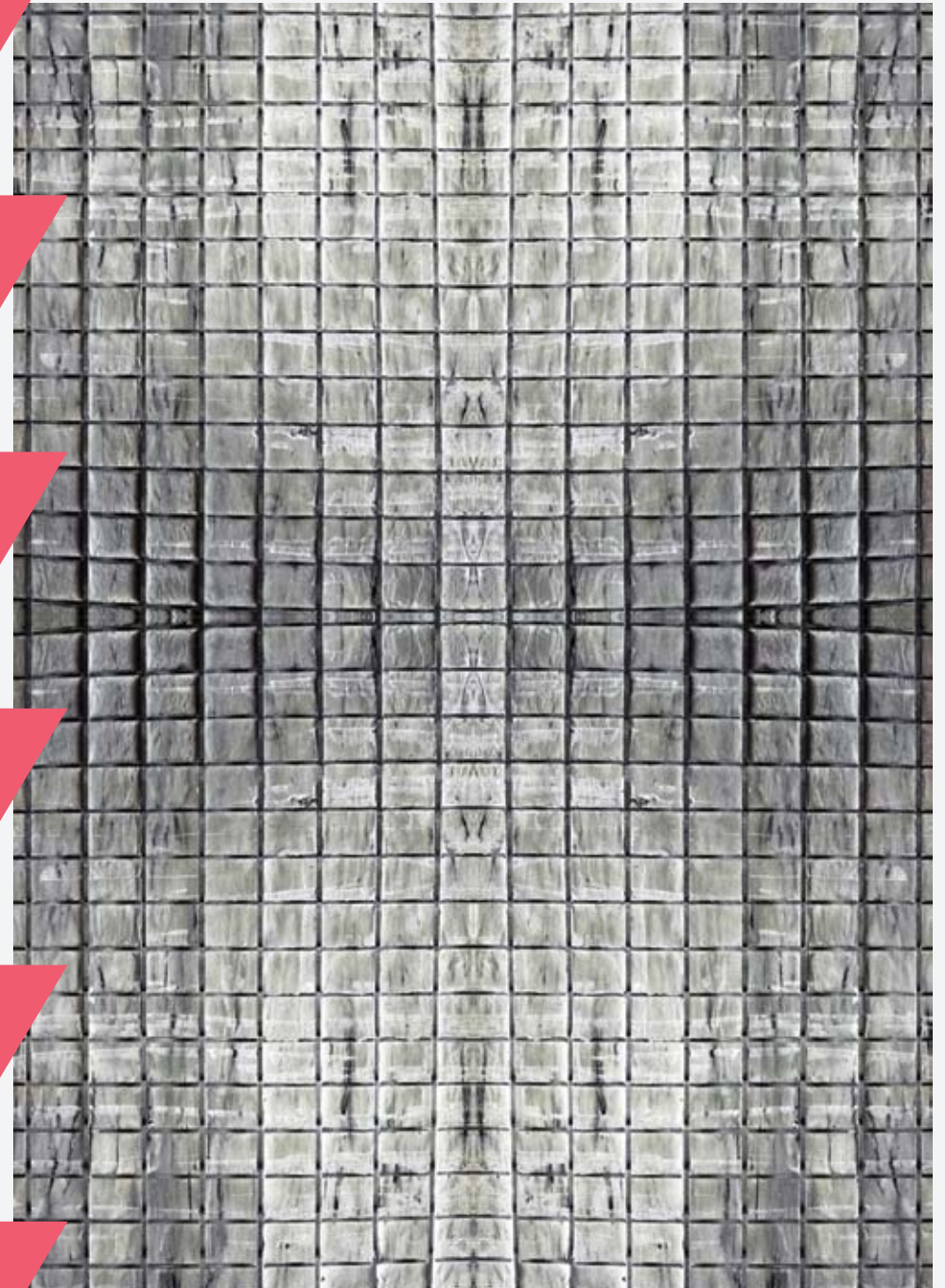
Pop philosopher Alain de Botton begins his book, "Religion for Atheists," accepting the argument of his peers that secular society has been left with voids once filled by religion. He elaborates that secular society has failed to effectively replace, not only the institutional and spiritual, but the corporeal infrastructure of religion. Referring to the built environment as it exists to serve spiritual needs, he suggests that, in all realms, secular society should intelligently steal from religion to effectively fill the aforementioned voids.

While rich materials often play a role in the solemn architecture of today, it is often the first consideration value-engineered out of contemporary works. Further, critical philosophy has not been utilized to create a tectonic language appropriate for new construction. Though

craft is often thought of as a nostalgic appeal to the time of architects' monopoly on the building process, leading firms today are aspiring to once again make well-crafted architecture the normative condition in our world, constructed of mass-produced materials, adhering to capital-driven, manufactured proportions, and assembled by unskilled labor.

How can these new approaches to craft produce contemporary sacred architecture? Elaine Scarry writes in "On Beauty and Being Just" that we experience beauty when an object transcends our ability to produce it. She qualifies this experience of beauty as sacred. Gothic cathedrals impressed their constituency with their grand scale and lightness... the layperson could not comprehend how such a structure could be built. Today, with our airports, skyscrapers, and stadia, scale is no longer an effective way to produce sacred effects. How does architecture imbue this feeling in occupants of today's architecture?

This thesis seeks to design a building whose occupants are confronted with incomprehensible objects, materials produced through repeated passes between digital and analog means of production, to create a sacred architecture.



## Temporal Varietals

### Experiencing Wilderness through Architecture

There is the problem of how wild a region must be to qualify as wilderness, or, conversely, how much of the influence of 'civilization' can be admitted.  
— Roderick Nash

The wilderness presents a natural condition in continual renewal, a place where man goes to explore, but can never occupy permanently. Wilderness is defined by the absence of human development. This opposition presents a challenge to architecture — to occupy the wilderness without deforming it.

Bruno Taut's research on the anti-object interprets architecture as a matter of relationships between the building and its environment. The anti-object is concerned with strategically framing the surrounding contextual environment. Upon inhabitation, the structure becomes the frame of the surrounding environment, defamiliarizing the familiar landscape to allow the user to view it freshly and with greater attention.

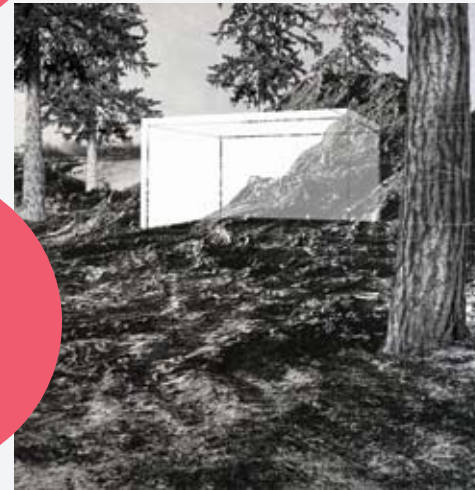
This thesis uses Taut's anti-object framework to simultaneously oppose, frame, and step lightly within the wilderness. Deploying various interventions

along the White Mountains National Forest trail network, the project proposes symbiotic elements that will serve as a means to enrich experiences in the wilderness. Simultaneously homogeneous and distinct from the wilderness fabric, the structures serve as pauses in the landscape to contemplate the surroundings and provide an architectural network within an anti-architectural context.

The location, climate, and temporality pose great challenges to designing and building in the wilderness. The structures are designed to, at once, alter and be altered by the surrounding environment through indexing. Specific site and environmental conditions impact the initial design of each varietal, and, over time, the structure is continuously altered by weather phenomenon — predominantly wind, snow, rain — and vegetation. The transitory nature of man in this condition is juxtaposed against the relative permanence of a building.

The largest wilderness looks larger when seen through a window  
— G.K. Chesterton

# ALEXANDER GUZMAN





In his 2014 encyclopedic box set, Rem Koolhaas and a host of co-researcher/authors theorize by examining the fundamental elements “used by any architect, anywhere, anytime.” Each element’s evolution uncovers conventional and unconventional adaptations from its origins, across modernity, and into the future. Fifteen elements comprise the periodic table, with some like *ceiling* and *fireplace* serving as catchall terms for other *potential* elements (i.e. *fireplace* encompasses all HVAC devices). Engaging *Elements’* thesis, itself confounded by the fact that any list excludes what it does not include, this thesis asks, what are the missing elements?

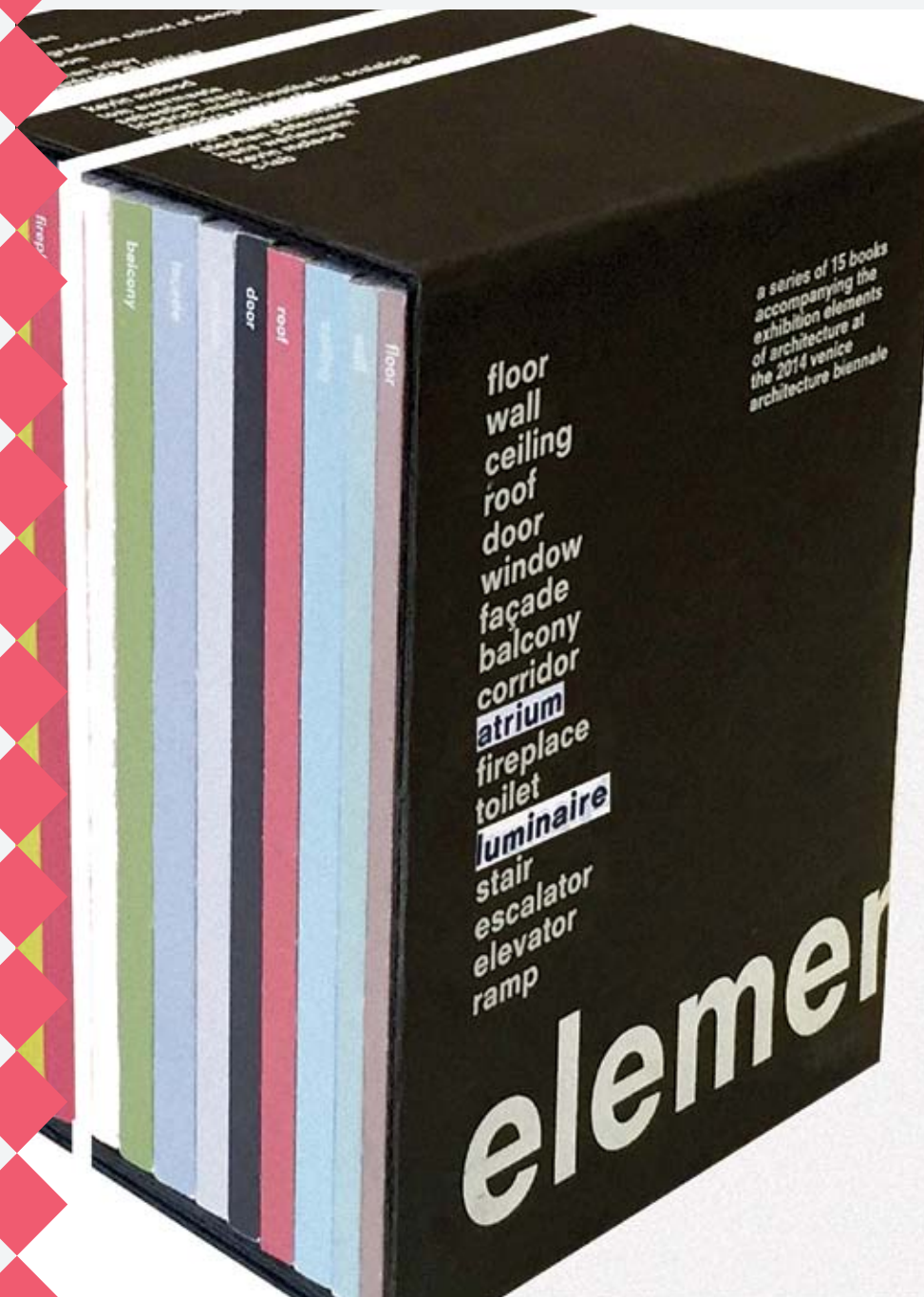
Koolhaas’s *Elements* intertwines the spatial-constructional with the circumstantial-social in two thematic subsets: enclosure and occupancy. Elements 1 through 4 — *floor*, *wall*, *ceiling*, *roof* — provide the primary means of spatial enclosure, with elements 5 through 8 — *door*, *window*, *façade*, *balcony* — offering horizontal enclosure of its secondary elaborations. Elements 10 and 11 — *fireplace* and *toilet* — ground occupancy in its basic human services of heat and water, while elements 12 through 15 — *stair*, *escalator*, *elevator*, *ramp* — supplement occupancy’s vertical ascent. Tying the knot between space and services, element 9 — *corridor* — anomalously bears out a spatial condition, differing from its otherwise off-the-shelf counterparts.

As the only element constructed of other components, the corridor

— composed of floor, wall and ceiling — is a horizontal connection that finds its mate in the atrium as a vertical connection. A combination of floor, wall, and roof, the atrium, is supplemented by the stair, escalator, elevator and ramp. The box set attempts to encompass all MEP within the bounds of the elements — while the luminaire deserving of its own book is merged within the ceiling — but wholly glosses over the atrium.

Sealing the mobius strip of *Elements’* continuity — where floor meets ramp in the box’s book-ends — our proposed box set’s gathering of spatial elements at the corridor has already passed into that equivalent gathering of occupancy elements in the atrium, through a moment of inflection recognizable only in hindsight where the horizon of spatial identity has already become the horizon of occupancy.

Koolhaas has critiqued the atrium as an anti-urban element, which might explain its exclusion from the list. Although its inclusion might associate Koolhaas with anti-urbanists such as John Portman, the atrium has figured heavily in OMA’s work. Koolhaas’ ability to take presumable unlikes to create new conditions has resulted in atria that are porous continua of the urban scene as an interior social condenser, challenging Portman’s model of an interior space divorced from the city. As a historically significant element worthy of any architectural box set, the atrium is a curious omission given its importance to OMA’s work.



## Decay and Opportunity of Architecture

### Reimagining Obsolete Underground Infrastructure

This thesis aims to tackle the issues of obsolete infrastructure through the creation of a new network throughout the urban center. Networks of abandoned underground structures exist in urban locations everywhere, left untouched or forgotten when building anew was easier. These sometimes iconic structures are left with only small traces of their influence upon their context. Sites like these still have the ability to influence their surroundings on both an urban and a local scale. Due to the elevation of such spaces, they are inevitably at a greater risk for damage. Redesigning the network to accommodate and adapt to the always-changing natural environment would ensure their resiliency within the system.

Obsolete damaged infrastructure, such as abandoned subway stations, can still play a role in the urban environment. Through the acceptance of, and allowance for, decay built within the design, these underground structures can operate as an adaptable network at both an urban and local scale. By accepting that events will happen to disrupt normal city activity, this network has the opportunity to relieve some of the system pressure while remaining operational. The utilization of these spaces will, in turn, increase the efficiency and resiliency of the ever-expanding urban infrastructural system.

This thesis develops a connection between the newly elevated downtown

Brooklyn, and the cultural/civic center of lower Manhattan. It will consist of an expansion of the Urban Farming Network as well as plug into the various cultural, civic, and institutional centers along the line. Through this expansion, the new network can act as the bridge between the city centers as well as a central hub for the farming network.

A high-risk occurrence is flooding, but many cities are not equipped to handle it. Major cities have pushed flood retention advancements aside. The damage can be greatly diminished by utilizing the network of abandoned lines underneath the city for retention and redirection of excess water. The development of an architecture that allows for various seasonal occurrences will permit the continual use of these spaces, reducing the need to build new infrastructure and increase the overall efficiency.

Designing the network to primarily house “pockets” of water allows the other programs to flow seamlessly around them. Always intertwined and visible, they can be molded together in a cavernous fashion, piercing the surface to activate dense areas with market halls and farmscapes. By using a catalogue of common factors, the line is developed to adapt to a multitude of site conditions and programs. By reimagining what resiliency in infrastructure means, obsolete architecture has the ability to productively enhance its surroundings.

# ALEXA L. HANSFORD





## Performance Pedagogy A Reconceptualization of the Modern Atelier

DANA HARELI

The deterioration of performance pedagogy in contemporary educational practices, fostering one-on-one teaching models in the place of lecture-based teaching models, is detrimental to the intrinsic theatricality of architectural design education. As faculty increasingly seek to build closer, interpersonal relationships with students as mentors under a student-centered methodology, the classroom, in its traditional form, becomes inflexible and rigid. The Montessori classroom, an early 1900s solution to self-initiated learning, dissolves the role of the instructor to that of a passive participant through the eradication of spatial hierarchy in favor of insensitively bland learning environments. Here, the spatial contingencies and intersectionality of the classroom are diminished to encourage self-initiated activities informed by tactile learning.

In contrast to the Montessori model, the architecture studio, an adaptation of the atelier-based training of the École des Beaux Arts, offers a teaching model that is fundamentally theatrical, conditioning acts of performance and spectatorship between students and instructors. Evolving from the notion of the architect as a patron of an atelier to that of a generalist within a craftsmen workshop, contemporary architectural education practices should foster the notion of the architect as a scholar-performer through

performance-based learning. However, current formal and spatial configurations of the architectural studio, which starkly mimic those of the Montessori classroom, inhibit the potential for theatrical interplay and improved learning. Rather than absolve the studio of rigid uniformity through formal and pedagogical innovation, the contemporary studio temporarily reconfigures itself via flexible partitions and furniture.

In a critical piece on radical pedagogies within the architectural curriculum, Beatriz Colomina calls for the reuse of experimentation and innovation as a means of revolutionizing the way in which the discipline is taught.<sup>1</sup> As research in higher level teaching overwhelmingly supports the displacement of the instructor from the role of an “expert” to that of a “delegator,” lecture-based teaching, despite its effectiveness in transmitting information via didactic performance, is abandoned.<sup>2</sup> Thus, through the adaptation of the Beaux Arts atelier, this thesis explores the intersection of surveillance and theatre as a means of revolutionizing performance pedagogy and subverting the traditional classroom in a school of architecture.

1 Colomina, Beatriz, Esther Choi Gonzalez Galan, and Anna-Maria Meister. “Radical Pedagogies in Architectural Education.” *Architectural Review*, 2012. Accessed October 1, 2014. <http://code-collective.org/post/35295185543/radical-pedagogies-in-architectural-education>.

2 Grasha, Anthony. “The Dynamics of One-on-One Teaching.” *College Teaching* 50, no. 4, 139-46. Accessed March 1, 2015. [http://www.pdx.edu/sites/www.pdx.edu.caefiles/media\\_assets/Dynamics.pdf](http://www.pdx.edu/sites/www.pdx.edu.caefiles/media_assets/Dynamics.pdf).



The act of making architecture is often just as much a creative endeavor as it is a political one. Inevitably, the discipline's most celebrated and thought provoking propositions have emerged from complex socio-political and economic situations.

This thesis investigates the architecture of twentieth-century affordable housing in New York City and proposes that many such projects resulted from a failed urban, social, and political agenda that diminished the lives of the people who lived (and still live) in these environments.

By studying not only the physical quality of these built housing projects, but the myriad other factors that contribute to a successful dwelling environment, this thesis proposes a new model for subsidized housing in New York City.

The United Nation's HABITAT program is charged with working "to promote socially and environmentally sustainable towns and cities." It is the focal point for all urbanization and human settlement matters within the UN system. Since its inception in 1975, UN-HABITAT has been successful in its goal of providing information, funding, legislative and logistical services to municipalities around the world.

From their main office in Nairobi, Kenya, UN-HABITAT manages its nine global initiatives. While the program operates in dozens of nations around the world, including India, Ecuador and Nigeria, efforts are limited to logistical and legislative support. For example, UN-HABITAT may send delegates to assist local policy makers in adapting legislation, making it easier to build inexpensive apartments, or it may provide educational materials to help local people manage existing resources more efficiently.

Although the UN seeks to improve living conditions for people in some of the world's most impoverished communities, the organization has failed to recognize that similar populations in so-called first world countries face analogous problems.

In NYC, the city's housing authority manages buildings that provide homes for over 615,000 residents — more than 175,000 families. For every unit currently occupied, there exists a long line of applicants waiting for similar housing support.

The need for not only more, but also better quality, affordable housing in the US's largest urban conurbation is overwhelming. This thesis seeks to address this need.





## The Urban Accessory Refiguring L.A.'s Mini-malls

This thesis proposes the refiguring of LA's ubiquitous mini-malls via the insertion of "urban accessories."

### 1973 — *The Oil Crisis*

OPEC's oil embargo forces gas stations to close across Los Angeles, freeing corner lots at busy intersections for mini-mall development. Kings of the mini-mall, the *La Mancha Development Corporation* opened its first mini-mall in Panorama City. 3,000 such malls are constructed by *La Mancha* and their competitors over the next twenty years.

### 2015 — *PLAN Re:code*

The Los Angeles City Planning Department proposes a new zoning code for a 21<sup>st</sup> century Los Angeles. Section 3.3: "Expand and Improve the Approach to Commercial Corners" calls for a citywide implementation of the Mini Shopping Centers and Commercial Corner Development Ordinance,<sup>1</sup> exempting the mini-malls from the minimum 10-foot front setback required in the CR, C1 and C1.5 zones in attempt to create pedestrian orientation.

Castigated as the birthplace of sprawl, L.A. is flush with mini-malls, which are known as the city's "ugly necessity."<sup>2</sup> Notorious for surface parking, domination by automobiles, and the inefficient use of land, L.A.'s mini-shopping centers do not, in fact, implement the Commercial Corner Development Ordinance and instead build to the rear of the lot with parking in-between the building and the street.

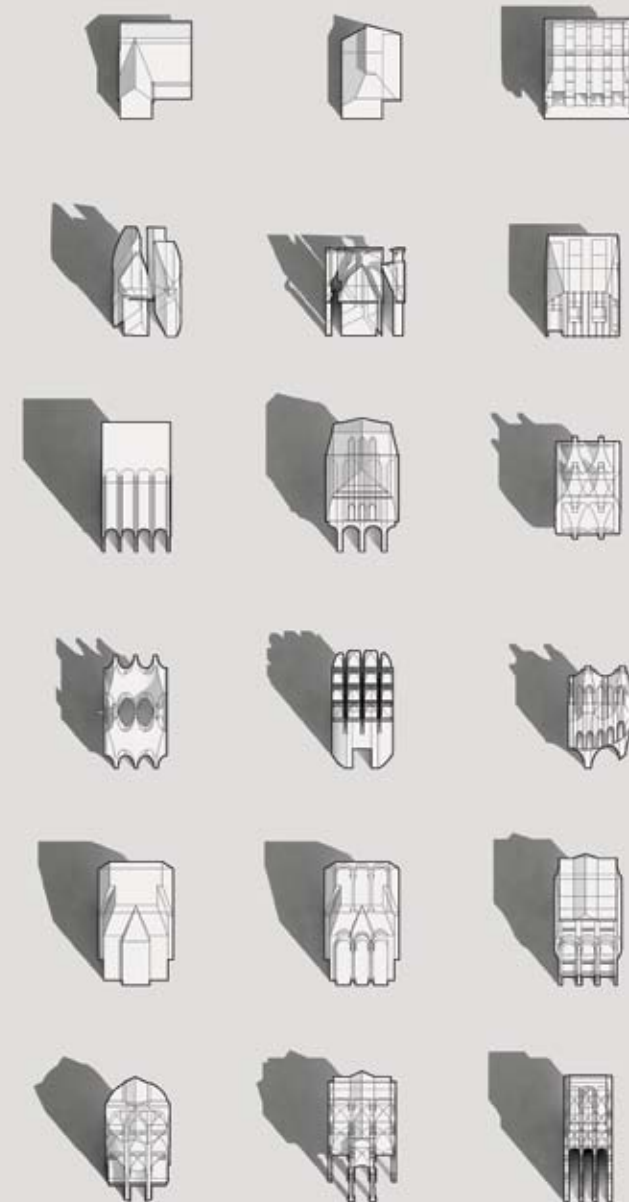
"The Urban Accessory" inserts a series of accessory-like units into the unused corner lots typically filled with signage, creating an interface between the mini-mall and the street. Defined under the Los Angeles Municipal Code, an accessory building is a "[...] detached subordinate building or structure, the use of which is customarily incidental to that of the main building or to the main use of the land."<sup>3</sup>

Although terms such as "auxiliary," "subsidiary," and "supplementary" are used to define the secondary role and aesthetic of the unit, this thesis contends that the urban accessory constitutes a key part of any holistic reading of its site. Thus, the project regards the urban accessory as an architectural unit used to complement, in a secondary manner, the program and appearance of the primary building.

This thesis accepts the multi-faceted, paratactic character of Los Angeles' urban fabric, and therefore, contests a one-size-fits-all urban accessory. Via the methodical cataloguing of forms, elements, and materials at three specific sites, this thesis seeks to retrofit the Los Angeles' mini-malls — its so-called ugly necessities — and to celebrate L.A.'s multiple personalities.

- 1 Zoning Code Section 12.22.A.23 of the Los Angeles Municipal Code (LAMC)
- 2 Melton, Mary. "A Brief History of the Mini-Mall: Born in the 1970s, Vilified in the '80s, Will Our Ubiquitous 'Convenience Centers' Be Usurped in the '90s?" *Los Angeles Times*. 16 Nov. 1997.
- 3 Section 12.03 of the Los Angeles Municipal Code (LAMC)

# MARK HERNANDEZ-CORNEJO



## Information Architecture

### An Exploration of Interactive Information Technologies in the School Environment

The pedagogy that exists in today's primary school model no longer relies on a direct source of information from the teacher or designated zones of interaction. With the introduction of modern technologies as a supplemental teaching tool and as a means of sharing information, educators have been proactively integrating learning technologies into their teaching methods through computer stations, smart boards, iPads, and the like. As these information technologies are constantly evolving into better versions of each predecessor, their holistic integration into the architecture of the school environment has the potential to become outdated within the span of a couple years. As a result, a reimagining of which technologies are integrated into the school is necessary. To what degree can these technologies be integrated architecturally, and how can a design framework support these rapidly evolving technologies? Questions of spatial organization, programmatic interaction and the role of the teacher and student relative to these technologies are ones to be explored.

Due to Montessori and Reggio Emilia's extensive research that is grounded in the importance of interaction as a source of learning for the child, it would be counterintuitive to design without interactivity in mind. With that said, modern society has been exceedingly criticized for its decrease in interactivity due to recreational technologies. This thesis explores the potentials of modern interactive material and smart technologies to act as catalysts for new types of spatial and social interactions within the architectural design of the school environment. Not only would these technologies serve as a new and essential source of information, they would promote a re-imagining and reassembling of the formal and programmatic organization of the school so that the technology and architecture could be simultaneously integrated with and separated from each other. This design approach would ultimately facilitate the newest pedagogical model that addresses how information is distributed, collected, and exchanged.

# CHRISTINA HOOVER





## Hedonic Architecture

### The Coexistence of Contradictory Experiences

This thesis proposes that carefully designed architecture can have natural rehabilitating effects on drug abusers by offering stimulating experiences. It argues that while hospital design requires stress reduction (hypo-stimulation) to improve healing, in contrast, hyper-stimulation is also necessary within a drug rehabilitation center to bring about a decrease in the relapse rate.

#### WHAT: A Hybrid Rehabilitation Program

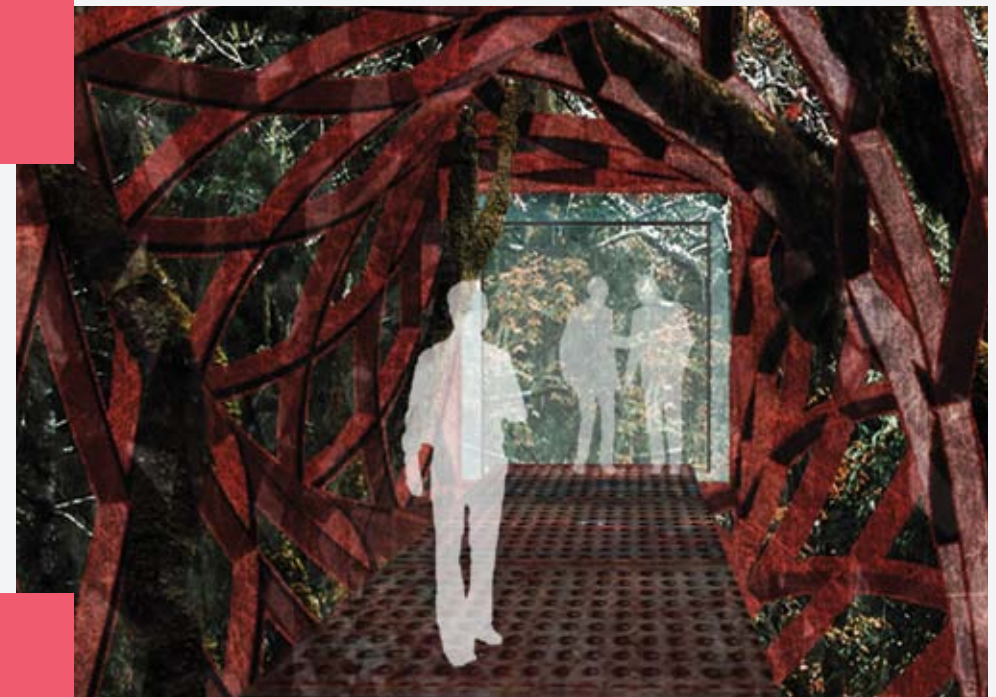
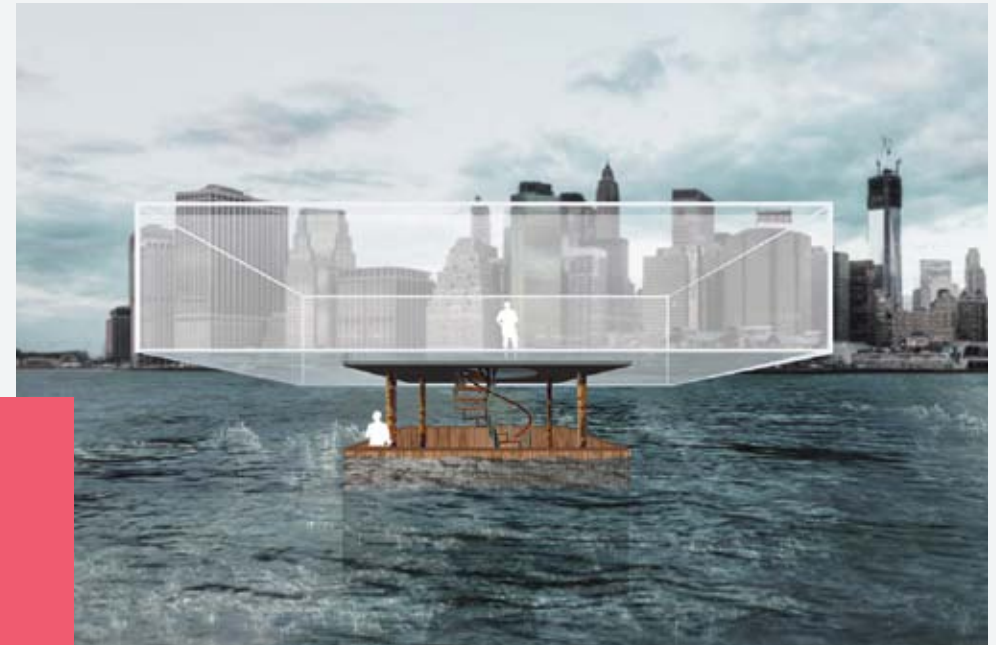
Based on Marvin Zuckerman's study, people can be split-up into two categories: High-sensation seekers (HSS), and low-sensation seekers (LSS). Because of neurological differences, hyper-stimulation experiences versus hypo-stimulation experiences have contrasting effects on each group. While hospitals require hypo-stimulating environments, drug rehabilitation centers should be designed to create two polar experiences. First, they must reduce stress caused by withdrawal, and second they must hyper-stimulate and satisfy the drug addict's natural need for an adrenaline rush. Because drug addicts are typically HSS, looking for hyper-stimulation

through synthetic means, this thesis proposes that adding hyper-stimulating program elements to a rehabilitation center will help reduce relapse rates by allowing the addicts to transition into a life of regulated stimulation rather than drug addiction.

#### HOW: Evidence Based Design Principles and the Five Basic Fears

Hospital design has been a primary focus of 'Evidence Based Design' processes thanks to research undertaken by architects such as Roger Ulrich — research that demonstrates the direct correlation between architecture, stress levels, and the health of patients. Three main principles were derived as reducers of stress: social support, control, and the integration of nature. These principles will guide the design of the hypo-stimulating moments. Thrilling experiences result in an adrenaline rush and, in turn, an increase in dopamine production for drug abusers. In order to achieve this effect in a regulated and non-addictive manner the five basic fears (extinction, mutation, loss of autonomy, separation, and ego death) will be stimulated.

# ROSSITZA IOVTCHEVA



Currently, there is no sustainable model for providing employment, education, shelter, food, counseling, and leisure services to young homeless women in Syracuse, New York. An ideal model should include all of the services in one building, 24 hours a day, and respect the clients' privacy, while providing safety and accessibility. This design thesis, "One-Stop-Shop," challenges the society that hides the homeless population by encouraging them to be present and active throughout a public building.

Typically, homeless shelters and transitional apartments force the client to vacate the building during the day. One of the reasons is cost, both construction and operational. "One-Stop-Shop" seeks to cut construction costs by renovating the existing historical Carnegie Library in downtown Syracuse. To optimize the operational costs, "One-Stop-Shop" will offer income generating counseling services, office space, a water-collecting green roof, and indoor marketplace

which incorporates a restaurant/cafe and hydroponic farm where local farmers can rent out plots to grow produce, extending the nearby outdoor market in Columbus Circle. Private programs for the homeless women are dormitories and a kitchen, while shared spaces with the public are a classroom, fitness center, lounge, and market. By sharing programs between the public and the tenants, "One-Stop-Shop" will become a viable, self-sustaining, and value-added project for the city of Syracuse.

The circulation design of "One-Stop-Shop" critiques the disintegration between the public and the homeless by offering physical and visual access between them. The homeless are often hidden from view, thereby depriving them of access to the public and rendering them insignificant in the public realm. "One-Stop-Shop" will allow the homeless to reclaim the public realm by making them visible working, training, learning and living alongside the public.





Contemporary libraries are re-positioning their role within our twenty-first century culture. Although historically libraries were planned around three great elements — the book, the reader, and the reading room — they are now creating a wide range of resources and services. Public libraries have begun to include educational, social, and civic services as a reaction to the diminishing scope of governmental agencies. The diverse array of programs available has expanded the identity of the public library from an educational institution to that of a civic and social foundation. This thesis explores how these services can be expanded in unorthodox and unexpected ways to better serve the needs of the twenty-first century library patron, further transforming the public library into a vibrant and integral part of communities across the country.

The thesis will design an extension to the Central Branch of the Free Library of Philadelphia, placing the project within the context of Philadelphia's interest in preserving its long library history and addressing the city's ongoing crisis with education, diminished social services, and public resources. This branch has already begun to incorporate new and creative programs into the conventional library such as a food literacy kitchen. Traditional spatial and programmatic

models will be intertwined with social services to serve a more diverse community. There will be three new major programs: business center, teen/youth center, and bathing facility. The business center includes an incubator and office space for patrons to jump start their business endeavors. The teen and youth center gives this age group their own flexible space separate from the adults. Although an unorthodox program for a library, the bathing facility provides a social service for patrons and is found to be needed because of the lack of public accessible hygienic facilities. Visual and physical relationships will be created between these unexpected programs to create maximum resources for library patrons while updating the Free Library's neoclassical footprint.

Urbanistically, the thesis is committed to further greening the city of Philadelphia. The extension's landscape will be integrated into the existing network of parks and the many scales of green space already existing within the city. This will be explored both within the building's immediate context as well as at the city planning scale. This new landscape will create an aspect that allows the site to be used by the public, whether or not one actually ever enters the building.





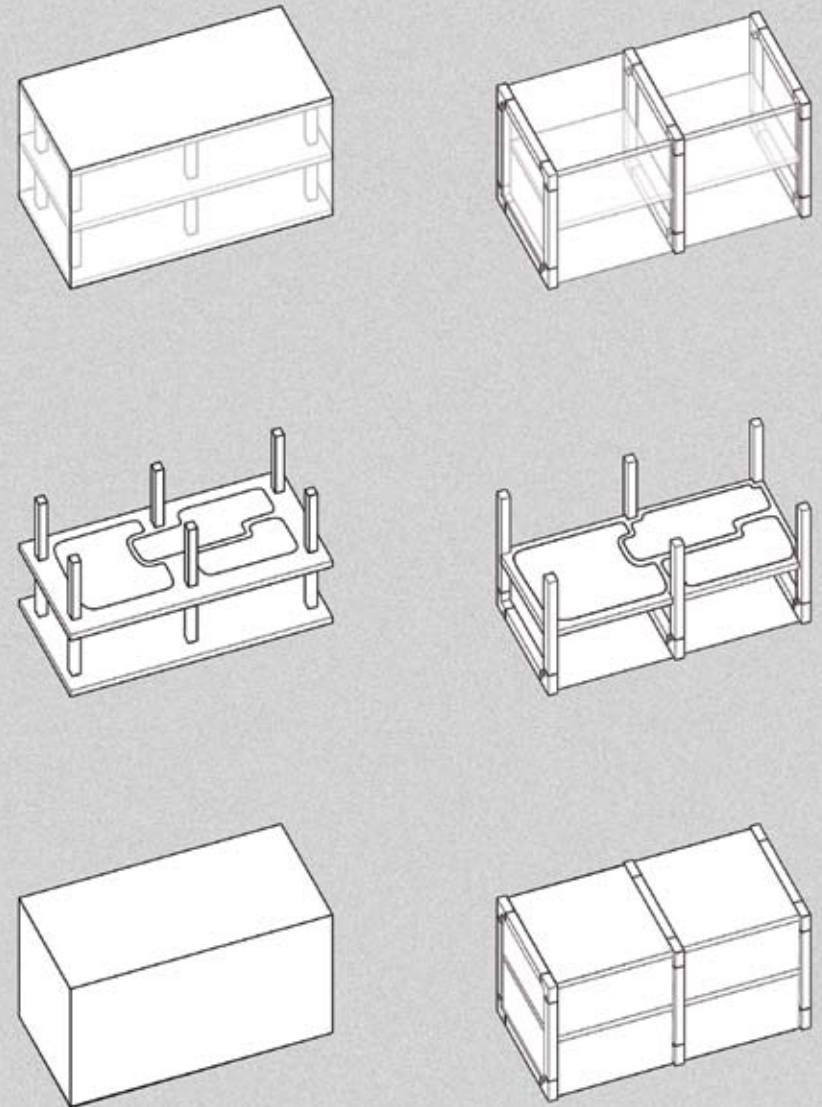
## Towards a Reparalysis of Architecture

### Reintegrating the Skin with Structure and Culture

The Maison Domino by Le Corbusier that set the guidelines for the majority of highrise residential and office buildings has created a “universal” language that lacks regionalism and narrative substance. By disintegrating the skin from the building’s structure, the result is a mask that does not narrate the contents of the building nor does it manifest the culture of its location. The five points set up by Le Corbusier were merely a basis for a shallow aesthetic and not necessarily an efficient or requisite orientation of structure. This worldwide epidemic has a significant impact on residential and office towers in Korea. The Dream Hub project in Yongsan, for example, is a development proposal for office, retail, hotel, and residential towers designed by starchitects. It is the site of the American Yongsan Garrison and the intention is to reclaim it as a new signature district of Korea. However, none of the proposed designs appear to have affiliation with Korea or Korean culture. In fact, the towers would not look out of place in any other city such as New York. A cure for this issue is the reintegration of the skin to its structure and the implementation of traditional elements such as

programmatic and structural organization. More specifically, traditional Korean houses or Hanok have a distinct open courtyard plan, an elaborate structural timber system, and passive sustainable aspects that modern high-rises can learn from. The open courtyard acts as a means of circulation, public space and a major opening for passive ventilation that is very unique to Korean culture. Furthermore, the structural timber system can be reintroduced to modern high-rises for improved sustainability and for distinguished cultural characteristics. Although code restrictions do not allow for wooden high-rises due to fire safety concerns, new research proves that CLT (Cross Laminated Timber) can provide similar fire retardant aspects as steel. There is much more to learn from the Hanok construction, such as the elevated floor plate for passive ventilation through the Venturi effect and the use of vernacular materials such as Ondol for passive heating and cooling. Going back to the traditional and regional vernacular to find new means of distinguishing and improving the banal modern high-rises is the answer towards a new architecture.

# FRANCISCO JUNG



All is precise and given in the model, all is more or less vague in the type.<sup>1</sup>

Architecture is a strange mixture of obstinate persistence and constant flux.<sup>2</sup>

This thesis proposes an architecture “*after type*” wherein the elements of contemporary architecture — those things “*used by any architect, anywhere, anytime: window, the façade, the balcony, the corridor, the fireplace, the toilet, the stair, the escalator, the elevator, the ramp...*”<sup>3</sup> — might be reinvented, repurposed, and transformed. “After Type: The Vague Elements of Architecture” seeks to expose our discipline’s *junk DNA* in pursuit of revised understanding of the architecture’s complex regime of part-to-whole relationships.

“After Type” proposes that the vague elements of contemporary architecture — the PVC window, the toilet, the HVAC unit, the metal stud wall — might be understood as “[...] *complex collage[s] of the archaic and the current, of the standard and the unique, of mechanical smoothness and bricolage.*”<sup>4</sup> This thesis proposes that such elements oscillate between two historical categories familiar to architectural discourse: *the type* and *the model*.

The relationship between architecture’s “*wholes*” and its constituent elements remains a topic of concern. Rem Koolhaas’s 2014 Venice Biennale exhibition “*Elements of Architecture*” sought to reveal new “[...] *micro narratives [...] by focusing systematically on the scale of the*

*detail or the fragment.*”<sup>6</sup> In so doing, the exhibition’s organizers aimed to uncover not a single, unified history of architecture, but rather the discipline’s multiple histories, origins, contaminations, and strange similarities.

This thesis also proposes the creation of a new and expansive taxonomy of architecture’s vague elements, and seeks to put to work architecture’s persistent triumvirate: substrate (its techniques of representation), practice (its projective geometrical transformations), and material (its stuff). Through the repeated intercession of each for and against the others, “After Type” speculates on the possibility of a recursive architecture emerging from the expanded field of part-to-part-to-part relations that the contemporary architect might reasonably be expected to explore.

“After Type” regards “vagueness” as a quintessential contemporary figure. This thesis considers the instability, mutability, and capacity for fickle reinvention inherent in our present understanding of *the vague* as a site rich with architectural probability.

“After Type” proposes a series of designs for parts of a 400,000 square foot office building at the intersection of West 46<sup>th</sup> Street and 8<sup>th</sup> Avenue in New York City.

1 Samir Younés, *The Historical Dictionary of Architecture of Quatremère de Quincy* (London: Papadakis Publisher, 2000) p.255. Quincy and Jean-Nicolas-Louis Durand respectively. Koolhaas, 193.

2, 3, 4, 6 Rem Koolhaas, *Elements of Architecture, Fundamentals Catalogue*, 14th International Architecture Exhibition, Rizzoli, New York, 2014. p.193



## Post-Digital Fabrication Defining the Art of the Joint

The joint is the beginning of ornament. And that must be distinguished from decoration which is simply applied. Ornament is the adoration of the joint.

— Louis Kahn

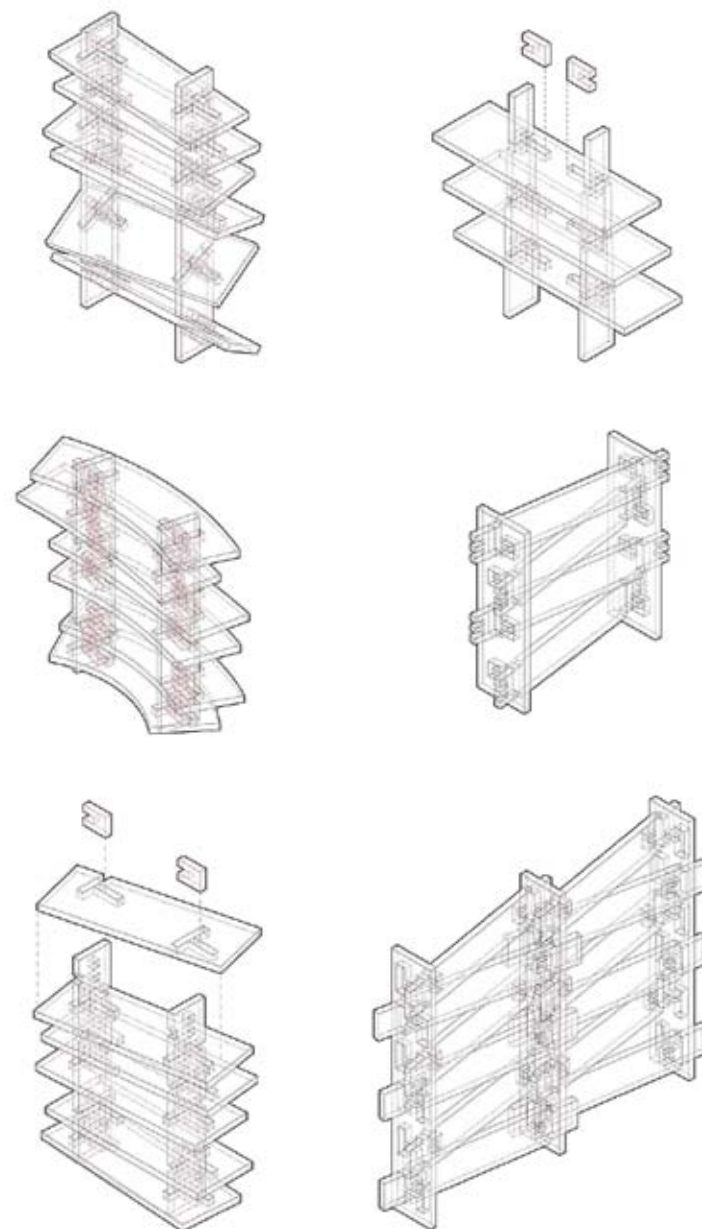
The joint is the translation between the conceptual and the real. On the one hand, the joint considers materiality, gravity, and sequence. On the other, the joint balances concept, language, and aesthetics. This thesis contends that in recent years, the joint has become a secondary concern for architects, and the reading of ornament has been limited to a digitally fabricated surface veneer. However, with the swell of digital fabrication, there exists a clear opportunity to leverage these new tools to resynthesize ornamentation and joinery back into architectural design.

This thesis investigates the ability of the joint to be both practical and beautiful through the implementation of

digital fabrication tools, specifically the CNC mill. In the past two decades there has been a surge of new tools available for architectural production generating myriad experiments; typically in the form of installations or wall panels. Most of the time, these experiments focus on a pattern/texture applied to a surface and rely on conventional means of connection, from waffle slots to zip-ties. The result is an “applied decoration” without structural functionality or any of the other potential benefits of digital fabrication.

To understand how ornament and the joint can align through digital fabrication, new techniques for the tool must be explored and exercised. The CNC milled joint opens up the possibility for artistic differentiation, mass-customization, and efficiency of assembly. Pushing the limits of the CNC mill begins to change the definition of ornament and the role of the joint in the construction process.

# SAM MICHAEL KALLMAN





As the prophecies of 19<sup>th</sup> and 20<sup>th</sup> centuries' secularization these are challenged by a sustained period of academic criticism and the tenacity of religious practices, the role of the sacred in contemporary culture must be revised and its architecture recalibrated.

Buddhist architecture is an ideal vehicle for the investigation of a non-monumental sacred architecture that embraces — and operates within — the framework of the un-sacred. The mainstream expansion of Buddhist practices follows a pattern of dispersed small-scale engagement with the lay world, rather than a concerted cross-disciplinary effort, but Buddhist religious buildings have, historically, been biased toward the grandiose. The trajectory of Buddhist practice is not matched by the direction of Buddhist religious architecture.

Given this discrepancy between practice and form, this project looks at two drastically different though key demographics within Western Buddhism: the well-educated middle class professional and the long-term prisoner.

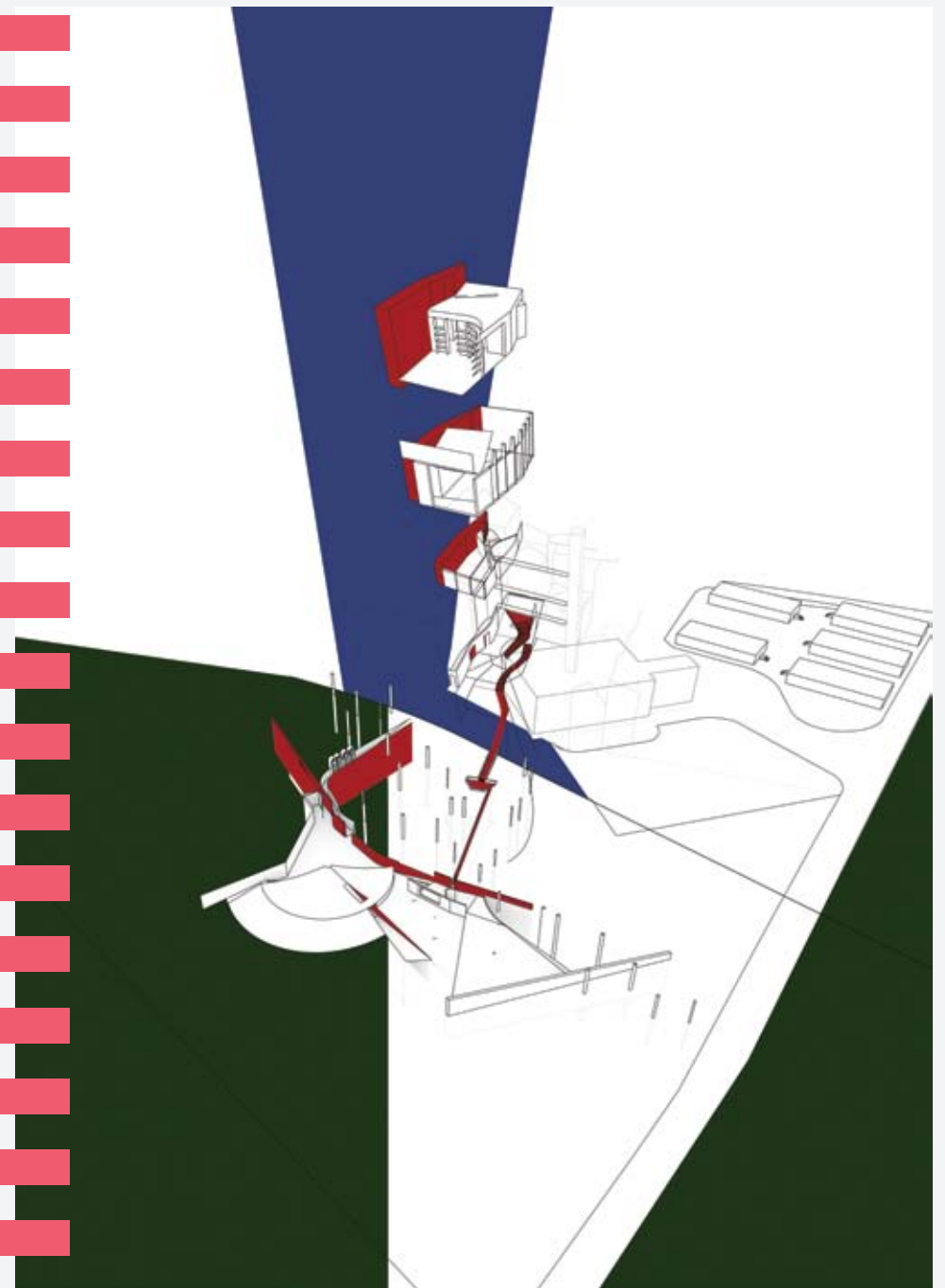
Within the geo-social context of England, this thesis proposes a small-scale urban temple in the commercial center of Oxford, and a multi-purpose

landscape forming part of Spring Hill Prison, one of three “Class D” or “open prisons” in operation in the UK — and the site of the oldest established Buddhist chaplaincy in England.

Both projects must resolve the spatial and sequential lineages that emerge via a reading of the existing formal contexts and contemporary methods of Buddhist practice. The temple seeks to remove or minimize the division between the clergy and laity while the landscape in the prison addresses the unique needs of a Buddhism practiced by incarcerated prisoners as well as the prison's agenda of rehabilitation and reintegration.

The temple's traditional program is consolidated to remove the bilateral division between the vihara and mahavihara; the public right of way is marked by the movement between suspended voids, engaging the monastery in the daily routines of visitors and practitioners. This sequence of programs is unwound and rearranged in the grounds of the prison, creating a series of spaces that contribute towards the financial needs of the prison (spaces that can be rented to organizations or events) as well as its rehabilitation services.

Advisor: Jean-François Bédard



## Storytelling and its Mediums

### The Spatial Implications of Creative Collaboration Spaces

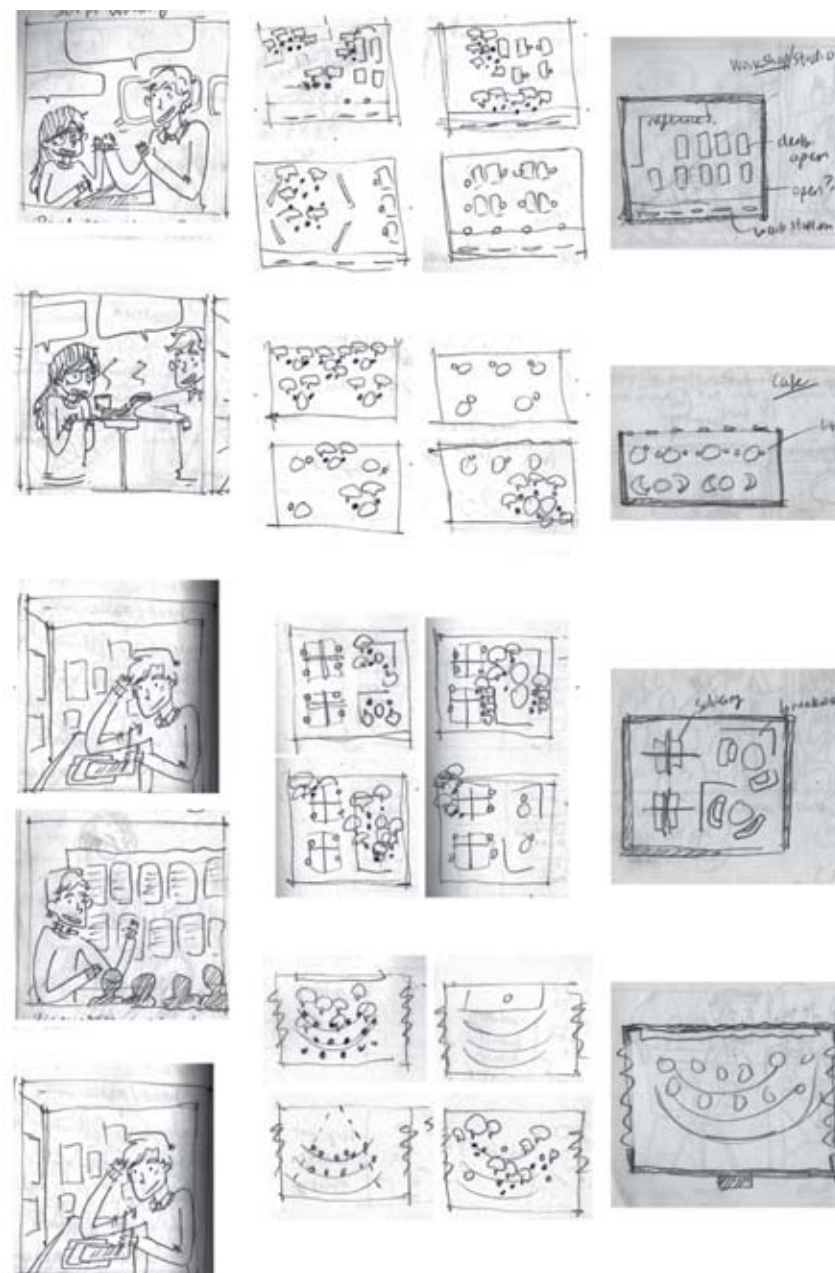
I contend that storytelling media and the techniques utilized to create films and associated media may act as a design methodology and create a certain type of architecture. This thesis intends to use film production methods as a motivator for reinventing the architectural design process. Storyboarding is not only used to investigate program and implications of space, but to also design through the lens of the user. This process breaks down the individual steps in film production, diagramming through storyboarding, to create a set of parameters that the architectural design process will then follow. By designing architecture through these storylines, the building produced as a result of this unconventional design process hopes to create a place of collective cross-collaboration that facilitates social interaction.

The vehicle for testing this contention would be a 'storytelling incubator space,' located in Portland, OR. This will be a facility which will specialize in film, animation, comics, and other storytelling media. The building will focus on using architectural elements, such as courtyard, spatial overlap, and poche, in conjunction with spatial

qualities required by the program, to create a space of collective learning and production. By investigating the interior space through story-telling media, and also accounting for external site factors, the building's final design will be the resulting combination of an architectural process and storytelling process.

By placing this building in downtown Portland, the architecture hopes to facilitate a stronger social bond with the people in the existing film community. The facility will support local filmmakers, students, and members of the community, and facilitate interaction between all levels of educated individuals. The "storytelling incubator space" intends to create a place of collective resource, learning, and production, that will co-exist with the established film institutes and centers in the city. The result of producing a building through the storyboarding and architectural design techniques might just be a facility that allows for a new type of film production and education to evolve. By redefining the ways in which we design, this thesis also intends to redefine the process of film making while spurring new film development.

# OMAL-HODA KASSIM





This thesis reconsiders the representational technique of the architectural perspective as a means to generate and promote “transitorial experience” in 21<sup>st</sup> century urban space.

Considering the images created by Giovanni Battista Piranesi in the 18<sup>th</sup> century, Baron Haussmann<sup>1</sup> and Camillo Sitte in the 19<sup>th</sup> century, and Gordon Cullen in the 20<sup>th</sup> century — wherein each architect sought to develop their own thesis of public space conceived via the creation of perspectival views — this thesis contends that all four architects anticipate a condition of *transitoriness*:

- 1 Piranesi’s intoxicating images overwhelm our senses.
- 2 Haussmann, the butcher, decimated medieval Paris in pursuit of an architecture of axial relations.
- 3 Sitte sought out the episodic urban room.
- 4 Cullen fetishized the flaneuristic.

This thesis defines *transitoriness* as spatial condition that privileges or heightens the experience of passage.

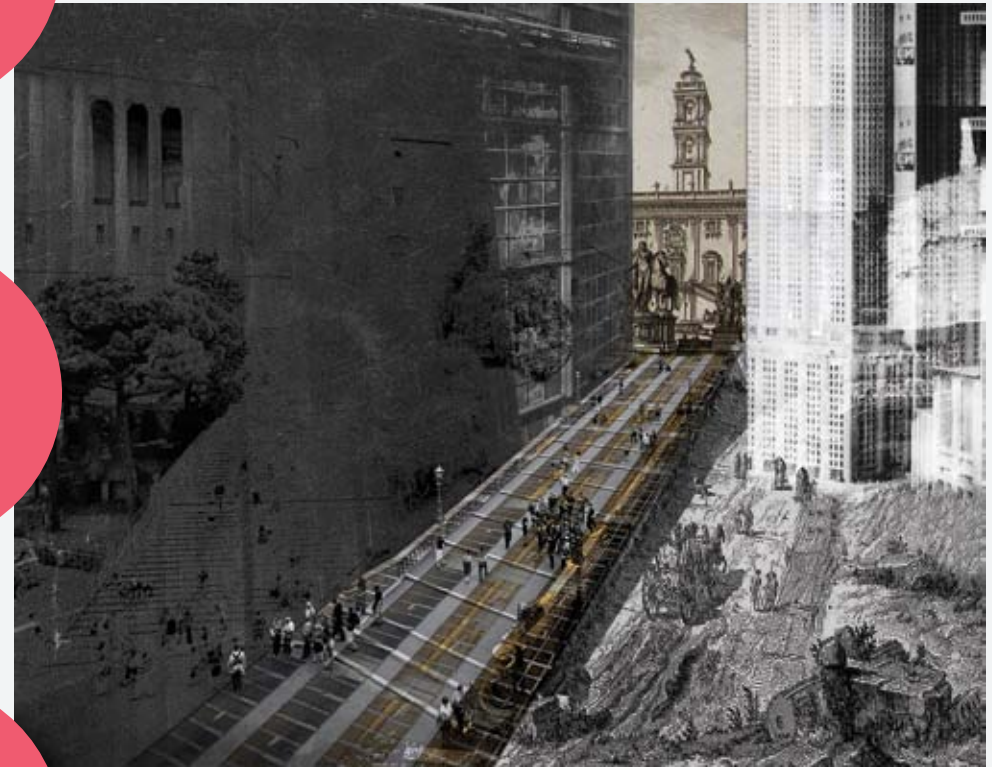
Via the creation of a *lexicon of transitoriness*, this thesis pursues a revived understanding of such *transitoriness* via an investigation of the methods deployed, and terms used, by these four historic figures.

Specific modes of perspectival projection are used to generate a series of images that reimagine selected locations in Rome and Paris. These propositions are both represented in, and constituted by this set of architectural perspectives — each of which is intended to act as a provocateur — hinting at the possibility of architecture *in transition*.

Henri Lefebvre mentions that architectural discourse has become a “formalist [...] language of aesthetics divorced from ethics, experience and the body.”<sup>2</sup> Considered — as they usually are — in plan, the public urban spaces considered by this thesis are rendered mute. Through the creation of the series of images referred to above, this thesis proposes a manifesto that seeks to recuperate Lefebvre’s “experience and the body” in 21<sup>st</sup> century urban space.

<sup>1</sup> Gustave Caillebotte, *Paris Street; Rainy Day*, 1877, Art Institute of Chicago, Chicago.

<sup>2</sup> Henri Lefebvre, *The Production of Space* (Oxford: Wiley-Blackwell, 1991), 65.





## East River Burial Park The Formalized-Informal Cemetery

**The Mundane Death:** Benny Acklin interred her father in the Green-Wood Cemetery in Brooklyn, where few fell witness to his epitaph or the memorabilia left at his grave.

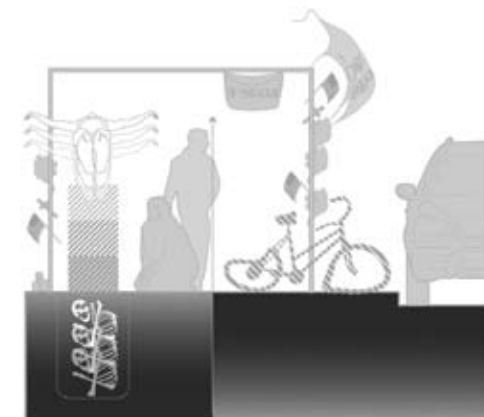
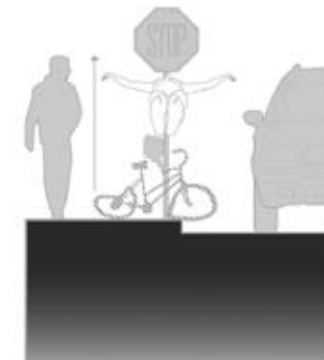
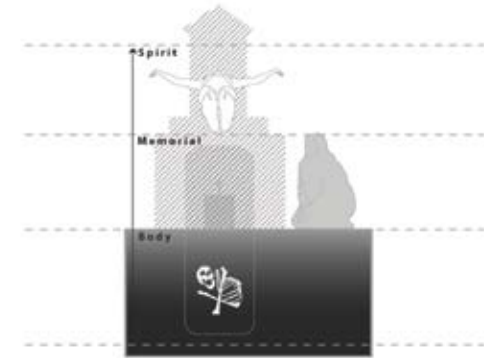
**The Tragic Death:** Jacqueline Bonet was struck and killed by a car at the intersection of Amsterdam Ave. and Dr. MLK, Jr. Blvd. while riding her bike. Her friends painted the bike white and chained it to the traffic light at the intersection of her death. Her body was separated from the message and placed too far for a stranger to visit.

Once commonplace in New York City since the Dutch settled the area in 1624, graveyards were officially outlawed in Manhattan in 1847. A new generation of then rural cemeteries removed burials to the fringes of the city: spaces we might now think of as suburban cavities of unsalvageable space as the city has — inevitably — grown-up around them.

The East River Burial Park: Circumnavigated by an esplanade on the river's edge on one side, and a bike path adjacent to FDR Drive on the other, the East River Burial Park beneath the Williamsburg Bridge in Manhattan is home to a new "East River Burial Park," which seeks to mediate between the mundane death and the tragic death. By filling the cavity, the burial park structure integrates itself into East River Park to create a truly complete city with amenities for the living and the dead.

The "East River Burial Park" evolves from a simple public space to something approaching an archaeological site as people are interred. After each body decomposes the plot will revert to open park space, at least until someone else is interred. Additionally, informal and temporal elements from roadside memorials give the "East River Burial Park" a continuing significance by allowing people to commemorate their dead relations as they see fit. In this way, the "East River Burial Park" becomes an archive, a collective memorial, or even a site for protest.

# MATTHEW KIWIOR



Architecture follows social norms. When social norms transform, architecture must transform as well. When new paradigms are introduced, the built environment must adapt through a series of interventions. In order for any architectural idea to manifest itself in the existing realm, the code must be satisfied. In other words, while the architecture acts as the agent between the society and the built environment, the code is the threshold the design must pass through. When the needs of the society change, the architect's reading of the code must be tailored accordingly.

Sitopia is a speculative, futuristic project which situates itself in a narrative wherein urban farming is regarded as a requirement by society at large. The project proposes how the existing environment might evolve in response to the introduction of a new set of parameters — and what regulations will be

necessary to manifest fruitful cross-pollination between the existing environment and any new intervention.

Sitopia is concerned with an understanding of architectural design as a system that stitches together a new layer of urbanity and the existing built environment through the lens of the code. The precedents this project expands upon are New York City's Highline and Hudson Yards. In these, an additional layer of urbanity is provided for the enjoyment of the city's residents and visitors. Sitopia embodies a similar approach to re-purposing by focusing on a residential block while analyzing a set of regulations such an intervention will instigate. While the site of this particular design is in Alphabet City in New York City, the project is concerned less with the creation of a specific design and more with the evolution of a system that is multipliable and modifiable.



## Infrastructure as Mediator Integrative Typology as Connector between Land and Sea

Coastal housing, along with rising sea levels, is present globally, making it necessary to design with the movement of water anticipated as an ongoing condition in order to avoid destructive flooding.

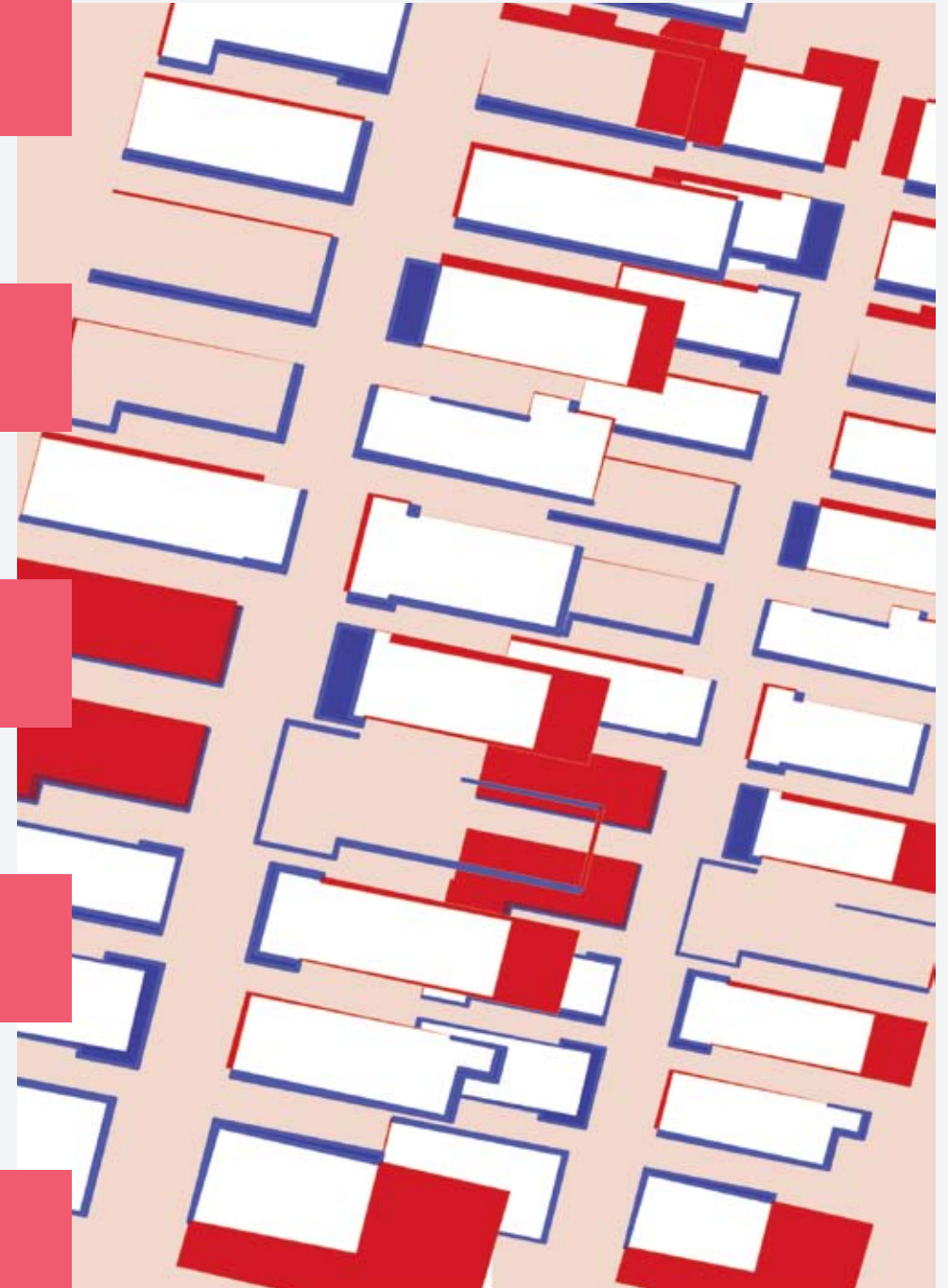
Rather than simply lifting a home, this thesis proposes a new typology of infrastructure in the lifting of homes that would withstand water damage and, keeping the impending increase of sea levels in mind, use it as an impending factor by allowing it into the site.

Breezy Point, Queens was severely damaged by Hurricane Sandy, leaving it partially in flames, and entirely flooded. This community is unique in that it is a small cooperative. Thus it is private to outsiders, and so are its beaches. This thesis utilizes the changing footprints of existing buildings to demonstrate the impact of both time and environmental forces on the foundations of coastal

structures within Breezy Point. Through the use of infrastructure, bracing can reveal the evolution of structure. Bracing that is a response to shifts in the location of housing footprints visually displays this change. This infrastructure determines the location of public and private spaces. The steering of water through landscape design and the design of a responsive lifting of homes are intended to interact with one another to act as a community intervention through an additional network of pedestrian walkways.

Rather than barricading a coastal community against water by putting up walls, this thesis proposes a manipulation of the ground plane and a system of walkways connecting this close-knit community in order to benefit from ever-changing water conditions. It's a proposal that could be implemented for the benefit of other coastal communities as well.

# SAMANTHA KUDISH





## A Square Meal Refiguring the Hospital Dining Room

The word *ritual* gains many definitions when considered in relation to the individual and communal eating. This thesis seeks to define the *architectonic ritual* as a celebratory event that choreographs a series of prescribed acts in order to heighten our experience of eating.

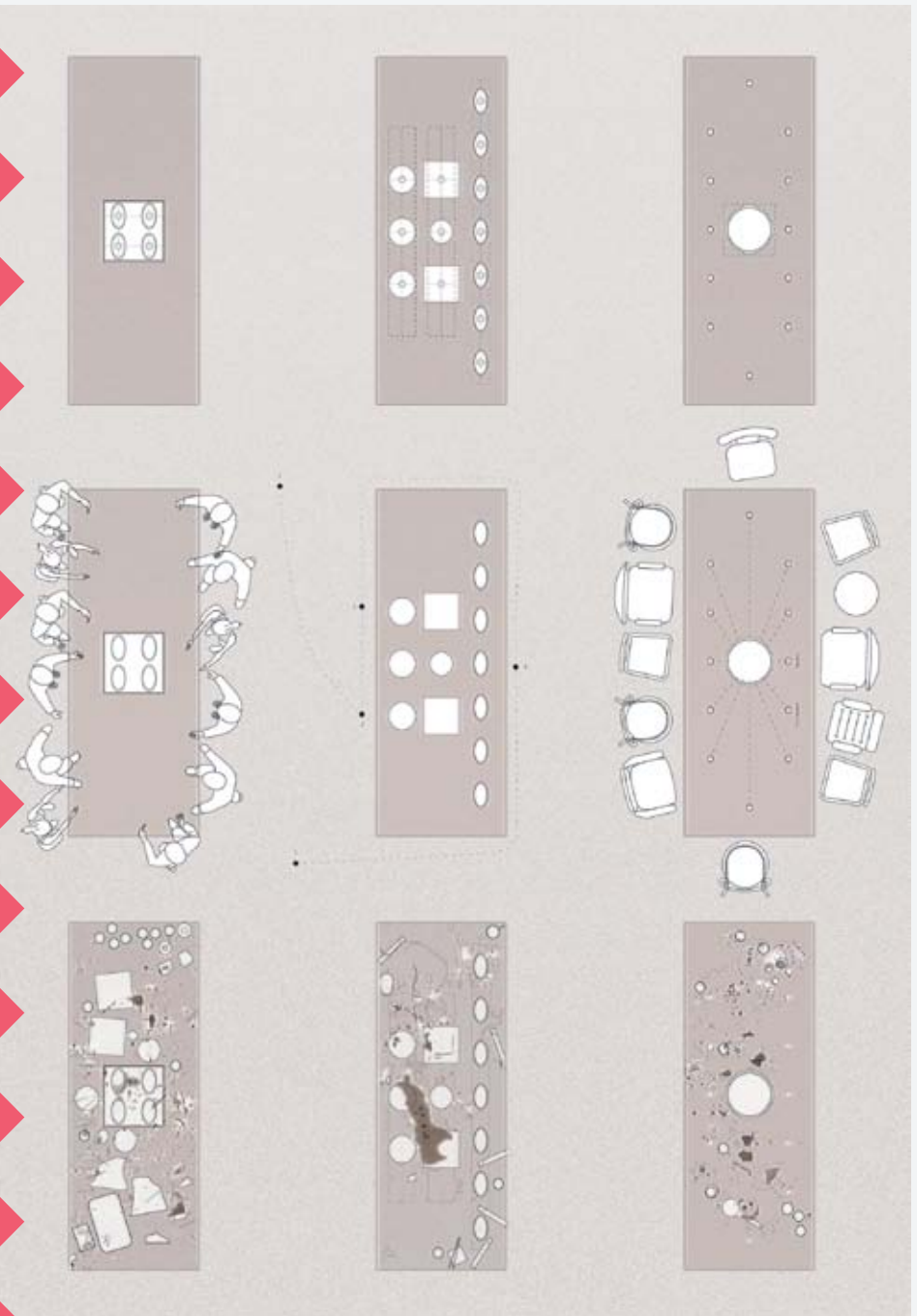
The Japanese tea ceremony offers us a powerful example of the *architectonic ritual*. Each element of the process is scripted, displaying the interaction between host and guest, architecture, landscape, the utensil, and interior materiality. Each tea ceremony is choreographed so that every participant performs according to a particular role. For this reason, one becomes mindful of the process of tea making and social interaction, resulting in an event that gives appreciation to food, space and people.

This thesis questions why food is often undervalued in hospitals, places intended to facilitate recovery and

good health. Critiquing the regimen at Bellevue Hospital in Kips Bay, New York, this thesis argues that deployment of the *architectonic ritual* has the potential to promote health via the imagining of new opportunities to experience culinary excellence and positive social exchanges. The processes of growing, preparing, cooking, and eating of food are intended to structure a new *architectonic ritual*. Architecture, landscape, the utensil and the interior's materiality will narrate a new social event focused on sharing food.

Each moment in the food preparation process is reconceived as an "act" to be situated within a new space of celebration. Each act is considered as and connected to a series of interstitial spaces, differentiated from one another by thresholds. The script — circulation within the hospital — is choreographed by architectural details and elements that orient, direct, and move users and food.

# KANYALAK KUPADAKVINIJ



## Baltimore City Housing Crisis Re-designing Blighted Lots

# SHAKERA KYLE

Baltimore is no stranger to blight and urban decay. The city has lost approximately one-third of its total population since 1950, and its 620,000 current residents live among more than 16,000 vacant properties that drag down property values and generate feelings of hopelessness in many struggling neighborhoods. These vacant properties are concentrated in areas with higher percentages of African Americans where there is one vacant house for every 15 occupied. My thesis project will focus on Baltimore inner city housing and aims to foster economically responsible and safe neighborhoods. This thesis project will focus primarily on residential housing. Improving the living situations of the city's inhabitants is simply the start: the spark to ignite the transformation of the city.

Nearby medical and educational facilities will serve as an anchor for mixed-use affordable housing in blighted areas. Such institutions provide necessary support to bring in people of various income levels, thus widening the tax bracket, bringing wealth back to the city. This will be a way to reduce concentrated areas of blight. I assert that architecture has the ability to provoke a sense of belonging, and an improved quality of life. I will use the unique situation of

Baltimore City to test this thesis. The significant scale of vacant properties and land in Baltimore City will serve as a testing ground for my claim. I argue that architecture can intervene in the problem of vacant housing by initiating a design strategy that involves a mixed-use affordable housing scheme that allows for the incorporation of program from the nearby medical and educational facilities. This will be accomplished architecturally through densification by the creation of micro-units to take the place of the common row house typology.

Affordable housing is a vital component of every mixed use community. Allowing people to live in the same communities where they work and shop improves their quality of life, increases residents' sense of belonging, and reduces traffic congestion. Having employment, shops, and schools nearby significantly reduces commuting and transportation costs. Mixed use communities promote inclusion and diversity by incorporating housing for people of all income levels along with supportive housing for the elderly and people with special needs. Ultimately, mixed use communities foster a sense of connection that bolsters the health and vitality of a community and its residents.



## The Missing Element Rethinking the Use of Natural Light in Architecture

Thanks to the processes of modernization, people are becoming increasingly divorced from “nature” and have tended to (under)value the natural world via the deployment of a series of anthropocentric models ill-suited to the description of the non-human world. The complex mixture of qualities embedded within many natural systems is flattened and diminished.

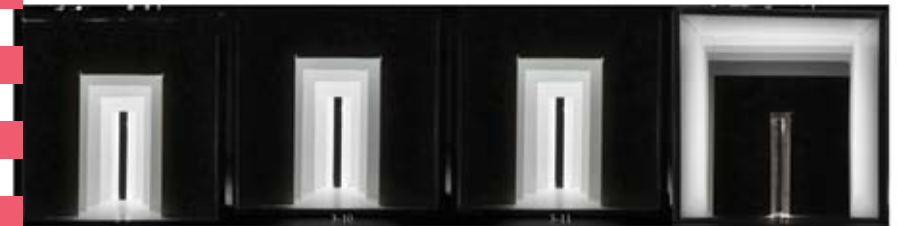
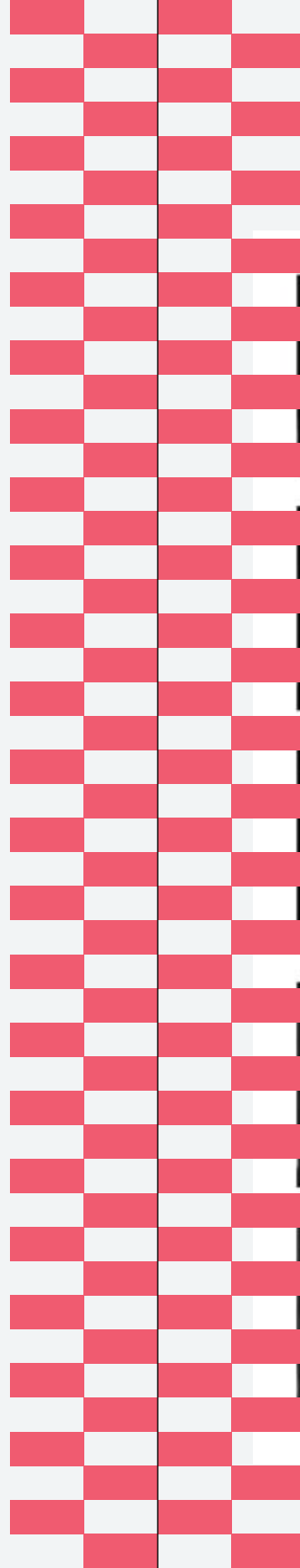
One such fundamental quality of nature is light — the originating source of energy for all forms of life. Light stimulates the senses and renders the world around us visible as such.

Natural light is a quality which is capable, via intelligent manipulation, of evoking strong and lasting impressions.

Discourses around architecture and light have often enjoyed a close relationship, however certain contemporary architectural practices have tended to underestimate light’s continued ability to elevate our experience of a given architectural environment.

This thesis seeks to refocus our attention on the potential for natural light to be considered a primary architectural element.

# KWANG-MIN LEE





## A Park at Peak Performance

### The Lake, the Park, the Mall: Intertwined, Spatialized Systems

SEUNG AH LEE

Water is our most fundamental resource, necessary for the maintenance of life on Earth. The constructed environment has, typically, chosen to engage with issues around water usage at a systemic level, rather than consider water management in spatial terms.

This thesis seeks to ameliorate the worst effects of this trend by proposing the creation of a new publically accessible urban park at a site close to the Destiny USA mall to the west of downtown Syracuse, NY on the shores of Onondaga Lake. This site is currently partially unused, and partially in use as part of the surface parking lot for the adjacent mall. Onondaga Lake has, in the past, enjoyed a troubled relationship with Syracuse's industrial legacy. As a result, the lake remains heavily polluted.

Significantly, this thesis proposes more than merely the creation of another public park. Rather, the aim of this proposal is to:

- 1 Reengineer the storm water run-off system which currently operates at the Destiny USA site to improve biodiversity and the cleanliness of the water entering Onondaga Lake;
- 2 Raise public awareness of such issues by encouraging further public access to the shoreline and the creation of a series of landscape and leisure related features; and
- 3 The establishment of new aquatic ecosystems.

This thesis embraces the notion that landscape, sites, and architecture are inevitably entwined: no one system — be it biological, hydrological or human — can be considered in isolation. In seeking to spatialize the complex interconnectedness of such systems via the production of a new public space for the citizens of Syracuse, this thesis proposes the creation of a “park at peak performance.”



## Redeploy. Redefine. Rehabilitate.

### The Redeployment of Portuguese Cosmetic and Spatial Traditions to Redefine and Rehabilitate Urban Space

...buildings do not simply reflect and absorb their surrounds..., but rather differ from their surroundings, comment on them, remember them, even transform them in such a way that they will never be the same.

— Philip Ursprung

This thesis explores the notion of cultural integration in architecture through the redeployment of existing cosmetic and spatial traditions, and tests architecture theorist Jeffrey Kipnis's claim that architecture has the ability not only to "redefine, undermine, explode and erase" our present understandings of form, but also the relationships between different elements in space.

Located in Lisbon, Portugal, and following a call from the Portuguese Council of Architects for proposals that rehabilitate the city center, this project is guided by three distinct Portuguese architectural traditions:

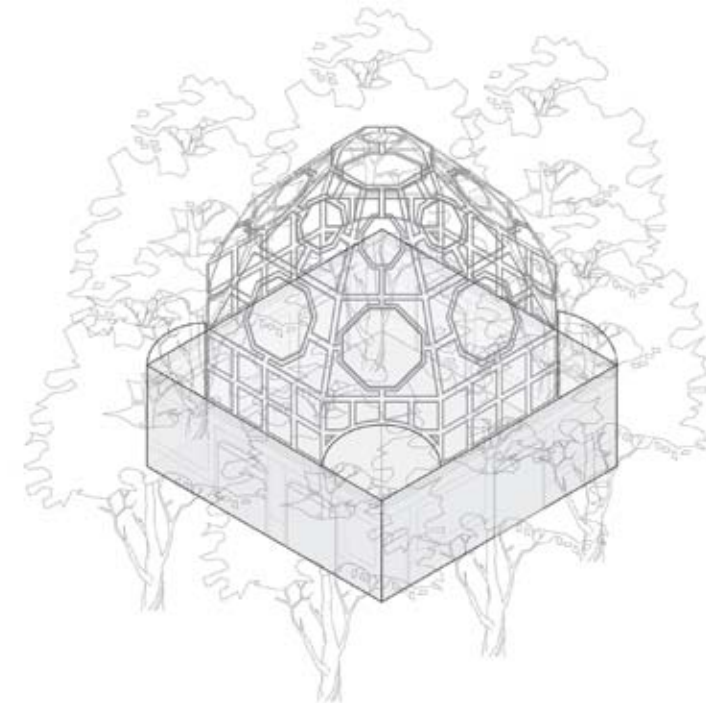
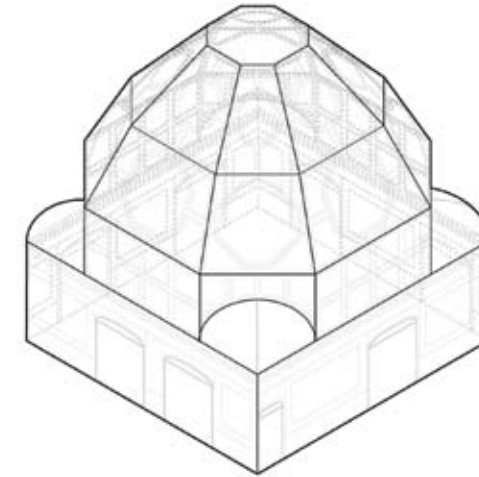
- 1 **Single Unit to Larger Whole:** This tradition is cosmetic in nature and is typically achieved through the use of *azulejos*, ceramic tiles, or cobblestones that are pieced together to create larger patterns or graphic images.
- 2 **Public/Private Separation:** Through the use of cosmetic material changes and architectural elements,

thresholds between public and private spaces are spatially and texturally denoted in the multi-use building typology found in Lisbon.

- 3 **Inside/Outside:** This spatial tradition centers on the use of interior architectural elements on the outside, and vice-versa. Elements are deployed in a manner opposite to their normal environment (i.e. fully framed windows with shutters inside).

The project site is close to the city's first opera house to be constructed after the devastating earthquake of 1755 — Teatro de São Carlos. This dilapidated structure faces an underutilized piazza to its front — the Largo de São Carlos. The site is just one block away from the culturally important and active Baixa-Chiado district in the Bairro Alto, a neighborhood that is home to two significant piazzas: the Largo de Camoes and the Largo Chiado.

By redeploying at this location the three unveiled architectural traditions outlined above, this thesis seeks to redefine the private nature of the underutilized area around Teatro de São Carlos, publicizing and connecting it to the wider city center and adjacent piazzas. Using the redeployment of the cultural cosmetic and spatial traditions, this proposal aims to redefine and rehabilitate this urban center.



## Spatializing the Corridor

### Corridor as an Urban Typology within the Design of the Public Realm

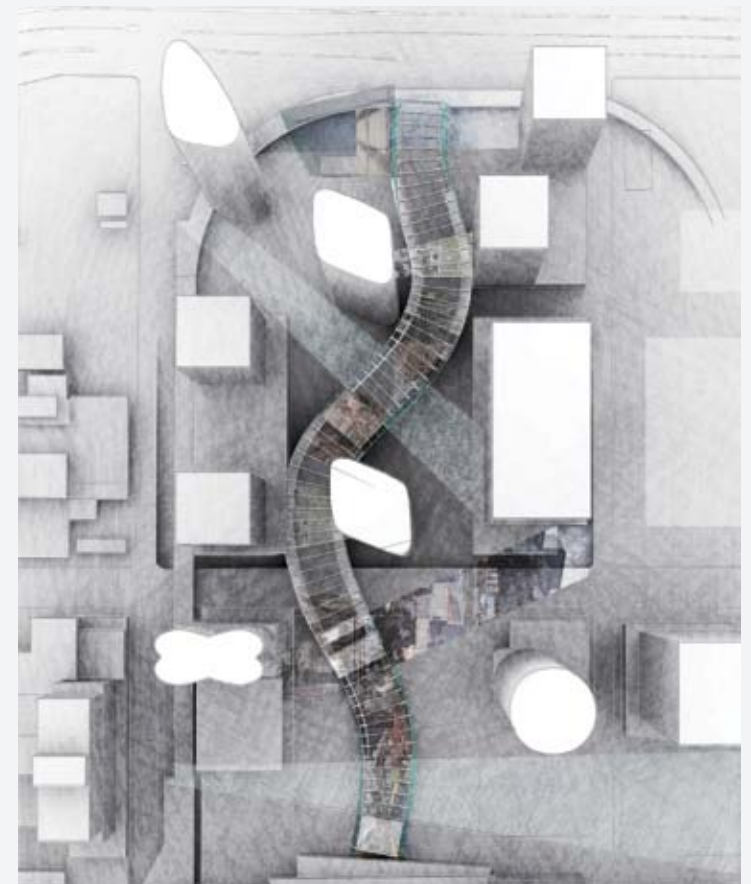
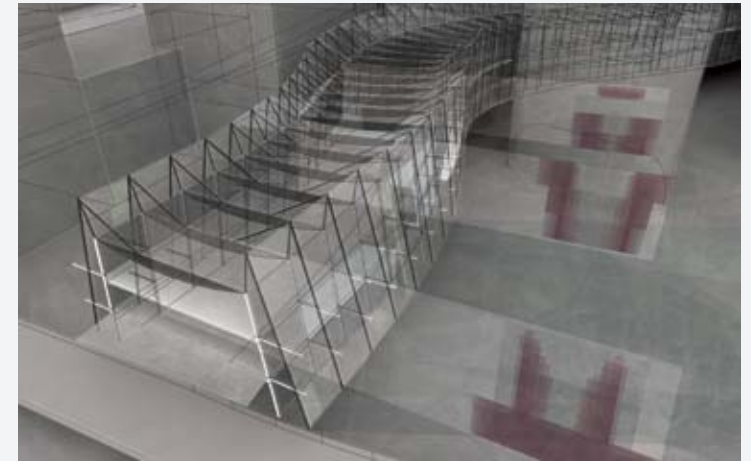
The word “corridor,” derived from the Middle French for “to run,” and originally referring to a narrow space providing access to different parts of a building’s programs, was a spatial typology that evolved out of the need for physical connection, privacy, and segregation.

In the modern era, however, the use of the corridor is no longer limited to the narrow sense of a space defined by two walls, but can more abstractly refer to any sort of connection. A “connective corridor,” for example, becomes the name of a defined and redeveloped traffic route, and a “green corridor” suggests ambitions of an urban and environment nature. Both names represent the intention of engendering movements through which the designated connections might generate activities and boost the development of the district.

I argue that the corridor should be one of the basic typologies for designing the public realm at all scales, since it fulfills every requirement of a social area within a typical multi-functional district by providing access to varied programs, creating connections among the people and the activities, and densifying the entire district efficiently. Furthermore, the linear form of the corridor provides a strong implication of movement, which

becomes a key to forming a vigorous space. As a result, the corridor should not be viewed simply as an add-on space, but rather as a flexible space that supports and enhances connections among other spaces and functions.

The test bed for this thesis is the Hudson Yards in Manhattan. Deviating from the proposed master plan, this project does not seek to pre-plan the programs and activities, but to develop a new model for a public corridor that would serve as the principal spatial armature for the future development of the district. Working within the existing conditions of the site, the proposed commercial corridor is anchored at the eastern end by a performing arts center and stretches to the Highline where a theater will be located. The corridor itself is a flexible space that anticipates the future connection of the residential towers and other possible structures. Formal strategies abstracted from the previous research at three scales of corridor types from housing, commercial arcade to urban armature, are also applied in the design process, which strengthens the local connection of the corridor, as well as the visual connection beyond the physical boundary of the site.





## Re-Forming Prison Better Mental Health through Progressive Penitentiary Design

Prisons are intended to both punish and reform their inhabitants. Complicating this task are the 21.7% of inmates who have serious mental health issues. Most contemporary experts claim that addressing mental health challenges in a progressive manner in prison will promote better results in terms of reduced recidivism through improved therapeutic techniques that foster an enhanced level of general humane-ness in the day-to-day management of penitentiaries. This thesis argues that prison design based on sound therapeutic practices will greatly increase the chances of creating more effective penal communities, benefitting both those housed in such facilities and the societies they serve.

In order to design for reform, the design must start with the basic human needs of inmates. It will begin with a plan of community configuration that promotes social interaction; the treatment will be inserted, imposing a program that requires effective communication between inmates. Finally, the needed security will work through the organization of the private and public spaces in order to maintain safety. The overall design for containment remains and exists as punishment by restricting the ability to exit the campus.

This project is a medium-security prison with the proper facilities to aid mental health patients located in Kings Park, New York. The design begins with 2 units, each for 12 patients. The unit can be replicated and manipulated to meet

any condition. In this instance, there will be 8 units, 96 patients total. They are organized according to a grid, such that patients create a diffused gradient representing the reformation process, through departure at the conclusion of their stay. The building moves according to its orientation to the Long Island Sound. This makes up the facility's main layer: the patient layer.

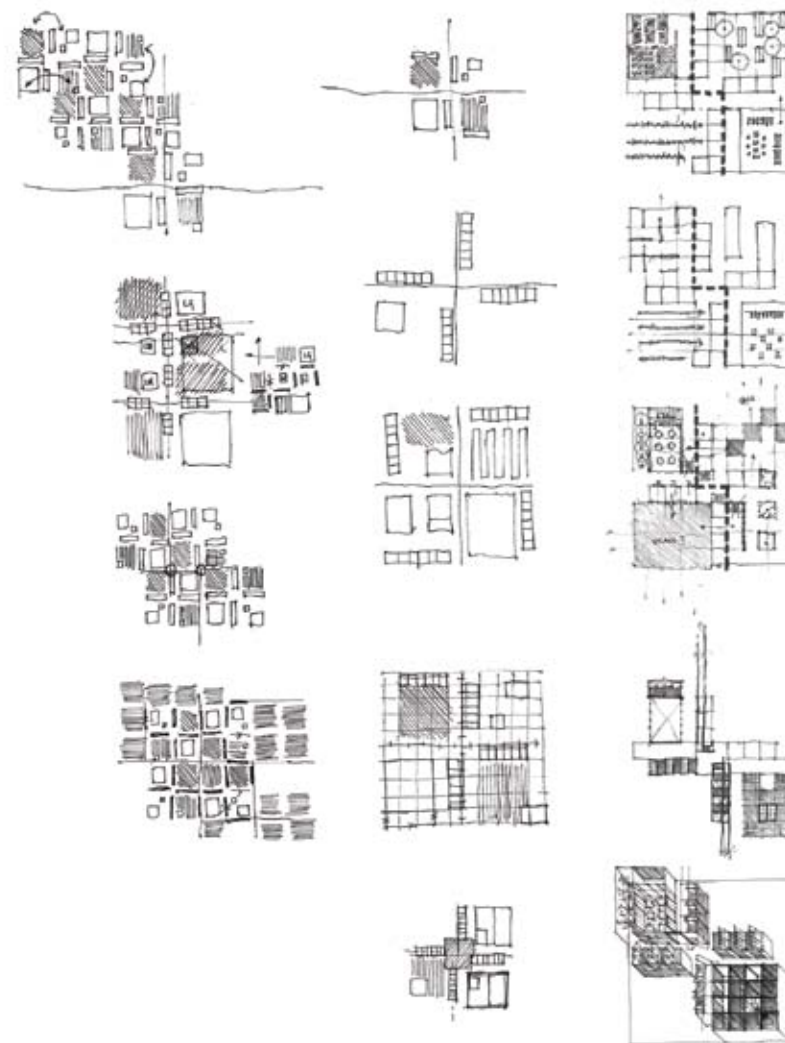
The staff cross through the pathways resting on top of the eight units. The grid of surveillance is shifted off axis with orthogonal units to shape the entryway for staff and visitors approaching the campus. The shift creates moments of vertical connection between the different layers.

Nature is the final contributing agent within the design. On this site, treatment comprises an agricultural program which creates meaningful work assigned to develop skills and embed a sense of obligation and accomplishment. The grid of units disperses and molds to the land, forming a puzzle of humans and nature.

Each layer is its own pattern. Each layer is superimposed onto another, stitching the model together. This textile architecture has the flexibility to move and adapt to any given condition. Its malleability is designed to be stretched by mental health experts. This flexible and intentional vocabulary of architecture will adapt with research.

This model can be used as a methodology for rethinking community development and the promotion of mental health through architecture.

# EMILY S. LODATO



The “urban village” presents a unique phenomenon and opportunity in contemporary China. Urban villages are literally trapped by the rapid growth surrounding them. Understood in accord with the current Chinese government’s policies, urban villages are urgent problems that need to be solved. The most common solution is to simply demolish the village — including its streets, blocks, buildings, and social fabric — and to replace it with new, high-density housing towers.

Simply demolishing the original buildings, and in so-doing destroying the urban tissue, is not the best way to redevelop these neighborhoods. The aim of this thesis is to assert that the urban village presents an essential urban unit. Through study and re-adaptation of the urban village this project will demonstrate how the living environment of the urban village can be improved while maintaining most of the pre-existing positive qualities of urban villages.

This thesis project contends that the urban village can be studied as

a typology rather than a problem. To develop the urban village as a typology, activities and spatial distribution in streets and in living units during different diurnal and seasonal time periods have been mapped. The result — the recognition of “urban elasticity” or the shifting use of urban space throughout the day. This characteristic is essential to the urban village typology and to a design that focuses on occupants’ activities. Within this thesis project, the design of “elastic” residential units as the primary program are partnered with connections to the active, diverse street life. With this in mind, this design proposal is carried out in the most dense and active intersection of the urban village in Guangzhou, China.

Ultimately, this thesis project proposes a new “face” for the urban village, demonstrating to the government, inhabitants of the village, and others who might be opposed to urban villages that the “urban villages” can become a propelling agent for the city’s rejuvenation.



Transmutation, transposition, transubstantiation, transcendence, any of which would sit happily over the blind spot between the drawing and its object, because we can never be quite certain, before the event, how things will travel and what will happen to them on the way.<sup>1</sup>

Our contemporary overexposure to digital images and media of all types blurs conventional boundaries between physical “reality” and our perception of the “virtual.” The 21<sup>st</sup> century consumer is suspended in a liminal state between these two states. Too often, this condition is taken for granted as it advances into our everyday life before comprehending its full potential. Therefore, this thesis speculates on the formation of a digital consciousness by exaggerating and harnessing certain tendencies exhibited by a range of contemporary digital media towards a novel realization of space.

In order to expose this gap, a virtual awareness is exploited through the use of 3D scanning. Discrepancies reveal themselves as skewed images, cast onto the surface of the scan. Photographs and their matching 3D models provide a testing ground to expose the blind spot of translation and locate the “advantage

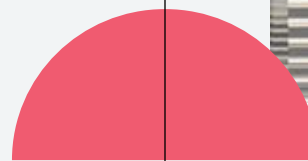
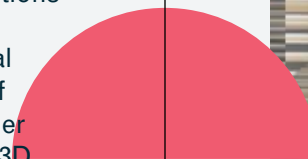
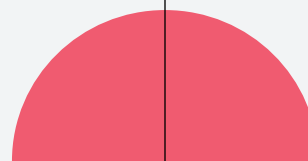
of the situation by extending their journey, maintaining sufficient control in transit so that more remote destinations may be reached.”<sup>2</sup>

A 3D scanning software’s virtual translation consists of the fusion of two items: mesh and bitmap. In order to reveal the blind spot, discrepant 3D scans are purposely generated. Mesh and bitmap are pushed to their limits through a process of translation and re-translation until the image begins to obscure itself, changing the comprehension between image and form. As their relationship diminishes, so does the understanding of what the translated origin is and instead the project establishes itself as a relic of the blind spot.

This cyclical process tests the boundary of the malleable to produce a contemporary architectural frame, and to suggest a new system of architectural representation — a system that accentuates the gap between actual and virtual and where both categories might be conceived as collaborators in the production of a new architecture.

1 Robin Evans, *Translations from Drawing to Building in Translations From Drawing to Building and Other Essays* (1997), 182.

2 Robin Evans, *Translations from Drawing to Building in Translations From Drawing to Building and Other Essays* (1997), 182.





## RE/USE/VIVE

### A Study of Adaptive Re-use on Chicago's South Side

Chicago experiences school closures nearly every year, the most recent of which leaving more than 50 buildings vacant across the city. These neighborhoods already struggle with education for their youth, and so far the move to find new uses for the schools has been slow. It is most likely that these buildings will only be re-inhabited in neighborhoods slated for external development, while the lowest-income neighborhoods will simply be left with another vacant building amidst thousands of existing vacancies. With the main center of development and community building now gone, it seems prudent to investigate how the gaps in these neighborhoods might be reconciled and reinvented.

Besides suffering from major disparities between the city center and surrounding neighborhoods, Chicago is often cited as one of the “fattest” cities in the nation. Much of this can be attributed to the fact that Chicago's low-income neighborhoods tend to also be food deserts, either lacking proper grocery stores entirely or lacking the transportation to get residents to the food sources that do exist. This combined with the fact that produce tends to be more expensive than non-perishable foods makes it difficult for those living in food deserts to

get proper nutrition. If food vendors are unwilling to come into these neighborhoods, another option must be explored.

Cities across the nation have been experimenting with urban agriculture, Chicago included. There have been some initiatives begun in the “greening” of the South Side, and there are two functional farms that exist there already, employing and educating local residents and distributing their produce around the city. In neighborhoods such as these, urban farming not only addresses the issue of food availability, but also the issues of minimal employment opportunities and how to deal with youth when school is no longer an option.

This project seeks to build upon the success of other urban farming endeavors, investigating the scale of a specific site, its surrounding neighborhood (Englewood), and the city at large. There is a vast amount of vacant space in the neighborhoods affected by the school closings, something that can and should be utilized for the benefit of those living there. Agriculture can be the vehicle for architectural reinvention in these spaces, providing a foothold for future development and sustainability of the neighborhood.

# ALEXANDRA THEONI MANTZOROS



## City Feed

### Manipulating Information, Energy, and Space as a Means of Reoccupying the Sidewalk

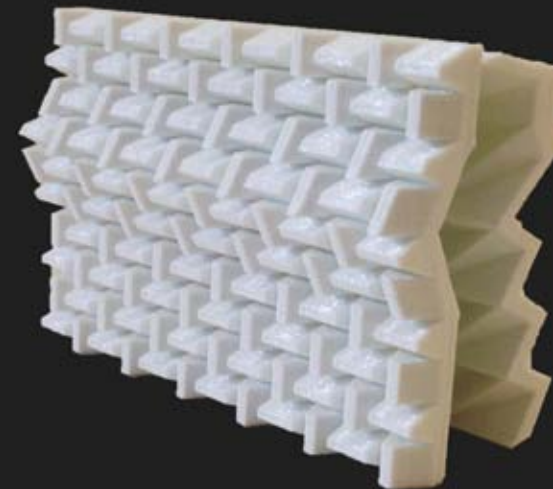
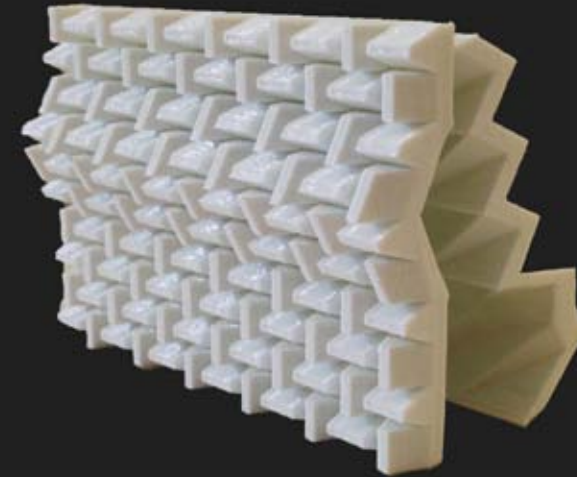
Integral to the life of any city is the way the street mediates urban infrastructure, the transportation of people and goods, as well as pedestrian activities and social exchange. Within this context, street services, such as payphones, have become obsolete as cities develop in the 21<sup>st</sup> century. Many cities, New York included, are developing Wi-Fi networks to replace the payphone infrastructure. While the implementation of Wi-Fi requires minimal physical presence along the sidewalk, it results in invisible networks that do little to enhance the pedestrian experience of a city's streetscapes. Reimagining the role of the payphone infrastructure provides an opportunity to expose, mediate or amplify certain systems that already exist within New York City as a means of representing the multi-layers of activity and exchange that occur daily. This thesis contends that the manipulation and mediation of different networks within New York City hold the potential for the pedestrian to experience the energies and flows that allow the city to perform. The exposure and celebration

of the infrastructural, social and spatial connections between street and subway systems provide the means for thinking about these pieces as adding to a space beyond just an electronic presence.

This thesis focuses on creating a spatial and experiential dialogue between material energies of the city and the body's sensorial envelope with light, heat and sound through the design of local energy geysers. These geysers are situated along Broadway, at primary pulse points where the existing fabric generates concentrations of people and energies to tap into. Harnessing the energies of subway cars and pedestrian interactions, the design of the new occupiable pockets strives to redirect people's attention from the "plugged in" nature of the street to facilitate person-to-person relationships.

By expressing the interactions of people, systems and flows architecturally, the intention is for people to feel connected to the ebbs and flows of their environment which can foster a shared sense of space and interaction between people.

# SARA MINSLEY





## Redefining the Retirement Collective

### Georgetown University Campus Reconsidered

ROBERT A. MOLDAFSKY

To retire is to withdraw. Contemporary retirement homes have no connection to broader society. They can be characterized as places of “withdrawal” molded by economics, social interaction, and politics. Philosopher Michel Foucault distinguishes this phenomenon as a heterotopia of deviation — an “other” space where society puts individuals who behave outside the norm, such as an insane asylum or hospital.

This thesis contends that retirement homes are “heterotopias of deviation” because they constitute a response to a period of withdrawal from working that is incommensurate with conventional forms of leisure or “free-time”.

Current initiatives to develop collegiate-affiliated retirement communities situate retirement homes close to universities. Unfortunately, these homes for the elderly remain heterotopias of deviation through their physical separation from campus life and isolation of their communities from college society. Utilizing Fumihiko Maki’s notion of “collective form,” this thesis proposes a new typology for the retirement home in order to formally reintroduce retirement homes into society.

The existing university typology can be considered an evolution of the European monastic cloister. Historically, such monasteries were generally composed of a series of courtyards intended to be used by one of two

groups: the monks (residents) or visitors (the general public). The monks had access to individual garden units that collectively comprised a central cloister only accessible by members of the order. Visitors, in contrast, tended to enter the monastery via a public plaza or forecourt fringed with spaces devoted to the monastery’s public functions. The church itself constituted the point of intersection between these two groups — however such interactions were limited in scope. The monks remained in their own heterotopia, separated (by choice) from society.

At Georgetown University, the college’s students and the city’s general population negotiate one another via the campus’s academic lawns — each bordered by educational buildings. These buildings, in turn, connect the campus’ lawns to the university’s residential quads. This thesis proposes the creation of a new retirement community that acts as an extension of the Georgetown University campus through the application of a traditional university typology: a sequence of shared spaces — residential communities, defined by individual units, that amalgamate to form larger public courtyards. The collective form, including both the university and the city of Georgetown, will bring retirement facilities out of the “heterotopia of deviation” and formally introduce retirees back into society.





**2D » 3D » 4D » Et Cetera**  
**An Architecture of Dimensions**

**TIFFANY M. MONTAÑEZ**

Architects draw; architects represent; architects communicate concepts, applications, and information.

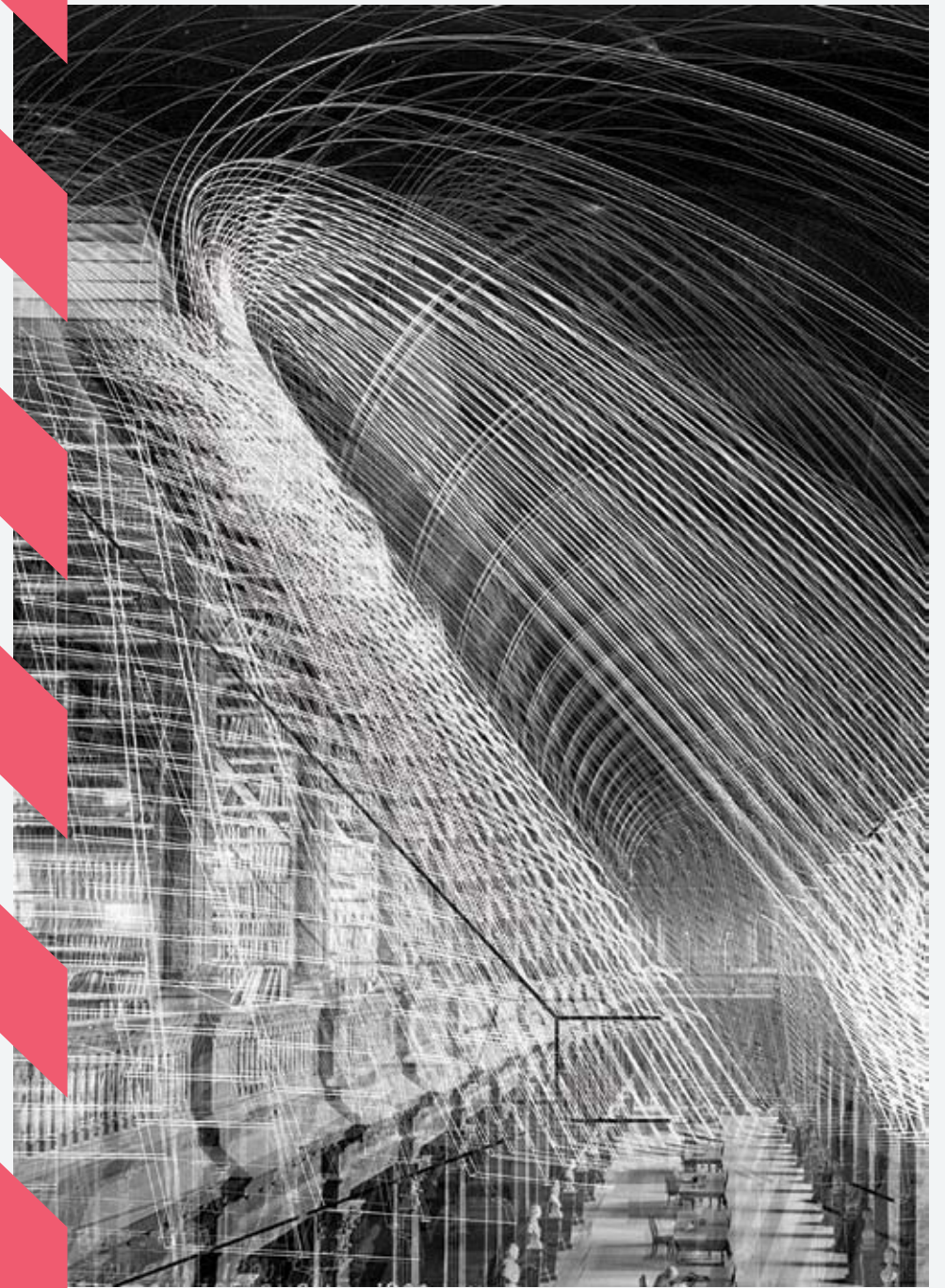
Architecture as a discipline can be considered one of spatial communication which occurs between the designer and their audience through the mediums of orthographic drawings, perspectival or three dimensional images, and digital or physical models. These methods of communication and representation rely on a set of mutual understandings, generalizations, and assumptions common to architects, builders, and end users. But between the lines — in the area between reality and expectation — there is an opportunity for another architectural dimension to emerge, one that exploits the tension between image and object.

As humans, we see, view, and understand spaces and the representation of spaces via images. It is natural for humans to have a preconceived notion of existing conditions based on expectation, mental record, and previous experience. This thesis explores the

dimensional potential in architecture of the mis-representation of space through illusory, mischievous, and even precocious means.

This intentional — and, this thesis argues, productive — miscommunication between image and object in architecture occurs via the creation of the drawing and model simultaneously with strategic though not comprehensive alignments to create an expected image in the mind of the viewer and a series of unexpected spatial conditions.

By manipulating the different dimensional means of architectural representation (2D to 3D), fresh relationships between the drawing, the image, and the model are revealed and exploited. This process of translation investigates the architectural potential of controlling the illusory in representation. Ultimately, the manipulation or confusion of the image has the ability to affect the experience of the built environment, creating a more amusing, exploratory, and engaged interaction with architecture — via its fourth dimension.





In the city of Santiago de Cali, the public market has historically served as a location for rural agricultural communities to interact with urban communities of various economic classes. Dialogue, debate, and the sharing of ideas took place alongside the selling of agricultural and handicraft commodities. In recent times, the displacement of large sections of the rural population by civil war has caused the urban periphery of the city to grow exponentially. The creation of new public infrastructure has not kept pace. Markets are lacking. This has produced a situation where agricultural and urban communities have few opportunities to engage with one another in a meaningful way.

Focusing on the highly segregated southern periphery of the city, this project works at three scales to bring about an integration of five neighborhoods. The scales work to intertwine the necessities of each socioeconomic class, including one composed of internally displaced people from the country's armed conflict, by creating an infrastructure that is diverse in program but utilizes the region's vernacular material of construction: *Guadua angustifolia* (a species of bamboo).

The project uses *Guadua* joints to generate a triangular structure that expands, contracts, and bends to allow for the easy manipulation of a horizontal plane into a vertical one. This verticality blurs the boundaries between soil and structure, creating new possibilities for "building land." Using a material that allows for auto-construction, internally displaced people can grow their produce and sell in the market. At the programmatic scale, a market/greenhouse allows the internally displaced people to put their knowledge of agriculture and handicraft skills to use. A police station and observation tower are linked to these programs at the urban scale through an infrastructure of pedestrian platforms that morph into bridges connecting each neighborhood with its respective program. Moments of outdoor recreation are dotted along the pedestrian path to underscore the unique peripheral location of the neighborhoods at the edge of a sugarcane field. The goal is to allow for each scale to build upon the other and create spaces of integration through verbal and physical exchanges.



## Image-scape Designing through Perception

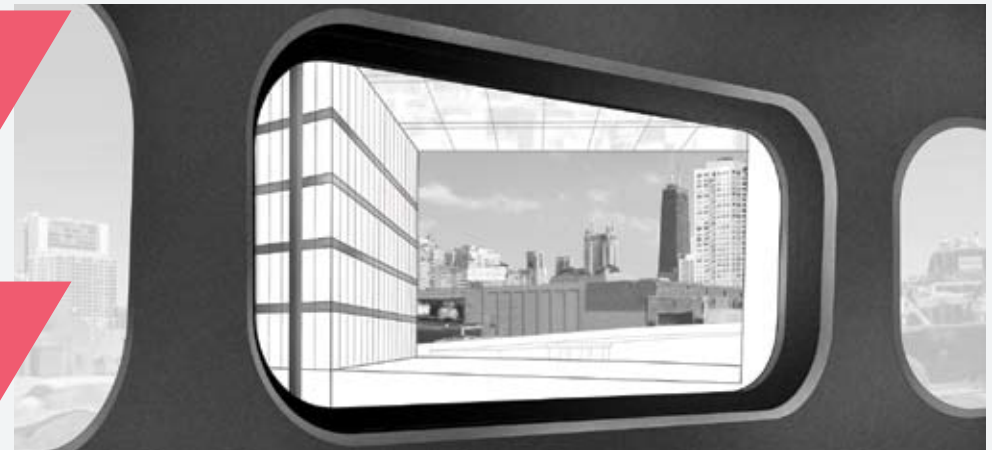
Every day, hundreds of thousands of people witness urban architecture — be it by foot, car, or train — but few engage it directly. The ones that do are a select few who have the privilege to use and physically occupy the space. This thesis argues for a broader notion of occupiable space: the space of the city, contending that in order for architecture to respond successfully to the highly diverse range of perceptions that one experiences throughout a city, architects need to develop designs that can be read at various scales and at various speeds. A building can frame distinct images and offer a range of perceptions in the same way just as it satisfies its other functions.

This project takes advantage of three vacant blocks located west of Chicago's city center at the confluence of train tracks, expressways, and roads. These various movements surrounding this site enable this project to operate at different scales and perspectives associated with these city pathways. Chicago is a city rich with distinctive images, including the skyline and its iconic landmarks, the endless horizon of both land and water,

and its diverse range of people, places, modes of transport, and infrastructure. As part of an historical manufacturing corridor, as well as a new innovation district, and located near a rapidly growing planned development site where high rise apartments and condos have risen up, this site is loaded with programmatic potential that has vast implications and relevance to the multitude of scales that a city's inhabitants can pass through on an everyday basis. A site design that caters to these various elements can respect and take a stance on the urban context while at the same time positioning itself as a new image to the city and its constant state of flux.

To explore these different perspectives and scales, the thesis adapts the tower-podium-square typology in order to offer a way to examine how the different perceptual-scapes affect an architectural project. The images created in this thesis reflect this difference and use techniques — such as framing, aligning, and distorting — to cater to the given perception a user experiences.

# DOUGLAS MOSKOWITZ





## Pop Architecture Reactivating the Carrie Furnace as a Generator of Culture

Pop Art, which is frequently dismissed on the grounds that it defies “good taste,” challenges the superstructure of aesthetic value in order to establish the legitimacy of the commonplace artifact in the gallery setting. Pop artists use minor aesthetic qualities of the capitalist machine — “cute,” “futuristic,” and “sexy” — to meet our tastes halfway, revealing both what we buy and how we are sold. Pop Art effectively validates the legitimacy of personal preference and elevates our notion of objective taste to the level of pseudo-universality.

Andy Warhol, one of the most famous American pop artists, would revolutionize art and pave the way for consumer-driven art production. His “Death and Disaster” series (1962–63), which featured serial images of electric chairs, suicides, and disasters, would transform the psychological effects of image proliferation into something uniquely positive. Warhol’s seriality would establish art as a powerful device to absorb the world at large into a new, popular, aesthetic realm.

Bernd and Hilla Becher shared Warhol’s archival impulses, using seriality as a framework to represent their collection of industrial photography, organizing each blast furnace, water tower, gasholder, etc. into a grid according to type to highlight the formal similarities and differences between each structure. The Bechers’

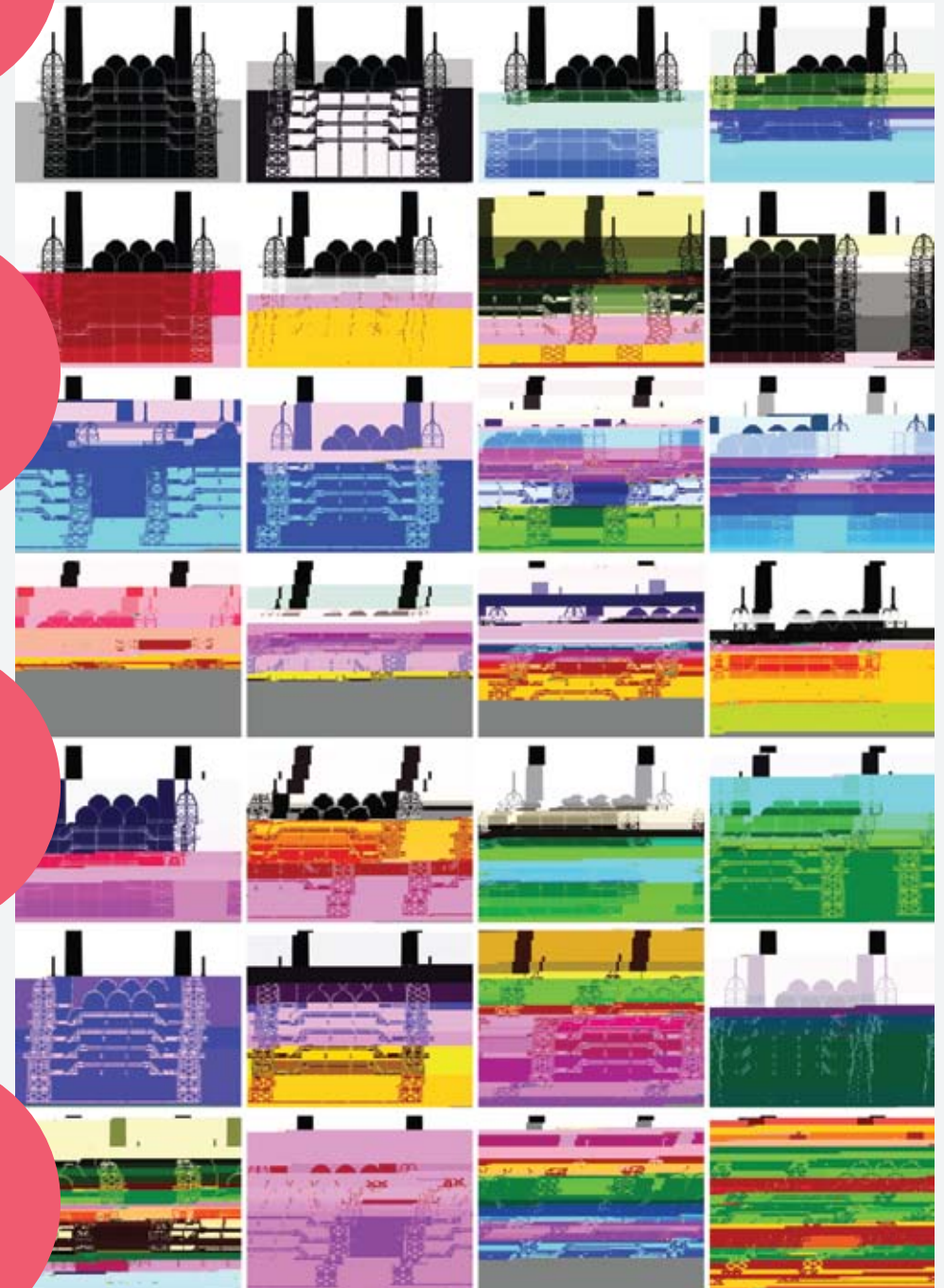
photography would standardize the aesthetic qualities of industrial architecture as productive futuristic entities on the verge of extinction.

According to Daniel Harris, “the futuristic” disputes the classic modernist dictum, stating, “form does not follow function, form pretends to follow function, but is actually an aesthetic end in itself, a decorative feature that ostentatiously proposes itself as useful.”

Pittsburgh’s steel mills once symbolized advanced technology and productivity. Today, most of these sites have been flattened and replaced by suburban-type open-air shopping malls. Any existing mechanical artifacts, if not immediately extracted and sold, are relocated or power-washed to serve as a reminder of the previous relationship with industry. Having survived the collapse of the United States steel industry in the 1970’s, the Carrie Furnace, with its rusty, tangled appearance, exemplifies the futurist dictum of how forms are reduced to decorative features, rather than functional fixtures.

Architects, unlike pop artists, have yet to establish the integrity of irrational form. This thesis speculates on how certain themes of Pop Art might be deployed to regenerate the formal qualities of the Carrie Furnace in a spectacular way to meet the taste of our consumer driven reality without reducing its historical significance.

# ANNA MURNANE





## Architecture as Negotiator for the Blind Incorporating Light and Materials as Organizational Tools to Aid the Visually Impaired within a Residential Domain

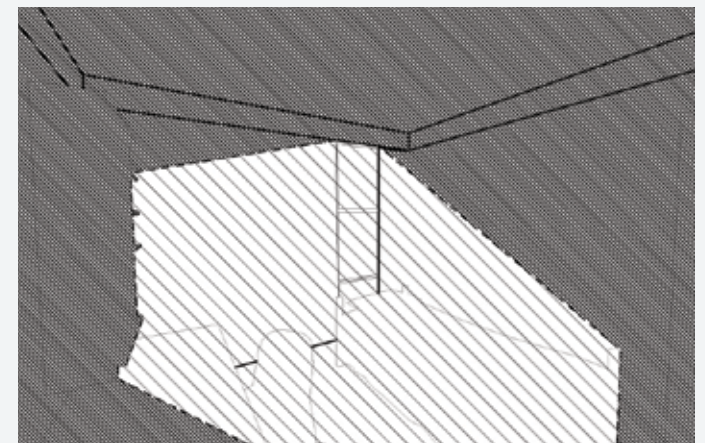
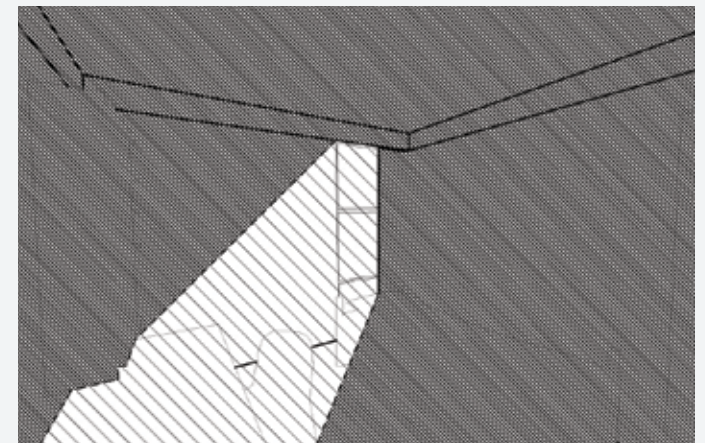
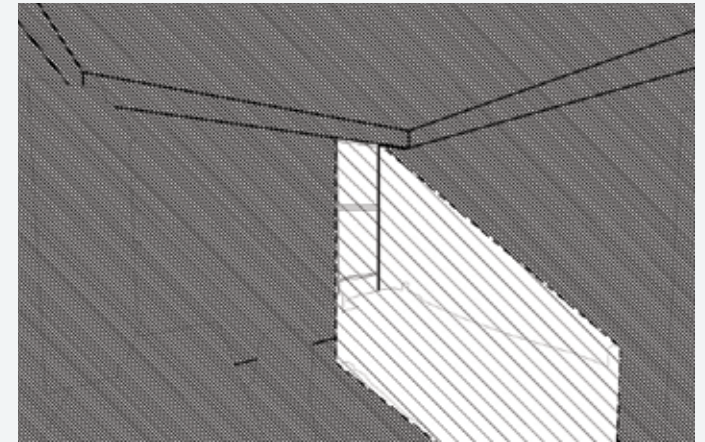
Designing façade systems to meet the needs of sustainability in a polluted environment has been a fundamental point of concern among the architects and designers of the world. However, regardless of the ongoing iterations to accommodate both the needs of the sustainability agenda as well as accessibility issues, there is still an imbalance in designing these systems for primary users with physical disabilities, more particularly, to accommodate those with a lack of vision.

With the understanding that the visually impaired differentiate between materials, architects can enhance the way these users interact and respond to the interiors of their domestic environments, in an attempt to provide them with a sense of self confidence in their abilities. Implementing the unique sensory ability of the visually impaired — perceiving high contrasts in light, strong acoustic proficiency, and detecting even slight changes in material through touch — provides an opportunity to capitalize on these attributes as organizational tools for the design of architectural environments that integrate sustainable systems while addressing the needs of the users.

A primary breakthrough while researching the abilities of the visually impaired was the understanding of a spectrum. On one end, an impairment could potentially be partially blurry vision, while on the other end an individual can only discern significant changes in contrast. By analyzing the New York Institute for Special Education in Bronx, New York, a school that primarily educates individuals with visual impairments on the basic aids and skills required to go about their daily routines, there is an opportunity to test these conclusions in a residential domain for these users.

With the up-and-coming rise in responsive building technology systems, there is an opportunity to harness the potential of redirected light while simultaneously taking into consideration the sensory needs and abilities of individuals with visual disabilities. By combining novel approaches to façade systems integration and design criteria that celebrates the unique perceptual abilities of certain users, new methods for architectural design create environments that adapt to the needs of the individual, creating a “neuro-plastic architecture.”

# SAI PRATEEK NARAYAN



## Residential Aid Henkan-Taishin Plaza

After Japan's most recent devastation in March 2011, the result of the record 9.0 magnitude Tohoku earthquake and tsunami whose epicenter was located 231 miles northeast of Tokyo, the nation reevaluated its disaster preparedness.

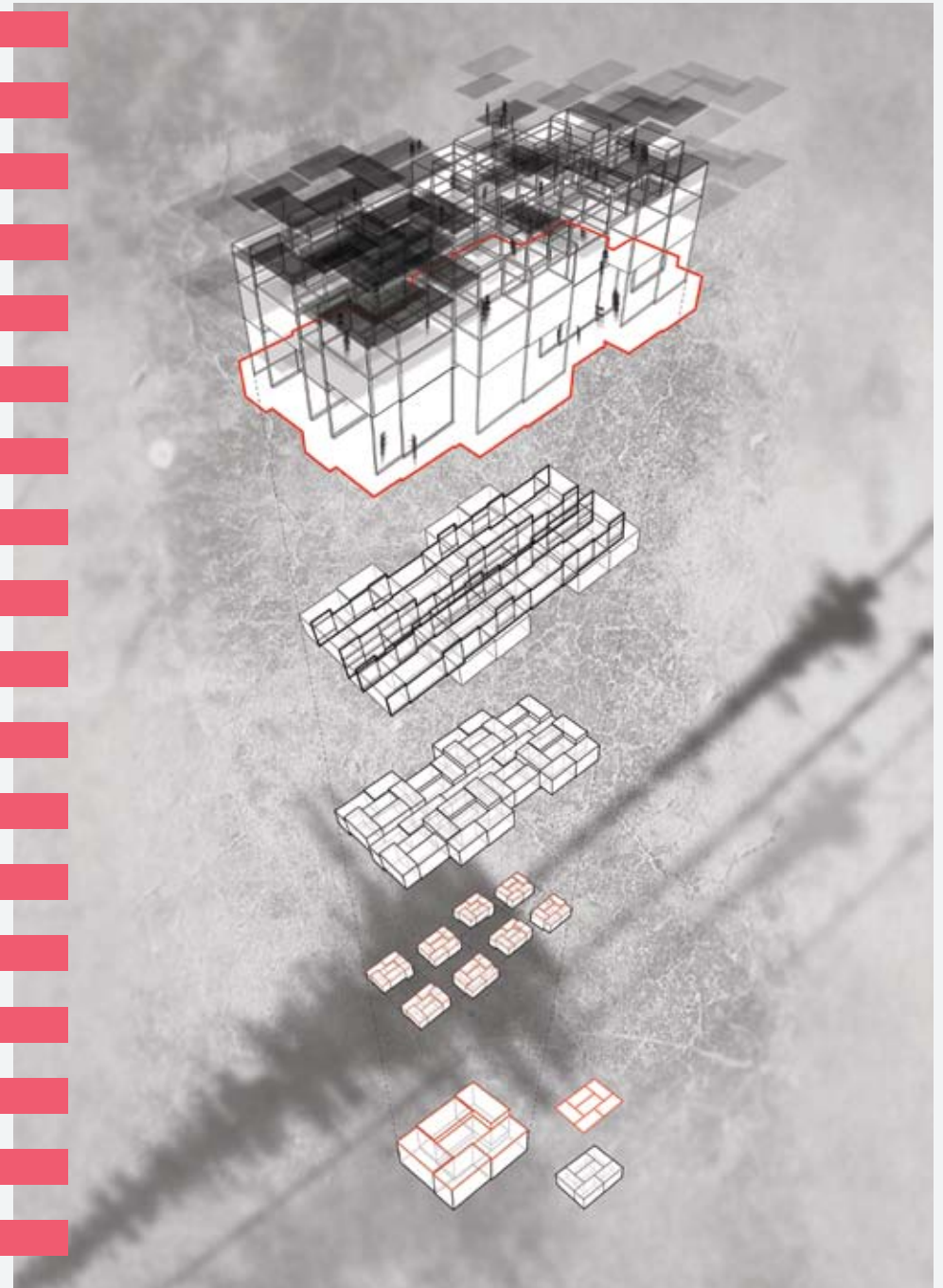
Japan interpreted the disaster as a warning, since earthquakes happen on a customary basis in this earthquake prone nation. The destruction of homes, highways, and several nuclear reactors was mainly caused by thirty-foot tsunami waves, and seismologists predict that an even bigger earthquake will result in more damage. Though destruction was limited in Tokyo and its suburbs in the 2011 quake, many people searched for shelter as the city tremored. In suburban areas, access to emergency shelters is often inconvenient, and sometimes impossible, since most shelters are located in school gymnasiums scattered among densely populated neighborhoods which are themselves vulnerable to collapse.

In order to prepare for future catastrophic earthquakes (5.0 magnitude or higher) in suburban Tokyo, a permanent earthquake-resistant housing system located in existing neighborhoods is

required. This thesis proposal is the test of a prototypical housing system that is both a safe dwelling and community accessible emergency shelter space. The framing system is structurally, spatially and programmatically flexible. For example, a four-person unit can be easily and quickly transformed into a two-family evacuation home by sliding a wall, thus doubling the capacity of the unit. Together with the housing, the system also provides safe access to shelter spaces via an elevated terrace level that simultaneously braces adjacent structures and allows people to move safely in the early stages of a quake. It is proposed that the result of a more locally dispersed shelter system in existing neighborhoods will generate a strong community as neighbors will build relationships based on projected emergency need.

The safe dwelling units, including the framing system, are designed as an interpretation of the traditional, horizontal Japanese house. For example, the pattern in the framing system comes from the tatami mat. The tatami mat pattern, interpreted as a vertical framing system, allows for strong, lateral support.

# ROBERT NISHIGAWA





## Thick Infrastructure

### New Grounds: Recovering Public Space from the Residual Urban Void

Instrumental single-function infrastructures produce residual spaces within the urban fabric of the city. Part of the “urban public space,” these existing sites may be ‘thickened’ formally, informally, materially, and programmatically to help construct the social fabric of the city. Potential transactions — licit and illicit — and chance encounters are produced through sites of social exchange.

The central district of São Paulo, Brazil’s largest city, is the site of intervention. On the west side of the district, four discrete infrastructural systems converge at bus terminal **Bandeira**. The combination of highways, elevated pedestrian pathways, and a subway line produce uninhabitable or underutilized urban voids. The elevated pathways are used by pedestrians to access the bus terminal over the adjacent expressways, acting as a conduit from both the subway station and the neighboring areas.

Pathways are singular, having been “cleaned” through legislation to create one form of order. In an effort to keep pathways clean, commercial activity is banned from the site by the government.

In plan, the existing infrastructure presents an animal-like form. Similar to an octopus, 8 arms branch out of the bus terminal. While the site presents an infrastructure that is singular and rigid,

an octopus is known for being flexible and adaptable. As large-brained invertebrates, octopuses are highly intelligent, with complex nervous systems. They exert extreme control over their bodies, and are able to squeeze through tight spaces. “Unlike vertebrates, the complex motor skills of octopuses are not organized in their brain using an internal somatotopic map of its body, instead using a nonsomatopic system unique to large-brained invertebrates. Despite this delegation of control, octopus arms do not become tangled or stuck to each other because the suction cups have chemical sensors that recognize octopus skin and prevent self-attachment.” To protect themselves from prey, octopuses camouflage and mimic their surroundings, adapting to their environment.<sup>1</sup>

Borrowing from the characteristics of an octopus and exploring concepts of adaptability and flexibility, the project confronts the existing residual spaces as an opportunity to produce a multifunctional infrastructure of excess beyond instrumental planning — a project in play. Through ‘thickening’ the infrastructure, the ground is constructed as an occupiable surface that is multiple and complex, with insertions of commercial and public programs.

<sup>1</sup> <http://en.wikipedia.org/wiki/Octopus>

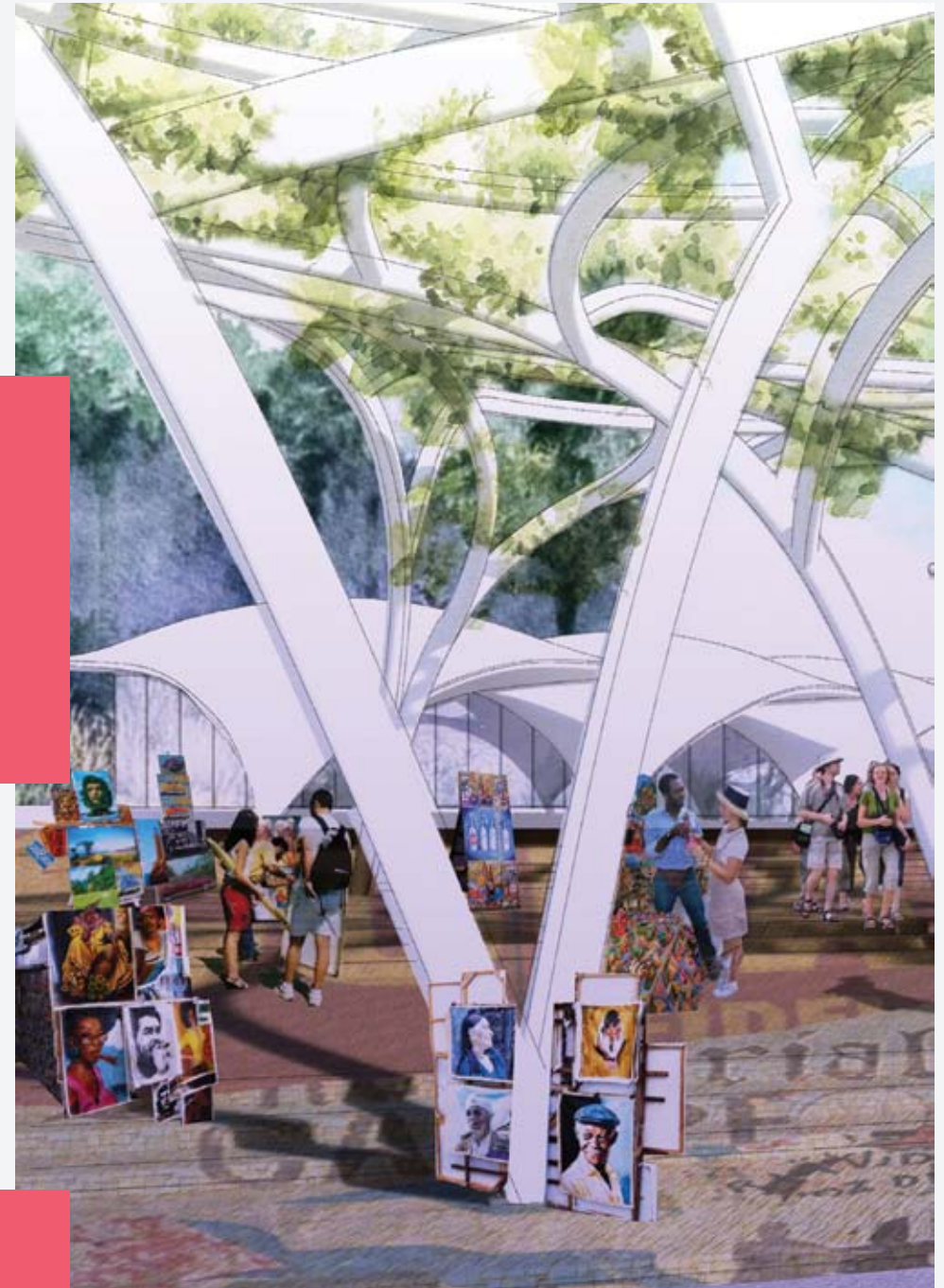
# ANDREA NOVAZZI





As Cuban society has emerged and developed, the combined forces of slavery, feudalism, capitalism, and socialism, as well as its colonization, immigration, and invasions, have had a significant impact on its architecture. Consequently, architecture solely responded to the needs of the higher classes and neglected the lower classes for over five centuries. Despite the early aims of the Cuban Revolution to extend the concept of “equality” to all sectors of the development of the new society, the stagnation of economic development resulted in the absence of art and loss of identity. In search of solutions, during the past twenty five years, architecture has responded to the interests of economic development provided by tourism. Today, the social structure is dominated by tourists (“the higher class”), while the Cuban population (“the middle and lower classes”) is forgotten. If architecture ceases to be a “cause” of these forces, it could instead become a tool to effect social change.

In this specific case, architecture could have an influence in the social order through a structural and organizational typology and program. On the one hand, the project will bring back that first vision of the Utopian socialist architecture, and the populist ideology. It is a continuation of the search for an architecture that symbolizes the values of the Cuban identity — connecting the modern to the traditional. On the other hand, the program allows a cultural and monetary exchange. There are two very distinct user groups and the program will give each what they seek. This will be a cultural and recreational complex where experience will unfold differently for each user. There will also be moments of overlap; spaces intended for both users to engage and interact. The objective is to create a prototype for future projects; designing within the structure, but adapting it and changing it in response to the populist agenda.





## Field Urbanism Collective Form and the City

As contemporary urban environments evolve into more complex fields of inter-related forces, they require more adaptable and opportunistic strategies.<sup>1</sup>

This thesis proposes a formal and social alternative to urban development in the city, as a critical response to Fumihiko Maki's study of collective form, Stan Allen's field studies, and Thom Mayne's combinatory urbanism. The logics of Maki and Allen are appropriated as strategies applicable to future urban developments, and are deployed in a combinatory manner to test the uses of collective form and behavior in the navigation between scales within urban fields. The field is derived from the site, where the strategies applied re-scale and re-organize the city and suburb to produce frameworks of social hybridity and intensity.

Collective form addresses the behavior between an object and its built environment through local linkages and relationships.<sup>2</sup> At the scale of the dwelling, the project seeks adaptable and flexible occupation, with the ability to evolve opportunistically in response to local urban dynamics and emerging social configurations. Following Maki, collective form offers a strategy for dynamic evolution of the unit and the neighborhood,

introducing multiple scales of social constructions through aggregation.

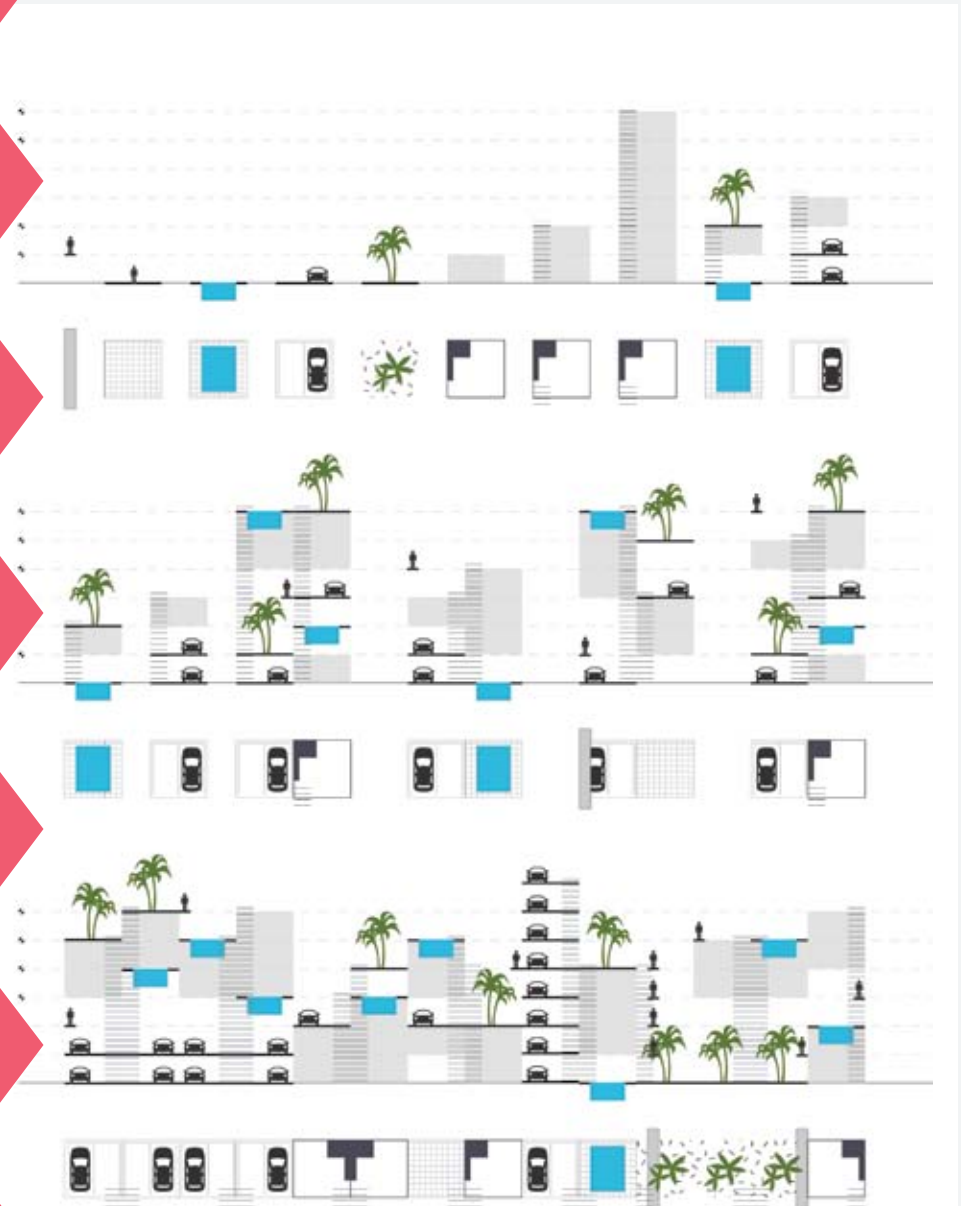
In contradistinction to the residential tower that aims to maximize land value in housing the economically elite, this project seeks to provide housing for the retiree, often isolated in the suburb, and the "millennial" in desperate need of housing in the city. It mines the suburban culture sought by the baby-boomer generation and slips within it micro-housing efficiencies. Miami is the laboratory in which theories of dwelling are tested, in a contemporary neighborhood for the future of urban living.

This project employs a tactical approach to the design process. Spatial patterns and local relationships regulate form and program to facilitate these hybrid social constructions. The deployment of field elements re-organizes in terms of interrelationships and functions, creating infinite possible combinatory logics in the evolution of the neighborhood. These logics negotiate the threshold between figure and field, accommodating programmatic indeterminacy with architectural specificity to thicken and intensify, producing an alternative "collective" urbanism.

<sup>1</sup> Thom Mayne, *Combinatory Urbanism* (Stray Dog Café, 2011), 27.

<sup>2</sup> Fumihiko Maki, *Investigations in Collective Form* (St. Louis School of Architecture, Washington University, 1964),

# ANN O'CONNELL



## Variable Tectonics The Project of the Jig

Neil Leach, in his “Manifesto for an Emergent Architecture,” aligns two general architectural approaches with Félix Guattari and Gilles Deleuze’s references to “Romanesque” and “Gothic” disciplines. He describes “Romanesque” architecture as an “aesthetic outlook” on design, that then imposes a material reality. This exists in contrast to a “Gothic” architecture, which refers to a process of design and study from which the form emerges. This thesis questions how an emergent or “Gothic” system of architecture can be applied to contemporary design thinking at a time in which the dominant architectural or constructional conventions can so quickly default to the “Romanesque.” This thesis argues that “Gothic” processes in architectural design must understand and exploit potential variables in modern fabrication methods.

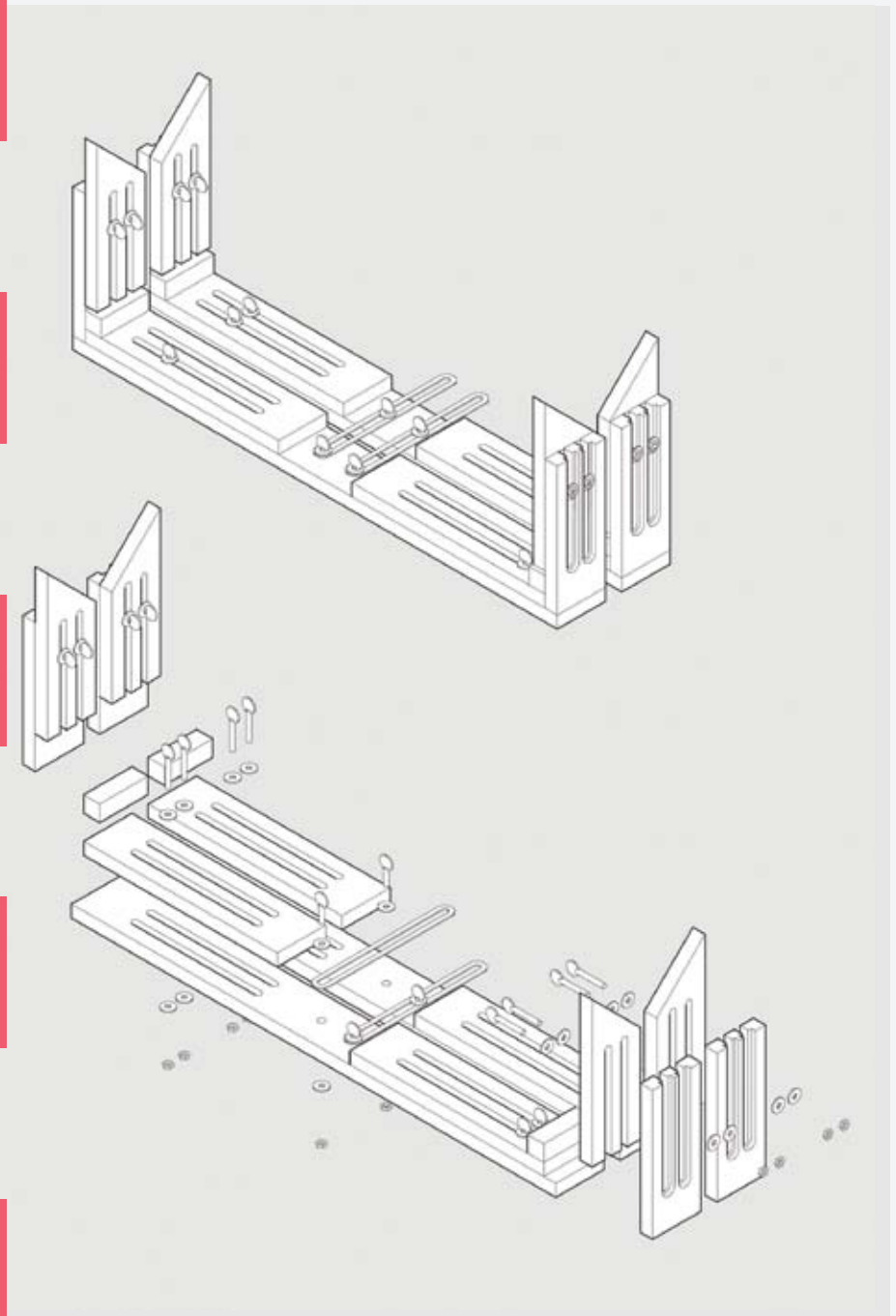
Construction is the medium of architecture. This project maintains that there is a matrix in any fabrication process, which includes a design intention, tool, material, and jigging. In order to allow tectonics to emerge and remain variable, free of the restrictions and conventions of economy, this thesis explores how re-thinking the jig can alter the existing hierarchies within this matrix. To question contemporary discourse on innovations of making, i.e. the digital fabrication project, the project of the jig offers an opportunity to move toward the “Gothic”

values of process and emergence, and away from the “Romanesque” values of aestheticized form making. This thesis contends that architecture can exploit the rich variables of making as an agent in design by re-imagining the role of jigging in construction and fabrication processes. This contention will be tested on the site of the Syracuse Regional market shed to its chronology, focusing on the jigging and potentials of glue laminated (glulam) lumber.

The process of re-thinking the jig is intended to dislodge the static relationship of fabrication and design. In conventional and specialized components — standard and digital fabrication practices — the design of architecture still remains a separated endeavor.

Conventional components are taken as the absolute elements of design (tectonics), or specialized components are created to rationalized an unconventional design (formalism). This thesis will explore how architecture can relate to its medium of construction in a dynamic way, by designing jigs with unknown results, and responding to these results with new designs, and new jigs. This experimentation will rearrange the hierarchies in the fabrication matrix, creating results tied to the process of making, outside of conventional or digital techniques.

# STEVEN O’HARA





## Moving through Color Perceiving Space through Color, Patterns, and Surfaces

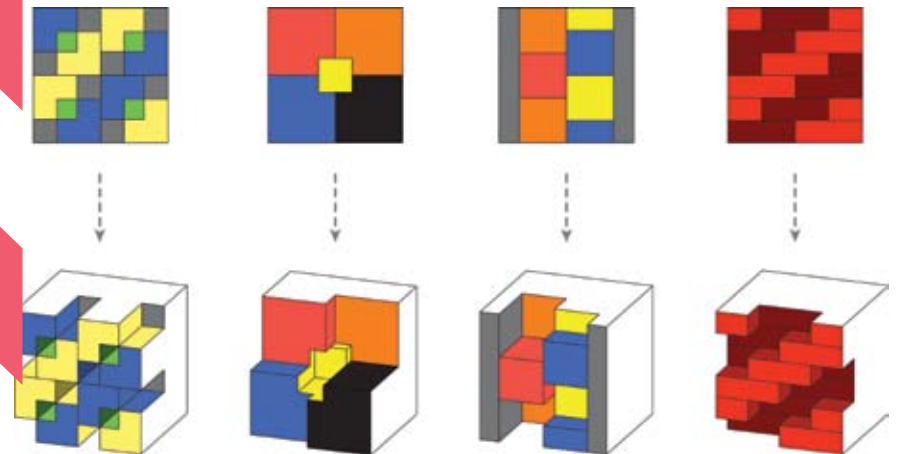
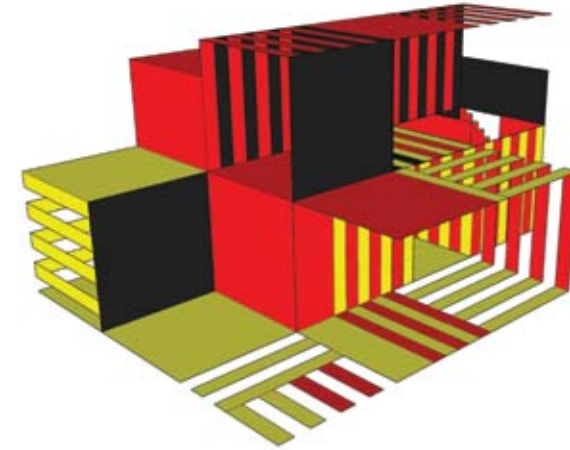
Graphics are all around us on a daily basis, but they rarely appear in architecture as one of the main design drivers. There is something about variations created by graphics that give life to spaces through visually manipulating surfaces and altering perception.

The current condition of architecture can be often rooted in a singular concern for form. The results are spaces that are standardized, conventional, and sometimes sterile. By radically viewing space and objects through the lens of graphics, architecture can be more invested in the sensation and experience of space. Walls, ceilings, and floors create spatial conditions, but space

is not simply dimensional. Space is realized through perception. Graphics can alter one's perception, and thus, one's spatial experience.

The project utilizes graphic techniques such as razzle dazzle, color and pattern wrapping, high contrast, preceding and receding colors, and vertical/horizontal accentuation. These techniques produce focal points, imply movement, generate visual immediacy, and accentuate the dimensions of space to make a room seem deeper, wider, or taller. These graphic techniques transform and magnify the spatial experience and generate a new way of reading space.

# UCHE OKOYE



## Critical Perception

### An Analysis of Architectural Image in Relation to the Built Environment

If we accept that the experience of architecture may now be inseparable from the experience of its imagery, and that photography may now belong to the very same networks of spectacle, it becomes clear that an independent and critical photography of architecture is as vital as it is endangered.<sup>1</sup>

— David Company

Independent and critical photography of architecture is now in the hands of the digital generation. No longer do designers and their photographers monopolize architectural image and create unrealistic, incomplete interpretations of a project by using a few, select images. Using social media applications such as Instagram, the general public has now emerged as a dominant third party in the architect/architectural photographer relationship, instead of a static one that accepts images crafted purposely by architects. Through the lens of the Solomon R. Guggenheim Museum by Frank Lloyd Wright, this thesis assesses the progression of architectural photography and how social media is changing the way we view the built environment.

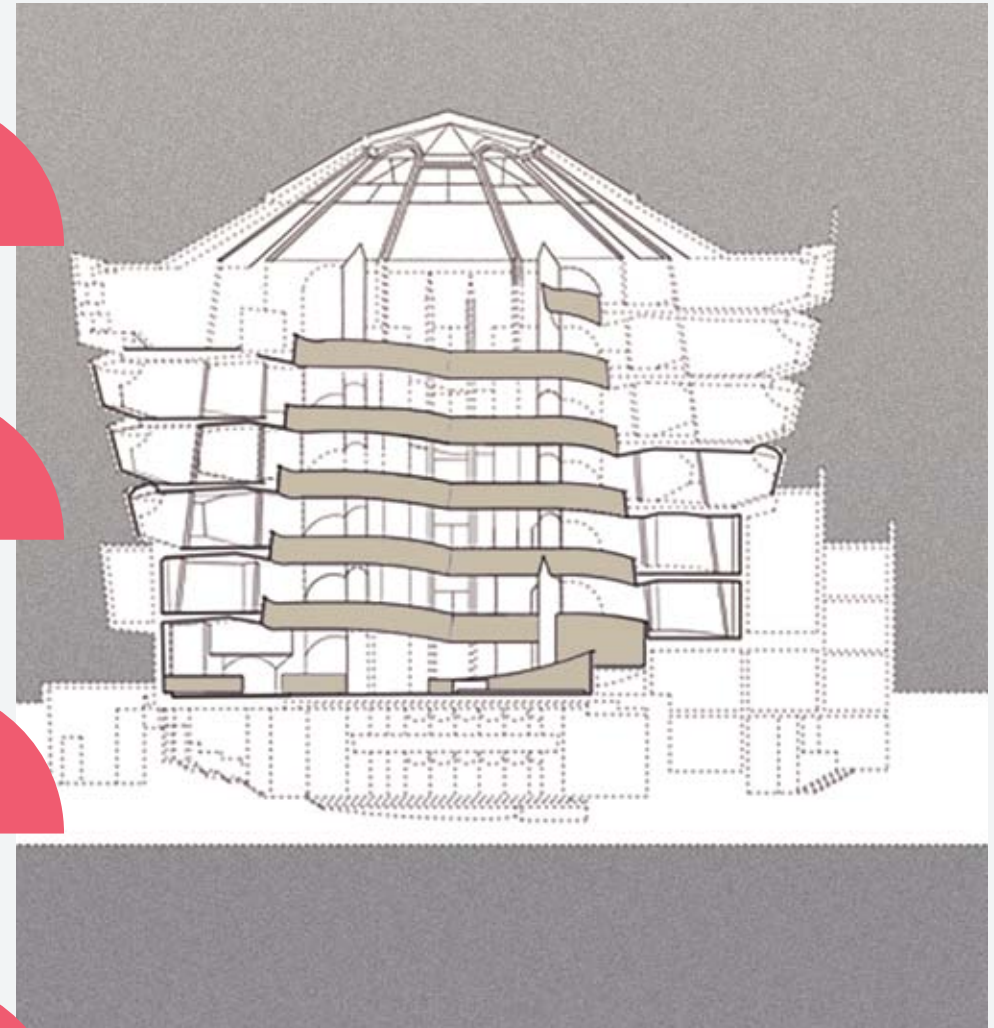
Since the emergence of the internet and social media, visual communication has become easier than ever. Mobile photography provides the general public with the agency to rapidly capture and share images. Photographic documentation is more informal, snapped “on

the go,” creating a network of images that can be added to and looked at by anyone, reversing the one-way street of visual communication of the past. These individual images are fragmented views of a building, but together they create a collection that allows for a more overall understanding of a building. Amateur photographers are not afraid to document the issues with a project, or capture how people are actually using the space. The result is a more realistic and comprehensive understanding of the built environment.

This thesis analyzes how each of the three parties creates a distinct interpretation of the Guggenheim Museum. Frank Lloyd Wright's design intentions can be seen in as-built drawings of the project. In the role of architectural photographer, Ezra Stoller worked closely with Wright to accurately depict the museum while still taking some artistic liberty, which results in a different understanding of a project. Stoller's version emphasizes certain spaces while downplaying or omitting others. Thirdly, the fragmented yet collective representation of the building by Instagram stands independently from the other two because mobile photographers, in most cases, will only understand a project through their own experience.

<sup>1</sup> Company, David. “Architecture as Photography: Document, Publicity, Commentary, Art.” *Constructing Worlds: Photography and Architecture in the Modern Age*. By Alona Pardo and Elias Redstone. London: Prestel, 2014. N. pag. Print.

# MEGAN L. RAND





## Thick Matters

### De-optimizing Infrastructural Redundancies

Closed system design methodologies have produced infrastructures that anticipate only a single lifetime use. This approach has burdened many urban areas with defective infrastructures in need of perpetual modification and repair. Rather than continue to over-engineer these vital frameworks to resist the inevitable failure of individual components, the next generation of public infrastructure needs to exceed its technical specifications and seek ways to create spatial reciprocity among systems.

This thesis calls for a renewed understanding of redundancy in order to strategically infuse infrastructure with public agency and diverse utility. Such an approach has the potential to yield greater systemic outputs and a more productive lifespan, allowing future infrastructures to be positioned both as a collective good and a resilient service.

Infrastructures are inextricably linked to the development of cities and the delivery of improved living standards. These ideals are embedded within the typology of the bridge — a structure critical to the efficacy of transportation networks. Optimized to facilitate the continuous flow of people and goods, the present state of bridges forecasts a future of urban dysfunction. Over the last decade, bridges in the United States have become a significant feature in the growing crisis of public infrastructure. Built during the post-war era when the growth of transportation networks was less of an expansion and more of an explosion, many bridges have now exceeded their 50-year lifespan.

Via the prototyping and design of a new Liberty Bridge in Pittsburgh, Pennsylvania, this thesis aims to demonstrate how infrastructural thickening might enable the next generation of public works to perform as resilient systems rather than standalone structures.

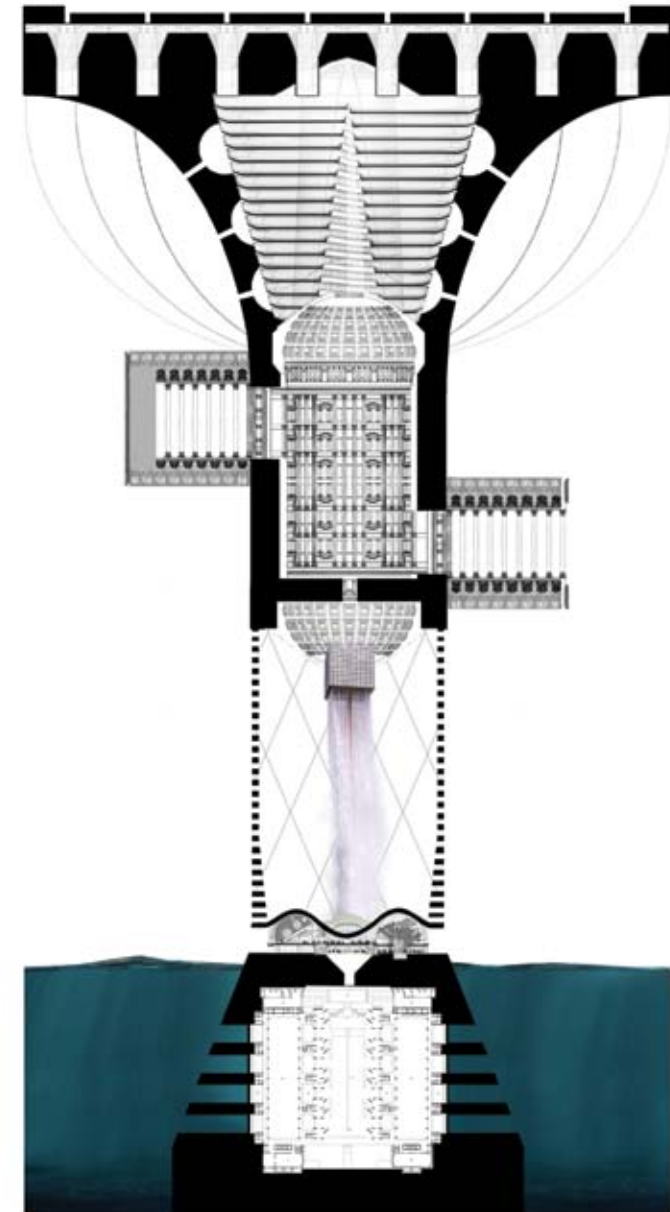
“Infrastructural Thickening” is the term I propose to describe a strategy that aims to modify the spatial, systemic, and experiential utility of infrastructure — a strategy that works towards shifting the understanding of infrastructure from line to volume. This shift is achieved by virtue of de-optimization, a design technique that seeks to augment engineered specifications into scenarios for inhabitation, participation, and added value.

In pursuit of infrastructural thickening, this thesis explores relationships between structure, space, and form as a means to generate redundancies that have the capacity to address issues beyond the bridge’s physical footprint. Topics such as storm water run-off, waste management, and public space are central to the design agenda. In response to these urgent issues, a system of modules is deployed that culminates flows of water, people, and cars into a unified, heterogeneous interlace.

This thesis envisions the next generation of public infrastructure as a thick matter that constructs new territories for the public to engage in mutually productive dialogues with issues of urban, spatial, and environmental urgency.

Advisor: Julie Larsen

# MARCO ANTONIO RAVINI



## A Priori

### Discovering a Uniquely Picturesque Perversion of Architecture

The picturesque movement placed a newfound emphasis on the power of everyday sensory experience, and thus the power held in our built environments to shape us. The key innovation of picturesque design was the careful sensorial curation of spatial sequences which ultimately lead to “painterly” views of the landscape. With the consolidation of the British picturesque by such theorists as Sir Uvedale Price, the focus shifted from emulating these “picturesque” views of landscape to the curated sequences leading up to them. There was no longer talk of pleasant “meandering” pathways, but of a gripping sequence filled with “confusion,” “irritation,” and “curiosity.”

This conception of movement did not take full effect in architecture until the historical break afforded by the modern movement. Similar to Price's late 18<sup>th</sup> century picturesque theory, Paul Rudolph pushed picturesque space-making to its limits in 20<sup>th</sup>-century architecture. Famously proud to tell his story of a supremely disoriented house guest made to leave on a stretcher, Rudolph was unrivaled in his characteristically interweaving spatial complexity. Rudolph's key achievement lay in creating an architecture of adventure where curiosity would “beckon and impel us to rush forward.”<sup>1</sup>

This project explores a new mode of interaction between architecture and everyday life. It extends Rudolph's exploration of picturesque confusion and curiosity to the development of a new domestic space. Programming such principles into a living space inherently engages individuals with its characteristic complexities daily, while simultaneously allowing a resident to learn those complexities through repetition of use. This domestic ritualization is intended to empower the individual to manipulate those picturesque effects. Although the spatial framework itself is rigidly designed, it has been formally curated in turn to allow the individual to curate their own spatial sequences within. Once understood, a maze becomes an intimate path of circulation. It becomes innately legible, with obscure personal shortcuts and hidden-away spatial quirks. The resulting program is a personal labyrinth with a completely unique sensorial quality. The domestic picturesque grants release from the city's own opaque labyrinth, to a personal refuge where the resident is now the ultimate author.

<sup>1</sup> Rudolph, Paul Marvin, 1918-1997. “The Changing Philosophy of Architecture.” *Architectural Forum* 101 (July 1954): 120.

# ALEX WILLIAM ROBBINS





## Modeling and Analyzing Unpredictable Building Systems

### Real-Time Whole Building Performance Impacts of Occupant Interaction with Dynamic Façade Systems

Recent developments in highly responsive electroactive building materials are increasing the resolution and rate at which next-generation façade technologies can respond to fluctuating environmental conditions, building energy demands, and the unpredictable preferences and actions of building occupants. Simulating the performance of these dynamic façade systems is critical for understanding the impacts that various degrees of occupant-response will have on whole-building energy performance and architectural design. However, current methods for real-time analysis of the relationship between complex dynamic systems within a single building model remain limited. The development of parametric simulation tools has begun to bridge the gap between design and analysis process. However, these new tools are mostly limited to basic predefined inputs, do not accommodate analysis on a whole-building scale, and lack real-time capabilities for informing variable actions of complex dynamic systems.

This project describes a method for real-time analysis of the whole building performance impacts of occupant interaction with a dynamic façade system, the Electroactive Dynamic Display System (EDDS). The objective is to deliver simulated results to benefit three areas of this research:

- 1 Optimize EDDS implementation and define system limitations early in the design development phase.
- 2 Incorporate EDDS as a contributing factor in whole-building energy analyses.

- 3 Provide real-time feedback of building performance data to allow EDDS to compensate for itself, the environment, and occupant movement or loads.

In the case of the EDDS, the complexities associated with the dynamic building systems and occupant interactions cannot be simply exported and analyzed by traditional analysis software. Utilizing parametric modeling tools and plugins, this method would provide seamless information transfer between model and whole-building energy analysis software whereby the analysis results become a new input parameter for the response of EDDS that factors back into the whole building performance analysis.

These methods provide significant opportunities for synthesizing the design and analysis process while supporting the integration of next-generation dynamic façade systems. Highly responsive systems such as EDDS can dramatically reduce building energy consumption, improve the well-being of occupants, and explore the architectural design potential of programmable material technologies. The ability to support real-time analysis of complex building systems such as EDDS in the design phase reduces the risk of blind implementation that could lead to inefficiency. It also encourages investment into multifunctional ecological building systems that promote participatory occupant engagement while offering a wide range of architectural design possibilities.

# KURT ROGLER



## Framework for Dwelling Resilient Housing

Buildings outlive the people they were designed for. As culture evolves, so does family size and household composition. The inflexibility and specificity of a dwelling designed for a nuclear, four-person household result in housing that is obsolete, and does not meet the needs of a constantly changing population. Architecture must reflect this evolution.

The solution is an architecture that accounts for changing household size and spatial requirements, considered within the context of constructional and tectonic solutions. This project aims to formulate and express flexibility as the relationship among fixed and replaceable architectural elements. An urban site allows for more diverse dwelling, as the city is programmatically diverse and offers more amenities for people of all ages.

Housing is a framework for dwelling. A structural concrete frame and floor system are economical, appropriate for housing, and allow for vertical as well as horizontal expansion. This structural framework provides an organization and logic for unit configurations. While units change over time, the relationship of floor system to concrete frame is maintained as an expression of flexibility. Flexibility must also be addressed at the

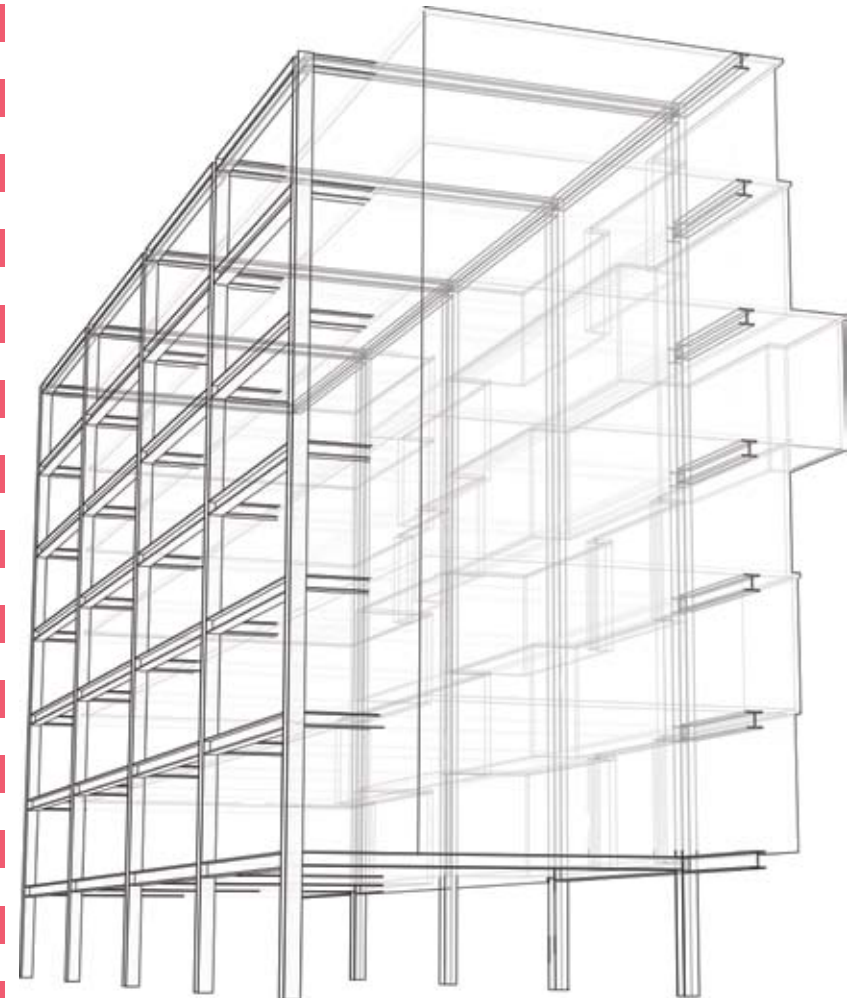
level of details. The concrete frame and floor system are designed with respect to optimal joist spacing and joist span to enable vertical expansion.

Because housing is programmatically repetitive, façades are often mute with respect to the expression of individual identity. This project attempts to differentiate units through their individual relationship to the structural frame. The frame acts as a terrace for some units, while others have floor plates that slip past the structural frame at varying depths. This uses the same language that expresses flexibility to also express individualization.

Context is an important aspect to any urban housing project. A package of core and structural elements is the basic unit of building repetition. This package is not site specific, and sits on a building base that responds to context and is flexible both in program and volume.

All buildings must respond to statutory limitations. Continuity of fire-rated, non-load bearing partitions between units and corridors limits flexibility and the ease with which units can expand and contract. Construction detailing and the addition of fire-stops make these operable elements continuous.

# LINSAY ROYER





## Occupied Edge

### Reconstituting Water Infrastructure in the Urban Fabric

The vast majority of America's water pipes were laid in three phases: the late 1800s, the 1920s, and just after World War II. Many of these pipes were made to last only 50–75 years before replacement. However with their constant use and low rate of replacement, many of today's water infrastructure is over 100 years old and is beginning to fail.

One such water infrastructural problem is combined sewers. These pipes carry both sewage and storm water runoff to wastewater treatment plants during heavy rainfall, and date back to the days when there was little distinction between storm water and sewage — city dwellers just wanted the sewage out of the city as fast as possible. Combined sewers remained common, specifically in the Northeast until the early 20<sup>th</sup> century.

Most of the time, combined sewers route all of the water to the wastewater treatment plant. But in large storms, the volume of storm water and sewage can overwhelm the wastewater treatment capacity. If the volume of water is too much to treat, the wastewater and sewage mixture begins to backup and can lead to sewage backing-up into basements and city streets. In order to relieve the system and to prevent sewer backup, the system dumps raw sewage into nearby lakes and streams to prevent further backup. This is called

“Combined Sewer Overflow” (CSO) and causes a sanitary, environmental, and ethical problem.

Syracuse, NY is one such city that suffers from combined sewers and the effects of combined sewer overflows. Although the city has tried to limit its effects in recent years with the building of CSO storage facilities, the problem persists.

This thesis will investigate how wastewater and sewer overflows can be rethought of as an urban amenity in which the architecture can exploit this infrastructural problem and reconstitute these buildings into the urban fabric with water as a programmatic catalyst. Looking at the experiential qualities of water in its three phase change states—solid, liquid, and gas—as well as the “Living Machine” wastewater purification technique, will lead to an architecture in which water and program are intrinsically linked through different experiences and wastewater is purified onsite, thus helping to relieve the combined sewer system. Surface will be seen as a mediator or edge condition in which performative modules are aggregated throughout the site in differing densities to allow for a variety of different public activities and interactions with water throughout the different seasons.

# TYLER RUMP



## Ladies and Gentlemen We Are Floating in (Form and) Space

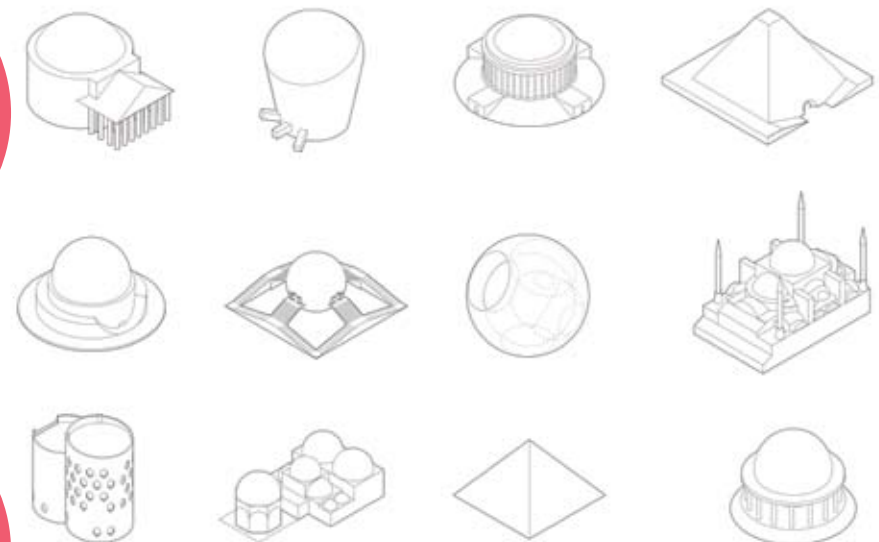
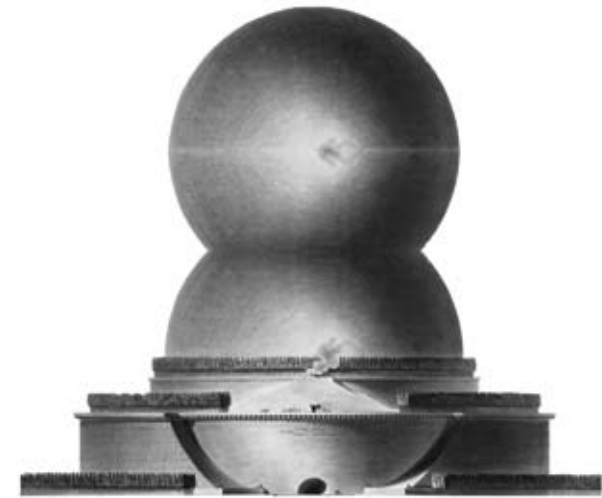
This thesis identifies a deficiency in the demonstration of the intrinsic value of the primitive solid<sup>1</sup> within contemporary architecture. Even when present in current form-making strategies, the intrinsic value of the primitive solid is deflected to or masked by legibility of process,<sup>2</sup> indexing of program,<sup>3</sup> or ornamental façade treatments.<sup>4</sup> In other words, the aesthetic and spatial qualities of the primitive solid are obscured by reductive or relational formal justifications.<sup>5</sup> Through historical analysis and speculative design, this thesis project aims to reemphasize the aesthetic and spatial qualities inherent to primitive solid forms.

Parallel to the study and use of primitive solid forms, the design investigation will seek to rejuvenate a typology that is of little value to the discipline of architecture, the developer-driven shopping mall. Because of their large size and complex programming, malls suffer from long corridors and confusing retail space organization. And because of their suburban locations, most malls tend to be single story buildings that are basic extrusions of the floor plan resulting in structures with low design value and compromised presence within their suburban contexts.

The formally diverse, legible, and monumental aesthetic together with the spatial qualities of primitive solids offer solutions to the bland, uninspiring, and undifferentiated retail spaces of shopping malls. Through careful curation and orchestration of aesthetic and spatial experiences, this thesis seeks to employ primitive solid forms and their inherent formal spatial qualities to simultaneously renew the significance of the primitive solid within the discipline of architecture and the shopping mall building typology within contemporary culture. Aesthetically, this project recuperates monumentality and the potential civic presence of shopping malls comprised of primitive solid forms. Formally and spatially, this project presents new assemblages of primitive solid forms that demonstrate the sufficient nature of the primitive solids as a form and space making device for contemporary architecture.

- 1 Primitive solids include spheres, cubes, cylinders, and pyramids.
- 2 See Bjarke Ingels Group, *TEK Cube*, Taipei, 2010.
- 3 See MVRDV, *Silodam*, Amsterdam, 2003.
- 4 See Herzog & De Meuron, *Signal Box*, Basel, 1994.
- 5 "reductive" and "relational," terms adapted from "Undermining and Overmining," coined by Graham Harman in "The Quadruple Object." Zero Books. 2011

# NATE RUSSELL





## Civic Composition

### An Architectural Solution to an Urban Problem

A city is not an accident but the result of coherent visions and aims. It is an invention of the human spirit.  
— Leon Krier

This thesis asserts that cities are growing inefficiently, and that suburban development constitutes a waste of the world's resources.

Urban theorist, Vishaan Chakrabarti, in his book "A Country of Cities" states "recent data from the U.S. suggests that economic growth and job creation are stronger in city centers and poverty is rising faster in the suburbs. There is also a link between climbing gasoline prices and foreclosure rates in suburban communities."

The growth of suburbs causes people to rely on the use of automobiles.

Dispersed civic infrastructures and the undertaking of routine daily activities, both in suburbia and in cities, cause an accumulation in commuting time and the segregation of places according to their use.

This thesis — "Civic Composition: An Architectural Solution to an Urban Problem" — proposes a solution to such problems: the creation of human-oriented cities with concentrated civic infrastructures.

The investigation begins with an analysis of the "New Urbanism" movement — a movement that has tended to produce projects that are human-oriented, dense, pedestrian friendly, and transit rich. Working at a site in downtown Houston, this thesis proposes the creation of a series of interventions at an urban scale.

# KAAN R. SANALAN



## Shadow Structure Waiting for the End of Time

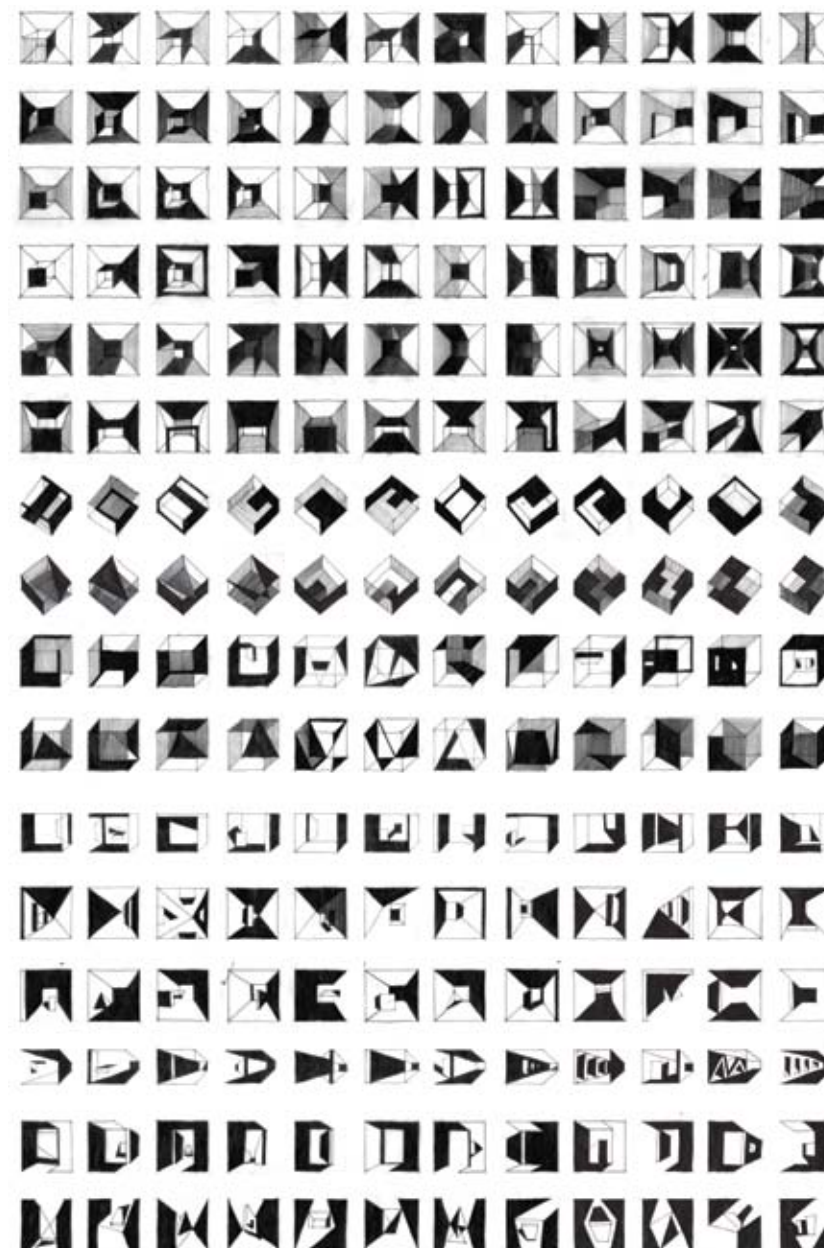
Light and shadow allow us to see and understand physical beauty, to discern the depth and dimensionality of objects and space, and to modulate time, space and the world outside. Yet those seemingly obvious truths have been less and less significant in a world where the use of electricity and the convenience of artificial lighting have reduced the role of architecture in defining time and place. Today, it is all too common to inhabit architecture where time can literally stand still and spatial distinction hardly exists.

This thesis proposes to reestablish the connection and relationship of people with time and place through an architecture of structure and surface, light, and shadow. Examining the various ways that structure and surface could intensively manipulate and play with those relationships will result in a deeper understanding of how light and shadow bring space to life. Such an architecture, rather than activating programs, such as watching TV or reading books, is itself engaging and entertaining. This thesis proposes to use architecture to entertain those who are waiting. The architecture itself will become the performance, the story, or the game that activates space.

Through the redefinition of light and shadow as an effect of structure and surface, this project explores the different ways structure and surface relationships play a role in the design of a playful and entertaining architecture. Structure becomes the creator of shadows and surface becomes the receiver of light and shadow. By taking existing architectural photography and translating it into structure and surface, light and shadow conceptual studies, a different understanding of the space is revealed. Inspired by the transparent, layered, and spatial ambiguity of Louis Kahn's drawings, this project develops those relationships in series.

Structure and surface relationships will be explored in the design of an airport terminal where the sole purpose of the space is to wait. The airport design will draw on the various techniques discovered and developed through the analysis of architectural photographs and Kahn-inspired drawings, such as transparencies, repetition, and space ambiguities, to design an architecture defined by structure and surface, light and shadow that is activating, engaging and fun.

# STEPHANIE Y. SHEN





## Non-Stick

### Reimagining the Kitchen-to-House Relationship

What is the house doing except concealing [...] mechanical pudenda from the stares of folks on the sidewalk?<sup>1</sup>

— Reyner Banham

Attempts to create new forms or shapes in architecture today is ultimately less interesting than looking at old things in new ways.<sup>2</sup>

— Robin Evans

The kitchen prototype employed within the Western suburban home since the Second World War is stuck: incapable of evolving. This thesis — “Non-Stick, A Reinterpretation of the Kitchen-to-House Relationship” — proposes to unstick the American kitchen.

Herein lie the issues at stake within this thesis: architecture’s attitude towards the kitchen in relation to the house. Rather than the historical kitchen as a perfunctory zone comprised of efficient non-architectural objects — Banham’s “mechanical pudenda” — or as “architecture through the kitchen” — the kitchen as collection of orthodox modular components — this thesis examines the possibility of fashioning a revised category whereby the kitchen’s objects might be understood as architecture.

Rather than subordinating the quotidian objects of our kitchen’s

everyday life to the compartmentalized underpinnings, and box-like spaces that mediate and govern the average kitchen’s current organizational strategies, “Non-Stick” seeks to foreground the manipulation of the peculiar qualities of these objects in order to capitalize on their potential to inform new sorts of domestic architectural arrangements. Putting conventional iterative techniques of architectural projection to work in pursuit of a re-conceptualized “house” comprised of the unfamiliar familiar, the architectural drawing is revisited as a site for the production of a “reality that will end up outside.”<sup>2</sup>

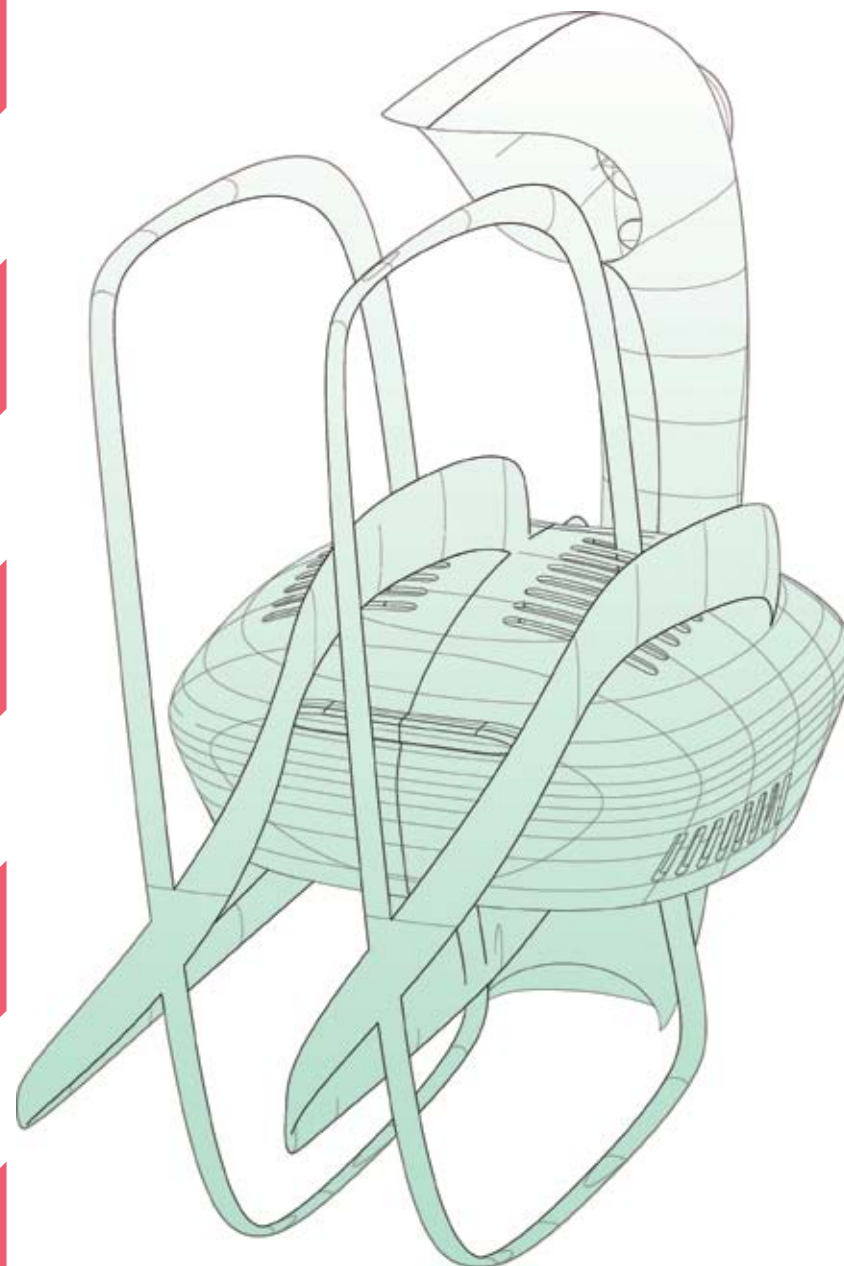
Via these projective processes, the kitchen is no longer determined by a rigid envelope, but is instead itself determinative: the building’s envelope pliantly conforms to an agenda set by the hand-mixer, the microwave, and the sink.

“Non-Stick” is situated between two ideas about site: the first being site as geography, plot, and location — a suburban community in Scottsdale, the second, being site as drawing, discipline, and projective technique. “Non-Stick” is situated within a discourse regarding the production of architecture itself.

<sup>1</sup> Banham, Reyner. “A Home is Not a House,” *Art in America*. 1965, volume 2, NY:70-79.

<sup>2</sup> Evans, Robin. *The Projective Cast: Architecture and Its Three Geometries*. N.p.: MIT Press, 2000.

# ADRIENNE SHERIFF



## Catch and Release

### Rethinking Seoul's Streetscape via the Interplay Between Catch and Release

The street is a room of agreement. Through-streets, since the advent of the automobile, have entirely lost their room quality. I believe city planning can start with the realization of this loss by directing the drive to reinstate the street where people live, learn, shop and work as the room out of commonality.

— Louis Kahn, Speech at Detroit, 1971. From "Draft-AIA National Gold Medal — 1971"

This thesis proposes the emergence of a new sort of streetscape at 어울마당길 (Eoulmadang-gil) in Seoul's Seogyo-dong neighborhood. Following Kahn, this thesis proposes a new paradigm for the urban street in the contemporary Asian city — a paradigm which seeks to understand the diverse experiences of any given street via the interplay between 'catch' and 'release'.

The many catch-spaces found in 어울마당길 are composed of storefront imagery and objects that direct people's attention such as signage, clothes hangers, goods displayed on the walls, canopy shading, and queues of people. However,

the condition of the site profoundly lacks release — places of relaxation that alleviate the overstimulation inherent to catch-space, such as seating benches and micro gardens.

This thesis' site at 어울마당길 is a linear parking lot within the median, surrounded by a congested commercial urban fabric full of "catch" typologies. Rather than introduce an intervention that rejects this context through a wholly "release"-based approach, this thesis proposes to retool the existing elements of catch to synthesize the vibrant commerce of 어울마당길 with a more breathable urban scenario.

The neighborhood is heterodox. To the northeast end of the street, an old railway will be transformed into a park due to the replacement of the subway underground. The Hongdae train station will be located where the old rail way connects to 어울마당길, then the street extends with the underground parking lot proposal. To the south end of the street, an obsolescent coal power plant will become a cultural center. Therefore, the site can be understood as a spine connecting each of these proposals.

# CHAEWAN SHIN





## Finding Modularity

### Embracing the Volatility of the Refugee Camp through Flexible Scalar Solutions

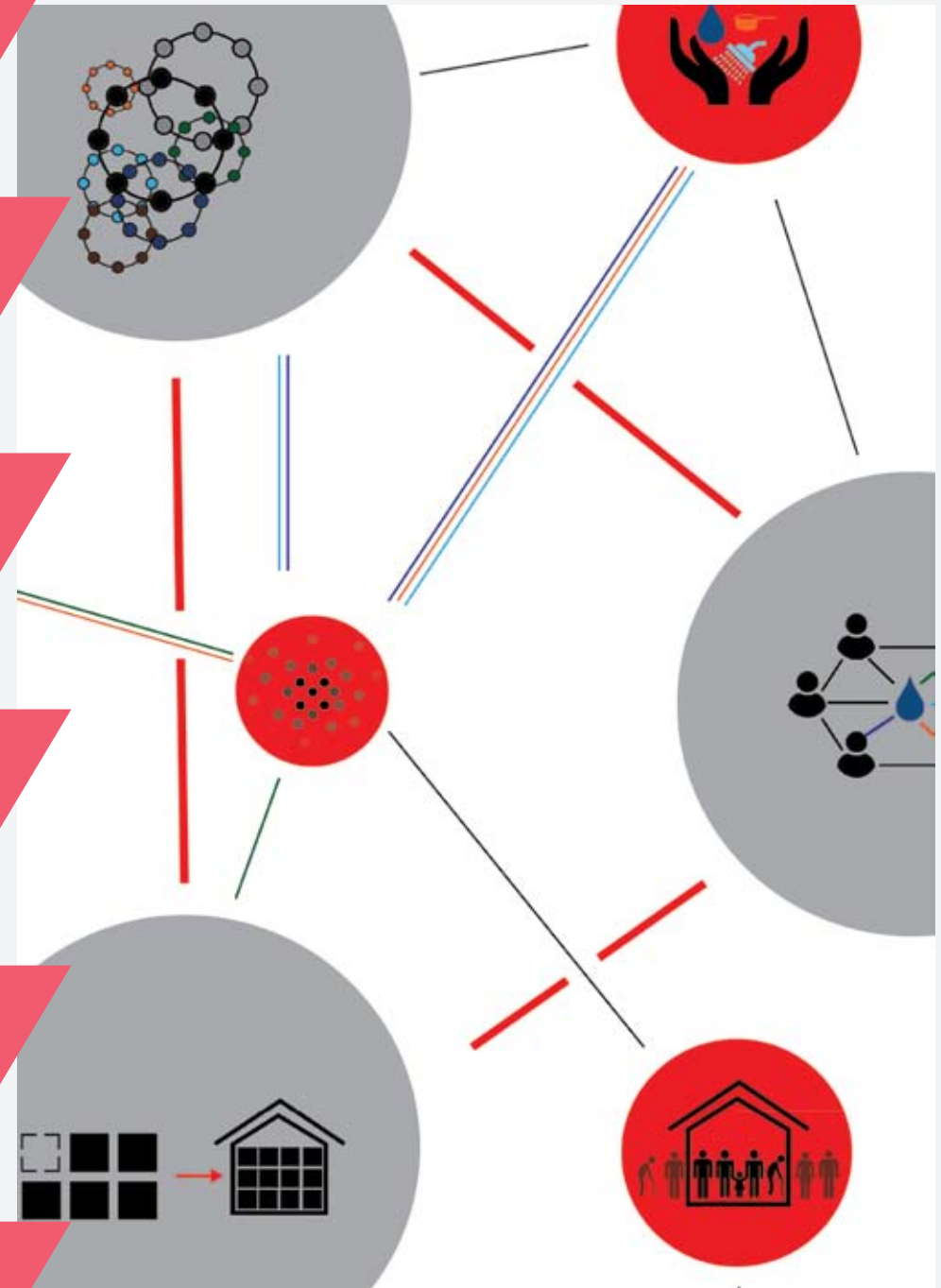
Architecture can act as a catalyst for a more site aware design process that embraces the uncertainty and flexibility of the refugee camp. In the Al Zaatari refugee camp in Jordan, the displaced population of Syria attempts to carve out a temporary living in the uncertainty of their situation. This thesis centers around the creation of a community of sixteen families that takes into account the changing needs of the individual and community and their relationships to the urban scale. A series of modular buildings will be used to form the framework of a community that is designed to develop over time.

The intrinsic relationship between an individual building and its urban setting is understood in nearly every culture. Each individual influences the development of the city by contributing ideas from his or her culture, community, and context. Architecture acts as the catalyst for turning communal desires into habitable form, resulting in an urban design that can be seen as a chronology of the culture it represents. The refugee camp progresses through the typical phases of urban development at an accelerated pace. The rapid nature of development creates refugee camps that lack the cultural influences and association of

parts to whole that allow other cities to support their residents. Residents currently connect through the network of mosques and communal kitchens dispersed across the site. These programs provide some of the only urban structure found on the site, and offer a foundation for organization that links the homes of the residents.

The role of the architecture in the refugee camp is that of a mediator, balancing the strict order of the governing organizations with the habitual needs of the residents. The generic pre-fab structures that are currently implemented fail both interest groups with their lack of adaptability. Units are often renovated in an attempt to assemble a feeling of place, and quickly degrade into an unorganized patchwork of provided shelters and the found materials used to alter them. Through design, a building solution can be implemented in the refugee camp that uses recycled material found on site in order to create a culturally relevant housing solution that embraces the need for phasing in the project. Housing units, local communities, and urban infrastructure will embrace the inevitable alterations, and use a framework to structure the growth and flexibility needed on site.

# JULIA A. SLATER



## The Meat You Haven't Met Exposing the Production-Consumption Gap

Thousands of miles away in a remote and barren landscape, a young steer feeds on grain rations with 1,000 pen-mates — **EATING TO BE EATEN.**

Meanwhile, an obese man devours a greasy burger for \$1 at a fast food joint in a commercial strip — **EATING TO EAT.**

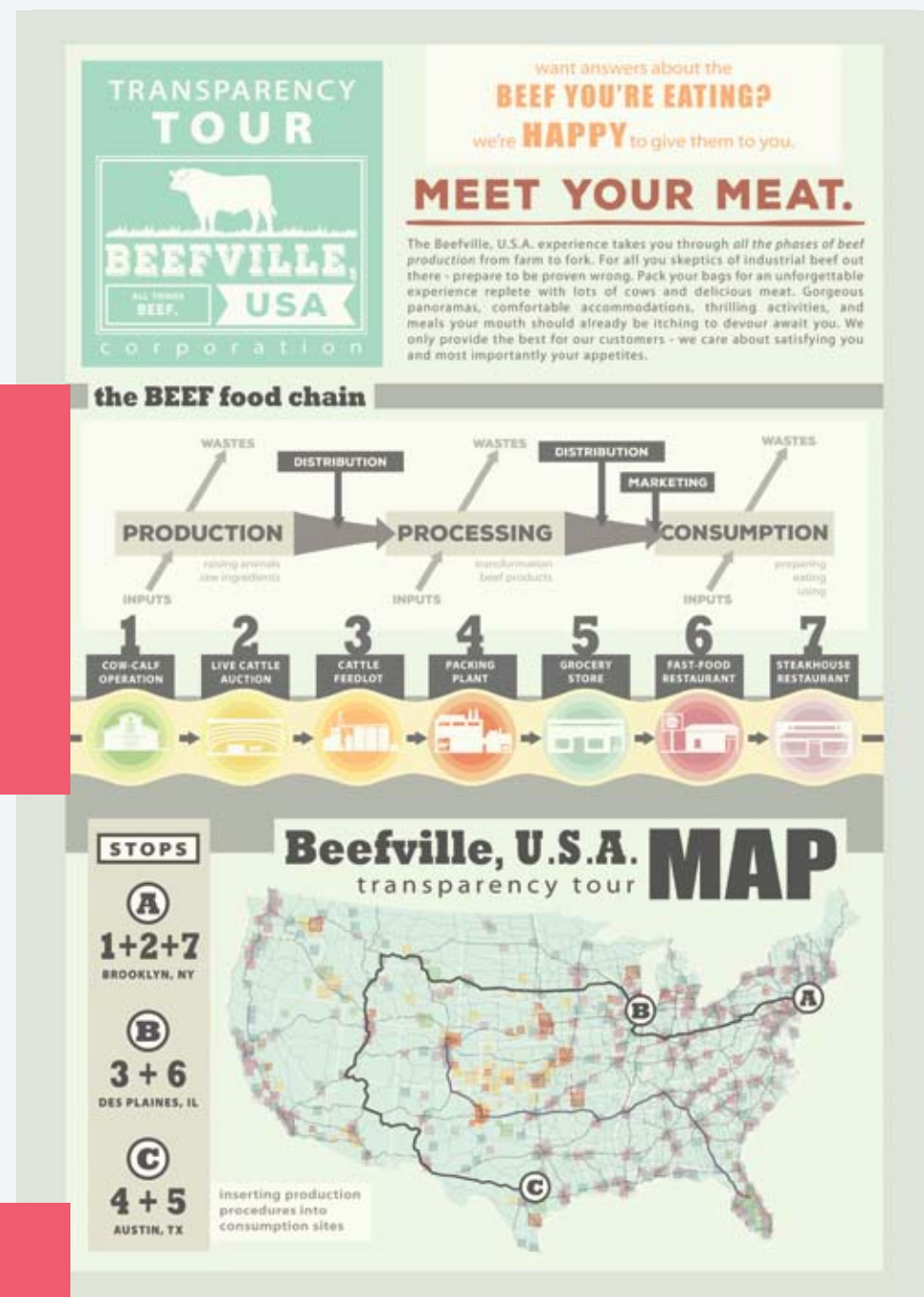
The chains of commodification in an industrial, conventional food system are spatially and temporally complex. Consumers are immersed in a global economy of abundant, convenient, and cheap food. However, in reality those products emerge out of locally based systems at the peripheries of geographical and cultural perception. "The Meat You Haven't Met" critically addresses how the inconsistent agency of architectural design in the conventional food system provokes the fragmentation of production and consumption spaces through the focused lens of industrial beef production.

Many meat consumers are unconscious of an intruding architecture and infrastructure that destroys natural landscapes, symbiotic relationships, and local communities in order to support such a sizeable industry. Industrial beef producers refuse to acknowledge the serious, immediate and long-term ramifications of their desires to control fickle nature through synthetic, manufactured means for economic gain. Furthermore, they employ deceptive imagery in marketing schemes to capitalize on lack of public knowledge. Yet,

as contradictions about industrial beef are publicized, consumers demand a more transparent food system. Where can architecture designed for consumption intersect with earlier phases of production and processing to link these seemingly disparate yet completely interdependent experiences?

This thesis contends that architecture can be a tool for exposing the social, environmental, economic, and political problems caused by industrial beef production and excessive cultural consumption of beef in order to promote meaningful change. A narrative is established in which a fictitious beef corporation seeks the expertise of an architect to design a "Transparency Tour" as part of a greenwashing campaign. However, while the intent of the corporation is to mislead consumers to gain loyalty, the architect seizes the opportunity to infiltrate the system and expose realities that would have remained hidden. Subversive design interventions within three stops along the tour deliberately juxtapose production and consumption experiences: the cow/calf operation and steakhouse, the feedlot and fast-food restaurant, and the packing plant and grocery store. The challenge is to deceive the deceiver with unavoidable, slit-like moments along a pre-determined sequence that explicitly force tour people to confront the realities of a complicated, messy network that aren't so easy to digest.

# REBECCA SOJA





In the case of masks, the underlying pattern or typological counterpoint is the human face behind them.

The face is a powerful pattern that can be easily recognized as we can perceive face like expressions on buildings' facades, electric outlets, or even a grain of wood.

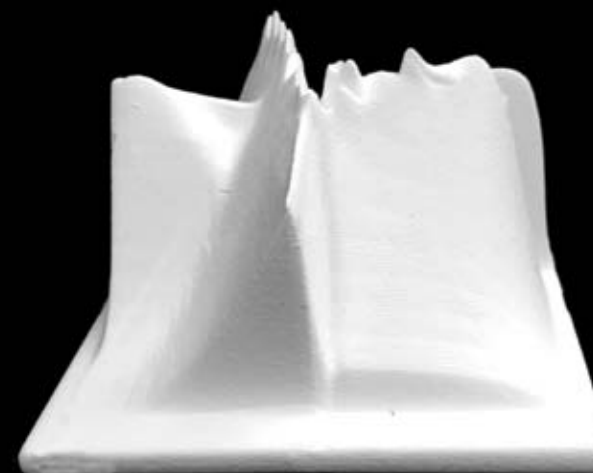
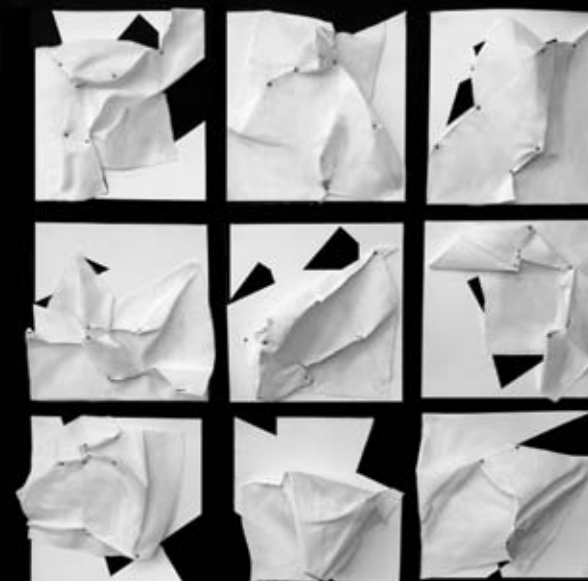
— Atelier Bow-Wow, "Masks"

Contemporary diplomatic spaces are defined by the tension of maintaining both security measures and high design. Late 20th and early 21st century attacks on missions of the United States of America have led to increased security standards in both new and existing missions, which led to the construction of highly secure embassies and consulates that resembled military fortresses. In an effort to counter the resultant sense of isolation within foreign communities, a new paradigm of design excellence was implemented under the Obama administration. The new design protocols prioritize the communication of a sense of strength, confidence and cultural engagement in embassy and consulate design — essentially, the construction of a new face of the United States to be displayed abroad.

This new design standard led to several visual and spatial interpretations of political ideal — most visibly, the notion of transparency. While total transparency is often viewed positively,

instances of detrimental transparency, such as the Wikileaks decryption of 2011 suggest that, as in diplomacy itself, diplomatic architecture should implement a system of masking, such that particular features are silhouetted or downplayed rather than starkly exposed.

The design for this thesis project, titled "Styling Statecraft," is inspired by the masking effects of military garments on the forms of the individual representatives of assertive diplomacy. Darting, cording and studing are techniques used in garment design to adhere to the general mold of the human form while pronouncing features that specifically convey power and imply authority. By analyzing both the established and emerging programmatic needs of embassies of the United States of America, the integrated programs can take on a specific form while being masked in a manner similar to way the human form is strategically emphasized, hidden, and revealed by military uniforms. The ultimate goal is to architecturally demonstrate the perceived supremacy of the United States through the design of the new embassy in London. By engaging the newly purchased site in Nine Elms, and translating these volumetric and decorative applications, *Styling Statecraft* will architecturally emphasize the strongest qualities of United States diplomacy.



## Negotiating the Urban/Rural Edge in Cape Town, South Africa

The Philippi Horticultural Area (PHA) links Cape Town's cultural, social, and ecological food systems. The 7500-acre area yields 50% of Cape Town's vegetable produce, provides for surrounding low income communities, and is located in a biodiverse region containing the Cape Flats Aquifer, an abundant water source for horticultural activities sheltering over ninety bird species. Historically, the area served as a buffer zone between the city's racially segregated areas and is currently undergoing land reforms to accommodate emerging farmers following Cape Town's post-apartheid construct.

Conflicting perspectives on PHA within Cape Town contest what is urban and what is not, and what should constitute the city landscape to propel a modern city image. Despite the PHA's many resources, its viability for food production remains in question. This distinctive green landscape within Cape Town is under constant pressure for rezoning by residential developers.

This thesis studies the role of architecture and the potential for design in influencing larger food systems bound by socioeconomic and ecological constraints. Determining the value of the PHA depends on sanctioning its viability as an important node in the broader food system of the city, and contesting

normative spatial zoning as a device of segregation in city planning. How can the modern/not-modern identity resist being synonymous with urban/rural and be reimagined as a dynamic and complex mixed system? How can the urban permeate the rural in landscapes through an ecologically and socially sustainable process? How can design connect spaces of food production and consumption in the city?

We believe that by redesigning the edges of farming, residential and commuting activities and how they intersect, actions can be fostered to solve issues of public space—restating who the city belongs to and what elements make it desirable to live in. It is also an opportunity to respond to the recurring problem of theft on the site, environmental preservation challenges, and, more specifically, inequalities in the current urban food system. This includes cost, distribution, and quality of food. Therefore, the PHA is reimagined as a base for a network of bicycle, pedestrian, vehicular, infrastructural, and commercial paths connected to the larger city of Cape Town. Through a designed landscape of these paths, we will design a series of activity nodes and edges that respond to the natural landscape and the issues of the occupants of the PHA.

# DANIELLE FOISY & TASKINA TAREEN





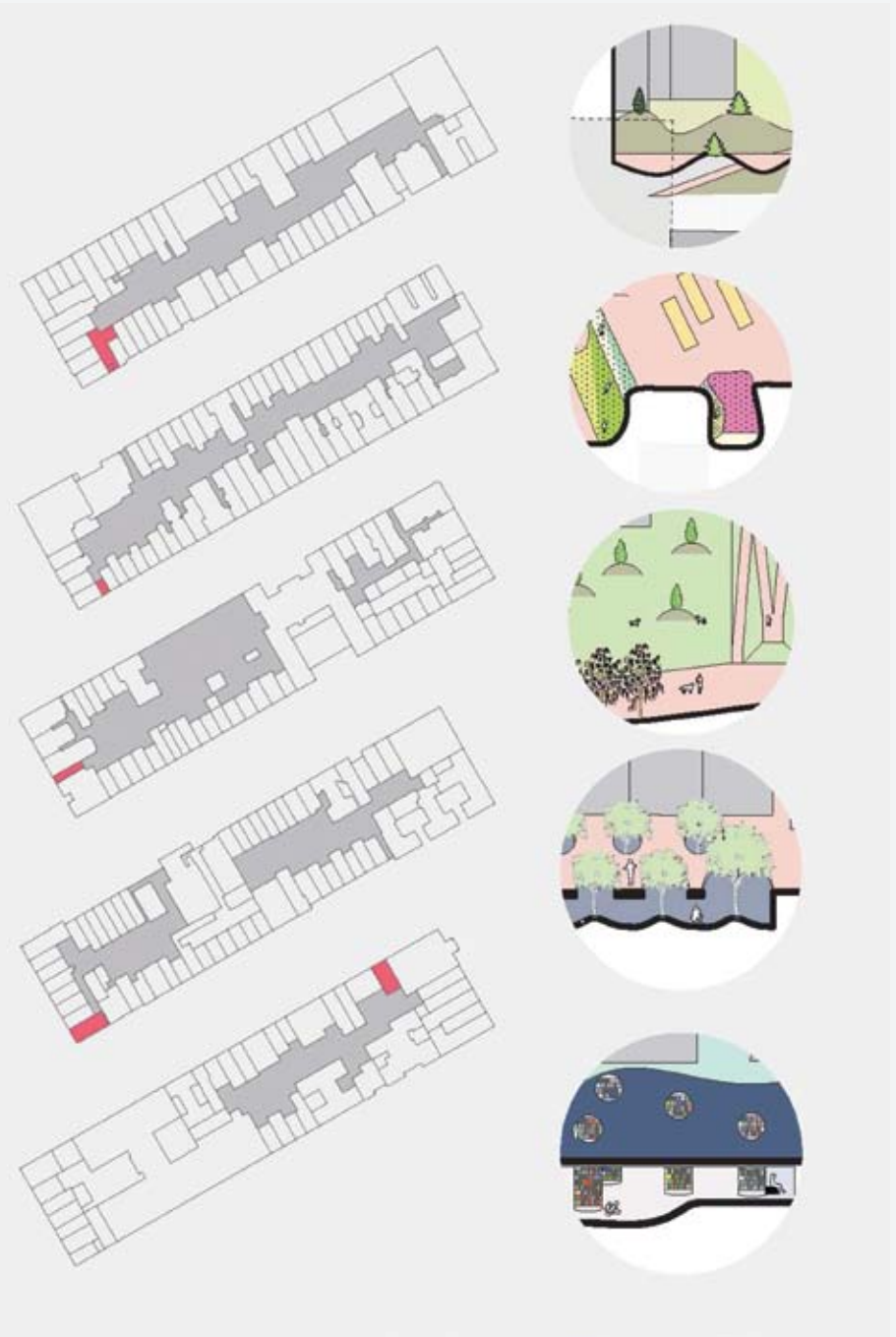
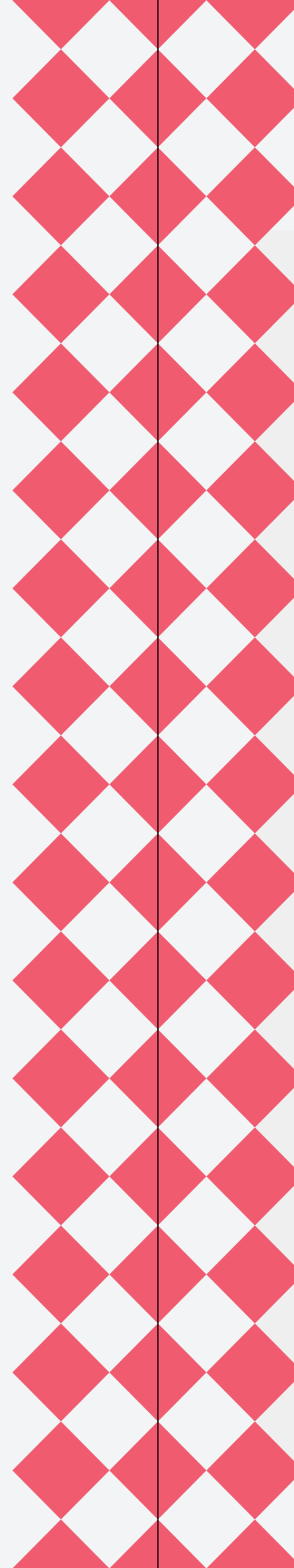
## Breaking the Block Providing Access to Manhattan's Courtyards

New York City has approximately 29,000 acres of urban open space that is owned and managed by the Department of Parks and Recreation. However, because of the city's population density, New Yorkers have less open space per capita than residents of almost any other American city.<sup>1</sup>

In order to provide more open spaces, the design intends to activate the interior courtyards of each city block and develop a network of a variety of public spaces for communal uses. Due to the thick walls of buildings bounding the interior courtyards on the perimeter, it is difficult for the public to access these spaces. The thesis aims to create a network of threshold conditions that puncture through the blocks. The opportunity lies in the small one story building located beside the corner lots, which are a result of the city grid and zoning laws. The design for these buildings not only introduces a new architectural typology for a system of gateways into the courtyards but also creates a buffer zone in between the interior and the exterior, the public and the private, the solid and the void.

<sup>1</sup> City of New York. 2007. PlaNYC: A Greener, Greater, New York, Mayor Michael R. Bloomberg, The City of New York. <http://www.nyc.gov/html/planyc2030/html/home/home.shtml>

# WEI-NI TING



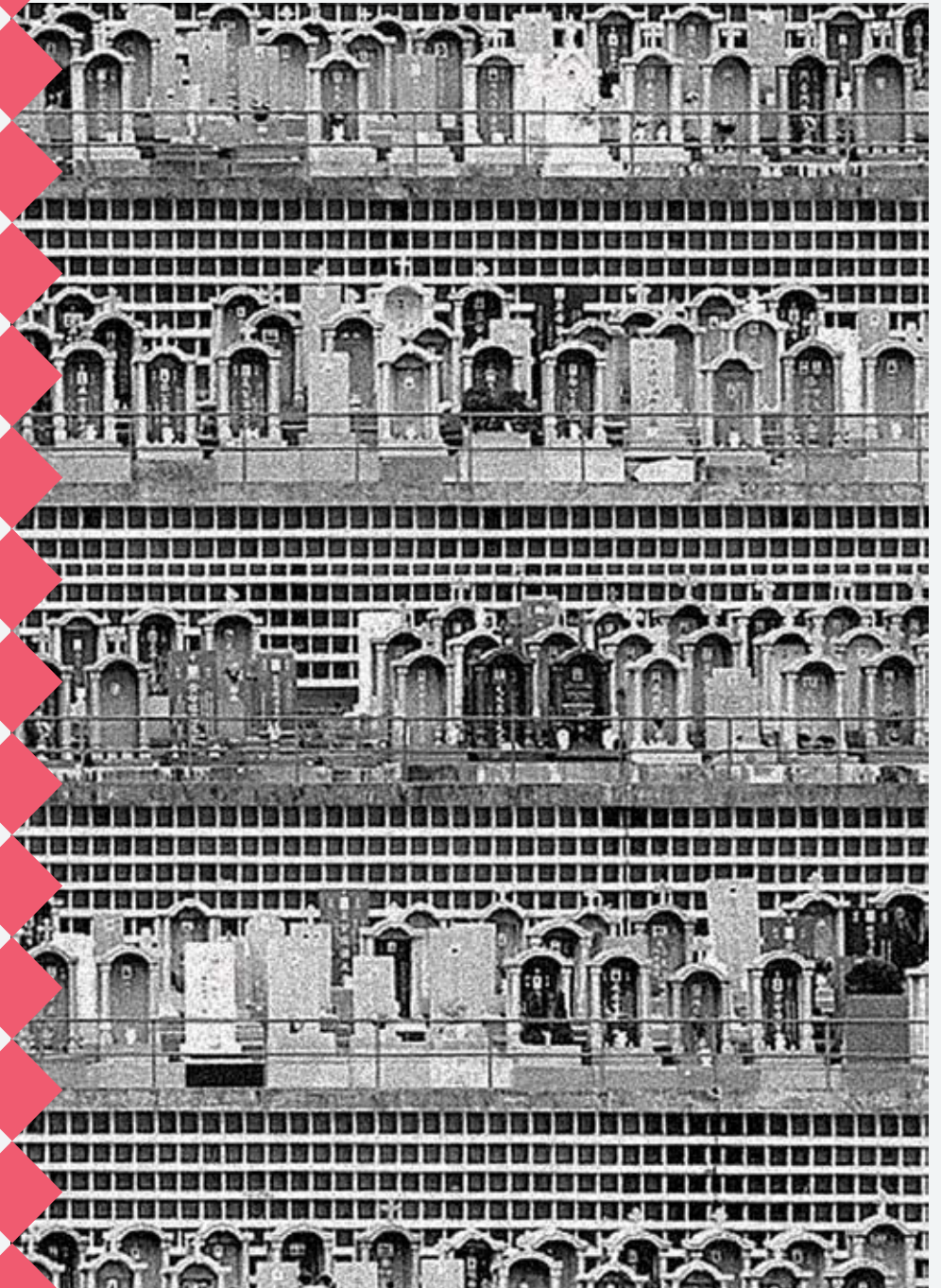
## Modernization of Death Spaces Solution to the Problem of Lacking Death Space in Hong Kong

SIMON TSE

Death spaces, as the ultimate destination of lives, hold an important role in carrying memory and emotion for individuals as well as the community.

Years before Hong Kong was urbanized, ancestral temples used to be the spaces to commemorate the deceased. They were located in the center of the community, and were the most celebrated space. When Hong Kong was urbanized, death spaces were shuffled to a remote area in order to handle the high number of dead bodies. Now, spaces to store the remains of dead bodies or ashes are extremely rare. In preparation for the increasing number of deaths in the coming years, it is necessary to think about how death spaces can be updated and modernized in order to satisfy the need for such spaces.

Digital media opens up a new dynamic in maintaining and recalling memories. It requires digital ancestral halls to provide spaces for the data to be stored, and for people to commemorate deceased people in the digital age. Using existing pedestrian bridges, these halls will once again be placed in the very center of the community. This thesis proposes the fashioning of a new culture of remembrance of those who have passed away. People will be able to visit casually as a daily routine. The proposed digital death spaces merge the traditional idea of ancestral halls with digital information. The infusion will generate a new idea of mourning and a new ritual of remembrance.



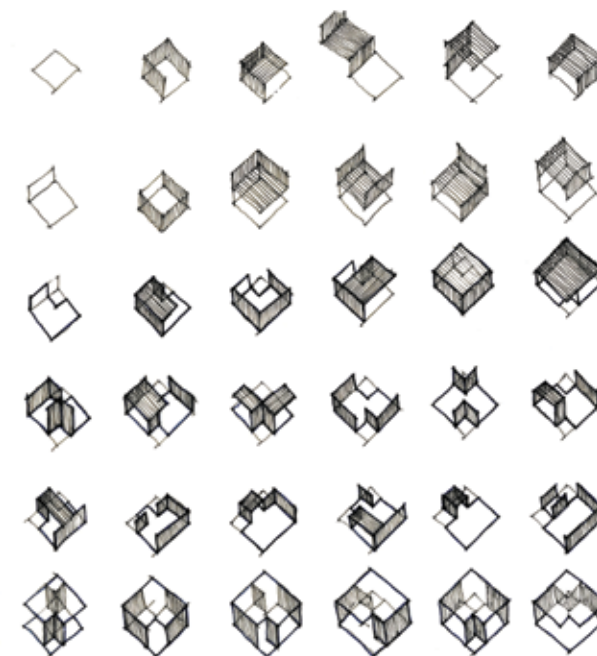


The progression of Chinese American culture in Boston, MA indicates changing attitudes towards community development through a desire for the preservation of cultural identity and the growth of coalitions. These various organizations provide essential services for the wide range of occupants from the local area and abroad. The disjointed community infrastructure caters to specific groups and age ranges, but is lacking in drawing groups together for their mutual benefit. Chinatown holds different meanings and significance to the layered generations that form the neighborhood. A demand for introverted and extroverted architecture is mediated by transformable elements to promote intergenerational interactions, particularly between senior residents seeking sanctuary, and younger generations that consider Chinatown as a center for a symbolic ethnicity. Because this correspondence between generations is important to foster, community infrastructure should provide both a cyclical and linear trajectory of transformability over time to best form spaces for cross-generational preservation of culture, cultivation of relationships, and sharing of resources without overstepping boundaries and issues of privacy.

The library is a center for information, and has historically been perceived as a building block of community. Adding a library to Chinatown reinforces the devotion to community development by contributing safe gathering spaces,

resources to encourage personal interests and learning, and an avenue for ethnic identity assertion. Beyond books, the library requires additive programs — a youth clubhouse, subsidized housing, gymnasium — that are specific to the social and cultural implications of the specific site. The institution provides services as well as redirects to established organizations that may not adequately communicate or promote their services.

The ability to change at different scales, for different purposes, and at different intervals of time is crucial especially for a neighborhood that accommodates generations with disparate cultural attitudes. Transformability becomes integral as an interface between generations as well as negotiating the threshold between the Chinese American and non-Chinese communities. Temporary extrovertedness reaches out to the non-Chinese community during major holidays/events, as temporary introvertedness allows for restoration and respite. These cyclical transformations create distinct spaces for privacy at times, and overlapping spaces for cultivating intergenerational relationships at others. These elements may also contribute to a linear trajectory of transformability that anticipates a development towards a primarily extroverted institution as immigrants continue to live and interact with generations of Chinese Americans.



“Maker” culture is a developing community stemming from the rapid change and advancement in digital fabrication as well as emerging DIY initiatives. Information and tools that were once solely reserved for large manufacturers are now available to anybody with a computer. This changing cultural movement is rapidly evolving from a hobbyist scale to a manufacturing revolution. This shift in the industrial sector is provoking a discussion around the failure and revival of urban manufacturing.

In this thesis, Long Island City is used as the testing ground to advocate the programmatic relevancy of the factory as a place of collaborative enterprise and identity formation in the urban sphere. Currently in transition, Long Island City is shifting from its industrial roots and becoming more commercialized and residential. However, Long Island City still holds its identity of creation. The developing area is becoming one full of studios and galleries occupied by artists and designers starting out their independent careers. The site that this thesis will study is located on seam between a commercialized neighborhood and a

yet untouched industrial neighborhood. The building takes on the role of housing small-scale makers that are starting to focus on bottom-up creation. The makers are the new industrial entrepreneur, who instead use open source design and 3-D printing to bring manufacturing to the desktop. The homogeneity of most artist studios creates constraints as to how the studios might be used by the tenant. The idea of this maker space is to look at how architecture can create an adaptable and evolving environment catering to the changing needs of users as well as the evolution of their technology, thus bridging architecture's autonomy with the bottom-up, do-it-yourself culture as a mechanism for achieving cultural relevance. This adaptive reuse project aims to keep manufacturing within Long Island City and make industrial creation a more public program. The building explores the diverse ways that manufacturing with 3-D printers can start to be introduced into the urban fabric, while acknowledging the “new industrial revolution” of maker technology.





## Tower of Babel Assemblage of the Vernacular

CAROLA VEGA

How can a high-density, residential architecture development exemplify desirable qualities and characteristics inherent to vernacular dwelling devices?

This thesis argues that the simultaneous maintenance and celebration of the qualities of vernacular architecture can occur in a highly multicultural context through a complex assemblage of abstracted vernacular elements and typologies. The concentration of diverse populations and diverse spatial languages once made the *Tower of Babel* an impossible endeavor. This project problematizes density, revisits the part-to-whole problem, and re-presents the high-rise residential tower as a dwelling device that embodies, visually and spatially, a vast, rich array of strategies found in a variety of vernacular architectures.

Since its creation in the late 19<sup>th</sup> century,<sup>1</sup> the high-rise residential tower typology has a limited range of formal manifestations: the vertical stacking of standardized units, the iconic, bold primitive form, and the delicate, sculptural form. In each manifestation, the high-rise residential tower fails to relate to the multi-cultural context of the cities in which it is erected. To ameliorate this disjunction, this thesis project speculates on how the high-rise tower directly addresses and learns from the diverse spatial languages present within its context.

This high-rise residential tower confronts the problem of “the difficult whole,”<sup>2</sup> a problem defined by its inflections and interactions between its parts.<sup>3</sup> To address this “problem,” the primary form and space-making method employed in this project is halfway between collage and hybridization, avoiding both the absolute legibility of parts and the creation of a monolithic whole.

The aesthetics of assemblage found within and throughout this project are achieved through analysis of vernacular typologies and their embedded spatial thresholds. The careful study of rituals, spatial hierarchy and cultural relevance is paramount to adequately abstract and project forward vernacular housing typologies and their associated architectural elements. Through the incremental assemblage of familiar architectural typologies and elements, this thesis project ultimately reconstructs the high-rise residential project as a new type of dwelling device for the 21<sup>st</sup> century that achieves the density required within the urban context while maintaining the traditions of the vernacular.

- 1 Ford, Larry R. *Cities and Buildings: Skyscrapers, Skid Rows, and Suburbs*. Baltimore: Johns Hopkins UP, 1994. Print.
- 2 Venturi, Robert. *Complexity and Contradiction in Architecture*. New York: Museum of Modern Art, 2011. Print.
- 3 De Landa, Manuel. *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London: Continuum, 2009. Print.



## The Airport within the City A Sense of Place

Architecture's place in the global flow of people, identity, and the city can no longer be taken for granted. Architecture must consider the current conditions, the past histories, and future prospects of its relationships to identity and place within the changing city.<sup>1</sup>

The possibilities within the relationship between airports and the identity of the local have yet to be fully explored. In the past, designers have been concerned with studying the airport as a functional system, rather than exploring the complex airport machine and its effects on the experience of a broader range of constituencies. Even though many programs have been adjusted to the airport's complex system in an attempt to create a sense of place, airports have yet to respond to local identities.

Airports have become stressful, uninspiring, highly sterile, and at times un-relatable to their geographic locations. Airports have failed to reflect the

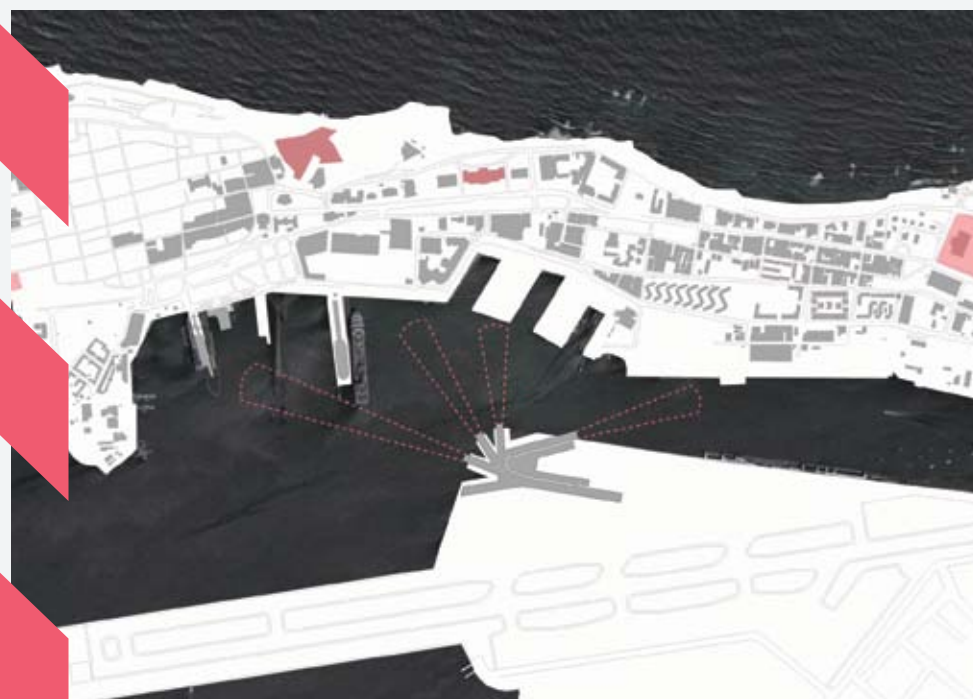
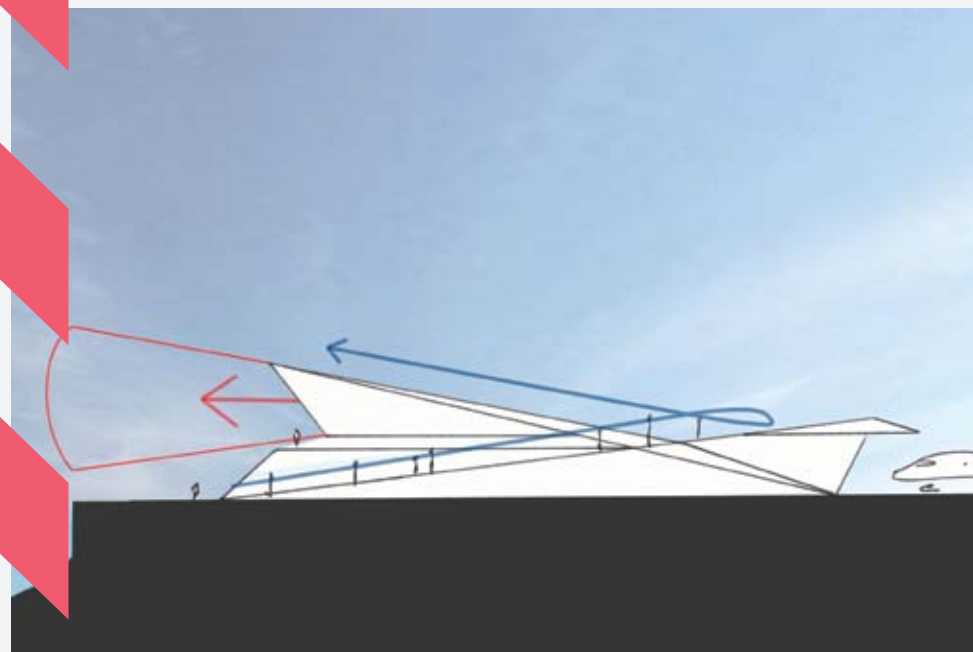
culture of their host cities, preventing travelers from experiencing their terminals as unique and memorable spaces. By not establishing a sense of character, airports miss an opportunity to elevate the passenger's travel experience.

Located in San Juan, Puerto Rico, this thesis — "The Airport within the City" — programmatically creates a space that is open to users arriving from all locations. As they approach the airport, visitors are able to see into the terminal, but as they enter the space, they relate to its location, to the various levels, and to opportunities to experience and access a range of exterior locales adjacent to San Juan Bay. One of the additional beneficial qualities of this site is its proximity to the Old City of San Juan.

Through the connection of the traveler to the culture of the city, the proposed airport terminal will provide a heightened sense of place to its travelers.

<sup>1</sup> Marc Augé, *Non-places: Introduction to an Anthropology of Supermodernity*, London: Verso, 1995.

# GUILLERMO L. FORTUNO VELA





## Hide & Seek

### Revealing the Political Agency within Architecture

Architecture must engage the overlooked and ignored.

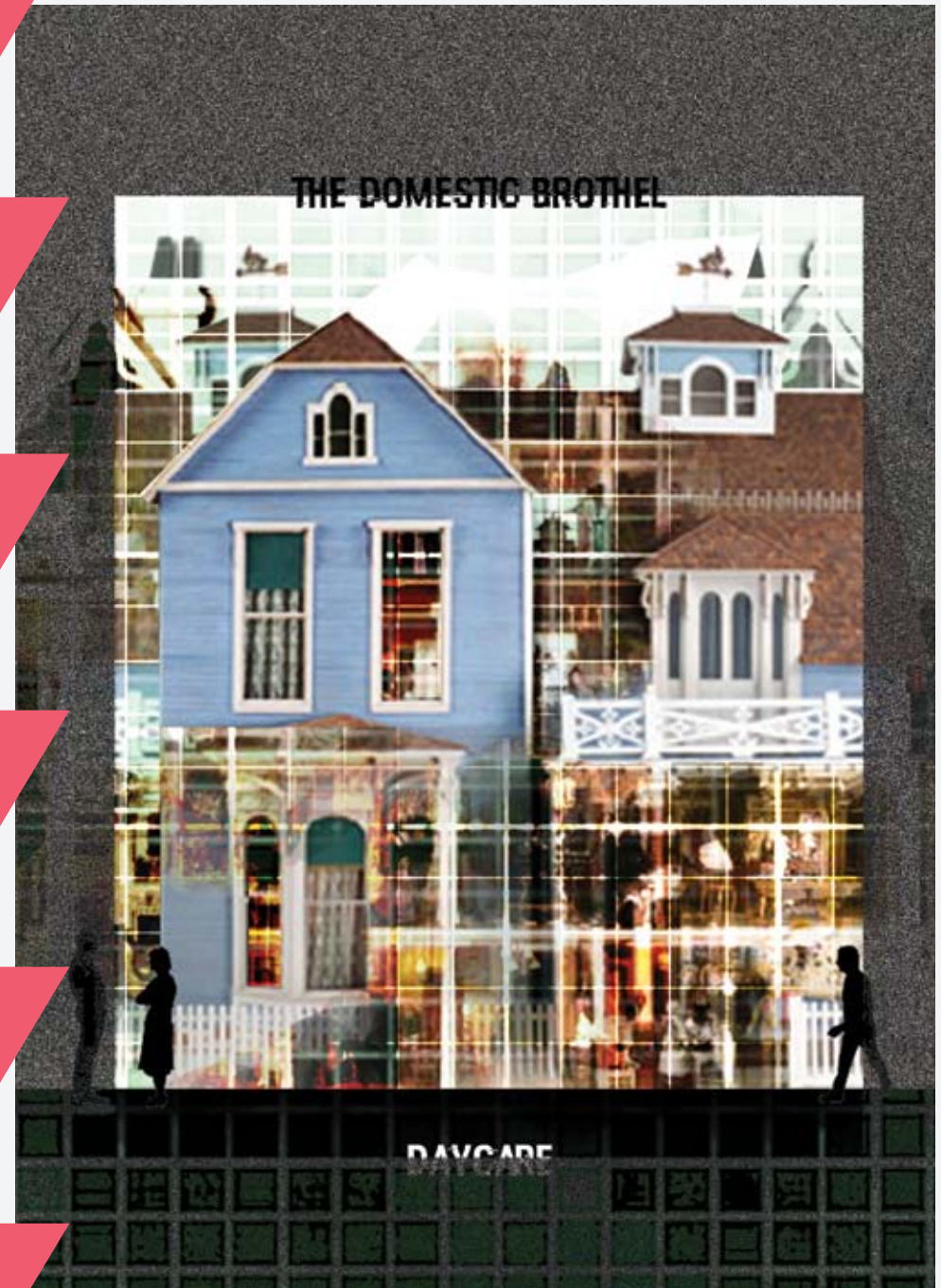
My thesis explores the dynamic game of Hide & Seek. Masked by the innocence of a children's game, Hide & Seek provides a simple yet powerful tool to reveal and expose the hidden. I assert that whether an architectural proposition conceals or reveals program, how it does so is inevitably revealing of ideology, power structures, social relations, and political bias. There is no such thing as neutral architecture. Architecture is an expression of power, which is used as a tool of propaganda to achieve, maintain, and display political agendas and power.

I will attempt to blur the home, brothel, and daycare in order to produce a complexly simple live-work relationship. The thesis will explore these relationships in Storey County, Nevada where prostitution is legal, one of the only areas in the country where this is the case. The prostitute can now work while still being able to care for her child with spatial proximity. This provocation contrasts heavily with today's brothel setup due to a restriction entitled, "Respectable Domesticity," whereby the brothel (which must house the legal prostitutes) must be located at least 400 yards away from anything considered respectable such as churches, schools,

and civic/cultural structures. This implicitly degrades the relationship between the prostitute and her child.

My thesis aims to call into question the house, a space that must act as a machine capable of concealing taboo work activities, enabling domestic living, and fusing the two through surveillance, autonomy, and privacy. The inside is no longer singular, but plural. There is no longer one inside but a multitude of insides within the interior. As the domestic brothel conceals and reveals an architecture of the interior, the barren industrial site and river landscape provide an opportunity for a blurring of the exterior to camouflage the children, prostitutes, and clients. A transformative exterior will inherently allow for seams where society can peek inside, deconstructing the social, cultural, and political biases constructed around prostitution. Hence, I aim to domesticate the brothel by hybridizing it with a daycare.

An architecture that breaks down the dichotomy between inside-outside, live-work, reality-fantasy, will be able to spatially support these women as both prostitute and mother. The space of the domestic that this thesis explores, a 19<sup>th</sup>-century construct, will transform between a space of prostitution and a space for the family.



## Revitalizing Place Restoring the Role of a Regional Architecture

The language is in truth a network, there is no one sequence which perfectly captures it. It is both a summary of the language and at the same time an index to the patterns.  
— Christopher Alexander, “A Pattern Language”

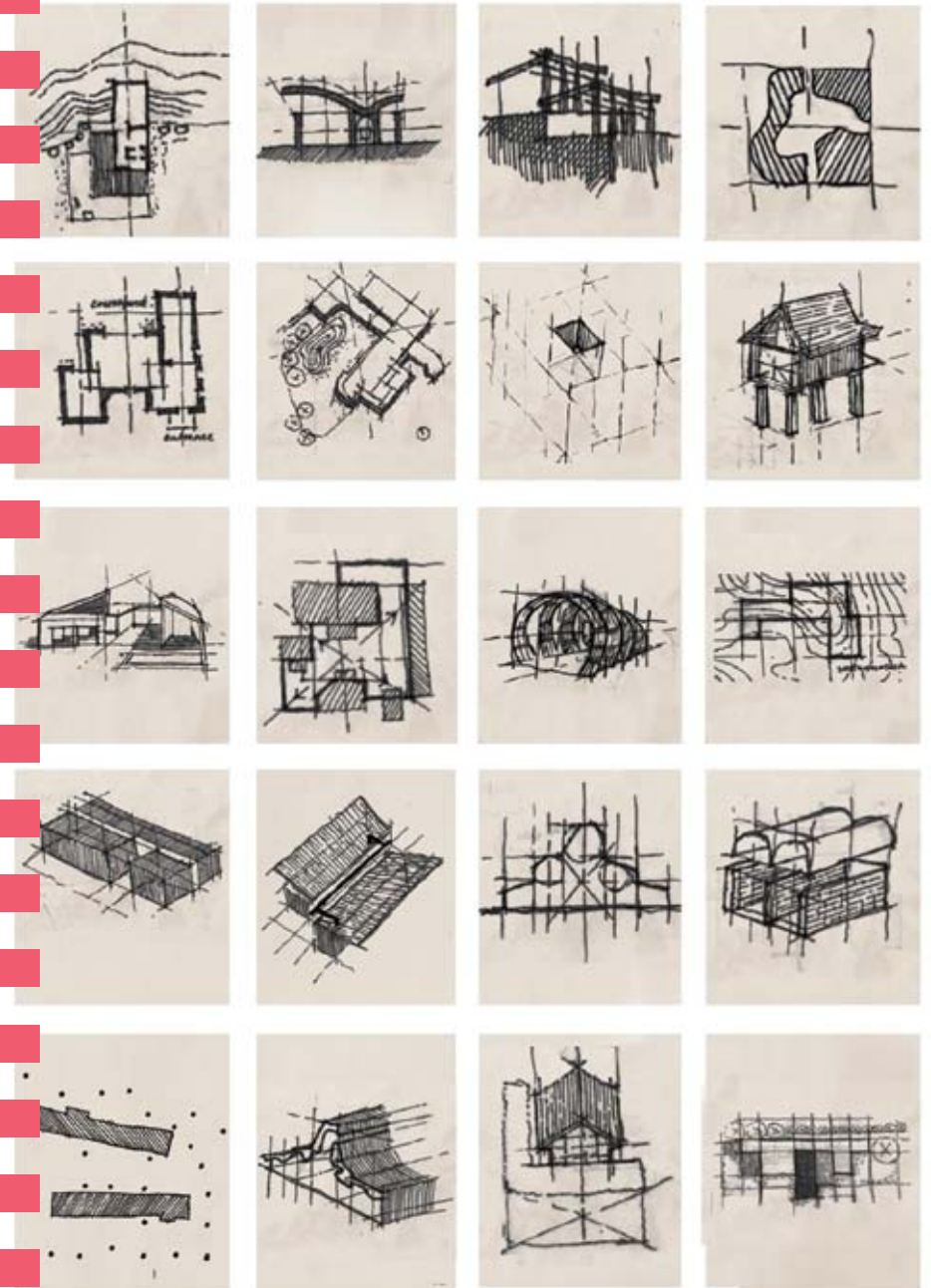
This project stems from a criticism of mass housing and the real estate market. The home has become a standardized, rationalized, and wholly impersonalized spatial format, disregarding the wisdoms and advantages of creating an architecture informed by place.

Project research begins by re-engaging Kenneth Frampton’s concept of regional identity as posited in “Towards a Critical Regionalism.” Identity is reestablished as a language guided by five governing paradigms: climate, material, occupant, cultural references and landscape. The role of “landscape” as both terrain and

settlement pattern is further informed by Christopher Alexander’s “A Pattern Language,” and Fumihiko Maki’s “Collective Form.” In sum, this thesis develops designs to revitalize the role of the home as a locally and architecturally relevant spatial format, strategically embracing particularities of context, and eschewing market-driven homogeneity.

This thesis project proposes to create a collective, social housing model in Todos Santos, Baja California Sur that incorporates these five governing principles of regional identity. Larger objectives include generation of new paradigms for the design and delivery of social housing and ending the continuous cycle of dependency on private donors and government aid by creating empowering moments of intervention for users to solve local problems with local solutions.

# MICHAELLE WILLIAMS





## Resocialization

### A Connective Intervention of Today's Students with Tomorrow's Campus

The young people of today are growing up in a world suffused with technology. Digital interaction, in particular, social media, has largely replaced traditional face to face socialization, depriving young adults of a more personal and spatial connection with their peers and communities. This social disconnect is particularly pronounced on university campuses and among students.

The potential remedy to this problem lies within the physical and social fabric of the university environment itself. The college campus is one of the most social environments offering the individual a myriad of opportunities for social engagement and interpersonal exchange. Of all of the various environments on campus where social interaction takes place, residential buildings are perhaps the typology that offers the greatest potential for encouraging and supporting a project for "re-socialization."

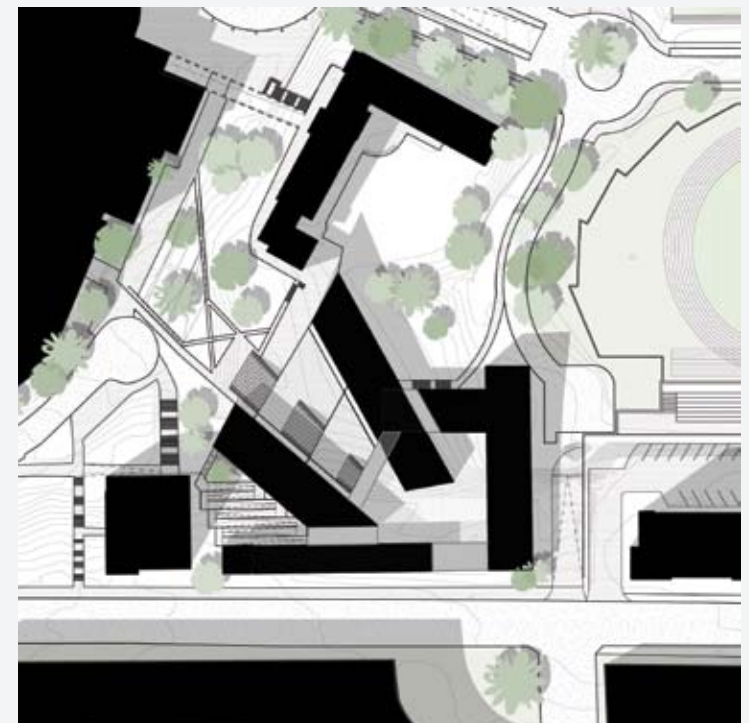
The University of Cincinnati in Cincinnati, Ohio has recently fulfilled a forward thinking and modernized master plan to revitalize a previously commuter campus. One of their main focuses was to respond to the "modern students" demands in active and communal spaces, in all aspects of the University environment. The largest manifestation of this was Main Street, a project providing a connective infrastructure

of communal and active student life amenities along the center of academic campus. This revitalization of the center of campus also came with a rebranding of the University's architectural identity, creating a campus full of unique and iconic name brand architecture.

While pursuing Main Street and the rebranding of the academic campus, the University neglected the renovation of UC's drastically outdated student living facilities. The most in need of revitalization are Calhoun and Siddall Residence Halls. Located at a strategic edge of the campus, Calhoun and Siddall Halls were built at a time when the campus identity was one of exclusion and the minimalization of public amenities. This is in stark contrast to what the students of today are calling for.

The Siddall and Calhoun dormitories exist as object-towers on the edge of campus. However, their identity and utility are outdated. With a prominent location adjacent to the largest off-campus economic district, the site offers opportunities to connect to the campus and contribute to the University's identity as well as revive an active threshold that currently does not exist. Through the integration of communal and public programs, the dormitory will become a more socially active environment designed to draw students and the public into a more interactive relationship.

# KAITLIN WOLFE



## Dwelling in the Details

### Design through Fabrication

This thesis proposes the design and fabrication of four small buildings sited in axis to produce a taxonomy of material relationships through their details.

Architecture can be defined as spatial formation for human habitation, realized in material terms. The key to the material phenomenal potentials of architecture is the detail. The construction of details begins with the need to solve the physical problem of joining materials; it is also the joining of the mental process of design with the physical construction of the object. While joints or details can be solved in numerous fashions, considering material joinery in relation to overarching conceptual frameworks can be productive. If the studied assembly of materials in relation to conceptual objectives is fundamental in realizing the phenomenal potentials of architectural space, then the means of designing the detail is of primary importance. However there is an inherent disconnect between architects who design plans for material assemblies and fabricators who work directly with materials to produce the desired product. Typically architects define their design intent by means of annotated drawing techniques including detail or shop drawings. This disconnect has removed architects from the means that produce the built work of architecture. "Severing the architect from the means and methods of construction is somewhat like permitting the writer to use a certain vocabulary, but disassociating it from the very alphabet from which the text emerges."<sup>1</sup>

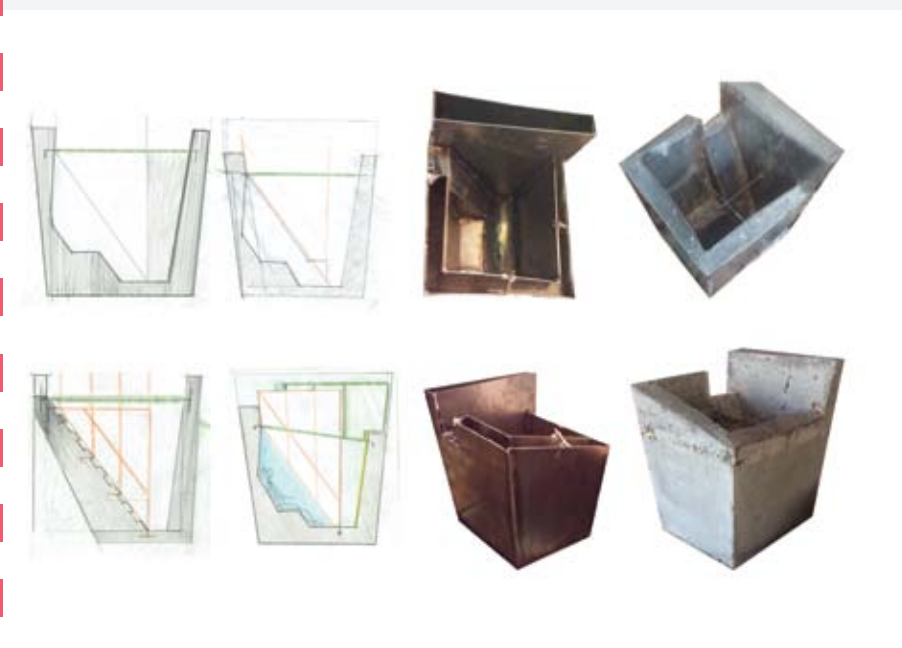
I propose that design through making can be productive in that it allows direct

exploration and observation of material opportunities and effects. In order to more closely align architectonics with intended material qualities, I propose to construct a series of small "dwellings." Only by participating in the act of construction is one truly able to understand it. "Architecture is always concrete matter. Architecture is not abstract, but concrete. A plan, a project drawn on paper is not architecture but merely a more or less inadequate representation of architecture, comparable to sheet music. Music needs to be performed. Architecture needs to be executed. Then its body can come into being. And this body is always sensuous. All design work starts from the premise of this physical, objective sensuousness of architecture, of its materials. To experience architecture in a concrete way means to touch, see, hear, and smell it. To discover and consciously work with these qualities—these are the themes of our teaching."<sup>2</sup>

I will fabricate four small, sited buildings, assembled with select materials and modes of construction. Each of my proposed buildings is concerned with elementary programs, simple forms, basic site relationships, and clear tectonics, focusing on four elements; threshold, aperture, wall, and roof. As a group, the buildings are unified by their concrete and steel construction, and their setting.

1 Nader Tehrani, *Strange Details*, by Michael Cadwell (Cambridge, MA: MIT, 2007), ix.  
2 Peter Zumthor, *Thinking Architecture* (Basel: Birkhauser, 2006), 58.

# EMILY E. WUTZ





## Crazy Long A Sticky Landscape Infrastructure

Infrastructure's narrow focus on its primary function — delivering  $x$  from  $a$  to  $b$  — and short-term economic efficiencies — delivering  $x$  from  $a$  to  $b$ , cheaply — constitutes a missed opportunity to conceive of such large scale interventions in a more holistic way. “Crazy Long: A Sticky Landscape Infrastructure” seeks to resist this tendency by proposing a series of sticky, resilient, and grounded infrastructural interventions intended to foreground the establishment of positive tertiary conditions. “Crazy Long” suggests a revised *modus operandi* for the design and use of the nation's next generation infrastructural projects — a logic antithetical to contemporary infrastructural norms — by calling for our collective attention to be focused upon those elements and effects that infrastructural designers have previously thought residual, otiose or down-right undesirable.

To explore these themes, “Crazy Long” seeks to re-conceptualize Hyperloop Alpha — a plan currently being evolved in California by Elon Musk, billionaire and owner of the Tesla Motors and Space X companies. Musk's Hyperloop Alpha proposal calls for the creation of a 700-mile long partial vacuum loop between the cities of Los Angeles and San Francisco capable of transporting cars and passengers at speeds up to 760mph. The scheme envisages the construction of 20,000 near identical loop-supporting pylons — one every 100 feet — over the course of the 344 mile route through California's Central Valley.

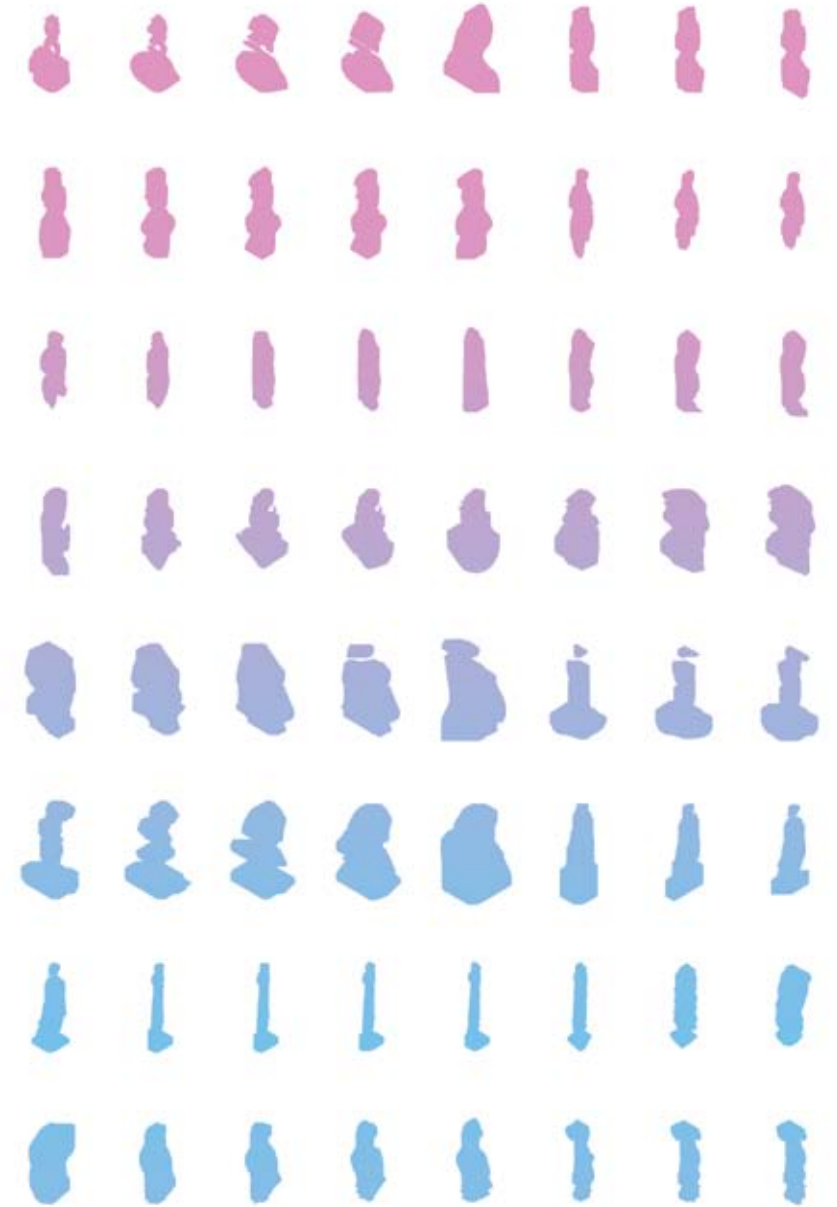
Via a sticky logics that understands

infrastructure's potential to engage landscape, “Crazy Long” seeks to upend the prevailing logic of infrastructural development through a shift of focus from the delivery of single-use systems intent upon mono-optimization towards multi-useful interventions capable of cultivating new constituencies multivalent. Specifically, “Crazy Long” reimagines each of Musk's Hyperloop Alpha pylons as an individuated locus for a multiplicity of emergent tertiary conditions serving two distinct, but contingent, constituencies: Hyperloop Alpha's Ridership: “Crazy Long” seeks to slow-choreograph the experience of riding the Hyperloop Alpha. Working against the blur, “Crazy Long” proposes the creation of a linear zoetrope. Each pylon acts as a single frame in an interpolatory animation intended offer a sense of physical bearing to Hyperloop Alpha's riders as they hurtle through California's Central Valley at close to 800 miles per hour.

A negotiated landscape, “Crazy Long” utilizes the seriality embedded in a more conventional infrastructural logics to create a never-repeating family of forms — a sticky formal heterogeneity. This formal variation augments the potential for these infrastructural elements to contribute to the establishment of revived “basins of attraction” — areas where native flora and fauna are able to thrive.

“Crazy Long” proposes a synthesis of architecture's ability to propose novel form and the community's collective responsibility to respond to contemporary climatic and environmental conditions.

# SEOK MIN YEO



When [commedia] employs its greatest excess of ridicule and parody, it must remain true to the underlying forces of thought and emotion... caricature is the art of exaggerating the truth... ideas expressed must be recognizably genuine.<sup>1</sup>

— Barry Grantham

Commedia dell'Architettura posits buildings as characters: distinguished individuals with a particular role or purpose. Some buildings clearly convey their identity through profile, massing, and patterning, while others remain silent. By exaggerating key architectural features and oddities, buildings begin to communicate, play, and fight with each other through legible, formal narratives. Inspired by commedia dell'arte's curated archetypes and hyperbolic features as well as Robert Venturi's modes of architectural interactions, Commedia dell'Architettura challenges formal conventions and expectations of architecture by manipulating them into caricatures.

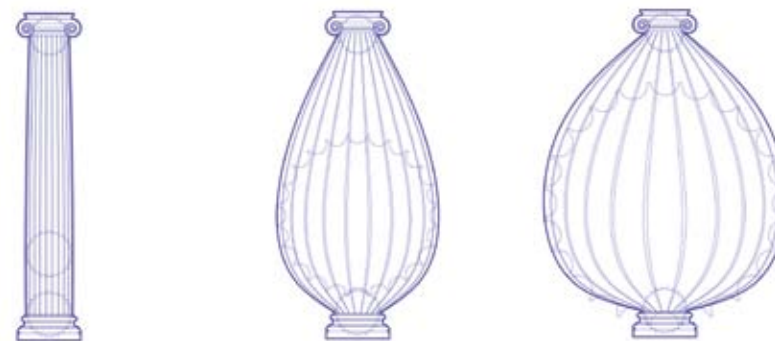
Commedia dell'arte is a form of street theatre in which society's character types play out situational tropes. Each character is an exaggeration of someone we know: the blind lover; the bitter old man; the arrogant phony; our id. Garb and particular gestures use exaggeration

and overstatement to communicate the character's qualities and tendencies. A grotesque crooked nose, untamed eyebrows, and cavernous wrinkles scream age and wisdom before a word is spoken. The result is an accessible art form understood and appreciated by a broad audience and a sly commentary on social issues.

In "Complexity and Contradiction in Architecture," Venturi distills several strategies for architectural elements — characters — to engage with each other in captivating compositions. Adapted elements subtly tweak banal clichés into novel moments, while juxtaposed elements clamorously stand out beside their humble counterparts to relate opposing forces. Together, the tensions amalgamate into a balanced and inflected whole — a cast.

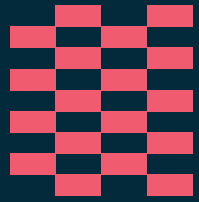
The Syracuse University quad becomes a stage to a cast; some actors play a larger role and others recede. This thesis proposes tweaking a set of architectural characters on the university's campus, reorganizing spatially loose and characteristically ambiguous buildings into playful narratives to answer questions like "how on God's green earth does a modernist behemoth axially respond to a Jeffersonian chapel?"

<sup>1</sup> Grantham, Barry. *Playing Commedia: A Training Guide to Commedia Techniques*. Portsmouth, NH: Heinemann, 2000. Print.





# Faculty Committees



**Jean-François Bédard**  
**Liz Kamell**  
**Tim Stenson**



**Larry Bowne**  
**Lori Brown**  
**Randall Korman**



**Ted Brown**  
**Lawrence Chua**  
**Julie Larsen**



**Sekou Cooke**  
**Terrance Goode**  
**Sinéad Mac Namara**



**Amber Bartosh**  
**Gregory Corso**  
**Larry Davis**



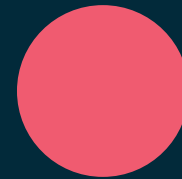
**Julia Czerniak**  
**Benjamin Farnsworth**  
**Joseph Godlewski**



**Roger Hubeli**  
**Bess Krietemeyer**  
**Art McDonald**



**Maya Alam**  
**Mark Linder**  
**Jonathan Louie**



**Molly Hunker**  
**Kyle Miller**  
**Anne Munly**



**David Shanks**  
**Yutaka Sho**  
**Rob Svetz**

**SYRACUSE  
ARCHITECTURE**





Jean Ahn, Abdulrazzak Nezar Alanjari, Carolyn M. AuClair, Eric Baker, Leslie Carolina Baz, Nathanael Bengio, Anastasia Benko, Brianna Blackaby, Nikole D. Cabrera, Andrew M. Cardinale, Cara Cecilio, Lorraine L.M. Chan, Kristen Charters, Thorfun Chutchawanjumrut, Becky Cohen, Ryan Douglas DeSilva, Heather M. Dela Cruz, Alison Marie Dobbertin, Patrick Dodson, David J. Domke, Chao Dou, May Usama Dussadeevutikul, Nolan R. Ediger, Lauren M. Festa, Alyssa Francis, Nathan Geller, Adriana Gherzi, Matthew Jordan Gins, Garrett Goodridge, Adam Michael Gottlieb, Morgan K. Graboski, Joshua J. F. Graham, Adrianna Griffith, George Guarino III, Alexander Guzman, Hasan Hachem, Alexa L. Hansford, Dana Hareli, Zachary Harwin, Mark Hernandez-Cornejo, Christina Hoover, Rossitza Iovtcheva, Briana N. Jones, Ebony Jones, Francisco Jung, Nilay Akbas & Gamze Kahya, Sam Michael Kallman, Holly Kang, Omal-Hoda Kassim, Kenny Y. Kim, Matthew Kiwior, Cesi Kohen, Samantha Kudish, Kanyalak Kupadakvinij, Shakeria Kyle, Kwang-Min Lee, Seung Ah Lee, SaDe' Lewis, Mengru Li, Emily S. Lodato, Yundi Lu, Andrea K. Macias-Yañez, Alexandra Theoni Mantzoros, Sara Minsley, Robert A. Moldafsky, Tiffany M. Montañez, Leandro Cortes Montaña, Douglas Moskowitz, Anna Murnane, Sai Prateek Narayan, Robert Nishigawa, Andrea Novazzi, Jessica Obregon, Ann O'Connell, Steven O'Hara, Uche Okoye, Megan L. Rand, Marco Antonio Ravini, Alex William Robbins, Kurt Rogler, Linsay Royer, Tyler Rump, Nate Russell, Kaan R. Sanalan, Stephanie Y. Shen, Adrienne Sheriff, Chaewan Shin, Julia A. Slater, Rebecca Soja, Allie Sutherland, Danielle Foisy & Taskina Tareen, Wei-Ni Ting, Simon Tse, Crystal Tzau, Gergana M. Tzolova, Carola Vega, Guillermo L. Fortuno Vela, Vinh Van Vo, Michaelle Williams, Kaitlin Wolfe, Emily E. Wutz, Seok Min Yeo, Mark Zlitsky

