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### INTRODUCTION

Michael Speaks, Ph.D. Dean and Professor We launched thesis this year as we have done each year since my arrival here as dean nearly seven years ago: with the excitement, anticipation and naiveté that attend every new project, and with the resolve, confidence and experience that arrive only with the completion of all but this one, final project. Due to the disruptions and calamity caused by the COVID-19 global health crisis, however, we did not end the year as planned: with final thesis reviews and Thesis Awards Jury held in Slocum Hall; with Convocation in the newly completed National Veterans Resource Center, designed by SHoP Architects, who were, in that spectacular new building, to have delivered our annual Convocation address; and with graduation celebrations the day after on the Shaw Quadrangle and in Slocum Hall. Between the auspicious beginning we made in September, and the celebratory end that we anticipated in May, thesis and the world changed forever.

The entire Syracuse Architecture community does now and will forever acknowledge and commemorate the loss experienced by the Class of 2020. But thesis is not just a final project. Thesis is the project that all students begin and complete before they leave Slocum Hall to find their way in the world beyond; it is the final beginning and the final end of architecture school and thus the transition to all that comes after. To be a thesis student in normal times is to live in a liminal zone between a certain past and an uncertain future. For the Thesis Class of 2020 that uncertainty is markedly, exponentially greater. And yet, though their thesis year was unimaginably dispiriting, that liminal zone became the proving ground where they developed an unwavering belief in themselves and in their ability to face head-on the uncertainty that now defines our world. No one, in my view, is thus better qualified than these students to shape and transform that uncertainty into the foundation for a new and better world. No one is more deserving of the designation "architect" than this remarkable class. Designing and completing their projects amidst a global health crisis, under less than ideal working conditions, without direct access to their classmates or advisors, and without the studio, fabrication and exhibition spaces available to all previous classes, the Class of 2020 persevered and designed the range of brilliant projects collected in this volume. Each project is a testament to resilience, creativity and genius. We salute them all for their extraordinary effort, courage and fortitude. On behalf of the entire School, I want to thank them for producing the work, the faculty thesis advisors who guided them, and all who worked to organize and realize Syracuse Architecture Thesis 2020.

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# B.ARGH

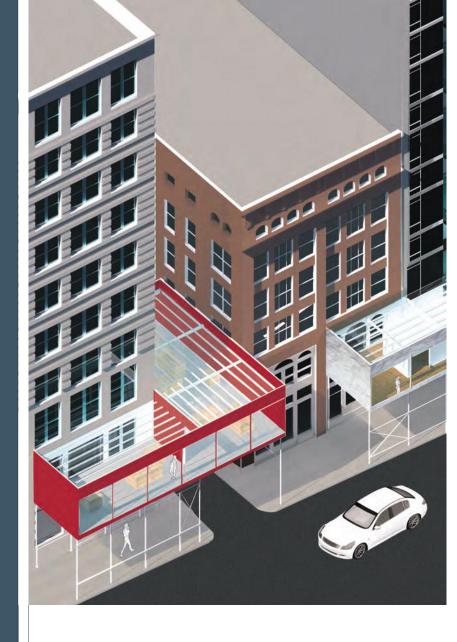
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The broad culture of construction is the basis of architectural making, both in its historical and in its projective dimensions. These projects critically investigate tectonic and material issues in architecture and pursue possible syntheses of form, structure, and materiality that are, or can be, actualized in buildings. We are not only interested in work that pushes the limits of form by the use of new materials; we also aspire to reexamine the potential of traditional materials while taking into consideration their history. As Sheila Kennedy has written, "It may seem counter-intuitive for a critical practice of material research to examine the material predicaments inherent in the culture of production as a source of inspiration. But it is precisely here that the greatest challenges to the imagination lie." These projects take on that challenge and operate within a wide chronological territory that includes, for example, the potential of brick in architecture from its origins in Assyrian glazed brick construction and its unprecedented elevation as a noble building material by the nineteenth-century architect Karl Friedrich Schinkel; the formal possibilities afforded by contemporary computer-aided modular stacking; the interaction between structural frame and surface theorized by Gottfried Semper and made apparent in ornamental surfaces, whether inspired by the architecture of antiquity, the graphic patterns of the Viennese Secession, or those made possible by digital fabrication; and the architectural potential of structural assemblies and geometric patterns found in nature at the origin of the modernist experiments in formal optimization.

One example of such an intervention would be turning the sidewalk sheds into low- or no-income housing for the homeless, who would normally sleep on the ground underneath the sidewalk shed. Another intervention could convert the sidewalk shed into an open gallery or market to critique the over-regulation and privatization of the City's public spaces. In both cases, the sidewalk shed becomes a multifunctional object that enhances the environment and contributes to a new identity for the City.



**ALTERNATIVE SHELTERS:** IMMORTALIZING THE NYC SIDEWALK SHED

SUKHMANN ANEJA

Advisors: Bédard, Chun, Hubeli

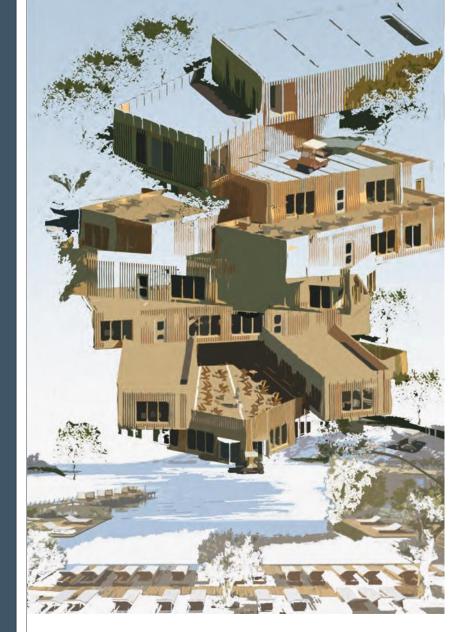
mage: Altered Sidewalk Shed, Franklin Street, Manhattan

Conserve freshwater resources and reduce utility bills by installing water-efficient appliances and plumbing fixtures, landscaping with drought-resistant plants and efficient irrigation, and using rainwater, underground water and greywater. To use more of the underground water present around the Bodrum area, store well water in tanks. Use green, high quality building materials that minimize indoor air quality concerns, avoid toxics, and reduce waste. Recycled-content and prefabricated products reduce material use, cut costs, and often perform better than traditional alternatives. Set criteria for purchasing by consulting guidelines, standards, and certifications.

feasible, is the ideal next step.

Sustainable design concepts are often boxy, since compact geometries allow for better energy preservation. However, letting go of this compactness using Jenga typology can bring ease in orientation, situation and program delineation. For example, in a two-story complex, shifting the upper or lower level in the desired direction avoids the need to completely rotate the building, potentially disrupting other programmatic alignment. In situating a building—in for example a hilly topography—the Jenga arms, given enough volume in their form, can be used to carve out space into the topography. The form that Jenga takes can inform what program may suit in a specific Jenga piece. Thus, it can become a language of its own.

# SUSTAINABLE HOTEL DESIGN IN BODRUM: JENGA TYPOLOGY IN PURSUIT OF SUSTAINABILITY



**GÜREL BARLAS AYDIN** 

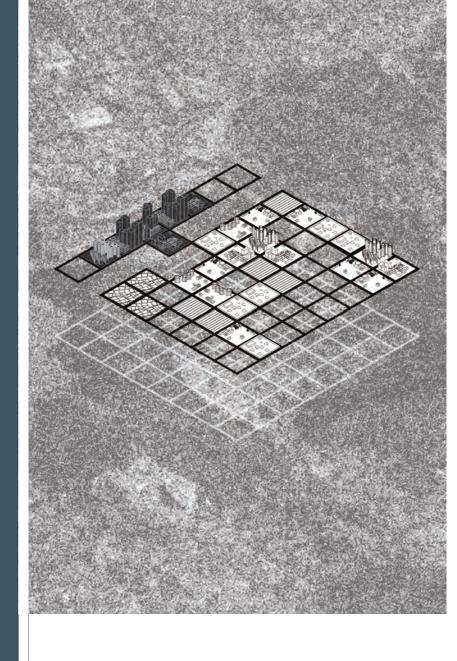
Advisors: Bédard, Chun, Hubeli

mage: Sustaining Bodrum with Jengas

Through this appropriated proposal for an upstream rare earth material processing facility in Western Australia, this project draws on the historical company town where the landscape is reshaped as an evolving playground. Here the earth—as the waste and byproduct of excavation, refinement and treatment—houses and merges with the social life of the site while being generated by its industrial elements. Produced between the industrial constraints of material production and the contemporary human necessities of recreation, the site is activated by a terrain that negotiates the conflicts of its programmatic engagement that are typically avoided by their geographic disassociation.

Image: <u>Lithosphere</u> Technosphere Advisors: Bédard, Chun, Hubeli

# RE-MAKING THE TECHNOSPHERE: SPACES OF MATERIAL CONSCIOUSNESS

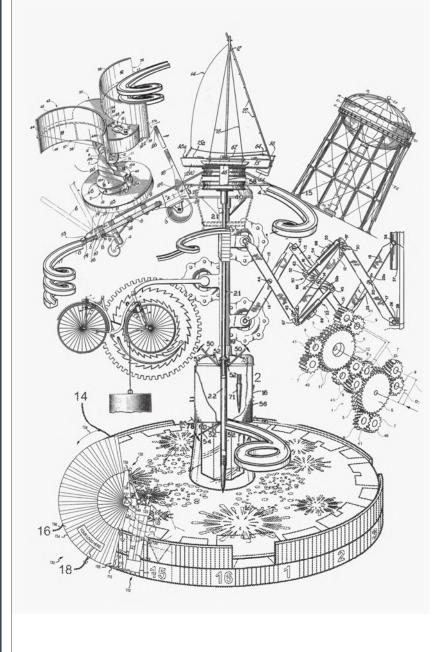


We need to explore smart materials that are self-actuating—not electricity consuming—to advance a responsive, interactive and intelligent architecture that reduces energy consumption. This thesis proposes to build a kinetic installation that changes in form and function in response to human interaction and simple energy inputs from Nature. This will work by merging existing engineering systems with dynamic and smart materials. The project will be an energy efficient, tangible architecture that engages us in the poetics of movement beyond our digital screens.

age: Universally Responsive System

Advisors: Bédard, Chun, Hubeli

# ARCHITECTURAL POETICS OF MOVEMENT: NATURAL ENERGY INPUTS POWERING PERFORMATIVE STRUCTURES



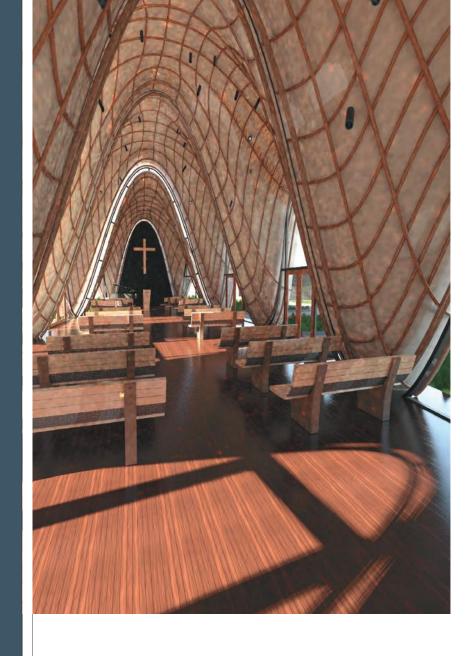
**JACOB GARCIA** 

The aim of this thesis is to incorporate the largely uninvestigated merger between modern-day architecture and the large collection of designed elements that predate it. Incorporating both the aesthetic and functional qualities of traditional designs offers a unique quality that can be linked to the identity of growing and emerging towns, cities and entire metropolitan regions within East Africa (and across Africa). The extensive design project, akin to Tony Garnier's Industrial City, explores the large creative pool of design precedents and tools in order to achieve a cohesive set of designed elements at vastly different scales linked through a common design language. The first phase of the design process will rely on schematic design through iterative sketches, based on relevant building and crafting techniques as well as design aesthetic. When clarity of design is achieved, conclusive models and drawings elaborately describing the objects will be produced in the second and final phase of the process. The models will be crafted using materials identical to precedents and if unavailable, visually and texturally similar materials will be used to achieve accurate representational quality.

### THE EAST AFRICAN AESTHETIC: EXPLORING TRADITIONAL EAST-AFRICAN DESIGN ELEMENTS

Advisors: Bédard, Chun, Hubeli

n through Weaving, Masonry and Thatching



The abandoned industrial sites of Detroit cannot be fully regenerated but they are too vast to be vanished and are an integral part of the city's landscape. This project commemorates Detroit's history and darkness with a car manufacturing museum that takes the industrial ruins and memorializes them with the experience of the assembly line, making it part of the user experience. An unfortunate outcome of mechanization was the creation of tension between the middle and lower classes and among races. Mechanization shifted the production of car bodies from skilled tradesmen to unskilled workers. As more and more skilled tradesmen became unemployed, the economy suffered, and civil unrest increased. As the economy of Detroit declined, urban decay became a reality.

Albert Kahn designed the six-story reinforced concrete plant that originally produced Buick and Cadillac bodies in the 1920s. The building represents an iconic moment in the history of Detroit when the assembly line and car manufacturing processes defined the form and layout of the building. The result was a very long and narrow building, with floor to ceiling windows for maximum daylight, allowing enough light to reach the interior. In the year 2000, the neglected building was returned to the City of Detroit. The graffiti-riddled building has remained an ugly yet iconic monument of Detroit's past for twenty years. Some of the original machinery remains in the building and plays a critical role in its cultural identity. Mechanisms such as overhead and ground tracks, ducts, pipes, water tanks, and chimneys introduce a formal language to the building which the thesis further explores as a formal design strategy. In using the existing structural configuration, a secondary system would be needed to support the more vulnerable areas. The experience of the museum relies on the interaction between the old and new, as well as the circulation of exhibited cars in the building, which navigates users through the different periods of manufacturing. The cars used for the exhibit circulation are also exhibits in their own right, which the user can experience firsthand.

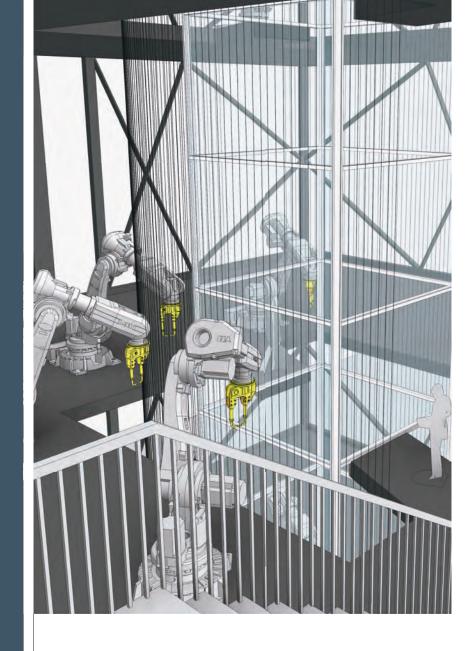
# FRAMING AN INDUSTRIAL DYSTOPIA: THE ASSEMBLY LINE EXPERIENCE



The program of a carbon fiber factory is chosen to make the material more approachable while creating a larger audience to learn about the potential of this remarkable material. A visitor's center devoid of columns, a long and thin cantilevered bridge and a tall slender structure mark three buildings that visitors can interact with at the factory to learn about the manufacturing and processing of the material. Brick, concrete, steel, wood, and more recently glass have been the most common working materials for architects and structural engineers alike, but with their widespread use, their restrictions are also very well understood. This has caused many interesting projects to lie dormant because of structural and cost restrictions of traditional methods of construction. It is time for a paradigm shift to new materials, and CFRP appears to have extraordinary potential. It is significantly lighter and stronger than steel (up to 10x) and concrete. This makes it not only an interesting material to study but also one with the potential to bring about significant change in the architecture and engineering fields.

mage: Vertical Pultrusion at the Factory

Advisors: Bédard, Chun, Hubeli



# CARBON FIBER ARCHITECTURE: MATERIAL EXPLORATION AND ANALYSIS OF CFRP

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Matthew Celmer Jiong Abingo Wu

Architecture is a spatial production that shapes and is shaped by power relations. We examine architecture as a contested arena where different actors compete to produce physical form, political alliances, social meanings, and everyday experiences. Our work deals with power, inequality and spatial justice, touching on topics such as reproductive health, immigration, empowerment, collaborative habitation, surveillance, and exclusion. Through our work we search for catalysts for change. Our interdisciplinary humanistic approach is centered on ethnography, historical analysis, mapping, diagramming, legal analysis, media analysis, model making and drawing production. Our ambition is to help the students formulate a speculative project and develop a rigorous research-design methodology. The projects will be initiated from and in response to factual realities.

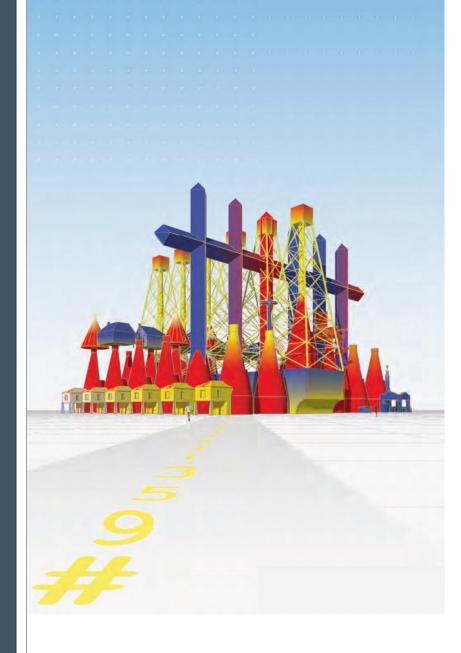
Our students have interrogated histories and spaces that architects have rejected, neglected and refused to engage with. As a group we have reevaluated the authenticity of American Chinatowns, projected new historical narratives in post-communist Albania, questioned media's role in the coverage of mass shootings, unpacked the contextual influence of signification on Route 66, pursued an archaeological approach to reveal redlining's legacy, created novel housing typologies in Shenzhen, reconstructed canonical architecture through the proliferation of images and explored the multiplicity of lived narratives in American Chinese takeout restaurants. Each of these powerful projects speaks to the architect's ability to construct and re-construct narratives; they provide

us with a framework for a new form of architectural practice, the architect as storyteller. In an era overburdened with misinformation and falsities, the architect cannot sit back and weather the storm but must directly engage in highlighting, uncovering, correcting and projecting new narratives. The intangible domain of history, memories and stories may be our most important contested space.

Route 66 has become a physical manifestation of mediated histories that is simultaneously constructed from and constructing American identity. The objects on the route are built to represent an idea or place, and in turn contribute to the idea and identity of the place they inhabit. This loop of "meaning to architecture to meaning" shows the agency of architectural objects in crafting our realities, histories, and collective identities. The route exists as an American invention, expression, and now, ruin. It represents a specific America that was built on pseudo-events, and that expects more illusions and fantasy. An America that glorifies the freedom of the open road. An America defined by the boom of the mass culture industry in the 19th and 20th centuries, which ushered in scenic spectacles along American landscapes. These sites capitalize on "natural" or constructed novelty to overwrite culture and history in favor of exotic fantasies. In some cases, they present romanticized, idealized versions of the past, and in others they celebrate the everyday object to give a visual identity to a place.

The built environment determines much of history through physical reality. The sites preserved today are owned by those who have vested interests in them physically, economically, or culturally. Oil, cars, and road infrastructure continue to define an auto-centric culture as people become ever more dependent on them. While these objects on the route sit innocently on the landscape today, tracing their histories reveals complex interest groups, power networks, and government administrations. With the current administration, what will the future of the objects on the American landscape be? Can these objects speculate on future American narratives by reflecting the systems that created them?

In a game that mirrors reality and the systems at play, the objects become the characters, and the players act through these characters to understand the implications of one decision on the entire physical landscape. The game generates endless alternate histories and futures which react to different narratives, objects, and heightened conditions, revealing the agency of architectural characters in crafting our environment through meaning, culture, and identity.



Mass media has developed a rote choreography that sensationalizes mass shootings and the perpetrator, resulting in nothing more than a repetitious theatrical media cycle. The excessive and gratuitous information and imagery allows the media to control the narrative. These places are seen as mere backgrounds to the tragic events that happen within them. The media frequently publishes mass shooting articles accompanied by images that typically display the main façade with yellow police tape strung across the front, seemingly dramatic and framed photographs meant to draw the public's attention.

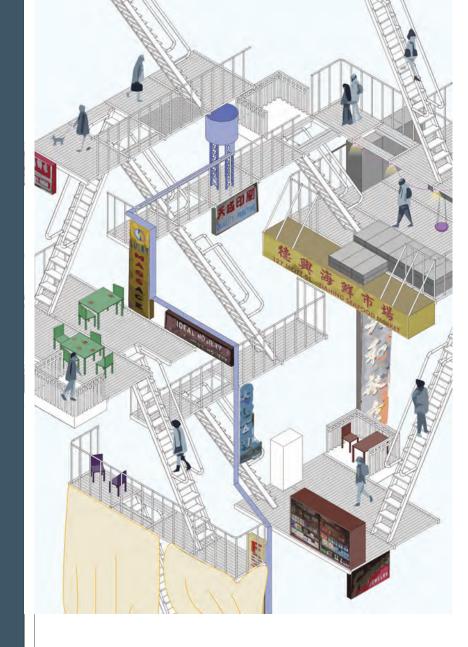
Memorial of Mass Shootings is a traveling memorial exhibition that exposes the public to a reality we often choose to ignore or forget. It is meant to target the fleeting nature of media's reporting of mass shootings by bringing 1:1 scale fragments of the architecture where mass shootings have occurred to various places across the United States. These fragments are constructed solely of parts of the building that the media represents in its photographs. The memorial aggregates the loss and sadness of mass shootings and brings the physical to the forefront so that people have to acknowledge and see that these painful events happened.

### MEMORIAL OF MASS SHOOTINGS: CRITICIZING MASS MEDIA'S REPRESENTATION OF ARCHITECTURE

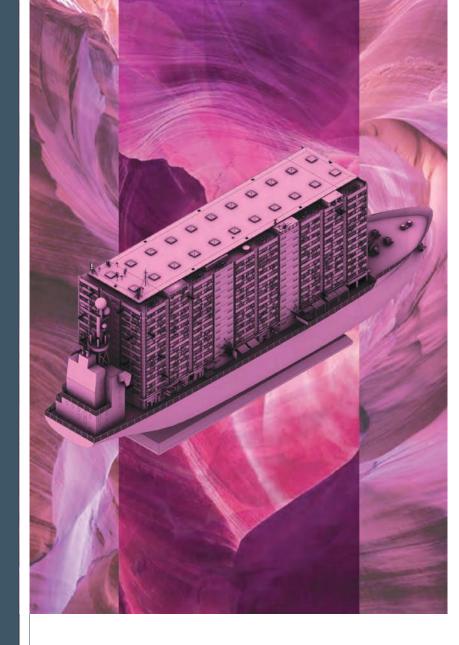
Advisors: Celmer, Wu

communities that have changed and evolved over time.

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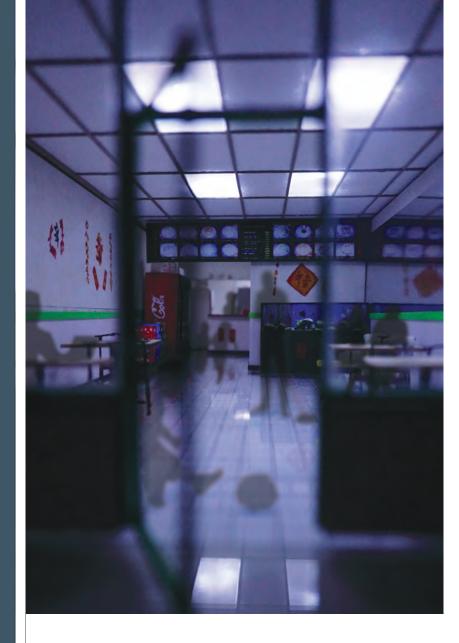
In order to solve the issue, this thesis proposes eight types of living capsules addressing the sharing economy and providing freedom of choice of living for young workers in the future. The designs of different capsule prototypes are based on online interviews with thirty young workers in Shenzhen about their current and ideal living conditions. The operating system could be compared to a combination of Airbnb + Uber, functioning as both housing and transportation. People can order the floating capsules using mobile apps to choose which kind of lifestyle they want to experience on a certain day. Capsules are organized in megastructures that are strategically placed in the city, allowing people with similar personalities and lifestyles to live with one another. On the one hand, this new living prototype solves the housing shortage using the notion of the sharing economy; on the other hand, it redefines the idea of houses. This new housing is no longer a fixed and unchangeable property, but instead allows people maximum freedom to choose how and with whom they want to live.



Advisors: Celmer, Wu

mage: Capsule Prototype Proposal

The nearly 41,000 Chinese restaurants in the United States is triple the number of McDonald's franchises. However, this ubiquity by no means lends itself to a level of authenticity or universal representation: rather, the manifestation of Chinese restaurants is mired with connotations of otherness and obfuscation through cultural motifs and characters. This thesis argues that there is actual authenticity in Chinese takeout restaurants, which begins with the families who own them. Each family has different motivations and goals, and that is manifested in how the restaurant has been adapted to suit those needs. The children as protagonists subvert the service space to a domestic one. This calls into question how aspects of the restaurant are reconciled, adapted, and reclaimed to meet the needs of a family. The informal domesticity must still play out under constraints of the restaurant as a business in the market economy. Human occupation is now an interwoven story, where the co-existence of children, customers, and employees defines a new, actual, lived authenticity where the space and qualities are generated through the agency of the people. By representing these stories as potential solutions, the research can be extrapolated on a national scale, which opens the discourse of Chinese American culture to the larger conversation about economic and societal differences within America.



### DOMESTIC INTERIORS: SUBVERTING CHINESE AUTHENTICITY

Contested Space

Advisors: Celmer, Wu

Image: After Hours

Today, the bunkers exist in a spectrum of states: some have been transformed to incorporate new programs or cosmetic alterations, but many remain in their original form. This thesis aims to detail the events that allowed for this massive-scale development to occur while speculating on the implications these structures can have in contemporary Albanian society. Focusing on the appropriation of the existing forms of the bunkers, the new constructions yield to both a commemorative reflection of past traumas and to an optimistic future through healing. Unlike the existing transformed bunkers, these new designs are based on a constructed narrative that serves as the confluence of two survivors of the communist regime and allows for the speculative studies to be completed under the implementation of the dictatorship of the proletariat.



**BUNKER RECLAMATION** 

**DEMOSTHENES SFAKIANAKIS** 

Advisors: Celmer, Wu

Three modern architecture pieces are chosen that have been widely studied through photographs. The typical process of the project goes from two-dimensional collages of deconstructed pieces from selected photos, to three-dimensional physical models of reconstructed space based on the collages, ending up in a two-dimensional presentation. The loop could act as a continuous circle, repeating itself to reveal the gap between lens and human observation. This alternative way of reading creates brand new spaces and projects with entirely different depth and spatial effects due to perspective, while somehow still capturing its original significances.

## NEW MODERN SPATIALITY: Translation between Lens and human observation

Advisors: Celmer, Wu

mage: Deconstruction and Reconstruction

Throughout the history of the United States, urban parks have been sites of emotional and physical escape from the chaos of daily life in the city. While in the park, a connection to nature provides a moment of freedom to the user. The park in Rochester is an alternative world distinguished by its topography and whimsical architecture. The whimsical produces a multiplicity of forms that evoke a range of emotions from its viewers and users. The adaptability of whimsical form and program enables unique and sustainable solutions to the modern fitness crisis. It is the whimsical architecture that bridges the necessary social aspect of fitness to the urban park system to produce a more complete vision of health and wellbeing that includes mental and emotional fitness.

mage: Whimsical Form Meets Conventional Fitness Regimes

Contested Space

Advisors: Celmer, Wu

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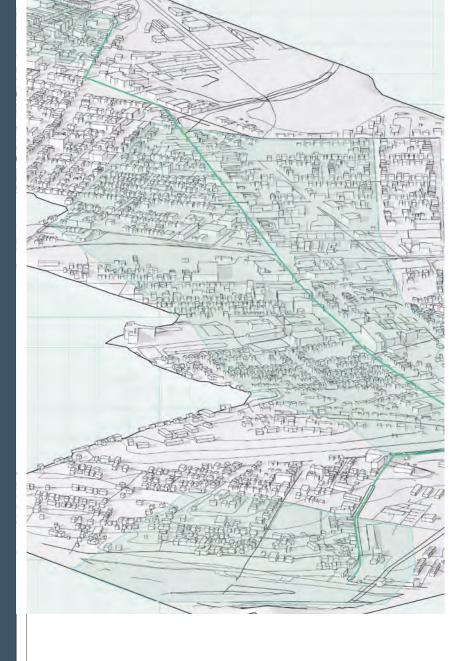
# FITNESS THROUGH SOCIALIZATION: FITNESS, WHIMSY AND THE URBAN PARK

The term "urban acupuncture" refers to a series of small-scale interventions, both architectural and infrastructural, to stitch the urban fabric back together. Using the lens through which the city will be examined, this project will also have to tackle issues of gentrification, a relationship between upstate New York and New York City, and the cultures of the minority groups that were relocated. A project like this can theorize the best way to develop without harming the urban fabric or community further.

# Image: Three Fragmented Neighborhoods Connected b

Advisors: Celmer, Wu

# AN URBAN REVITALIZATION: Rebuilding American Cities After Urban Renewal



**AMANDA BRUNNER** 

Despite efforts to restructure the current waste system, New York City's Department of Sanitation has seen a twofold increase in the residential waste problem. Low public interest, combined with processing and exportation costs of current residential waste disposals out-of-state, prevent the implementation of funding for retrofit and educational programs. Although recycling and organic waste disposal options are readily available within most of the City's neighborhoods, many individuals still lack the incentive to use such resources adequately, or avoid using them altogether.

By investigating ways to increase public interest, this thesis aims to serve as a model for the speculative resolution of New York City's inadequately managed waste surplus. With the speculation that the home can serve as an agent of adequate refuse management due to proximity principles, this proposed model takes the form of a multi-family-scale residential complex, designed with concepts of less wasteful living and community life. It focuses on the normalization of and education about adequate waste discharge practices, and the incorporation of community self-sustainability strategies and incentivized practices of reuse. The site, which incorporates multiple sorting hubs for residential waste discharge, expands the dual recyclables system of New York City to one sorted by individual material classification; economic profit from the sale of that material serves as an incentive for the community. The result is an architecture model capable of speculatively resolving some of the challenges of the New York City waste conflict.

### RETHINKING HOME WASTE: A NEW MODEL FOR RESIDENTIAL WASTE MANAGEMENT

Advisors: Celmer, Wu

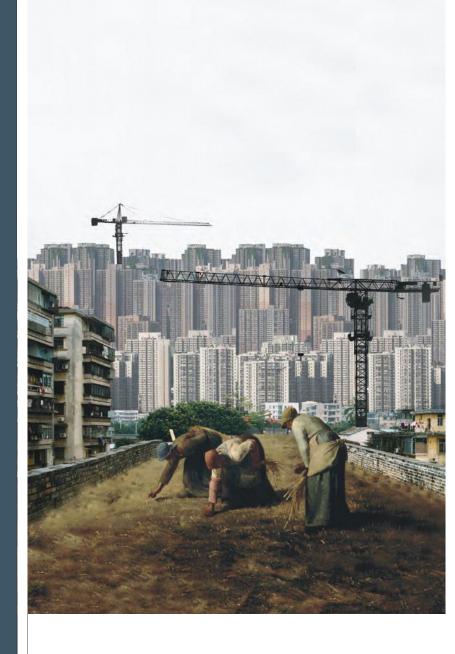
Image: Snapshot of Waste Management Structures



These projects examine new forms of urbanism and question the "urban" as an analytical category of social and spatial organization. Although the city is often assumed to be a static form, its parameters have shifted historically, requiring the development of new questions about the range of technical, formal, and social operations for architecture and urbanism. Does the "urban" still have valence in an increasingly homogeneous global landscape? Do different forms of urbanism emerge from different social, economic, and historical contexts? How do we understand the opportunities and limitations of architecture in a new urban field? Among the challenges explored by thesis projects in this Advisory Group are gentrification, climate change, suburbanization, urban renewal, the place of "nature" in the design process, the impact of new high-speed infrastructures, and the aesthetics of exercise. This required students to re-examine their tools and develop strategies to link attributes previously understood to be either separate from one another or external to the design disciplines.

This thesis contends that the development of the high-speed rail offers an opportunity to modify the long-standing uneven development of the urban and rural areas in China to become more sustainable. Since many resources are not physically controlled by dense cities in the era of the internet, it's time to design a distributed strategy. This project introduces an alternative urbanrural landscape around the HSR new town in Suzhou, Anhui province along the Beijing-Shanghai high-speed rail line. In this region, traditional agricultural villages have been reshaped into hybrid neighborhoods with newly arrived urban populations; this project attempts a Chinese urban-rural integration in spatial arrangement with economic and political strategies for the future. These renovated villages will allow immigrants from cities to enjoy the traditional village lifestyle and landscape but also to work long-distance and have efficient business travel options. Traditional villages are preserved to allow farmers to be employed locally, providing healthy food for the villages' consumption and maintaining the land. Distance-education and medication are introduced, so farmers get the same treatment the immigrants are expecting in the countryside. Instead of purely centralized urbanization, this project looks at the distributed countryside as a means to preserve a substantially ideal place to live for the next generation.

# SUPER RURAL: FARM TOWNS BETWEEN CAPITAL AND COMMODIFICATION



TIANYI HANG

2

Advisors: Chua, Davis

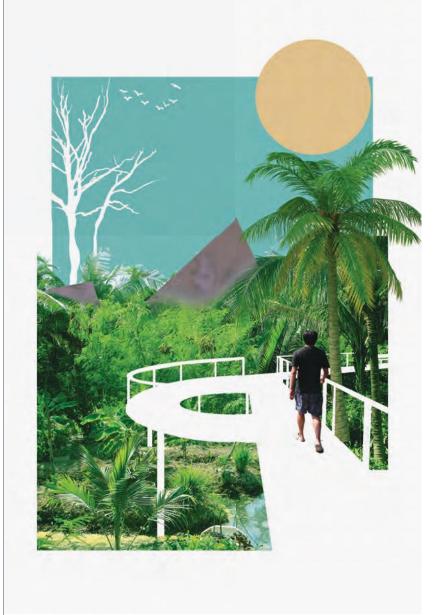
Image: Raw Urbanism

Bang Kachao is considered Bangkok's "Green Lung" due to its green spaces and geographical shape. It is set along the Chao Phraya River nearly two kilometers from the central business district. In the early 1990s, the government bought more land from the locals to establish a protected area for biodiversity conservation. Strict planning codes that prohibit certain kinds of land development have helped stem uncontrollable development. Today, due to its green oasis reputation, Bang Kachao has received attention from visitors. There are large networks of trails for bikes going through the lush mangroves and jungle to encourage locals to set up bike rental shops and other businesses. Recently the laws and codes have become more lenient, providing an opportunity for this thesis to speculate on how the role of architecture can improve and enhance the community of Bang Kachao.

# e: Architecture Becomes a Part of Bang Kachao

Advisors: Chua, Davis

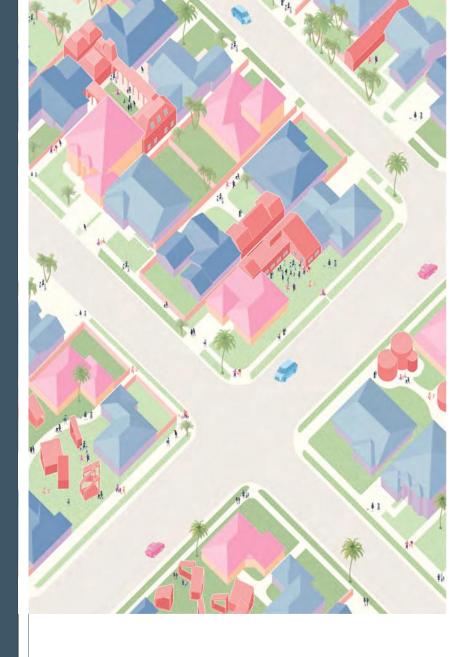
# DIS(SOLUTION) BANG KACHAO: HARMONIZING NATURE'S ORDER AND CHAOS THROUGH ARCHITECTURE



**SORAVIS NAWBHANICH** 

Zoning and codes continue to be the driving force in the development of many postwar suburbs across the U.S., ensuring consistency and ease of development, a central component of perpetuation of this formal typology. The postwar suburbs of today have approached the end of their first life cycle. It is now critical to question how these spaces start to morph to cater to and evolve with their new inhabitants. Through the analysis and investigation of suburbs that are not predominantly occupied by white, middle-class families, it has become evident that these new populations occupy the domestic space uniquely and that they have different spatial needs. This project speculates on how the suburban texture will transform and develop if traditional zoning and codes are removed, allowing for more diverse programs and increasingly distinctive spatial interventions. Creating a system of tools that promote flexibility allows spaces to function for the individual. As those inhabiting the space and their needs become the driving spatial force, the postwar suburban landscape will no longer be the same.

# SUBURBAN MORPHOLOGIES: TRANSFORMING POSTWAR SUBURBS WITH DISTORTED TYPOLOGIES



**ANJA PAJEVIC** 

Advisors: Chua, Davis

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regions with the largest economic disparity. Using a speculative scenario where the city hires architects to create a repeatable "kit of parts" form of modular housing to be inserted into different parts of the city, the project investigates where architecture can create positive change and where its impact reaches its limits as various social and political factors come into play. The project begins with positive intentions: rather than developing more housing in low-income neighborhoods pushed far outside the city, the architects seek to re-insert low-income communities back into the areas where they've been excluded, using Transferable Development Rights and Accessory Dwelling Units, strategies allowed within the existing zoning code. The intent is to re-insert people not only physically, but also culturally, into the areas where their culture has turned now-gentrified neighborhoods like the Mission into the vibrant places they are today. The project then speculates on the architectural implications of how these new communities can (or cannot) be re-inserted into the urban fabric, and also on how that will influence the city in terms of identity and ownership.

# RE-DESIGNING GENTRIFICATION: DESIGNING FOR THE DISPLACED

**ELENA WHITTLE** 

24

Advisors: Chua, Davis

Image: Air Rights Housing Intervention, San Francisco

22

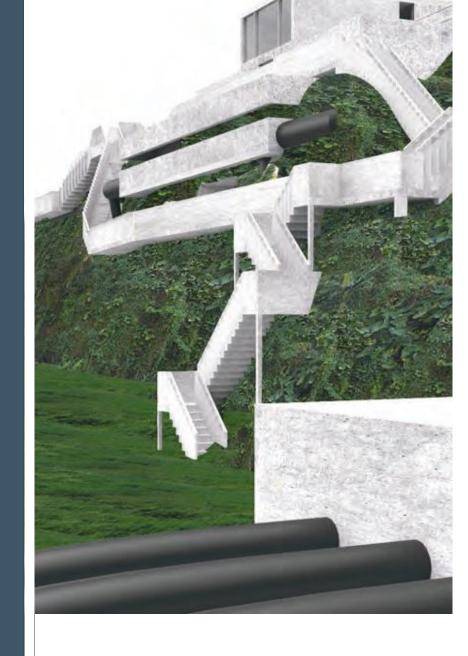
Sekou Cooke Elizabeth Kamell Timothy Stenson

"Littoral" commonly refers to territory occupied by land and water, or sometimes by land, and sometimes by water, but it can also be understood more broadly. Things, geographies, concepts that are interstitial can be characterized as littoral, as thick boundaries. A river's flood plain is littoral; so is the earth's atmosphere. Littoral territories lie between ocean forces and the almost equally strong inertia of the land—terra firma. In the midst of violent fluctuation, where planet-scaled quantities of energy are spent, we squat—three billion people and counting, in increasingly vulnerable coastal locations. For millennia, water was a transportation infrastructure for colonization and trade. Now, it is a threat to 40% of the planet's human population. Somehow, we are still managing to ignore the risk. We shield ourselves from evidence, we ignore facts, we stick heads in sand. We want the definite. We expect the unalterable. We want water that is cool, salty (and sweet), and predictable. We want rain, but not deluge. We want fire, but not wildfire. We want heat below boiling. What we get is Katrina, Harvey, Sandy, Andrew.

Climate change and population increase are combining to produce rapidly growing levels of distress and destruction within coastal regions, the planet's littoral zones. Population increase and shift, with attendant increases in shoreline settlement, are placing ever-larger numbers of people and volume of construction in storm-vulnerable locations while simultaneously degrading the potential of these same coastal landscapes to absorb storm force. The intensity, frequency, complexity, and monumental tragedy of flooding disasters will not decrease.

In fact, predictions are for the opposite. It is well established that rising global atmospheric and oceanic temperatures are linked to increasing carbon levels in the atmosphere. And further, that rising temperatures are changing global climate dynamics—wetter wets, drier dries, more frequent and powerful storms. As greenhouse gases accumulate in the atmosphere, temperatures climb and climate change accelerates. These projects address sea-level rise in a variety of ways; some are dystopic and biblical, others take cynical aim at the crisis of realpolitik. Each of them addresses the broad zone "in between."

This project reassesses the freedom, manipulation, and celebration of water, within the context of a slum in Santo Domingo, the capital city of the Dominican Republic. Poor waste management practices and political corruption have left little to no support for underprivileged communities in the nation, who are suffering because of choices made by government officials. La Barquita, a town on the perimeter of Santo Domingo, understands the afflictions of climate change all too well, be it natural disasters. pollution, or inaccessible resources. Conditions are only expected to decline with time, as the global temperature rises. In 50–200 years La Barquita is expected to see a water level rise of five meters. The most valuable resource in the world will surround this community and they won't be able to use it because of poor waste management. Architecture can redefine this condition and create a more sustainable and viable solution that will mitigate the pain endured by these residents. This project will use the surrounding water from the Rio Ozama, collecting it through a siphoning system that will move the water upwards of twenty meters to service existing communities without using energy. Once the water has arrived it will be filtered for drinking, bathing, and washing. The space will emulate the flow of water, celebrating each moment of the process as well as illuminating the same process to those circulating through it. Guided by a series of walls and an everflowing current, the patron enters the site with the water. The walls dictate movement throughout the site, while also determining what can be seen. In one moment, you may be surrounded by walls, only able to hear the crashing of water, or the sounds of families bathing in the pools, and then you arrive at your destination engulfed by the space. Water should not be understood as a commodity but rather as a right. This project demands the action of the Dominican government, to supply neglected and suffering communities with access to clean water and to educate these communities so they can collect and produce clean water for themselves.

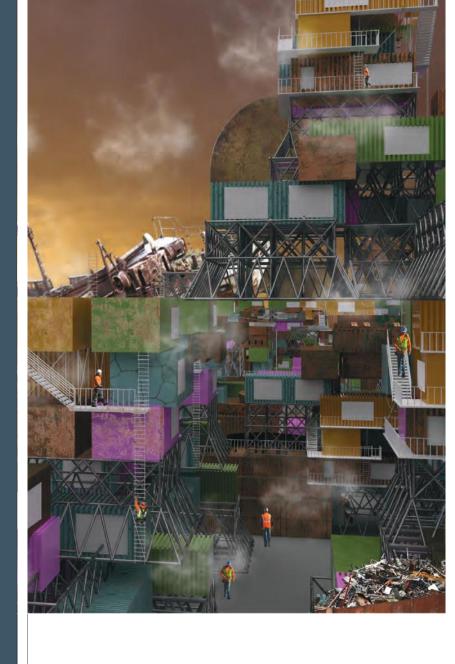


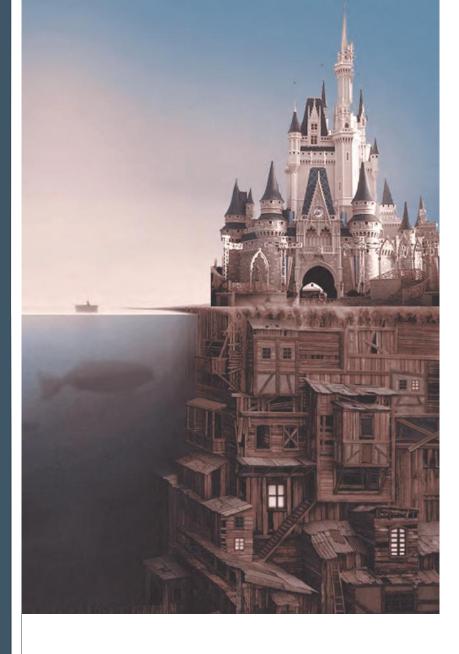
Between 2025–30, the luxury islands are almost completely flooded; inhabitants have migrated inland. As a result of national economic distress and a virus pandemic the luxury cruise industry is collapsing, creating an opportunity through the ship breaking industry. A new neighborhood emerges within Dodge Island. The ship breaking company, with a live-in system for their workers, encourages its new residents to design their own housing using existing elements and resources—discarded cruise ship parts and discontinued shipping containers. By 2040, the massive structural clusters have merged into one elaborate system of ship parts and shipping containers. As more workers are needed for the ship breaking industry, there is less space for the residential neighborhood called Neuvo Pequino Miami by its residents. To expand their space, the workers have created platforms over the flooded islands. Using freight ships, they move existing structures and homes to the new areas, claiming the once luxurious properties as their own.

Image: 2050 Settlement Prediction, Dodge Island, Miami, FL

Advisors: Cooke, Kamell, Stenson

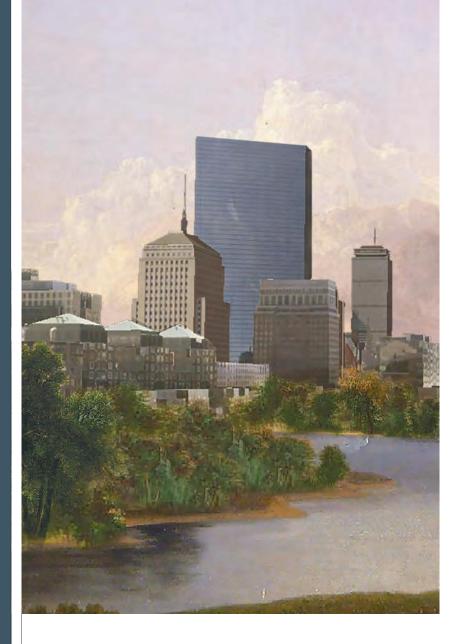
# COASTAL CITY COLLAPSE AND REFORMATION: MICRO-CITY OF NUEVO PEQUEÑO MIAMI





Advisors: Cooke, Kamell, Stenson

### GARDEN IN THE MACHINE: PICTURESQUE SCENES THROUGH A SUBLIME MECHANISM



**JESSICA LIBBY** 

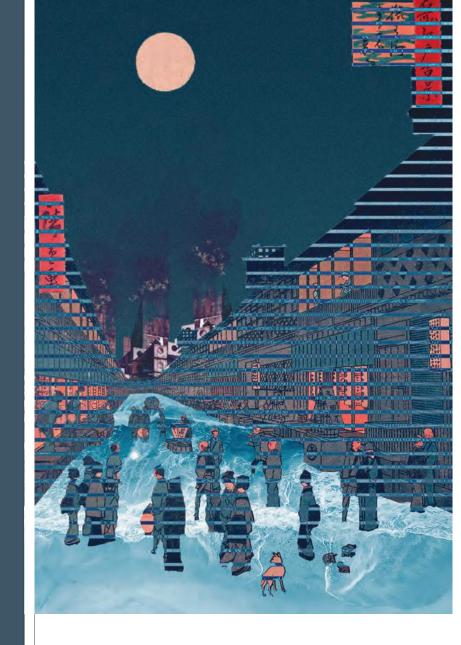
## LIFE AFTER INUNDATION: CLIMATE-RESILIENT PROPOSALS FOR EAST HARLEM

STEWART TILLYER

Situated in Osaka, a site threatened by both coastal sea level rise and declining population, the project is a crematorium that grows to usher in decay within the vulnerable city. The crematorium and cemetery operate as a virus fueled by human death to bring about an infrastructural death in the vulnerable site. Water, understood as a revitalizing and transitional element in Japanese death rituals, is used to repurpose both the body and the city through water cremation and flooding. Dissolved bodies are deposited into a garden matrix which grows to overtake the city. The crematorium reframes death not as an end—an anthropocentric view—but as a transition, a more natural understanding. Preventing new generations from building on susceptible land, the crematorium acts as a wandering memorial garden, forces residents further inland, and reclaims land for wildlife and vegetation. Rather than resisting forces of Nature, flooding and decay, the crematorium embraces the ephemerality of objects and acknowledges humans' place within Nature.

mage: Ephemerality of a Japanese City

Advisors: Cooke, Kamell, Stenson



# EUTHANIZED CITY: THE DEATH AND REBIRTH OF ARTIFACTS

Gregory Corso Kyle Miller Daniele Profeta

Design is inherently an act of speculation. Beginning with the provocation that the design process necessitates the suspension of disbelief, these projects accept the premise that fiction is an effective device to deliver a project that conjoins architectural design and broader cultural, 2 social, and political contexts. The distance between a near-future fiction and present-day realities creates just enough room for speculation and scenario planning, positioning architecture as the protagonist in a constructed narrative. Fiction is not intended to be understood as a story with characters, but rather as a speculation on possible trajectories, futures, and realities where the built environment is the setting in which architecture plays a primary role.

As the history of our discipline has demonstrated, times of political and social turmoil necessitate radical restructuring of our physical environment and the economic, political, and social systems upon which it is organized. These students think big. Their provocations link architecture to its constituents in a manner that imagines positive change. Thinking big does not necessitate operating at a very large size. These projects range from surgical operations on an existing artifact to the conception of new forms and environments for living.

In demonstrating the value of architectural design, projects in this Advisory Group:

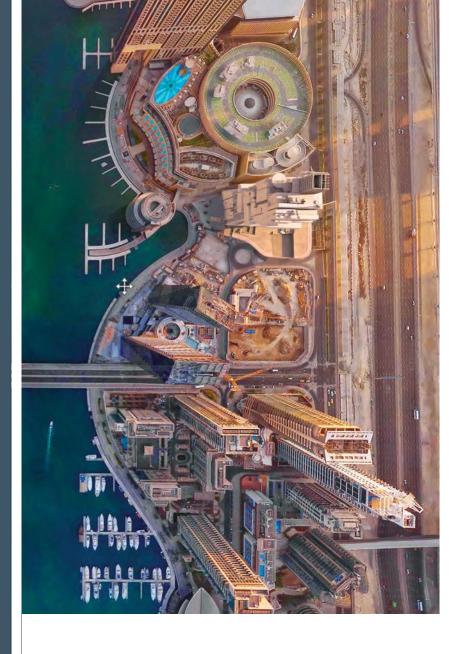
- Embrace the overlap between culture and form;
- Capture the public imagination by engaging pressing global issues;
- 3 Privilege form-making over form-finding;
- 4 Avoid cliché at all costs;
- 5 Privilege speculation over solution (problematize rather than problem solve); and
- Explore latent architectural implications of cultural, environmental, and technological phenomena.

hidden narratives presents an opportunity to explore the potential for aesthetics, form, and composition to operate politically. To create a new reality, the free-trade zone and its benefits are first returned to the host city. Incomplete infrastructures, by-products of the culture of material excess in a politically and economically volatile context, serve as hosts for the new zone. As the zone mutates, it breeds with the prevalent urban form, the capitalist vertical icon, and is selectively exposed to become more transparent in its operation. The displacement of the zone creates a unique jurisdictional condition that subverts existing authoritarian laws and recasts the aesthetics of autocratic neoliberalism. This enables informal economies operated by low-wage migrant construction workers to be relocated to the vertical zone, creating new social flows and material processes. The reimagined zone relies on the aesthetics of the *ad hoc* to generate an anti-icon rife with misaligned seams of tension, contradicting the skyline of generic, global icons. By engaging the relationship between abstraction and realism as aesthetic qualities, the proposed reality redistributes the senses to affirm equality for low-wage migrant

This thesis constructs a fictional scenario where the politics of aesthetics are disrupted and recast to redistribute the senses and create new realities out of current, hidden ones. By contradicting existing forms and systems, the project looks beyond the familiar to suggest alternative possibilities. Characterized by a unique system of governance emerging from a conflicting political agenda of autocratic neoliberalism, Dubai offers a demonstration of the politics of aesthetics and its ability to alter a context and its existing infrastructures. In Dubai, the agendas of autocratic neoliberalism extend beyond politics, encroaching upon the responsibilities of architecture by reconfiguring the city into discrete zones. In one such zone, low-wage migrant construction workers are systematically excluded from the "global" image of the city. This issue of exclusion is analyzed in conjunction with the culture of material excess and the jurisdictional and ethical issues of the free-trade enclave that persist in the city. The intersection of these

## HIDDEN REALITIES: THE POLITICS OF AESTHETICS

construction workers.



This thesis seeks to shift the current retail paradigm from a focus on transactions around the consumption of material goods to a focus on cultural transactions that influence social interaction and cultural exchange. By celebrating the culture of fashion and shopping, retail spaces can be revitalized to serve as activist ingredients that provide new cultural interactions rather than merely material consumption. The forces of globalization are impacting the built environment's local identity and distinctiveness. It can be argued that the intense pressure to globalize architecture stems from two trending phenomena—the culture of consumerism and the culture of design. Globalized media and consumer culture have created a "sameness" that emphasizes the generic universality of the built environment and its coinciding cultures. The fast-paced transformations of modernization have left architecture in the middle of traditional values and imported ideas, resulting in an unavoidable banality of space and culture. Within the built environment, fashion retail spaces have fallen victim to this global monoculture, where spaces no longer retain their original uniqueness, so much so that the distinct activities they were intended for no longer act autonomously. Because the practice of shopping and the fashion industry are constantly struggling to redefine themselves every few years to remain relevant, many brands and stores are forced to compete with changing consumer behaviors and e-commerce. In the age of the internet, online platforms have drastically changed retail landscapes and how society participates in the culture of shopping. This disruption to retail environments has called into question the significance and value of the physical store. The current retail trend lies in experience, where every store seeks to provide the consumer with a "unique experience." But how many stores can continue to capitalize on the experience economy before it becomes the new norm and retail is once again in need of a new trend to latch onto?

#### REIMAGINED RETAIL ENVIRONMENTS: REDEFINING SHOPPING IN CONTEMPORARY CULTURE



waste can counteract the exasperating rate of overconsumption and the overproduction of single-use, everyday objects that are discarded after their utility has been exhausted. The project utilizes themes of Excess, Collection, Reuse, and Intentional Communities in making donated domestic waste seem desirable again. The donation center, viewed through these lenses, is seen as an intentional community based on a system of logistics that deals with excess through collections, and encourages the reuse of donated goods. Through an understanding of Bruno Latour's definition of an object as an actant that entices events of action, the thesis brings objects to the primal focus of architectural space, which then begin to illustrate the narrative of donations and their political, cultural and economic impact.

The project begins with donated domestic goods entering a machine that performs defined domestic cleaning practices such as

Communal living and a new form of engagement with domestic

machine that performs defined domestic cleaning practices such as laundry, stitching, polishing etc. The machine sorts the domestic goods into three categories: New, Broken and Irreparable. By extracting the raw material of the irreparable discarded domestic goods, the machine generates structure for the new communal living space being conceived. This may include floors, columns and walls. The broken discarded domestic goods are repaired through the machine processes. Some of the raw material from the irreparable objects is also utilized to repair the broken objects in an ad hoc manner. The new discarded domestic goods undergo cleaning. Once the objects have been treated, they are curated and ejected out to the community into domestic spaces. These spaces are treated as bedrooms, dining rooms, bathrooms and living rooms. Moving along each of the spaces generated, one engages with domestic goods that were once thought of as waste but may now suggest a provocative manner of living.



#### ISABELLA CALIDONIO STECHMANN TANVI MARINA RAO

#### LIVING GREEN: EXPANDING THE LIMITED AESTHETICS OF SUSTAINABILITY

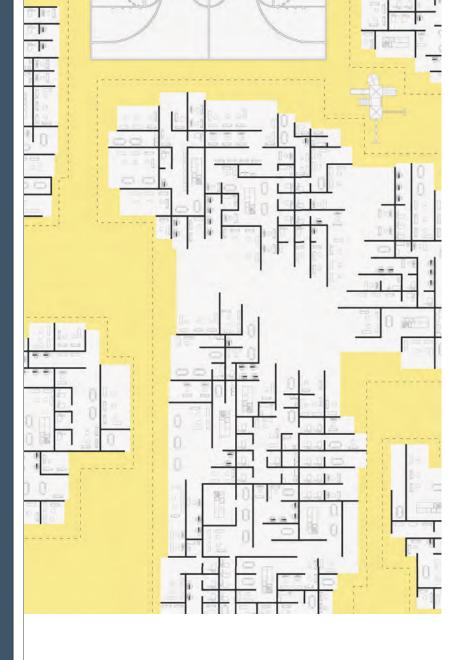
This thesis radically imagines a housing block that redistributes

how it is supposed to perform. For contemporary generations, sustainable architecture is synonymous with clean, green, pristine and futuristic. Our minds, as designers, are limited by aesthetic associations rather than performance. Furthermore, ongoing issues like greenwashing limit our perspective of sustainability, as architecture is used as a tool to promote an

image of environmental responsibility, rather than achieving positive results for the environment. One of the markets most significantly affected by the impression of sustainability purely based on aesthetics is the housing market. Developers promote new housing developments as the promise of the ultimate sustainable lifestyle, using attractive renders and large amounts of vegetation. In reality, factors like inefficient use of space, location, and automobile commute ultimately render these developments' attempts to be sustainable, useless. The typology of sustainable housing developments allows architecture to demonstrate its ability to operate on a domestic scale and at the

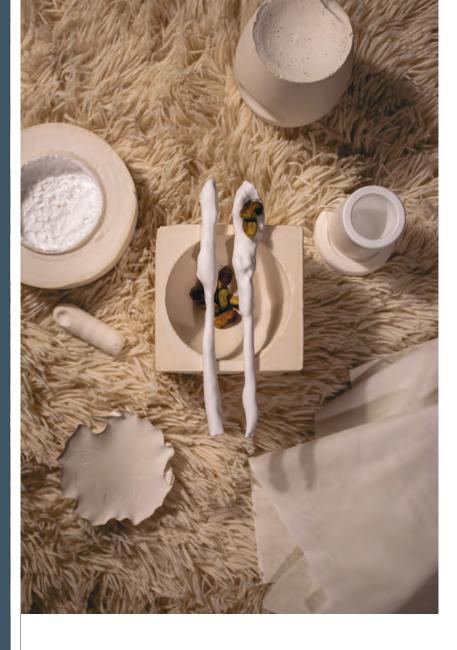
scale of the collective.

program and spatial conditions by blending private and collective spaces. Over the past two decades there has been an increasing, although still small, interest in sustainability in architecture, influenced by large corporations, high-end developers and sustainability certification organizations like LEED. This same influence has negatively impacted our attempts to design sustainably, because we fall under the prejudice of how sustainable architecture is supposed to look, instead of



The research explores how fine dining mobilizes and manages behavioral dependencies on the latent infrastructures and tacit rules that define any given space. In a study of fine dining, the manipulation of human behavior and the ritualistic patterns can become normalized through total architectural control, presenting a platform by which other experiences can be executed. This design thus aims to emphasize both the traditional and the unconventional rules and practices of consumption by exaggerating their attributes, leading to a fully curated and executed dining experience to test a series of interventions. The implemented techniques of functionality, counter figuration and material instability will lead to commentary that reveals the technical and political aspects of consumption and later introduces an architecture that intrinsically encourages desired practices as opposed to prohibiting unwanted behavior through external means. From a broader perspective, they will begin to generate a model for future realities by which architecture becomes a medium to consciously manipulate human behavior through form, space, and aesthetics.

#### LEARNING FROM FINE DINING: LATENT FRAMEWORKS FOR HUMAN BEHAVIOR

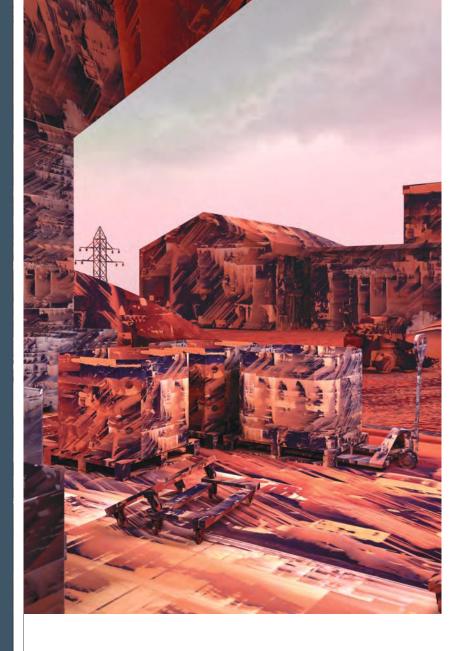


Near-Future Fictions

Advisor: Miller

mage: Artifacts for Consumption





#### THE HIVE: COEXISTING WITH UNLIKELY COMPANIONS

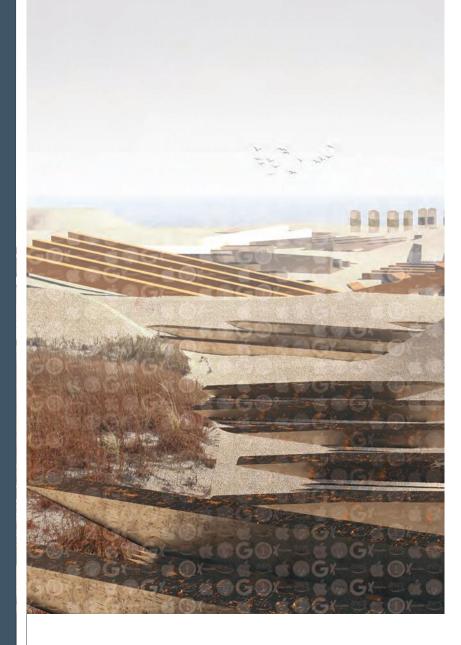
As a society, we have chosen to erase and neglect the problematic images and narratives of Superfund sites. Veiled by the parties responsible, these wastelands are the toxic remainders of American culture. Rather than remediate these industrial sites and thus revive Nature, this project seeks to coexist with the consequences of our past and ongoing present through myth. The project does not attempt to design a solution for Superfund sites, but rather to foreshadow a harrowing state of coexistence with a damaged landscape. How do we make space for an extraordinary

companionship with toxic ecology? Passed down to this generation is a poisoned landscape and ignorant compulsion which only perpetuates the industry's perverted, never-ending carnage. A magnesium production plant adjacent to the Great Salt Lake has left the surrounding landscape scarred with evaporation ponds, smut piles and waste lagoons. This new American landscape in Utah can no longer exist in adjacency, and society must

come to terms with the consequences of mass industrialization and militarization. Sites such as these are what Mike Davis calls, "the materialization of our cultural heritage," and must be engaged as such. The thesis seeks a chimera of material collisions and troublesome artifacts to enhance the dissonance of the fictitious American landscape and the authentic reality we refuse to acknowledge. When challenged with the imagery of these damaged sites, one is confronted with an unfamiliar and deeply disturbing ecology—a toxic blind spot in the community. This project speculates on the collision of two ecologies: the human and the toxic. Through an open and poly-temporal system, this thesis investigates how humans are forced to acknowledge their synchronicity with these toxic entities. This coexistence is defined by Donna Haraway in Staying with the Trouble as "Terrapolis," an indeterminate equation which accommodates unexpected companionship through materials, languages and histories.

Unlike real clouds, the digital cloud is not in the sky. It lives in the thousands of data centers dispersed around the world and its content incessantly travels thousands of miles in the form of light, through a global network of fiber-optic cables. The significant majority of data centers are located in exurban environments; however, a surprising minority of critical data centers are located in dense urban areas. Investigating the public's engagement with network infrastructures of digital data and genetic information is a relevant undertaking in a world where governments file multibillion-dollar lawsuits against tech giants over privacy concerns and our daily conversations are concerned with the distribution of deadly viruses and public health information. This project aims to reveal the internet infrastructure as a physical entity with varying degrees of inaccessibility where billions of digital identities live. The internet infrastructure is portrayed as a culturally significant artifact through the lens of personal data agency governed by a third party. This effect is achieved through a series of carefully constructed sequences that different types of users would experience as they engage with the project. Varying degrees of transparency, ground-level formal gestures and interfaces of byproducts such as exhaust vents and cooling towers build up levels of awareness for the passers by that are unprecedented in real-world examples of the internet infrastructure.

The Personal Data Initiative is an imaginary publicly governed organization for personal digital and genetic data agency comprised of a data center, a genome lab and necessary public programs such as the personal data council. The project sits on a large plot of land in the Rockaway Beach in Queens, NY and is mostly submerged in the ground. Proximity to the ocean brings the vulnerable nature of the infrastructure forward and underlines the risk associated with storing sensitive personal information on the seemingly ethereal and invulnerable digital cloud.



## THE PERSONAL DATA INITIATIVE: WE THE CAPTIVES OF THE CLOUD

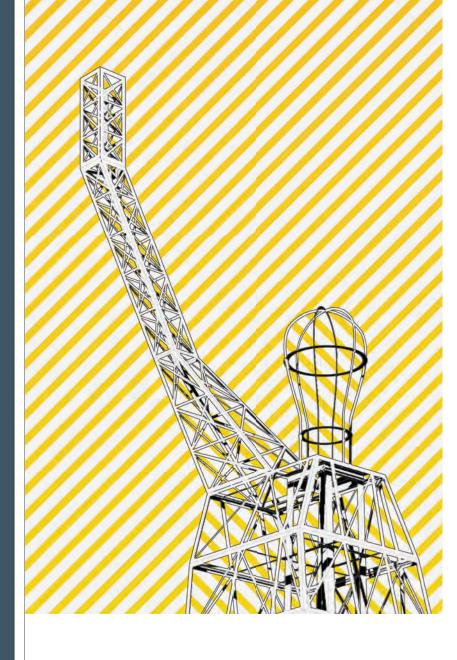
**Near-Future Fictions** 

Advisor: Corso

#### PLANNED OBSOLESCENCE: INTENTIONALLY UNSUSTAINABLE FORMS FOR CRISIS DESIGN

unjust structures of power. We need to be the check on power in the production of space, not simply neutral actors in the formalizing of

an order beyond our control.



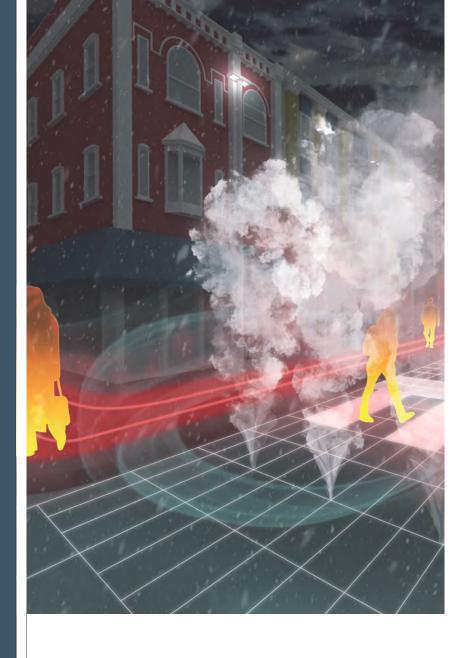
DANIEL HOGAN



## AFTERLIFE OF GOBEKLITEPE: HOUSE OF GOD WITHOUT SACRED ARCHITECTURE

Advisor: Corso

## REVEALING LATENT ENERGY GRADIENTS: ENGAGING WITH AESTHETICALLY SENSORIAL SPACES



**RAN XIE & BIYUN ZHANG** 

Britt Eversole Julie Larsen Sinéad Mac Namara

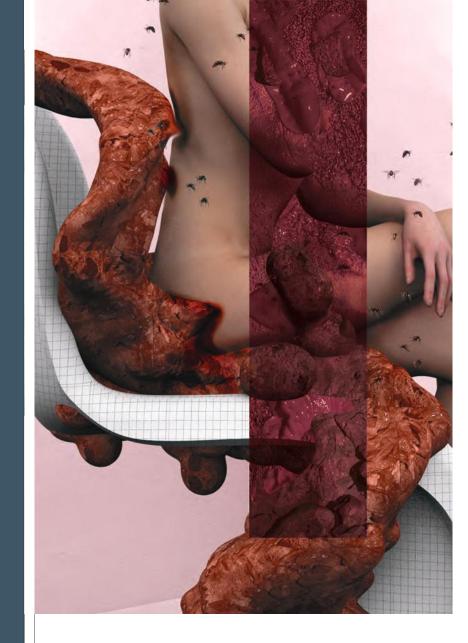
Let's start with matter as a way of reconsidering the material imaginary of architecture in ways that question economic logics. Architecture's semantic field remains burdened by the phenomenological legacy of the moral ways of working with the stuff of building—from Ruskin to Kahn to Frampton, we've been following an elitist map of tectonic propriety that guides us to pre-ordained elegance and prefigured poetics, all while pretending that the market plays little role in our designs. A focus on matter swerves around the comforting disingenuity of good practice and instead insists on an approach that looks not at the quantitative "performance" of materials but the behavior and misbehavior of an assemblage, a practice or a machine. Matter eschews nature/ culture oppositions, insofar as matter (both the material and immaterial) can be simulated, projected and invented in ways that create new feedback loops with environmental systems and networks. Animal, vegetable, mineral—you can design them all. We accept that the Earth and earth are already de-natured and inauthentic. We embrace the uncanny effects of engineering a world—or many worlds—for a cynical society that is post-original, post-truth, post-fact...a society that long ago jettisoned its anxieties about substance and instead turned to questions of effects and affects. Today dissimulations surround us: material and aesthetic simulations that preserve the reality principle. They are simulations so artfully engineered and executed that we consider them part of the quotidian and the found because they enjoy an uninterrupted synchrony with their surroundings, which is what imbues them with critical

and political potential. Tectonics reaffirm, but matter satisfies desires, weaponizes fears and plays with memory. Matter absorbs pain and pleasure. Matter releases placebos, toxins, hallucinogens and curatives. Matter is already encoded with politics, economy, geology, geography, genetics and (deep) history. Matter is always already covered in blood.

We aspire to bad tectonics, alt-materiality, corrupted aesthetics, fuzzy connections and unethical assemblages. We look for flaccid strength, weak structures, dirty ecologies, and low-brow logics. We delineate forces, image substances, project failures, and design for cyborgs (you're already a cyborg, btw). We aim for unprofessional practice, to engineer the organic and to faithfully falsify. Reject the binary opposition, get over your fake honesty, and get with a real that's better than reality. Matter is what you make of it.

For modernist designers, notions of standardization and mechanization challenged the design of spaces, and domesticated bodies. The aesthetics were less important than ergonomics. A normative model of the human body was proposed by Kiesler, Dreyfus, Neufert and Le Corbusier. Following the shock of a world war, modernists sought to miraculously heal the diseases of society with clean and polished designs: Germany praised the English model of smooth walls, Loos celebrated the generation of simple furniture and Le Corbusier saw clean surfaces as the anesthetic to calm the nerves. The desire for numbness became the true client of design. The normalization of numbness became a means to create comfort, and this idea still drives elitist design. What if your body does not need to find its right position anymore because there is no right position?





**UNCOMFORTABLY NUMB:** MANIFESTO FOR THE PARADOX OF DISCOMFORT

**CAMILA ANDINO & DANIELA ANDINO** 

Six characters based on six iconic building precedents serve as spokespeople for a new building project. Rather than reducing a piece of architecture to its numerous parts, conceived of anecdotally in relation to abstract diagrams no user ever experiences first-hand, these buildings are imagined as living, breathing characters. These buildings are alive. They have motivations. They have fears. They have convoluted tendencies. They have a fictional presence. They are six sickly schemas, scale-less and heretical, premised on the idea that citation is fundamentally unavoidable, and that we must focus on how the image of that citation is translated and frozen in flux. They each have an iconic silhouette and a trading card to pair. They aim to construe an architecture that might inspire the kind of excitement that fictional characters in card games, video games, cartoons, literature, and sports bring to a broader public boundlessly larger and more far-reaching than the architecture community alone. Each object is conceived of by answering three questions. First, what are the precedent's motivations—a typical discursive situating of the project, made active. Second, what happened to the precedent in its translation into this suite of characters—in other words, what claims did the architect make that fell flat, and how did the character evolve? Third, what is weaponized—what latent arguments can be elevated beyond utility, made explicit, graphic, and mostly, unquestionably modern.

We have set out to discuss a most vital subject, our beloved Architecture, with the aim of establishing the formwork for an explicitly Contemporary Project. A manifesto boldly presents its intentions and defiantly pursues their achievement. A thesis quietly presents a set of principles and tacitly seeks to answer them. This is not a thesis; this is a manifesto—a manifesto for an aesthetic architecture, a decisively colorful, uplifting, difficult architecture, deeply human, ambitious, at times irrational and unintelligible, and as complex and excessive as the time in which it was conceived.

LURID, LUCID AND UNINTELLIGIBLE: SIX SICKLY SCHEMES CHALLENGE SIX SYMBOLS



Earth Choreographer is a development project that looks into the near future and provides a variety of landscape forms as testing grounds. It will continue growing and extending over the next hundred years; it will never reach its final stage. The landscape will be continually activated by the robotics and landform and it will constantly re-shape itself, choreographing around the need of the testing. Earth Choreographer is intended as an experimental testing grounds for future sustainable technology companies. Its main construction method is a constantly transforming "cut and fill" approach. Instead of bringing the construction material from somewhere else, Earth Choreographer will reutilize excess earth from carving into the ground and earth left over from drilling oil wells to provide a wide range of spaces for companies depending on their needs.

#### EARTH CHOREOGRAPHER: REMEDIATING OBSOLETE GROUNDS OF THE FUTURE



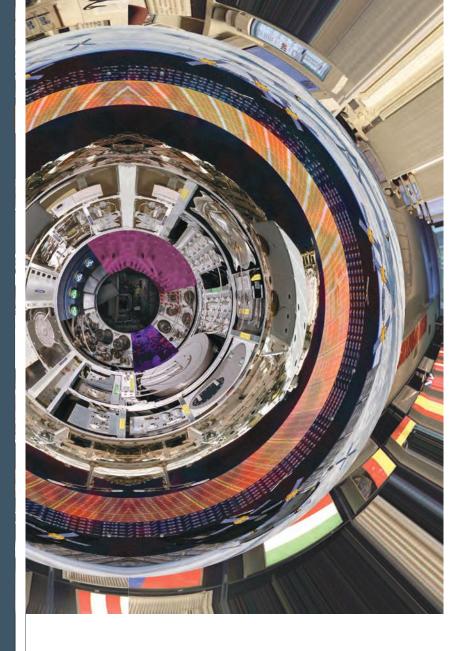
ANNA KORNEEVA & IRMAK TURANLI

The space-archive interiors explore the possibilities of human-machine interface in space habitation. They are conceived as an interface that is always on: its physical and digital spaces are essential to the support of human life and experience. The project alters the usual relationships between "closed" worlds of objects, moments, and environments that are supported by the larger infrastructural and sociocultural systems and their digital landscapes. The layers of information of each "closed" world are now communicated through a coded and unfamiliar representation which is not immediately or directly intelligible to humans and is further complicated by the omni-orientability of microgravity.

An archive tool allows constant informational, spatial and sensorial access to the body of information. This archive cannot exist on its own: it is created by, embedded in, and responsive to the infinite connectivity of things. It becomes its own being, accessed by the interface of the archive tool, yet inseparable from the environments of its origin. This design is the production of a digi-physical environment—capturing the utter inseparability of materiality and immateriality, of reality and "virtual reality." This environment learns from human gestures while the person learns how to move and act within this spatial interface. This is an unbounded continuous environment of access, the design of which is replicated as closely as possible through a physical installation and augmented reality. This dynamic relationship between human bodies, physical spaces, and the digital landscape is further liberated by the opportunities of outer space, where the human body is no longer limited by gravity. Furthermore, the interactive surfaceenvironment is designed to take advantage of microgravity and inform human body movements.

A primary driver of this design process is human interface and gestures, or proxemics: the study of how built environments and technologies affect the way people move and act. In turn, these body movements reinforce and affect the built environment and technologies. In favor of efficiency, human experience and comfort have until now not been central to space design and exploration; this thesis argues for the reprioritization of humans in the changing sphere of space exploration.

#### CONTINUOUS INTERIOR SPACE ARCHITECTURES: AN OMNI-ORIENTATIONAL ARCHIVE OF INTERFACES

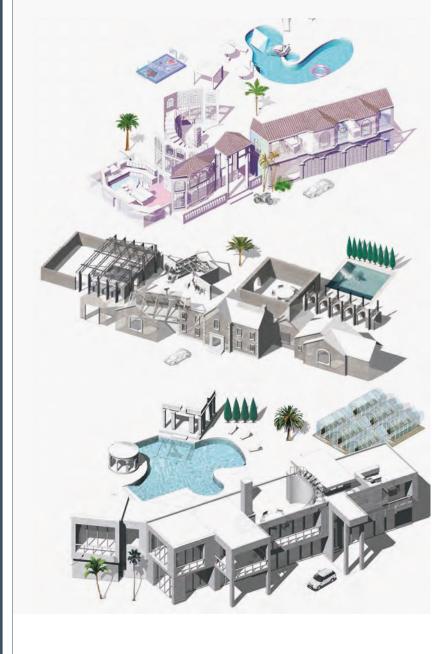


NATASHA LISTON-BECK & YUNDI WENDY ZHANG

The recent spectacle of news and "fake news" clarifies how the control and subversion of the media have measurable bearings on reality and demonstrates that humans prefer to reside within a tailored representation of reality on social media. Based on the construction of a digital unreality through the appropriation and reconfiguration of the McMansion by social media influencers, this thesis proposes a new housing type that addresses the changing dichotomy of public and private in a post-Kardashian cultural landscape. The Influencer McMansion is ultimately a consumer construction. It is a rare piece of architecture that can be evaluated objectively, as each part of the house aids in the construction of a false lifestyle narrative. Even the construction of such houses has served to establish a narrative surrounding their presentation on reality television, during which plans and finishes are carefully presented to an audience. The home has thus become a Non-Home, as domestic functions have been flayed open for followings. In an ecosystem of radical individualism, four disparate influencers chosen for their cultural "clout" are dismantled through a critical reconstruction of their public lifestyles. These influencers are treated as case studies in which one might glean the tactics that allow them to construct a persona, and how architecture allows for

FORM FOLLOWS FAMOUS: A CRITICAL RECONSTRUCTION OF INFLUENCER SPACE

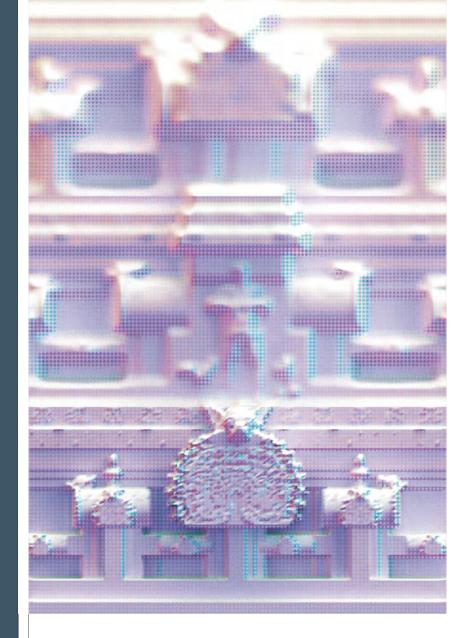
their self-commodification.



PETER ANTHONY MAFFEI

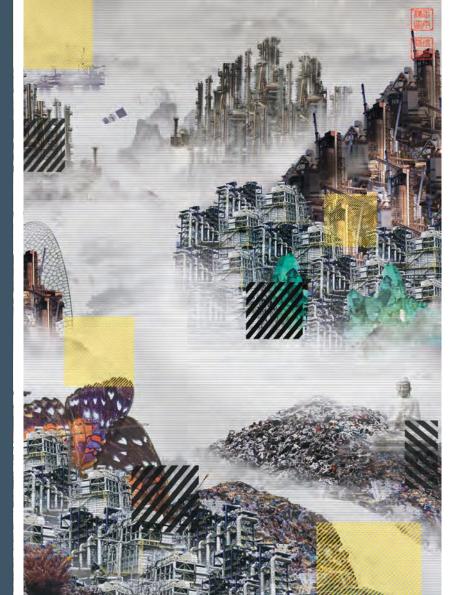
The intertemporal and dynamic nature of spatial perception constantly undermines and overmines the legibility of architectural space. The cross-referential nature of memory creates immediate tension across several scales of perception of the architecture, allowing us to reconsider and evaluate the existence of each of these scales with respect to its contexts. The contexts however are not restricted to the perceivable world but are spread across subjective associations through memory networks and relatability via the perceiver. A re-evaluation of the architecture across scales and memories allows the perceiver to construct a subjective and variable interpretation of the architecture, making it immediately and infinitely interpretable and legible. An architecture that forces a variable interpretation, or a blurred definition, hands over the agency of architectural perception to the perceiver, returning to them the power of architectural creation and interpretation. The deliberate inefficiency of resolution across scales of the architecture creates an immediately legible, interpretable and identifiable architecture.

## EFFICIENCY OF TRANS-RESOLUTIONAL LEGIBILITY: RE-POSSESSING THE SUBJECTIVELY CONTRIVED



ADITYA MEHTA

Fast-paced development in China has dramatically transformed the natural landscape and the environment. Continuous extraction of the elements has caused cities and villages to start to blur with their natural surroundings into a seemingly continuous landscape. Historically, there has been a close connection between architecture and nature. We see a constant interest in understanding the beauty of form and material/construction through nature, either in the proportions of Greek orders or in primitive huts as primitive tectonic structures. However, we see a tendency of human desire to "better" nature, to modify nature in ways that blur the definitions of natural and artificial. There must be a rupture with externalization so that the value of space is integral rather than incidental to the narratives of the Earth. The notion of environment begins to occupy public consciousness when substantial quantities of chemical waste from industrial production have consequences, from major rivers to the food supply.



THE RARE MYTH: VISUALIZING ANTHROPOGENIC PROCESSES

ANDRES FENG QIAN & YUQIAN WANG

Manifesto: The standard approach for practicing architecture results in most places having their programs and materials predetermined by their "owner's" private agency and self-interest, which are threats to your public and private liberty. *Architecture* as a practiced modus of expression can't be an expected freedom without also simultaneously creating a space in which to exercise such freedoms. Due to this disparity, what follows is a list of destructibles and their accompanying tactics that allow you to hijack, hold and defend, or even subvert the spaces and places you feel aren't serving their given purpose. Once you realize the potential you have to influence what happens in the environment around you, you will understand the potential you hold to rewrite the rules of architecture. Let each act produced with help from this manual serve as an exemplary denunciation of the indoctrinated process we have grown so accustomed to in order to exercise authentic creativity in architecture. Let history serve as our guide: from sitting in to standing out, unruly masses have participated in disrupting and taking over spaces and their functions in order to effect change.



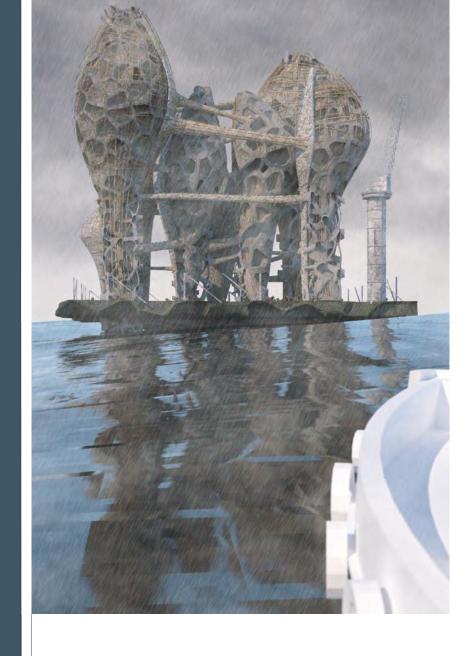
## INSURGENT ARCHITECTURE: A DESTRUCTIBLES GUIDE FOR HIJACKING SPACE

The site is Cromarty Firth, North Scotland, in the North Sea the world's largest oil field. Because of decreasing oil prices, the site is predicted to become an oil rig graveyard; over 600 infrastructures will be decommissioned in the coming years. As a wildlife protection region, this site has great potential to be engaged with architecture, for example for wintering birds. The deep ocean layer also includes reef creatures such as cold-water corals, barnacles, mussels, and sea anemones. Moreover, the site also hosts the endangered bottlenose dolphin and harbor seals and is protected by the SAC. The project aims for a living species utopia that embraces unpredictable weather. The design process starts by analyzing material behavior under extreme weather conditions (erosion, rust, seaweed cover), as well as animal activities. These natural material reactions are then highlighted and exaggerated. The design aims to balance the relationship between human operations and natural forces. The process begins with a minor operation on the existing oil rigs and then a redesign based on the natural habitats of these living species. At some point humans will be totally out of the picture and the project will be completely controlled by natural effects—the best outcome for the other species.

#### EMBRACE THE OTHERING: AN UN-ANTHROPOCENTRIC PARK AT THE NORTH SEA

Eversole, Larsen, Mac Namara

A Grotesque Eco-Utopia



YUNHAO YANG

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Robert Venturi's use of the term "difficult whole" in Complexity and Contradiction in Architecture (1966) suggests that adding to an existing work of architecture is not an act of closure or completion, nor is it a reduction of a possibly multivalent or ambiguous condition to a singular one. He states, "[The difficult whole] is the difficult unity through inclusion rather than the easy unity through exclusion. .." Addition can be an opportunity for amplification, interruption or revelation: of material, formal and/or spatial readings, of conditions that may be totally or partially hidden; ephemeral as well as permanent; temporal as well as spatial. These projects use three modes of material practice as a conceptual frame of reference: measurement, fabrication and assemblage. These are applied to the three operations of addition, interruption and alteration as methods to alter a pre-existing individual building, an ensemble of multiple buildings or an urban-scale site.

A historic building should be adapted to the existing context and its character should be encouraged to evolve and transform. Additions and interventions to existing buildings are inventive and creative processes that provide opportunities to transform an obsolete building into a propelling agent. Architecture should become a tool for highlighting the relationship between the old and new, and a bridge connecting the past, present, and future, becoming a point in the timeline of a place and culture. Visual storytelling displays a history of the past, an identity for the present, and an expectation for the future. Architecture is an ever-present form of visual storytelling. The built environment has the potential to become more than just a space for daily life and activities, beyond the pure materiality. The space itself can carry stories, memories and imaginations.

#### BEIJING XUN LU MUSEUM: Architecture of Narrative

YUJING DAI, ZHEYUE SUN & ZHAONAN ZHANG

Altered: Difficult Whole

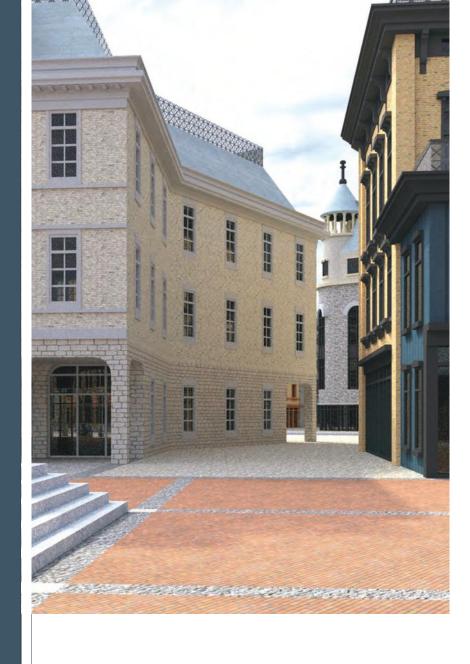
A mix of strategic, planned civic conditions, and an urban fabric of unplanned, bottom-up developments encourages walkability at the scale of the city, neighborhood, block, street, space, building, and detail and enhances human experience, sustainability, and connectivity. This thesis explores the importance of parallax and the picturesque for walkability. Parallax is the "displacement of the apparent position of a body due to a change of position of the observer," as defined by Yve-Alain Bois. This is best experienced with spatial enclosure and irregularity, objects of identifiability, and an occurrence at the scale of both the space and the detail. The picturesque is an aesthetic created by perceptible inflection, variation, and irregularity, which references human scale and human imperfection through movement and framed views. This operates best through unique and irregular urban compositions at multiple scales from the space to the detail. Both parallax and the picturesque improve walkability by creating urban experiences of interest that draw people through space, in a delicate balance between irregularity and cohesion. These factors, in combination

with more practical concerns of physically walkable infrastructure

and dense mixed-use development, create walkability.

15TH WARD NORTH: A NEIGHBORHOOD DESIGN TO **RECONNECT SYRACUSE** 

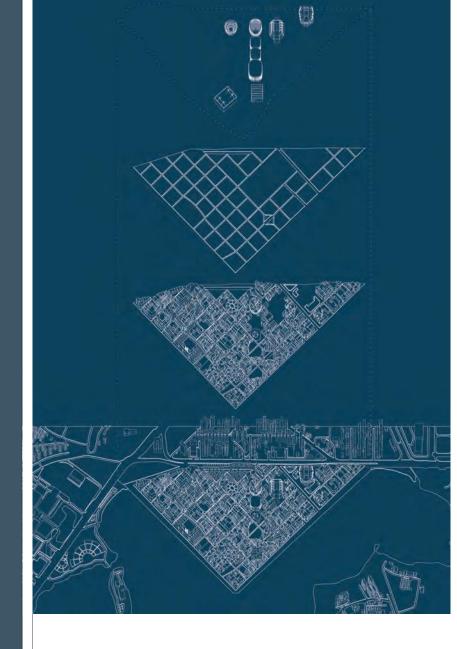
Altered: Difficult Whole



**BAXTER HANKIN** 

The conceptual framework of this thesis manifests itself in the ideology of Stan Allen's Field Conditions and the intersections of the work of Aldo Rossi and Rodrigo Perez de Arce. These urban theorists have explored the ability to unify diverse elements while referencing their identity and broader significance. By implementing working methods used and suggested by these individuals, this thesis makes its own claims about Olympic sites and their ability to transform. The project has culminated in three investigations; each scheme follows a similar conceptual strategy while introducing and abstracting idiosyncrasies of each particular city.

## RE-CONTEXTUALIZING RIO: URBAN TYPOLOGIES MITIGATING STADIA AS OBJECTS



MELISSA MELONE

mage: Urban Fabric of Barcelona Projected on Rio Olympic Park

Altered: Difficult Whole

"Ruin" is defined as a site (noun) or the act of (verb) collapse, deformation, and deconstruction. Piranesi and other historical artists and architects used ruin and the ruination process to explore and examine the identity of structures and their potential futures. Through this process, they collapsed and deformed these historical structures and in doing so, reframed their spatial narrative and accessibility. This thesis uses ruin in a radical alteration and preservation of obsolete industrial sites through the process of stripping back, in order to highlight and explore the history and potential of an industrial site's temporal identity. Through alteration the specific, utilitarian, and abandoned typology will be altered into a new, sustainable "difficult whole."

#### AN AGRICULTURAL RUIN: TRANSFORMING INDUSTRIAL SITES INTO PRODUCTIVE LANDSCAPES

visors: Goode, Mun

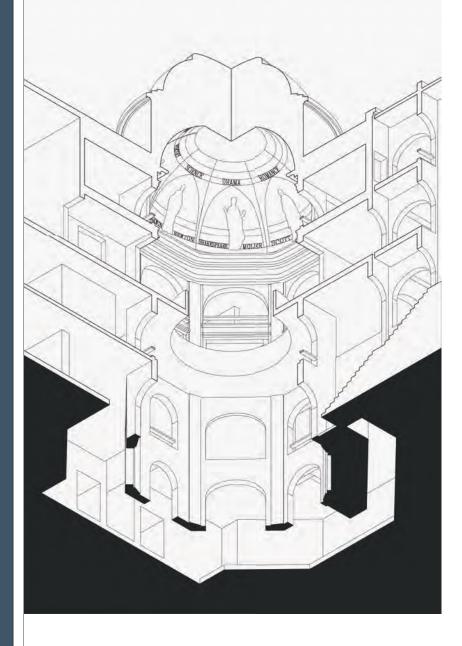
Image: A Productive Industrial Ruin



PATRICK SMITH

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THE INCOMPLETE WHOLE: **ALTERATION WITH MULTIPLE AUTHORS** 

**AUSTIN JAN SPENCER** 

In architecture and in the arts, analogous acts of translation and communication serve larger political ambitions; interdisciplinary scholarship and creativity are required to best understand the integrated visual-political construct. Emergent political crises facing contemporary society, questions about the ownership and identity of public space, the role and value of the arts in transmitting political intent, and the evolving forum for social activism all make for a poignant and timely opportunity to study the intersection of politics, art and architecture.

The histories of architecture and of the fine arts are inextricably linked to the polemical and practical realities of political philosophy and action. Architecture has served as the urban and spatial framework for political activism, assembly and engagement from the agora and the forum to the city hall, the courthouse and the street. Architecture provides not only the pragmatic setting but also symbolic and content-based image and text, which elevates the complex relationship between architecture and politics and plays an influential role in what types of political activities are instigated and facilitated, allowed and obstructed.

Architecture and the arts literally translate and transmit political ideas to the public through *image*. The ability of painting, print media, sculpture and three-dimensional representational form to connote political ideas defines an essential link between the arts and politics. These projects concentrate on *material acts* of intervention in the city and the conceptualization of and construction of representations of the city. They examine disciplinary motivations within

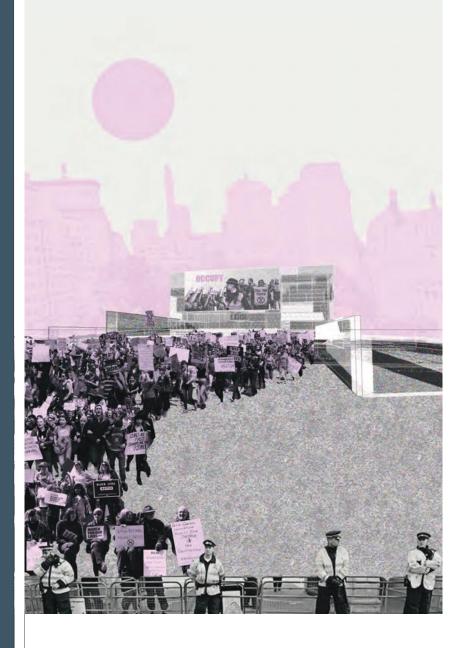
complex urban political contexts to better understand the rich network of blurred boundaries between art, architecture and politics; this comprehension will operate as a foundational basis for proposing material interventions into the politically charged urban environment.

Baltimore is divided in many ways as a result of its long industrial history layered with battles over race, heritage, and territory. Due to the enormous overhaul of the port that used to be in the center of Baltimore there has been a shift in the community surrounding the downtown harbor area. A place that used to be touched very little by the rich, it is now being converted for their benefit into a city with water views. This shift in community needs and status has left Baltimore at a crossroads of who she was and who she wants to be. Therefore, there are portions of the city developing and interacting with newcomers in vastly different ways. This is the context in which this thesis takes place. In the contrasting attitudes to Baltimore's changing character, neighborhoods have separated themselves almost fully from each other. However, on the edge of these neighborhoods lies a rather unclaimed space that this thesis has been referring to as "seams"—areas between two neighborhoods that mark a transition in aesthetics, opinion, and organization.

These seams are characterized by their un-romantic programs that fill a need which the adjacent neighborhoods do not provide. They house parking lots, mechanic shops, laundromats, etc. Seams are run-down and used purely for operational needs. Therefore, these spaces represent an architectural opportunity. The design intervention opportunities are seen as "stitches" to the hollow gap between the two neighborhoods—a joint that can both meld the two neighborhoods it collides with and provide a life within the seam that was not there before. The stitches are designed both to bring the city culture into these forgotten areas and to provide community-oriented needs. The specific seam on which this thesis focuses is a food desert, has less than 0.5% tree coverage, and is the home to a rather unsuccessful public housing project. The stitches proposed to battle the cleansing of this street are: urban garden space, a public library and art exhibition, and a market.







#### OCCUPY: TRANSPARENT AND **ACCESSIBLE NEWS FOR ALL**

A news media center encourages public assembly and transparency

of information distribution through an additional program that seamlessly weaves together news and the public. Its site is Union Square, originally called Union Place, because it was a public forum for parades, and public addresses. However, the current design of the park has made it far less conducive to public forum and assembly. This thesis revives Union Square as a news media center that is a vehicle for public forum once again. The public space will be used as a platform for different types of forums, protests, and even public addresses in conjunction with the newly remodeled public space, Union Square. While space for public forum is hard to find in 2020, unbiased news is also non-existent, and clear, factual information is inaccessible to the public. This project aims to counteract and contradict the current news available to the public. This idea spawned a new building typology with a clear focus on spreading factual information and unbiased

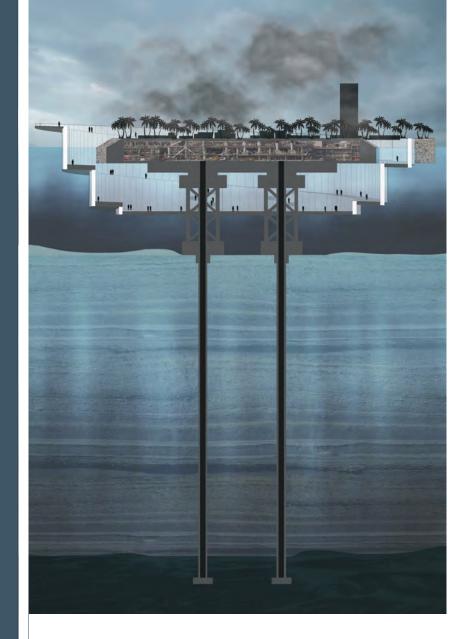
news, as well as making a space for the public to convene. A news media center that incorporates and supports the public, and is held

accountable by the public, is vital in modern society.

This thesis addresses the proliferation of continued acts of environmental injustice through a series of urban-environmental installations positioned at critical sites. These interventions are constructed and programmed to engage the public in various interactive events. They will expand awareness societally while addressing the environmental issues tactically. Through a series of site-specific acupuncture operations upon the urban environment, an environmentally responsive architecture of calibrated technological-scientific interventions can foster assembly, activity, and awareness.

# Image: The Manifestation of Disparate Injustices Advisors: Herrera, Rosa

**Urban Political** 



#### INTERRUPTING URBAN INFRINGEMENTS: LOS ANGELES: THE UNTENDED AND UNINTENDED

Subway stations are indispensable parts of city life and iconic

cultural features. New York City is a cultural capital famous for its unique artistic and historical background. The design proposes to add supplemental programmatic spaces to the otherwise singularly utilitarian aspect of the subway stations to archive and record the rich cultural significance and the historical features of New York

City into the station.

urban spaces. But the current atmosphere of the New York City subway—with dirty stairs, rats running on the rails, and occasionally homeless people lying on the station ground—is neither a secure nor a comfortable public space. In other countries, many subway stations are not only waiting points for transportation, but also underground public spaces for people to enjoy. Subway stations can be windows where visitors get a glimpse of a city; an artistic subway station has value in shaping the image of the city. For example, the natural cave style of the Stockholm metro stations reflects the value of the natural environment and sustainability in Northern Europe. The magnificent palace style of the Moscow metro stations embodies the symbol of power. The ceramics and sculptures in the Lisbon metro station reflect the city's tradition and their artistic culture. The narrative construction of Chengdu's subway station describes the city's history and its



A dancing, bending, folding line or pathway composed of episodic,

performance arts-based installations transforms Dr. Martin Luther King, Jr. Boulevard, and creates a new identity for Harlem as today's Black and African American cultural capital. Nine programmatic pieces, including a lemonade stand, an outdoor jazz theater and micro-libraries, create this new urban tissue. Harlem was once a place where people were out late into the night—dancing, singing

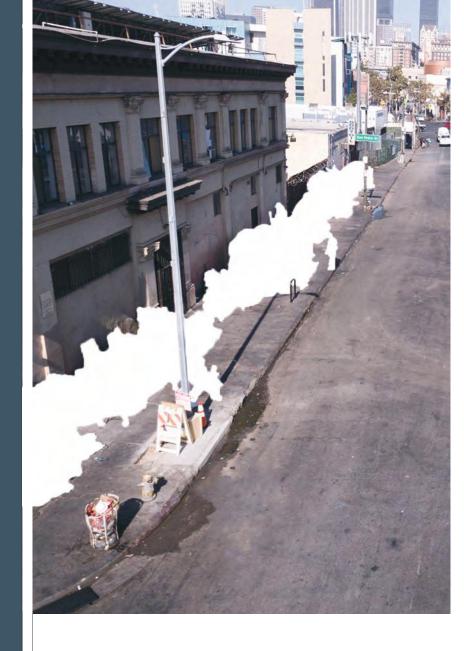
and enjoying their new-found city life. It was a neighborhood characterized by its immense love for Jazz, Ballroom and Swing music, a place where people came to be free. The rapid gentrification of Manhattan and booming real estate prices, however, are driving

New and contemporary mechanisms of architectural space making can be used to revitalize Harlem and return it to its original inhabitants. Unique urban conditions such as thirtyfoot wide sidewalks, four subway stations, mom-and-pop shops, large outlet stores, street vendors, jazz clubs, dance halls and

theaters characterize the site. The western end of the street leads onto the Harlem Piers which face the Hudson River, while the eastern end connects to a series of highways that go into the Bronx neighborhood. The site produces a long axis that stretches across the width of Manhattan. Insightful and carefully designed architectural installations along this path are necessary not only to promote and celebrate the artistic and cultural foundations of the neighborhood,

out its inhabitants and diminishing its rich cultural life.

but also to create a new era for Harlem.



## NOMADIC BATH HOUSES: REDESIGNING URBAN SPACE FOR THE HOMELESS



TODAY'S SCHOOL: PREVENTING GUN VIOLENCE

safe from gun violence.

**JUSTINE MCELMAN** 

Francisco Sanin Yutaka Sho Marcos Parga

The concept of private home ownership has been under scrutiny in recent years. Co-housing and micro-housing with shared amenities, spaces and responsibilities are increasingly familiar in urban areas globally. Common land in Great Britain has long served those with little access to commodified resources. In Japan, some survivors of the 2011 earthquake, tsunami and the nuclear power plant explosions have moved to properties with traditional systems of sharing land and services, so the communities that lost their hometowns can stay together. In Alaska, instead of private corporations owning drilling rights, oil is understood as a common natural resource, and profits from its sales are distributed among all local residents. This turn in the concept of ownership attests to the fact that architecture is an active participant in the construction of the city, suburbs, the rural, and the natural, and an agent in realizing a political and cultural project in the environment we share. The concept of shared ownership reimagines architecture beyond the object-icon dimension in which it is trapped today.

These projects grapple with sharing resources and how architecture may contribute to and critique this practice. Contrary to a romantic notion, shared resources can cause conflicts. Border walls, wars over precious metals and refugee camps, communes, gated communities and micro-housing all call into question who owns which resource, who decides, and what the consequences may be for our environment and for architecture.

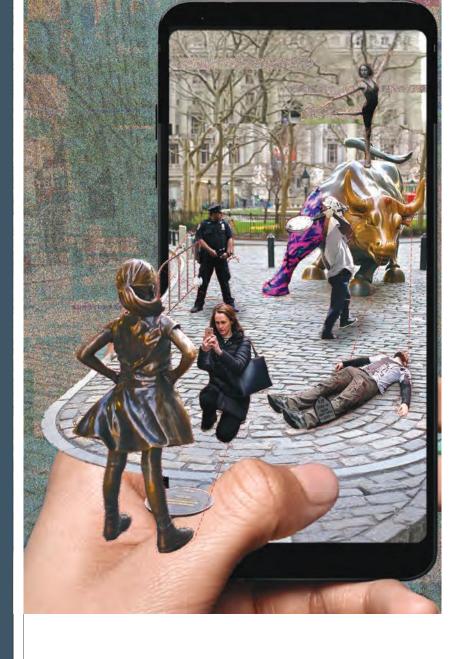
In public space, people, objects, virtual content, and ground utilize the same modes of connection as social media. This thesis develops a catalogue of examples that connect social media—a form of new age public space—with physicality. Social media uses algorithms to calculate what content is of interest to the user and to keep it flowing. Algorithms activate virtual space and allow for a plurality of people's voices to be heard through: congregation—the ability to tag something as part of a larger picture; feedback—how content takes in information and responds to the narrative it is presented within; relevance—how space is kept up to date by the continual production of new content; interactions—how content is manipulated and reproduced in order to promote a personal response; and engagement—how content promotes itself, and how others view and react to the content. These criteria, which allow content to circulate on social media, are equally important for physical public spaces.

Action to reappropriate public space can use these methods. Using the tool, "An Unfinished Virtual Taxonomy of Matter in Public Space," this thesis makes connections between different types of existing matter and draws conclusions that will lead to new projective designs to reactivate public space.

## mage: Diagrammatic Understanding of Matter in a Virtual Collage

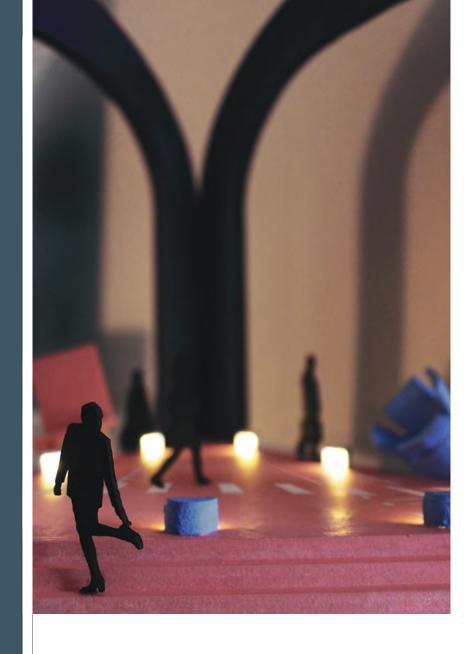
After Sharing

#### REPROGRAMMING PUBLIC SPACE: DEVELOPING VIRTUAL MATTER IN SHARED PHYSICALITY



**ANTHONY BRUNO** 

The Situationists used the terms "spectacle" and "anti-spectacle" to explore these narratives and argued that we are obligated to use the spectacle's own language and forms. History provides a series of theatrical mechanisms born of the spectacle that are torn between theater's ability to call out the spectacle and its inherent affinity for the spectacle. This thesis uses these found forms as its primary tools for agency through storytelling. They are taken apart, pieced back together, textured, and contextualized based on the needs of their assigned act in the natural feedback loop of these dueling narratives. A designed mechanism—a social, urbanset piece—will highlight our tendency to be performative along a path of least resistance. It recontextualizes the street and heightens awareness of the systems and behaviors at play.



# FOLIE A CINQ: PERFORMATIVE SYSTEMS EXHIBITED THROUGH THEATRICAL MEANS

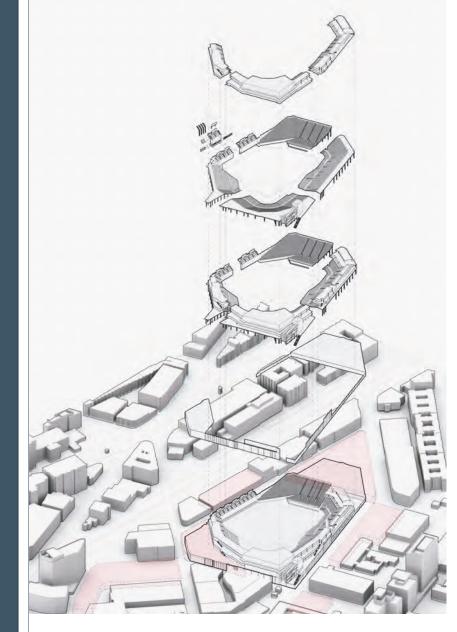
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mage: Theatrical Mechanism Populating a Pedestrian Intersection

This project focuses on the cluster of residual sites—effectively non-places—within or adjacent to one of America's most beloved structures, Fenway Park. From outside, the stadium appears as a fortress on the street edge: the heavy masonry and steel façades are disproportionate to the street and its pedestrians. The stadium's residual sites are an unnecessary necessity, primarily composed of concession concourses, bathroom waiting spaces, parking lots and underutilized streets that are dormant for the majority of the year. They could be something more—a catalyst of the urban fabric in the shadow of a megastructure. New typologies can be identified in which the spectacle can activate and occupy the space immediately outside the stadium, for something other than the sport of baseball.

This thesis identifies ways in which community-desired architectural interventions can modify the stadium's periphery. It proposes a new convention of the structural formalities of the stadium in which unnecessary elements are dismantled to promote a more porous, harmonious relationship with this newly defined periphery. The stadium is stripped of its existing façade to produce a symbiotic—although not homogenous—relationship between the stadium's concourses and the street, which become one and the same, and promote free movement of people, ideas, and physical activity.

### PAST-PRESENT-FUTURE STADIUM: STADIUM ARCHITECTURE AS AN URBAN CATALYST



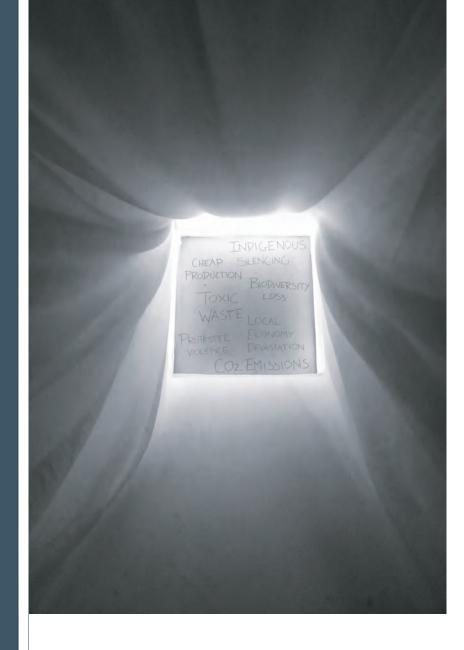
The Information Age has cultivated a more informed and mindful society, one that demands transparency in the fashion and food industries about ethical factors affecting the environment and our health. Social media has the power to mobilize a society into "canceling" celebrities or companies that make poor ethical choices. Exposing the poor labor conditions and environmental damage involved in the procurement of building materials would reorient public attitudes toward the built environment. However, building material manufacturers do not feel the pressure to practice transparency or offer traceability of their products, and architects do not demand that of them. Because information about building materials sourcing is not easily accessible to the larger public, supply chains in the construction industry are rarely a topic of conversation.

Expanding upon consumer awareness present in other industries, this thesis highlights the architect's ethical duty to responsibly source the components that make up their designs, and posits that architects are the primary consumers of building products due to their agency in material specification during the design process. Therefore, architects have a responsibility to become aware of potentially unethical practices contributing to their designs.

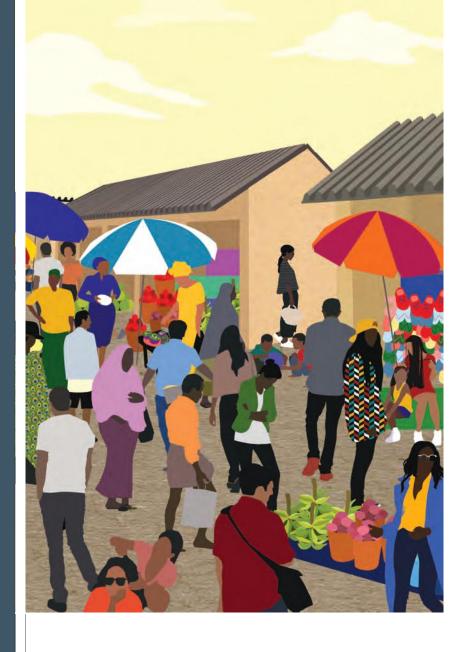
Image: Uncovering the Origins of Building Materials

After Sharing

# IF WALLS COULD SPEAK: A CASE FOR ETHICALLY SOURCED ARCHITECTURE



Research into the public realm reveals that the only real "public" space or amenity is the marketplace, more specifically Wuse Market, the most popular market in Abuja. The market historically and presently acts as the main stage of transaction, production, and interaction, and is a dynamic and dense place to become lost in. Like a city, Wuse Market has paths, nodes, districts and landmarks, and upon examining its logic, parallels can be drawn to the city's masterplan. This thesis proposes strategic micro-interventions within and around Wuse Market, which will serve as the ultimate Nigerian public space. By exploring the conditions and potentials of the market, this thesis tests how a new hybrid public architecture can connect Wuse Market to the people, mediate between the market and its surroundings, and push the idea of densification, ultimately transforming Wuse into an urban activator and precedent for future public spaces in Nigeria.



CONFRONTING A NIGERIAN AFRITECTURE: MARKET AS ULTIMATE PUBLIC SPACE

CAROLINA HOLY & AYEBANENGIYEFA TEPHANIE WABOTE

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Advisor: Sanin

mage: Marketas Urban Activator

In 2019, Australia experienced a tragic bushfire that destroyed 18,636,079 hectares of forest, more than 135 times the size of Manhattan, causing severe loss and segregation of nature. The bushfire also wiped out approximately 30% of the koala population, who were isolated in forests, causing them to be "functionally extinct." This could have been prevented if a corridor had been put in place.

To aid recovery from this devastation, this thesis proposes an architectural project connecting the greenness in Australia to "reserve green areas," government-regulated non-occupied lands, usually located in between the suburbs. Though the reserve areas are composed of grass, they are not functioning in the ecosystem of greenness, as they are kept private by the government for future use. With the potential of reconnecting sections of forest, the reserve areas will serve as a corridor for forests.

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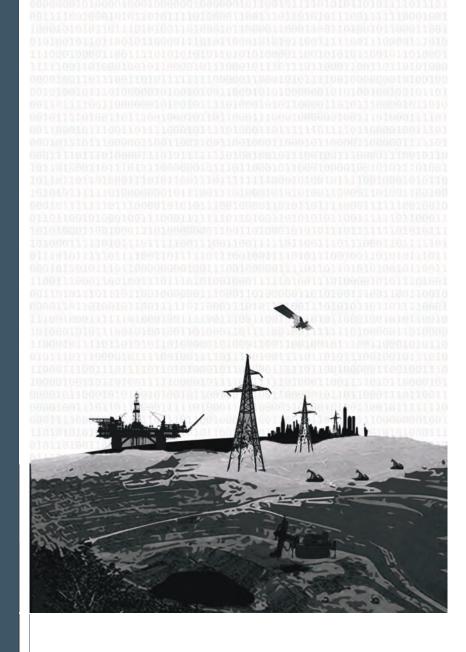
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Advisor: Sanin

Image: Bridging Nature

As this new type of architecture emerges, new project types should serve to align human prosperity with the evolution of the digital age. Data centers today sit isolated, disconnected from local networks and urban fabrics. They serve no physical need. To engage this condition, new project types and speculation through diverse programs can address some of the social issues urban societies face. With redundant operations of security and resources, data centers can elevate social conditions in all contexts. These data centers can intercede with unorthodox programs in ways that a traditional building cannot.

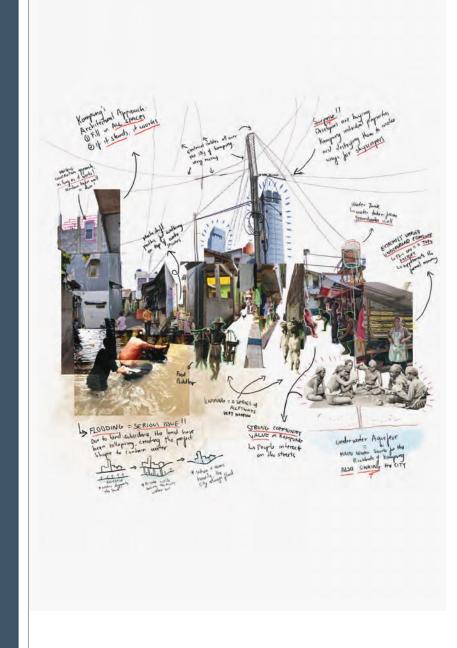
As methodologies evolve, the architecture should be reimagined, addressing the evolution of our digital culture. This thesis aims to associate the expansion of the digital age with the enhancements of societal well-being in the built environment. It speculates and through multi-disciplinary research tries to use architecture as a mediator. In the future, digital technology infrastructure will become seemingly nonexistent with the advancement of technology. By intensively investigating the physical and built repercussions of our data use, the thesis ultimately pursues the research question: Where does architecture stand in the virtual world and how can architecture address and mitigate the growing ramifications of our datacentric society?



In this thesis, architecture is used as a lens to critique the current socio-political climate by employing techniques of memorialization, sensationalism, and certain spatial tactics relating to memory onto the typologies of the courthouse and the archive. This approach actively reinforces memories of trauma, injustices, and activism onto a typology that has historically denied its contribution to systemic erasure and oppression of counter-history. It aims to impose the collective memory of erased narratives onto the city in the form of a courthouse imbued with commemorative and sensational archive spaces for consuming and imposing forgotten memories. Doing so will provide a lens into the past and demand that un-represented histories are not forgotten or reversed. The thesis seeks to identify and consolidate these memories—to celebrate the collective memory of narratives that are otherwise underrepresented or erased within the urban fabric.

After Sharing

mage: Participatory Memorialization



KAMPUNG AND THE CITY: A NEW MODERN CO-LIVING

TIRTA TEGUH & ZIYU ZHAN

In the landscape of Neoliberal policy—tax breaks, enterprise zones, and visa incentives—there emerge particular environments that naturalize Neoliberal ideology. The Capital Imaginaries of Kop van Zuid in Rotterdam, Canary Wharf in London, and Hudson Yards in New York construct their own truth games and therein the market's ideal subject.

The thesis carefully analyzes the mechanisms that produced these environments, and it studies the daily life within them. In a film series documenting each Capital Imaginary, the Neoliberal Subject is revealed as the Uncritical Worker, the Depoliticized Individual, and the Entertained Consumer. The films deploy the long take to invite criticality into a space that is built to smooth out friction. The films and the process of their production reveal the truth games of ideology being played by the Capital Imaginaries. Unmasking and defamiliarization reveal the pacified subject behind a banal city, in a constant state of production or consumption. Fundamentally, this thesis seeks to reveal the mechanisms that produce our environments, and to question how those environments are producing us.

TRUTH GAMES: NATURALIZING THE NEOLIBERAL SUBJECT



After Sharing

Advisor: Sanin

mage: Capital Imaginaries Installation: Films, Storyboards, and Truth Games

### ADVISORY GROUP

Joel Kerner Bess Krietemeyer Brian Lonsway Hannibal Newsom Daekwon Park

### THEMES

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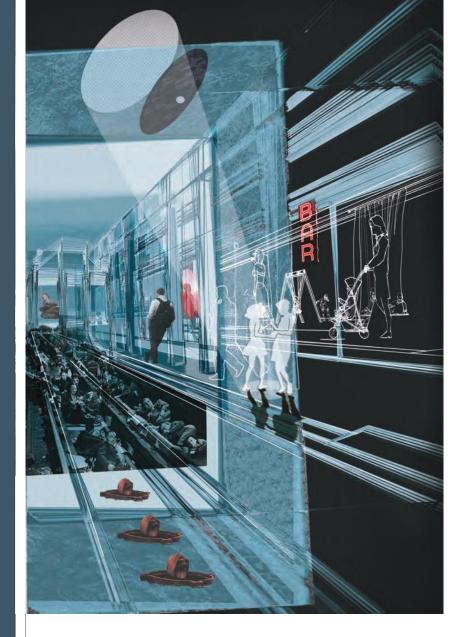
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220 Well-being

The next generation of architects must tackle the expanding list of contingencies that affect the contemporary metropolis. In a marked departure from the top-down, fixed-state modernist urban planning of the 20th century, 21st-century urbanists are approaching the city with more malleable, nuanced, and adaptable solutions. The contemporary metropolis will need to fill the voids left by the degeneration of infrastructural space and the absorption of streets and plazas into the interiors of monstrous, immense buildings. As architecture, infrastructure, and the public realm become increasingly entangled and inseparable, these projects propose new forms of city-making that challenge the modernist legacy through increasingly nimble and responsive interwoven systems that sustain constant states of flux. How can we preserve character, tradition, and community as bland, homogenous urbanization peeks over the horizon? How can buildings become programmatically flexible and resilient to increasingly precarious climatic conditions? How will architects adjust their approaches as the effects of climate change render themselves increasingly palpable, as resources diminish, as urban centers adapt to demographic changes, as transportation shifts from individual to collective, as vehicles become autonomous, and as technology challenges anachronistic modes of spatial and social gathering?

In a high-speed society like New York City, commuters can easily get lost in their daily routines. People come and share the same platform, but they don't understand each other's lives. Commuters see themselves living in one world above ground, and then there's a whole different underground world that people "above NYC" aren't aware of. Their paths do not cross, and secret spaces are kept hidden. The underground subway platform is one of the spaces (habitat) that is part of the commuter's everyday life. People use the subway platforms as an intersection (node) to meet with friends, while ignoring others sharing the same space. If there's one connector between these universes, it would be these platforms, where designed strips of space can act as portals where the different universes collide, and people from totally different worlds can engage, interact and influence one another.

results from social segregation and can bridge social gaps.



SUBTERRANEAN INTERMISSION:
RETHINKING LIFE ON UNDERGROUND PLATFORMS

YIWEN DAI

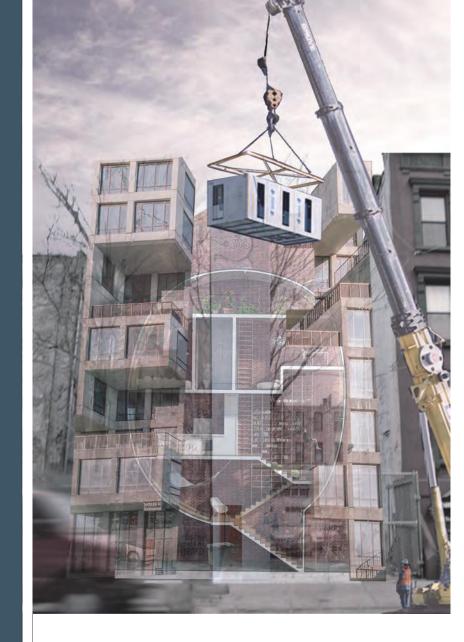
Advisor: Krietemeyer

Image: One Strip Space

This research classifies possible design methods and contexts to make a prototype for future infill building development. Limitations of size, scale, and design of new construction will be analyzed and will form the strategies for a prototype of infill building design. With the density of the built environment increasing in metropoles, urban lands become more and more valuable. Making use of vacant lands (vacant lots) in a metropolis can fill gaps in existing communities and play a critical role in achieving community revitalization. In The Death and Life of Great American Cities, writer and activist Jane Jacobs wrote, "Cities need old buildings so badly it is probably impossible for vigorous streets and districts to grow without them." Many historical buildings have been torn down during rapid urbanization in metropoles, and the newly constructed buildings do not relate to their historic context. Lifestyles and people's urgent need for diverse living space will continuously change. The metropolis is seeking a way to provide a house with potential

resilience and adaptable systems for future urban growth.





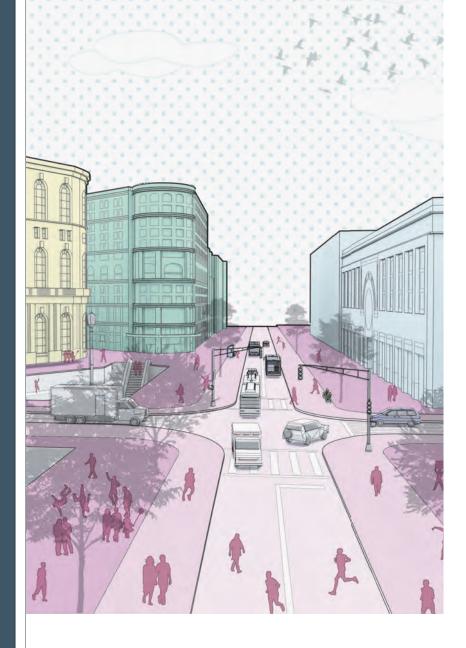
INFILL BUILDING: HISTORICAL INFLUENCE AND METROPOLITAN DEVELOPMENT

**QINGRI DENG** 

In response to the disadvantages of self-owned cars in dense cities traffic congestion, tremendously inefficient parking spaces, and polluted environments—several large cities have started to implement car-free policies. San Francisco pioneered a transportation culture of sharing with smart technologies, and the city now faces the challenge of reducing self-owned cars by applying car sharing, ride sharing, bike sharing and public transit. In future visions of the city free of self-owned cars, questions of car infrastructure come into play as the demand for roads dramatically decreases. What is the future of road and street, and how can architecture address the relationships between reclaimed street space while considering new modes of mobility and use of the streetscape? Market Street is a wide thoroughfare with multiple modes of transportation in downtown San Francisco, and it epitomizes the unbalance, with giant tech companies, tourism, and homeless people. Although it should be a safe and enjoyable space that welcomes residents and tourists, Market Street has significant crime issues.

This thesis aims to address the situation in three ways: first, analyze certain conditions of crime in the area according to type of crime and when incidents are reported to the police. Second, by referencing ideas set out in "Crime Prevention through Environmental Design" introduced by Neal Katyal, construct design criteria using quantitative and qualitative values. Third, suggest design prototypes to plug into the designated site to mitigate crime and activate a community of a shared culture of transportation in the reclaimed space. Urban fabric is the space that defines the identity of the city. It is where people come out of buildings, freed from their respective roles to share the mood of the city. It is more than just space between buildings for urban circulation—it represents the unique culture of the city. San Francisco has the capacity to celebrate and support many cultures and forms of transportation. However, the street is not yet activated to accommodate cultural events or to support a ride-sharing system. Architectural study of the urban streetscape can help the site become a healthier environment and activated communal space.

# CITY RECLAMATION: URBAN STREET ACTIVATION FOR CRIME MITIGATION



SINHO KANG

The United Nations estimates that 60% of the global population will be urban by 2030; as people flock to cities over the world, an increasing number of urban areas will exceed ten million inhabitants, reaching Megacity status. In the Megacity, when there is not enough space for urban development, space is achieved by skyscrapers stacking floors vertically. Under such circumstances, on the ground level, some urban development problems cannot be avoided—traffic conflicts and man-made environmental problems. Pedestrians are often vulnerable to traffic in the crowded city; the huge area of shadows caused by high-rise buildings swallows the whole city in the winter; the urban heat island effect poses a serious public health

This thesis proposes a new public space-oriented pedestrian system to deal with a series of urban development problems in the urban scale. This horizontal system will offer a cohesive living environment with social interactions and urban connectivity extending to the surrounding streetscape. In New York City, the scope is defined along 8th Avenue and 42nd Street with four main transportation hubs: Penn Station, Port Authority bus terminal, Times Square, and Grand Central Station. This thesis explores how to create a new pedestrian system connecting all four transportation hubs into one "super platform" supported by vital programs.

threat in the summer.



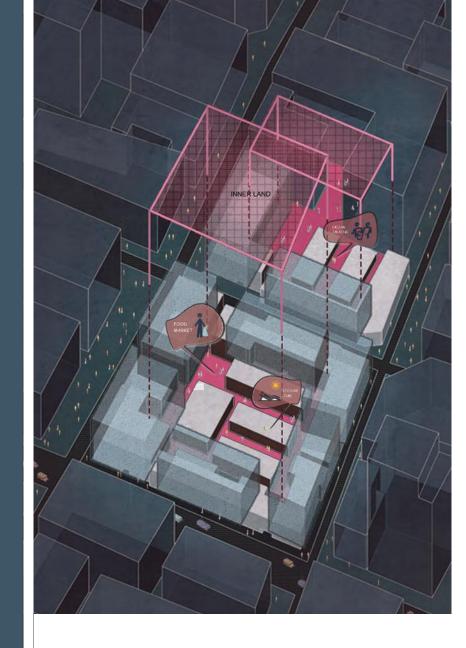
LOWER MANHATTAN URBAN LINK: PUBLIC SPACE-ORIENTED PEDESTRIAN SYSTEM

**HAOQUAN WANG** 

With the development of the Chinese city, plots that bear historical context are losing their original functions, while the streets and buildings are preserved. When they are considered by the government during modern urban planning, they are too often torn down and overlapped by the new. This happened originally in the interface of city blocks because of priorities of the development sequence, while the inner part of the block usually developed slowly. As a result, "isolated islands" have formed, enclosed by new construction.

Architects have the responsibility to bring these "isolated islands" to the public's attention and guide people to use them, since they are only temporarily hidden; their historical value and rich spatial experience have not disappeared. Although the new buildings with gigantic volumes will be the main feature of downtown areas, they should not constitute the whole story of the city. These historical plots are necessary because they contain stories and great joy, much like "condiments" that enrich the highly unified and dense urban life.

This project selectively reserves some historical elements before these "isolated islands" completely disappear, making them into positive space. In this way, their utilization ratio can be improved, making it more reasonable to conserve them, and not just for emotional reasons. From the perspective of plot ratio and building density, there is also a need to keep some low-density sections in order to leave urban life some breathing space.



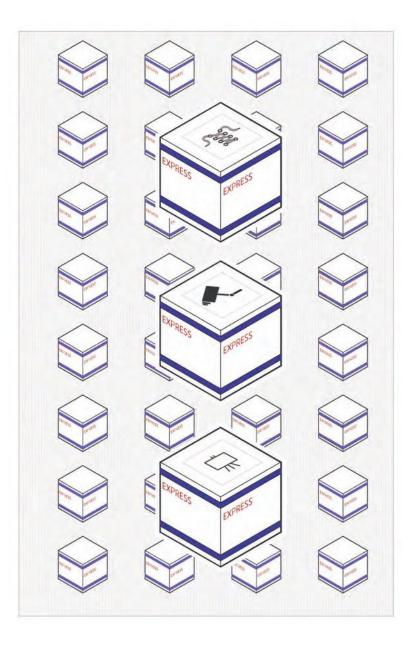
Cities

Advisor: Park

The single industry village is a unique economic condition in many rural villages in East Asia, and in China specifically. These villages dominate a market either at a national or global scale. Starting in Japan as the "One Village, One Product Movement" in the 1980s, this model has appeared most recently as the "Taobao Villages" which rely heavily on the Urban-Village symbiotic relationship unique to China, which has had this rural-urban structure since its birth. City-citizenship and villager-citizenship policies differ in all ways related to working, living and moving. The city-citizens only have land usership, with ownership of urban property residing with the state, resulting in a fundamental difference in the flexibility of the land use. The rural land can be kept as arable land or converted into village construction land by building activities before it falls into the urban construction land system. Thus, these villages are trapped in China's dualistic urban-rural relationship. This thesis explores this dual identity within rural villages and rural villages through future fictions based on two actual single industry villages:

Da Fen: An urban village in Shenzhen that grew from a painting material supply chain into an art duplication "factory" satisfying 70% of the European and North American markets. The collectively owned land and individual usership of the homestead land blur into one another, forming a space between the street and building—the exhibition space. The village is split into two: the village of producing and the village of exhibiting.

Heng Dian: China's Hollywood, a village in Zhejiang, Southeast China. The village provides scenery from every historical period of China's history based on collective ownership. The villagers have since signed an agreement of Portraiture Right and hold a dual identity in the village both as human-residence and object-actor.



SINGLE INDUSTRY VILLAGES: DUALITY IN UTOPIA

Architecture and its political counterpart, urban policy and planning, are traditionally privileged realms. It comes down to questions of access. Architectural education is, for the most part, limited to those with the means to pursue "higher education." Urban policy, meanwhile, is enacted by elected or appointed officials working with professional designers and economic developers; community input is often limited at best. These projects explore the potential for alternative methods to open the fields of architecture, urban policy and planning to the input and participation of a broader community. Can the narrative power of film and its ability to convey complex messages through the moving image broaden cultural accessibility and interest in architecture? Will the design of open, unfinished systems encourage constructive improvisation in our built environment; what is the potential of an architecture that plays? Is it possible to co-opt the proliferation of social media and online gaming in our society to increase access to architectural education? With the broadening of online crowdfunding platforms, can communities gain a seat at the policy-making table through bottom-up fundraising? Lack of financial means, elected office, or higher education shouldn't be the barriers to participation in our built environment or its design. Questioning the method, rather than the content, of design and decision-making processes can expose the far-reaching potential of universal access and agency in both design education and real-world policy making.

This project reviews the precipitating factors of these phenomena and analyzes the traditional marketing and financing models of architecture projects, also inspired by the potency of applying branding effects on architecture projects. The need for public participation is even greater today, and "crowdfunding" appears to be a mechanism that could be explored more.

community safety, or the heat island effect.

mage: Crowdfunding the Leftover Space

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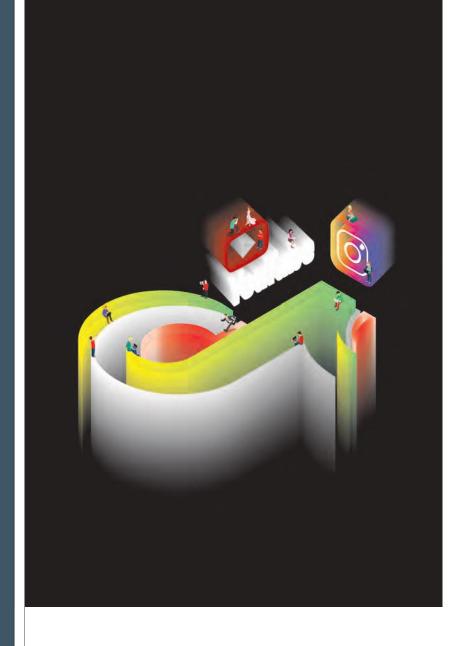
This thesis redefines "crowdfunding." It derives "crowd-space," "crowd-built" concepts which directly relate to space creation in a broad sense, instead of narrowly treating "crowdfunding" as a financial mechanism which can only collect capital and support from broad stakeholders. It explores alternative design strategies and operational mechanisms that may emerge in response to "crowdfunding" to reassign value to lost spaces. This can not only increasingly diversify the stakeholders who are involved from the early design stage, but also explore the potential of public space by shifting architects' role from creating space to setting a frame. It imagines a more ideal crowdfunding model to access publics and how the physical environment will change along with application of "crowdfunding."

# CROWDFUNDING THE LEFTOVER SPACE: DESIGN STRATEGY RESPONSES TO "CROWDFUNDING" MECHANISMS



NIYANG GUO

Today's young adults have grown up in a madness about new media associated with videos. Newly developed video apps like TikTok and YouTube Live have become a big part of life, especially for those in Generation Z. These new media are encoded with images, emojis, and memes to express the thoughts of the younger generation. Learning from these new media, we see how they can express the user's thoughts and be involved in changing social agendas. According to Media Richness Theory as described by John Short et al, writing in *The Social Psychology of Telecommunications* (1976), "people would choose media that allowed for the transmission of a greater number of nonverbal cues for interpersonal communication." Breanna McEwan writes in *Navigating New Media Networks* (2015), "Richer media also offer greater speed of feedback, greater language variety, and allow the sender more adaptability to the receiver." Since architecture style (form and function) is also an expression of social change with its own social agenda, this thesis seeks a new virtual architectural expression of an online community through a co-design process which can encode and decode with the users themselves. Using this co-design method, the model of the online community will be constructed with data from the users on the platforms that are considered new media (TikTok, YouTube, and Instagram).



### YOUR ONLINE COMMUNITY: ARCHITECTURAL EXPRESSION THROUGH NEW MEDIA

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mage: New Media Community

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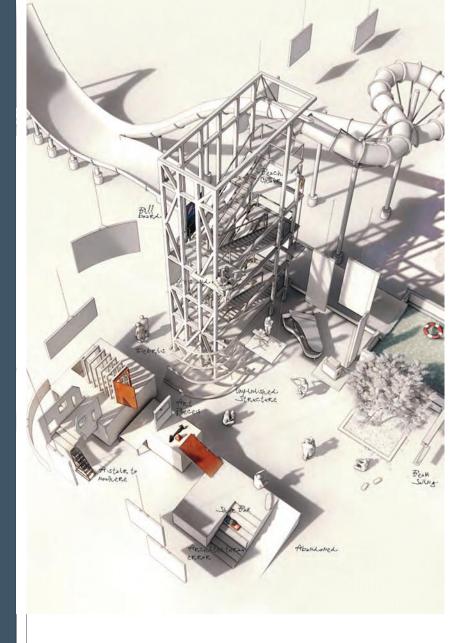
MIAO HUI

The traditional architecture education is unhealthy, ineffective, and expensive. Because of this, the field is relatively inaccessible for the public and students who cannot afford it—that's where Architecture Fiero comes in. Architecture Fiero is a new architectural gaming concept based on multiplayer online education games. 'Fiero' is a term used to describe success and accomplishment felt in gaming; it is a feeling similar to pride. By combining architecture and game design techniques, Architecture Fiero explores ways to make reality better by unlocking the power of game design. The gaming framework combines the structure and goals of traditional education with the model of online and real-world interactivity popularized by games such as Pokemon Go. Adaptive difficulty and level unlocking systems add to the mechanism of the design so that all users, from children to adults, can access education and find a suitable level to explore their architecture journey. The data collection system enhances the power of collaboration to create a meaningfully growing platform. Architecture Fiero welcomes everyone to find their passion and curiosity in the architecture world. We will all share the same emotion, Fiero, as we share architecture to build a better world together.

mage: Architecture Fiero Released Concept Cover

The arts speak to each other. Music and architecture have historically had a strong relationship, often developed in tandem. Gothic cathedrals had ceilings reaching to a higher power, creating vast acoustical resonance chambers that hampered speech and in turn led to the development of the Gregorian chant. Louis Kahn conceptualized the Fort Wayne Theatre of Performing Arts auditorium as a violin enclosed in a concrete case. Both disciplines reflect and acknowledge the cultural, social, political, and historical background in which they originated.

Of all the musical practices, improvisation may be among the most compelling. Instead of a final form, there is a perpetual state of development and change in playing that facilitates a leap into the unknown. It is open-ended, it allows mistakes and it rejects repetition and uniformity. Rather than look critically at techniques of musical composition, this project will investigate the relationship between improvisation in music and the potential for improvisation in architectural design. In order to develop this relationship, this project examines the similarities and differences in the creative approaches of the two fields in this context. This thesis examines the capacity of improvisation techniques in architecture to create meaning, and whether this can be a relevant technique for architects today who are facing a "creativity crisis."



## IMPROVISATION ARCHITECTURE: AN ARCHITECTURE THAT PLAYS

Advisor: Newsom

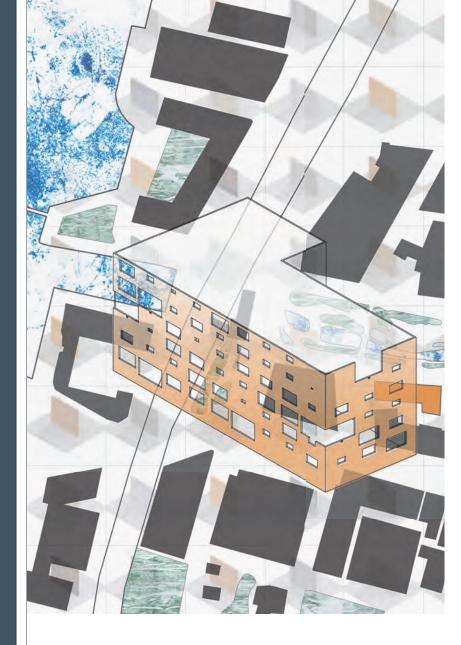
Image: Rules in Improvisation Architecture

In crafting a new narrative, there is a correlation between architecture and the film industry. Laying out a storyboard, establishing scenery, creating scenery, composing a series of shots, are all just a few components that go into making a film. Architecture relates to all of this because there is a structure and design component that contributes to the experience the creator, the designer, wants for their audience. One important way the two fields differ is how they treat continuity. Film is not bound to a physical space because it pieces together a series of locations that can appear to be one, whereas in architecture those spaces must be one in order to move through them.

Looking back at Bernard Tschumi's work on "The Manhattan Transcripts," our technological limitations are different now than they were in the 1970s, so we can imagine examining not just still frames, but actual moving ones as well (videos). Through research and experimentation, this thesis examines a parallel agency of architecture and filmmaking, and how both can explore this notion of continuity. Does the narrative have a larger influence on the architecture, or vice versa? The thesis will explore narration by testing different film techniques—general direction of a shot, time, environment—within this architecture, and see where their limitations lie. Finally, an architectural space will be developed that visualizes the narrative driving its design.

# CONTINUITY OF DYNAMIC SPACES: CREATING ARCHITECTURE THROUGH FILM NARRATION

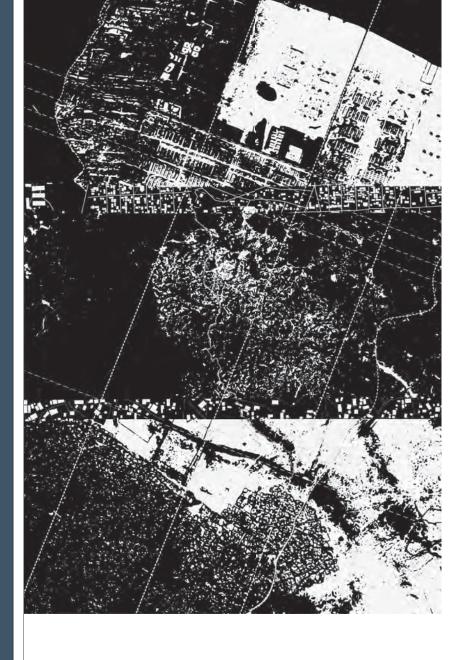
mage: Scenes Shaping Spaces



Architecture is inextricably political. Our discipline's unavoidable engagement with the *polis* drives our decisions. Some of these projects are overtly about politics itself, while others engage particular political discourses. Some seek to better understand the architectural politics of power and control; others seek to challenge normalized political frames of reference. But all share a fundamental commitment to the ethical propositions and quandaries of what we do as architects and the agency of architecture as a discipline, profession, and practice. Awareness of and sensitivity to this agency, and the ability to demonstrate the agency of architectural design, are perhaps the most fundamental responsibilities of the architect.

Refugee camps are permanent spaces built with temporary materials. Although refugees are banned from building solid structures, construction takes place under the cover of the tents. Refugees will build in cities on empty lots where they can, as they invest in regaining their agency. However, when governments or agencies plan for bottom-up construction it's typically pushed to the outskirts of the cities and remains categorized as temporary. These are seen as areas that can be wiped out for development, as "... biopolitical spaces where the sovereign can reduce the subject to bare life" (Romola Sanyal). When squatters build, an overlay of bottomup and top-down construction is seen in happy accidents where bottom-up architecture is imposed on the city fabric by squatters. History suggests that refugee camps rarely remain temporary, therefore the solution is not to continue pushing them to the outskirts of cities. When given the opportunity, refugees will move closer to cities where work is more readily available. Furthermore, cities afford a degree of anonymity, allowing them to escape the apparatus of humanitarian assistance and the stigma of refugee-ness. How can architecture strategize and plan to integrate bottom-up refugee settlements into the top-down planning of existing cities?

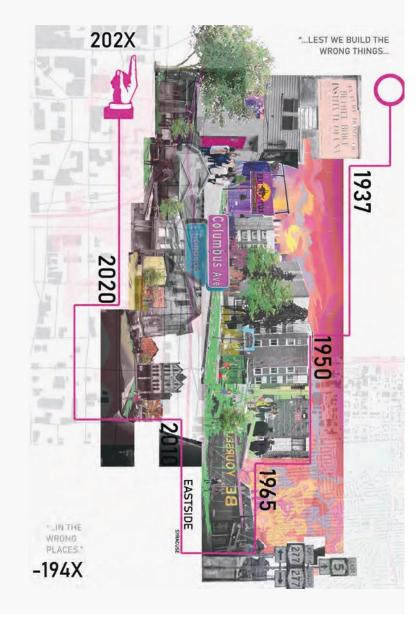
# REFUGEES' PATH TO AGENCY: THE ARCHITECT'S ROLE



language of social injustice and discrimination.

As we enter into the new decade, leaders from a multitude of disciplines cannot help but imagine the opportunities and/or problems their respective regions will come to face. The future requires planning, and planning requires a set of rules or policy frameworks with which to make decisions. Power belongs to those who control these decisions; it is crucial during this period of transition that we critically evaluate these pre-existing policy frameworks to identify the effects those frameworks have had on local neighborhoods within the City of Syracuse. By pinpointing specific aspects of those policies and policy frameworks and associated outcomes and typologies, we can begin to modify them in ways that allow us to speculate on alternate realities and futures.

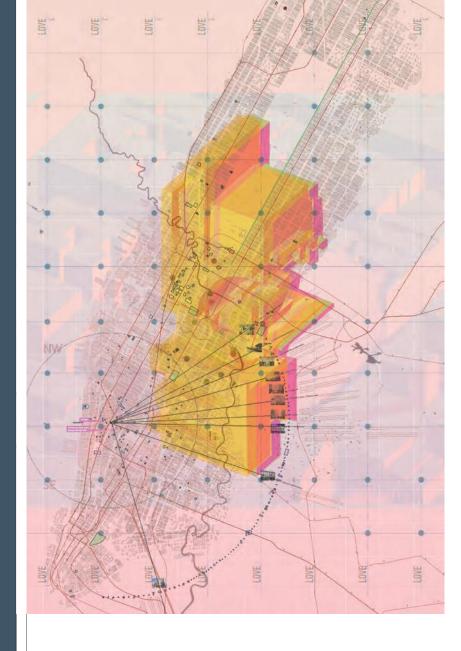
The City of Syracuse is now entering its next phase of major urban renewal policies. Through critical comparison of policy frameworks and physical, cultural, and social outcomes, it is clear that the City of Syracuse is a relevant case study for how the American government has been separating people based on race, gender, and religion outwardly and quietly in an attempt to control the wealth and power of a region. Based on the previous eighty years of federal, state, and local policy implementation, it is crucial now more than ever to critically re-evaluate the frameworks in which previous urban renewal projects were operating and the disastrous effects that they have had on the segregation, economic deterioration, and cultural discontinuity of the city—lest we build the wrong things in the wrong places.



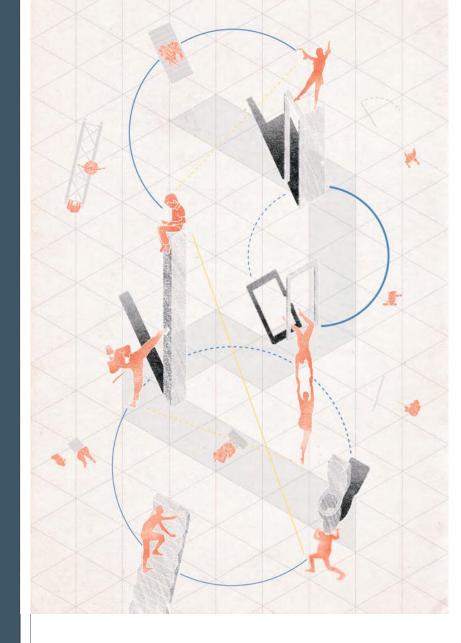
mage: Proposed Follies in Chengdu City

voices. This thesis contends that architecture, as a unique kind of mass medium, can spread diverse ideas to the public. Discussion of architecture is another way to express different viewpoints. The main idea comes from Marshall McLuhan's book *Understanding Media: The Extensions of Man*: "The medium affects the society in which it plays a role mainly by the characteristics of the medium rather than the content." Architecture has the same ability as a medium to amplify and accelerate the processes or messages that shape and reshape the ways in which individuals, societies, and cultures perceive and interpret the world. Therefore, architecture could act as an essential medium of expression for the minority LGBTQ community to represent their solidarity, collectivity, and identity as well as resistance to discrimination and violence. This project investigates how architecture can promote tolerance

of members of the LGBTQ community within two different social contexts, Chengdu City in China and New York City in the United States. Two utopias are created to foster understanding for the LGBT community. In New York, an iconic landmark located near the Stonewall Inn is a monumental tower that can be seen from a great distance—in celebration of diversity, inclusiveness, unity, love and hope. For Chengdu City, a series of follies combined with public municipal service facilities serve to spread understanding, engagement, and improvement.



Theatricality is used here as a spatial language "halfway between thought and gesture," in order to grasp the uncanny residues/gaps between reality and fiction. New spatiality is invented and reinvented through ever-changing, nonlinear storylines, resulting in a tangled complementarity and contradictions. Extending its proscenium, dialogical spaces are created through, as Artaud's wrote in *The Theater and Its Double*, "a sense of humor, a sense of laughter's power of physical and anarchic dissociation." A sense of the carnivalesque is brought out through the communicative dimension of architecture and the production of knowledge through narration.

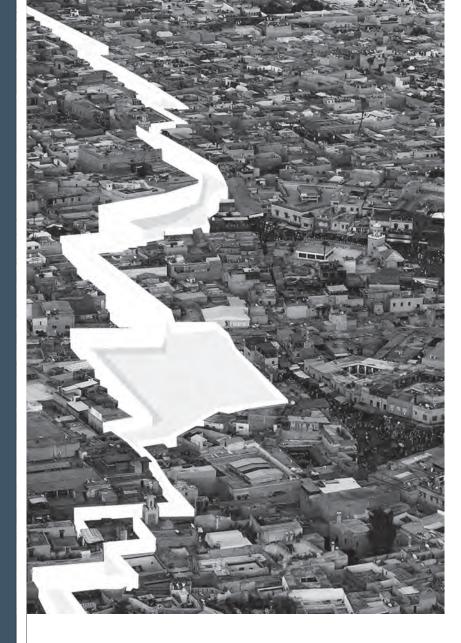


Advisor: Newsom

As modernity propels forward, preservation of historical cultures and artifacts becomes something we believe is a necessity. UNESCO is a leader in designating what they call "cultural heritage." For UNESCO World Heritage designations, architecture is often used as a means to define the boundaries within which cultural heritage exists. This process creates a cultural product, leading to the concept of "cultural tourism"—the search for an "authentic" experience through the consumption of other people's lives.

The walled medina of Marrakech, Morocco is a setting where this has become amplified. Existing within the center of Morocco, Marrakech has been a large tourist destination since the 1800s. The medina itself exists within a red clay wall, which UNESCO uses to define the boundaries of where culture exists (within) and where it does not (outside). Although this wall claims to be the designator of cultural property, the urban fabric within the medina has changed significantly to appease the tourism community, with boutique hotels formed out of the ancient buildings, staged performances occurring within the main square, and Moroccan shopping sprees taking place inside the center of the medina.

This thesis uses the wall of the medina and the UNESCO framework as drivers. If the wall were to thicken, what types of spaces could be created to counter the mass tourism culture? If UNESCO's framework for Marrakech no longer existed, what new reality could exist through the wall? This thesis explores the new possibilities through exploiting and removing the framework given by UNESCO to preserve and protect the architecture that represents the culture at a moment in time. It presses upon the issue that remains unaddressed: where is the threshold between preservation and progress?

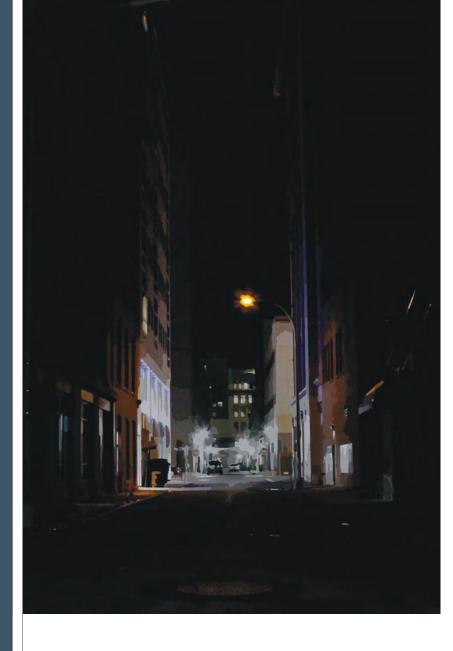


## CULTURAL PARTITIONING IN TOURISM: DIVISIONS IN THE RED CITY

Spaces that feel too open or enclosed, have limited exits, contain too many possibilities for concealment, or have poor legibility, create discomfort in humans. Alleys, stairwells, tunnels, and parking garages are commonly portrayed in horror films, and specifically identified by women, as being associated with violent assault. The commonality of these experiences raises design problems that cannot be adequately approached without a deeper understanding of causality.

Equitable design requires relinquishing the hubris of individually situated knowledges and actively seeking expertise of "others." [Haraway, 1988] This thesis applies visual and textual analysis to challenge architecture's patriarchal norm and provoke discourse regarding spatial experiences so ubiquitous they have become invisible. The imaginary of abjection cannot, of course, be represented in singular fashion; however, this thesis aims to provide insight to those privileged in this patriarchally-dominant society so they may, hopefully, gain awareness of abjection in space through the lens of an "other."

# SINISTER IN SITU: GENDERED ABJECTION IN THE ARCHITECTURAL INBETWEEN



TARA PEARSON

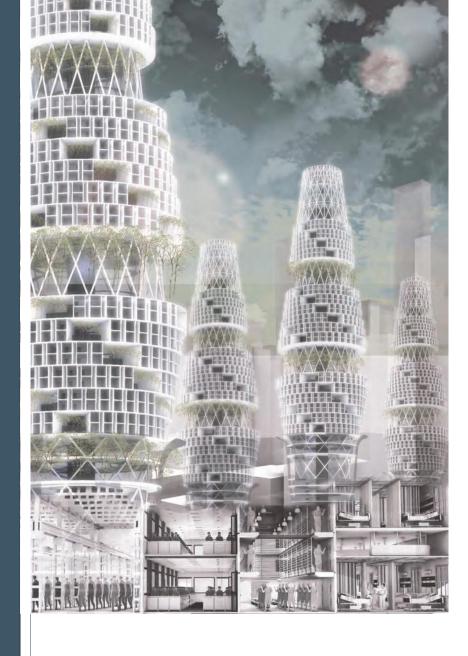
mage: Don't Worry, You'll Be Fine

Architecture as a regulatory force can affect or even dominate people's behaviors and activities. We tend to think of the controlling power of architecture as negative, especially when referring to prisons, camps or asylums. They are represented as a deprivation of freedom, places of cruelty and inhumanity. However, this power of control can also play a positive role in centralizing services and hardware, achieving efficient organization and economy of scale.

As architects, we should place architecture's power of control in a dialectical position, not to eliminate the control completely, but to balance the control through our smart design. On the one hand, the design should meet the functional requirements of security and organization; on the other hand, it should fulfill both a social and a psychological role, mitigating the repressive environment of spatial organization—creating an efficient and organized architectural space without sacrificing humanity.

The contemporary prison is not only a place for incarceration or punishment, but an integrated architectural complex for rehabilitation, with a complex morphology, which comprises multiple programs, including accommodation, education, working and healthcare. As a spatial model for efficient Fordist organizations, the contemporary prison aims to achieve efficient organization and economies of scale by centralizing services and hardware. Its spatial design and organization reflect the purpose of its function to control and discipline people's behaviors, sharing certain principles and spatial features with other institutions such as schools, factories or hospitals. By studying the architectural features of contemporary prisons, this project seeks to discover the spatial similarities and features of different institutions of control/discipline to create a spatial prototype which can be applied to these institutions.

### LEARNING FROM PRISONS: Universal prototype for a "disciplined place"



We live in a world with increasing degrees of interdependencies, complexities, and uncertainties. The global challenges influenced by globalization, urbanization, environmental degradation, and ideological divisions demand an approach that is equally systematic and responsible. In this context, architects should think beyond the domains of form and function and tackle the broader social, economic, political, cultural, environmental, and technological issues of our time. The following theses explore a wide range of complex issues including food accessibility, natural and artificial ecosystems, political engagement, community identity, and waste management practices through the lens of architectural design. How can a grocery store foster healthy food consumption? How can an artificial architectural system restore the delicate and complex coral reef ecosystem? What can we learn from natural systems to tackle man-made environmental challenges? How can an architectural system for protest foster a transparent and free exchange of ideas? Can a renewed traditional market serve as a hub for restoring local communities? How can current waste management practices and processes be systematically improved? Each of these projects takes on the challenges through a systems design approach to develop responsible design.

The retail market drives the activity of both the producer and consumer of the food industry through the grocery sector in the United States. Americans place value on convenience and cost, and therefore become subject to strategic decisions about how much and what one should purchase. The corporations that build supermarkets follow a prescribed model mostly unchanged since the creation of the typology in the 1930s. This dictates store size, layout, and product placement, which have a direct correlation to the rise of chronic diet-related disease. Chain supermarkets have a responsibility to facilitate healthy food choices as they are the main influencer of a consumer's diet and the food environment.

Traditional supermarket stores are faced with pressure from consumers to evolve the experience and landscape of grocery shopping. The opportunity to immensely and radically change the grocery industry will allow retailers to take responsibility for the impact of the products they sell. Technology and competition within the market will leverage which physical stores are successful.

### UPSETTING THE APPLE CART: RETAILER'S RECIPE FOR REINFORCING HEALTHY HABITS

Advisor: Park

mage: Roll-out Supermarkets Reimagined for Experience that Influences Diet

This thesis espouses the exploration of meaningful architecture shaped by a multiplicity of influences and ideas, an architecture that is the product of economic, political and cultural influences. Seldom the act of just an architect, performed in the realm of one discipline, for one species, it looks to the past and future concurrently. It aims to push the boundaries of our assumptions, and ultimately asks: Can architecture question its role in the Anthropocene and reach across traditional disciplinary boundaries to generate meaningful design that benefits ecology first and restores a symbiotic relationship with our reefs before it is too late?

AS BELOW, SO AHEAD: Towards the eradication of an ecosystem

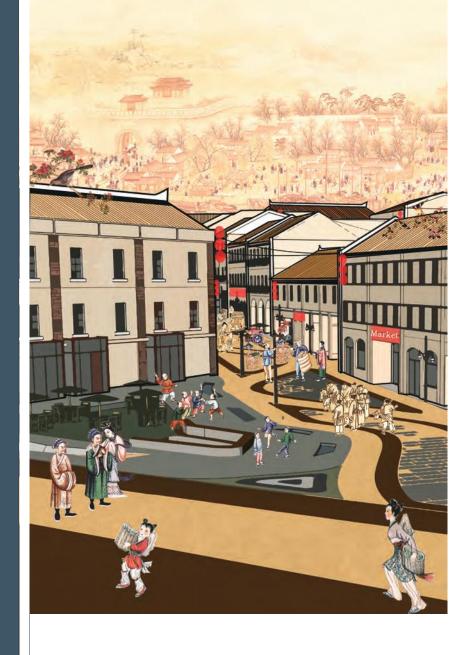
DANA KELLY

The traditional market is a space not only for selling vegetables and other foods, but a place for social gathering, culture and community; it also represents the happiness and warmth of daily life. Will modern technology and our high-speed lives cause the traditional community food market gradually to decline and die out? This thesis seeks to transform a single vegetable market area by adding new functional elements that allow its reuse as a community life complex. While centered on the vegetable market, it also brings street culture back. Using residents as the main focus, the project considers the chronological order of their lives and then makes adjustments to function and layout, turning the vegetable market into the commercial core of the smart community.

System

Ivisor: Kern

Image: New Mode of Life with Old Market



MARKET RECONSTRUCTION: ARCHITECTURE TO CONNECT PEOPLE

YUEXIN XUE

### **COMPETITION INTRODUCTION**

The 2019 Hong Kong protests began in opposition to a proposed extradition law that would have allowed the transfer of fugitives to mainland China, among other jurisdictions. Protesters launched a variety of protest methods at an urban scale, among which decorating the Lennon Wall is the method that covers the largest area. In the 1980s, the first Lennon Wall was composed in Prague, Czech Republic, filled with John Lennon-inspired graffiti, lyrics from Beatles songs and designs relating to local and global causes. In 1988, the wall became a source of irritation for Gustav Husak's communist regime. As a public infrastructure, the wall turned into an artistic site of protest, highlighting the tension between protesters and those in power. The Lennon Wall in Hong Kong is comprised of more than 150 urban-wide public infrastructures such as pedestrian overpasses, crossing tunnels and government building façades. Most of the content on the "walls" is paper-based text and image, mainly on colorful sticky notes. The unorganized layout makes the protest sites messy and affects the essential function of the architecture. The existing design of pedestrian overpasses, crossing tunnels, and public building façades is ineffective at defeating the protest and fails to provide rational service for civilians. We invite architects and other designers to present proposals for redesigning these unsuccessful public infrastructures to give birth to a functional bridge for Hong Kong.

### REQUIREMENTS

The competition is open to architects, designers, landscapers, citizens, anti-protesters, peace-lovers, and entrepreneurs, etc., who can demonstrate the effective implementation of the intervention over time. The winning team will be responsible for developing and reconstructing the most contaminated public pedestrian infrastructure across the whole of Hong Kong.

### **PRIZE**

The winner of the first prize will receive 15,000 HKD (about 2,000 USD) for travel expenses and the great honor of rinsing off the stain that shames the city.

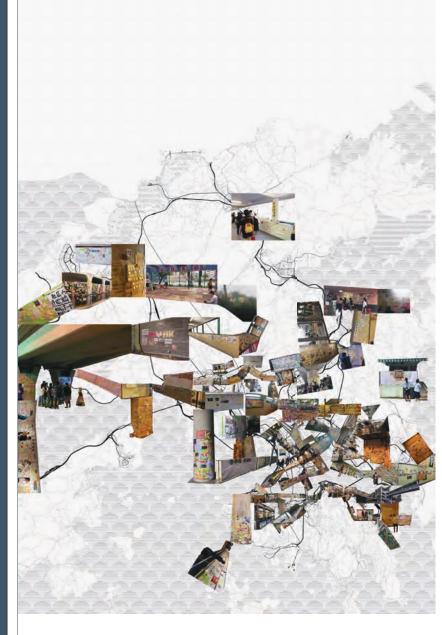
### **JURY**

Chief Executive of Hong Kong; Outstanding Hong Kong Civilian determined during the event.

### MERELY A BRIDGE: ANTI-LENNON WALL INFRASTRUCTURE DESIGN COMPETITION

Advisor: Park

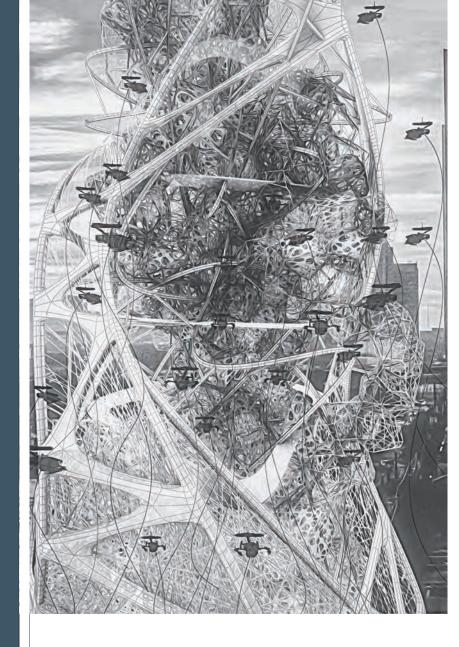
Image: Bridgethe Wall



ZHIXIAO YU

Humans aren't the only creatures on earth, so how do other species survive in harsh environments? Research for the project revealed that many organisms, such as termites and bees, create a comfortable indoor environment with natural materials and simple and effective functional structures. By contrast, humans use complex methods, but the results are less effective. This project seeks to create a biomimetic mixture through the simulation of biological behavior and technology, using design to solve the problem of survival in the harsh city. In addition to forms and materials, the symbiotic behavior and adaptability of nature have great potential for the future development of urban architecture. Therefore, an architectural quasi-ecosystem was created by combining different bionic technologies and biological behaviors. For example, tree structures, lizard skin, termite nests, spider webs and other biomimetic techniques organize the building in the way bees and termites design their habitats. These functions and behaviors constitute the quasi-ecological building system that enables the building to operate sustainably in a complex urban environment.

### **BIOMIMETIC MIXTURE: BIOMIMETIC** TECHNOLOGY SOLVES URBAN PROBLEMS



With the acceleration of the social industrialization process and the continuous increase in urban populations, resource production and consumption have increased rapidly. A shared problem for the whole world is how to dispose of waste efficiently. The project proposes a future design that joins two different systems together: waste disposal and residential architecture. It can become a machine like a digestion system, digesting the waste internally, reducing waste discharge, and reducing pressure on the city. Proper disposal technologies could transform waste into renewable energy, supporting people's lives and reducing environmental pollution at the same time. The waste disposal would include the transportation system, which automatically collects and delivers household waste to the appropriate places, and the anaerobic digestion system, which transfers the organic waste and human excrement into renewable energy-biogas that can be sent back to residential houses, supporting residential gas consumption.

Image: Waste Digestive System with Residential Space

### WASTE WORKS FOR PEOPLE: WASTE DISPOSAL SYSTEM WITHIN RESIDENTIAL ARCHITECTURE

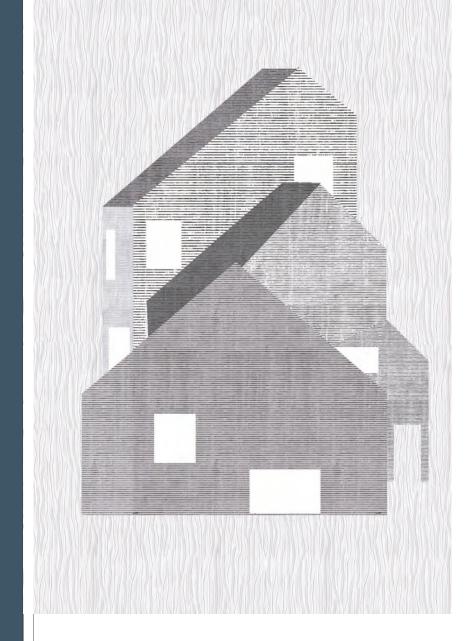


QIANYAO ZHAO

Heightened awareness of the fact that material and environmental conditions of our built environment have a profound influence on our physiological and psychological well-being has inspired new forms of architectural design with more positive effects on our bodies and minds. Well-being is a crucial, global concern in light of population density and public health, climate change, technological and scientific innovation, diversity, environment-behavior and resource management. As designers of the built environment we must recognize the effects of our design decisions as they relate to regional, community, building, interior, system, and material scales. These projects explore the impact of architectural design on well-being and produce new ways of effectively engaging the complex set of interdependent factors at play between design and well-being. They pursue design research into material and system strategies to address mental and emotional health, human sensory systems as drivers for spatial and material organization, new models of designing learning environments for human development, architectural strategies for aging populations, and techniques to engage the design of natural systems for both human health and ecological well-being. These models of critical design thinking examine the diverse needs, desires, and definitions of well-being by experimenting with materials, organizational strategies and spatial processes. They introduce new kinds of environments and spaces, empowering architectural design as an agent of change.

In the process of social development, the economy always overrides architecture. In China, there has been extensive building in once-rural areas, seemingly without thinking. Traditional buildings have been almost forcibly demolished, and replaced by the ubiquitous reinforced concrete building, obliterating not only regionalism but also the relationship between materials and space. This research seeks to redefine the role of traditional building materials in traditional drawing design by studying the nature of materials and the relationship between materials and space. In the rapidly developing architectural world, the hope is that these spaces can make viewers experience the impact of materials on humans and arouse the residents' resonance with traditional architectural spaces.

materials and arouse people's attention to material design.



# REDESIGNING TRADITIONAL HOUSING: THE SPATIAL IMPACT OF MATERIAL

Residential architecture and its marketing continue to shape the lifestyle of the American family. As a result of easy access and affordability, standard designs and layouts found in residential practices such as modular and tract homes are abundant in American rural and suburban areas. Today, more and more American families adjust this boxed lifestyle to what they feel is right for their personal situation through renovations. This thesis explores the ways in which architects can better assist the consumer in finding the best design to facilitate this personalization process. Good architecture finds balance between a design's structure and flexibility; design acts as a structural element of society that allows and encourages the growth of those who interact with it and the societal conditions that result.

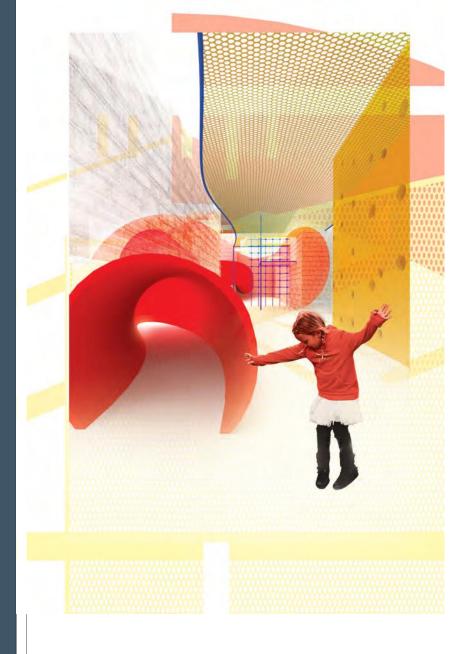
Image: Which House Is Your Home?

Today in the U.S., learning environments usually resemble classrooms designed for standardization during the industrial revolution; they fail to support students' individuality, creativity, exploration, or collaboration, and ultimately neglect their intellectual value entirely. Further, standardized learning has favored economy and bureaucracy over students' growth and prosperity. The outcome of this environment has had and continues to have detrimental impacts on our children, communities, and entire society. We must instead listen to those populations who have been neglected when designing learning spaces—the learners.

Learning and development are most dramatic during early childhood, when they are driven by imagination, curiosity, exploration, and play. Reimagine Learning creates environments that emphasize this learning and development for students of all ages, opening up the possibilities for free, uninhibited play and exploration created by the boundless imagination of children. The thesis critiques the notion of traditional education by creating a series of active learning spaces that engage students by giving them personal agency over their own experiences, in turn creating a more impactful learning experience. When provided with open-ended play environments, children are stimulated to explore their endless imaginations; the activity of play is transformed into a learning device. The very act of learning as well as the stereotyped term can be re-imagined through thoughtful design. We must leave the barriers and walls of a learning space up for the imagination.

### **REIMAGINE LEARNING:** REDEFINING LEARNING ENVIRONMENTS THROUGH IMAGINATION AND PLAY

mage: Free, Uninhibited Play and Exploration



Well-heing

dvisor: Newsor

Architecture today needs to respond effectively to changes in the external world but should not lose its basic principle of being people-oriented. Whether driven by technology, context or economy, human beings will eventually return to the starting point—their intimate relationship with Nature. Economic development and social progress, as well as the extension of modern architecture, have caused quickly expanding urbanization. Under the influence of urbanization, the countryside has gradually been replaced, with many locals forced to move into the urban environment. New, unfamiliar elements such as intense modern architecture cannot meet the basic needs of the traditional lifestyle. Many people accustomed to traditional lifestyles have refused to accept government compensation, staying where they were, and leading to a variety of social dilemmas.

Therefore, it is critical to address the sense of belonging during the process of transition from rural to urban life. Chongqing, the "mountain city" of China, stands out in the urbanization process. Due to unique elevation differences throughout the city, people living in the rural areas of Chongqing depend heavily on the surrounding natural environment. The traditional lifestyle of Chongqing consists of vernacular buildings, intense courtyards, abundant public space, and smart connections among adjacent families such as bridges and winding paths. However, there are so many newly built communities that are forcing people to abandon their traditions. This thesis investigates how to combine the old lifestyle with the modern lifestyle in new high-rise buildings of Chongqing.

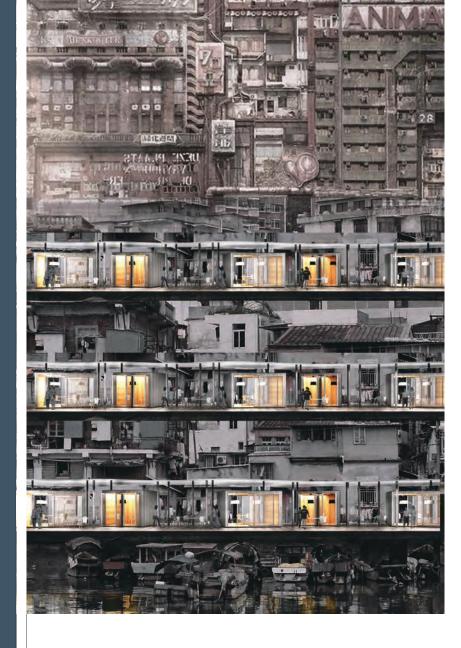


Image: Topic Circle-Map











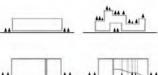


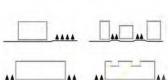












Gaokao is a fair but strict examination system for Chinese high school students that determines which college they can attend. Students feel great pressure to compete with one another, and their workloads can become extreme. This pressure causes significant stress and can be harmful to students' mental health. However, due to China's large population, it is difficult to change the examination system to a less stressful and more flexible mode without sacrificing equality. Instead, it is more feasible and practical to change the built environment into a more comfortable space to promote students' mental health. Using specific design strategies to create a space that can stimulate positive mental experiences and promote meditative activities will help relieve the pressure. This approach is valuable because there is little cost to apply a design strategy to schools, but it will have huge effects on students' mental health and will be

beneficial to the whole society.

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