DANIELS

Thesis Reviews Fall 20

UNIVERSITY OF TORONTO
JOHN H. DANIELS FACULTY OF
ARCHITECTURE, LANDSCAPE, AND DESIGN

This book showcases final thesis projects produced by Master of Architecture students at the University of Toronto's John H. Daniels Faculty of Architecture, Landscape, and Design. Because of the COVID-19 pandemic, these projects were presented remotely, rather than in person, on December 17 & 18, 2020.

Advisors

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Aziza Chaouni

Robert Levit

Laura Miller

Carol Moukheiber

Mauricio Quirós Pacheco

Adrian Phiffer

Michael Piper

John Shnier

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Noor Alkhalili

Re-Inhabiting the Monument

Afrocentric historical consciousness was a powerful instrument of independence movements during the 1950s and 1960s. In Senegal, the socialist poet and president Léopold Sédar Senghor's philosophy of Négritude and pan-Africanism was embodied in the Centre International du Commerce Exterieur du Senegal (CICES), a postcolonial modernist exhibition centre and fairgrounds in Dakar. This site had a significant role in Senegal's history and independence. However, as the city grew into the site, the original programming of the campus deteriorated to the point where people no longer understood its significance and use. Through a series of interventions on an urban, architectural, and interior scale, a new design will push the site to become a campus of landscaped public spaces while creating and developing its program.

Advisor: Aziza Chaouni
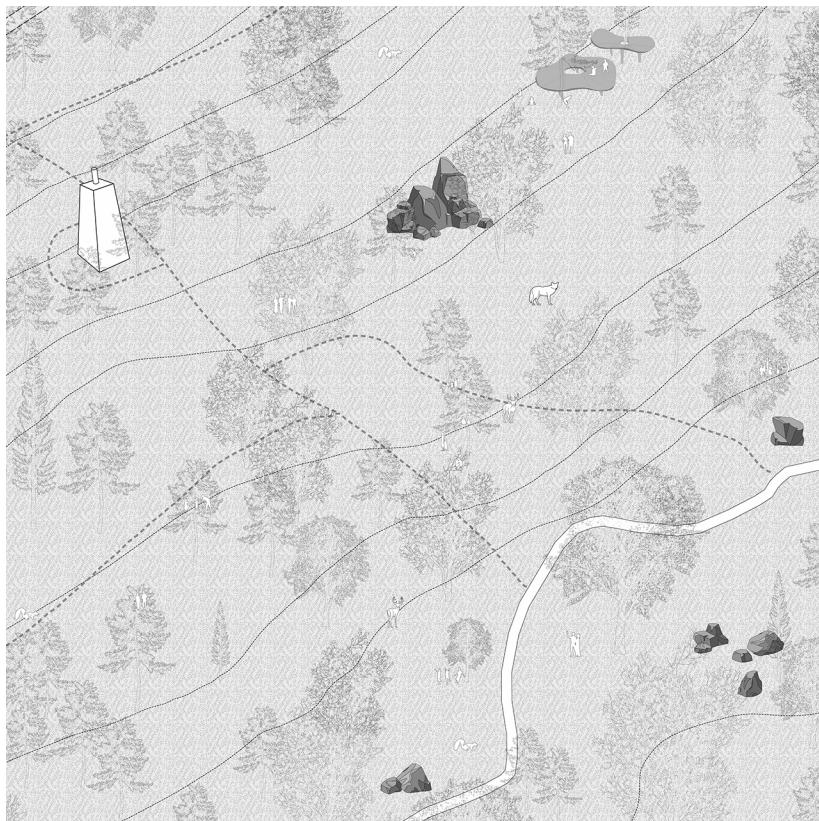
Hao Yue (Jennifer) Bai

You Have to Walk to See: A Speculative Guide to the Bruce Trail

Why are people drawn to nature?

Responding to a series of walks during the COVID era, this project proposes a new atlas, guide, and index of architectural interventions for the Bruce Trail. By inhabiting walkscapes and imagining an index of human marks and navigations on an ancient and industrial landscape, I explore rest/play structures, viewpoints, modern ruins, and spaces of encounter. A set of models and drawings question our connection to nature, our architectural agency, and different acts of conservation.

Advisor: Petros Babasikas
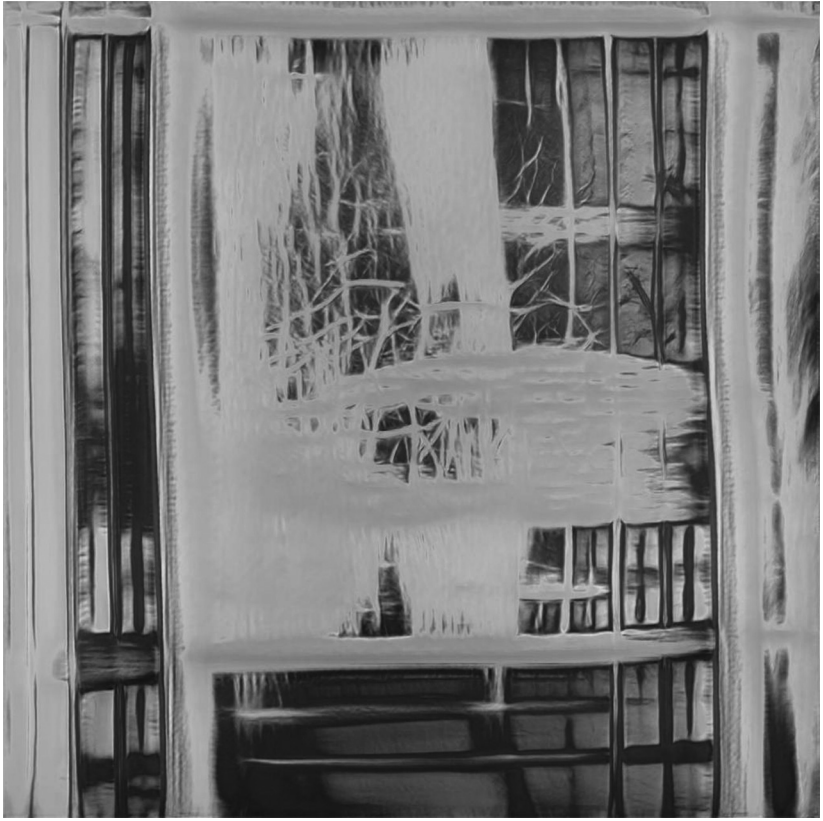
Yukun Bai

Empathic Room

Empathic Room is a room of possibilities, where parallel timelines are entwined. By translating origami techniques into spatial design skills, "folding" a three-dimensional space into a four-dimensional experience is shown to be possible. Much as a three-dimensional origami form can be discerned from the creases in a two-dimensional sheet of paper, a fourth dimension can be framed in a three-dimensional object and imagined from there. Empathic Room is a spatial object, a dynamic shadow, an enigmatic "crease," and a spectacle that shows the future of space.
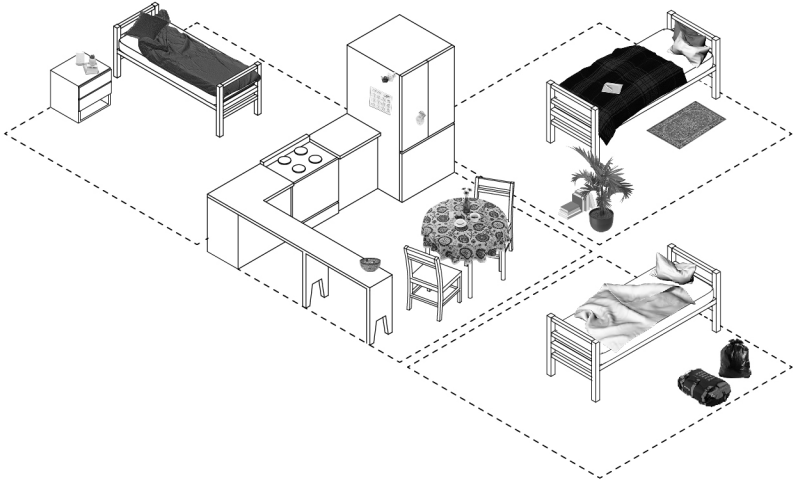
Clara Bitter Hurtado

Room to Grow

In an effort to address the growing rate of homelessness in Toronto, this thesis envisions a spatial arrangement that collapses the housing continuum, from shelter to home, into one site. The Scott Mission, a men's shelter whose aging structure is slated for reconstruction, presents an opportunity not only to integrate the wider community into the current insular site, but also to innovate on the relationship between emergency shelter and permanent housing. The aim is to reimagine how architecture can respond to the varying durations, uncertainties, and circumstances of the homeless episode to address the lack of dignified affordable housing options.

Advisor: Carol Moukheiber

Ivy Chan

Places of Refuge

This project examines a genealogy of commons related to the domestic spaces of two very isolated communities: aging seniors and unaccompanied refugee children. These communities are often overlooked, and they both suffer from chronic loneliness and social alienation. Could we bring them together and give them opportunities to connect and learn from one another across different domestic or neighborhood spaces? I propose retirement communities as a starting point of an urban strategy for fostering engagement between seniors and refugee minors. A series of spaces of encounter, appearance, shelter, and commons foster growth and allow the two groups to connect to the community around them.

Advisor: Petros Babasikas
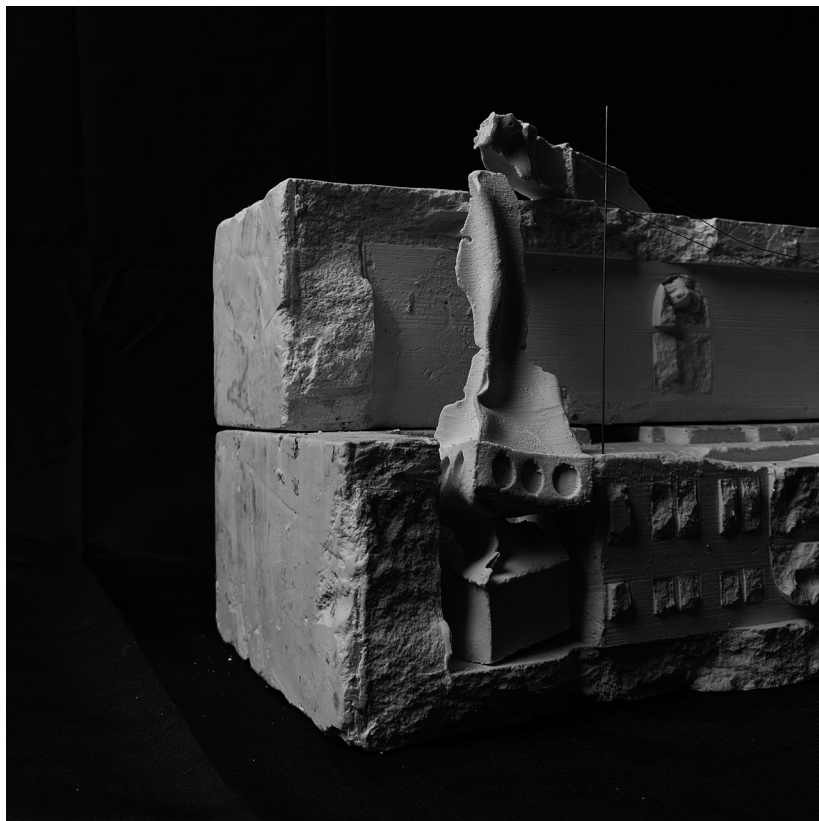
Steven Yuchuan Chen

Memory Filters

If architecture is an iterative process connected by history and memory, then every act of construction is an act of reconstruction. If we also consider that physical matter is subject to transformation, entropy, and reconstitution over time, then we may imagine that every deployment of material is a form of preservation, and that preservation can be understood as an act of material transition. The repetition of these processes over time embeds the collective memories of its own construction and experience into the existing memory. The form and context of architecture filters our consciousness in a manner that stimulates the emergence of both past and present, resulting in the simultaneous recognition of and memory of the object of architecture.

Advisor: John Shnier

Sibylla (Xinyue) Cong

Chinese Nouveau, Nouveau 新象

The formation and development of ancient Chinese architecture has a long and layered history. Each dynasty added unique shapes and motifs, resulting in an evolution of iterative complexity and beauty. Viewed in retrospect, the overall change is subtle. Given this extensive evolution, it is curious that China never developed a style related to the western Art Nouveau movement. The objective of this thesis is to tease out a novel taxonomy of Art Nouveau tectonic elements and assemblages that have Chinese aesthetics and history clearly embedded in their DNA — and, finally, to shape a visual feast of new forms and flavours.

Advisor: John Shnier

Atieh Daneshian

Beyond the Border

The Strait of Hormuz is a contested maritime zone, with clearly marked zones of exclusion, where opposing forces, cultures, and cities have been facing off for decades. Within the strait and among a small archipelago lies Hormuz, an island of cultural, historical, and ecological significance. Accessible exclusively from Iran, Hormuz has a legacy of international trade and trans-border exchange. My thesis proposes the invention and design of an extraterritorial agency — an institution residing in international waters — that deploys an annual international festival across important locations on Hormuz. The project explores the vessels, infrastructures, and architectural elements required for the deployment of this festival.

Advisor: Petros Babasikas
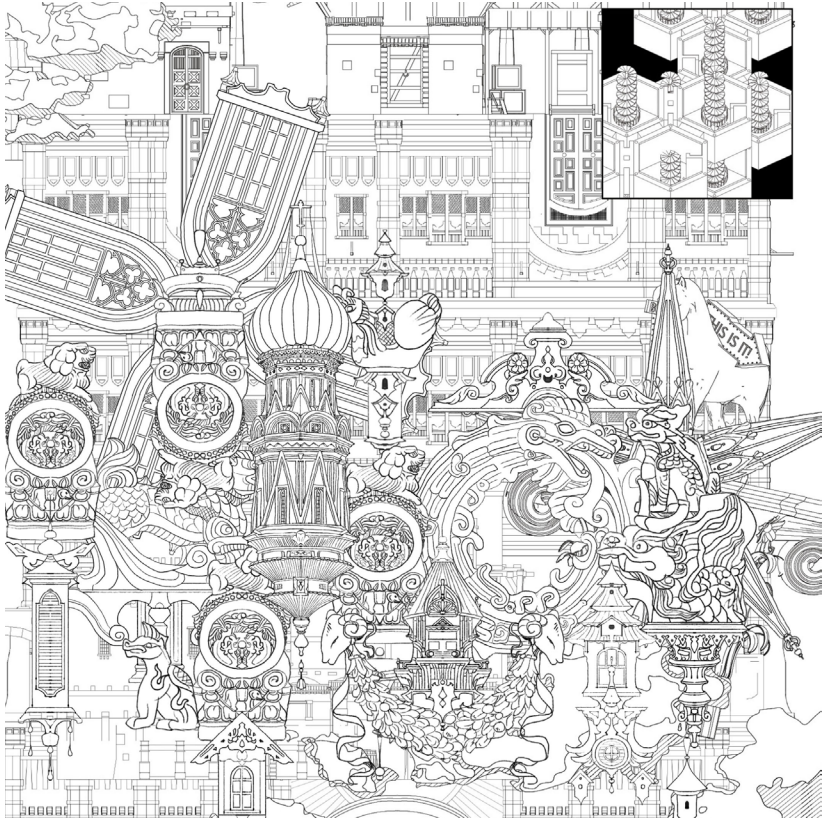
Yuezhu (Enica) Deng

Archive of the Chimerical

The chimerical refers to the imaginary, with a touch of the fantastical. This thesis posits that the chimerical elements of humankind's legacy should be retained as a repository immersed in an architecture of reverie and whimsy. In a Borgesian manner, architecture can expand infinitely inward, containing fiction and fact, completeness and ruin, within the mixed logic of dreams. This repository adapts and shifts alongside its contents, re-energized foundlings seeking to re-enchant the mundane.

Advisor: John Shnier
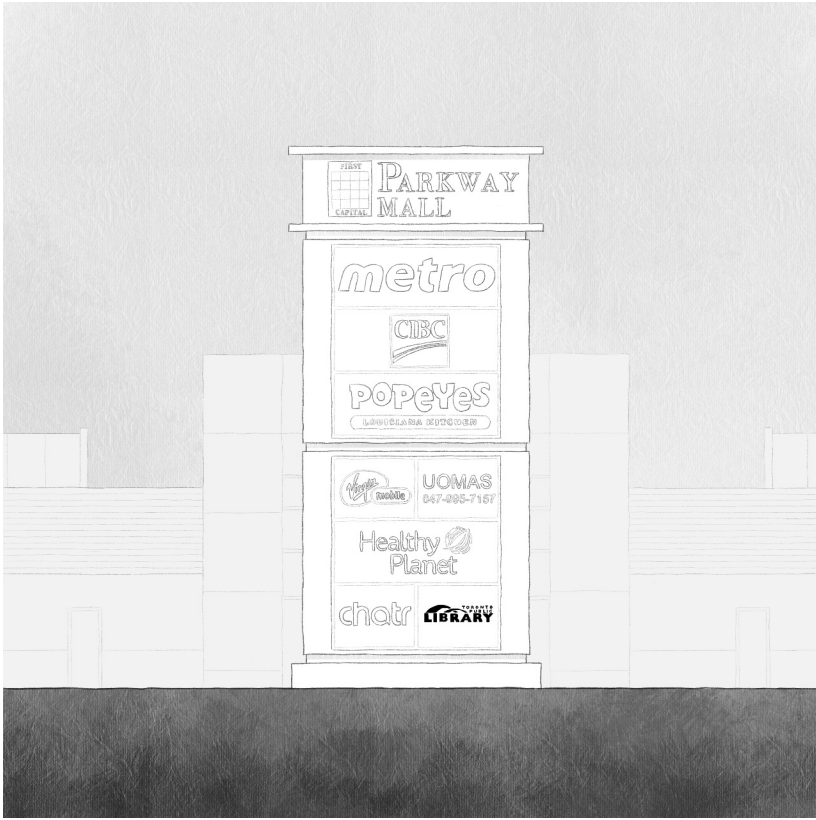
Miranda Fay

Civic Retail: Napping in Toronto's Mall Libraries

Public libraries are the only spaces where you can do everything and nothing. They are an enduring civic space in contemporary cities. In Toronto's postwar suburbs, these civic spaces started to appear within the least civic of spaces: shopping malls. It would seem that the civic nature of libraries would be drowned out by the commerce of the mall, but this isn't necessarily so. Architecturally, these spaces are forgotten with often no designer listed. With the expansion and renewal of mall libraries we can reclaim privately owned public spaces, finding the potential for the civicness of libraries to seep into the mall.

Advisor: Michael Piper

Wesley Fong

Dissident's Ark

In a distant future, the state of modern society has collapsed, and the ideologies behind a "free world" bear most of the blame. Amid wars, environmental degradation, social injustices, and struggles over scarce resources, civilizations have become apocalyptic and uninhabitable. A group of separatists responds by creating an inverse world of sociopolitical structure and rigidity. This new world materializes as a mobile airship that incorporates all facets of life. It articulates, through architectural paradigms, a criticism of the "free world" by flipping social, political, economic, and cultural norms upside down.

Advisor: Mauricio Quirós Pacheco
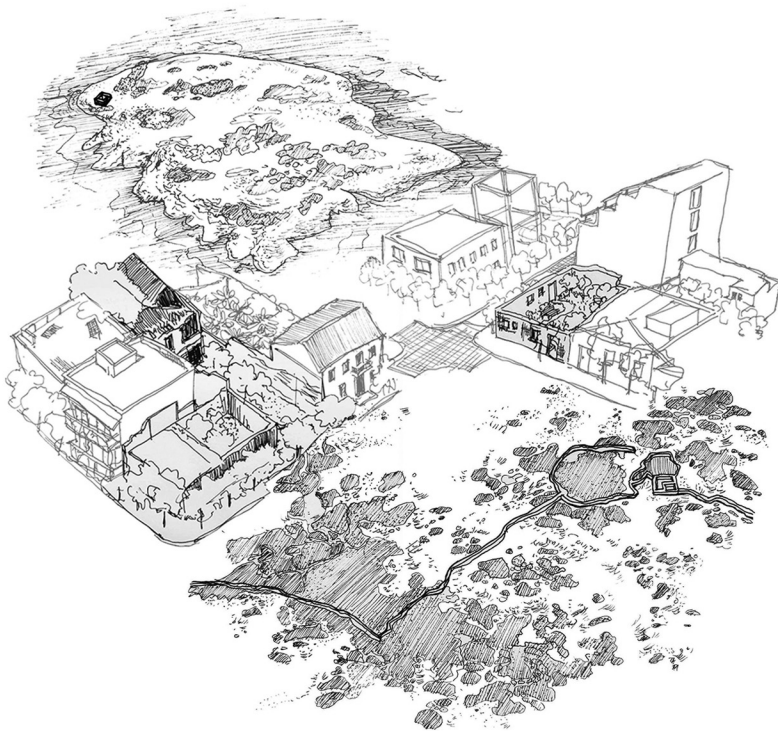
Yvonne Pui Yan Fu

Urban Voids; Deserted Islands

As cities become privatized and public space shrinks, liminal urban voids become visible and significant. These voids are to the city what desert islands are to an archipelago: invisible spaces made visible through entropy, collapse, and accumulation of waste. How can architecture take on this temporal challenge, not as a monument-making enterprise, but as tidal motion, recording erosion, flux, sediment, and growth? Can we rethink the transformation of urban waste through architectural invention and, perhaps, also reinvent public space? This thesis imagines an organization and process of reconstruction and rewilding across a series of abandoned plots in Athens, Greece.

Advisor: Petros Babasikas
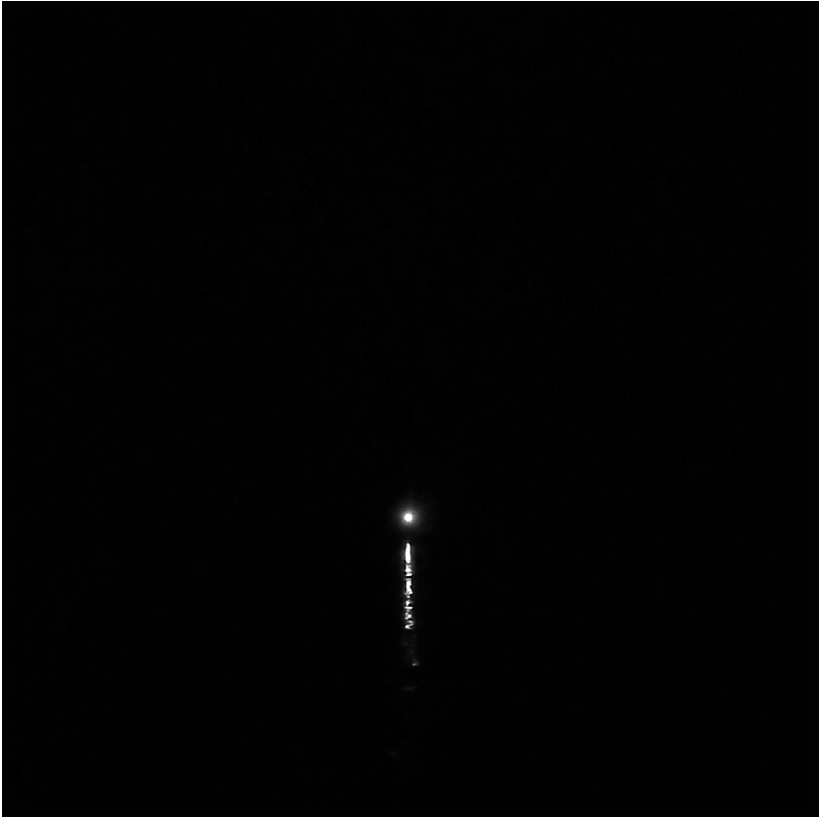
Raymond Garrioch

The Lighthouse

We are amid a crisis that is deeply architectural. If you want my opinion, I will tell you that at this point there is little hope, for the closer one gets to understanding this crisis, the more one sees that it is not a crisis of environment, but of thought. Though we remain connected, our ways of knowing have been disentangled from ecology, from profound coexistence. If there is any hope, it exists in architecture becoming truly ecological, and the telling of the narratives formed in the process.

Advisor: Adrian Phiffer
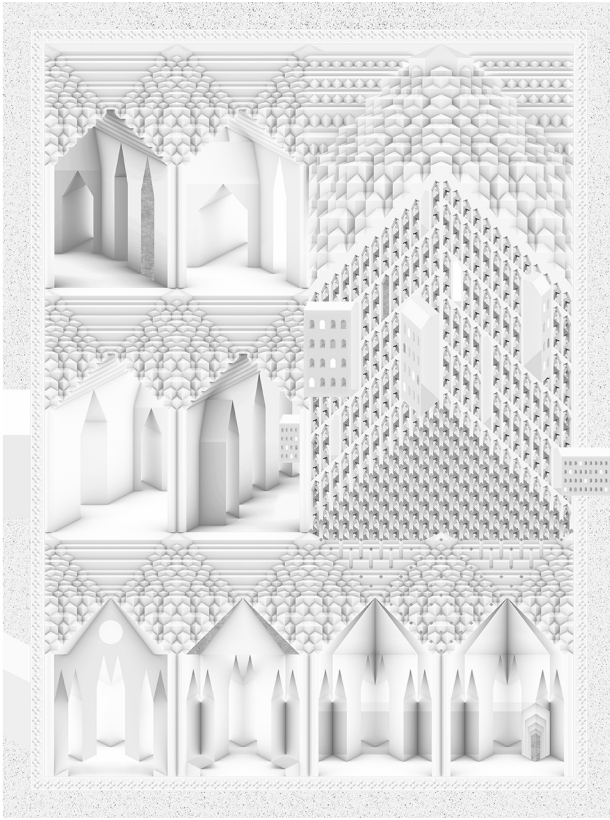
Arman Ghafouri-azar

Tracing Apparitions

This thesis explores the generative and transformative potential of archetypal forms drawn from Persian miniature painting to reach a new synthesis. The exploration takes the form of an iterative process that distills the formal essence of a cultural past to reach an entry point to the present. Through positing *Haft Peykar* — a significant Persian literary narrative from the 12th century — as a site of architectural conception, Tracing Apparitions reimagines the central role of representation techniques in the story's narrative formation and historical imagination. The result imagines a contemporary mode of architectural operation and representation in dialogue with historical mutating origins.

Advisor: John Shnier
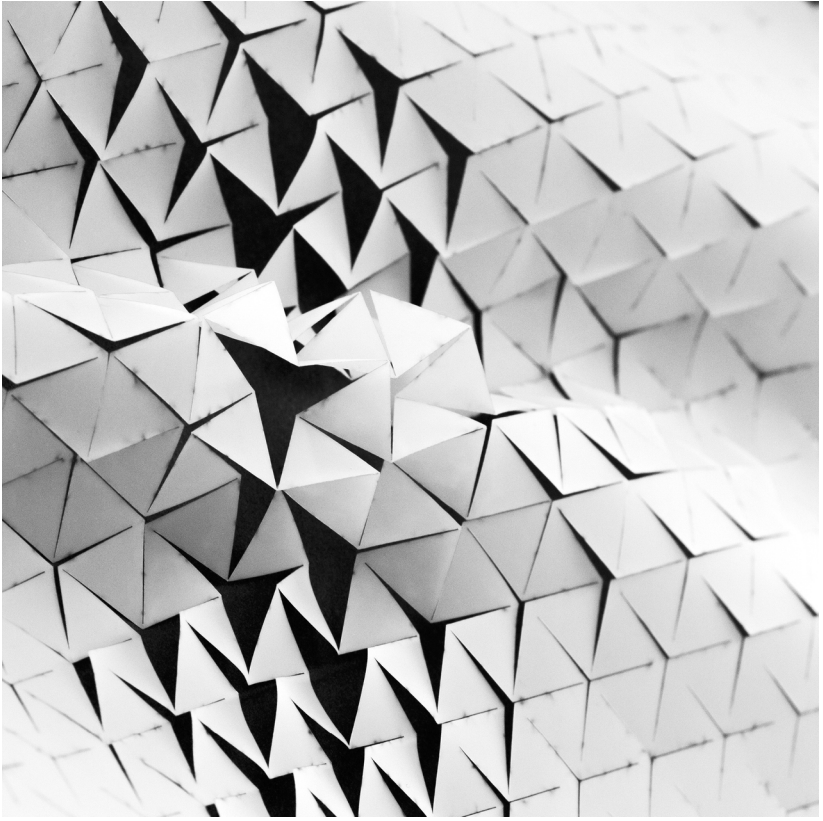
Sarah Hasan

Lightopia: A Hyper Plenum of Embodied Light

What is the potential of architectural elements to modulate light within space, as a way of accommodating adaptability of use? A building's interior offers a fluctuating threshold between inhabitant and architecture where the variability and quality of light affect not only function but atmosphere. This thesis proposes a Hyper Plenum — an evolved ceiling surface that enhances lighting conditions for spaces with large floor plates. The intervention consists of an actuated surface that captures daylight, embodies it, and redistributes it where needed. The Hyper Plenum presents a conceptual framework for responsive architectures that give agency to — and act as extensions of — inhabitants and their metabolic functions.

Advisor: Carol Moukheiber

Dylan Johnston

Open Practice: Collectives, Co-operatives, Platforms, Networks

The premise of this thesis is that the organizational model of an architectural practice is inextricably linked to its output. As the output of mainstream architectural practice fails to contend with today's socio-political context, one might ask: what's the alternative? As a result of global events such as the 2008 economic crisis and the climate crisis, other modes of architectural practice have emerged that reject top-down organizational structures in favour of open models, which rely on horizontal hierarchies and collaborative labour. This thesis explores the utility of these models and speculates on future practice scenarios that are more actively engaged with today's issues.

Advisor: Mauricio Quirós Pacheco

Yana Raphaela Kaiser

Let There be Night

When was the last time you saw the stars in the sky? How many children can identify Orion's belt? Light pollution has made engaging with the darkness of the night almost impossible for residents of dense cities. This environmental disturbance is a creation of human negligence and abuse of the accessibility of cheap light. This thesis aims to address the preservation of our night sky and advance a theory of how conscious design can protect darkness.

Advisor: Mauricio Quirós Pacheco
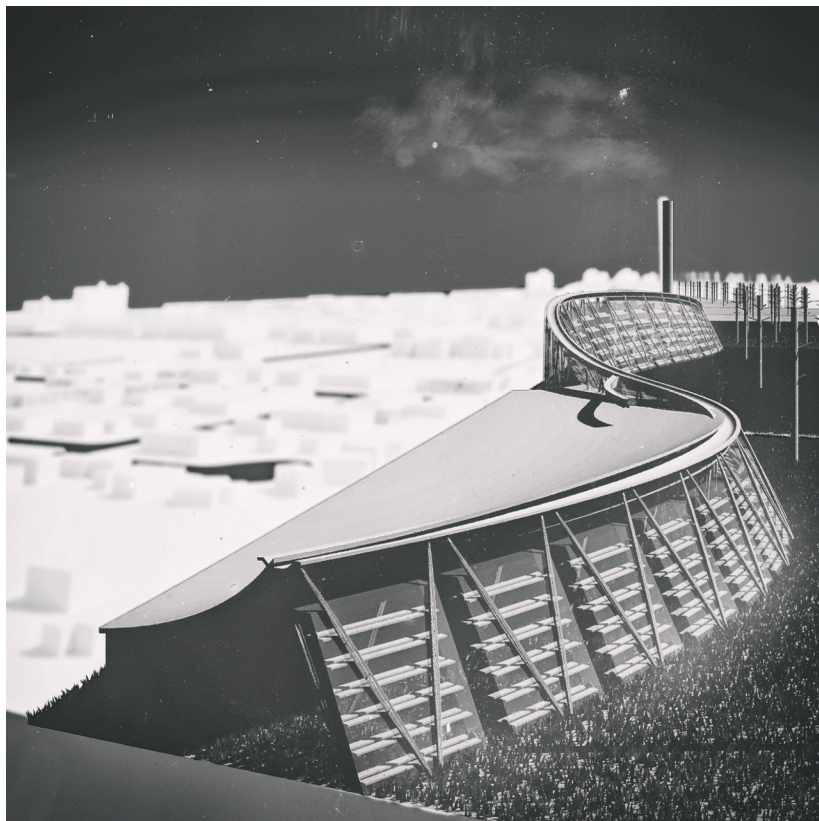
Jaewon Kim

Future of Agriculture

By 2050, population growth will increase food supply demand by 50 per cent. In Toronto, a 16-kilometre hydro corridor passes through Scarborough. It is among the largest urban linear green spaces in Canada. The proposal: build on this site a vertical farm that uses information technology to ensure that crops and soil receive exactly what they need for optimum health and productivity. Crops will be robotically transported to an adjacent and integrated market, reducing cost and energy. Linked to this infrastructure will be a waste-to-energy facility that will generate enough to power for the facility, with the surpluses able to provide energy for over 10,000 homes.

Advisor: Robert Levit
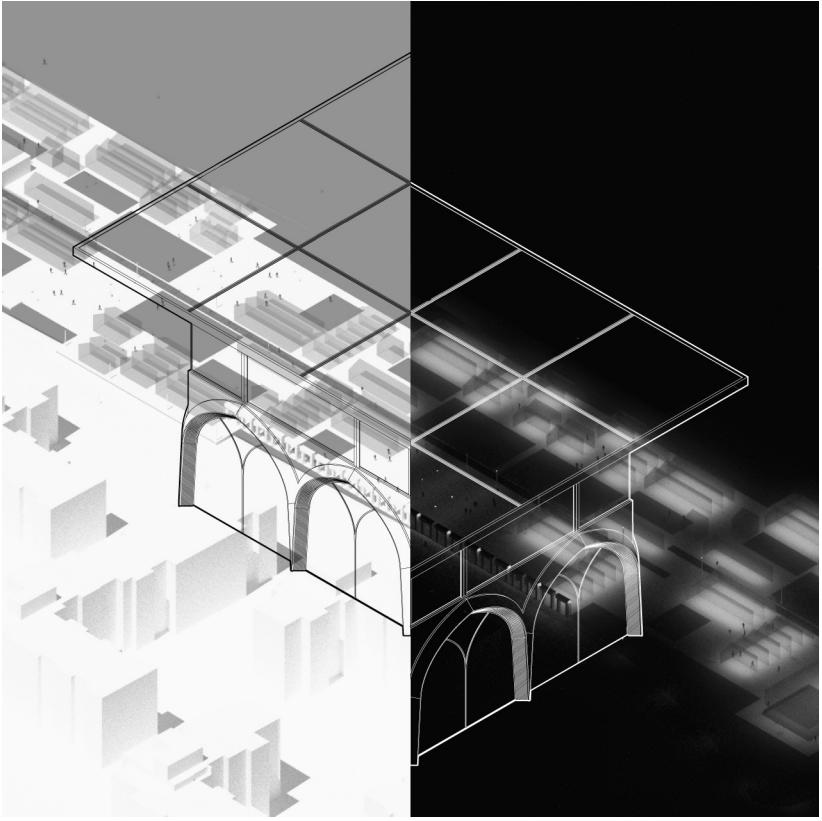
Thomas Yunhyung Kim

The Golden-Green Mile

By implementing the Cannabis Act, the federal government has taken a firm stance on cannabis as an institutionally regulated substance. Legal restrictions on the display, production, processing, and sale of cannabis and related products create a level of control that does not apply to other intoxicants. Alcohol, for instance, is much more freely available. Anyone can visit vineyards and breweries and experience the spectrum of those products and production processes. This thesis aims to question this disparity in the institutional perception of cannabis via an urban and architectural intervention.

Advisor: Robert Levit
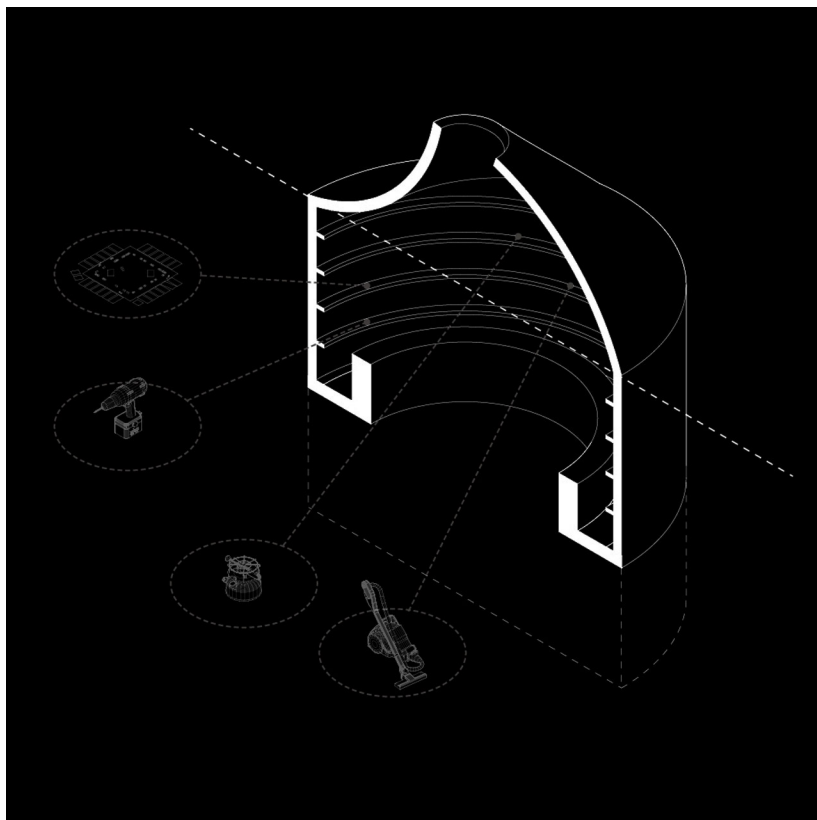
Diana Koncan

From Me to We: Object Sharing. Knowledge Sharing. Everything Sharing.

As consumers, we participate in a cycle of use, accumulation, discard, and waste. How can we change this linear lifecycle of objects in our lives?

Share them.

Urban areas would benefit from a circular economy of object sharing, which would allow city dwellers to buy less and share more, minimizing their collective carbon footprint and increasing their social engagement. Because the adoption of this model of sharing and exchange is imperative to the success of our future civic life, this thesis proposes a "library of things" at Nathan Phillips Square, which reinhabits the site's monofunctional, underused underground parking.

Advisor: Laura Miller
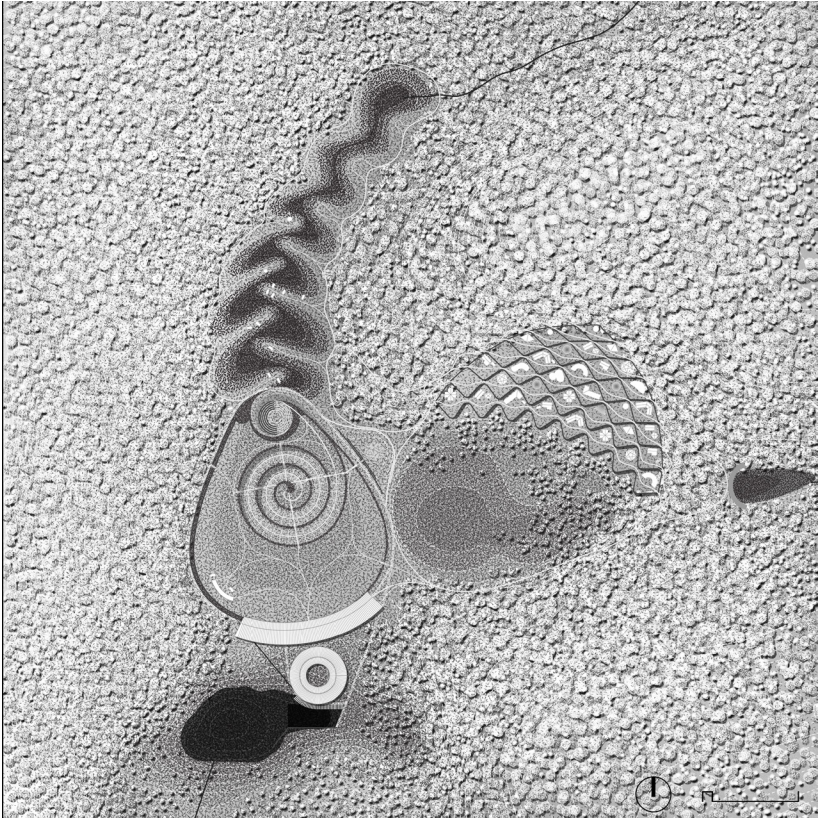
Adam Krajewski

Another Walden Pond

This project questions our relationship with the natural environment by proposing a community that is intimately linked to and dependant on a site, its resources, and its natural processes. Can there be a symbiosis between the needs of occupants and the needs of the surrounding ecosystem that leads to the stable continuity of both?
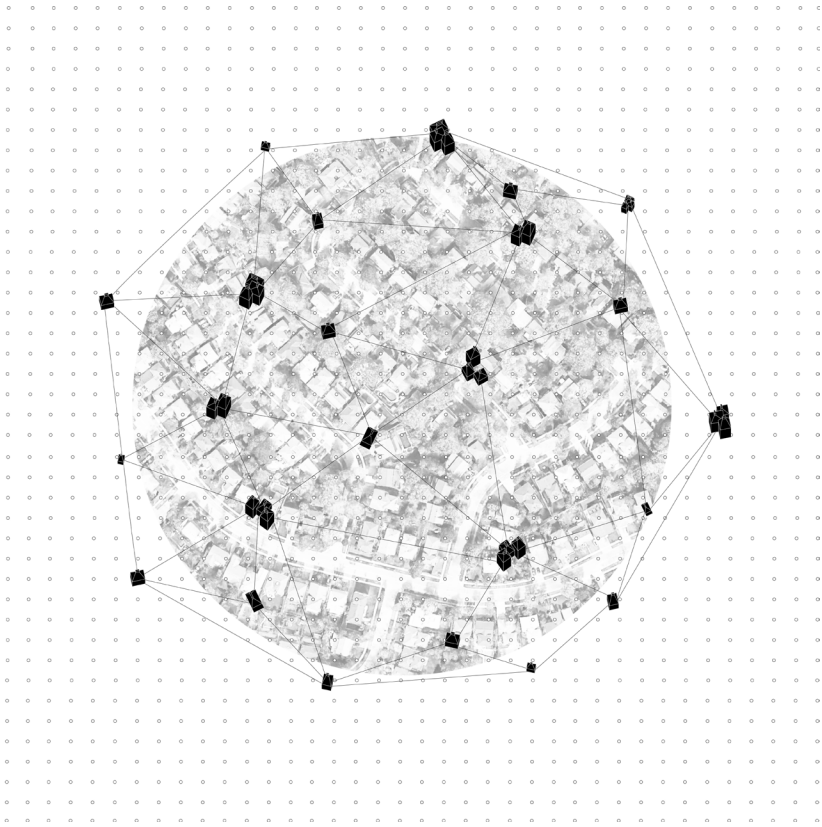
Anne Kwan

Together-Apart: Alternative Landscapes for an Aging Society

Together-Apart investigates new forms of collective living by integrating a senior care facility into an existing single-family neighbourhood. The proposal disaggregates the program of a care facility and reorganizes it as an integrative network of small-scale housing typologies, centralized services, and a system of mobility that links them together. Using Mississauga, a suburb of Toronto, as a test site to analyze different household configurations and how they relate to varying social conditions, this thesis suggests an alternative, typologically driven approach to senior care, designed for livability and social sustainability in the suburban context.

Advisor: Michael Piper

Christopher Lam

Facing Reality

The Facing Reality trailer attempts to promote thought about our relationship to our environment and our place within it, while also giving a platform to traditional ecological knowledge and ways of living. As a mobile education centre, the vehicle brings a holistic climate education to communities on Vancouver Island. A pneumatic structure hosts classes, lectures, and workshops that support climate-based learning. The trailer also acts as a platform for studying the environment in remote locations, by enabling the setup of permanent climate monitoring stations.

Advisor: Adrian Phiffer

Sean Lamb

The Reverberant Field

Architecture is heard as much as it is seen. A place can sound small or large, comfortable or disquieting, intimate or communal. But the orthographic simulation of drawing has hegemony over architectural representation. Therefore, the ocular mode motivates design decisions. Architects design by rigorously imagining space. How might they rigorously imagine sound spaces? This thesis investigates representation of acoustic environments through immersive real-time simulation. It develops a working method for gathering spatial impressions of sound during the design process. Employing this method, a crossmodal rave architecture is conceived where form, material, and light are commensurate with echo, reverberation, and occlusion.

Advisor: Carol Moukheiber
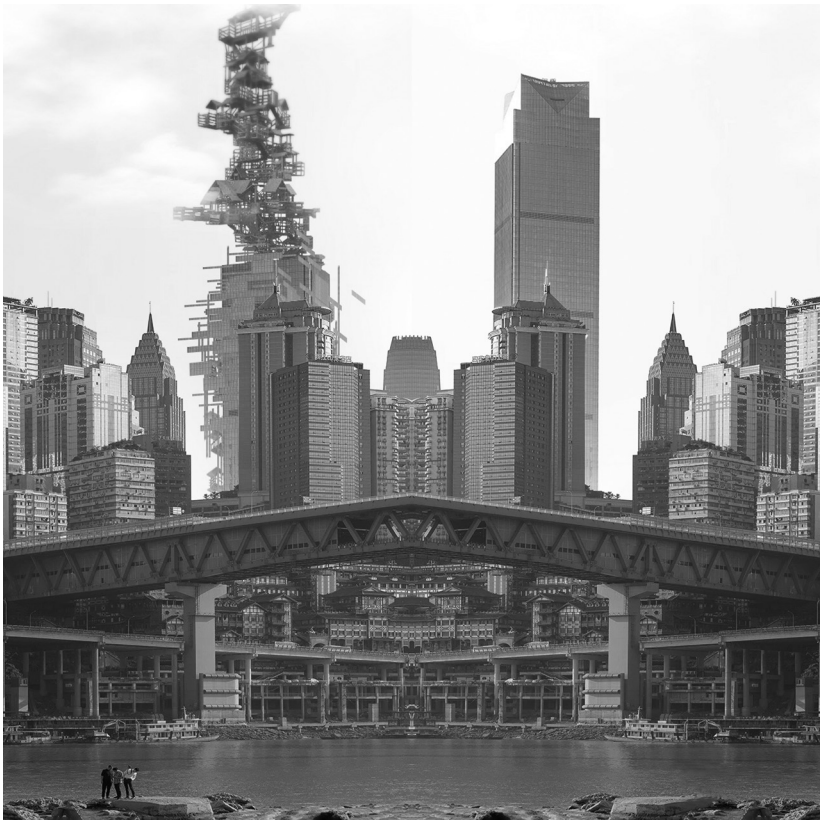
Junlin Lan

The Twin

This thesis explores the concept that behind or within each architectural proposition lies its twin. The notion of the twin implies that no single definition of any architectural category exists in isolation. It imagines that architecture is not a state of "being," but rather one of "becoming." Twins may also not be only binary or mirrored tectonic siblings, but can be seen to possess multiple relationships and asymmetry iterations. A kaleidoscope-like effect is the point of departure to observe and represent the idea of architecture and its twin. In this project, the city of Chongqing is used to test a kaleidoscopic perspective as a multi-mirrored set of elements that are simultaneously fragments and assemblies that overlay hidden or fictional characteristics onto its original, to experience an alternative perception of the city that may reveal hidden truths.

Advisor: John Shnier
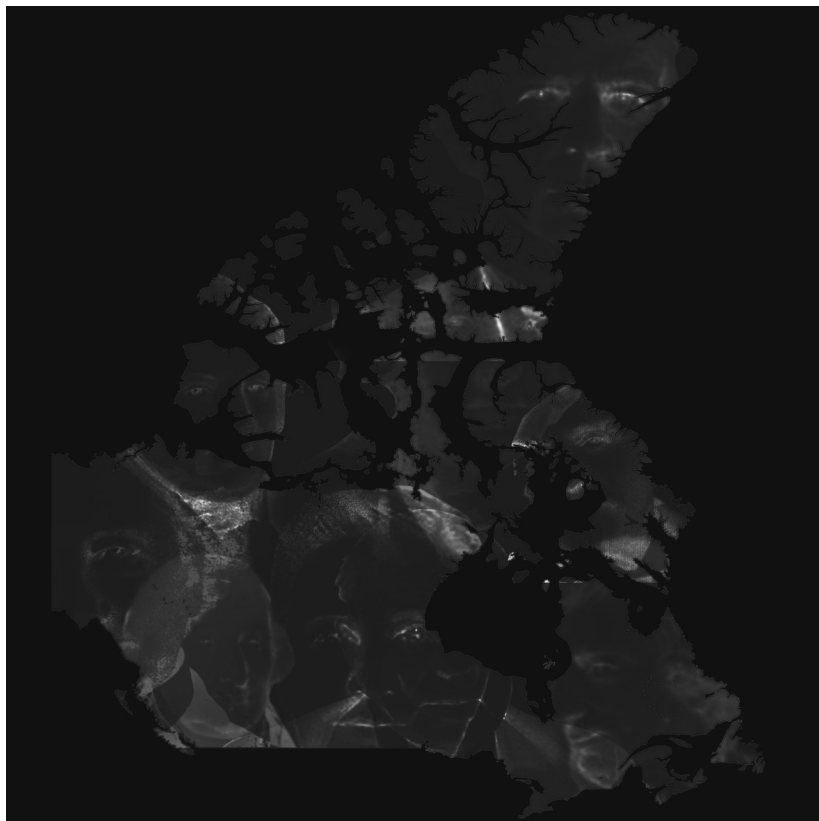
Anna Leung

Atlas of Controversy: Geographies of Injustice and Indifference

How should we see the past in the present day? How can one reconcile with the complex, interlaced, and often problematic narratives of Canada's histories? The removal of contentious commemorative artifacts in our parks and public spaces has become a symbolic "solution" for historical and social remediation — yet this is a largely ineffective action. It is not only such artifacts, but also landscape features, place names, networks of streets, schools, and even our currency that perpetuate the problematic past today.

This thesis takes the position that recognition must precede reconciliation. It proposes an "atlas of controversy."

Advisor: Laura Miller
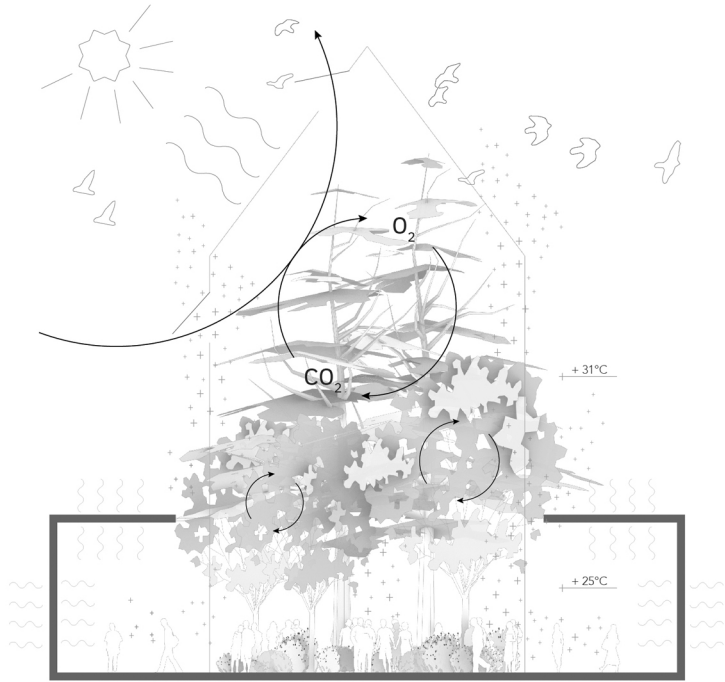
Jing Li

Energy House

"Passive house" design guidelines define high-performance buildings as structures with super tight, sealed envelopes. Do buildings have to be closed systems in order to be energy efficient? Can we design high-performance buildings based on more dynamic, open systems? This thesis proposes a building that uses semi-conditioned collective space as a thermal buffer zone to mitigate indoor and outdoor climates. It projects a scenario where the enchanted vegetated space of a conservatory helps in the exchange of available energy to support the activities of occupants — human and plants. The building explores the symbiotic relationship between architecture and energy. It questions the separation of structure, material, and infrastructure currently represented by the closed-building system with air-based heating methods.

Advisor: Carol Moukheiber
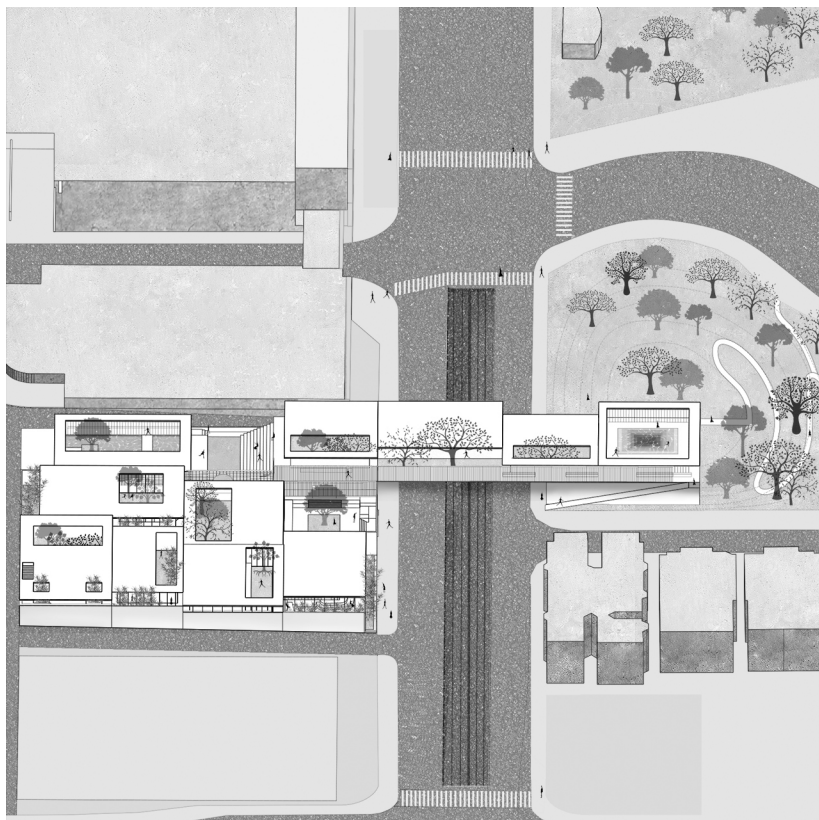
Shuo Li

Library for New Social Forms

The role of libraries has shifted from collecting and archiving research materials to fostering connection and creation among users. Could libraries become active spaces that people could stroll around rather than sit to learn? Inspired by the spatial design in China's scholar gardens, my thesis tries to break the barriers around libraries' isolated architecture and landscape. I attempt to connect useful space with ornamental space, creating feelings of infinity in a limited area and offering new forms of sociability in contemporary library design.

Advisor: Robert Levit

Kai Chun Liu

The Greenhouse Pattern

Amongst the many ideals of a modern urban life is eating local and living conveniently — a lifestyle that is built upon an ecological ethics of efficient use of resources. Imagine living in a community where agriculture is interweaved with residential neighbourhoods and commercial districts. This new urban pattern would create an effective industrial environment for urbanizing the agriculture industry while providing park amenities to residential districts. Greenhouses generate a more adaptable farming possibility in an urban context. Higher-valued agricultural products, including organic vegetables and processable fruits, provide for freshness and expanded value for a niche of the agriculture industry. This mixture of agriculture and urban living will eventually form a sustainable community that benefits itself and an industry interwoven into the city.

Advisor: Robert Levit

Fiona Lu

House of Memories

Despite its many cultural institutions, Toronto lacks a cultural space that serves to register and represent the daily lives of its diverse populations. This thesis proposes a new, informal institution, operating as a transect of cultures and stories. Individual histories within an extended, multicultural community are collected as a way of finding common ground and building a shared history. The public presence of the building — an apparatus for collecting, archiving, and displaying the activities and artifacts that are part of the diverse Bloor and Christie neighbourhood — comes into definition over time, through the accumulation of artifacts and images.

Advisor: Laura Miller

Chloe Lui

Avant-Guardian

In a world full of conflict and injustice, social dissent and protest are tools of resistance. Museums, which hold controversial artifacts within secure institutional settings, are strongholds of cultural authority. And yet, through their collections, they are implicit sites of conflict. This thesis recalibrates the museum's institutional space, reshaping it as an instrument of civic participation, solidarity, and resistance. Protecting — collecting, preserving, and curating — the ephemeral artifacts of social movements creates an accessible haven of objects, incubating greater public discourse. Counter-hegemonic narratives, actions, and ideas are gathered, debated, staged, celebrated, sustained, and disseminated.

Advisor: Laura Miller
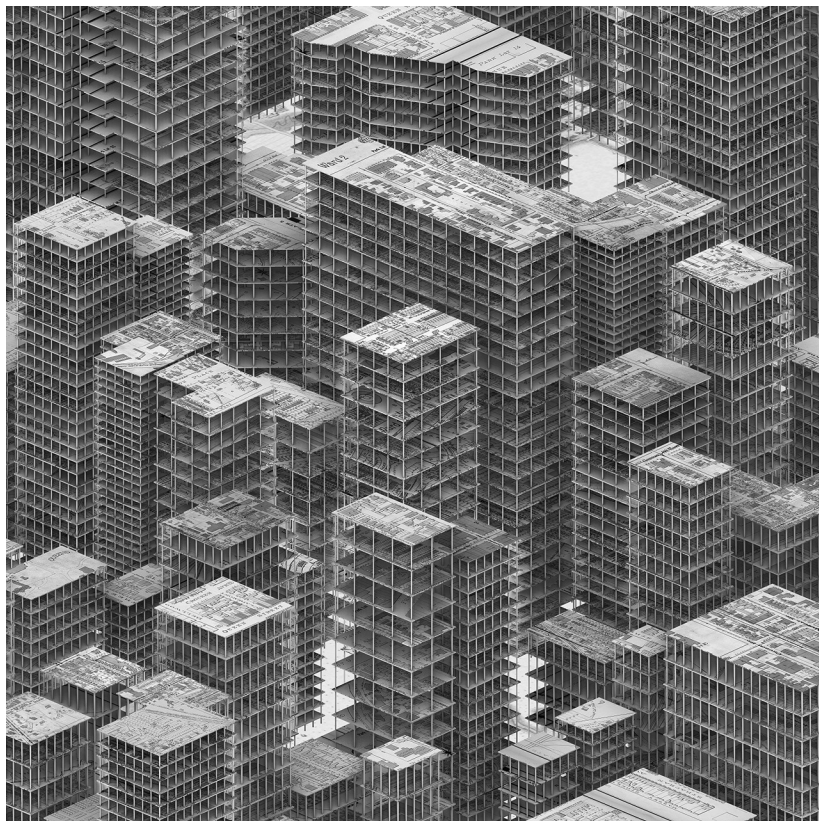
Michael MacNeill

Adapting Obsolescence

If carbon neutrality is the goal, then *tabula rasa* needs reconsideration. Can a building truly be carbon neutral if the disembodied energy from its predecessor was not considered? Precarious typologies — structures that are too small, old, or without potential for big financial payoffs — threaten to contribute millions of tons of demolition waste to our landfills. At the same time, the energy used in building replacements for those structures will flood the atmosphere with CO_2. This thesis explores methods of adapting one such precarious typology — the parking garage — by taking advantage of its natural attributes to form new ways of collective living, similar to the radical changes brought about through the transformation of factories into lofts.

Advisor: Carol Moukheiber
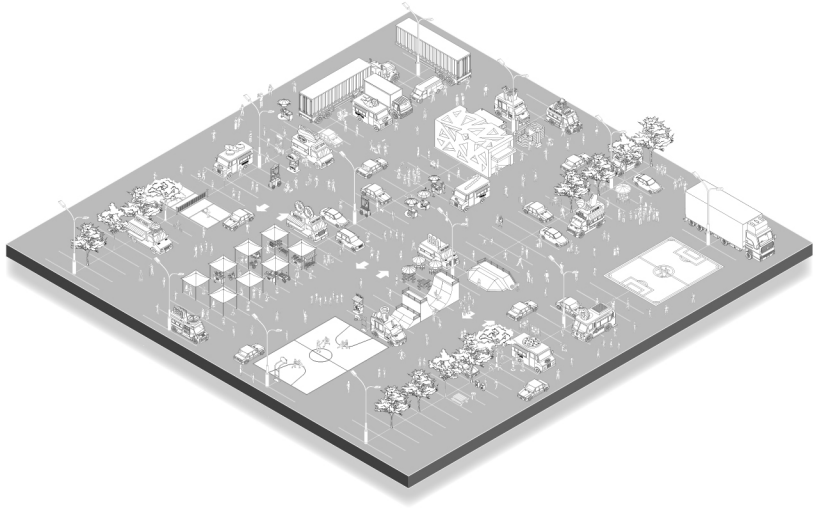
Simba Xin Mai

From a Little to a Lot

Until public transit reaches the far corners of our vast urban region, parking lots will continue to be a necessary type of infrastructure. Designers and urban planners often see parking lots as opportunities for new density — but, where parking is required for mobility, such proposals are not always feasible. This project explores an alternative strategy for developing parking lots that can preserve them for cars and open them to public life, while at the same time adding density and allowing the city to grow from a little to a lot.
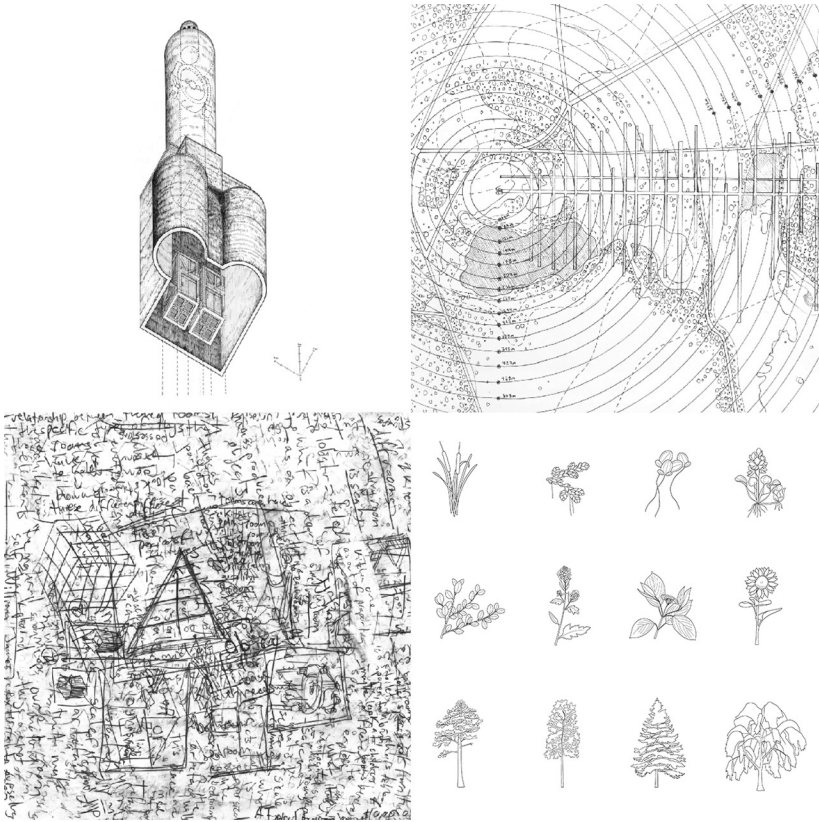
Valerie Marshall

Not Since Gutenberg

This thesis explores contemporary modes of surplus and archiving. Not since Gutenberg invented the printing press in the 15th century has any invention or system had as profound an impact on the ability of individuals to access and share information as the internet. Through the reclamation and remediation of an abandoned mine site in Quebec, a revolving community undertakes to archive internet and digital ephemera.

"Digital documents last forever — or five years, whatever comes first."
*–Jeff Rothernberg*

Advisor: Laura Miller

Safina Moloo

50 Houses

The single-family home is no longer exclusively a place for the nuclear family. Today, these structures are used for a wide variety of domestic arrangements. The project begins with a survey of the inhabitants of 50 homes in Scarborough. It creates a subjective atlas of residents' needs, habits, and scenarios of habitation. A narrative of new domesticities emerges, which structures a new architectural organization. I propose addressing changing domestic needs by adding density, creating new public space, and bringing new connectivity to an area of low-rise, single-family, detached houses.

Advisor: Petros Babasikas
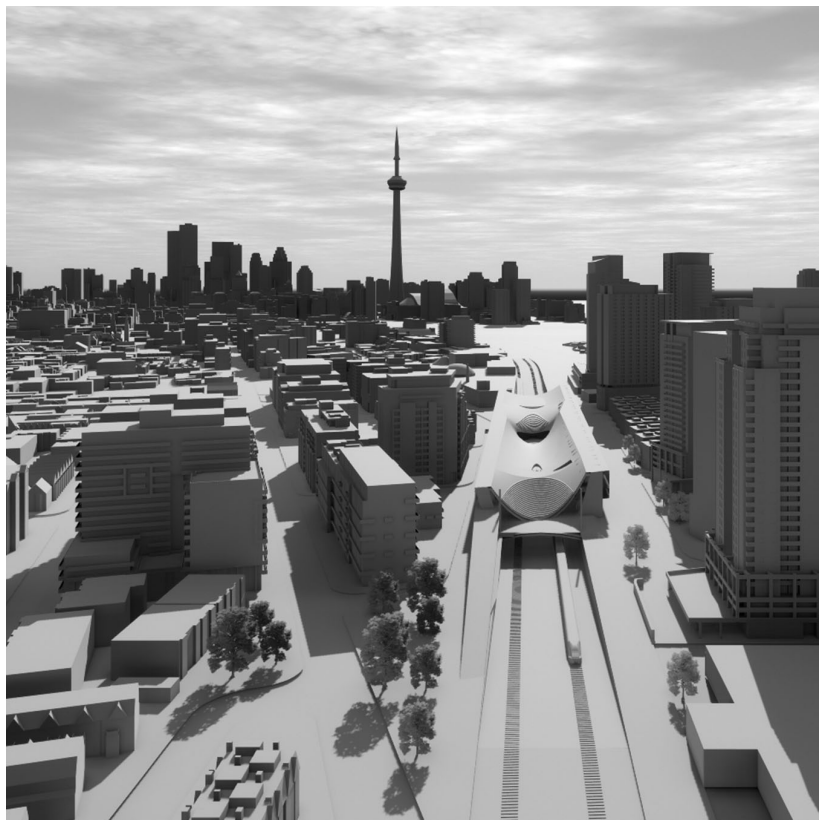
Ehsan Naimpour

In-Transient Station

Cities need to rethink single-use infrastructure in a highly privatized metropolitan context. This project looks at a section of Toronto's rail network, between St. Clair and Spadina avenues, as the potential site of a hybrid infrastructural system that responds to the needs of its immediate neighborhood as well as those of the transportation network. On the formal level, the project makes use of catenary and parabolic arches to create a transient but also stationary public sphere. The objective is to create a porous monumentality within city infrastructure — a meaningful blend between structure, landscape, and public programs.

Advisor: Robert Levit

Ace Nguyen

Hypertopia: Constructing Solitude

Hypertopia is an analogical architecture that accommodates the paradox of solitude with the belief that architecture can pre-mediate experience, balance trade-offs between compartmentalization and connectivity, modulate senses, create thresholds and transitions, and corporealize atmospheres. Both individual and collective experience is heightened by the ardency or absence of the other. The Hypertopia can be understood as part labyrinth and part sanctuary, a place of voluntary exile wherein self-situation dwells. No one can know the entirety of its history, but it has always existed. It involves potential contextual conditions that allow people to experience solitude through the transit of a territory where one pursues the pleasure of being lost.

Advisor: John Shnier

Milan Nikic

Raft Islands

A floating home on the west coast of Vancouver Island became the inspiration for a new kind of collective life known as the Raft Islands. Floating atop the barges and structures of repurposed salmon farms, this settlement on the water became a vessel for testing new architectures and lifestyles. In search of a new model for living that was a counterpoint to the relentless suburban house or west coast mansion, this collective of individuals set off on a journey to make that vision a reality.

Advisor: Adrian Phiffer
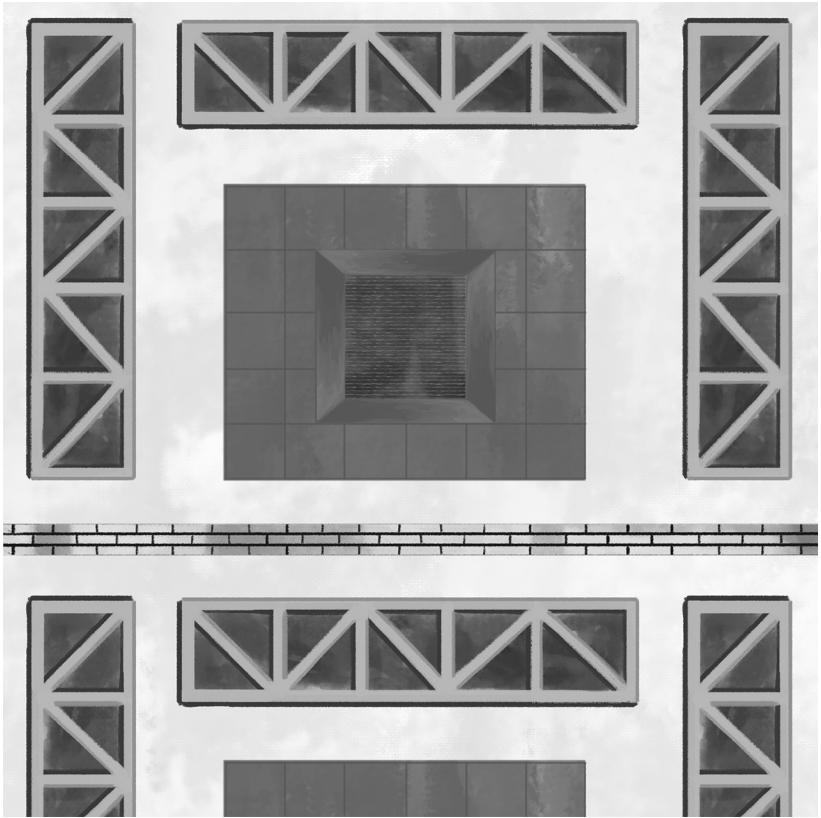
Roman Romanov

99 Boring Facades

Describing Canadian diplomatic architecture in terms such as "familiar," "ambiguous," "safe," "tolerant," "vague," or "boring" is not uncommon. Canada's image as a lesser world power has been consistently reflected in its forgettable architecture overseas. Leveraging Canada's identity as a mosaic rather than a melting pot, this thesis attempts to complicate the interpretation of Canada's unremarkable "brand" and offer a closer, less superficial reading of the country's national as well as architectural façade.

Advisor: Mauricio Quirós Pacheco
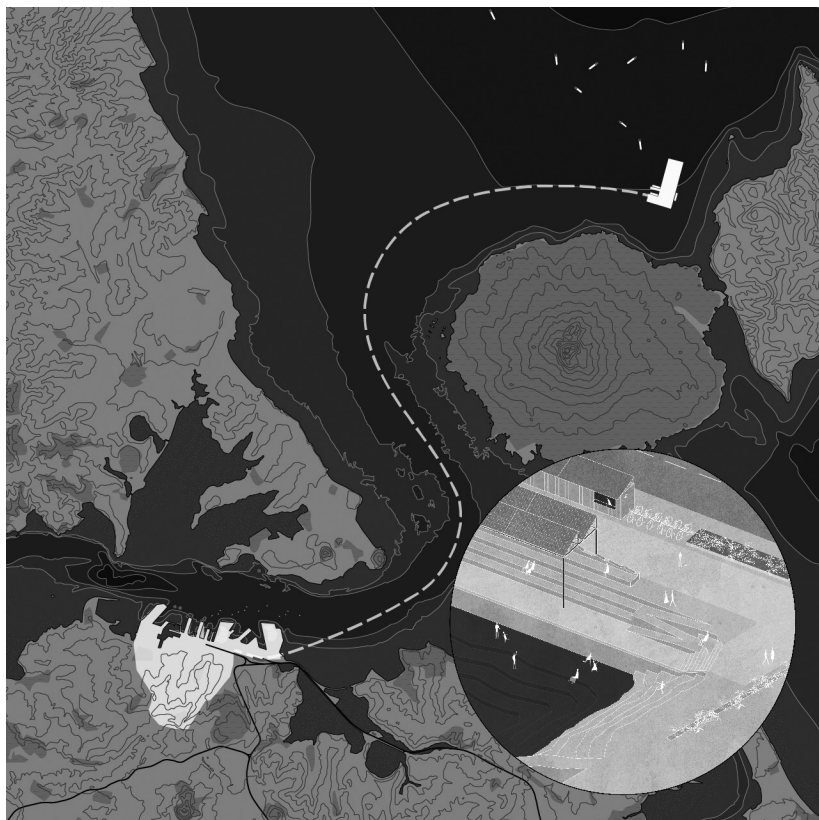
Lynn Sang

Ugly Landscapes

Multiple stakeholders at the port of Auckland — civic, industrial, Indigenous, and ecological — are at odds over its future. Speculative studies propose the removal of port functions to an exurban location. My project explores an incremental urbanism through a series of hybrid architectural operations on the old port. The interventions include allowances for logistics and light industry, reused infrastructures, an extensive network of public spaces, and the phased creation of new ecologies. The design acknowledges the industrial reality of Auckland's past, present, and future and finds ways for spaces of production, recreation, and civic engagement to coexist.

Advisor: Petros Babasikas
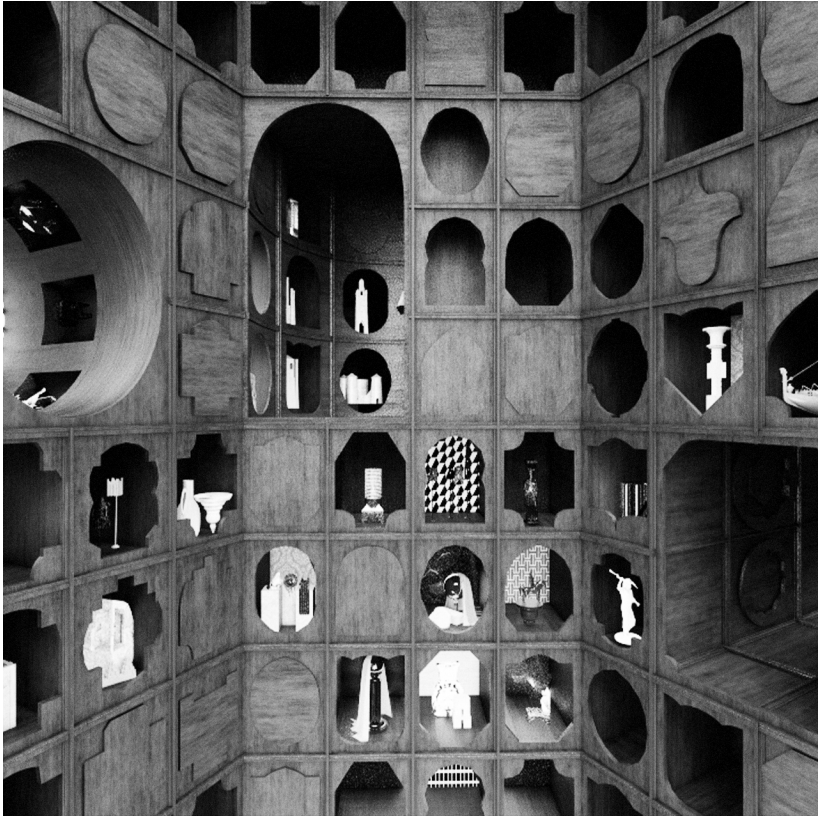
Nassim Sani

City of Trophies

This thesis explores the evolution of architectural form and the ways in which novel form can reveal its history without repeating or abandoning the past. City of Trophies is The Newsoanian Museum's latest exhibition. It assembles and curates fragments of a city lost in time. Archaeologists and architectural historians seek to understand the city's rich culture by investigating its most significant monuments, which were appropriated through conquest, assimilation, trade and political transitions. The museum's curator positions the exhibition as an effort to reconstitute the relationship between a culture's unveiled histories and a speculated future through the metamorphosis of its monuments.

Advisor: John Shnier
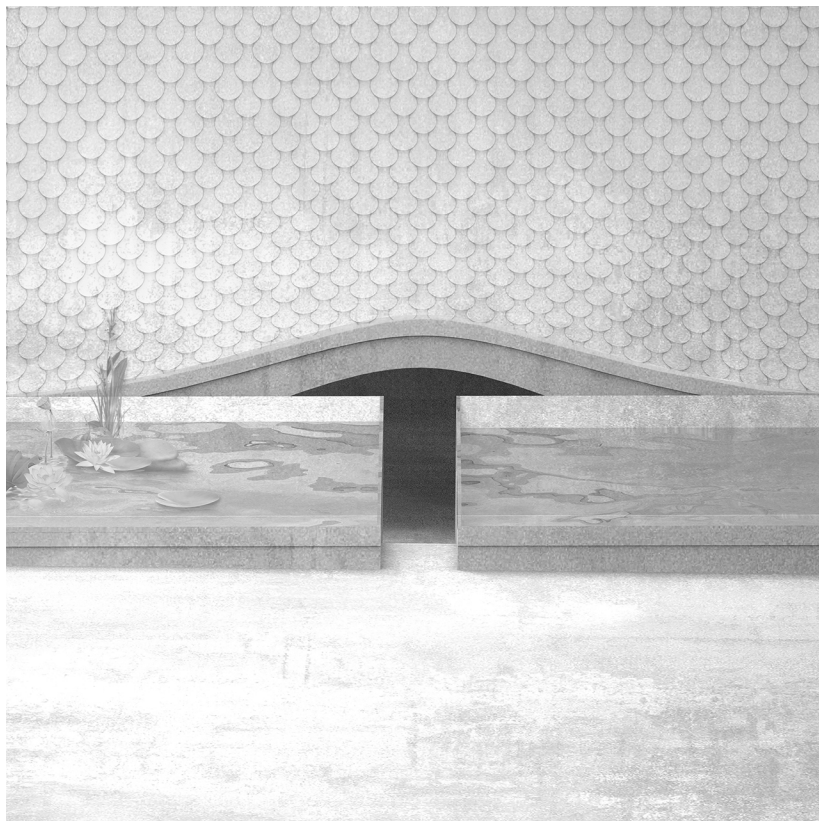
Yu Jung Shen

The Temple_Poetry of Terroir as a Bridge_as a Root

Immigrants are flowers planted in an exotic terroir, and for Chinese immigrants the temple restores something familiar in the unfamiliar. Temples, in traditional Chinese culture, were not simply places of faith but also centers for broad community life. Yet, in immigrant cities, the temple has come to serve a segregated minority, no longer a hub for the broad metropolitan life it once served and not yet able to establish its role within the demographically diverse cities of the new world. This project aims to remake the temple for new settings — to sustain and modernize the temple's cultural and architectural character while building a bridge to new communities.

Advisor: Robert Levit
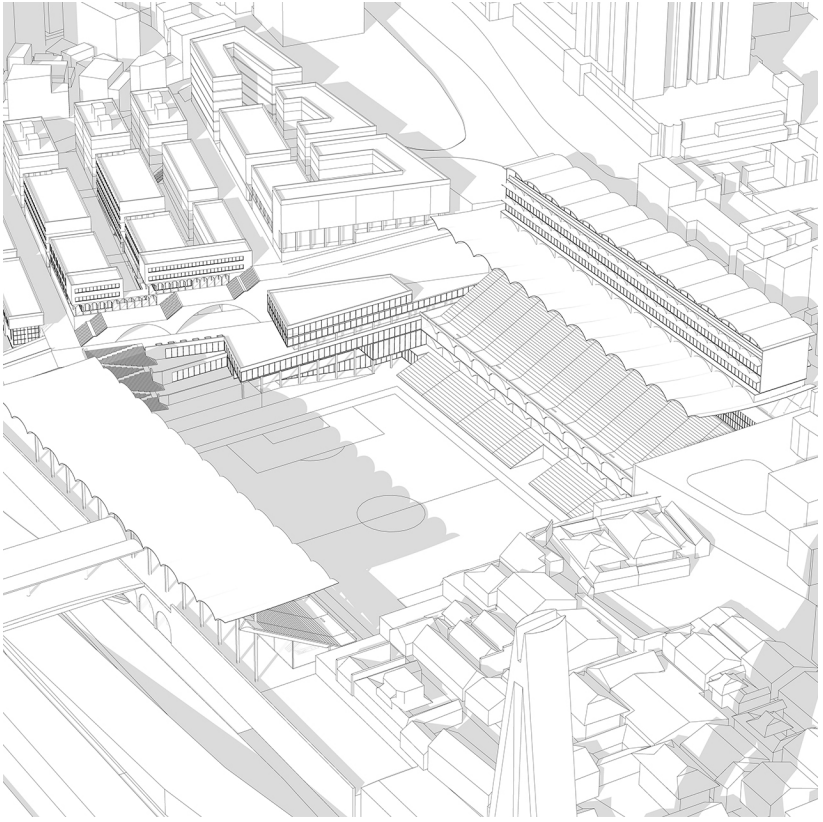
Zhan Shu

A Stadium in the Context of Super Dense, Mixed-Use Vertical Urbanism

Chongqing has one of the fastest urbanization rates in the world. This growing megalopolis is located between mountains and giant rivers, which give it a unique land-use scenario. In response to a global trend towards inner-city stadiums, this thesis proposes an urban strategy for embedding a large sports facility into a major plan for transformation in the context of Chongqing's super dense, mixed-use vertical built form. The multipurpose structure includes a welcoming public-space component.

Advisor: Robert Levit

Erin Sigal

Biosphere 3: The Impossibility of Enclosure

Biosphere 3 reimagines what many artists, scientists, architects, and engineers have been dreaming of for centuries: a designed atmosphere sealed off from the outside world. Rather than manipulating the environment to suit human needs, I will look to influence the atmosphere to suit the environment's needs. In the process, I will attempt to reconceptualize climate change as a source of design potential.

Advisor: Adrian Phiffer
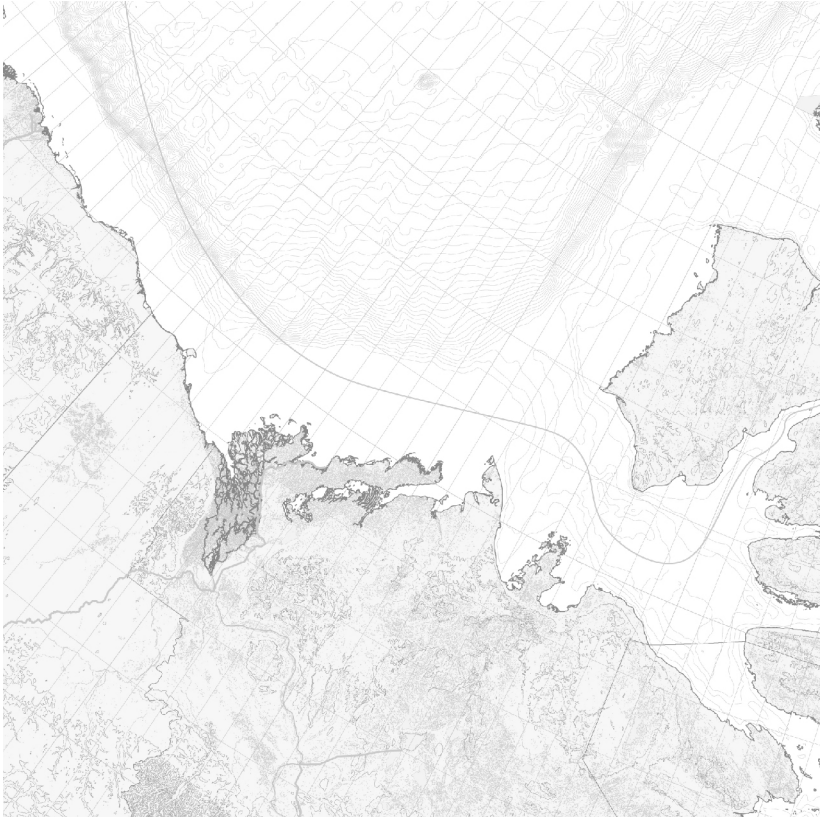
Holly Smith

Grounding the Arctic

The Arctic has often been a space positioned far outside the concerns of the southern majority in Canada, but climate change has begun to awaken political battles and rivalries in the high north. With melting ice caps opening the Northwest Passage, this space is increasing in importance on the world stage. Tuktoyaktuk is the northernmost town on the Canadian mainland, first established in the 1930s. It now lies at the end of the Dempster Highway, Canada's only highway to the Arctic Ocean — and yet, due to melting permafrost, the town is eroding faster than any other area in the nation. Through a new linear edge, this project aims to reclaim the Arctic coast and increase the town's connection with the Arctic Ocean for both civilian and industrial occupations.

Advisor: Mauricio Quirós Pacheco
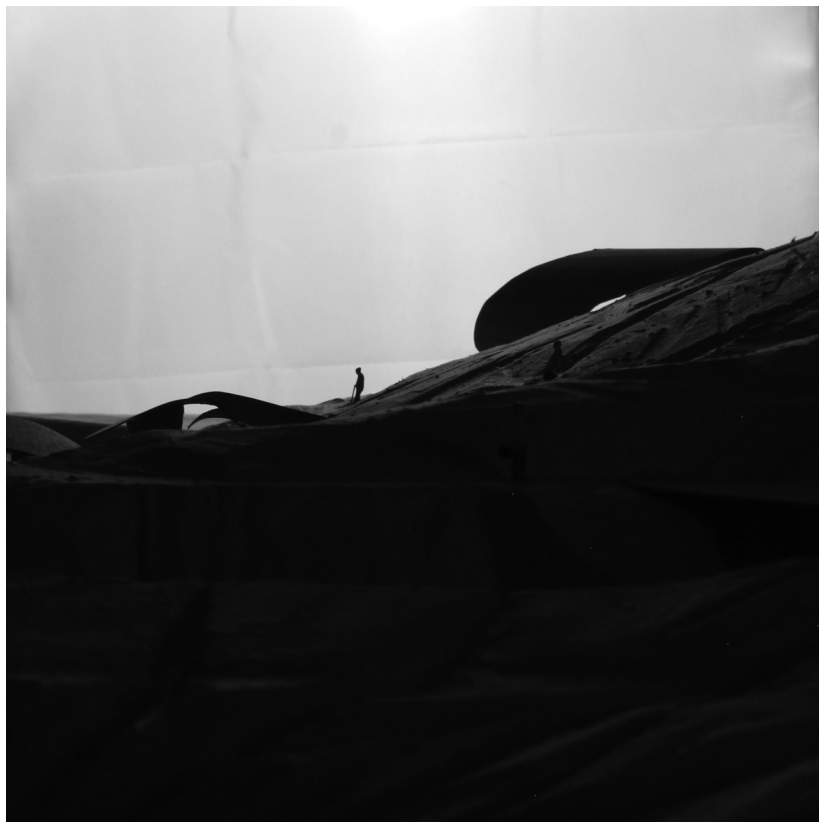
Shivathmikha (Shiva) Suresh Kumar

Child and Adolescent Psychiatric Facility for First Nations

This thesis presents a possible design for a safe and welcoming environment for First Nations children and adolescents born into settings and situations that were not under their control. The design provides spaces for individuals to receive guidance and psychiatric care from elders in their communities through engagement with the ecological environment, regional activities, and traditional and current healing methodologies. Each First Nation community has a unique history and identity grown from cultural practices dating back almost four thousand years. Models of healing environments are explored for the Ucluelet Nation and Toquaht Nation, located on Vancouver Island's Pacific rim.

Advisor: Adrian Phiffer
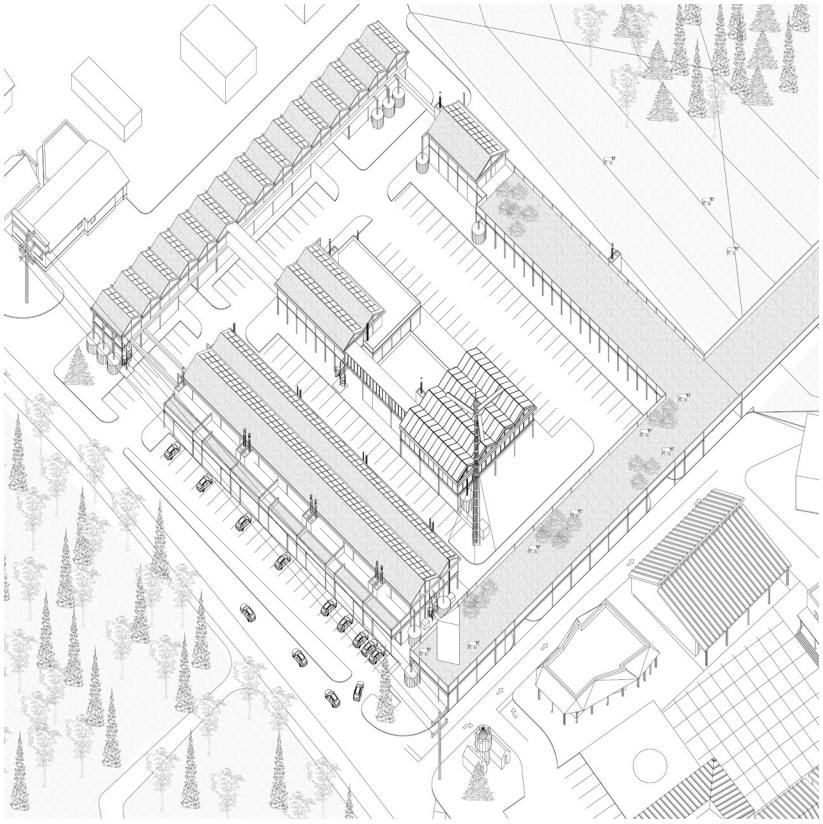
Hrishikesh (Rishi) Tailor

The New Ordinary: Strip Mall +

The architectural manifestations of capitalism and consumerism can be found in all typologies. One of the most expressive is the "strip mall." These spaces tend to become the social centres of neighborhoods. They are often unloved objects of architecture — however, they often contain unique experiences and expressions. Consumerism has been the primary cause of the climate crisis and so, in order to for it to continue, we will need to adopt a circular economy — an economy that is restorative and regenerative by design. This thesis explores new forms of architecture that can emerge within the typology of a strip mall when the pressures of circularity are added to it.
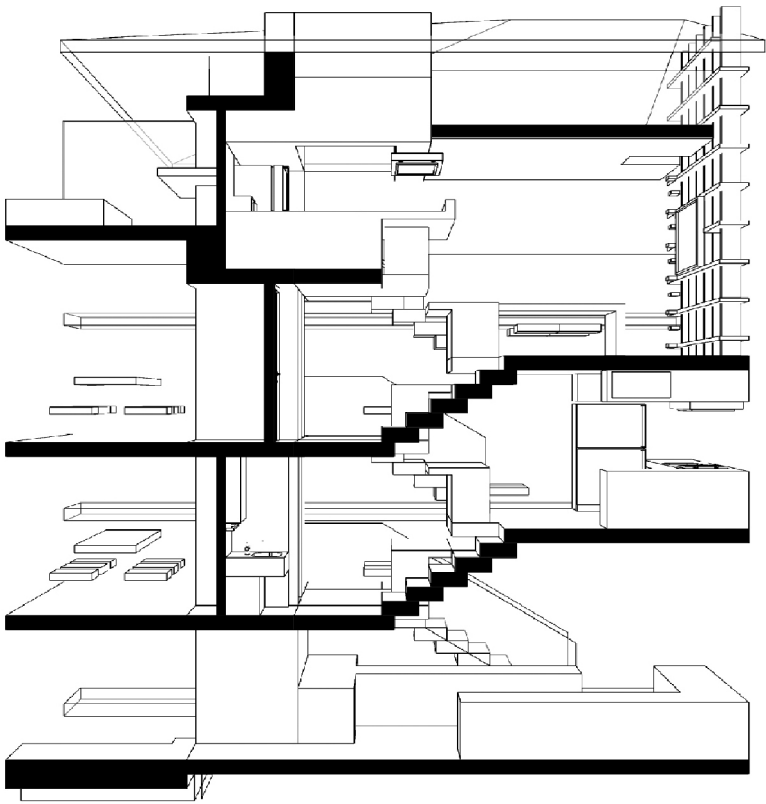
Jun Tan

Suburban Rooming House

A lack of student housing in suburban Toronto neighbourhoods has led to the proliferation of illegal rooming houses in single-family homes. These subdivided structures, often located near peripheral college campuses, might have beds for up to 18 students. Given their illegal status, the city currently shuts down these accommodations when they are discovered — but they are hard to detect and many still exist. This thesis proposes that universities and governments sponsor a co-housing program in Toronto. Such a program would include the purchase and retrofit of single-family homes near university campuses, and the provision of amenities and infrastructures through the surrounding neighborhoods.

Advisor: Michael Piper
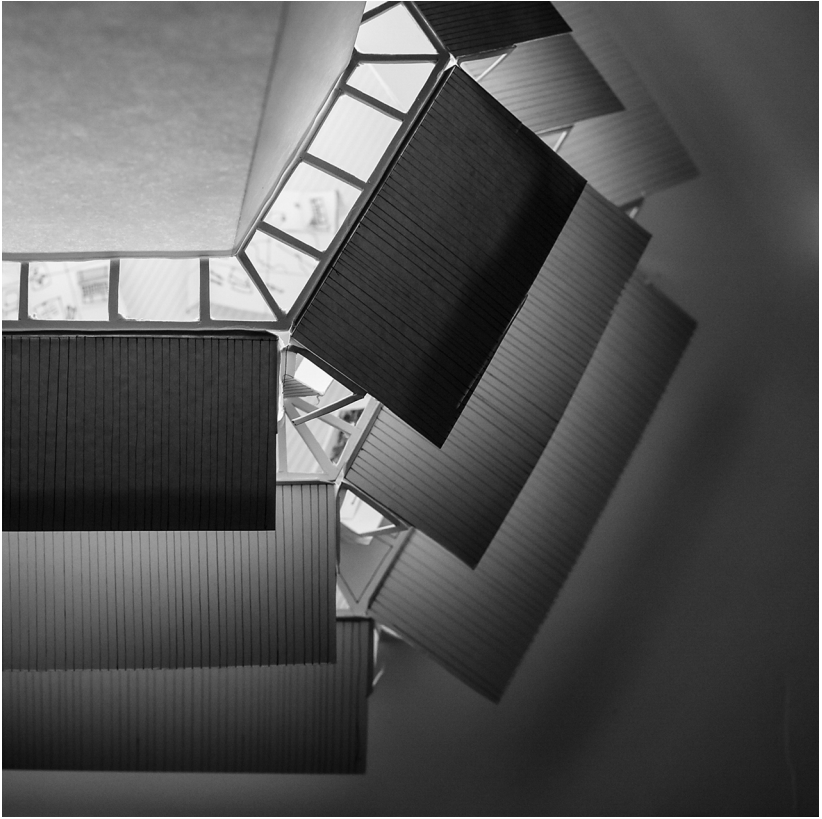
Stephanie Wai Chi Tung

Network Commons: Kindness, Production, and Safespace

This project inhabits Hong Kong's post-2019 commons. It questions how architects can contribute to and enhance social networks through architectural production. The ultimate product is a research and design guidebook, which includes catalogues, inventories, photos, and analyses of urban objects and fragmented commons related to bottom-up actions, as well as their architectural manifestations in the public realm. The guidebook generates a series of bottom-up design speculations and narrative approaches. These present an alternative future beyond the functionalist city, defining new, hybrid, and connected networks of kindness, production, and political safe space for itinerant populations and political mediators.

Advisor: Petros Babasikas

Blake Wallace

HeadRoom

HeadRoom is a prototype for a network of transitional communities designed to help anyone who struggles with their mental health. This design, which uses architecture as a therapeutic device without being classified as an institution, exists to solve three of the leading problems mental health care faces in Ontario: demand, quality of life, and stigma. This community is intended to be paired with existing medical and educational institutions, including Carleton University's neuroscience and mental health program and the Ottawa Hospital. HeadRoom's intention is to use design to eliminate stigma surrounding mental illness. It engages the existing community, normalizing mental health struggles that affect so many people — not only in Canada, but around the world.

Advisor: Mauricio Quirós Pacheco
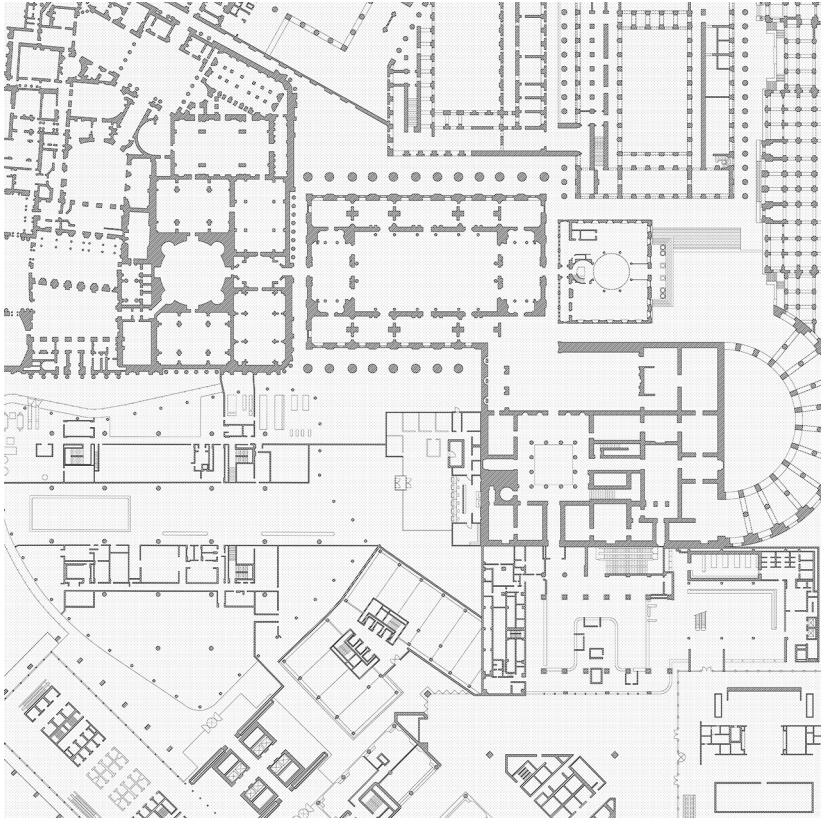
Siqi Wang

Where Money Lives

Banks have developed into one of the most splendid architectural typologies. They are created by private capital to serve a pragmatic function for their owners. At the same time, a bank building communicates an institution's importance, assures us of its stability, and builds tangible trust though materiality. In today's world of ubiquitous computing, where banking is mediated electronically, physical architecture's propensity to enclose, demarcate, particularize, and isolate becomes awkward as capital strives to be weightless, instantaneous, flexible, and free from spatial and territorial confinement. This thesis documents the past and present of banking and speculates on the future state of an architectural typology in crisis.

Advisor: Mauricio Quirós Pacheco

Laura Xin Wang

Migrating Memories

Workers in factories across China, and particularly in Shenzhen, migrate from the far reaches of China and live lives isolated from the cities in which they labour. Few amenities are provided beyond utilitarian canteens and housing. This project seeks to establish a model of public amenities that will provide for a theatre of civic life made available to both factory workers and to local residents. Park systems, libraries, and a broad array of community centre programs seek to forge a new public from immigrant labour and existing urban populations in a setting shared by both and benefiting both. The setting for this effort is the environs surrounding the famous Foxconn factory.

Advisor: Robert Levit

Vanessa Yaohan Wang

Synesthesia City

Colour is often a problematic subject for architects, relegated to a matter of subjective taste or considered decorative and superficial. This thesis merges colour and architecture through drawing, proposing a hyper-synesthetic environment. Rendered in different chromatic values, tectonic fragments explore sensorial possibilities that draw out both the conscious and subconscious meanings gleaned from a range of habitual and traditional associations. These representations celebrate and inspire the use of colour as a method of visualizing sensations and challenging conventions of comfort and taste to which architects have often defaulted.

Ivee Yiyao Wang

Casting Beijing

Casting Beijing is a concrete upcycling factory that creates itself, transforms itself, and eventually consumes itself. Reflecting on the current model of planned obsolescence, the project proposes a circular lifecycle in which buildings are designed to always be in a transient state, capable of adapting to uncertainty and decay. The factory's transformation is designed to echo the changing demands of its surrounding context. At the inevitable end of its various lifespans, the factory is itself consumed by the mechanism it hosts. Following the fate of every building it has devoured, it is then absorbed into a new structure somewhere, hundreds of years from now.

Advisor: Carol Moukheiber

Yifeng Wu

Airborne

This thesis projects a near-future scenario in which e-retailers such as Amazon extend their logistical networks into the city's core in pursuit of faster delivery and consumer satisfaction through object saturation. At the same time, the single-minded, efficient leveraging of capital in high-density downtown towers is questioned in light of the abandonment of those same towers as a result of the pandemic. Questioning logistical determinism, this thesis asks if one set of logistical concerns can be harnessed to serve another set of desires: can maximizing drone delivery's efficiency in a new tower typology resuscitate office space with improved environment and indoor air quality?

Advisor: Laura Miller
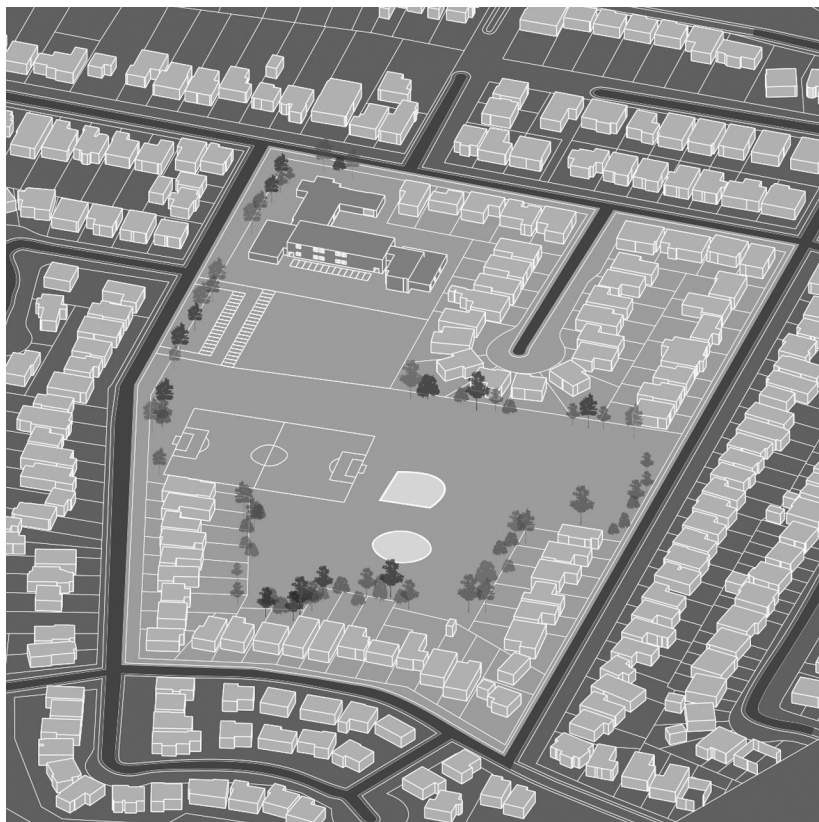
Mengqi Xu

A Second Life of Surplus Schools

In many suburban neighbourhoods in Toronto, there are no longer enough young families to drive demand for schools. The city's school boards have responded by slating underutilized school buildings for closure. Some of these school sites have been sold to private developers and redeveloped into housing. However, once the city sells a school, it can't get it back, even if demographics shift. This thesis proposes a development and design model that creates housing on surplus school sites, but enables the creation of new schools within the surrounding landscapes.

Advisor: Michael Piper
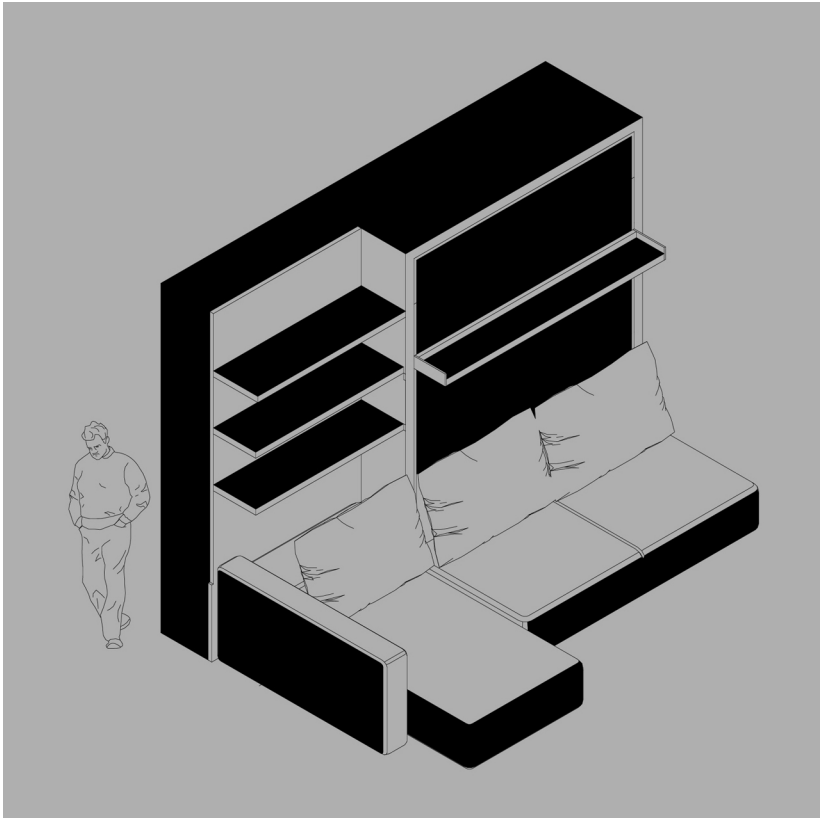
Roger Xu

Fat Pack House

Personal domestic expression has been stifled by the need for the efficiency and economy of mass production. While products like cars and shoes have differentiated themselves through mass customization, this trend has not resonated in housing. This thesis, the Fat Pack House, proposes a niche between prefab and speculative housing. It imagines a space for more creative expression by proposing a series of consumers with different lifestyle scenarios and offering alternative ideas about housing flexibility and individuality. This is achieved by reimagining the home as a consumer product, under the operations of the mega-retail phenomenon.

Advisor: Laura Miller

Ranran Zhang

Rage Against the Machine

In their book *Anti-Oedipus,* philosopher Gilles Deleuze and psychoanalyst Félix Guattari argue that we should ditch the dichotomy between human and machine and instead see the world, the body, and society as a set of interconnected machines. The Green New Deal can also be thought of as an extremely complicated machine. This machine is always embedding itself into other groups of machines in order to bring about its own actuality. This thesis aims to interpret and paraphrase "machine theory" in its purest sense by recruiting the motif of criss-crossing industrial pipelines and assembling it with other machines in multiple scales in order to create a new synthesis that results in a stronger, more evolved being.

Advisor: Adrian Phiffer

DUCK

HIGHWAY

EAT

DECORATED SHED

DIGI-WAY

INVERTED DUCK
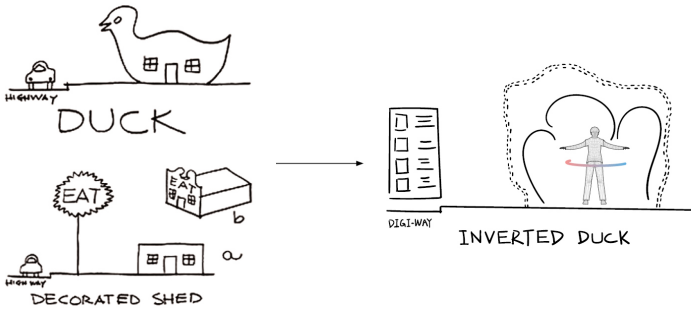
Yi Zhang

Shopping Sceneography

The internet has drastically changed the retail industry by reducing shopping activity at physical stores. But perhaps the fall of the traditional retail model will breed a new architectural form. This thesis attempts to redefine the relationship between physical shopping space and the surrounding community by introducing a different approach to retail design: shopping sceneography. The project is delivered in the form of a research paper and design intervention.

Advisor: Mauricio Quirós Pacheco
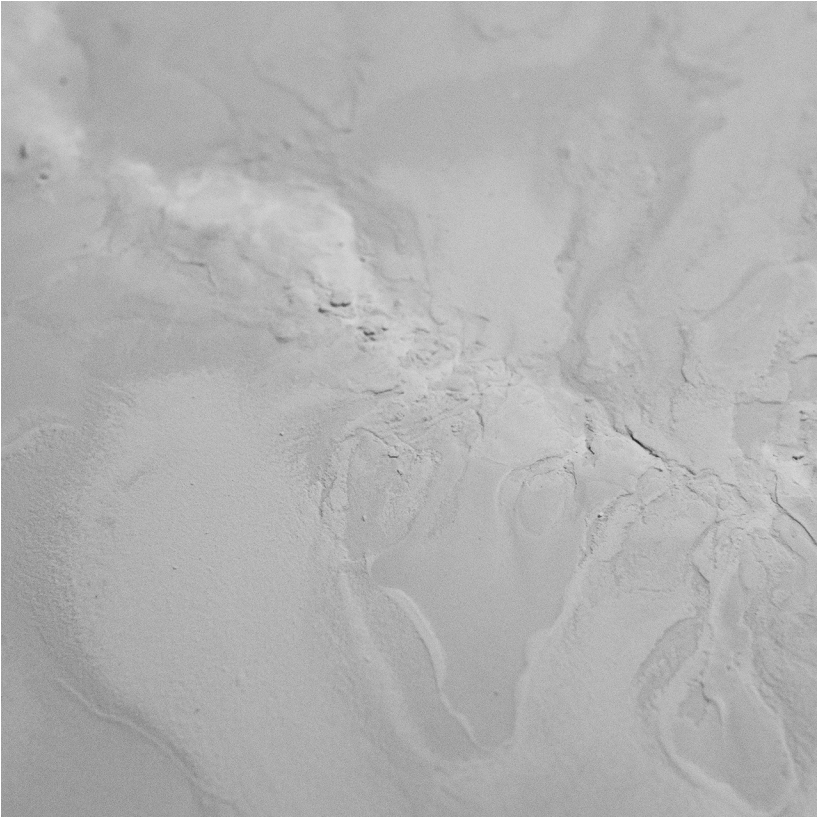
Serena Yuhao Zhang

symbiOASIS

This thesis investigates the area of the Chemainus River estuary in British Columbia as a space of shared interactions. It tries to imagine how human-made structures could contribute to reinitiating and transforming living habitats in estuarine ecosystems that are being damaged by rising sea levels. The project looks into ways of providing alternative habitats for all symbiotic species via artificially augmented nature that supports blue carbon sinks.

Advisor: Adrian Phiffer
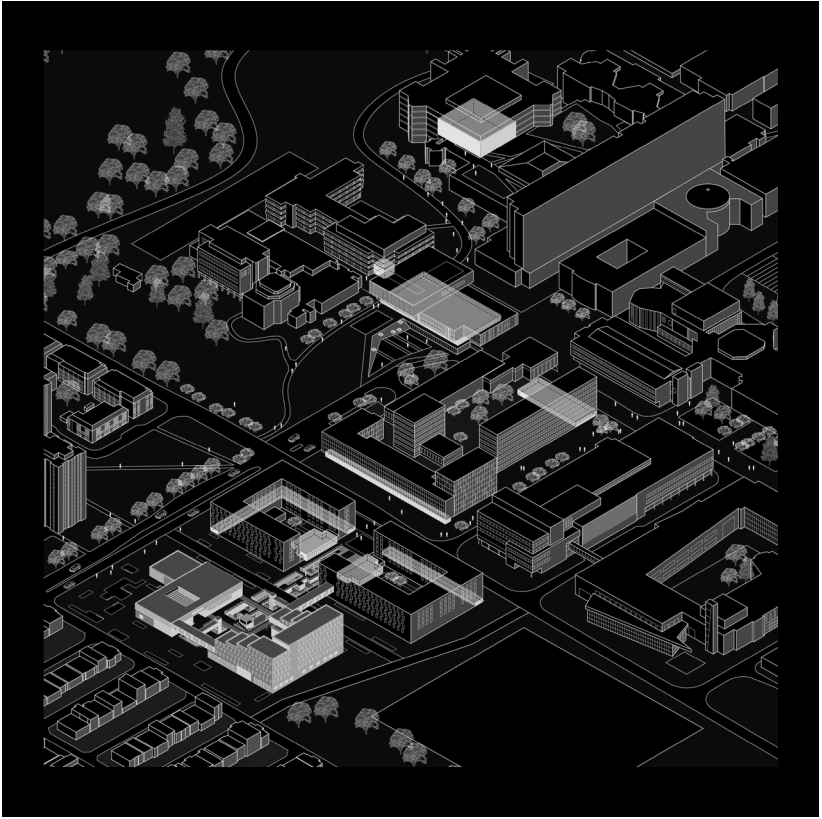
Tina Zheng

Seniors +: Integrated Senior Community

"Aging in place" is a growing concern for Canada's elderly, in part because traditional retirement homes provide very limited public space and social opportunities. My proposal is to create an integrated senior community that connects retirement facilities with institutions like universities. This thesis uses the existing amenities on the York University campus to join a senior centre with the surrounding neighbourhood, as a way of promoting mutually beneficial interactions between seniors, students, and other residents in the area.

Advisor: Michael Piper
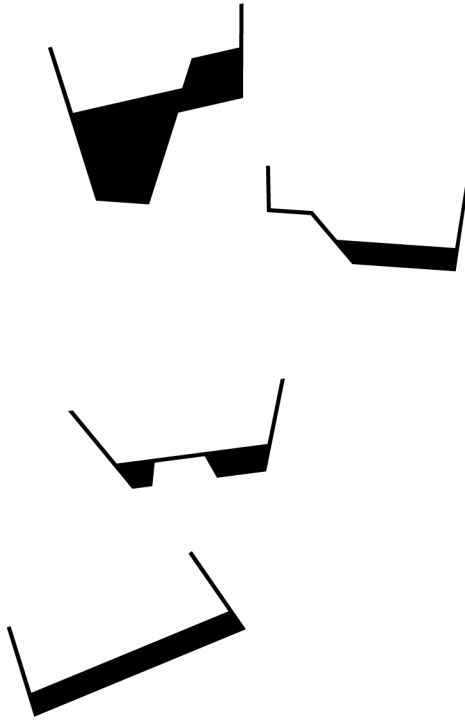
Ghazi Ziben

Rain, Rain, Don't Go Away

Lebanon is facing depletion of its freshwater resources, including clean potable water. With failing central water infrastructure and contaminated local springs, access to clean drinking water has become privatized, at great socioeconomic and environmental cost. This thesis proposes methods of recharging historical modes of freshwater infrastructure to support precarious collective and ecological environments. These neighborhood-scale interventions collect and filter rainwater and runoff while simultaneously offering public amenities. This concept hearkens back to historical models of social exchanges near springs and rivers in Lebanon, creating a contemporary version of a historical practice.

Advisor: Carol Moukheiber