D AN IELS

Thesis Reviews Winter 20



This book showcases final thesis projects produced by Master of Architecture, Master of Landscape Architecture, and Master of Urban Design 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 April 16 & 17, 2020.

Advisors

An Te Liu

Carol Moukheiber

Brady Peters

Mauricio Quirós Pacheco

Mason White

Jeannie Kim

Michael Piper

John Shnier

Mark Sterling

Aziza Chaouni

Jane Wolff

Liat Margolis

Fadi Masoud

Behnaz Assadi

Justine Holzman

Georges Farhat

Elise Shelley

Victoria Taylor

Master of Architecture

David Alba
Abubaker Bajaman
Angela Cho
Laura Fox
Diana Franco Camacho
Siri Hermanski
Christian Huizenga
Niloufar Jalal-Zedeh
Felix Chun Lam
Chloe Leung
Mariam Malaty
Isaac Neufeld
Rosa Newman
Mina Park
Lu Wang
Yi Ran Weng
Joanna Zhang

Master of Urban Design

28	Ahmed Al-Jirjees
29	Paulina Aviles
30	Pooja Brahmbhatt
31	Dorreya ElShal
32	Yuan Li
33	Yiming Ma
34	Seif Malhas
35	Xiaoqing Zhao

Master of Landscape Architecture

38	Bronwyn Austin
39	Sing Zixin Chen
40	Bonnie Chuong
41	Avery Clarke
42	María Paula Cortés Herrera
43	Hillary DeWildt
44	Alexandre Dos Santos
45	Wenpei Fang
46	Elspeth Holland
47	Shikha Jagwani
48	Caroline Kasiuk
49	Alyssa Lagana
50	Katherine Liu
51	Ted Marchant
52	Alexandra Ntoukas
53	Ambika Pharma
54	Tharshni Shanmuganathan
55	Bonnie Tung
56	Alexandra Walker
57	Zhengbang Wang
58	Michael Wideman
59	Yuanyuan Ye
60	Chiling Zhou

Master of Architecture Advisors

An Te Liu

Carol Moukheiber

Brady Peters

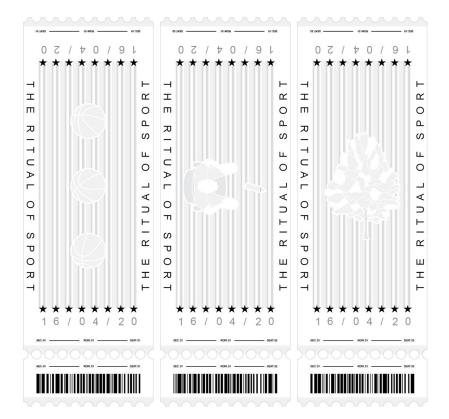
Mauricio Quirós Pacheco

Mason White

Jeannie Kim

Michael Piper

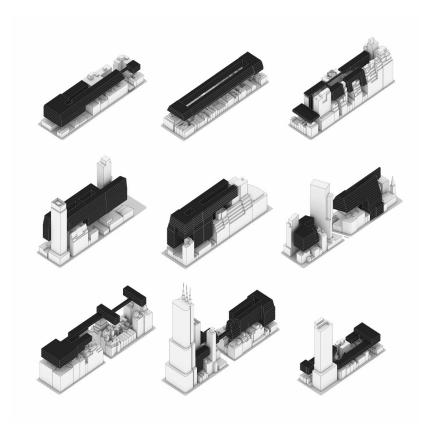
John Shnier



David Alba

The Ritual of Sport

Professional sports locker rooms are emotionally charged. Athletes use these spaces to change into sports attire, stretch, and receive treatment, while simultaneously managing extreme excitement, aggression, and fear. Additionally, locker rooms are places to strategize and regroup, and they act as intermediary spaces where athletes transition from competitive to non-competitive activities. This thesis is a study of the environmental psychology of sports locker rooms. Its intention is to develop a design approach that enhances athletic performance through anxiety management and physical rehabilitation. In doing so, it deals with issues of threshold, proximity, adjacency, and biophilia.



Abubaker Bajaman

Neo-Manhattanism

Manhattan has always been a site of perpetual innovation and experimentation. With every viable piece of land developed, this thesis looks up to envision a new society rooted in ideas of communality and flux. By exploring the established phenomenon of "air rights" and prophesying the commodification of air, a framework is developed to propose a new archetype teetering within the liminal territory between reality and fantasy. This project challenges notions of hierarchy and density through a speculative lens and ultimately seeks to establish a new paradigm for the verticality of Manhattan — a Neo-Manhattanism.



Angela Cho

Working Memory

A memory palace is a traditionally mental practice used to artificially aid memory. It employs an architecture — its niches, doorways, cupboards — familiar to the subject, as a vessel for placing "objects" that prompt recollection. These objects should be striking images, and their encountered sequence is integral.

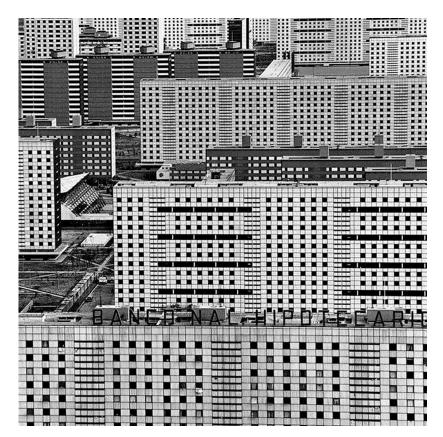
Using One Spadina, a collectively familiar architecture, this project indexically catalogues not solely facts and events, but primarily the material elements of the building itself. Rubbings, plaster casts, and clay slip-casts constitute this catalogue in a collapse of multiple scales, emphasizing that a building's essential memories are embodied in its material flesh.



Laura Fox

Hear Me Out

Open-plan offices are designed to facilitate spontaneous collaboration; however, the resulting workspaces are fraught with problems of visual and sound privacy. This has health and productivity consequences for occupants. Hear Me Out is an architectural research project that investigates how the deployment of customized meeting rooms in the open plan can improve acoustic and visual conditions. This series of experiments aims to develop an efficient workflow for meeting room design using a combination of parametric geometry, generative design, and acoustic simulation. The result is a series of meeting pod designs and a comprehensive toolkit for designing spaces with sound as a central design parameter.

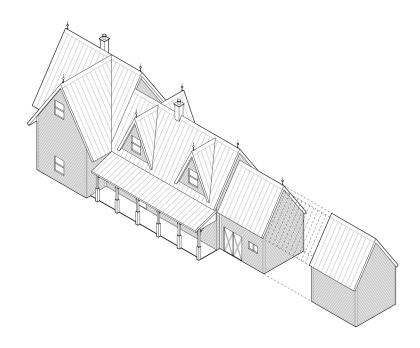


Diana Franco Camacho

MArch

Reclaiming the Modernist City

The Nonoalco-Tlatelolco Housing Complex, built in the 1960s by architect Mario Pani, is the largest apartment complex in Mexico, and the second largest in North America. Many of the complex's buildings were demolished in the aftermath of the 1985 Mexico City earthquake; today, there are 90 remaining apartment towers. Tlatelolco remains a fully functional neighbourhood, but its buildings and public spaces require revitalization to match the needs of current Mexican demographics, as well as contemporary quality-of-life standards. This thesis is a collection of proposals for urban and architectural regeneration in Tlatelolco.



Siri Hermanski

A Fair Framework for New Ruralism

A group of urban friends and their families got together and bought a 100-acre rural property in northern Nova Scotia. The group shared an interest in creating an intentional community based on ecological living and alternative land ownership. Each family was to be financially independent, except that they would negotiate the use of the common land. They began hosting a small, annual three-day summer festival called Free School, where anyone (locals, neighbours, or visitors) could give a workshop on their area of expertise — be it preserving fruit, indigenous culture, or nanotechnology. Now, the group wants to expand the community and the festival...



Christian Huizenga

The School of Direct Action (SoDA): Plein Air Architecture

Plein Air Architecture is the action of design immersion. Its tenet is the belief that only through a site-specific design-build process can one fully understand, and thus empathize with, one's assigned environment and community. For the facilitation of direct design and community engagement, the School of Direct Action provides designers and educators with mobility and the resources to fulfill this immersion. SoDA is the studio of design immersion.



Niloufar Jalal-Zadeh

The Emancipated Bathroom

Within the confines of the condominium plan, space is tightly negotiated to embody conventions embraced by the mass market. The real estate spared on the bathroom reflects a persistent utilitarian attitude, towards the body that seeks refuge in this marginalized domestic space. Driven by Victorian mores and Modernist efficiency, the relatively recent development of this room into a single water-supplied appliance leaves much to be desired as potentials go unrealized in isolation from the open plan.

This thesis entertains possible alternatives to the domestic habits afforded to the condo dweller, through an experimental amalgamation of the bathroom into the rest of the condominium plan, emancipating its rituals from the darkest and least desired corners of the unit.

Advisor: An Te Liu



Felix Chun Lam

Unavailable to Die

Since the handover in 1997, Hong Kong residents have suffered from both a scarcity of land and an unaffordable housing market. And death in Hong Kong is a mirror image of life, with prohibitively expensive burial plots, public crematoriums at capacity, and niches in private columbaria leased at prices up to \$500,000 HKD (\$95,000 CAD). Whether enforced by the government or by a change in social practices, a paradigm shift in burial practices is warranted both spatially and culturally. Can burial practices become urbanized, and potentially instrumentalize as a transitional part of a larger development plan for Hong Kong?



Chloe Leung

Mundane Things

In a city as dense as Tokyo, streets often become accumulations of urban elements rooted in aspects of daily life. Potted plants, fans, and garbage bins line the edges of suburban housing developments and fill the gaps and residual spaces between them. Mundane Things analyzes and depicts the city in ways that give equal importance to the interior, the exterior, and the in-between. The project looks at what is often overlooked and makes the viewer pause by directing their attention to ordinary detail. The hope is to identify opportunities to extend the limits of the domestic public sphere and define new typologies of shared domestic space and commons

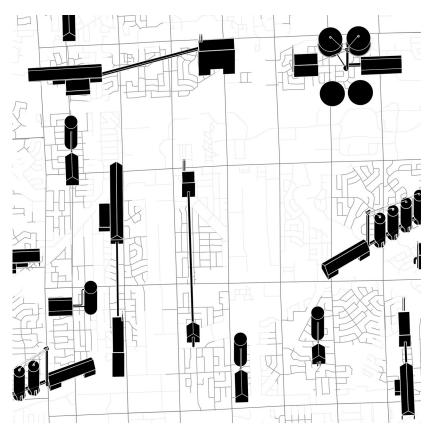


Mariam Malaty

The Grotto of Illusive Forms

There are two sorts of grottoes: the ones are work from Nature, others works of Art: and as Art never makes something more beautiful than when it imitates nature well: so nature never produces something rarer than when Art puts its hand on it." -A. Félibien

This thesis uses an interpretation of "grotto" as a framework wherein the "idea of nature" flirts with and merges with the "idea of the synthetic," with the objective of creating a range of fantastical design propositions. These propositions are an open exploration of form found within the spectrum of the "familiar" and the "unfamiliar."

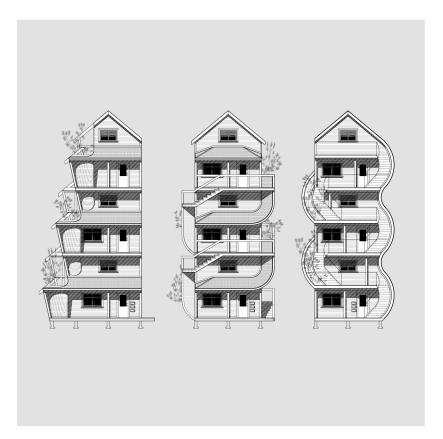


Isaac Neufeld

Toronto's Neighbourhoods: New Suburban Energy Landscapes

This project envisions new systems of localized sustainable energy infrastructure that could catalyze a reurbanization of Toronto's low-density single-family neighbourhoods. The residential suburbia of Toronto's urban periphery is under mounting pressure to relax its restrictive zoning to meet demands for future housing. If the single-family parcel is opened to higher densities, new sustainable energy solutions that can systematically propagate throughout the entire urban region could replace the current fossil fuel supply chains. These distributed energy hubs, located at the centres of Toronto's neighbourhoods, would be functional symbols of collectivity that could facilitate higher density.

Advisor: Michael Piper



Rosa Newman

MArch

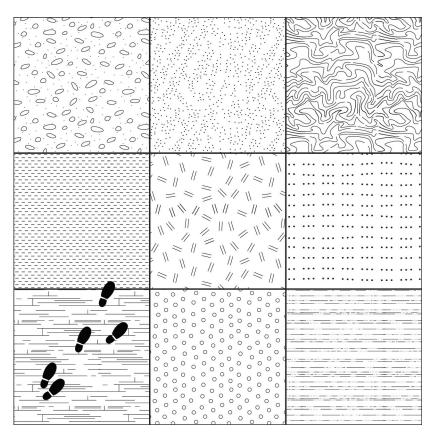
The Shape of a House

The house takes shape as a built form and simultaneously exists in the mind as a cultural construction. Both forms reflect fluid desires, expectations, and images of the domestic realm.

This thesis anticipates and revels in the dissonance between pure residential types and the imperfect reality of their architectural deployment. There is space in our neighbourhoods for the delightfully strange and unfamiliar.

Working from the observation that distortion is a method for invention, The Shape of a House playfully pushes existing codes and types beyond their conventional boundaries and challenges who we think we are and the shapes of the places we inhabit.

Advisor: An Te Liu



Mina Park

A New Way of Finding

Visually impaired and blind people confront a number of visual and social challenges that create obstacles to mundane tasks even within their own residential environments. This proposal provides a tactile, intimate wayfinding system to encourage residents to move independently throughout a building. Categories of textured material palettes create a tactile language in order to distinguish different programmatic areas. Residential units and other amenities are distributed to create a continuous environment meant to increase interaction and decrease social isolation, a growing concern for the visually impaired.



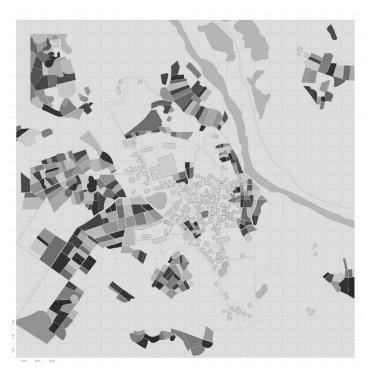
Lu Wang

Adapting the City for Seniors

"Aging in place" is an international phenomenon aimed at addressing an aging society. The naturally occurring retirement community (NORC) movement emerged in New York City and has become influential — but what are some other models for aging in place, specifically within the cultural context of modern China?

My design proposal, situated in an ancient neglected site in Xi'an, in northwest China, creates spaces and new housing typologies customized to seniors and an aging society. Each urban space is connected via a path, integrating the new and existing parts of buildings, including residences and food markets. Three new housing prototypes are proposed to respond to various health conditions and levels of dependence and independence.

Advisor: Mason White

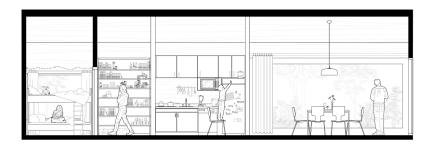


1949 - YEAR OF THE OX

Yi Ran Weng

Guanchao, Jiangxi, the Village of an Imaginary Past

It all began in October 1949 with the creation of a communist China, which led the country into 27 years of tumultuous development. This thesis employs the village of my great-grandparents in Guanchao, Jiangxi province, to draw an alternate historiography for Chinese architectural development. Using the trope of speculative fiction, the project reacts to the historical events experienced during this critical period — which is still shaping contemporary China — and reimagines Guanchao village as being filled with ingenious primitive tools that are devoid of any colonial influences. The project intends to rethink Chinese modernity, collective living, and the role of vernacular architecture from the past to the present.



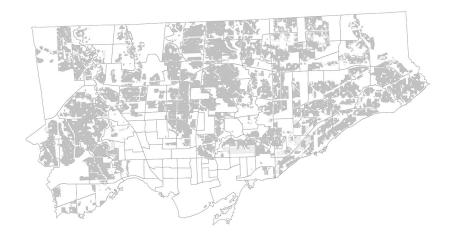
Joanna Zhang

Re:Habitation: Designing for Permanence

Given the likelihood that Vancouver will experience a significant earthquake within 50 years, it is crucial for architectural relief efforts to be prepared for the next "Big One." While devastating, these events offer opportunities to implement change in how housing can be provided for the disadvantaged populations that are typically the last to be rehoused. Much emphasis has been put on fast deployable shelters for disaster response, rather than the long-term living conditions of displaced residents. Relief housing needs to do more than efficiently and economically meet basic needs. Rather, a new typology is required — one that allows residents to "recover in place" by transitioning seamlessly from temporary to permanent housing.

Master of Urban Design Advisors

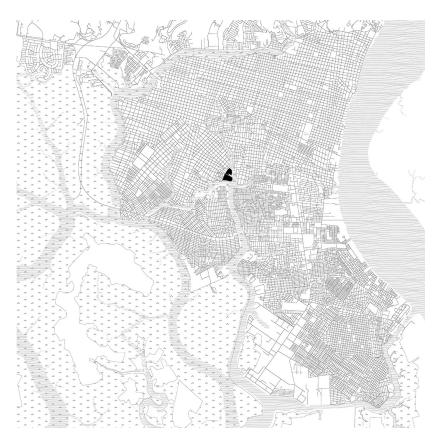
Mark Sterling Aziza Chaouni



Ahmed Al-Jirjees

Into the Yellowbelt

Considering the housing crisis that Toronto is going through and the city's projected population growth — from the current 2.7 million to over 3.9 million by 2041 — a different approach needs to be considered to accommodate growth within the city's neighborhoods. This research looks at different ways of densifying Toronto's infamous Yellowbelt — areas zoned primarily for detached homes — first by identifying different edge conditions and locations with opportunities for growth; second, by proposing different solutions for a particular site that can be applied around the city.

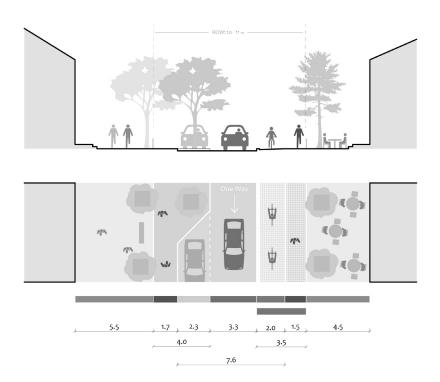


Paulina Aviles

Restoring the Salado Estuary Through Urban Design and Social Housing

The Salado estuary is located northwest of the Gulf of Guayaquil and southwest of the city of Guayaquil, in Ecuador. It is composed of saltpeter areas, as well as remnants of tropical dry and mangrove forests. The estuary is approximately 90 kilometres long, from the seaport of Guayaquil to Posorja.

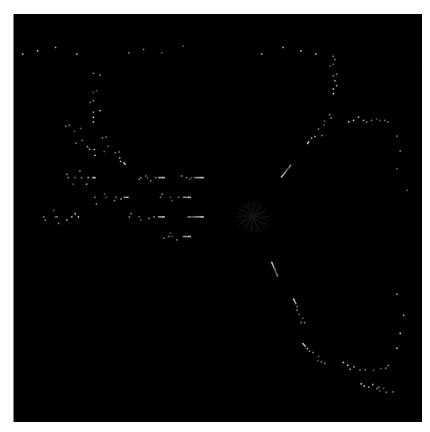
This thesis proposes an urban master plan, focused mainly on the relocation of thousands of illegal houses that have been built along the estuary in past decades. The plan creates a protection margin and reinserts green areas and vegetation that will help with the restoration of these ecologically sensitive wetlands.



Pooja Brahmbhatt

Rethinking Geometry and Toolkits: Toronto Complete Street Guidelines

Streets are a vital part of cities. They are common space where people come together, children play, neighbours meet, and couples stroll. Streets are essential networks for movement, and they run alongside the frontages of homes, parks, and institutions. As designers, it is our role to design streets that serve all kinds of users and the public realm. My thesis tests the structure of street design processes stated in the Toronto Complete Street Guidelines and creates an appendix to those guidelines that addresses missing elements. I will present my case by citing site-specific examples and referring to other street design manuals



Dorreya ElShal

HOP

In the fast-paced world we live in, stopping and smelling the roses has become a luxury most of us can't afford. We have somehow lost our connection to our cities and disregarded the many happy coincidences that occur around us every day. Most downtown residents of Toronto commute by taking public transit or walking, and most of their commutes are fast and uneventful. In a world that has recently been taken away by a pandemic, leaving us isolated in our homes and wishing for a day out in our city, this thesis aims to create a memorable experience within the public spaces of Toronto.



Yuan Li

City in Transition: A Strategic Master Plan for the Hamilton Bayfront Area

Hamilton is one of Canada's leading industrial centres and Canada's largest steel producer. Yet the city's decline is obvious as industry fades, leaving workers without employment. Where should Hamilton go next? This thesis examines the potential for specific urban interventions at different scales to act as catalysts for the development of a sustainable built environment. It proposes both the accommodation of new institutions and improvements and expansion of an attractive public realm for the future of the Hamilton Bayfront Area.



Yiming Ma

Urban Agriculture in a Toronto Neighbourhood

This thesis focuses on obtaining food in Toronto through community agriculture and rethinking existing built formand infrastructure. Community agriculture is a social project with the potential to change the way we look at the land. I believe that appropriate urban agriculture activities can be achieved within a neighbourhood by: creating a new, central, mixeduse building that includes greenhouses as well as new residential and employment uses; adding an array of greenhouses in the rear yards of some single and semi-detached houses; and occupying larger parking lots and parts of local parks with greenhouses and allotment gardens. Lessons learned from this experiment in food production in underutilized open spaces could be applied in other neighbourhoods.

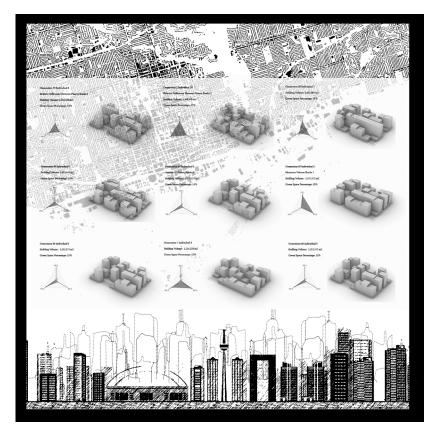


Seif Malhas

Ontario Place Rebirth

Seven years after closing down Ontario Place, the province of Ontario put out a call for bids on the redevelopment of the former lakeside theme park. The government's request came with two key restrictions: no residential buildings, and no casino.

Although the request didn't specify any buildings to be preserved, this design proposal explores the potential of maintaining Ontario Place's significant modernist architectural and landscape heritage while bringing the park back to its origin as a key entertainment component of the city's waterfront.



Xiaoqing Zhao

Height Emergence in Toronto

This thesis examines the tall-building neighbourhoods that are emerging today in downtown Toronto. Generative design, a new methodology that utilizes artificial intelligence, is used in order to simulate a large number of urban design responses to intensification pressures at the scale of the urban block. The thesis attempts to unpack the logic of generative design processes as supports to decision-making in complex urban situations like downtown Toronto, where growth is occurring rapidly and development proposals are often seen as arising spontaneously.

Master of Landscape Architecture Advisors

Jane Wolff

Liat Margolis

Fadi Masoud

Behnaz Assadi

Justine Holzman

Georges Farhat

Elise Shelley

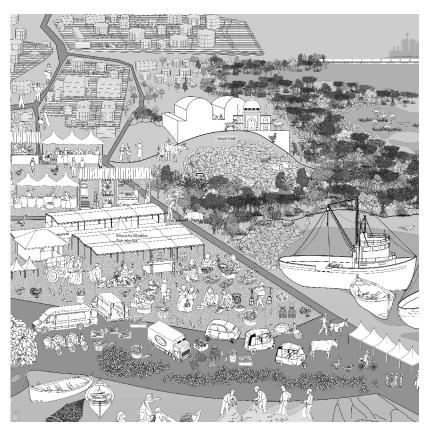
Victoria Taylor



Bronwyn Austin

The Seismic Line Legacy

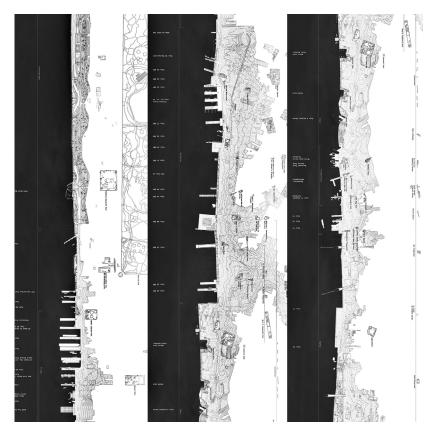
This thesis uses the landscape strategies of afforestation and ecotourism programming to address the energy sector's environmental impacts on the boreal forest in Alberta. These impacts arise from seismic lines — clear-cut corridors used by the oil and gas industry for resource exploration. These corridors have changed animal movement patterns in ways that affect sensitive populations. Caribou habitats have fragmented, allowing wolves to hunt them more effectively. Public consciousness about the negative effects of resource extraction is limited. This project is meant to encourage engagement with the fragmented boreal landscape through a beneficial ecotourist and replanting experience.



Sing Zixin Chen

Adaptive Traditions of the Eastern Waterfront of Mumbai, India

This thesis examines Mumbai's Eastern Waterfront, which has a co-existence relationship with Koliwada village life, the area's unique ecological habitat, and heavy industry. The project explores a unique form of documentation and captures the complex, dynamic, and intertwined spatial and material relationships of the site. It also recognizes the site's cultural context and its people's way of living by introducing a design movement that builds on indigenous and vernacular infrastructure to generate a sustainable, resistant, and nature-based technology. The aim is to rethink and reconsider the land's interface with the water, which plays an important role in the villagers' livelihood and cultural and spiritual practices.



Bonnie Chuong

Shifting Manhattan's Shoreline

Over the last three centuries, New York City's shoreline has expanded in response to urban development pressures. Today, a network of hard infrastructures and hundreds of piers have replaced the original shoreline and its marshes. This has made Manhattan especially vulnerable to sea level rise, storm surge, and pluvial flooding. At the intersection of these issues is an opportunity to reconsider Manhattan's shoreline as a continuous system of public green infrastructure, one that is connected to the rest of the city's green spaces. This thesis aims to reclaim the spaces between the existing piers to form a continuous new edge of wetland marshes, parks, promenades, and programmable public surfaces in service of climate resilience and adaptation.



Avery Clarke

Défricheurs d'Eau

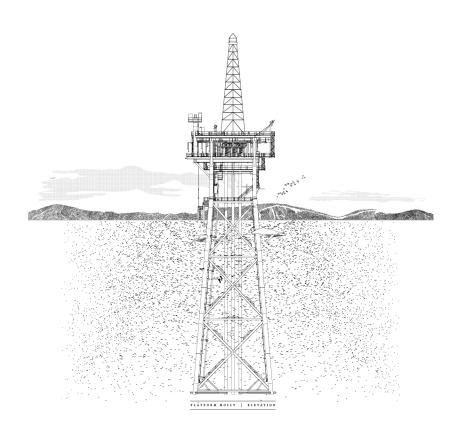
Sea level rise and land subsidence makes the Chignecto Isthmus a vulnerable landscape. Dykes holding back the Bay of Fundy from flooding productive farmland and vital trade infrastructure cannot be topped to the necessary heights to accommodate sea level rise. Thus, it is not a question of if the isthmus floods, but when. By 2080, the dykes will fail, and the sea will inundate 88 per cent of local farmland and delay \$51 million of trade per day. Rather than continuing to invest in static infrastructure, this thesis explores coastal adaptive design achieved through a resilient landscape strategy on the Chignecto Isthmus.



María Paula Cortés Herrera

Hg to H2O

In recent years, an increase in illegal gold mining processes in Colombia has been severely affecting the country's landscape. This criminal activity has resulted in unnecessary ecological degradation, such as mercury contamination in the air, soil, and water. Heavy metal contamination is now a national environmental problem. This thesis explores remediation strategies that can be enacted in post-mining areas affected by mercury pollutants. Exploring phytostabilization methods with native species can act as a first step towards rehabilitating this landscape in a way that allows healing processes in wounded areas. The hope is to cure the scars caused by the illegal extraction process.



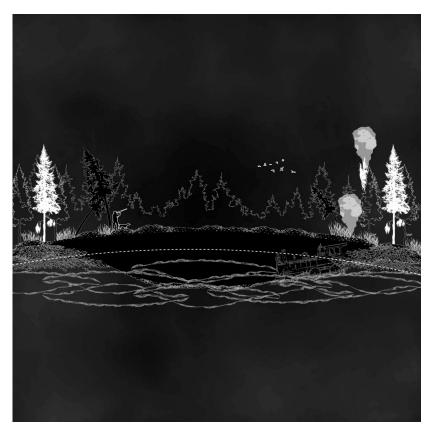
Hillary DeWildt

Re-Rigging

Globally, there are over 6,000 offshore oil and gas platforms. Many of these are aging relics left over from an era of haphazard resource extraction, when little thought was given to the eventual removal of equipment. As the rate of global oil and gas production continues to decline, there is an opportunity for designers to reconsider the design potentials of these petroleum landscapes.

Southern California is currently in the process of imagining alternative futures for its vast offshore infrastructures, prioritizing ecological enhancement. This thesis seeks to present designs that enhance aesthetic and visual qualities of the Southern California offshore extraction landscape alongside its ecological potentials.

Advisor: Justine Holzman



Alexandre Dos Santos

Fire Cultures: Cultural Fires

The Hudson Bay Lowlands, in Ontario's far north, comprise one of the largest intact wetlands in the world. Settlement patterns and landscape management in the area changed dramatically when Omushkego signatories to Treaty 9 were required to cede "rights, titles, and privileges" to their lands. Uncoordinated growth in the lowlands, aggravated by climate change, will disturb hydrology and ecology, increasing the risk of ground fire ignition around the urban-wildland interface. Reconnection with fire cultures can be an ecological, social, and economic alternative to extraction. This thesis explores the regenerative strategies needed to restore and adapt community agency on this dynamic landscape.

Current after disturbances



Proposal water-adaptive agricultural landscape



Disturbances sediment collection and run off management

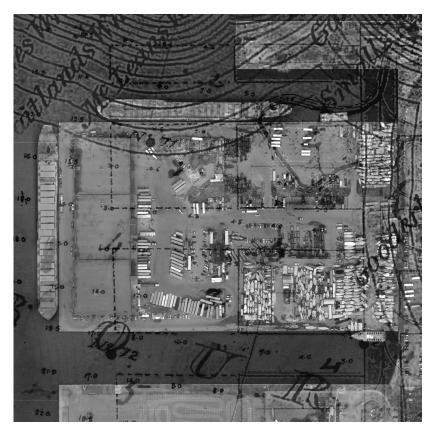


Wenpei Fang

Living With Disturbance: Retooling Farming and Water Infrastructure

The region surrounding the upper reaches of the Min River, between the Chengdu Plain and the Tibet Plateau, is faced with frequent geological disturbances resulting in devastating landslides and mudflows. Traditional wisdom in the Chengdu Plain prioritizes the connection between upriver conditions and downstream effects, evident in the vernacular landscape and water-adaptive agriculture seen throughout the area. This thesis translates historic agricultural practices and water infrastructure into a new set of strategies — including planting, terrace farming, non-wood farming, and water management — to address the upper reaches' current social, cultural, political, and ecological needs, while minimizing the damage of past and future disturbances.

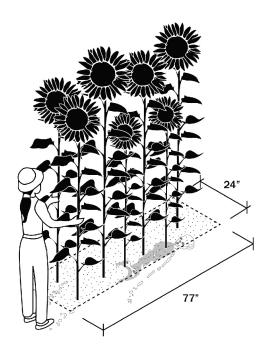
Advisor: Justine Holzman



Elspeth Holland

Ground to Play

Toronto's Port Lands have undergone profound transformations over the past two centuries. They are now part of a naturalization and urban development project that will re-engineer the site and strata once again. Contaminated lands are being capped and converted into a mixed-use community and regional park destination. This project analyzes naturalization within a lineage of forces that have shaped the land. It proposes a destination playground designed with a deeper narrative, where the site's layers enmesh and hybridize. The playground seeks to reconcile the area's potential lost history for a new audience, using an approach that embraces the site's depth.



Shikha Jagwani

Urban Life, Urban Death

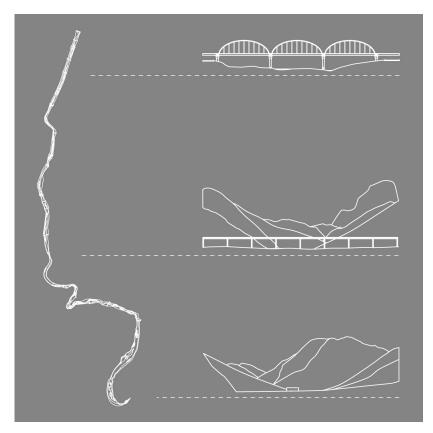
Cemeteries are historically one of the most significant typologies of open space in the world. Burial methods vary between cultures, religions, and geographic locations, but their significance remains the same. Although burial spaces have a long history in landscape design, their existing typology is not conducive to urban settings, or urban traditions. This thesis aims to reimagine the capabilities of spaces for remembrance and their larger applicability to an urban context, as a means of challenging the existing methods of interaction with the departed and emphasizing the notion that, through death, there can also be life.



Caroline Kasiuk

Löyly: Reimagining the Urban Sauna in Helsinki's Parks

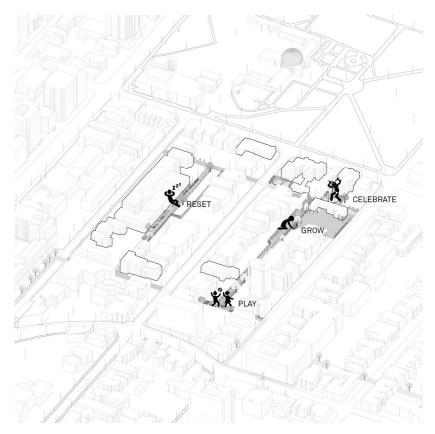
The traditional Finnish sauna connects the body and mind with their surroundings through sensory experiences that go beyond the sauna walls. Stimulating the senses through heat, scent, sight, and touch, the sauna brings one closer to the magic of forest trees, mosses, and wild plants, creating a landscape of contemplation and rejuvenation. Through understanding the richness and materiality of the traditional sauna, we can reimagine urban place-making, reconnect with cultural heritage, and encourage holistic relationships with our changing surroundings.



Alyssa Lagana

The Pollinator Pilgrimage

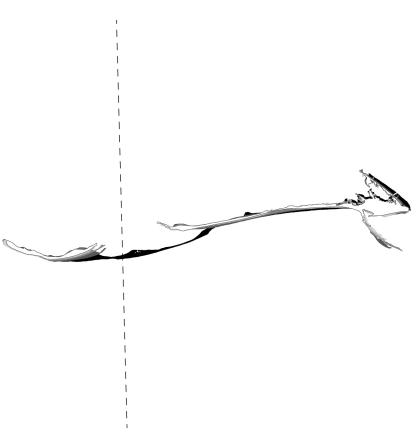
The Pollinator Pilgrimage, a 30-kilometre trail that begins in downtown Monterrey, Mexico, explores the connection between bat conservation and landscape design. Using landscape as a mediator, the site-specific design presents a 24-hour recreational experience intended to help participants explore the tensions between the Mexican long-nosed bat — a stigmatized species — and humans. The trail follows an urbanized section of the bat's annual migration corridor, using the species' primary food source, agave, as a catalyst for wayfinding. The design aims to build a new sense of solidarity through the revitalization of a shared landscape for both people and bats.



Katherine Liu

Healing District

Toronto's heritage-designated "Garden District," located just east of the downtown core, needs a garden to better support the large number of people who reside in the area's emergency shelters, low-income housing, and aboriginal health centres. This design transforms 800 meters of neglected and single-use laneways into a network of healing gardens that are embedded in the district's urban fabric. The reimagined healing landscape network is divided into four unique zones: play, reset, grow, and celebrate. Each zone is dedicated to improving daily life for the diverse demographics living in the Garden District.



Ted Marchant

Sand Island

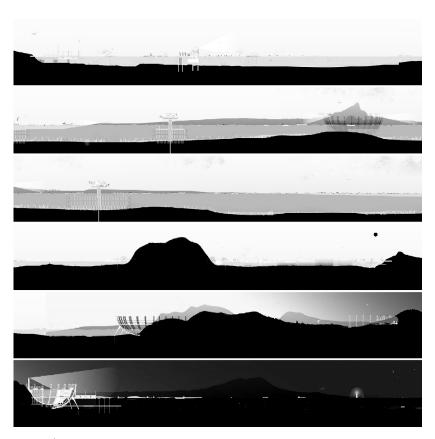
Barrier islands are vital to coastal ecosystems, protecting the mainland and creating environmental conditions that enable important estuarine habitats. However, marine urbanization and climate change is causing these landscapes to disappear. This project aims to increase the resilience and resistance of barrier islands to severe storm events and sea level rise. It uses Dauphin Island, an inhabited barrier island off the coast of Alabama, as a case study. West End Public Beach, the western boundary of development on the island, serves as an experimental site for a dynamic design of strategically placed artificial reefs, sand fences, and dune vegetation, followed by an afforestation program.



Alexandra Ntoukas

FOREST EXPO[SED]

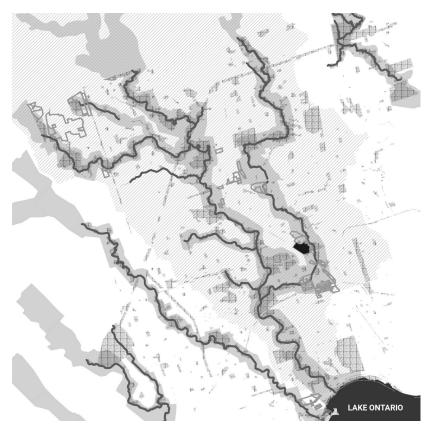
This thesis challenges the idea that landscapes impacted by invasive species are ecologically degraded and without identity. The subject site, Komoka Provincial Park, is a place where global material flows have resulted in the arrival of invasive species and death and decay of woody material. I argue that flux is the identity of this site, through which the local community can understand past and present human impacts and reengage with cyclical ecologies and material processes in a curious and informed manner. A case study and material samples will facilitate the exploration of forest processes, which will ultimately be displayed in an exhibition that connects the viewer to the ephemeral experiences and identity of the changing forest.



Ambika Pharma

On Thin Ice

As Arctic sea ice declines, the Bering Strait's emerging role as a major maritime route threatens existing and urbanizing populations within the region. New pressures related to the shipping economy, political investment, and global security are poised to clash with the Bering Strait's identity as one of the world's most productive marine ecosystems and subsistence populations. This thesis proposes a reinvention of nautical systems that integrates economy, trade, and ecology around a new formulation of time. A series of infrastructural armatures imagines how shipping routes, urban expansion, and shifting terrain can benefit the vulnerable ecological systems they transect.



Tharshni Shanmuganathan

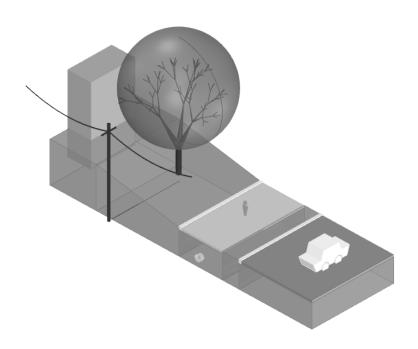
Brownfields: An Untapped Asset

This thesis leverages brownfield remediation in Toronto floodplains as an opportunity to increase tree canopy cover and add value in the public realm.

Brownfield sites within Toronto and Region Conservation Authority lands, currently off-limits due to soil pollutants, will be studied to determine how different decontamination options can best use tree planting for remediation while contributing to Toronto's tree canopy and enabling new futures.

This thesis will set standards and create guidelines for how this process can transform the public role of brownfield sites during and after the phytoremediation process.

Advisor: Elise Shelley



Bonnie Tung

A Modelling Tool to Close the Software Gap in Landscape Architecture

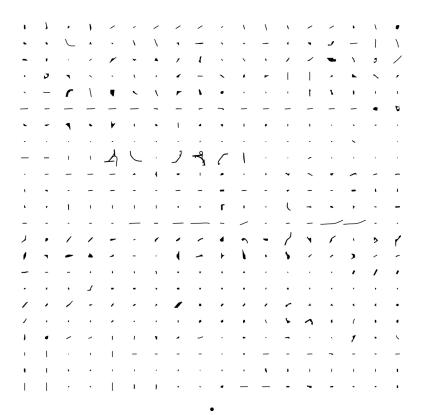
This thesis investigates a method of creating an analytical visualization tool in landscape architecture — a tool that can parametrically show the growth of trees (e.g. Quercus rubra, Catalpa speciosa). The project's aim is to determine how data-informed visualization can be used as an analytical method to help designers and managers make strategic decisions for planting within urban open spaces.



Alexandra Walker

Inundating Public Space: Stormwater as Amenity in the City of Hamilton

This thesis mobilizes the city of Hamilton's historic drainage networks as a framework for a new system of connected green spaces to manage stormwater in the public realm. Hamilton has a history of industrialization and associated infill along the Lake Ontario shoreline that has drastically modified the interface between the land and the water. This project suggests that using historic waterways to instigate a new network of park spaces will enable methods of green stormwater management that register history in the urban environment while creating vibrant, functional public areas in the city.



Zhengbang Wang

治标治本 Cure the Symptom, Cure the Root

As extreme rainstorms become more frequent due to the urban heat island effect, flooding issues in downtown Beijing's sunken traffic interchanges have become the city's major concern. This project develops design solutions for the interstitial spaces in these sunken interchanges. Hoping to cure both the symptoms and the roots of flooding issues, I explore the potentials of these spaces as a means of absorbing excess water in extreme rain events and reducing the heat island effect within the contemporary urban landscape.

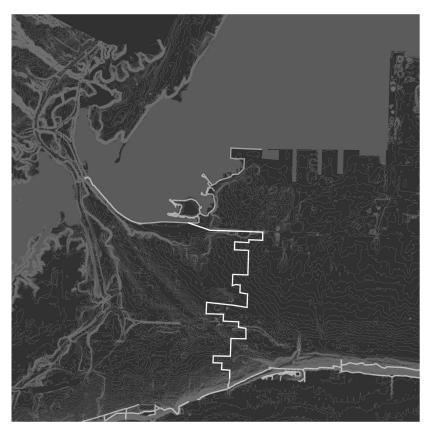


Michael Wideman

For the Rampant and Remedial

The UN defines "invasive alien" flora as introduced plants that spread in ways destructive to human interests and natural systems. But what if such species are in fact serving human interests and enhancing natural systems by performing vital ecosystem services where indigenous species can't survive? Through cataloguing and showcasing the performative qualities of plants typically dismissed, destroyed, and omitted in contemporary landscape practice, this thesis challenges prevalent nativist "dig-and-haul" approaches to urban landscape restoration. The outcome is a reimagining of Toronto's ongoing YongeTOmorrow streetscape rehabilitation project as a flourishing, performative, remedial pedestrian right-of-way spontaneously vegetated primarily by rampant non-indigenous flora.

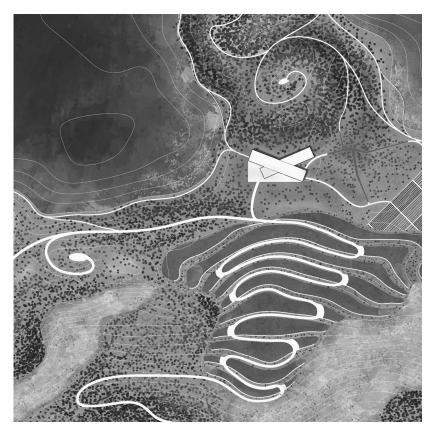
Advisor: Victoria Taylor



Yuanyuan Ye

Hamilton's "I" Line

This thesis investigates how to increase the legibility of a city during urban planning in order to improve the day-to-day experiences of residents and visitors, and to guide future city planning decisions. The site is Hamilton, Ontario — an area that has long been undervalued reputationally. The main strategy is connecting Hamilton's two iconic landscape features: the Lake Ontario shoreline and the Niagara Escarpment. Along this connection, designed for legibility rather than speed, important historical sites will be linked to development sites with rich potential to improve the urban landscape's quality ecologically, visually, and experientially.



Chilling Zhou

Healing the Panorama and Revealing the Scarp

A devastating landslide triggered by the 2008 Wenchuan earthquake caused extensive damage and casualties in a rural area of southwest China. This project aims to study, reclaim, and restore the landscape created by the landslide after its collapsing. The earthquake created unique tectonic and topographic features, which this project intends to transform into a working, cultural, and memorial landscape. Terraced agricultural fields and ecosystem restoration support an overlay of public programming to allow visitors to experience the massive elevation change from before and after the landslide, and a memorial site to remember the residents, their lives, and the landscape before.