



Azrieli School of **Architecture & Urbanism**

THESIS FINAL DEFENCE
APRIL 24 - 25 2023

GUEST CRITICS + ABSTRACTS

GUEST CRITICS

Barbara Kenda



Barbara has taught undergraduate and graduate studios, seminars and courses in architectural design, history, theory and other areas. She has held faculty positions at the University of Pennsylvania, University of Notre Dame, University of Maryland and elsewhere. Most recently she was reappointed a Visiting Professor at Virginia Polytechnic Institute and State University, Architecture Design Research PhD Program in Washington-Alexandria Architecture Center with which she has been affiliated for the past several years. Barbara has also served as the Director of Education at The Prince's Foundation for the Built Environment (currently TPF for Building Community) in London, UK; a Visiting Scholar at the University of Pennsylvania, History of Science and Sociology (History of Medicine) Department; an Instructor at the U.S. Department of State, FSI, and elsewhere. As an architect, she has worked in Canada and in the U.S. and has created set designs, including for the Wilma Theater's musical "Gunmetal Blues" in Philadelphia.

Tammy Gaber



Dr. Tammy Gaber is Director and an Associate Professor at the McEwen School of Architecture, where she teaches architecture design and theory courses. Dr. Gaber joined MSoA as founding faculty in 2013 and previously taught at University of Waterloo, American University in Cairo and the British University in Egypt. Dr. Gaber completed a SSHRC funded research project which led to her forthcoming book with McGill Queen's Press, *Beyond the Divide: A Century of Canadian Mosque Design* and has published on gender and architecture with a chapter in the forthcoming *Global Encyclopedia of Women in Architecture* (Bloomsbury press). Dr. Gaber has also published chapters on vernacular and regional architecture in *Habitat: Vernacular Architecture for a Changing Planet* (Thames and Hudson) and *Diversity and Design: Perspectives from the Non-Western World* (Fairchild Publishing), and has two chapters in the forthcoming *The Religious Architecture of Islam* (Brepol

Publishing). In 2019 Dr. Gaber won the Women Who Inspire Award from the Canadian Council of Muslim Women and in 2020 she was awarded Laurentian University's Teaching Excellence Award for a Full-time professor. During her 2020-2021 academic sabbatical Dr. Gaber completed a two-month academic residency in Finland for her research on Alvar Aalto in the fall of 2020 and was an invited scholar at the Centre for Theological Inquiry at Princeton University for the 2020-2021 academic year.

Zannah Matson



Zannah Matson's research and design work focuses on the histories and contemporary reinterpretations of landscapes throughout processes of colonization, extraction, and state infrastructure projects. Her current work traces the afterlives of coloniality through highway construction in Colombia's Eastern piedmont landscapes to think about power structures, transportation infrastructure, and visual representation in Latin American landscapes more generally. She is an Assistant Professor at the University of Guelph School of Environmental Design and Rural Development. She is on the Editorial Board of the Journal of Architectural Education and is an active member of the Beyond Extraction Collective.

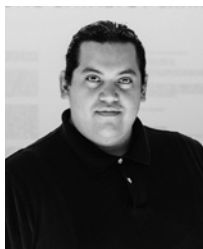
Zannah has previously worked as an Assistant Teaching Professor of Landscape Architecture at Penn State University and as a Design for Spatial Justice Fellow at the University of Oregon Department of Landscape Architecture. She has a Masters in Landscape Architecture from the Harvard Graduate School of Design, and in professional practice worked with OPSYS Landscape Infrastructure Lab as Project Manager and Lead Exhibition Designer for the Canada Pavilion at the Venice 2016 Architecture Biennale. Matson is currently a PhD Candidate in Human Geography at the University of Toronto, where her work has been funded by a SSHRC Joseph-Armand Bombardier Doctoral Award.

Claudine Deom



Claudine Déom is a professor at the University of Montreal's School of Architecture. Her research focuses on the processes of identifying and recognizing cultural heritage, particularly through the values that link heritage to sustainable development, namely social, economic and ecological values. She has been working with heritage community groups for over 25 years, notably with Héritage Montréal and ICOMOS Canada. She sits on the Table des partenaires du ministère de la Culture et des communications du Québec and on Culture Montréal's Commission de la transition écologique.

Alberto de Salvatierra



Alberto de Salvatierra is Founder and Director of the Center for Civilization and Assistant Professor of Urbanism and Data in Architecture at the University of Calgary School of Architecture, Planning and Landscape (SAPL). He is also Founding Principal of PROXIIMA and a former Global Shaper at the Las Vegas and Calgary Hubs of the Global Shapers Community—an initiative by the World Economic Forum based in Geneva, Switzerland.

A transdisciplinary polymath, architectural designer, and landscape urbanist, Alberto's research agenda and professional work is organized around the pursuit of six simultaneous streams of inquiry—intersections between the city and morphology, ecology, pedagogy, technology, mythology, and civilization. Since arriving to Calgary in 2020, Alberto has secured, as PI, over one million dollars in grant funding, including direct funding sponsorships by Alberta municipalities, industry partners, community associations and non-profit organizations.

His work has been published widely and exhibited both domestically and abroad. Previously, he's been part of the Harvard Kennedy School's inaugural STS (Science, Technology and Society) program on Expertise, Trust and Democracy, and an invited panelist and delegate to

the United Nations.

Alberto is the past recipient of the UN Sustainable Development Solutions Network (SDSN) Local Pathways Fellowship, Cornell's Robert James Eidlitz Fellowship, Harvard Library's inaugural May Crane Fellowship, and Harvard GSD's Penny White Prize. He has previously taught at Cornell University, the Boston Architectural College, the Harvard University Graduate School of Design, Universidad Iberoamericana (Mexico City), and the UNLV School of Architecture.

Alberto holds a Bachelor of Architecture from Cornell University and both a Master of Landscape Architecture and a Master of Design Studies in Urbanism, Landscape and Ecology from Harvard University's Graduate School of Design.

Fiona Lim Tung



Fiona Lim Tung is a designer, researcher, and educator. She is currently Assistant Professor, Teaching Stream at the John H. Daniels Faculty of Architecture, Landscape, and Design at the University of Toronto and a Lecturer at the University of Waterloo School of Architecture in Cambridge, Ontario.

Fiona's teaching spans a range of architectural and engineering programs, both professional, pre-professional, and within the liberal arts, with a strong focus on the coordination and teaching of design and drawing fundamentals in first year graduate and undergraduate studios.

Fiona's research focuses on new agendas in representation, design pedagogy, and the potential of architecture to contribute to more equitable futures. This work has been presented at conferences internationally. Her design practice focuses on the potentials that exist in the overlap between high and low-tech fabrication methods in contemporary craft. Her work has been widely published in magazines, in books, and exhibited in galleries nationwide.

Christopher Romano



Christopher Romano is an architect and an educator appointed as an Assistant Professor in the Department of Architecture at the University at Buffalo. Academic affiliations include the Material Culture Graduate Research Group and faculty co-lead within S.M.A.R.T. (Sustainable Manufacturing and Advanced Robotics Community of Excellence). His research and creative practice are focused on the theoretical and pragmatic bridges that integrate material and structural ingenuity with architectural experience. As a methodology – he pursues research inquiry through hands-on investigation, installation, architectural fabrication, and one-to-one production. He is also licensed architect in the State of New York, LEED accredited and director of Studio NORTH, a creative practice dedicated to assembling interdisciplinary teams of technical specialists to deliver innovative responses to projects that require a high degree of architectural and engineering integration. This work has been recognized with a number of awards which include the TEX-FAB SKIN Competition winner, the Architects Newspaper Fabrication Award, multiple Architects Newspaper Product Awards, multiple AIA New York State Design Awards, and multiple Architizer A+ Awards.

Jelisa Blumberg



Jelisa Blumberg is a transdisciplinary designer, educator and researcher, with a focus on architecture and lighting design, based in Baltimore, Maryland and New York City, NY.

Her practice, Un–Other Practice, looks to spatial intervention and emergent theory as a framework for facilitating possibility and radical imagination in the built environment. Jelisa's work prioritizes networks of trust and collective strategy over traditional modes of practice.

Jelisa is a core member of Dark Matter University and a recipient of GSAPP's Dean's Unlearning Whiteness Research Award (2022). She holds a Masters of Architecture and a Masters of Fine Arts in Lighting Design and a BFA in Design.

S T U D E N T W O R K

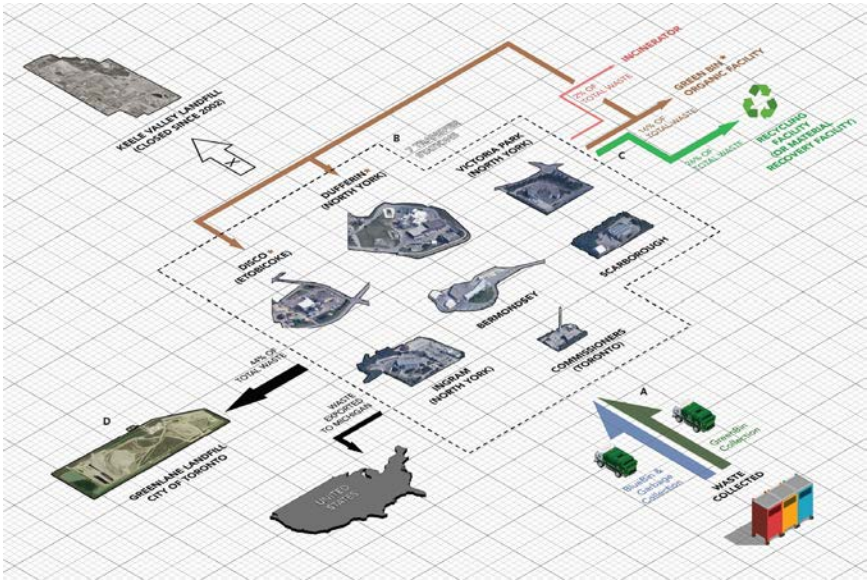
The Waste Crisis:

Speculative Architecture for Waste Reduction and Public Awareness in Downtown Toronto

student: John(HyeYoon) Ahn
advisor/s: Natalia Escobar Castrillón

The waste crisis is an escalating global environmental issue resulting from colonial and extractivist modes of thinking and living. This crisis has far-reaching consequences, including among other environmental pollution, loss of biodiversity, human and non-human displacement and health decline, and climate change. Additionally, this crisis has economic and spatial implications, such as the high costs of waste management and the proliferation of landfills used to keep waste out of public sight while still damaging ecosystems and communities. The challenge of this crisis demands an urgent response to address the fundamental causes of the waste crisis that, beyond managing waste, requires a change of mindset.

Through a compilation of data gathering and analysis of current waste production and management strategies in Toronto, this thesis proposes a speculative architectural typology aimed to recover, repair, and reuse buildings, objects, and materials while also educating and raising social awareness to influence collective behavior.



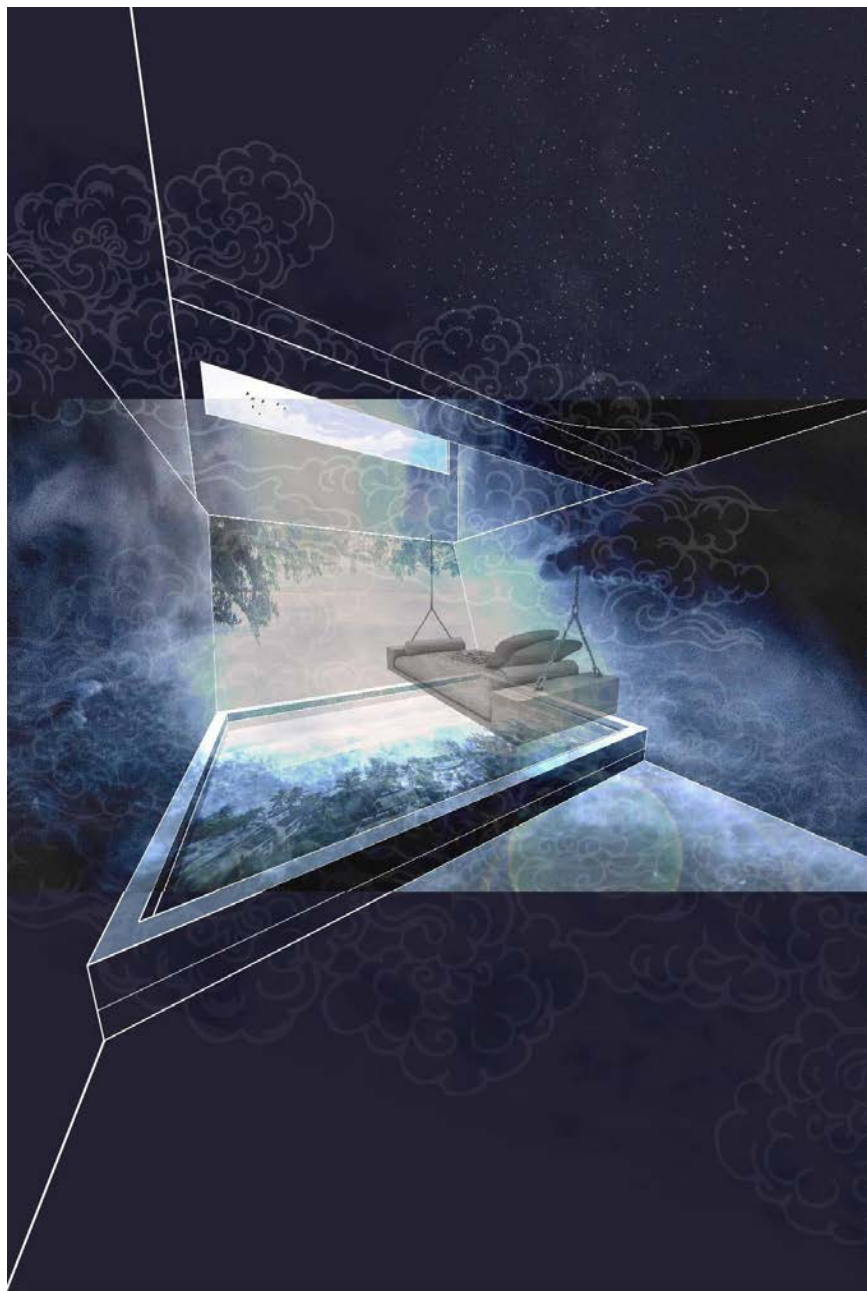
Waste Stream Map of Toronto Solid Waste Management

Periscope House

Views, Insights, and Locating Oneself

student: Hadiya Al-Idrissi
advisor/s: Catherine Bonier

The idea of home and family are almost synonymous, transcending the physicality of a house. Beginning with vivid, multigenerational memories of home, this thesis proposes a personal and sensitive approach to how we can see and interpret people through the medium of their memories and built environments. The site is a vacant lot near the Indian Ocean in my parent's homeland of Mauritius. Because of its proximity to the beach, the project will test the materialization and interrelationship of water, home, and memory. As memory itself is fragmentary by nature, this thesis is structured around fragmented vignettes of my parents and myself, stitched together through self-reflective commentary. The eponymous Periscope House becomes both a test and a metaphor for how a designer can locate themselves in relation to their clients, and how memories can be imbued within home, far beyond what can be seen from it.



Hadiya Al-Idrissi - Periscope House: Views, Insights, and Locating Oneself

Initial Atmospheric Vignette (Digital Collage)

Transforming Ocean Plastics into 3D Printed Islands:

A Speculative Project for Areas Suffering from Rising Sea Levels

student: Corina Amarioarei
advisor/s: Zachary Colbert

This thesis investigates the architectural potential of transforming ocean plastics into 3D printed islands. Purely speculative, the project proposes an alternative use for excess plastics that can positively impact the environment. Two interventions are proposed:

The Factory, is a structure positioned in the Great Pacific Garbage Patch. It takes advantage of the ocean's natural currents to collect and prepare plastics for 3D printing.

The second, The Islands, are the 3D printed product of The Factory and the focus of the thesis. They are envisioned to be dispatched to areas suffering from rising sea levels for land reclamation. Emphasis is placed on designing a form that maximizes the ecological opportunity for biodiversity both within aquatic and terrestrial environments. The creation of multiple islands using ocean plastics begins to put a scale to the catastrophic amount of pollution. Prototypes are developed to test criteria of interest and inform the design direction.



Map of the Marshall Islands surrounded by The Islands made from ocean plastics along with a view of what The Islands might look like.

Suburban Maturations:

Speculations on Socially Driven Suburban Living

student: Matthew Beliak
advisor/s: Jerry Hacker

With patterns of loneliness on the rise in Canada, this thesis explores the relationship between the built environment and its potential impact on human, social interaction. Specifically, this thesis seeks to further understand to what degree can the built environment be used to promote social interaction, connectedness, and an improved sense of belonging within Canadian suburban morphologies? The private automobile and individualization of space have been key contributors to suburbia at the morphological level but with the emergence of new technologies such as ridesharing and autonomous vehicles, the privatization of suburbia could soon change, opening up new opportunities to explore how suburban morphologies could evolve to promote enhanced social interaction. As such, this thesis uses the suburban community of Richmond hill as the site of interest to imagine how existing suburban communities might evolve under the influence of design to become more socially interactive places to live.



Matthew Beliak - Suburban Maturations: Speculations on Socially Driven Suburban Living

The transformation of a typical suburban street

From Communal Services to Social Resilience:

Creating a New Life for Smiths Falls Former Water Treatment Plant

student: Melissa Brady
advisor/s: Mariana Esponda and Mario Santana Quintero

The Town of Smiths Falls in Eastern Ontario has experienced both periods of economic growth and decline throughout its history. These economic trends are mirrored in the population's growth and decline. Following the Covid-19 Pandemic, the populace of Smiths Falls has increased exponentially with communal resources struggling to keep up.

Once a vital aspect of Smiths Falls' service infrastructure, the Waterworks Buildings are located adjacent to the downtown. These provincially designated heritage buildings have been left abandoned since 2010 and have experienced substantial deterioration. The buildings are historically significant, as they represent Smiths Falls' industrial past and evolution.

This thesis explores using conservation practices to address the conditions of the site and its heritage values. Design will be used to explore approaches for adaptive reuse, with the goal of adapting the buildings as a new communal resource for the Town of Smiths Falls in the face of an ever-increasing population.



Melissa Brady - From Communal Services to Social Resilience: Creating a New Life for Smiths Falls Former Water Treatment Plant

A Multispecies Abode:

Envisioning Harmony in the Midst of Conflict and Crisis

student: Stephanie Casanova
advisor/s: Zachary Colbert

Humans have initiated an “evolution” across urban wildlife. There are innumerable conditions to which they and their nonhuman neighbors must now adapt. Given the immense role of the former in producing these conditions, the moral and ethical responsibilities lie with them.

This thesis situates itself at the intersection of humans and nonhumans, it questions anthropocentric worldviews that not only exclude anything that is not human, but also generate great disadvantage. It challenges perspectives that divide beings into categories of relative importance and reflects on what it means to live harmoniously.

Three artifacts across Chicago; the pier, the alleyway, and the silo, serve as catalysts to explore the coalescence of beings in the city, always remaining conscious and curious about perceptions that are beyond our own. Through this alternate lens, this thesis intends to contribute to the forging new relationships that re-define assumptions on who is permitted to exist in space.

Re-envisioning life in Braun Alley. Chicago, Illinois



Stephanie Casanova - A Multispecies Abode: Envisioning Harmony in the Midst of Conflict and Crisis

Dynamic Vessels for Shifting Thresholds:

Bodies and Water at the Edges of the Toronto Islands

student: Annette Chan
advisor/s: Catherine Bonier

At the interface between air and water, land and lake, lies a watery threshold ever-changing in form. As climate change and land loss reconfigure recreational shorelines, how might we reimagine human connections with dynamic watery experiences? On the shifting shores of Lake Ontario, can the beaches and lagoons of the Toronto Islands be occupied in new ways to rebalance human and non-human occupants' divergent and conflicting needs? This thesis explores ways of engaging with the shifting water's edge that work with its dynamic and reciprocal motion. Balancing the buoyancy, stability, power and resistance of these active spaces, this project imagines installations and vessels that provide new water-based human experiences, while protecting and remediating non-human habitats. Using deployable, folded geometries that expand and contract to mediate tactile, shifting relationships between bodies and water, this thesis designs for adaptability and change.



Annette Chan - Dynamic Vessels for Shifting Thresholds: Bodies and Water at the Edges of the Toronto Islands

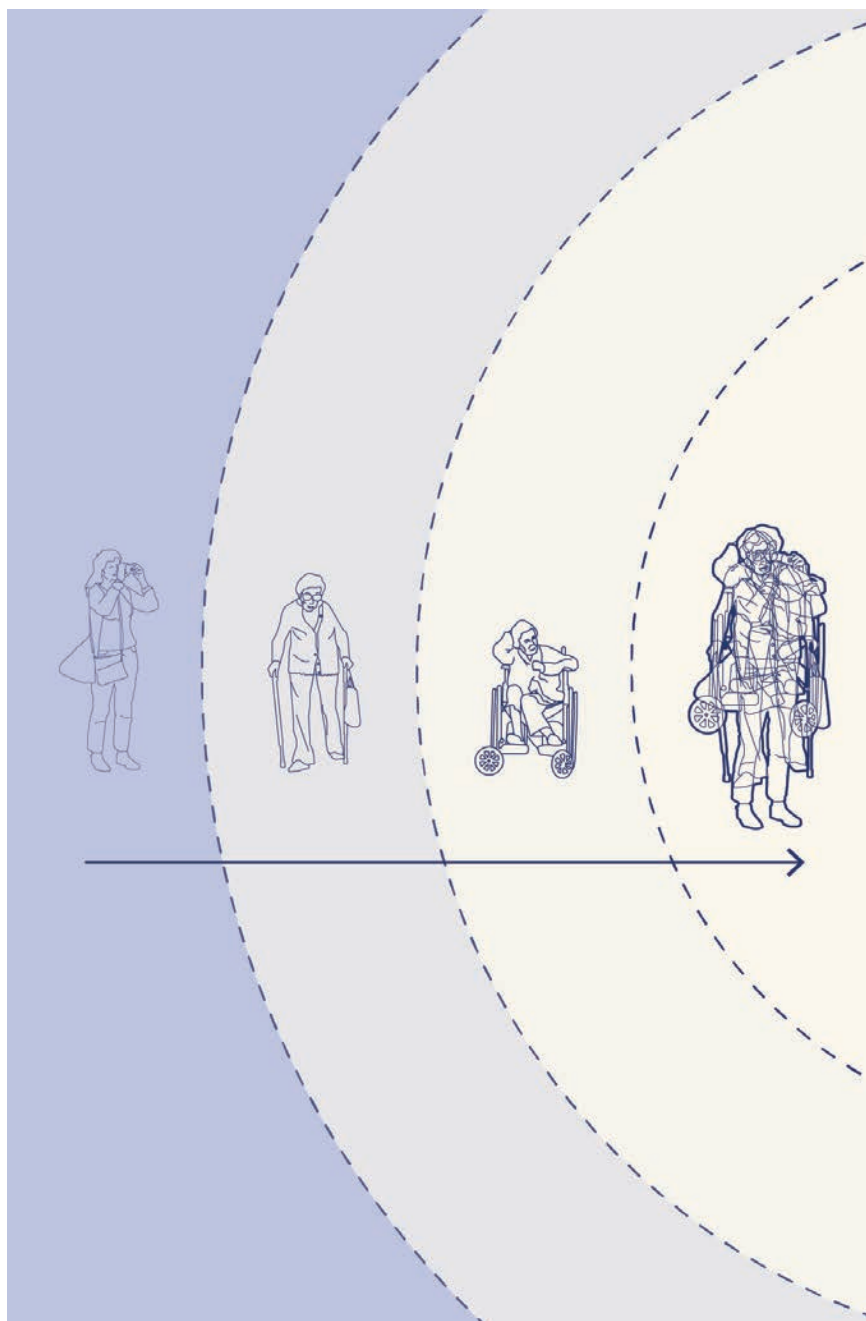
Interactions between vessels, humans, and non-humans at the lagoon.

The Architecture of Interdependence:

Supporting the Ageing Chinese Population in East Toronto

student: Sarah Chin
advisor/s: Natalia Escobar Castrillón

This thesis reframes humans as interdependent to dismantle the stigma commonly associated with ageing populations, explores the needs and potential for collaboration of different ages through collective living, and supports ageing populations' right to a community by ageing-in-place. To articulate this thesis through design, I will rethink architectural and urban spaces and facilities to foster collaboration and counter the current individualistic lifestyles. The thesis is grounded on my first-hand experience living with a Chinese elderly relative with whom I learnt about the obstacles that architecture and the built environment pose on elderly populations that commonly result in their displacement. The study will focus on Toronto's East Chinatown, which consists of a mixed population of Chinese immigrant seniors to recently arrived younger families. Grounded on in-depth site analysis, I propose the design of intergenerational spaces that encourage and support collective living and ensure elders' right to a place and community.



Ageing is an accumulation of life experiences, moments, and memories, rather than a final destination.

Lending a Hand to Guryong Village:

Agency, Community, and Shared Economies

student: Jonathan Chung
advisor/s: Jerry Hacker

Using Guryong village (a self-built community in Seoul, South Korea) as the site of investigation, this thesis explores the spatial relationships and architectures of care between the state and the city's ignored and most vulnerable citizens. The question is what degree of aid should be provided for the waste economy to further enhance community and quality of life for the village? This thesis endeavours to explore the role, active and creative users hold in lending a hand to normalizing waste collection through research methodologies such as social media and literature reviews, analytical drawing, and on-site experience. As a result, this thesis proposes an infrastructural framework comprised of three agents of support intended to further the agency and community of those in Guryong village. Using architecture's potential to create broader citizen and urban dialogue, this work strives to build a better understanding of the value of self-actualized spaces and their communities.

- care - desire - love - community - joy - challenges - togetherness -



Unearthing History, Memory, and Creativity:

A Park in Ottawa for Artistic Production

student: Shirley Chung
advisor/s: Inderbir Riar

The thesis seeks to explore the creation of a city park that reveals the site history and offer spaces to ignite public culture and artistic imaginations. It explores a relationship between the history of the site experienced through cuts – forms of excavation that bring up cultural memories – and how the language of material studies discovered through artistic processes can influence architecture in creating a space of memory and cultural activity for the community. Can the notion of a cut through the land be a way of experiencing the landscape and its history? Can the relationship of the cut in the ground, the capturing of history, and the influence of material studies inform a place for discovering the forgotten histories of a site and serve as a model for overlooked or neglected places around Ottawa? Can the result – simply put, a public park – offer ways to resist needless development and return public land to citizens?



Shirley Chung - Unearthing History, Memory, and Creativity: A Park in Ottawa for Artistic Production

Unearthing History, Memory, and Creativity: site model

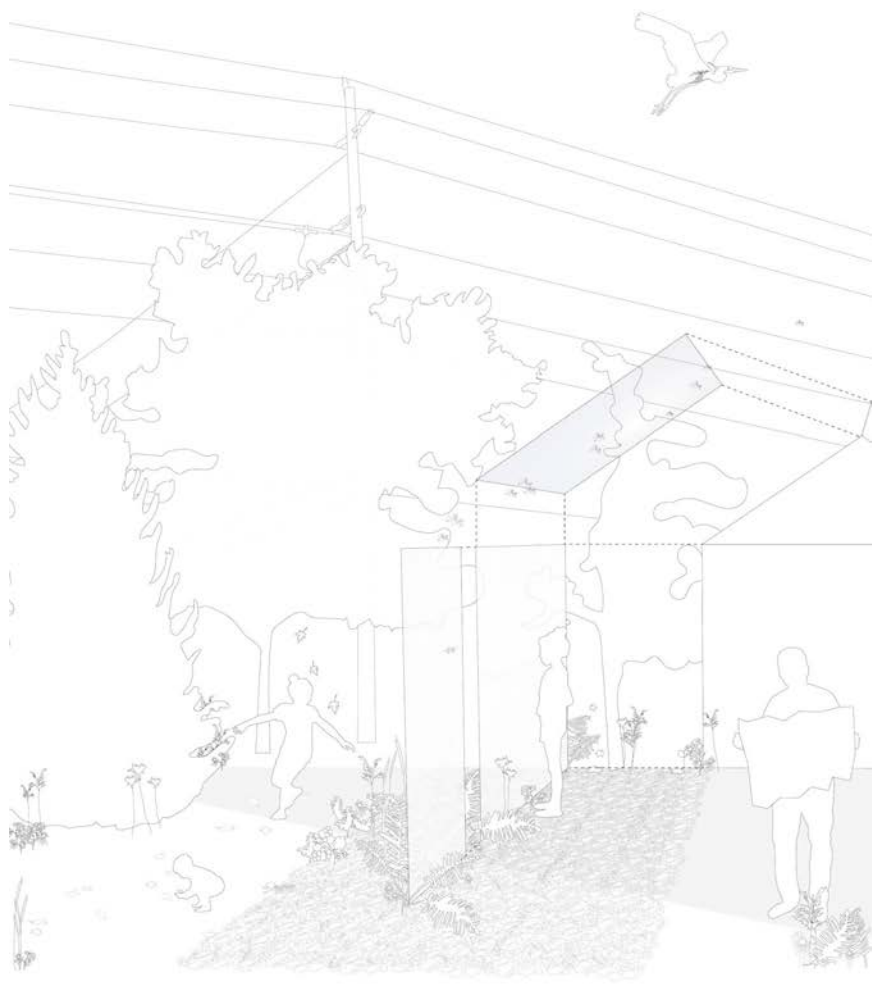
Impressions of the Natural Environment:

Balancing Landscape Protection through Human Engagement in Rouge National Urban Park

student: Megan Combaluzier
advisor/s: Lisa Moffitt

Nestled within suburban sprawl and farmland in the Greater Toronto Area, Rouge National Urban Park is the amalgamation of rich Carolinian forest ecology, urban pressures, and vital Rouge River networks. An important site for recreation, the park is easily accessible by over 20% of the Canadian population. The park has recently undergone a period of management change and increased tourism.

Unprecedented within the larger national park network, the park presents a unique opportunity for human engagement, habitat conservation and future development. Based on research, site visits, material studies and mapping, this thesis revises the Rouge National Urban Park Management Plan to reflect site specificity and programmatic needs. This thesis proposes a series of design interventions that balance human influence and environmental conservation by reinterpreting architectural elements of a typical visitor centre and by exploring what it means to visit a place of ecological significance.



deconstructed visitor centre

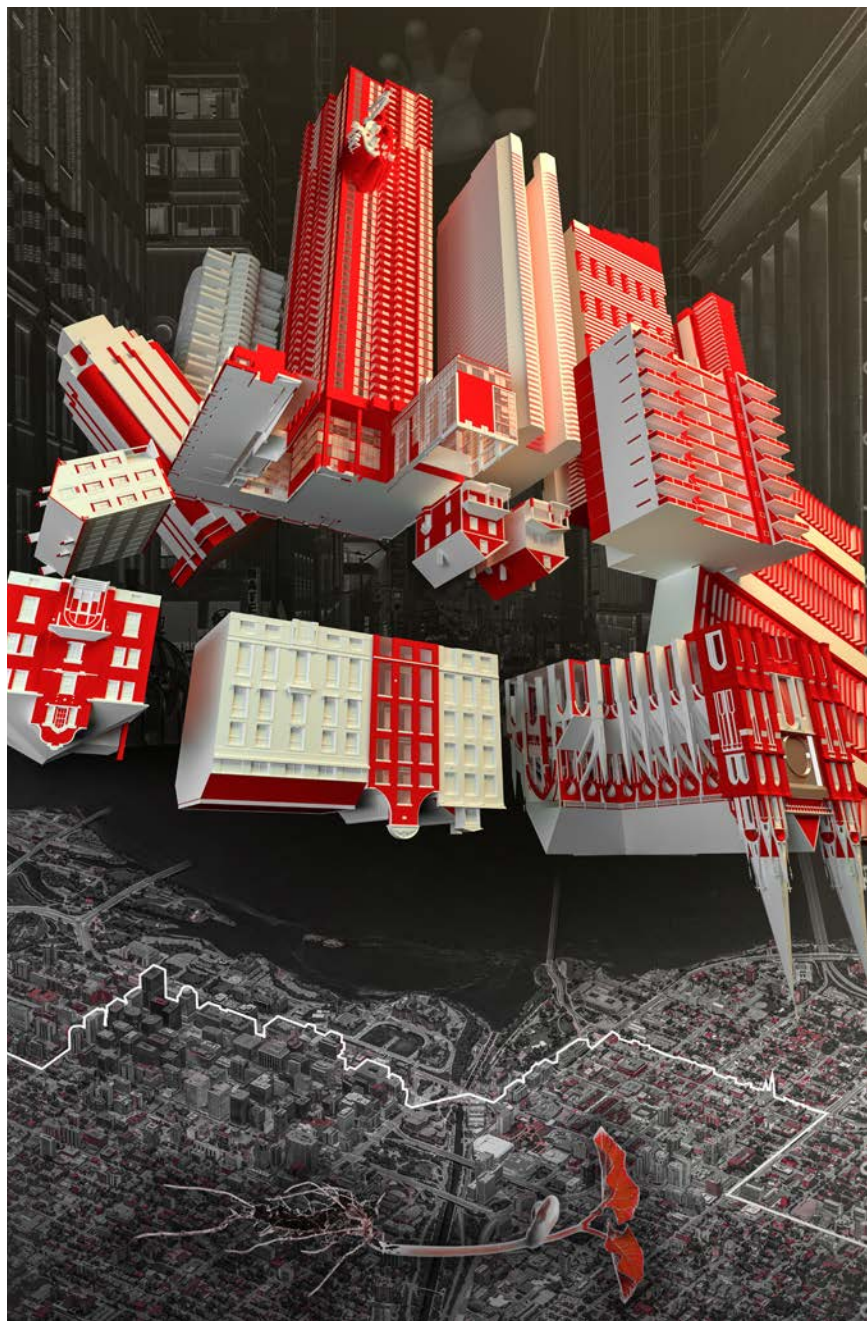
Knowledge through Awareness:

Towards Supportive Housing in Ottawa's Byward Market

student: Mathieu Denis
advisor/s: Suzanne Harris-Brandts

In 2014, the City of Ottawa adopted a 10-Year Housing and Homelessness Plan that committed to ending chronic homelessness by 2024. Despite these efforts, the waiting list for social housing has expanded dramatically, leaving many still reliant on shelters. Factors such as a noisy environment, lack of physical and psychological support, and inferior living conditions in old buildings have led to people living in inadequate conditions.

Building on the notion that presence prompts awareness, the work argues that an architecture that promotes social interaction between community members and those experiencing homelessness benefits all. Through on-site documentation and interviews with both clients and staff, the thesis first demonstrates the importance of design knowledge being acquired through designer presence. Then, a design proposal examines the opportunities for a multi-building inclusive site—one providing residential, social support, and community spaces while being conscious of its historical, environmental, psychological, and economic impacts. Overall, the work aims to raise awareness on homelessness in Ottawa and to provide innovative design strategies that invite discussion on the importance of architecture in providing spaces better adapted for communities.



Visualization of pedestrian and vehicular traffic density around the Shepherds of Good Hope site

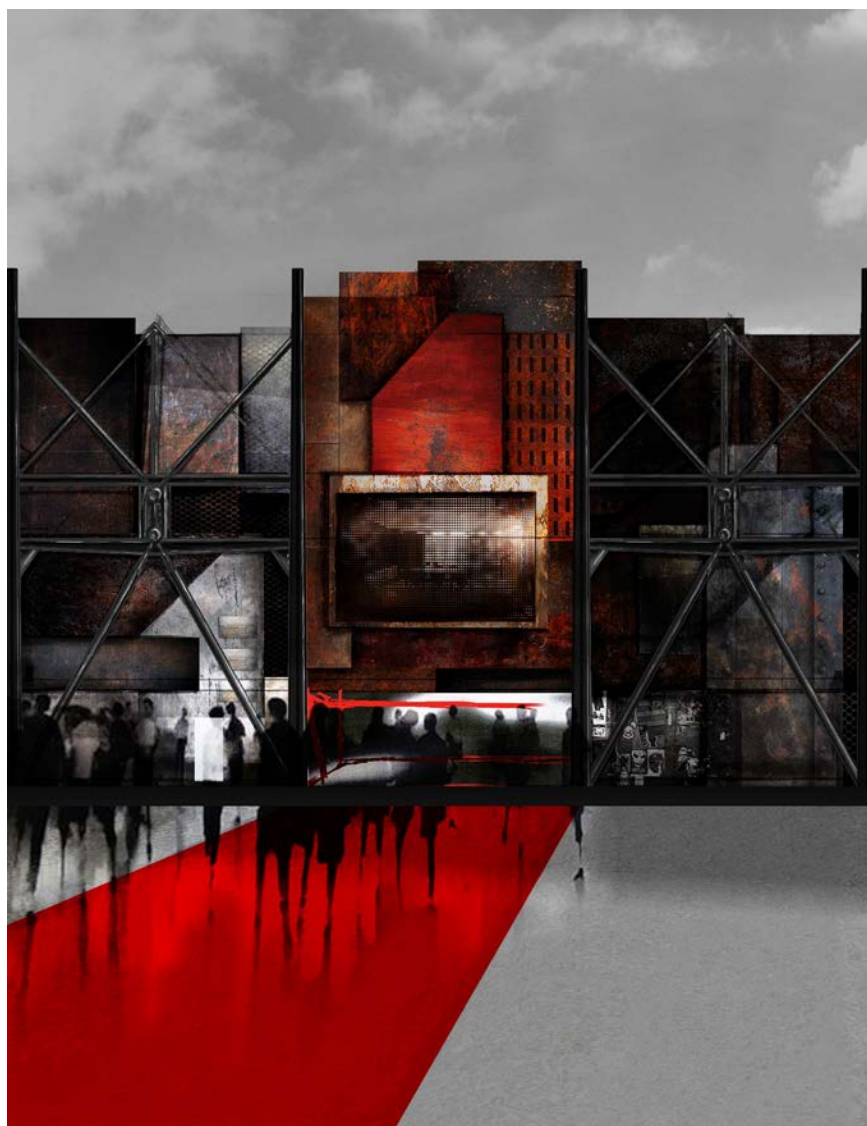
Architecture of the Mosh Pit:

Metal Music to Open the Urban Fabric

student: Miriam Doyle
advisor/s: Janine Debanne

Today, Ottawa's urbanity is in question. For the past thirty years, decision makers and urban planners have prioritized conventional condominium and office developments over cultural spaces and a dynamic public realm. Ottawa's urban fabric has become increasingly homogeneous as a result. Building on the notion that healthy cities rely on the co-presence of formal and casual spaces — even gritty ones — this thesis folds conventional and unconventional realms together. It organizes the cohabitation of rebellion and peacefulness through one proposition on a strategic site: a residual block abutting the Queen Elizabeth Highway, across from the former Ottawa Bus Station on Catherine Street.

This thesis utilizes metal music as a catalytic tool to pierce and disrupt normative urban planning and design in Ottawa and develop unconventional urban strategies focusing on marginal dwellers and spontaneous spaces of creative expression through a proposed project of a metal concert venue and cultural centre.



Miriam Doyle - Architecture of the Mosh Pit: Metal Music to Open the Urban Fabric

Entrance through the urban Baffle.

Caught in the Heart of Vanier:

Envisioning Public Housing in Underutilized Urban Spaces

student: Joshua Eckert
advisor/s: Ben Gianni

Municipal bylaws and provincial policies are encouraging the redevelopment and intensification of existing neighborhoods in Ottawa, which will have an acute impact on modestly sized dwellings in lower-income neighborhoods. As newer housing is typically more expensive than existing housing, the replacement of this building stock will have a significant impact on the city's supply of naturally occurring affordable (NOAH) housing. Redevelopment threatens to push an increasing number of residents out of neighborhoods, away from supports, and onto waiting lists for subsidized housing, which is in short supply and difficult to produce.

This thesis focusses on the Ottawa's Vanier neighborhood, which accounts for a significant percentage of the city's supply of NOAH housing. It explores the "unlocking" of several parcels of underused public land to accommodate subsidized housing and create a series of parks which, together, will create a new heart for the community and pedestrian connections into adjacent neighborhoods.

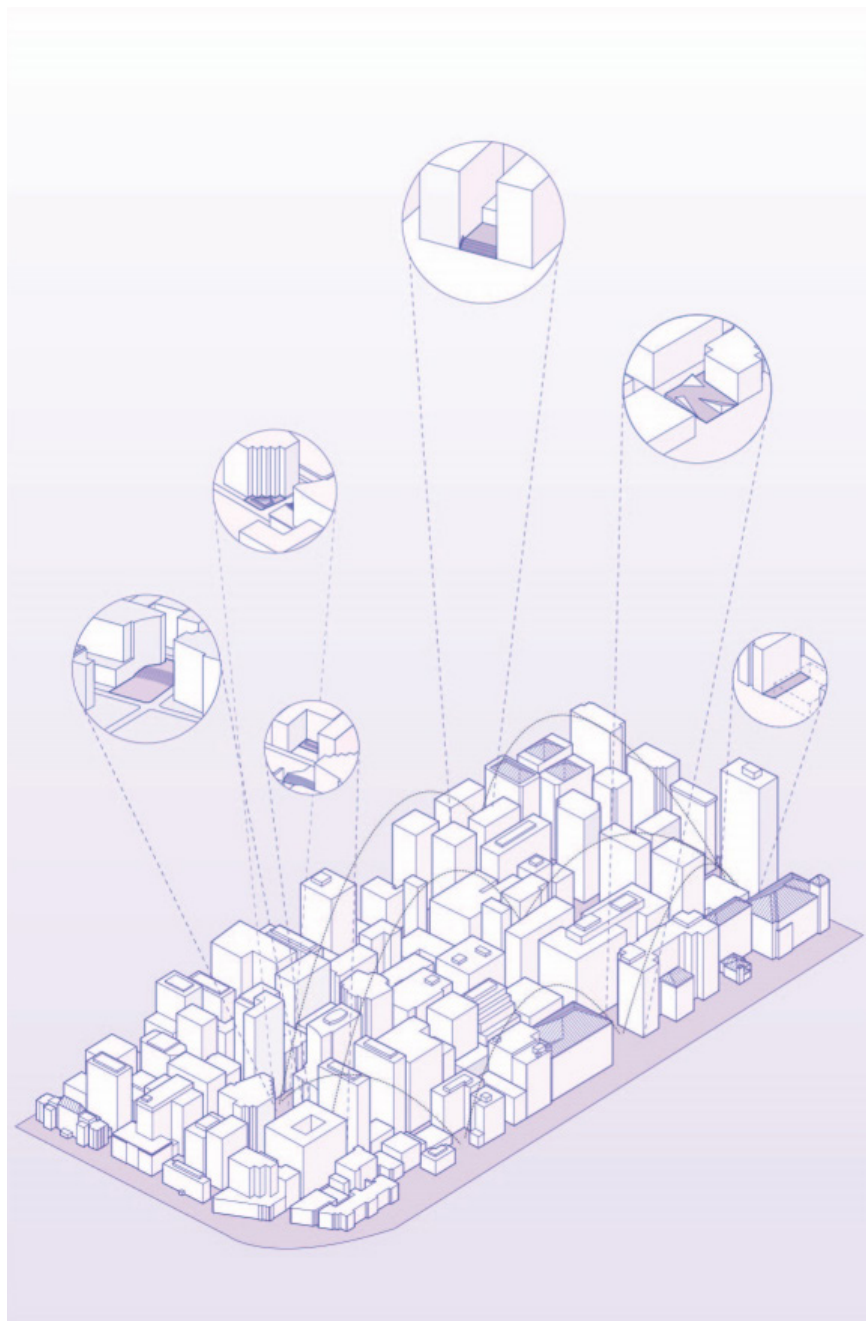


An Alternative City:

Tracing Mental Health Consequences Across Ottawa's Urban Fabric

student: Emily Eikeland
advisor/s: Federica Goffi

The quality of our built environment affects our happiness, well-being, and mental health through conditions of loneliness and isolation. Ottawa's urban realm fosters many 'devices of isolation' throughout its landscape, as displayed through its materiality, privatized living, and lack of engaging public space at the street level. Research has found these conditions of social isolation among urban residents negatively affect one's health and well-being. However, cities still lack consideration for the quality and quantity of their social spaces. In order to provide opportunities for social interaction to improve mental health conditions among residents and reinforce a sense of human-centered design, a reconsideration of Ottawa's public and private-public-facing space is needed. In response, this thesis proposes five calls to action through a network of public space interventions that reimagine existing plazas in downtown Ottawa, and question how we can use our cities to foster human connection to reduce urban isolation and subsequent mental health conditions.



Axo diagram of selected network sites in downtown Ottawa

Building Hope:

The Forgotten People of Gaza

student: Sarah Fahmy
advisor/s: Suzanne Harris-Brandts

Since 2007, the Gaza Strip, an occupied Palestinian territory, has been under an Israeli and Egyptian siege. Terrestrial and nautical blockades, in addition to incessant militaristic onslaughts by the Israeli Defence Forces have had devastating impacts on the Gazan people, infrastructure and ecology. The resulting destruction, resource scarcities, utility and service deficiencies have produced an urgency for intervention.

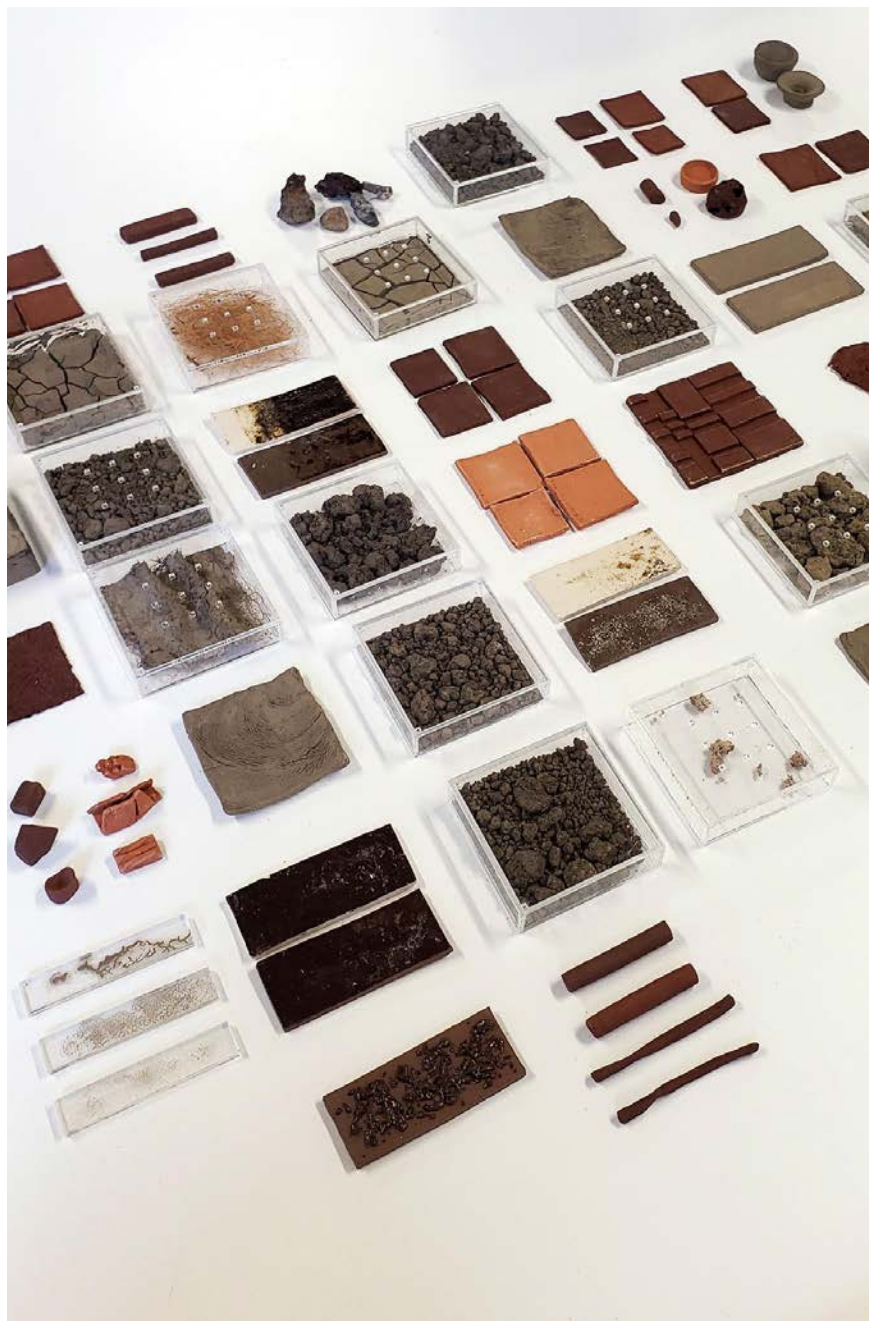
This thesis unravels the deteriorating ecological and infrastructural conditions in the Gaza Strip in order to illuminate opportunities for design to be utilized as an agent of empowerment, amelioration, and hope. In an effort to interrupt compounding systems of suppression, an exploration of novel hydro-electric and ecological pavilions of refuge are proposed as speculative models of stable utilities and service provisions. Situated among ongoing rehabilitation efforts in Gaza's main socio-cultural and ecological spine, these speculative models aim to provide sustenance, support and hope for the people of Gaza.

Dirt:

Making with Contaminated Lands

student: Ju Huang
advisor/s: Sheryl Boyle

My thesis explores dirt in the contemporary world and its place in architecture through a series of ceramic-making exercises. Using my hands, my eyes, and my mind in these exercises, I make sense of the multiple meanings and the critical matter of dirt through feeling and thinking. My sense of touch helps me explore the place and non-place of clay, my eyes aid me in clarifying the scientific order in modernity that turns dirt into waste, and my mind eventually brings me to tackle the critical problem of discarded waste sites called brownfields in Canada. The series of experiments has created a new sensory order from which a tectonic expression of architecture rooted in a particular place is created – a process that trespasses the taboos of the contaminated and embraces the uncertainties contained in earth and land in the technological age of the Anthropocene.



Ju Huang - Dirt: Making with Contaminated Lands

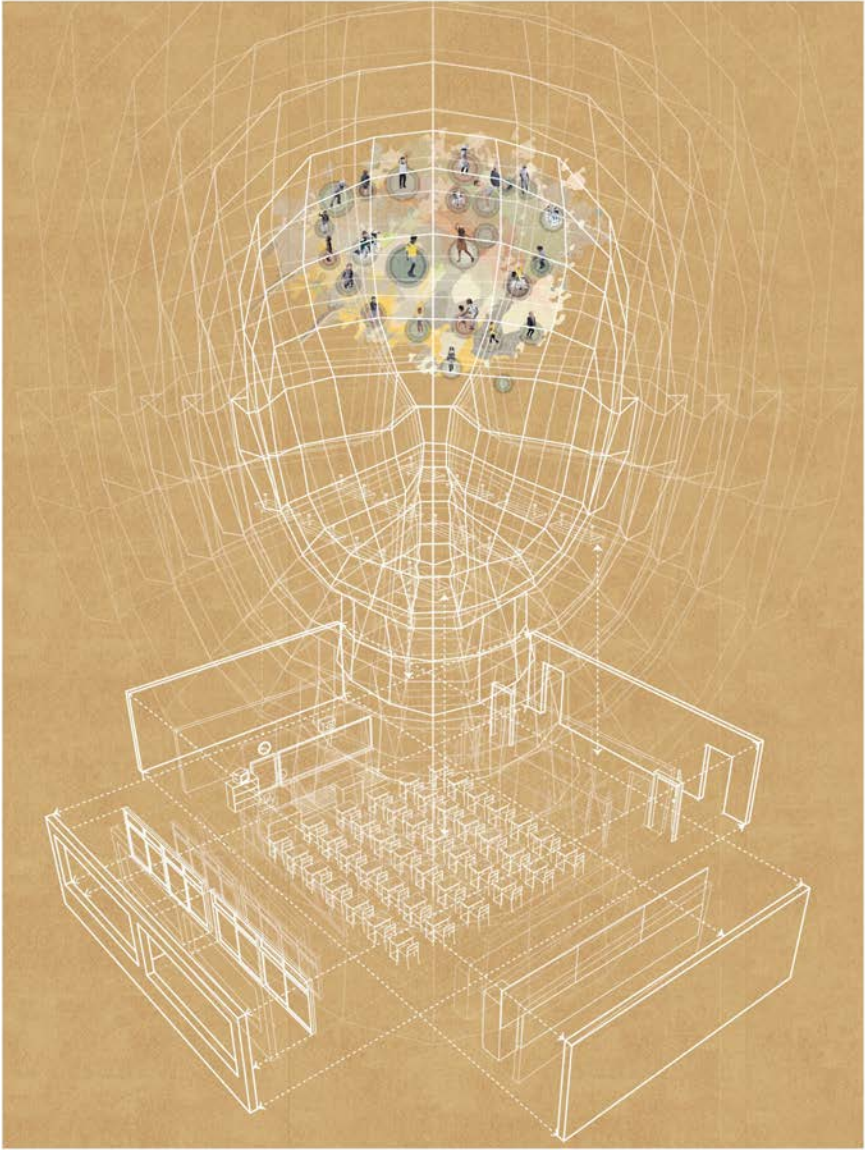
Dirt material studies.

Neurodiverse Architecture:

Reframing Early Childhood Learning Environment

student: Argel Javier
advisor/s: Federica Goffi

According to the Neurodiversity Paradigm, there are no good or bad brains, and no one type of brain is the right kind. People have different cognitive styles, and it is natural and healthy that people think differently. Neurodivergent people require acceptance, tolerance, and accommodation rather than seeking treatments that aim to make them appear neurotypical or attempt to make them forget their cognitive differences. This thesis examines neurodiverse architecture with an emphasis on early childhood learning environments for preschoolers. By carefully examining different learning typologies, we may better understand how children can develop abilities like problem-solving, communication, and motor skills. Developing these skills early is crucial in the growth of children, especially for neurodiverse children who have autism. Analyzing different kinds of early childhood learning environments provides diverse situations, which can help children to discover what works best for them and see how their differences may be advantageous to everyone.



Axo of traditional learning environment and highlighting cognitive difference of each child

Las Vegas:

Vanishing Illusions of Paradise and Fantasies of Plenitude

student: Kaleigh Jeffrey
advisor/s: Piper Bernbaum

Las Vegas exists in a dichotomy between its extravagant built environment and its extreme desert surroundings. The city is like a mirage, and the illusion presents a narrative that evades reality: a narrative Vegas is anxious to preserve regardless of its instability. Years of urbanization, and constant drought, made worse by a warming climate, has triggered the first-ever reduction to Nevada's water allocation; the first of many cuts in the foreseeable future. As a result, new policies are being implemented, challenging the city of fantasy and its image.

This thesis investigates the past, present and future of Las Vegas as it negotiates the conditions of a changing desert; engaging with policy and notions of spectacle. Through various forms of documentation, speculative design work and climate fiction, the project broadly questions the role of maintenance in architecture and to what degree it is worthwhile.



Conceptual Narrative Exploration - Mobile Boundaries, illustrating existing and future tensions of Las Vegas

Mirror of Delirium:

The Other Anthropocene

student: Howie Jiang
advisor/s: Zachary Colbert

In urban contexts, climate is often addressed through technocratic, rigid, solutions-based policies and designs such as coastal defenses and sea walls. However, in cities such as Manila, Saigon, and Amsterdam, these solutions become increasingly futile against the forces of nature. Furthermore, there are a growing number of thinkers and designers criticizing these approaches and calling for alternate approaches for coastal urban regions.

This thesis develops and critiques using Unreal engine, a gaming software. It seeks to develop a bridge between academic climate discourse and the daily experience of the built environment for the general public. This work begins by examining the relationship between language, data, and narratives, and how these collide in digital space to produce a new commons for contextualizing forces of climate change in the built environment in readily comprehensible ways, as a reflection of our own worlds.



Howie Jiang - Mirror of Delirium: The Other Anthropocene

The Resilient Nature of Inuit Knowledge:

Community, Culture and Climate Adaptation

student: Natasha Lemire-Waite
advisor/s: Jake Chakasim

This thesis explores the design of a refined building typology informed by Inuit ways of knowing, doing, and making – innovating through the wisdom and experience of Inuit. A ‘resilience center’ responds to the need for culturally appropriate and sustainable infrastructure within the Canadian Arctic, drawing from traditional Inuit knowledge supplemented by experimental materials and technologies to equip Inuit in a changing landscape.

Since the arrival of early Settlers across the North, including the imposition of their foreign assemblies and settlements, Euro-Canadians have displaced Inuit societies from their homelands and customary ways of life, and consequently altering Inuit nomadic lifestyles centered on subsistence and cultural sustainability.

Amidst a myriad of social, cultural, economic, and ecological forces, today’s Inuit communities continue to find ways to balance ‘old’ and ‘new’. By sustaining and strengthening Inuit culture, a ‘resilience center’ supports Inuit in ensuring the vitality of their culture and identity.



Exterior Render of Proposed Resilience Center

Body Territory: Mending the Divided City

Female Urbanism in Pointe-St-Charles

student: Chloé Lévesque
advisor/s: Janine Debanne

The question of urban design for vulnerable populations has remained at the margins of urban planning and cities and neighbourhoods in Canada continue to be built according to dominant positions. The thesis considers the less visible members of a society, and more generally, persons who dwell on the margins and will explore the need for connectivity through safe and inclusive design strategies in Pointe Saint-Charles (Montreal).

Employing a poetic language of stems, the routes traverse adjacent neighbourhoods and touch down in significant locations including spaces of female memory, before arriving at the Wellington basin development.

By rooting the new development in the community, and by proposing small-scaled interventions and by operating at the human-scale, these paths of remembrance reconcile women's bodies with the territory. This thesis' female-centered urbanism strategy celebrates women's role in Montreal's economic development and industrial history, while safeguarding women's inclusion in the fabric of the city.



Pointe-Saint-Charles : The need for connectivity through safe and inclusive design strategies

2223:

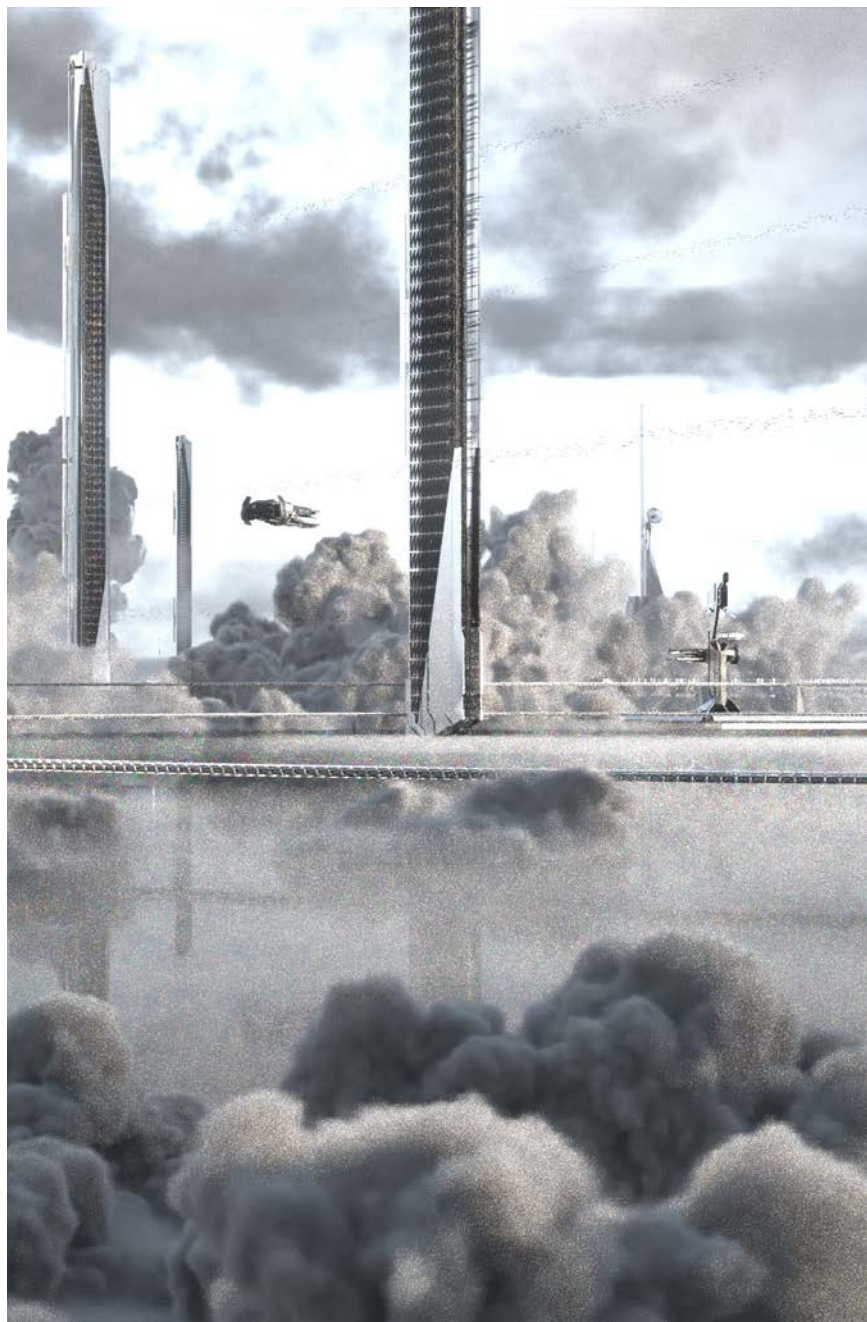
Architecture and Climate Futures through the Lens of Science Fiction

student: Cameron Maiolo
advisor/s: Johan Voordouw

2223: Architecture and Climate Futures through the Lens of Science Fiction, is a project-based thesis that synthesizes two topics: climate futures through the visual narrative of science fiction.

It uses ArcGIS Pro mapping software to visualize climate futures at global and regional scales, in particular, 70 metres of sea level rise resultant from total disintegration of polar ice caps, and revolves around understanding the science fiction genre through a series of key authors and projects.

In conclusion, it creates its own work of twelve elaborate digital scenes developed in Cinema 4D, then visualized with Octane render engine, which demonstrates world- building through environmental storytelling. The first six images depict the broader world of my speculations, while the following six depict adaptations of urban settings spanning three sites: Norway, United States, and Panama. It aims to demonstrate how technology and science can be a force for good in a dramatically changed world.



Cameron Maiolo - 2223: Architecture And Climate Futures Through The Lens of Science Fiction

The flooded Coast of Southern United States in 2223.

Bettering the Quality of Life for People with Dementia through Family and Intentional Community Living Conditions

student: Tavleen Mann
advisor/s: Federica Goffi

Dementia is a cognitive disease affecting how a person acts and thinks, with symptoms affecting their memory and other behavioural aspects. Eventually, someone with dementia becomes dependent on others to perform routine daily tasks. Families typically act as primary caregivers, but ultimately, they may realize that the required level of care exceeds what they can provide.

Design work in dementia care frequently focuses on the design specific to institutional healthcare for people with dementia without considering their quality of life in terms of sociability. This thesis explores an innovative project for dementia care, hybridizing cohousing living conditions and dementia villages in Brampton, Ontario, to include families in care housing and offer people support while allowing them to be a part of a broader community that shares their values and interests. The project aims to alleviate family guilt while meeting residents' needs for a high quality of life.



Tavleen Mann - Bettering the Quality of Life for People with Dementia through Family and Intentional Community Living Conditions

Happy aging

Still Motion:

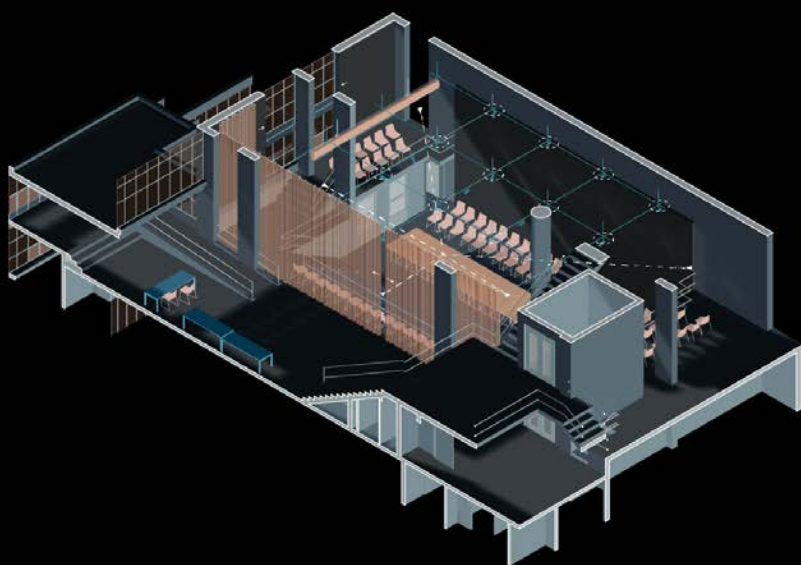
Drawing Movement toward Adaptability in Time

student: Dana Mastrangelo
advisor/s: Federica Goffi

Within the built environment, buildings often behave as inanimate objects, unable to act and react to their occupants or surroundings. These characterless elements are found in structures that idle as unresponsive, unable to evolve and adapt in time.

Since architecture can be described as the thoughtful art of making space, it would seem trivial for architects to render buildings independent from 'time' and 'motion', as the space-time continuum is inherently linked to movement.. However, architectural drawings regularly illustrate static depictions of moments frozen in time, reducing the dimensional performance of space to a flattened, silent plane.

Designed as a guide for depicting movement in architectural drawings, my thesis aims to invite architects to consider a building's active rapport with its users and context. I seek to study and discuss the interplay between architecture and its representation, investigating the outcomes of adaptability when derived from traces of movement in architectural drawings.



Movement typology #3: Notational drawing of the Pit arranged for a performance

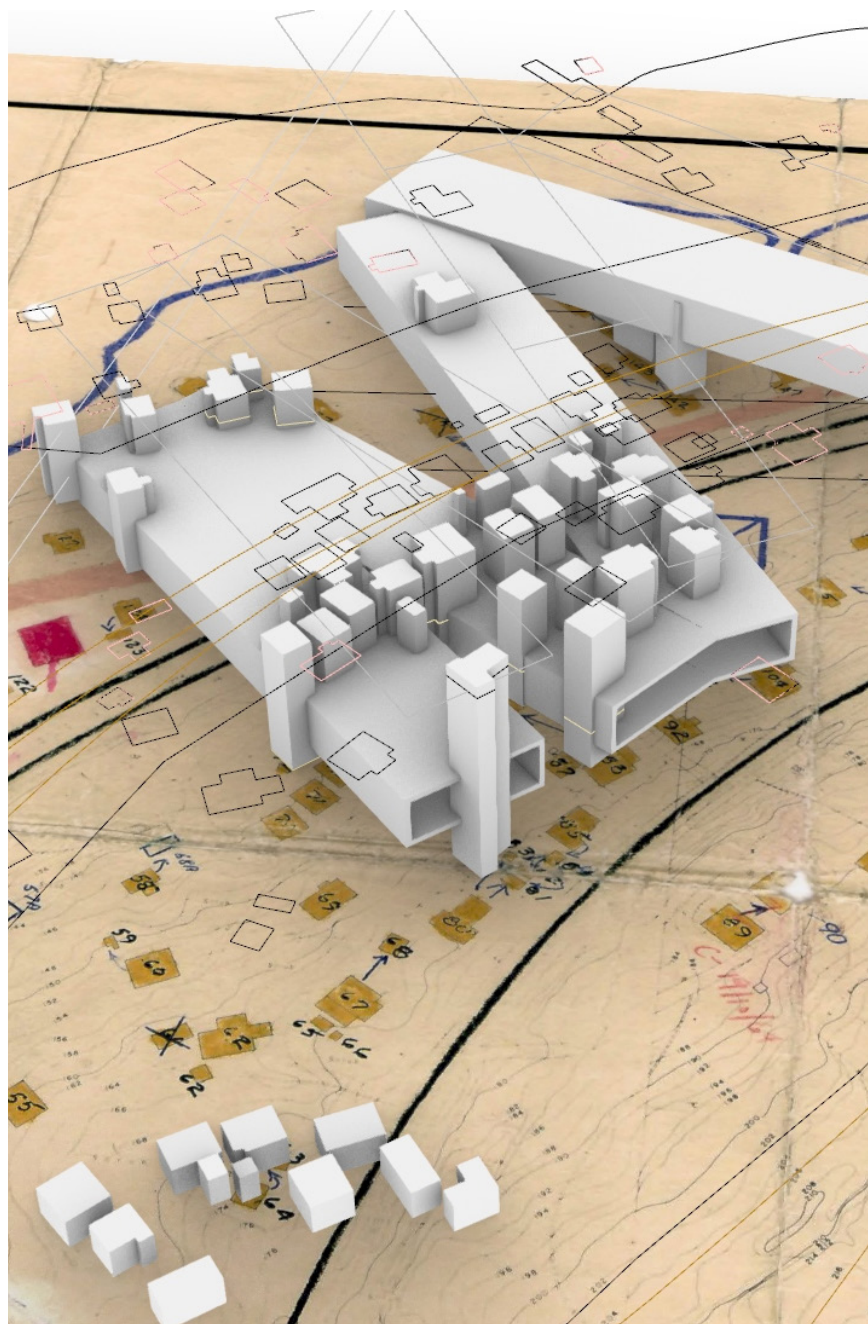
Re-Memory and Resistance:

Through Mapping and Making, an Imaginary Reconstruction of Blackness in Africville

student: Otmar Melhado
advisor/s: Menna Agha

Africville is a two-and-a-half-acre lot that is home to a northerly park in Halifax, Nova Scotia. It was a community that was razed for fifteen years, starting in 1964 after the Halifax City Council decided to rezone the land for industrial use. This decision eventually became psychologically hostile and regressive to the black citizens as it took shape in enacting dispossession and spatial injustice that brought with it several forms of racial marginalization strategies. Eventually, this seaside country village would cease to exist after its original formation in 1848.

Through a counternarrative lens, the project explores forms of memory, re-memory, and resistance in making as speculative social interventions of a broader context of commemoration through black memorials and spaces. It includes utilizing pedagogical lessons learned in architectural design and conservation. This would position the project's proposal towards reinterpreting the Afro-Canadian experience within a responsive and engaging and contemporary framework.



Tunnel Reconstruction Intervention Model

Re Imagining Vacancy:

A Case for the Partial Adaptation of Office Buildings to Accommodate Permanent Supportive Housing

student: Alexandra Miller
advisor/s: Ben Gianni

The increasing trend of working from home is leaving many office spaces vacant. At the same time, cities across North America are experiencing a rapid increase in the number of people experiencing homelessness. The City of Ottawa has proposed to address the housing and homelessness crisis through the construction of permanent supportive housing. This, however, is easier said than done.

Tackling these issues together, this thesis explores office-to-residential conversions. Given the deep floor plates of many office buildings, it may be more expedient to divide floors between office and residential uses. Using the Jeanne Mance Building — a vacant federal office building in Ottawa — as a case study, the thesis explores a hybrid approach to the transformation of office buildings as a means of increasing the supply of permanent supportive housing.



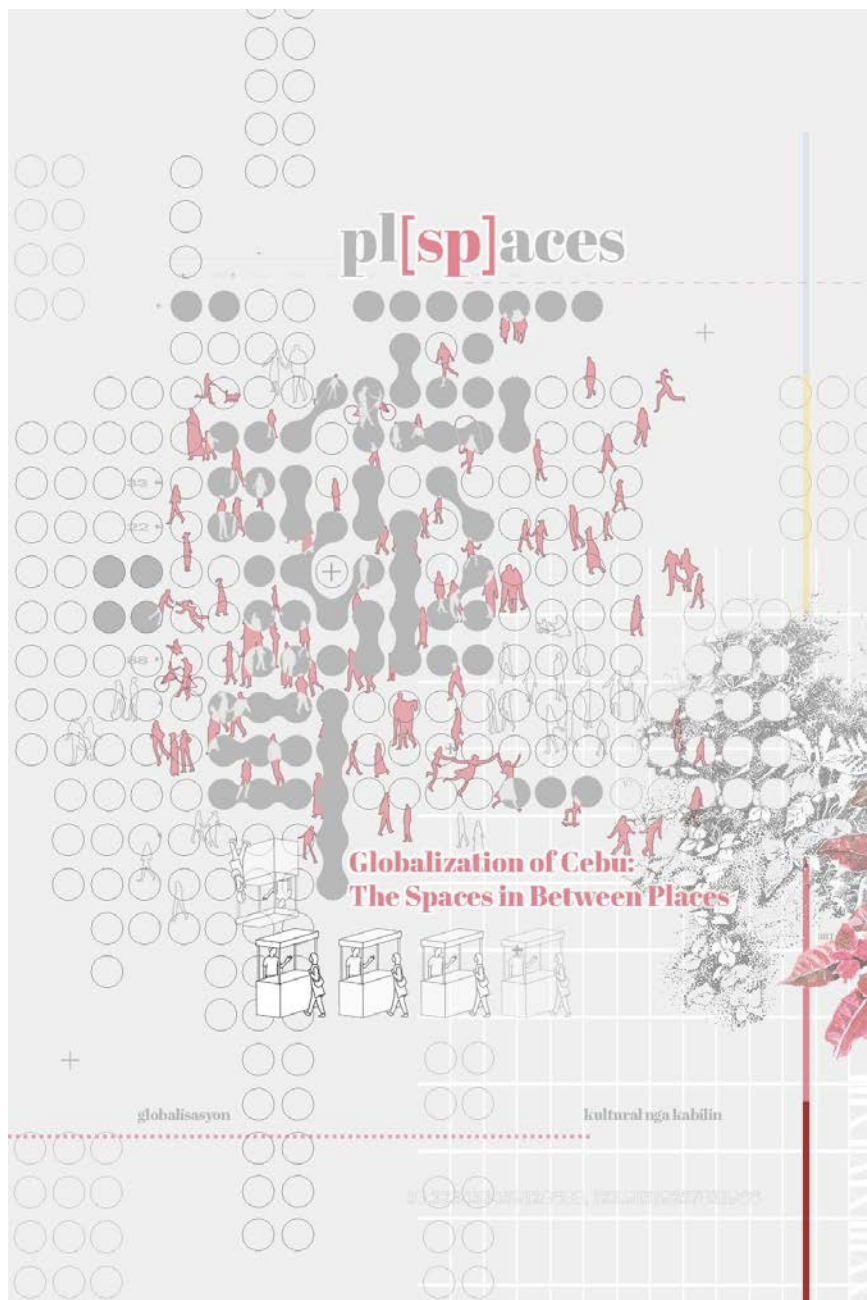
Globalization of Cebu:

The Spaces in between Places

student: Red Narvasa
advisor/s: Stephen Fai

With a distinct blend of a Spanish and American past, alongside a Chinese predominance, the Philippines is very unique for its rich culture, traditions, and delicate past. In Cebu, its oldest city and first capital, the economic disparity between social classes grew wider over time through its rapid economic and urban development. Although cultural development is somewhat necessary as tourism is an essential aspect of the economy, globalization will not cease to oppress heritage as it progresses.

One positive manifestation is the concept of Asian night markets, which is argued to be either imported by the Chinese diaspora or as a South-East Asian tradition. This thesis aims to distill the architectural aspects needed to create the atmosphere of a night market. By studying elements that improve its experience, usability, and functionality, the objective is to create a system that is more stable and resilient against the increasing marginalization of globalization.



Red Narvasa - Globalization of Cebu: The Spaces in between Places

The interconnectedness between actants in a market

Towards A Socially Connected Campus:

Built Environment's Impact on Loneliness at Carleton University

student: Robert Oleksiak
advisor/s: Jake Chakasim

This thesis investigates the impact of the built environment on loneliness and social connection in relation to university campuses – specifically Carleton University. Research links chronic loneliness to negative effects on mental and physical health and confirms that young adults and students are especially vulnerable to experiencing loneliness. While it is not uncommon for campuses to have official plans to address social issues, particular attention toward loneliness and social connection is often overlooked.

In response, this thesis proposes five calls to action supported by key recommendations emphasizing the importance of social connection along with three design interventions to promote social connection on campus. The primary methodologies used in this thesis are case studies, fieldwork, and research through design.

By adopting this research, campuses may begin to augment their current policies with specific emphasis placed on the built environment to facilitate connection and belonging.



ARCHITECTURES OF LONELINESS

DESIGNING FOR SOCIAL
CONNECTEDNESS IN THE URBAN
BUILT ENVIRONMENT

Initiating Social Connection

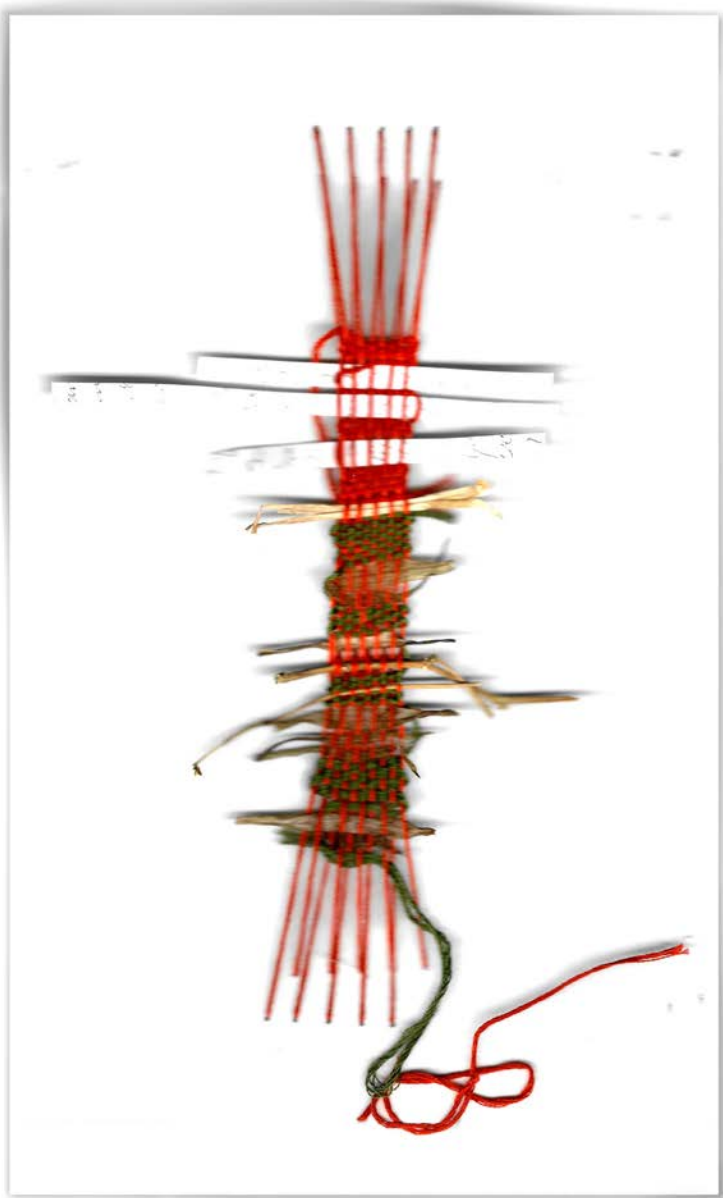
Cosmovisions: World-Building in the Time of Erasure

Towards Re-Positioning Within the Nahua-Pipil

student: Daniela Olivares
advisor/s: Menna Agha

In an attempt to look deeper into my roots, I stumble on emptiness and voids. For all that I am can easily be defined as all I am not. This disconnection is both a feeling and a placement, so I embark on an exploration of Indigeneity and the self, through thoughts, memories, pointers, visions, and stories. By allowing the voices of the past to reach me, I seek them and reposition myself on new epistemic grounds. I find my site through this relationality and expand my understanding of space past the western sphere, and towards the Nahua-Pipil cosmovision.

I activate this research to claim and be claimed by my Pipil culture and reckon with the erasure faced within the nation-state of El Salvador. Ultimately moving away from the dominant epistemology of the west for a re-working of centering and learning from Indigenous epistemologies.



Weaving Relations: Relationality within Land explored through weaving.

Toronto's Terrestrial Reefs:

BioRock's Infrastructural Biogeochemical Futures

student: Cameron Penney
advisor/s: Lisa Moffitt

This thesis explores the design potentials of BioRock, an underutilized accreting material that simulates the reef building processes of corals. BioRock is a grown limestone, concrete alternative with design agency that has many positive benefits including its ability to act as an ecological scaffold, sequester pollutants, and being highly sustainable. This thesis proposes three speculative applications of BioRock within Toronto, including the reintroduction of Alvars as a landscape strategy extending from abandoned quarries, an industrial remediation for obsolete water treatment reservoirs, and the in-situ repair of concrete bents supporting the Gardiner Expressway. As a material system, BioRock can help relieve cities from various environmental and infrastructural issues, informing new design proposals for future urbanization. This design is explored through experimental models and test fragments of BioRock which form a library of artefacts that traverse biogeochemical scales of speculation, assembling a collection of work that I call a Terrestrial Reef.



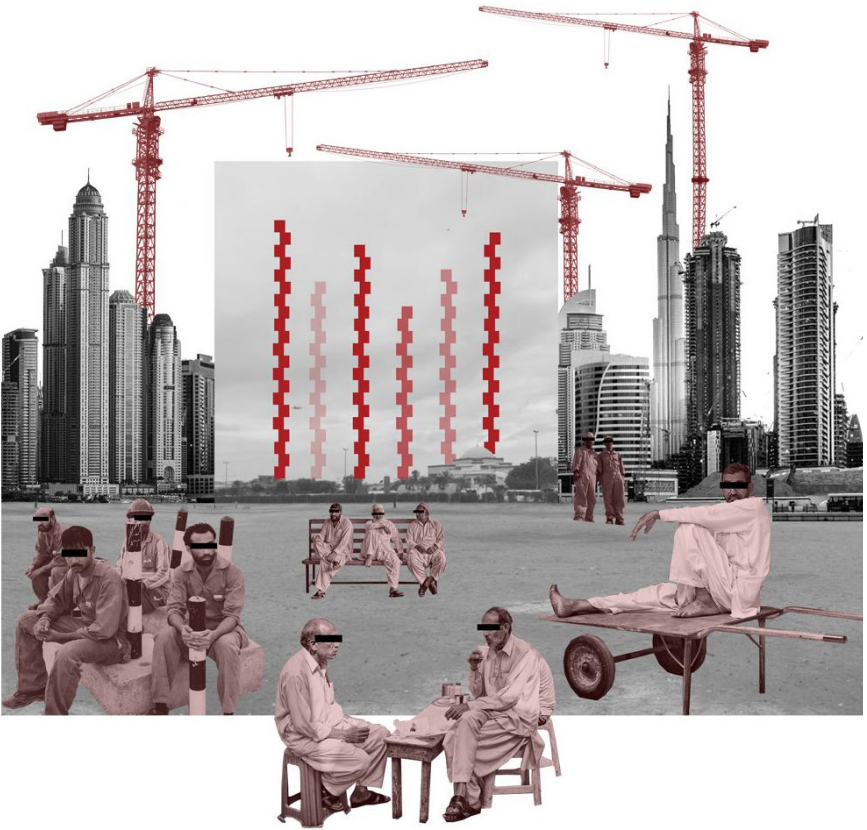
Close up photograph of multiplanar BioRock at day 12; successful experiment of calcium carbonate mineral accretion.

Disconnected Dubai:

Cities Within a City

student: Dalia Qasem
advisor/s: Jerry Hacker

This thesis explores the long-standing systemic oppression of transient, low-income migrant workers in Dubai, who have resorted to methods of self-actualized urbanism due to the city's development. Despite this troubling context, migrant workers do find degrees of agency, but this thesis questions how the publicly presented face of Dubai (a city now comprised of iconic architecture built by migrant workers) might re-prioritize itself to empower the agency of the people who make this face possible? As such, this is a tale of cities within a city. Primarily using the methodology of research through design, to address this conundrum, the thesis looks to urbanism and architecture and proposes a series of design interventions focused on the social empowerment of the migrant workers. The aim is to demonstrate that even in the face of extreme adversity and systemic oppression, architecture and urban planning can act as catalyst for change.



Dalia Qasem - Disconnected Dubai: Cities within a City

Transient and Spaceless

INTAKE :

Reimaging the Canadian Coast Guard Photography Archive

student: Emma Rath
advisor/s: Catherine Bonier

This thesis explores architectural issues pertaining to Canadian archival practices. Using the Canadian Coast Guard as a case study, it investigates the records of decades of ice-breaking missions, a paper archive that assumes polaroid photographs and associated log sheets as determinate facts. How do we create more generously designed archives, opening up old stories to new consideration? By focusing on engagement and experiential interventions, this project offers both a critique of, and a newfound appreciation for, the forgotten ice-breaking archive.



Emma Rath - INTAKE: Reimagin in the Canadian Coast Guard Photography Archive

Cyanotype and water experiment

The Body in the City:

Understanding Sexual Harassment in Urban Outdoor Public Space

student: Hilary Romaniuk
advisor/s: Menna Agha

How can we confront existing urban public space which allows frequent sexual harassment? This thesis seeks a better understanding around the ways in which sexual harassment impact our bodies, lives, and perceptions of space, in public urban outdoor space. Literature and global mapping initiatives are consulted that tackle issues of sexual harassment and women+'s safety in public spaces. This study aims to centre the body as a priority by utilising body mapping focused on various sites across Centretown, Ottawa. The communal body mapping workshop was an act of solidarity with other women+, an intimate kinship-making exercise. The resulting body maps allow viewers to better understand the collective woman+ consciousness as it relates to sexual harassment in public space.



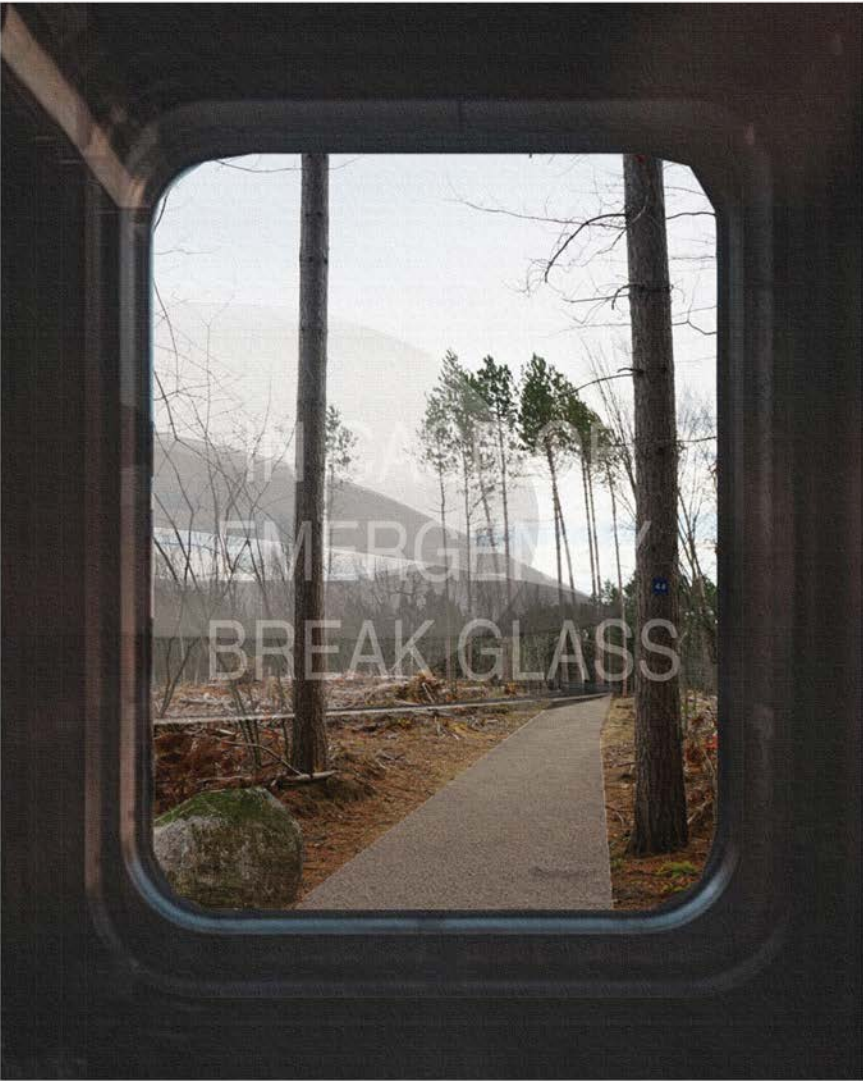
Body Maps Overlaid with Repeated Themes Highlighted

The End of the Line:

Activating Ottawa's Greenbelt Through Cultural, and Architectural Intervention

student: Stephen Scanlan
advisor/s: Benjamin Gianni

Exploring the relationship between the city of Ottawa and its protected Greenbelt, this thesis provides stronger connections between the rural and urban. By examining planning strategies, zoning, and transportation, the thesis proposes the creation of a recreation loop trail within the Greenbelt. This proposal is inspired by Indigenous cultural heritage and raises questions about our understanding of protected land within our urban environments. It promotes a collective history of both Canada and First Nations. The Greenbelt is an area of land that should be accessible to all and connected to all communities. It provides a space for retreat, education, cultivation, amusement, and rehabilitation. This thesis aims to enhance these qualities through distinct planning strategies and architectural interventions.



Stephen Scanlan - The End of the Line: Activating Ottawa's Greenbelt Through Cultural, and Architectural Intervention

The image depicts a journey through both a train and a path, providing a sense of relief from stress and anxiety. The emergency scenario in the image represents both the individual and the community within the greenbelt.

Memory in Ruin:

Re-establishing the Identity of Bosnia-Herzegovina Through the Restoration of Islamic Architecture

student: Lejla Sejdinovic
advisor/s: Piper Bernbaum

This thesis examines the role of memory and reconstruction tied to places of collective identity, trauma, and erasure in Bosnia-Herzegovina, focusing on the reconstruction and reinterpretation of mosques following the destruction of Islamic architecture during the 1992-1995 Bosnian War. The mosque serves a distinctive role for Muslim communities, and with their destruction also came a devastation to the Bosniak identity. While the country has been slowly reconstructing demolished cultural spaces, physical scars of the events are being overlooked. Rather than contributing to a climate of erasure and forgetting, ruins should be acknowledged within design as vessels for memory. Through the documentation of various acts of erasure, a compilation of personal anecdotes, as well as engaging with material studies representing loss, time, emotion, and memory, this thesis presents a restorative design intervention that intertwines these complicated histories with contemporary reflections using ruins of the Mehmed-paša Kukavica Mosque in Foča, Bosnia.



Lejla Sejdicinovic - Memory in Ruin: Re-establishing the Identity of Bosnia-Herzegovina Through the Restoration of Islamic Architecture

Collage on vellum displaying the layered history of the Mehmed-paša Kukavica Mosque in Foča, Bosnia

Constructing the “Ineffable”:

Threshold to the Water

student: Shreetika Singh
advisor/s: Stephen Fai

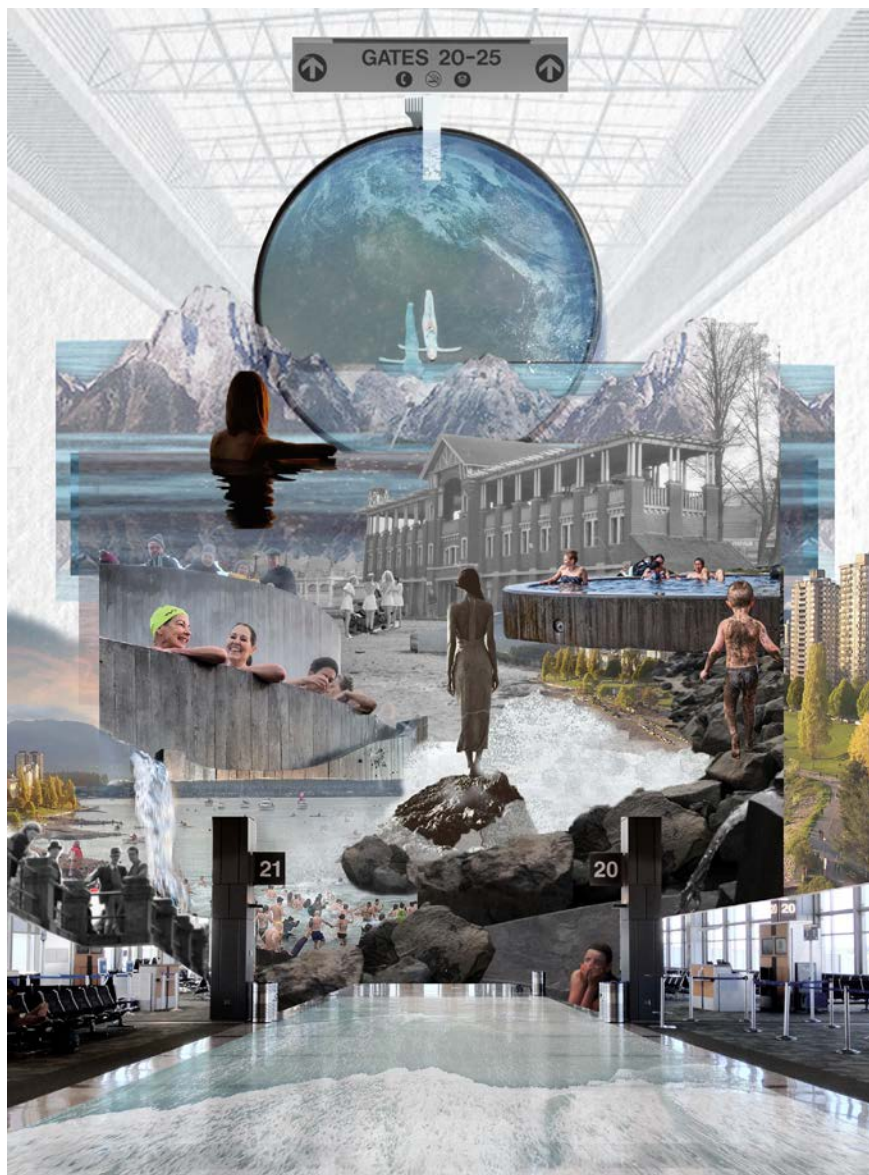
This thesis began with a feeling.

It began with the questioning of a profound and indescribable experience evoked at an airport, provoking the question of how architecture can transport oneself to otherworldly and transcendental spaces.

To explore “ineffable spaces,” this project ventures into the world of transcending architecture to bring scarce out-of-body moments into public spaces by proposing an intervention inspired by water: a public bathhouse in the city of Vancouver.

The design approached through research on transcending architecture, connecting water to the ineffable through art, and a sensorial understanding of the site. This project aims to take individuals on a journey where they leave calm, inspired, and with a sense of a “greater meaning.”

Further questioning, how does architecture address a more personal and intimate need? To create moments of contemplation and curiosity and provide a feeling of security, inspiration, faith, and humanity to everyday life?



Shreetika Singh - Constructing the "Ineffable": Threshold to the Water

Collage of the connection between the Ineffable, the airport, water, and the English Bay Bathhouse.

Undermining the Edge:

Reflecting on Policy and Possibility of the Canada-US Border

student: Travis Strochinski
advisor/s: Piper Bernbaum

The Canadian border is understood as an invisible line imposed into the landscape but this assertion, although accepted as true, is flawed. This thesis is an examination of the disconnect between intent and reality of the spatial conditions of the border, utilizing current typologies and non-human influences to construct a narrative that expands a section of the border, in Waterton-Glacier International Peace Park, from a 'line' into an occupiable space. The spatial conditions of the Canadian border are investigated through policies, jurisdictions and events, exploiting their capacities to undermine the political constructs of this invisible line. This thesis is a direct response to the Safe Third Country Agreement which unconstitutionally restricts asylum seekers from legally crossing the border between Canada and the USA. Through cartography, analytical mapping and a series of proposed design interventions for the site, the dynamics of power and exclusion inherent to the Canadian border are investigated.



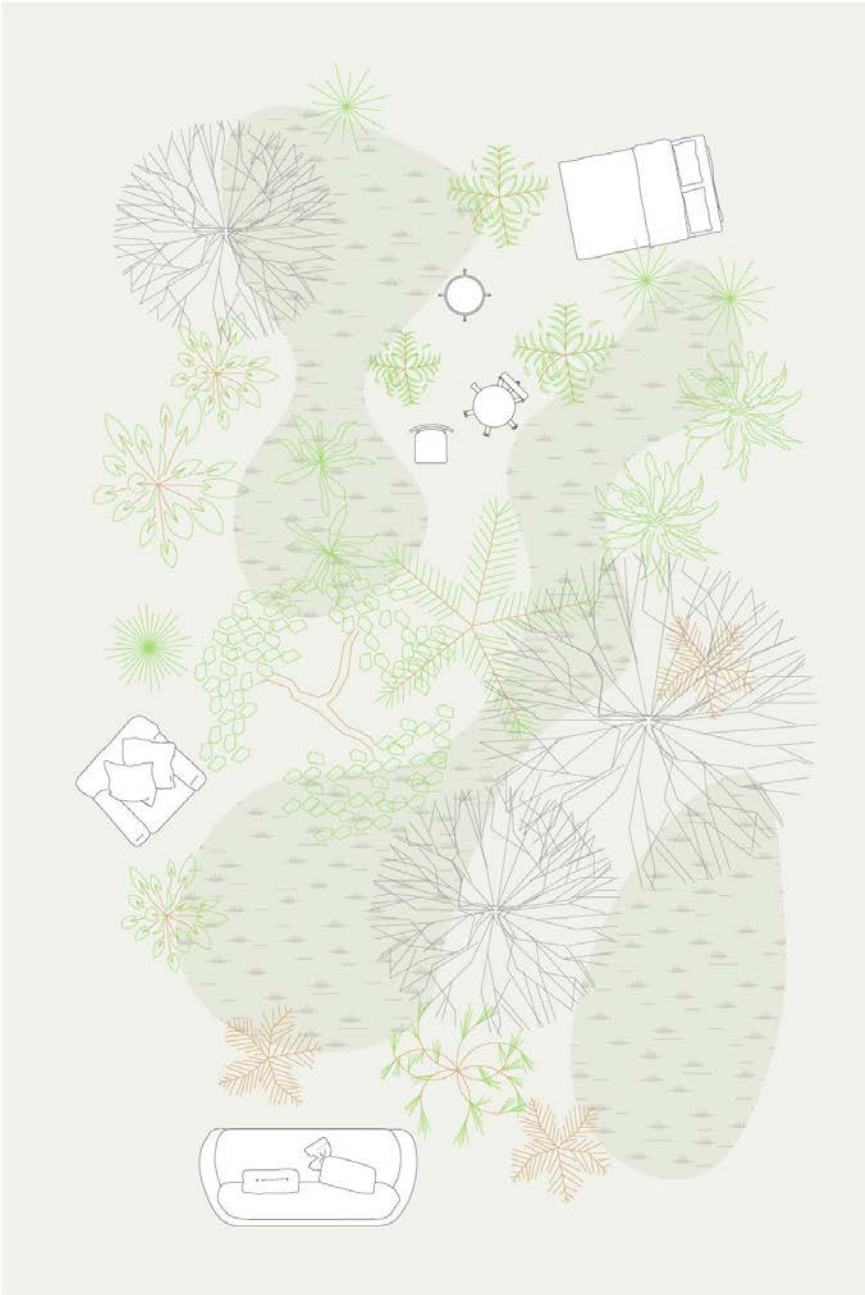
An imposition of political control inscribed into the landscape

Land-scape / Tree-scape / Slow-scape

student: Connor Tamborro
advisor/s: Jerry Hacker

As the world becomes led by fast-paced practices, critical engagements with physical presence of the environments are decreasing. These superficial engagements made through the 'digital' is eroding a critical awareness of presence, even though human conditions have had a history with space whereby people are personally, physically, and mindfully immersed. As a result of this new digital mindset and 'rushed' modes of engagement, there has been a shift in human awareness: Spatial architecture is perceived differently, and barriers have been created in fostering connections. In response, this thesis seeks to explore the timeless authenticity of a place through the meaning of 'Slowness' in architecture.

Using a site in Combermere, Ontario, a process of critical site engagement was used to re-discover the meaning of 'Slowness' in architecture. The result is a resistance that positions deep and meaningful engagements as an antidote to the 'fast,' blurry, and constructed experiences offered through technology.



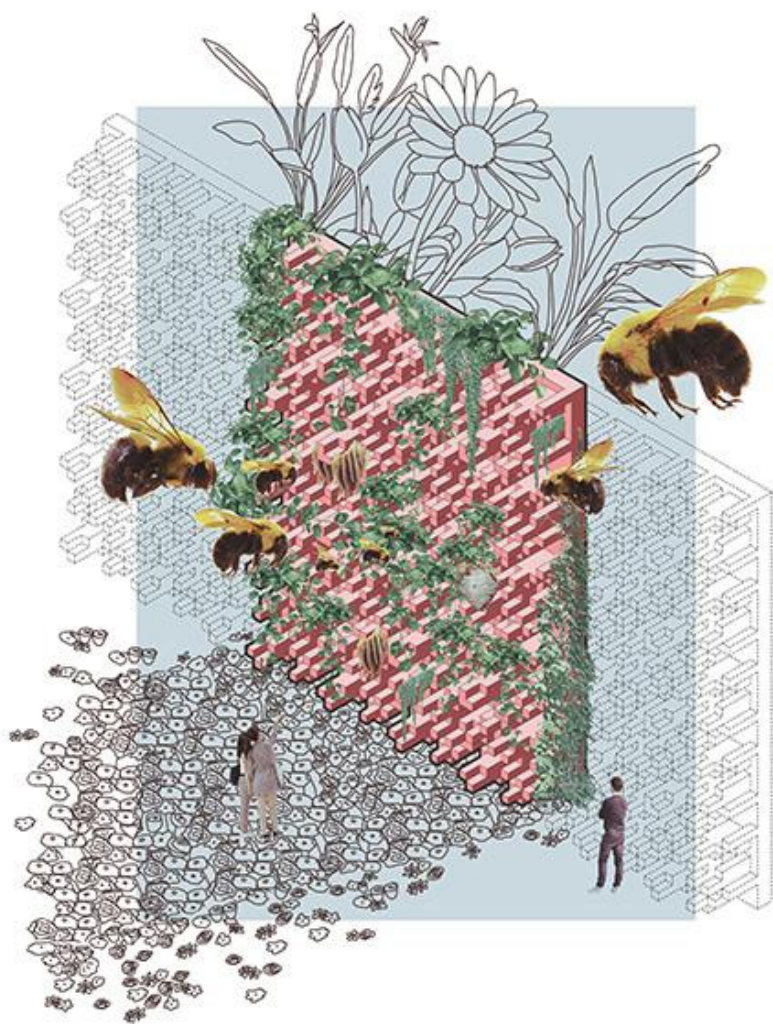
Concept map: 'Slow' floorplan in a 'Slow' landscape

Ecocentric Architecture:

A Counter-Proposal for Pierrefonds West

student: Jillian Weinberger
advisor/s: Lisa Moffitt

Habitat loss and fragmentation are the most significant factors causing species extinction. Consequently, architectural and landscape designers are shifting their approaches from anthropocentric design to ecocentric design, prioritising designing with entire ecosystems in mind. In this thesis, the Cap Nature neighbourhood development project in Montreal serves as both a case-study and a site for ecocentric design. Cap Nature, proposed in 2005, caused public disagreement about consequential urban sprawl and environmental concerns. The project was canceled in 2017 and the untouched post-agricultural landscape remains. This thesis uses speculative site plan and building design strategies supported by environmental mappings, habitat drawings, and theoretical reflections of existing ecological design frameworks to investigate the potentials of ecocentric design as a counterproposal for the site. The counterproposal blurs boundaries between human and non-human landscapes and inverts anthropocentric design practices, presenting an architectural typology that reprioritises wildlife, habitat construction, and cohabitation between human and non-human species.



The Boundaries & Identity of Chinatown:

Treading In-Between the Gates to Where I Once Called Home

student: Jamie Wong
advisor/s: Suzanne Harris-Brandts

In major urban cities, property ownership is a powerful tool dictating who and what gets to belong. As land for development becomes scarce in the rapid evolution of cities, the world over, existing communities are being forced out through gentrification. This thesis draws on Toronto's Chinatown West as a specific site of high contestation, exploring the politico-economic forces that influence its shifting boundaries and sense of collective identity. Through historical document analysis, photographing of site conditions, community member interviews, and mapping of the built environment, the research highlights the urgency of preventing this district from losing its distinct spatial identity. Utilising architectural design as an agent of tactical transformation, the thesis then proposes a series of interventions to aid local businesses. It creates new mediatory spaces for social interaction and neighbourhood discussion, serving as socio-cultural linkages that bolster Chinatown's evolving identity.



The Healing of Environmental & Cultural Trauma:

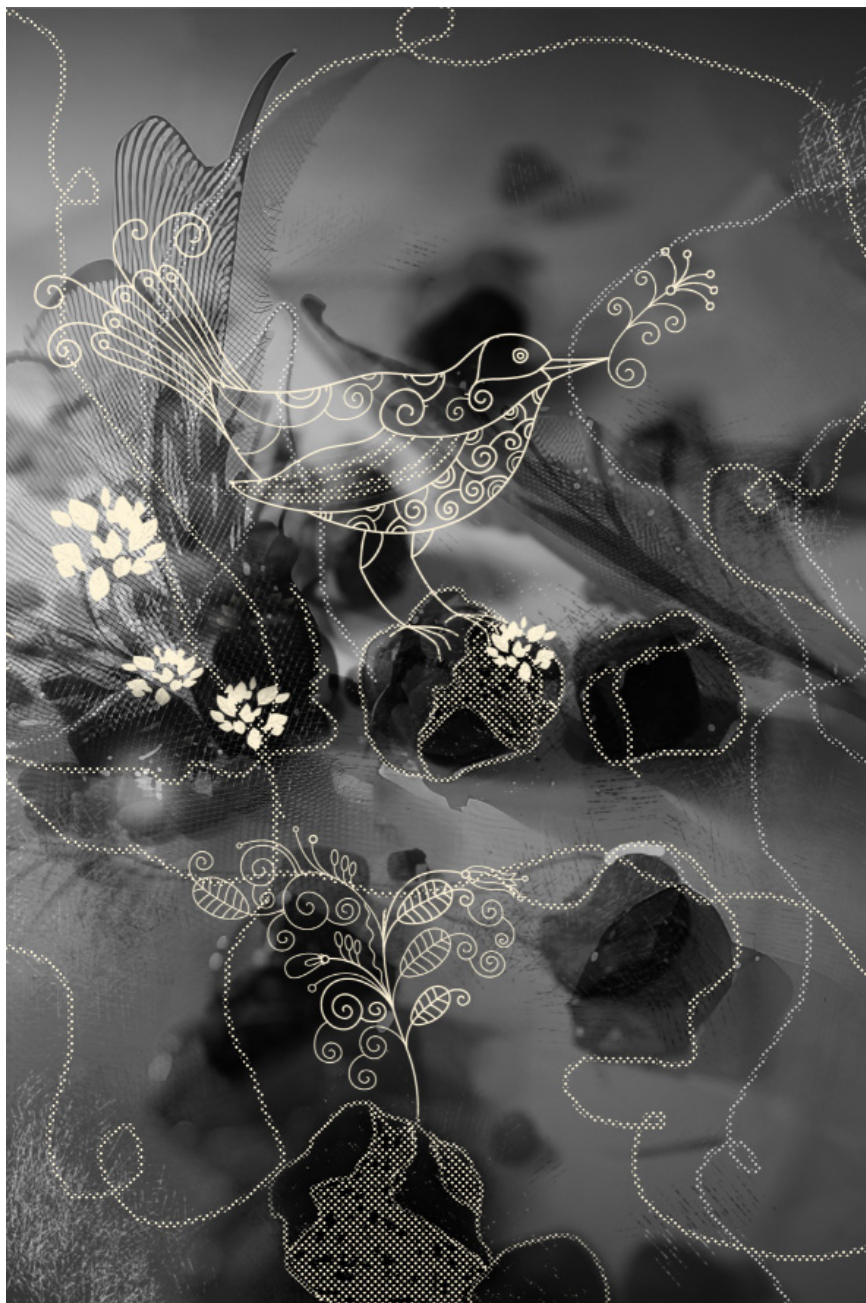
Creating Bird Habitats to Teach Humans to Cherish Nature and Peace

student: Vivian Zhang
advisor/s: Paul Kariouk

This thesis studies the relationship between bird habitats in the Chinese region of Shanghai through the lens of cultural memory with the hope of mutual benefit aiming to find ways that human activities as well as localized human histories can be combined with the reproduction of birds in their habitats.

This thesis focuses on several abandoned sites where as a result of the decommissioning of the sites, the natural ecology that was previously left in the area has improved; natural succession is taking place in these Shanghai “artificial” environments.

With proper design and management, can highly urbanized environments become no less attractive to wild birds than a park in an urban area or even a mountain forest in a rural environment? Can the conservation and management of urban abandoned sites become a benefit for conservation and biodiversity?



Photography of materials for the birds' nest model with drawing on it



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