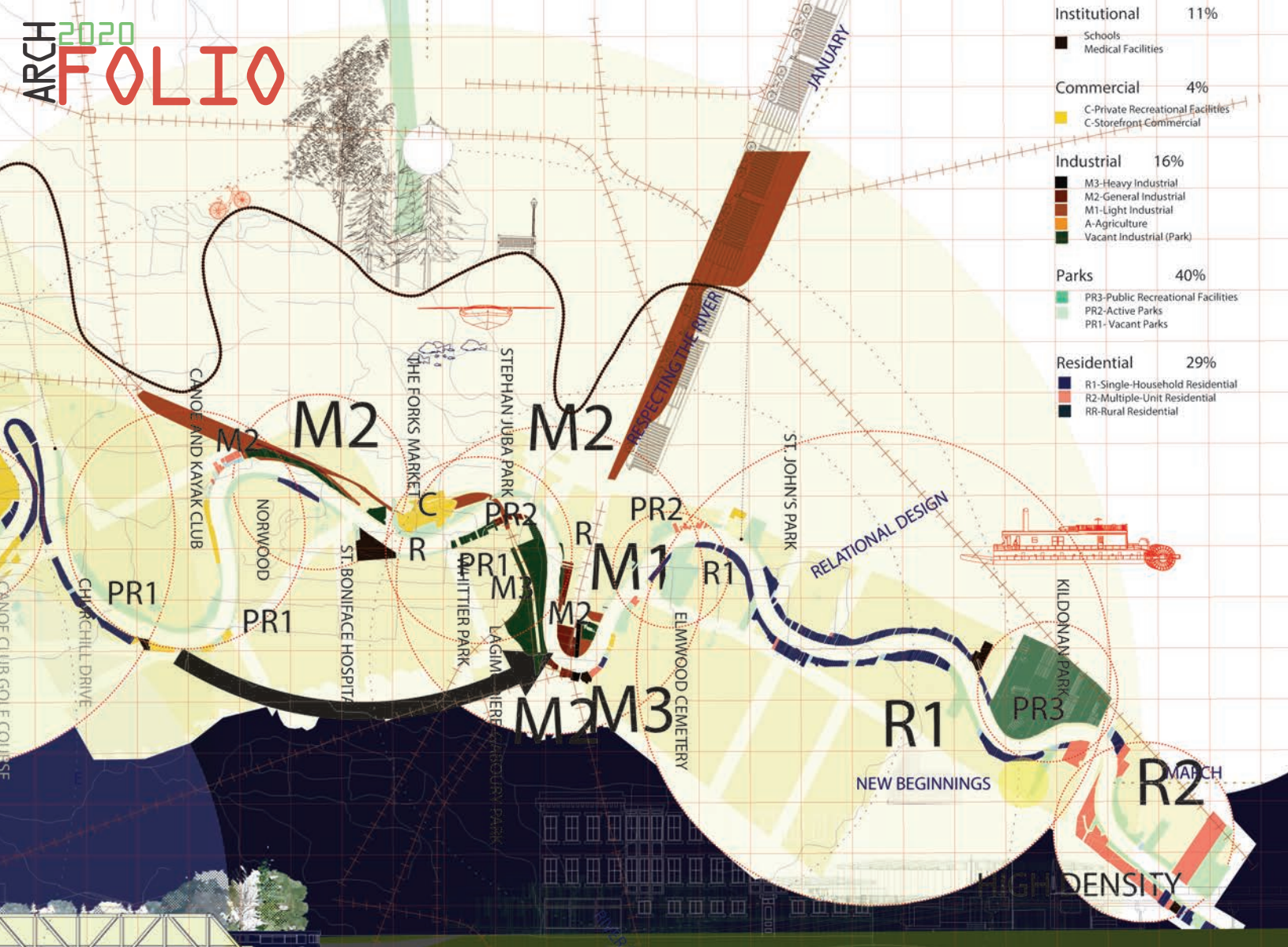


ARCH 2020 FOLIO



Institutional 11%

Schools
Medical Facilities

Commercial 4%

C-Private Recreational Facilities
C-Storefront Commercial

Industrial 16%

M3-Heavy Industrial
M2-General Industrial
M1-Light Industrial
A-Agriculture
Vacant Industrial (Park)

Parks 40%

PR3-Public Recreational Facilities
PR2-Active Parks
PR1-Vacant Parks

Residential 29%

R1-Single-Household Residential
R2-Multiple-Unit Residential
RR-Rural Residential



ARCH²⁰²⁰FOLIO

The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota and Dene peoples, and on the homeland of the Métis Nation.

We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of reconciliation and collaboration.

ArchFolio gathers a selection of student work from the Department of Architecture in the Faculty of Architecture at the University of Manitoba in Winnipeg, Canada. For more information about the program, please visit our website: <http://umanitoba.ca/architecture/departement-architecture>

UM | Faculty of Architecture

Images: (Above) Nation-to-Nation: A Conversation on Indigenous Principles, Perspectives and Practices in Shaping Canada's Architecture (Feb. 28, 2020). Smudge and song ceremony: Kind Hart Women Singers. Moderated by Reanna Merasty and Danielle Desjarlais, members of the Indigenous Design and Planning Student Association (IDPSA), with support from the Manitoba Association of Architects. This event was part of the Canadian Architecture Forums on Education (CAFÉ). Photos by M.Arch student Dylan Hewlett.

(Cover and background): Alix Lanyon-Taylor, *Fluid Boundaries: Relational Ecologies of Place on the Red River Corridor* (more details on p. 168). This design thesis earned the RAIC Foundation's Canada Green Building Council (CaGBC) Scholarship, which acknowledges outstanding contributions to sustainable research and design in Canadian schools of architecture.

For more student work from all levels and streams across the Faculty of Architecture, see the 2020 Year End Exhibition - Online: <https://www.yearendexhibition.com/>

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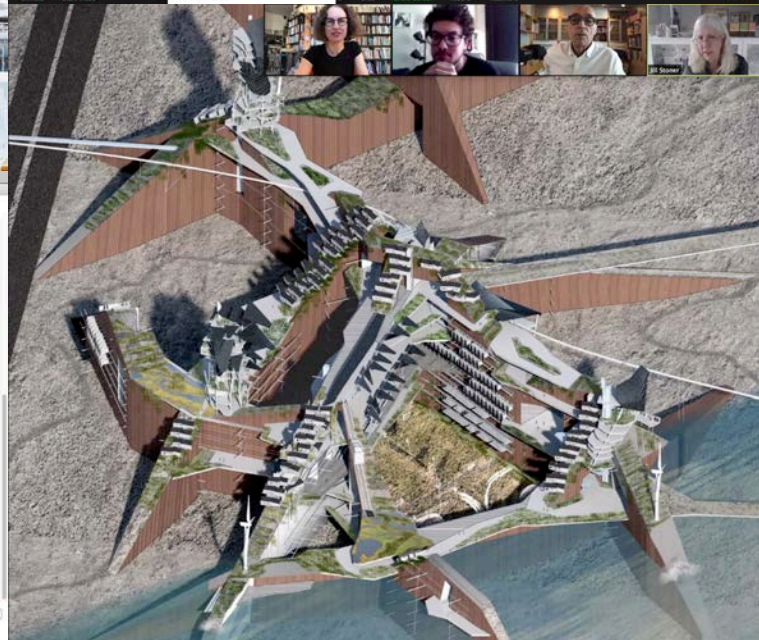
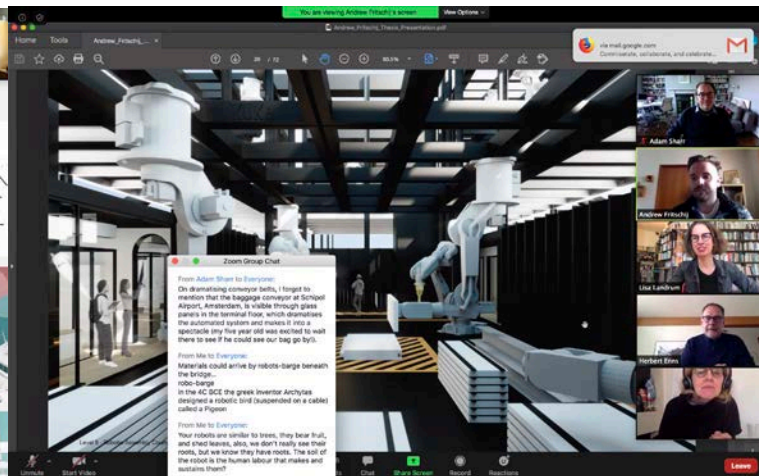
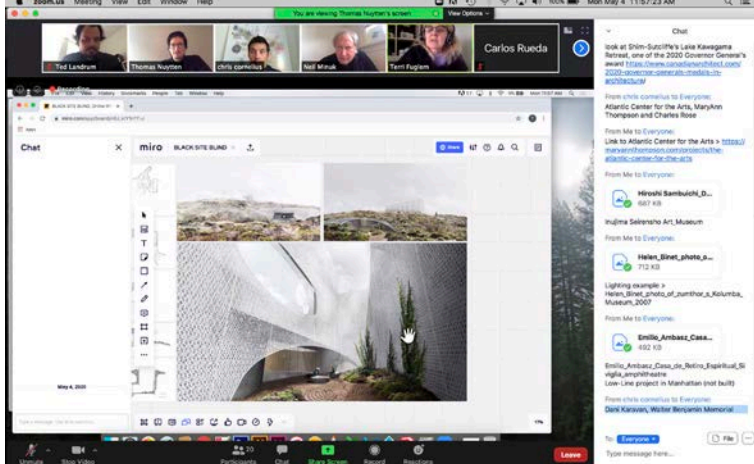
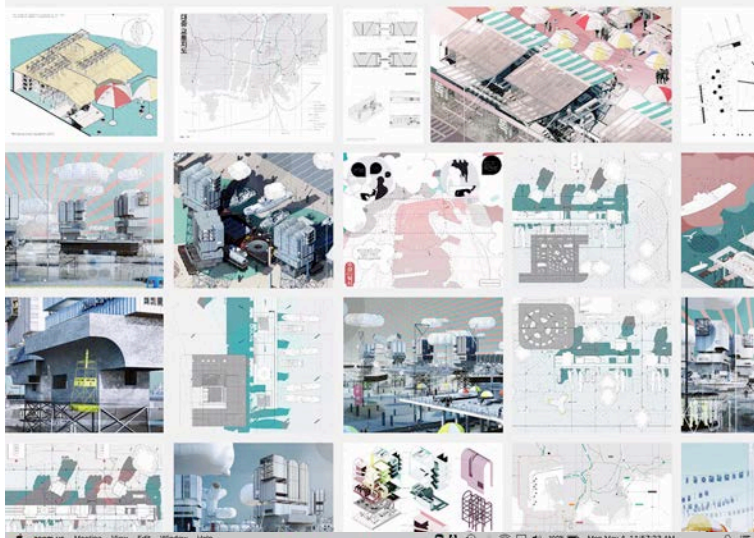
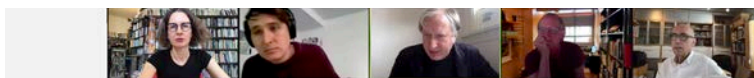
RED RIVER ZONING:

Institutional 11%

Schools
Medical Facilities

Commercial 4%

C-Private Recreational Facilities
C-Storefront Commercial



INTRODUCTION

Creative exuberance! Contextual responsiveness!
Adventurous experimentation! Mixed-media play!

These have long been hallmarks of our school. The sudden turn to remote learning in mid-March of 2020 thrust these adaptive capabilities into urgent action.

The global pandemic created enormous challenges - personal, cultural and technical - yet it also fostered some surprisingly enriching opportunities, such as involving guest critics from afar to participate in online presentations; interacting in serious discussions via poly-vocal multi-channel 'chats' and supportive emoji-mojo; opening reviews to alumni and family from around the globe; and fostering mutual empathy and support through uncanny shared experiences.

A notable new experience was online group reviews. These hyper-linked multi-media encounters were simultaneously familial, foreign & fantastical. Oblique glimpses of personal worlds and desktops were intertwined with professional and poetic displays of visionary architecture. As always, the outstanding work of students conjured a world renewed: more sustainable, equitable, inspiring and socially-engaged.

Congratulations to all the students, whose energetic grit and wit beamed brightly in spite of difficulties; and thanks to all the faculty, staff, family and friends whose encouragement and practical support helped us through.

Enjoy this collection of skillful work and student perspectives on an extraordinary year:

"The sudden requirement for isolation and the transition to remote learning for students was an unprecedented challenge in our architectural education and personal lives. Extending well beyond the scope of public health, the impact of the pandemic is revealing uncomfortable truths about fundamental social, economic and environmental inequities in Canada and the world. As city-builders, the challenges associated with COVID-19 provide the **opportunity to reflect and re-frame our priorities and approaches** to teaching, learning and practicing architecture to more effectively build an equitable future."

– Jessica Piper (M2 & UMAAS President 2019-2020)

"When the University of Manitoba transitioned to remote learning in March, it took us two businesses days to adapt... I am proud of the **resiliency**, aptitude, and strength of our students, faculty, and staff!"

– Bianca Dahlman (M1/incoming UMAAS co-President)

"How the year wrapped up has reinforced in me the need to adapt and be **creative in the midst of adversity**." – Alexander Bartmanovich (M1)

"Exploring **new possibilities**... This pandemic has made us look at things from an entirely different perspective." – Ritam Niyogi (M1)

"I was working on my final model as part of my thesis, getting the files ready for fabrication when

we received an email from the Dean stating studio doors were to be closed the next day, and so we were to work from home — no access to the FabLab or Work Shop, not to the library, or one-in-one meetings with our advisors. It was shocking, but this process has taught me a great deal about resiliency, which I think it is at the core of Architecture. Overall, these past few months have highlighted what matters most to us which (pre-COVID) was taken for granted or undervalued. The present health and economic crisis have allowed us to reconsider assumptions, but mostly, has been **an opportunity to re-imagine how we build cities**. It has definitely emphasized the power of the collective and provided a deep appreciation of our physical realm as many of us are sheltering in place.

We always talk about resiliency in school, and what this means as we question the power of resiliency in architecture. We have been put to test in our efforts to become more resilient as individuals, families, businesses and communities, but how do we translate this into our built environment? What does that look like? Would that mean more adaptable design systems, perhaps the use of local material resources? It has opened our eyes about how we think about land use as outdoor spaces are getting new attention. It affects how we select products and identify what is essential and determine (and learn) what is important. Maybe the pandemic is uncovering what has always been essential and we had become oblivious to and forgot."

– Jessica D'Toste (M2 & MAA Student Rep. 2018-20)



*...Architecture's paradoxically
immaterial conditions for its
material reality...*

- Studio Brief Excerpt

TOPO ILLOGICAL

In the opening lines of Gabriel Garcia Marques' novel *One Hundred Years of Solitude*, the world is quickly revealed through a magical realism not to be the immediate place we believe we know, but the place beneath that place. Marques lets the unseen and uncelebrated elements of the physical reality we sense come bubbling to the surface. It is a cyclical procession of surprising images and extraordinary occurrences building a picture that comes closer to the truth of how we experience the world around us rather than how it might conventionally be described.

With the goal of fostering such alternative modes of vision, the motive of this studio is to engage with the hidden and surprising qualities of unassuming and unseen matter. **Topo Illogical** seeks to see the constructed world more holistically, more deeply, and with the critical empathy that the craft and practice of architecture requires of us. To provoke such altered sight, the studio considers matter through a topological thinking of sorts.

Rather than engaging with topology in architecture as a drive towards tortured geometric computations in service of an aesthetic or imagined totality, **Topo Illogical** uses it as a model to examine material systems. This necessitates a retreat from the expected material palette informed by commercial supply chains that can obfuscate and pervert our understanding of matter's origin, value, and possibility for architectural experimentation or production. Following this systemic logic, rather than merely seeing "beam," we

"...He went from house to house dragging two metal ingots and everybody was amazed to see pots, pans, tongs, and braziers tumble down from their places and beams creak from the desperation of nails and screws trying to emerge, and even objects that had been lost for a long time appeared from where they had been searched for most and went dragging along in turbulent confusion behind Melquíades' magical irons. "Things have a life of their own," the gypsy proclaimed... "It's simply a matter of waking up their souls."

-Gabriel Garcia Marques, *One Hundred Years of Solitude*

ought to see "beam" as derivative of "wood" as derivative of "tree" as derivative of "forest" etc. Such considerations of architecture's paradoxically immaterial conditions of materiality might proffer topological thinking as a more systemic, interconnected, or haptic practice.

First term explorations ask students to examine, extract, process, tool, and finally, inhabit the material palette of their urban surroundings in Winnipeg. Through this process, the project of architectural study is shown not to be only the anticipated proposition for a future construction or the action inside the studio, but also incorporate the endeavors of obtaining, harvesting and crafting its subject. Within the second term, students engage remote sites selected on an excursion to Napflio, Greece and surrounding area. These locations serve as a site to test the concepts and processes unpacked through

research and provide the basis for an architectural proposition. Responding the Napflio's developing tourist hub and developing urban fabric, student propositions are constrained to smaller scale institutional architectures. In contrast to the previous semester's focus on conceptual disposition and poesies of material, these public architectures additionally engage questions of public space, civic presence, and historical aspects of context.

1-3: Kirsten Wallin - Tyndall stone tower (1); Acid excavated fossil elevation (2); Acid excavated fossil elevation plan (3) 4: Nichola Basford - Cattail reed tower
5-6: Michael Mandac - Charcoal tower (5); Shadow blister effect study (6) 7: Renz Marinas - Oxidized swarf tower (metal shavings) 8-9: Giordana Nocita - Gypsum tower (8); Gypsum excavation drawing (9)



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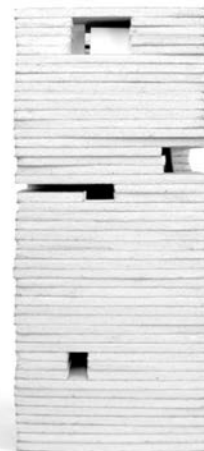
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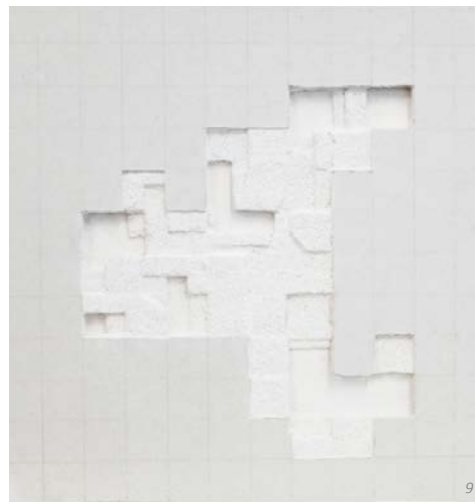
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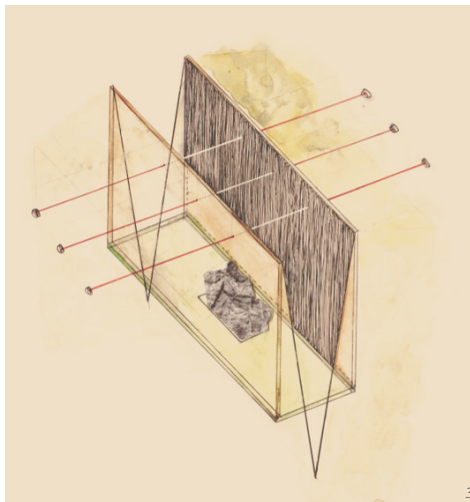


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1: Emma Onchulenko - Aluminum can tower section 2: Chelsea Colburn - Ceramic tile analytic tower sections 3: Lexi Brennan - Dust tower insertion sketch 4: Renz Marinas - Swarf tower camp section 5-6: Thai Cao Nguyen - Rope reinforced clay dome section (5); Rope reinforced clay pod section (6) 7: Jack Ziemanski - Embedded reflection pool and corridor plan



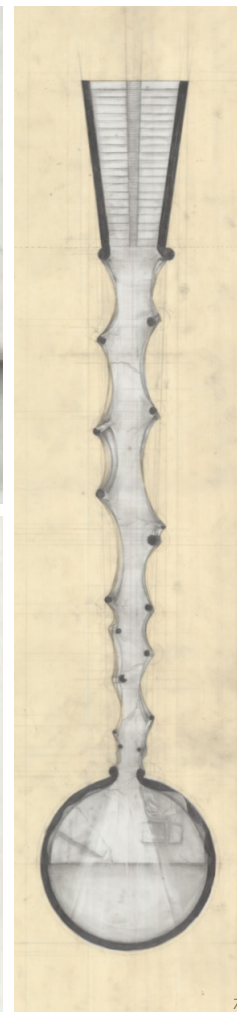
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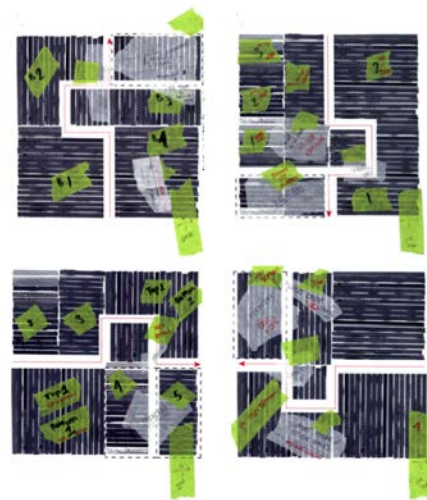
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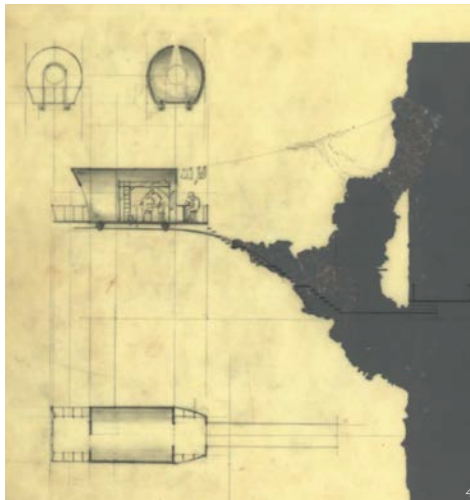
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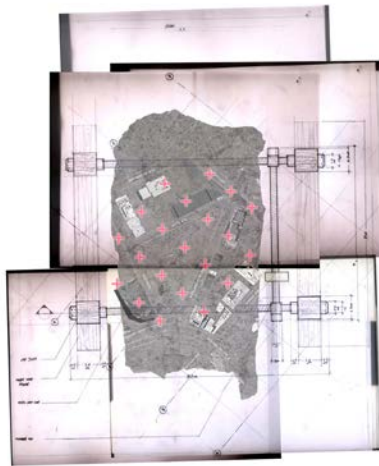
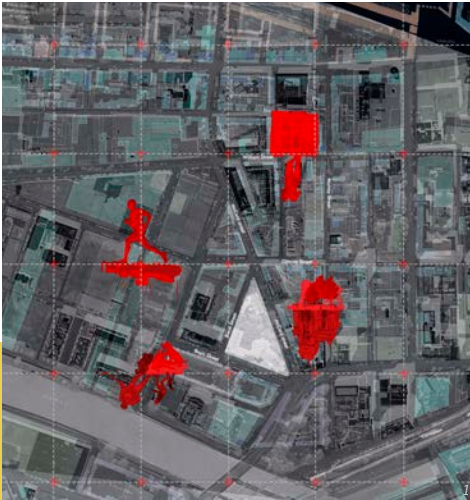
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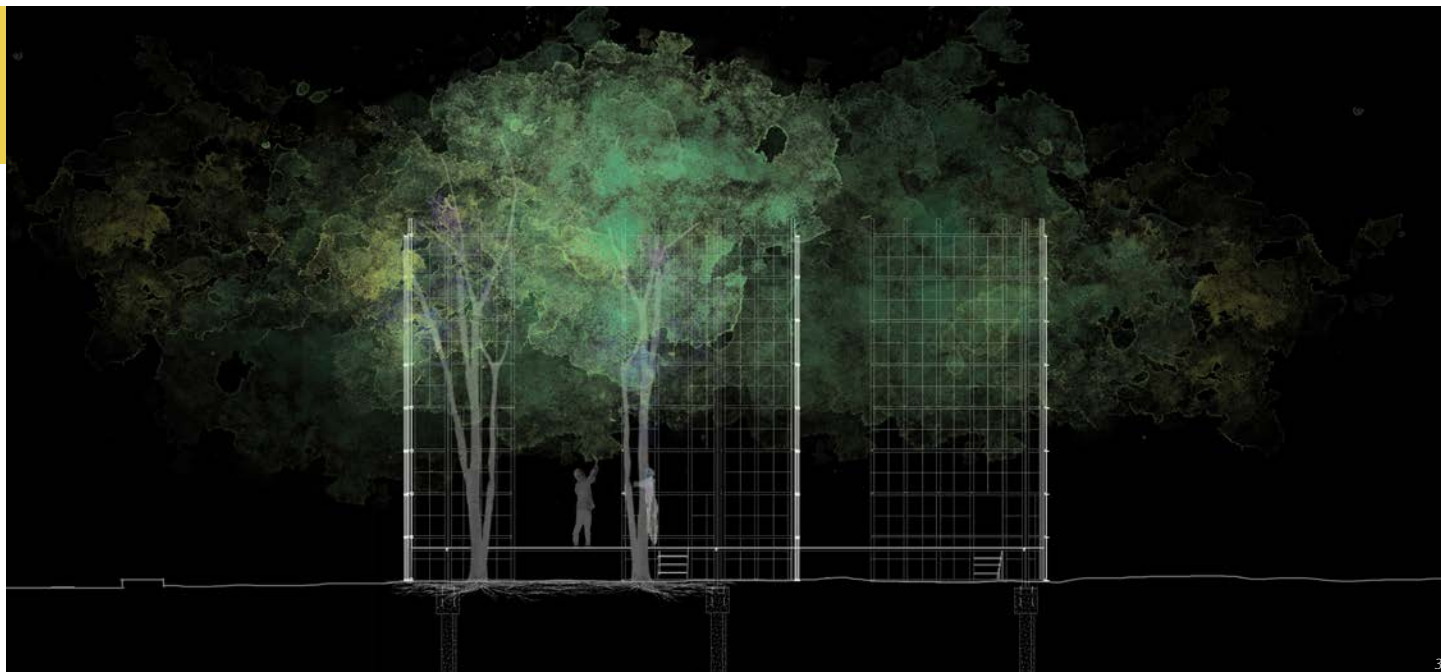
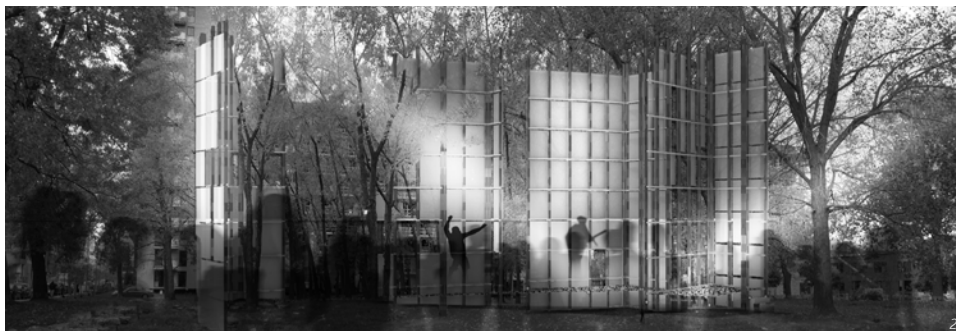
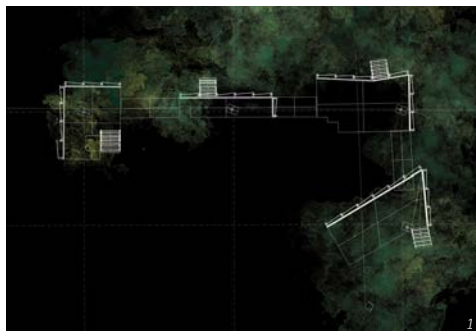
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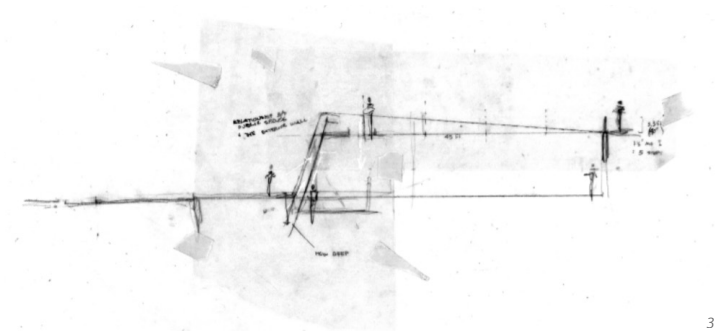


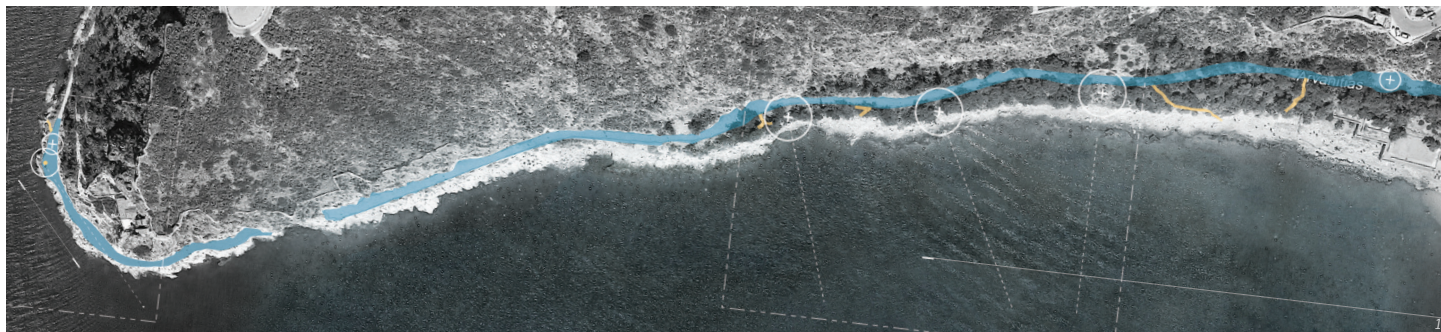
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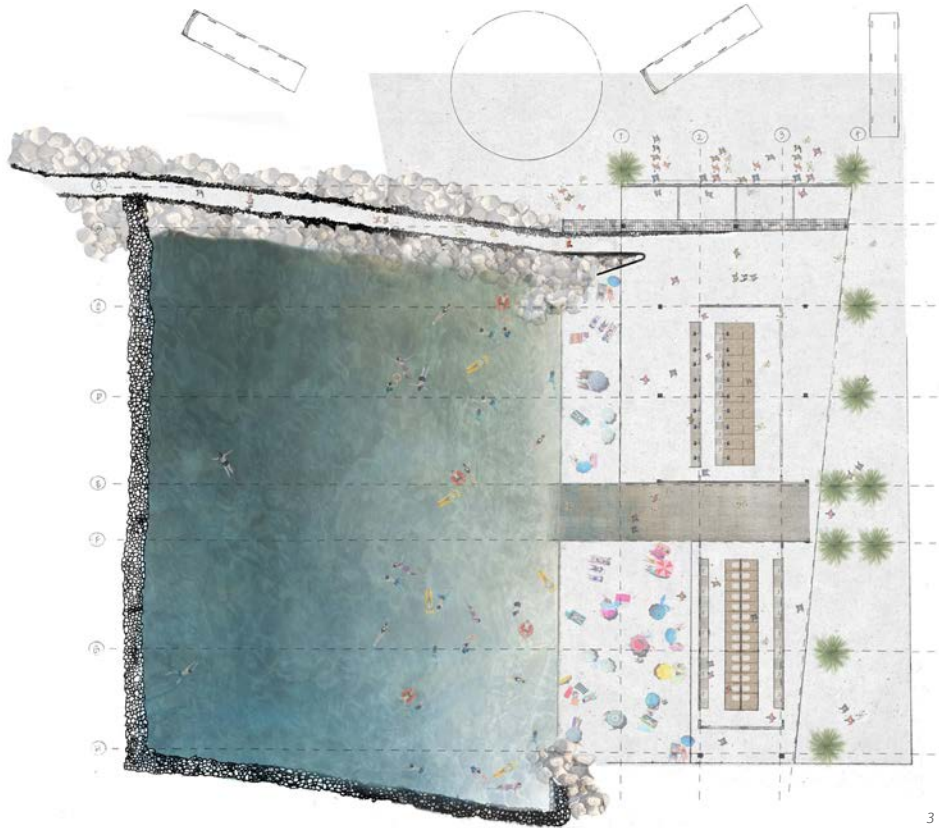




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Teresa Lyons - Photograph of the studio's group site model postulating Winnipeg's future



"It is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be. This, in turn, means that our statesmen, our businessmen, our every man must take on a science fictional way of thinking."

Asimov, Issac. "My Own View" 1978.

FUTURE;PAST

The motive of this studio was to focus on the anticipated impacts climate change and advancing technologies will have on our spatial, emotive and social behaviour. Starting with the exploration of the broad subject of “sustainable” design from an architectural perspective that is inventive, propositional and critical rather than reactive.

The studio was positioned within the context of the “longer now”, shifting the discourse of the project from a limited short-term way of thinking to a multi-generational time span; looking at our past(tense) before we can critically imagine the future(tense).

To augment their understanding of the subject(s), the students were tasked to research historical data, current trends and future forecasts on subjects such as; climate, food production, food security, land use and the development of emerging technologies.

Mid-way through the first term, the studio traveled to Clearwater, Manitoba to participate in an immersive field study split between two local organic farms. During this time, the students were taught first-hand about progressive practices such as regenerative farming and adaptive land management. Following this invaluable experience, the studio began to collectively understand first-hand how man’s relationship

This shift in understanding of the present(tense) in relation to the larger here and the longer now directly impacts our normative and often limited short-view way of thinking, charging us with a responsibility to consider the future(tense) in every decision we make. – excerpt from the brief

to “ground” and surrounding native ecologies can act as a critical counterweight to our advancing technologies and climate uncertainty.

This sentence was followed by a critical reflection of how architecture must re-position its “anthropocentric” approach and explore a subtractive rather than an additive methodological advancement

This exploration began at the macro-scale, collectively postulating on how the city of Winnipeg, 25 years into the future could be transformed in a post “ego-centric” era, confronting the predicted climate data, depleting land stewardship and biodiversity.

The studio culminated with a final comprehensive project, inviting students to critically respond to the cooperative

ideologies discussed throughout the term. Positioning their individual architectural propositions between the emotive and spatial timescales of both their chosen physical site and the fictional overlay of a prophesied future.

In attempt to unbind the studio discussions, a panel of professors and graduate researchers representing the University’s Faculty of Agriculture Food Systems Group were invited to collaborate with the studio through panel discussions and reviews throughout the term. Their expertise and knowledge of a wide range of subjects were critical to the diverse cross disciplinary dialogue that inspired the students and their studio final work

Studio Timescale:

01 Present(tense)

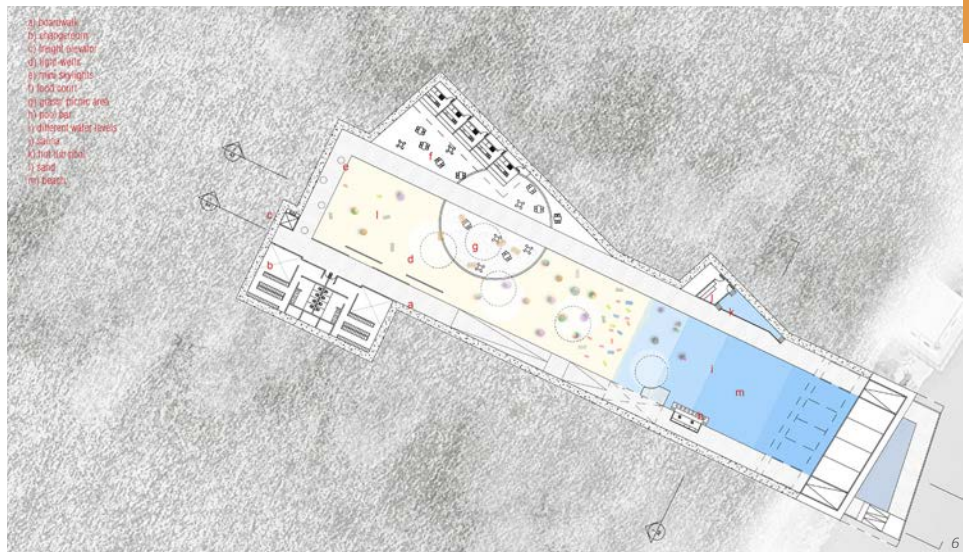
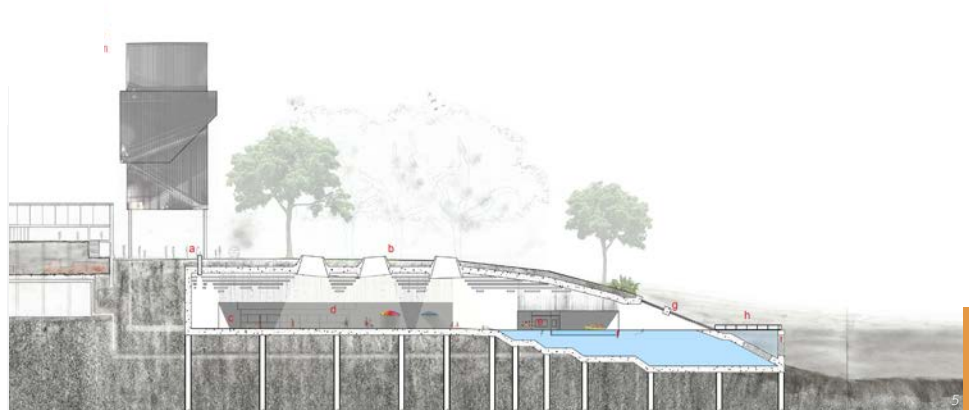
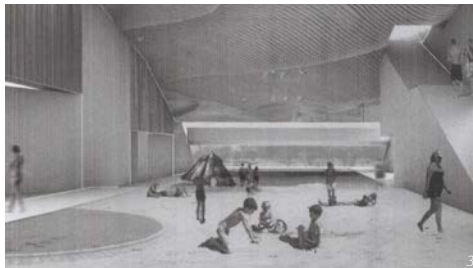
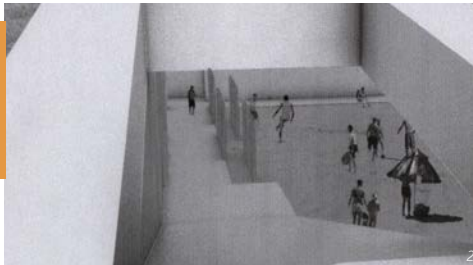
Situated in the present(tense), this project explored the concept of relational thinking and programmatic openers through a series of pre-spatial language prompts.

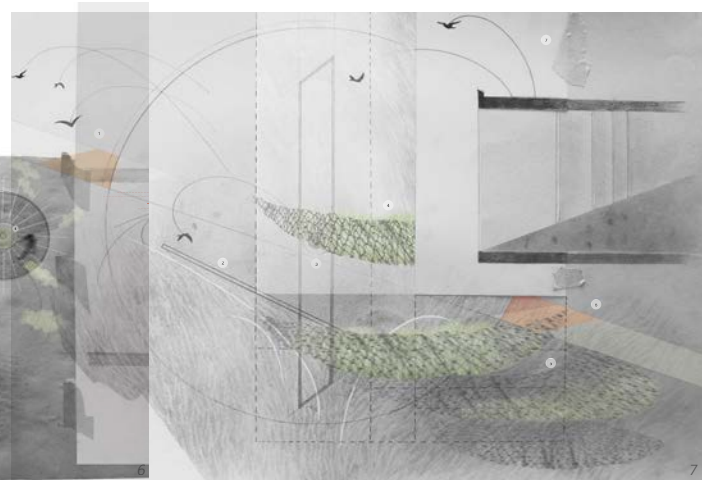
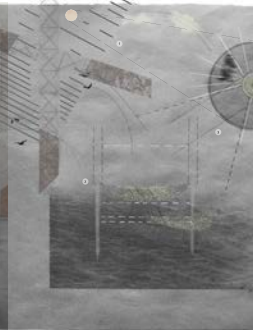
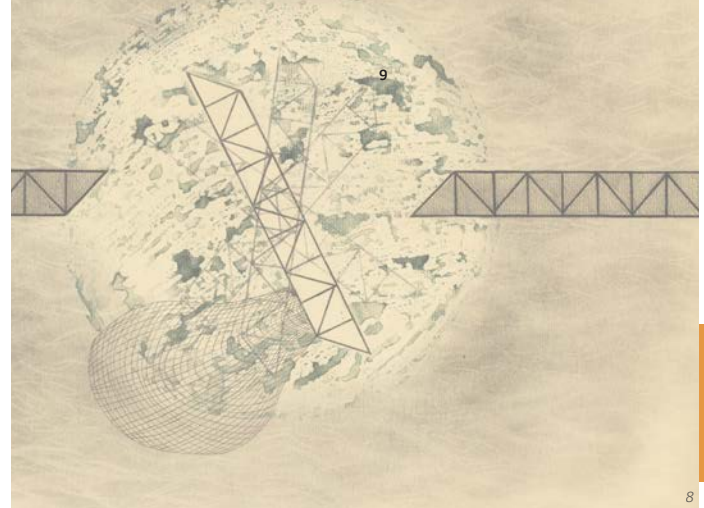
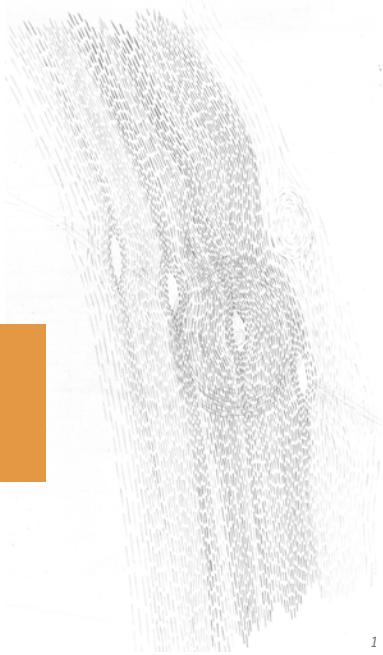
02 Past(tense)

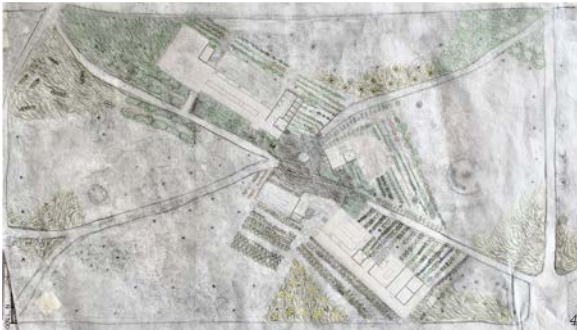
Field study + preparatory research
Clearwater, Manitoba

03 Future(tense)

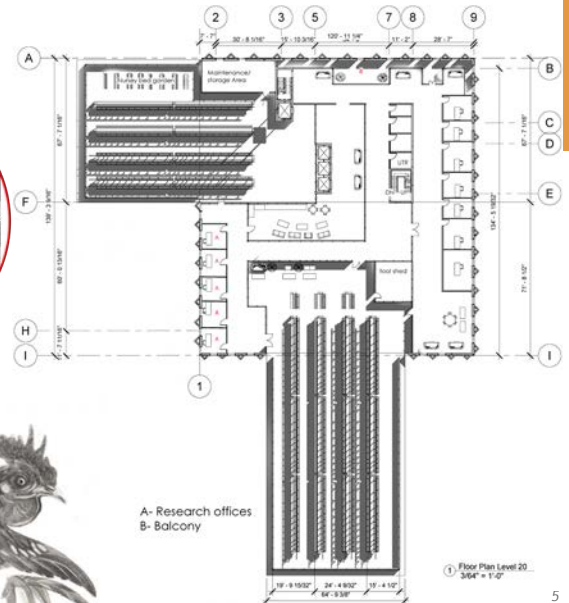
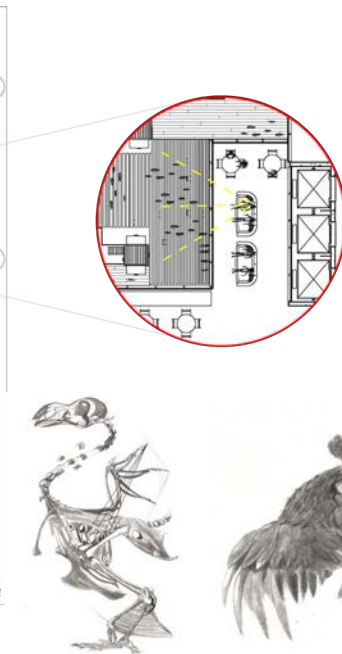
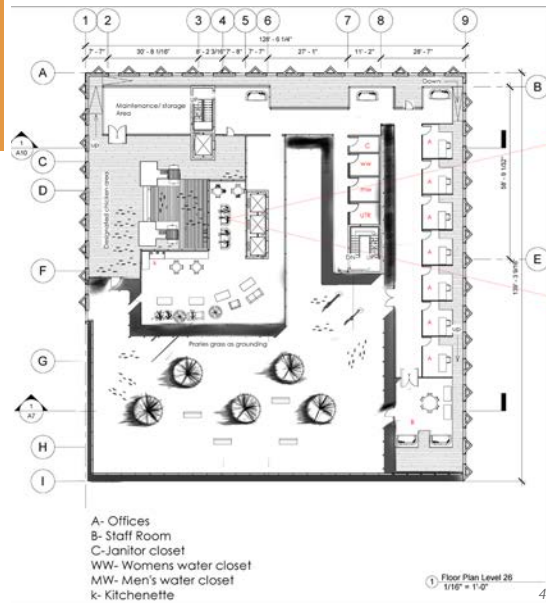
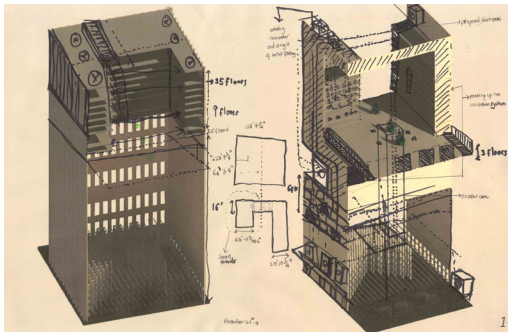
Situated 25+ years in the future, this final project invited propositions that critically responded to their preparatory research.



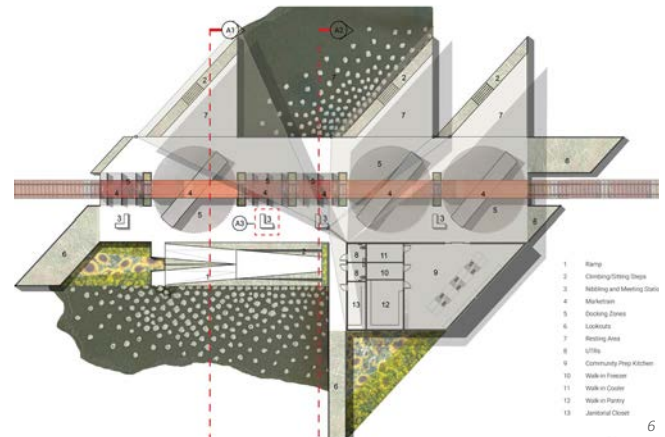
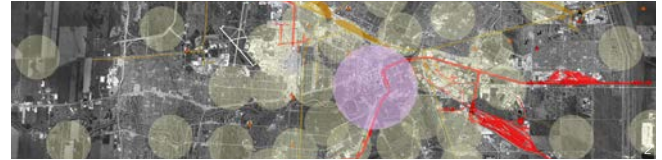




Benjamin Mujuni - "Decanting" the existing building (studies) (1); Model explorations (2); Perspective of garden canopy (3); Floor plan -offices, roof terrace + chicken "run" (4); Floor plan -offices + gardens (5); drawings exploring the physiology of a chicken (6)

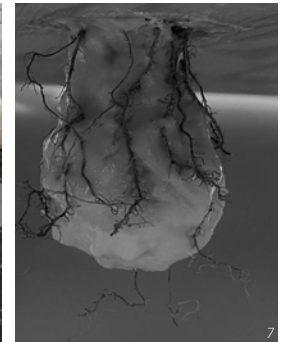
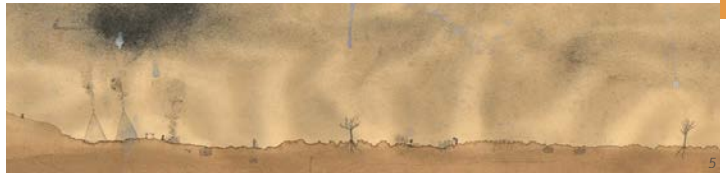
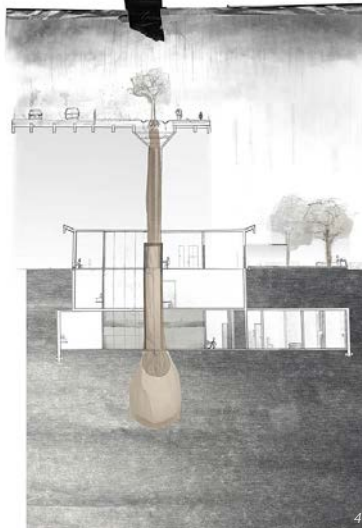
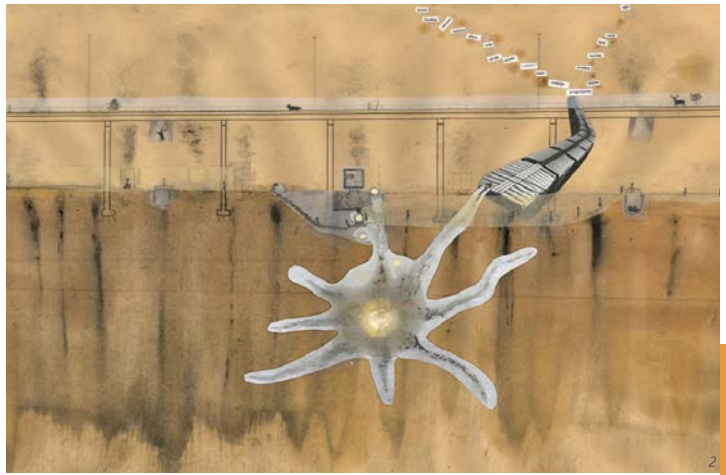
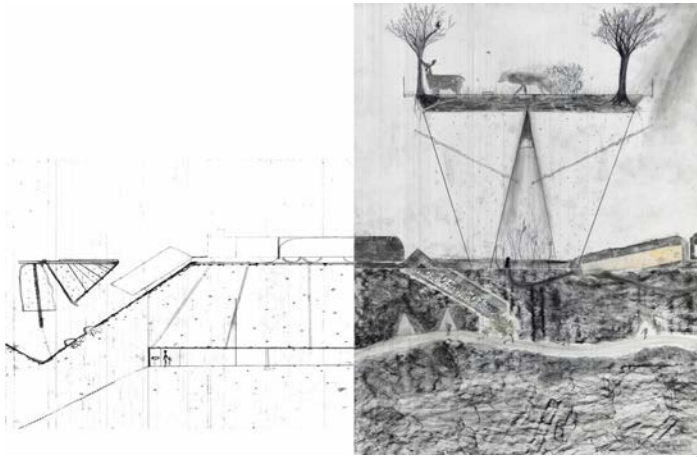


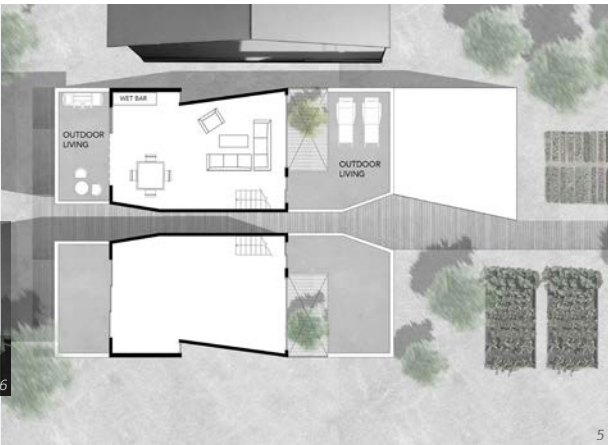
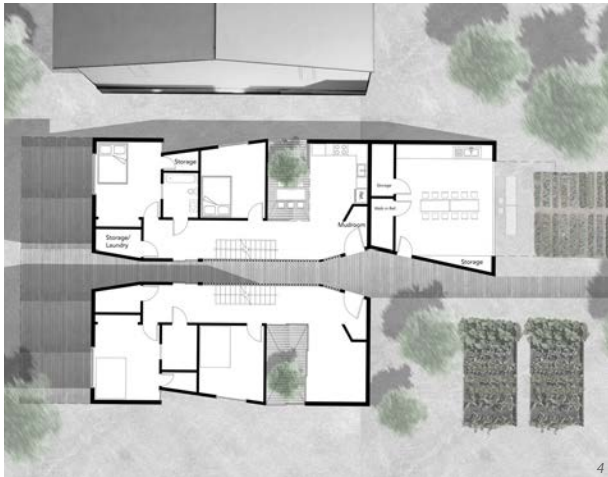
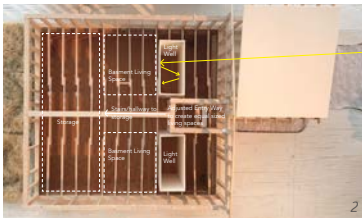
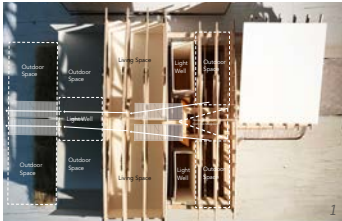
Stacey-Leigh Berrington - Material studies (1); Macro plan of "market train" lines (2); Section/elevation of "market train" station + remediation gardens (3); View of "rem" gardens (4); Site + remediation garden plan (5); Plan of 'market train' station (6)



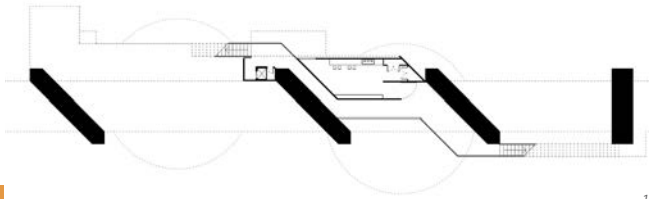


Hannah Thiessen - Exploring site + burying train cars to serve as seed vaults (1); Proposed site concept (2045+) (2); Collage exploration - retreating below ground (3); Bldg section - Isolation bunker + fermentation/food storage (4); Historical site section (5); Axonometric exploration (6); Material studies (7)

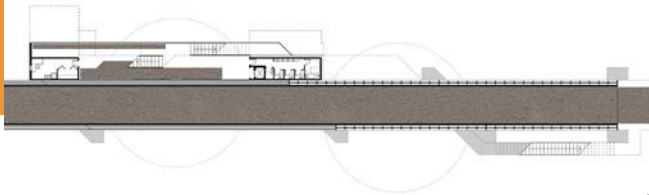




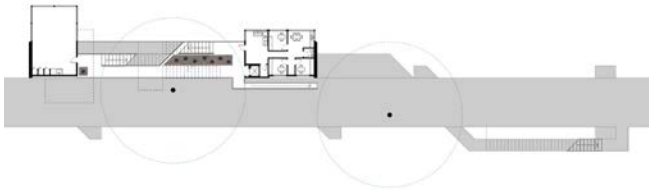
Stephen Meijer - 1st floor plan - seed storage + winter platform (1); 2nd floor plan - spring platform (2); 3rd floor plan - summer terrace (3); 4th floor plan - Autumn terrace + tree canopy platform (4); Elevation - Tree nursery/sanctuary + education centre (5); Section/elevation (6); Section/elevation (7)



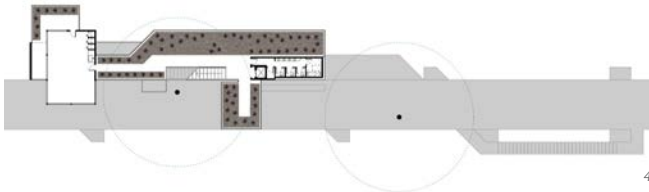
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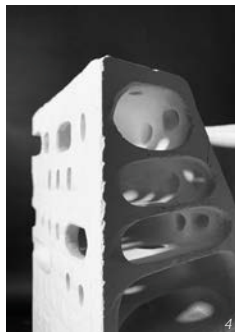
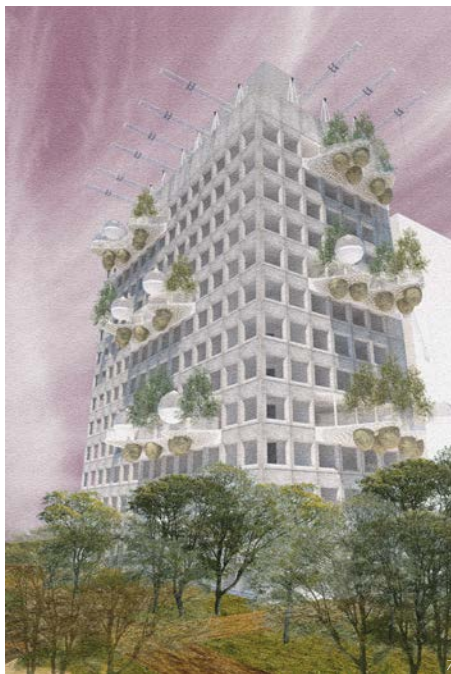
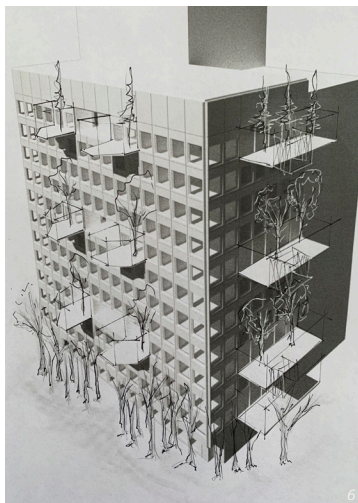
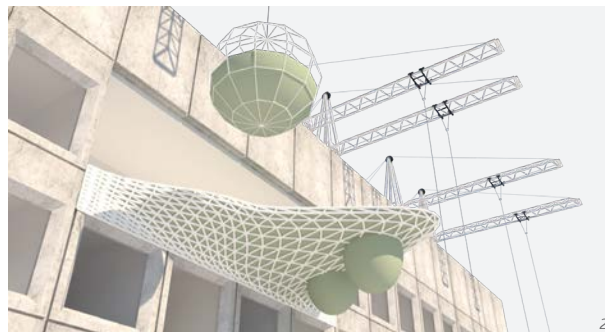
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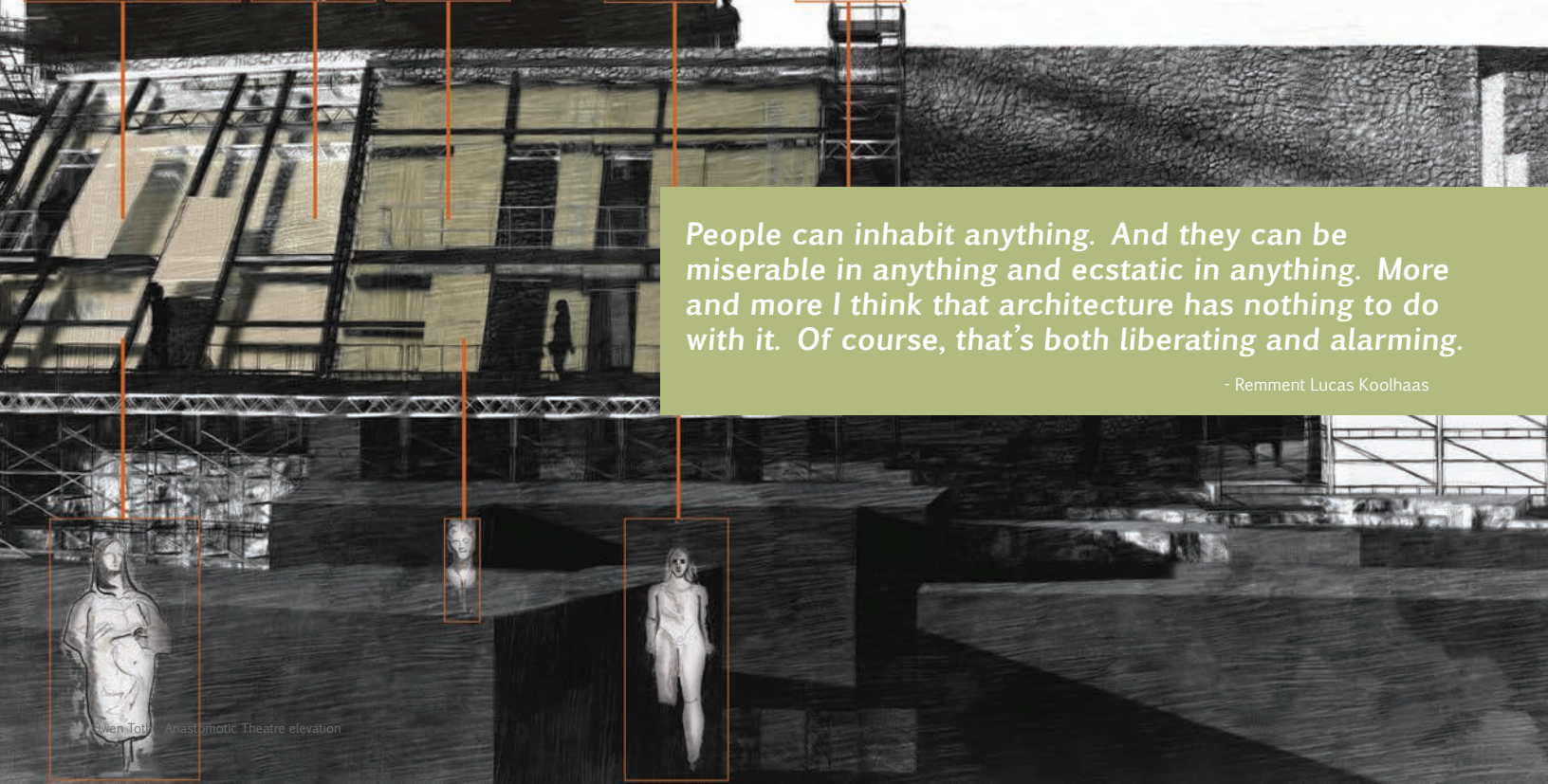


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People can inhabit anything. And they can be miserable in anything and ecstatic in anything. More and more I think that architecture has nothing to do with it. Of course, that's both liberating and alarming.

- Remment Lucas Koolhaas



Oliver Tobi / Anastomatic Theatre elevation

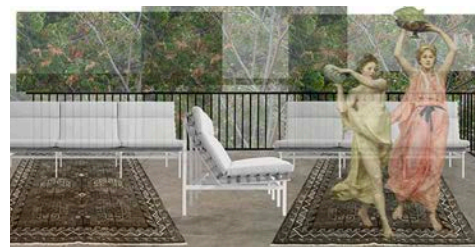
ELEMENTAL STUDIO

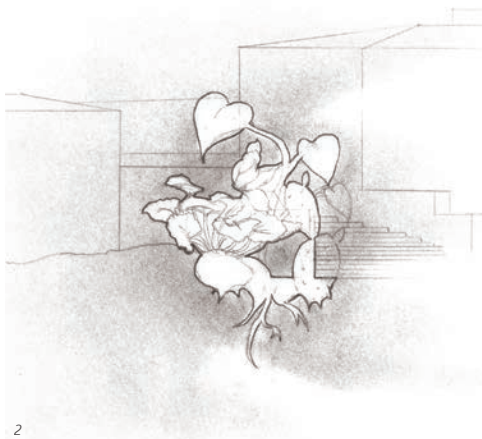
In a world where urban complexity and growth increases in an astonishing speed, what is the role of architecture in contributing to better our cities and improve urban life? The 80s and 90s witnessed a boom of architecture, with a new wave of sensationalism in the process, helping the status of architects rise to celebrity. While this dynamic promoted architecture as probably in never seen levels of exposures, it also contributed to the dismissal of environmental and social justice in the process. This cultural glitch produced a new consciousness inviting us to question the ethical role of architecture from the ground up.

There is a quietly growing crisis in the architectural culture at the beginning of this new century, the fact that architecture has been gradually losing the status of an artform, distancing itself from the imaginative tradition, increasingly assuming the role of a “service industry,” with no commitment to history, experimentation, invention, local culture, spatiality,

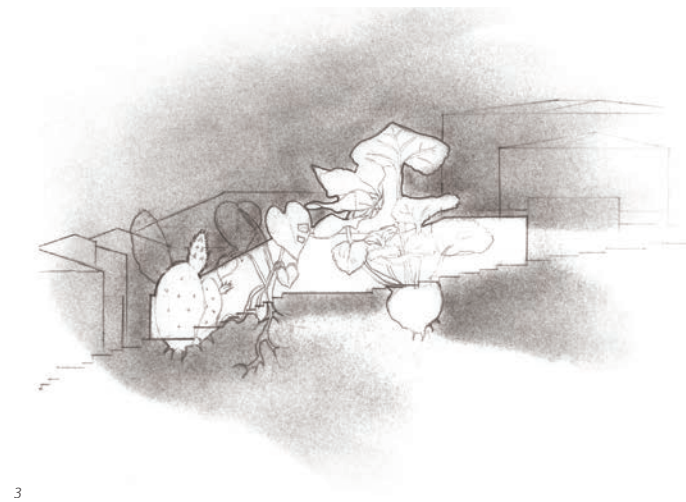
or even the original poetic mandate of architecture. This crisis directly affects architecture education as well, with higher and higher demands coming from the profession for more productive outcomes, which include technical and managerial skills, but rarely requests for improvement in critical, imaginative, or design skills. The forces of the capitalist apparatus overwhelm the aesthetic and spiritual role of architecture by investing almost exclusively and defiantly in an “object for profit”, reducing the value of architecture as an art. Due to the reduced availability of resources and human labour, the super-valorization of profit, the new code of environmental ethics, the exclusive power and control of developers, architecture has been gradually losing its connection to art and imagination, becoming more a commodity and a service object. However, the integral relationship between art & architecture has been for the past four decades experiencing a new renaissance as an attempt to recover architecture’s intrinsic quality as art. This new renaissance results in an individual’s or a collective’s pragmatic needs but also reclaims the unprecedented role of architecture as a poetic act, resulting from imagination, and reaching people’s spirit.

At the 14th Venice Architecture Biennale of 2014 (Fundamentals), Rem Koolhaas presented “Elements of Architecture”. Constipated as a sort of microscope at the fundamentals of our buildings the exhibition encouraged a debate about our building’s components used by any architect, anywhere, anytime, as the catalogue indicated. Whereas as any other encyclopedic collection, such an archive always stays fragmentary and turns at its best into a reference point for an ongoing speculation. Elemental Studio seeks to keep the givens of architecture’s fundamentals in its elemental condition by reducing its complexities to open up the possibility for foundation design students to concentrate in simpler programs, smaller scales, more essential urban connections, focused on materiality and tectonics. The intention is to counteract on the dismissive position of “architecture as service” to propose the overall rethinking of architecture’s role in society. We have proposed in this context two sites: one in Montreal’s Griffintown/ Little Burgundy, and another in Nafplio, in Greece. While the students had the freedom to identify their own programs, all the projects developed inherently clear public vocations for their respective urban contexts.





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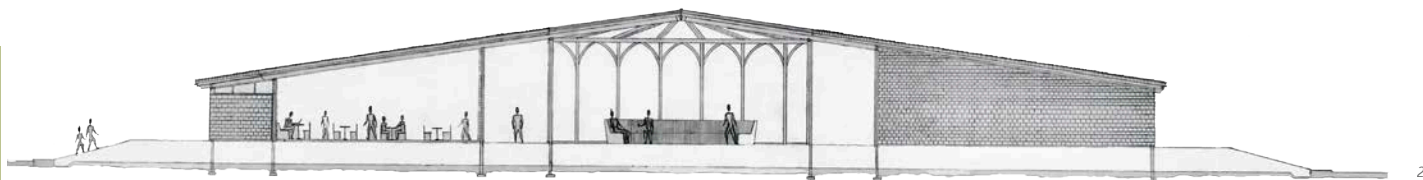
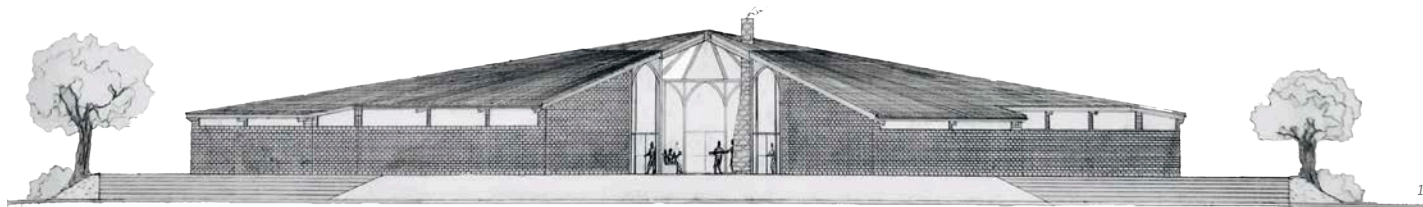


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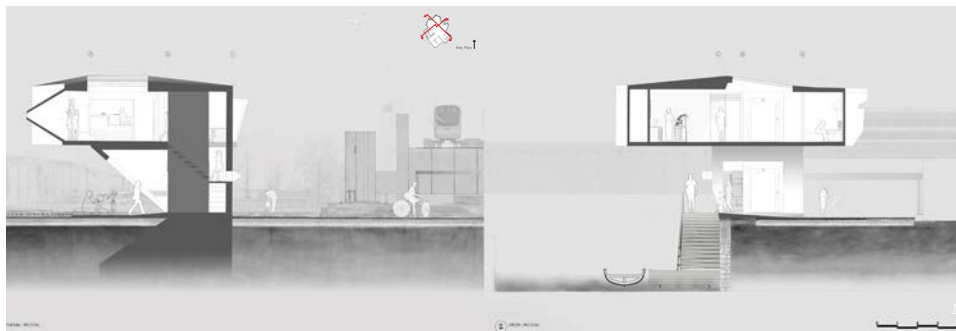
Materials chosen include olive wood, limewash plaster, terracotta, and stone

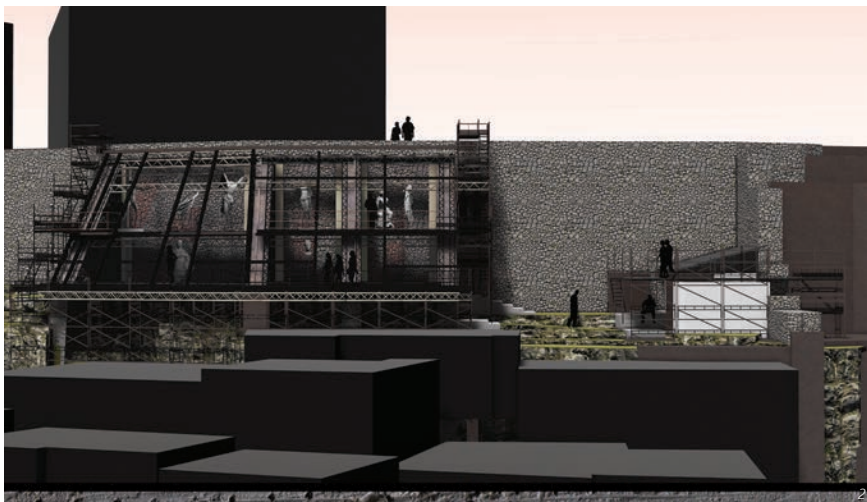
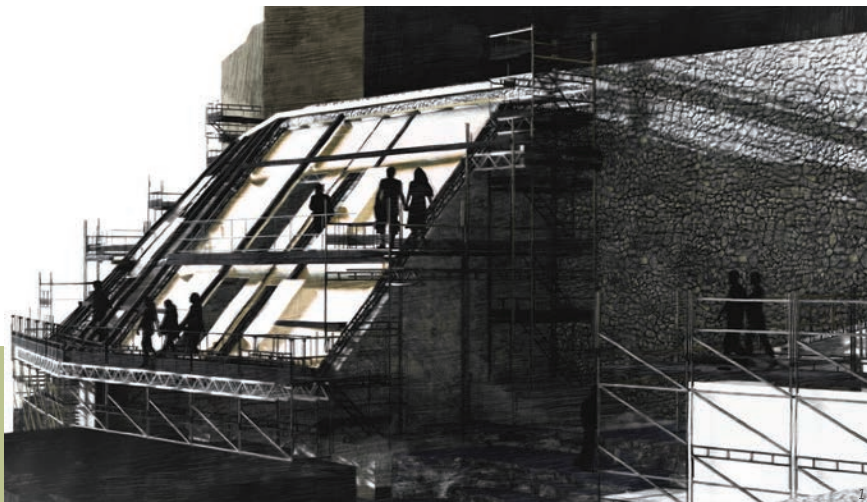
Each space intends to emphasize the outdoors through large openings and lush vegetation.





Kenyo Musa - Section (1); Site view (2); Interior view (3); Site view (4)





STUDENTS: Danna Ambrosio, Eduardo Aquino, Shawn Bailey, Johanna Rae Besiata, Romilie Calotes, Cassidy Cantafio, Caelan Chornoboy, Danielle Desjardais, Caitlin Ferris, Nurielle Gregorio, Neil Haque, Hanna Henriksson-Rebizant, Jami Holden, Ali Impey, Nick Krahn, Joreline Laririt, Rylan Lucyk, Kenyo Musa, Ashley Polet, Jae Riviera, Shawn Bailey, Owen Toth, and Kendra Wile



KIN HUTS

History of fishing in Lake of the Woods dates back thousands of years, and the intimate connection between nature and people remains strong. The goal of designing two ice fishing huts was to create a conversation between architecture and nature, winter and summer, and each other. For the Fall term 2019, the ED3/AMP and ED4 studios collaborated in a design-build project of two matching ice fishing shacks commissioned by Lake of the Woods Brewing Company, located in Kenora, Ontario. Led by professors Shawn Bailey, Shawn Sinclair, and Eduardo Aquino, the Kin Huts—as they were named—are a sister pair of ice fishing shacks, each equipped with a room for fishing and sleeping, with fire-burning stoves and storage, in addition to beer serving stations. Created to expand a social space for the community of Kenora, the huts were designed to receive groups of guests, helping to promote the social and cultural activism of the company through the long-running tradition of ice fishing. With adjustable windows, the huts can also function as mini cabins for summer rentals. Clients Taras Manzie and Denise Lysak envisioned the huts to reflect the company's social and environmental mandate by maximizing the adaptability of the spaces, as well as using sustainable materials in its construction. Their slogan, "Make it lake time," was reflected in the

overall aesthetic of the huts as they created several opportunities for different space arrangements.

During Kenora's sleepy winter months, ice fishing brings the city to life. People come together ice fishing atop the frozen landscape, spending hours socializing and drinking beer. Just south of the border, an ice fishing competition attracts thousands of visitors, with more participants every year. The region has struggled to bring tourists in winter months, but a new era of ice fishing and other winter sports is on the rise, supporting the local economy. The company cares about the environment, and as good stewards, they are constantly striving for a healthier, greener planet Earth. As such, the huts were built with repurposed plywood, insulation, and wood studs to minimize the environmental footprint it created.


The architectural design of the huts was a result of a process that sought the integration of the structures into the frozen landscape of the lake. With simple geometrical lines but a complex composition for the openings, the ice fishing shacks' design intended to adapt to the landscape conditions by incorporating the natural light, and by providing an efficient mobile system through the Teflon-clad skids. The Kin Huts became mirrored images of each other, with only two identifiable variances: one hut

was clad with clear treated cedar while the other with burnt cedar, through the Japanese technique of Shou Sugi Ban. Each cedar plank was burned, then treated with linseed oil to encase the charcoal. Simple but high-quality wood finishes created a warm and inviting atmosphere. In the interiors each bench folds open into a 3-foot wide bed, with storage beneath that's accessible from the inside and the outside. Each hut was equipped with a locally fabricated wood-burning stove to provide heat. Long, narrow windows were designed to give seated fishers a panoramic view of the landscape, while the fluted polycarbonate skylight channeled bright light into the space.

The desire for togetherness and access to nature runs deep in the culture of Kenora. While almost all tourists visit during the summer, locals invite visitors to see the city as a year-round destination for outdoor activities. With snowmobiling, ice fishing, and other winter sports becoming more popular in the region, the Kin Huts animate the sociability during the quieter months, helping to foster a sense of community and "lake time" feel year-round.

In collaboration with ED4 Architecture studio *The Gift is in the Making* (Professors Shawn Bailey & Shawn Sinclair)





*I'm junk but I'm still holding up
This little wild bouquet*

- Leonard Cohen, "Democracy," 1992

"THE GIFT"

EXPLORATIONS OF RECIPROCITY & RITUAL IN ARCHITECTURE

This studio set out to examine the notion of "the gift" and the architectural implications of reciprocity and ritual in both personal and communal aspects, and as both ordinary and extraordinary events. The first term focused on notions of craft as a form of reciprocity in the making of a series of small, architectural objects in the wood shop. The second term explored more symbolic rituals that mark the major passages of life in the community.

TERM ONE

The term began with a set of short exercises will investigate various notions of CRAFT through joinery, connection and juxtaposition. Projects investigated this notion using photography, explorative collage, drawing, modelling and object-building as an introduction to ideas of simultaneity, temporality, ambiguity and relational or liminal form.

After a careful study of the personal rituals that surround the activity of reading, the term project entailed the fabrication of a small dwelling for a precious book on a site as a gift. Students carefully

The artist appeals to that part of our being ... which is a gift and not an acquisition – and, therefore, more permanently enduring.

- Joseph Conrad

selected a book, and interpreted the world of the through drawing. They then selected public site and proceed to design and build a physical "house" for the book that mediated both the world of the book and its new context. Each "house" was to offer the book for public use while at the protecting it from the elements and vandalism. The students learned wood joinery in the shop by first completing a prototype and then a final version out of hardwood.

TERM TWO

The second project of the term continued the theme of "the gift" in the design of a Pavilion for a Book Exchange on a prominent site in Montreal, building upon the "dwelling for a book" project undertaken in the first term.

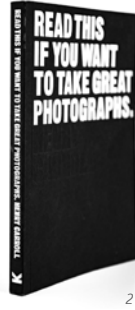
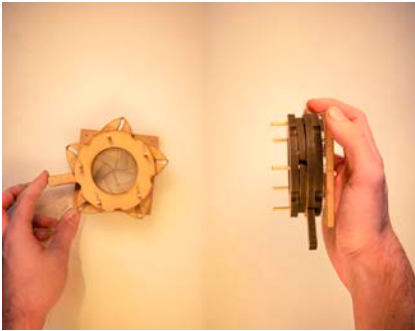
The Pavilion will provide a non-profit, public venue for people to exchange physical books and spoken ideas. It is to be a place to exchange dialogue, hear lectures,

foment ideas, set courses of action and inspire agitation. The Pavilion is to offer a place for communality amid diversity, and to promote free speech, civility and polity. It will be – as per Leonard Cohen's song, one of "the holy places where the races meet."

The site for the Pavilion is a clearing on the northwest corner of Parc Mont-Royal in Montréal on Park Avenue near the corner of Côte-Sainte-Catherine and Mont-Royal O. Adjacent monuments include the iconic angel (a memorial to Québec politician George-Étienne Cartier [1814-1873] dedicated in 1919) to the east, site of the weekly "Tam-Tams" gatherings in summer months, and further east, the bandshell memorializing the great Montreal writer, Mordecai Richler. Notably, the angel was the site of a recent march – one million strong -- for the environment lead by Greta Thunberg. As a way of the balancing the site, the proposed Book Exchange Pavilion will honour the memory of the poet and musician Leonard Cohen, known for his generosity to homeless poets, who lived and worked in this area of Montreal.

POSTSCRIPT: Due to the COVID-19 pandemic the University went into lock down on March 13th Studios were closed for the critical month before final reviews. Most of drawings for the Book Exchange Pavilion were completed with whatever software and equipment students could muster at home, and all instruction and reviews were conducted online or by phone.

Maximilian Eschuk - House for a Book: Aperture Prototype (1); Book on Photography (2); Cardboard Model (3); Wood Joint (4); Collage/Montage of Reading Ritual (5); Flour sifter photos & drawings (6); Collage/Montage of the World inside a Lens (7); the House for a Book in its Site in the old Gravel Quarry in Silver Springs Park, East St. Paul, Manitoba (8)



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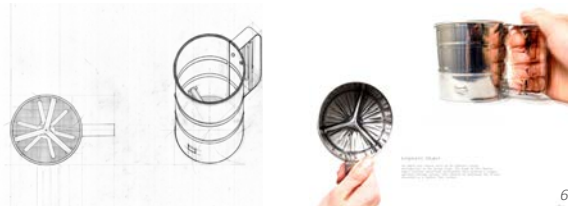
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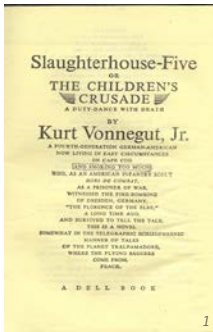
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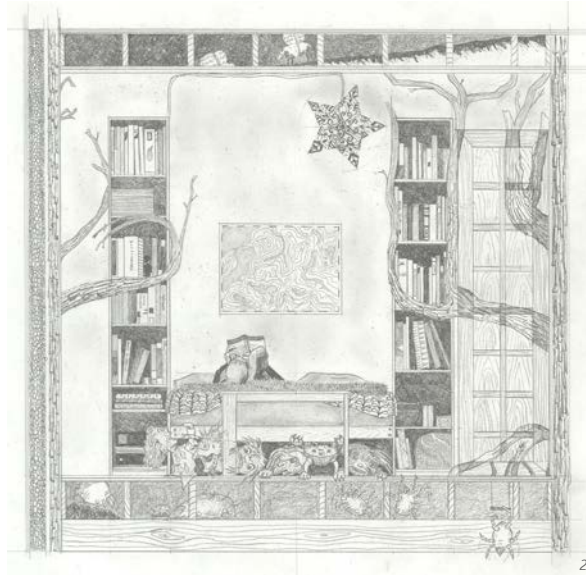
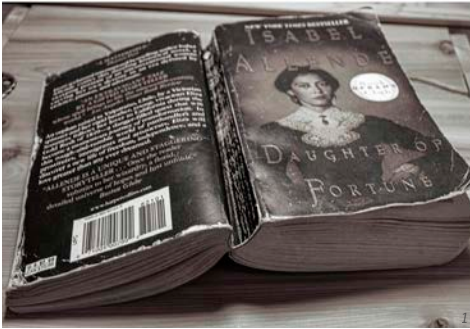
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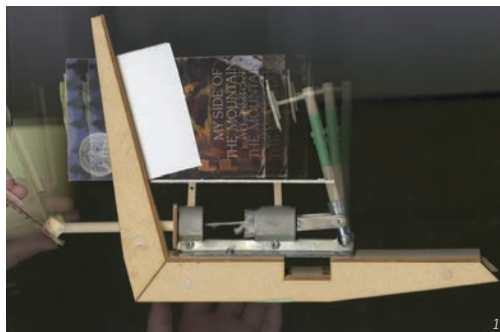


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Benita Klierer - House for a Book: Daughter of Fortune Cover (1); Drawing of Reading Ritual (2); Final House for the Book (3); Site at BNSF Rail Bridge over the Assiniboine River, Winnipeg (4); Photos of the Fabrication of the House for a Book (5-8)



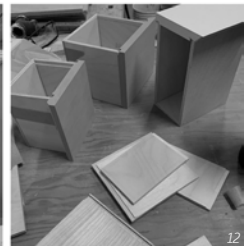
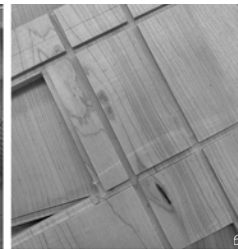




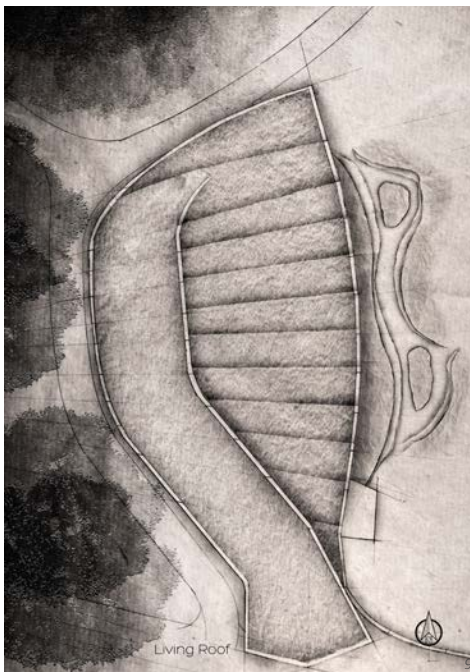
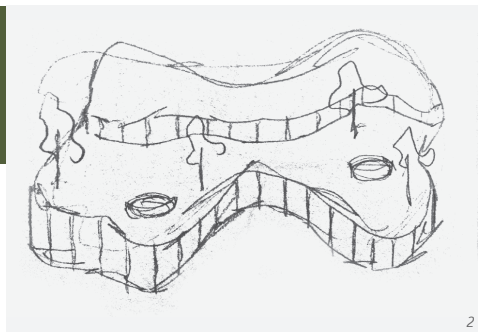
DRAWER CONTENTS

INSIDE THE DRAWERS, A "CHARACTER" FROM ONE OF THE STORIES WILL BE PLACED. OPENING THE DRAWERS WILL REVEAL THIS HINT AS TO THE CONTENTS OF THE BOOK ITSELF.

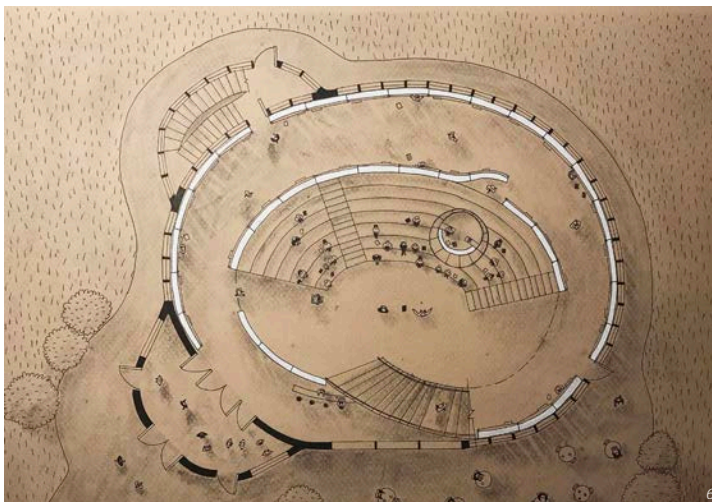
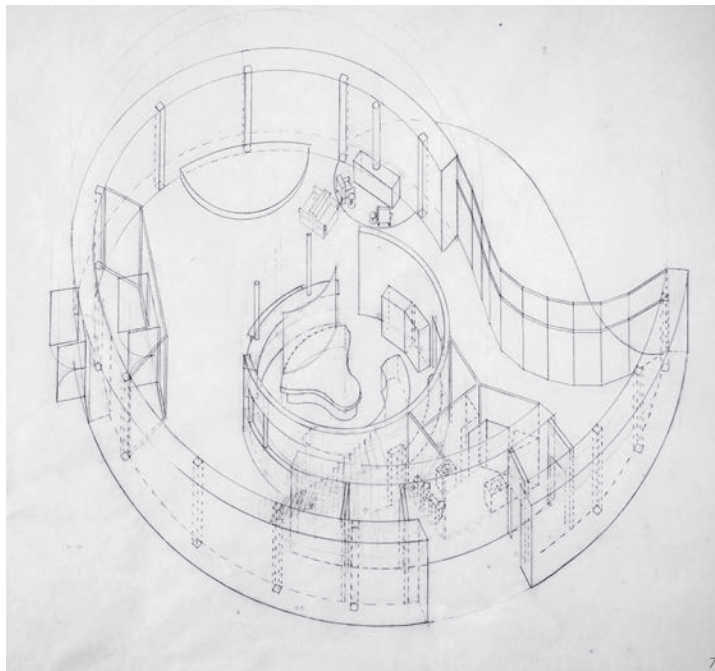
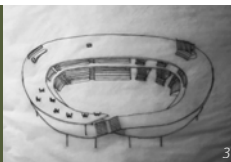
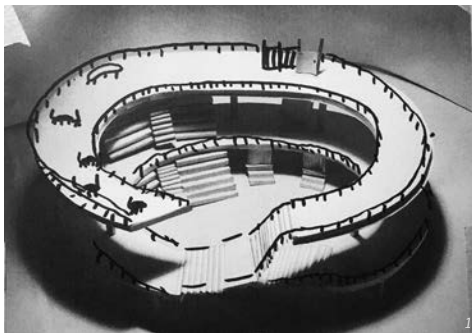
The little red hen lived next to the road by the farmer's house.

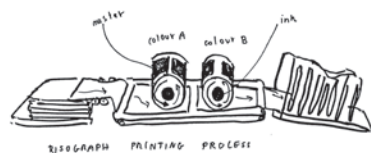


1-3: Rochell Castillo - Book Exchange Pavilion "Garage": Axo on Sketch of Site (1); Sketch of Pavilion (2); Collage of Repair Shop (3);
 4-9: Maximilian Eschuk - Book Exchange Pavilion and Cafe: Coffee Roaster (4-5); interior of Pavilion (6-7); Green Roof, Axo (8); Green Roof, Plan (9)



1-6: Kate Sherrin - Book Exchange Pavilion & Theatre/Confessional: Sketch Models (1-2); Sketches (3-5); Ground Floor Plan (6);
 7-8: Benita Klierer - Book Exchange Pavilion & Community Centre: Axonometric of Kitchen & Gathering Areas (7); Building Section (8)





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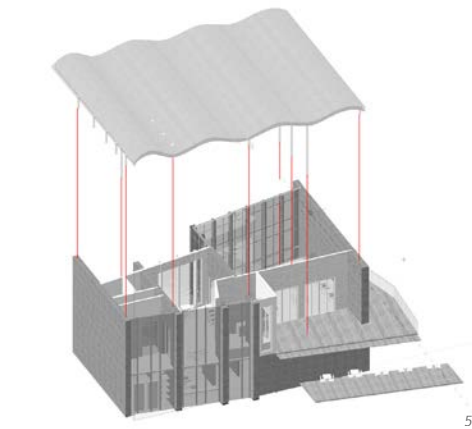
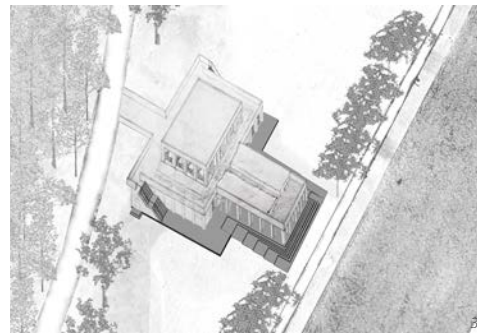
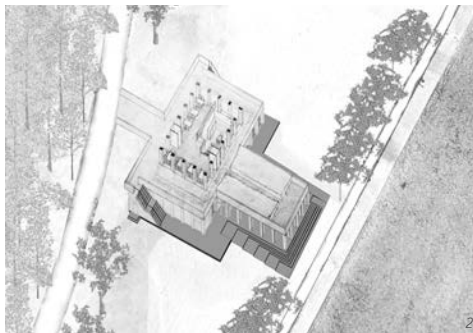


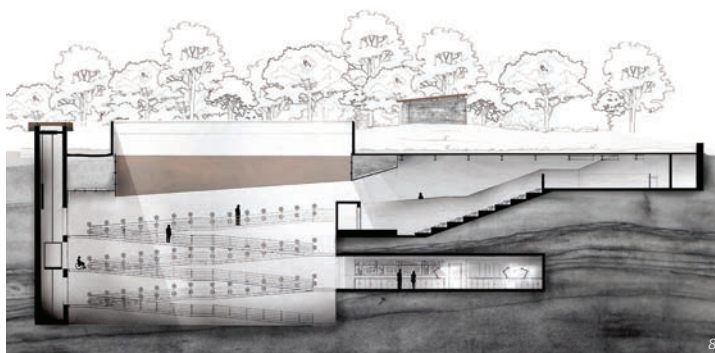
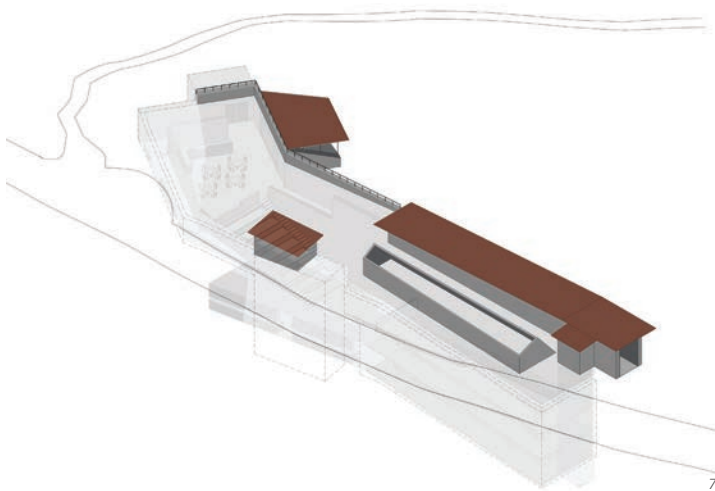
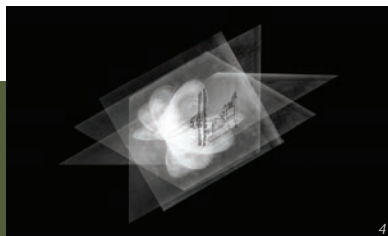
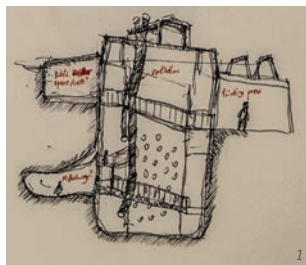
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1-4: Ifa Khairul Ahmmad Ridan - Book Exchange Pavilion & Tea House: Axos of Pavilion on Park Avenue (1-3); Building Section (4)
 5 & 6: Carter Hague - Book Exchange Pavilion & Pottery Studio: Axonometric (5); Perspective of Outdoor Cafe (6)





2020 WARMING HUTS

CLOUD OF UNINTENDED CONSEQUENCES

Cloud of Unintended Consequences is a collaboration between internationally renowned Winnipeg artist Eleanor Bond and third-year students from the Department of Architecture, University of Manitoba. In her work, Bond has a particular interest in the built environment and the interpretation of public space. The idea for the project started with the prospect of re-using a material that is quite common in our everyday lives: single-use plastic bags. The intention of the project is to confront a troubling image of waste in the face of out-of-control consumption and environmental destruction. The transformation of an everyday material into a cloud-shaped object suggests the conversion of ecological damage caused by reckless consumerism into something more optimistic or poetic, such as a cloud. The visitor can contemplate the object from the outside and as well from the inside, by inserting "the head into the cloud." The project intends to raise a collective environmental awareness by using the poetic language of sculpture to this effect. All the plastic used in the project will be recycled by local company and transformed into composite construction blocks.



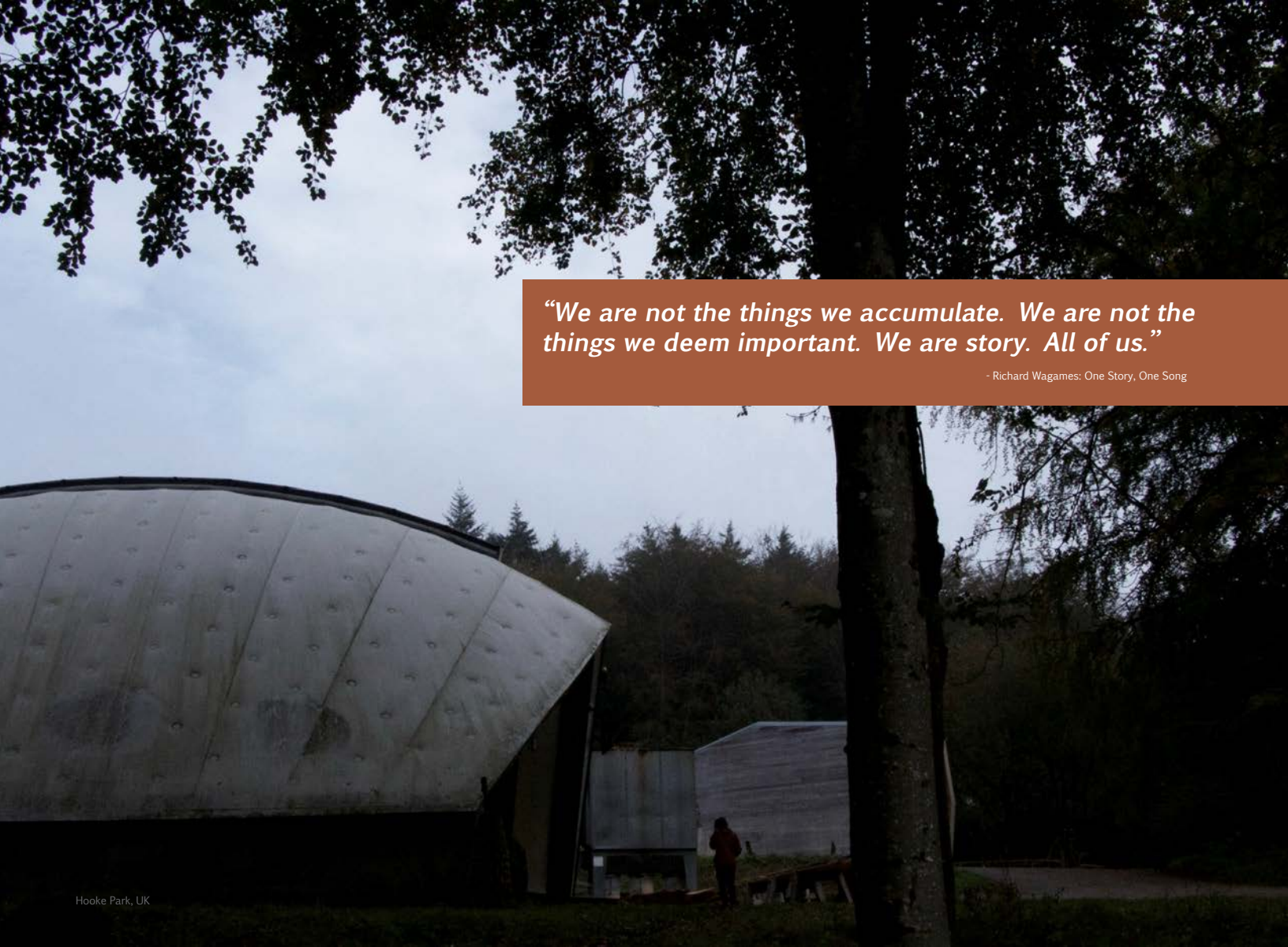
Eduardo Aquino, Chad Connery, Terri Fuglem, Liane Veness

In collaboration with Eleanor Bond

STUDENTS: Nicola Basford, Stacey-Leigh Berrington, Lexi Brennan, Cassidy Cantafio, Rochell Castillo, Chelsea Colburn, Paige Coleman, Maximilian Eschuk, Matthew Evans, Nixon Garcia, Nurielle Gregorio, Carter Hague, Jami Holden, Ali Impey, Ifra Khairul, Benita Kliewer, Teresa Lyons, Michael Mandac, Renz Marinas, Stephen Meijer, Dylan Moll, Benjamin Mujuni, Kenyo Musa, Marlon Nartea, Cao Nguyen Thai, Giordana Nocita, Emma Onchulenko, Ahmmad Ridan, Kate Sherrin, Micaela Stokes, Bailey Taylor, Hannah Thiessen, Owen Toth, Kirsten Wallin, Rhys Wiebe, Kendra Wile, Jack Ziemanski







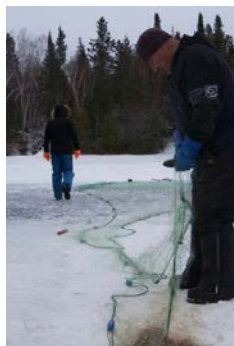
“We are not the things we accumulate. We are not the things we deem important. We are story. All of us.”

- Richard Wagames: One Story, One Song

THE GIFT IS IN THE MAKING

"All that we are is story. From the moment we are born to the time we continue on our spirit journey, we are involved in the creation of the story of our time here. It is what we arrive with. It is all we leave behind. We are not the things we accumulate. We are not the things we deem important. We are story. All of us. What comes to matter then is the creation of the best possible story we can while we're here; you, me, us, together. When we can do that and we take the time to share those stories with each other, we get bigger inside, we see each other, we recognize our kinship – we change the world, one story at a time..."

Richard Wagamese: *One Story, One Song*



We worked together with Iskatewizaagegan (Shoal Lake 39), an Indigenous community located approximately 150 Kilometers east of Winnipeg. We collaborated with the community to design a culturally based recreational park to help improve the community's long-term financial stability and cultural awareness among visitors and community members.

Through a series of readings and conversations with knowledge-keepers and community members we did our best to understand culture, historical context and the land as it relates to architecture. The ambition is to develop a place that celebrates the land and shares culture within the context of the Canadian Shield.

*"Know the ways of the ones who take care of you, so that you may take care of them.
Introduce yourself. Be accountable as the one who comes asking for life. Ask permission before taking.
Abide by the answer.
Never take the first. Never take the last. Take only what you need. Take only that which is given.
Never take more than half. Leave some for others. Harvest in a way that minimizes harm.
Use it respectfully. Never waste what you have taken. Share. Give thanks for what you have been given.
Give a gift, in reciprocity for what you have taken.
Sustain the ones who sustain you and the earth will last forever."*
Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*

Robin Wall Kimmerer is a professor of Environment and Forest Biology at the State University of New York College of Environmental Science and Forestry. She believes that learning the names of plants and animals is a powerful act of support

to the land, and when we know their names and gifts, it opens the door to reciprocity. In her book *Braiding Sweetgrass*, Kimmerer talks about "The Honorable Harvest" and how it applies to any exchange between people and the earth. The focus of this studio will look at how, as architects, we can learn ways of applying notions to the "Honorable Harvest" through our architectural exchanges with the landscape.

"If a work of architecture speaks only of contemporary trends and sophisticated visions without triggering vibrations in its place, this work is not anchored in its site, and I miss the gravity of the ground it stands on."
Peter Zumthor, *Thinking Architecture*

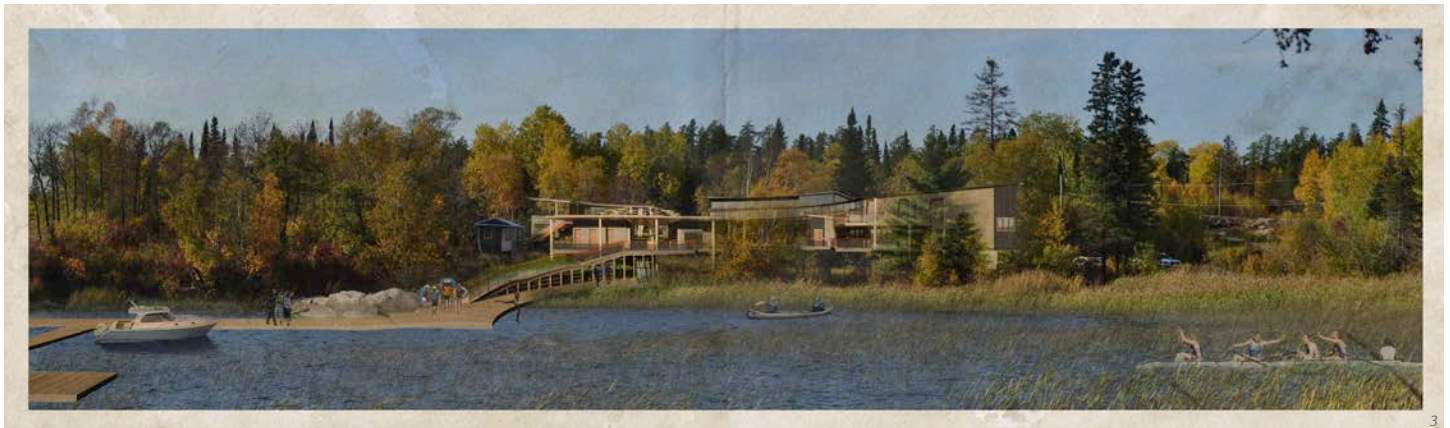
Peter Zumthor says that meaningful architecture becomes part of the essence of its place, while at the same time it speaks to the world as a hole – or becomes part of the story. Rather than focusing on "contemporary trends and sophisticated visions" our studio will develop an architecture understanding through a process rooted in story – "changing the world, one story at a time".



Kimmerer, R. W. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. Minneapolis, MN: Milkweed Editions.

Wagamese, Richard. (2011). *One Story, One Song*. Madeira Park, BC: Douglas and McIntyre.

Zumthor, Peter. (2010). *Thinking Architecture*. Basel: Birkhäuser.

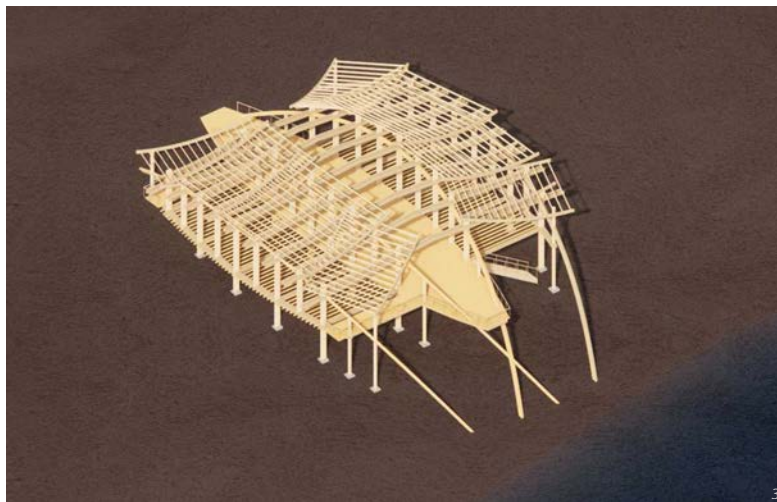




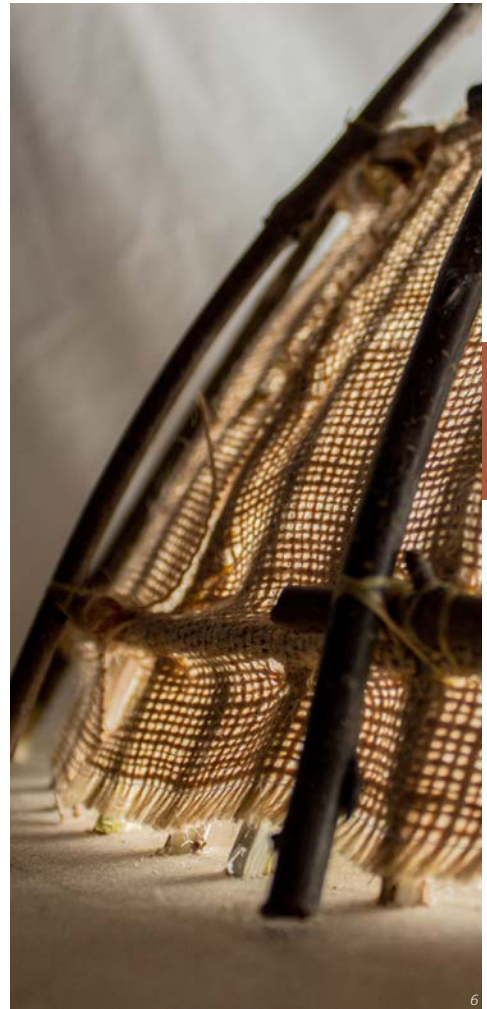
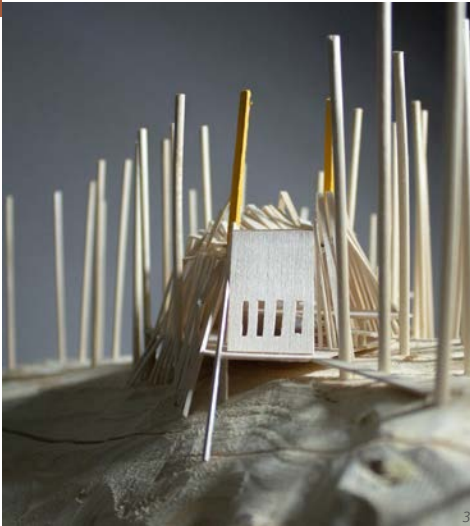
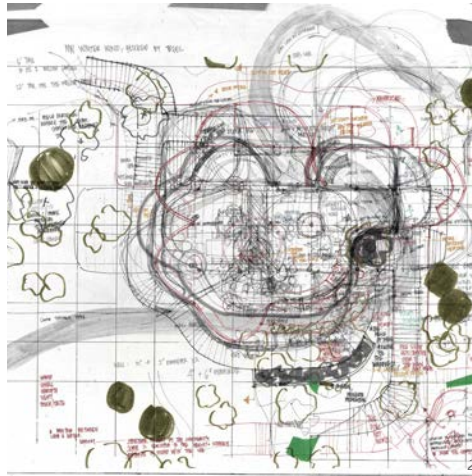








Romilie Calotes - Collide: A collage that expresses the complex engagement between man and nature as an aid to visualize the personal interpretation of the project brief (1); Process drawings (2); Concept Model (3); Bent wood model tied with locally sourced sinu (4-6)





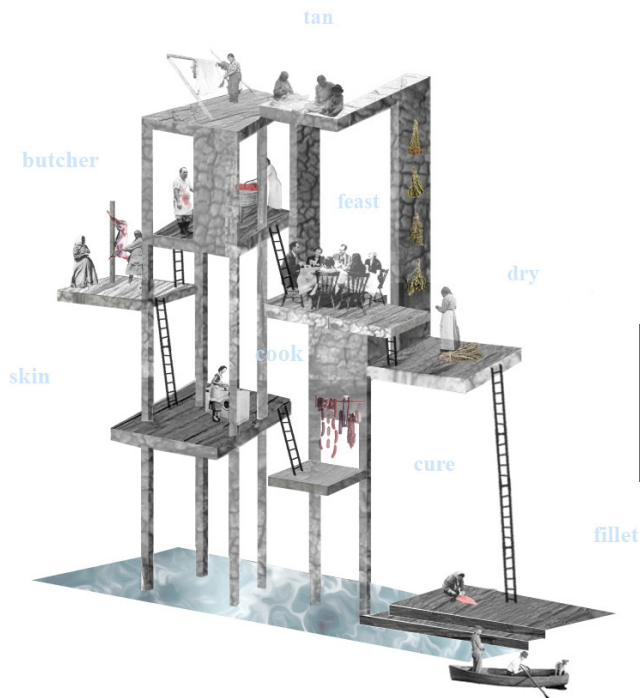
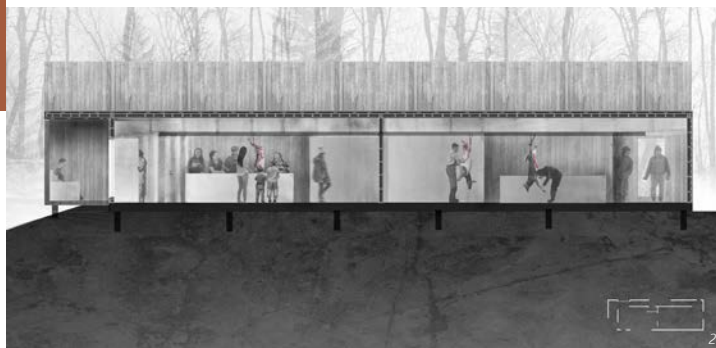
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Hanna Hendrickson-Rebizant - View into busy kitchen and butcher space, additionally an area to view the lake is shown (1); Section of meat processing and skinning building (2); Concept axonometric diagram (3); Plan of meat processing and skinning building (4); Front facade elevation (5)



The background of the slide is a grayscale aerial map of a city. It shows a dense grid of streets and building footprints. A prominent river or canal winds through the city, starting from the top right and flowing towards the bottom right. The map is rendered in shades of gray, with darker tones for buildings and lighter tones for streets and open spaces.

AU WPG

This studio posits a paradigm shift in architectural education that differs radically in structure, content and delivery to the prevailing model(s)

- Excerpted from Studio Brief



NEXT SCHOOL AU

“In a world with little respect for traditional structures, almost everything – from the operation of a company to the organizing of a community – can be approached as a design problem.” –Thomas Fischer

This design studio set out to explore the related themes of: Freedom · Education · Architecture through two projects, namely: The Centre for Academic Freedom & Civil Liberties (not included) and The Architecture Union: a networked architecture school, hereafter referred to as the AU.

Visiting guests and critics: Susan Algie, Michael Banman, Colin Neufeld, Sasa Radulovic; Eduardo Aquino, Carlos Rueda, Jaesung Chon, and Trevor Boddy
 Field Studies: Reed Kroloff (IIT), Thomas Fisher (SALA, UM)

This studio project investigates the ‘architecture of architecture schools’. Globalization, climate change, resource depletion and ‘big data’ characterize the 21st century. Architecture schools are challenged to retain their autonomy within a university system that favours academic research and

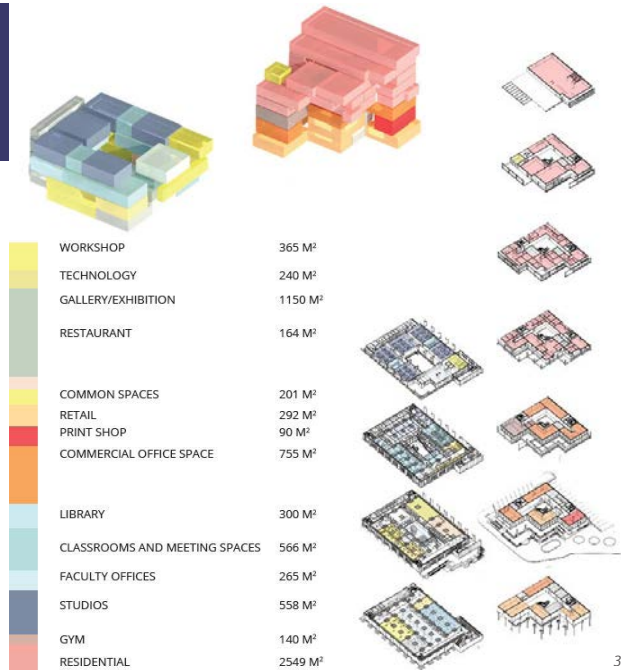


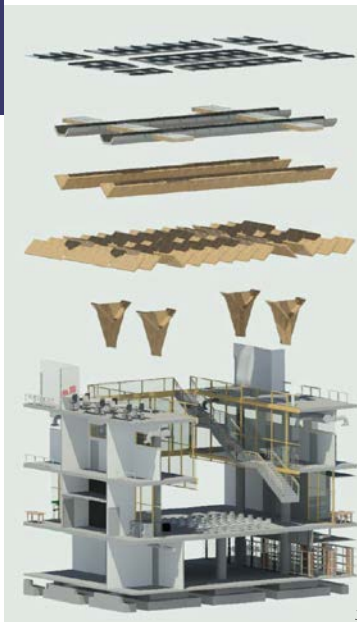
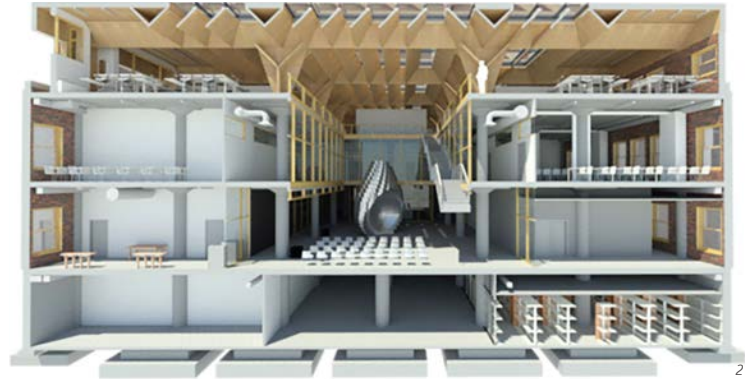
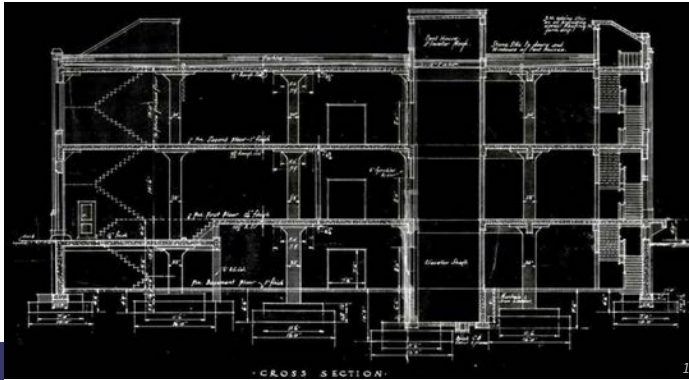
publication, once removed from the practice. Architecture firms are now generators of architectural knowledge; in devising new structures for practice, in designing new building types, and in forging new ground – for the 21st century.

This studio posits a paradigm shift in architectural education that differs radically in structure, content and delivery to the prevailing model(s) – founded on the idea of a ‘networked community’ of shared interests – and supported through the union of the academy and the profession, with industry and allied partners locally and globally. It will be called the Architecture Union, or AU. The AU will be constituted nationally as an independent school with its head office in Winnipeg, Canada. It will be networked (partner) locally and globally through online and distance education infrastructure; with leading architecture schools and post-secondary

institutions, with leading practices, and with innovative industry and research partners. It will offer professional degree, apprenticeship, continuing education, and community design programs ‘in situ’, and at dedicated locations globally. Programmatically, the AU will be composed of a school, an administrative / community resource centre, and a residence – not unlike the Bauhaus. Additional school space requirements will be met by local practices and firms. The school will occupy 1 of 3 site conditions in urban Winnipeg including: a ‘brownfield’ site, a ‘greenfield’ site, or a be constituted as an ‘adaptive-reuse.’

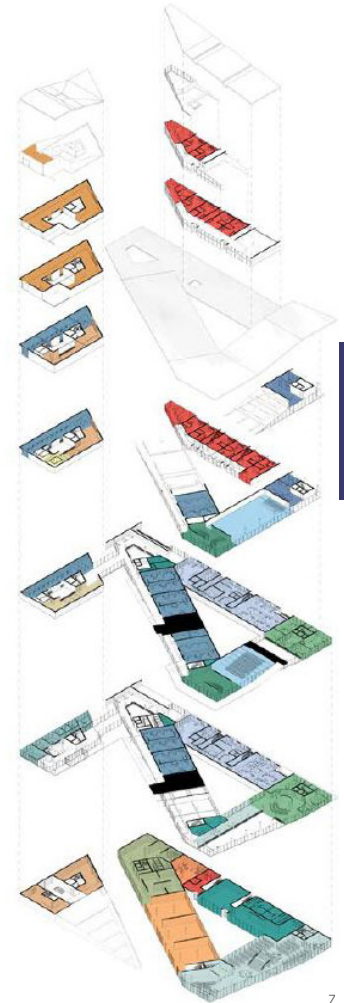
- AU A call to action
- AU An independent school
- AU Located in Winnipeg, Canada
- AU Advancing the mission of architecture
- AU Living, working, learning, and playing
- AU Flexible degree / program syllabus
- AU Program structure / online and in situ
- AU Global course of studies / delivery
- AU Faculty
- AU Local and Global Collaborators



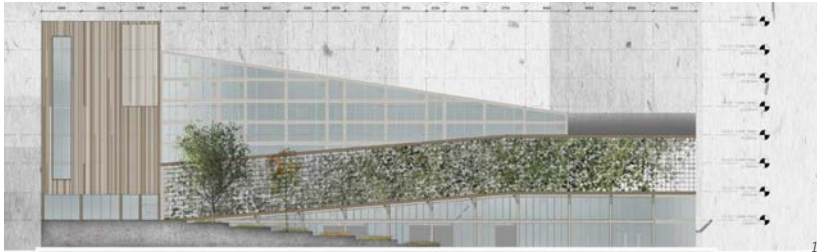




- STUDIOS
- SEMINAR ROOMS
- AUDITORIUM
- FIRMS
- LIBRARY
- ADMINISTRATION
- AMENITIES
- EXHIBITION SPACE
- COMMUNITY DESIGN CENTER
- GALLERY
- CAD LAB
- FAB LAB
- WORKSHOPS
- MAKERS STUDIOS
- MAKERS MARKET
- CAFE
- RESIDENCE



Jaden Janzen - South West Elevation (1); **South East Elevation** (2); **Studio Hall Section** (3); **Library Section** (4); Exterior View - the lattice has depth allowing the vines to be revealed and hidden with different porosity of screen. Additionally, snow is caught within the framework, animating the space through all seasons. (5); Interior Presentation Space (6)



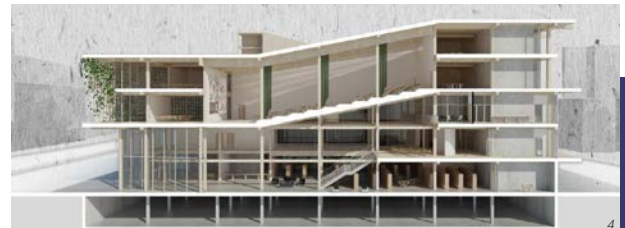
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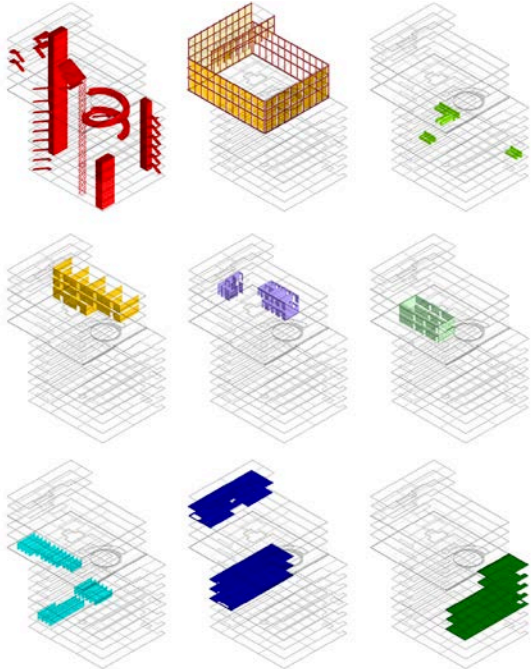
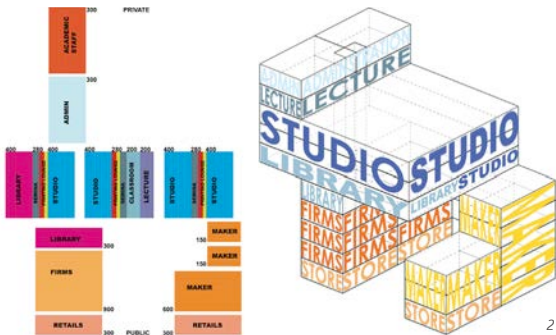
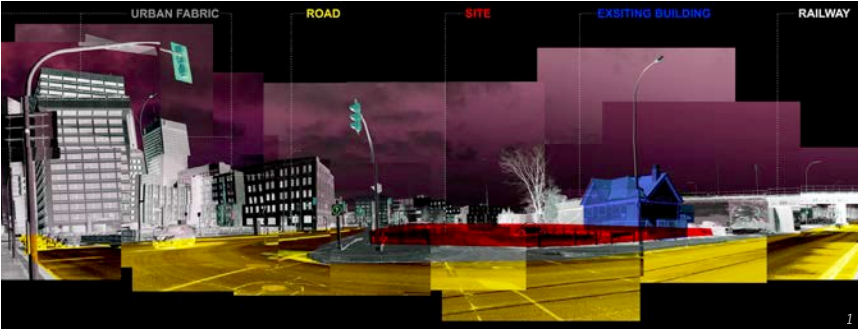


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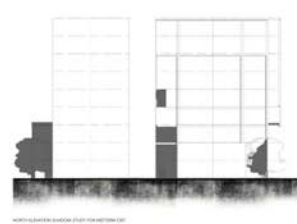
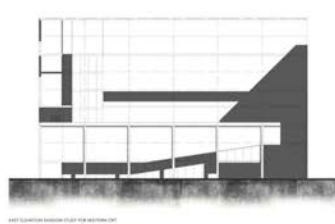
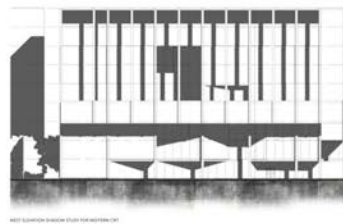
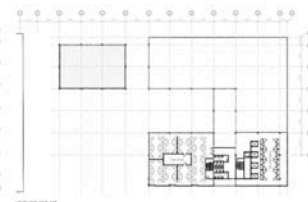
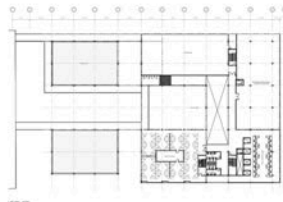
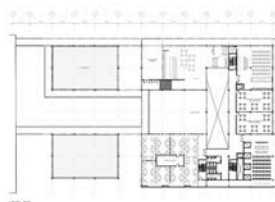
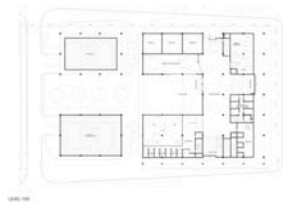
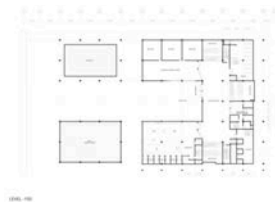
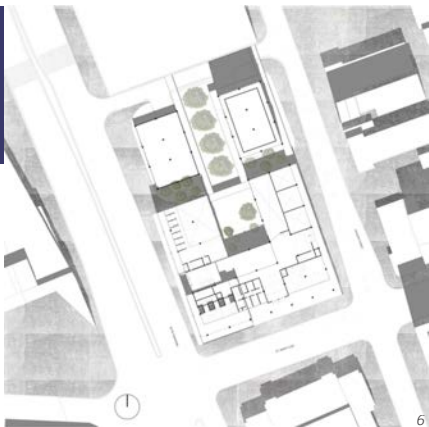
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Tong Yue - Site Collage (1); Programmatic Massing Study (2); Structural Model Study (3); Axonometric Series of Building Elements (4); South Elevation (5)



Tong Yue - Exterior View at Night - The composition sits on the edge of the skyline, lifted studio and academic offices form an overhand and forwarded posture, facing the urban jungle, ready for its challenge. (1); Interior - central atrium (2-3); Library (4-5); **Building Section** (6); Exterior View at Dawn (7)



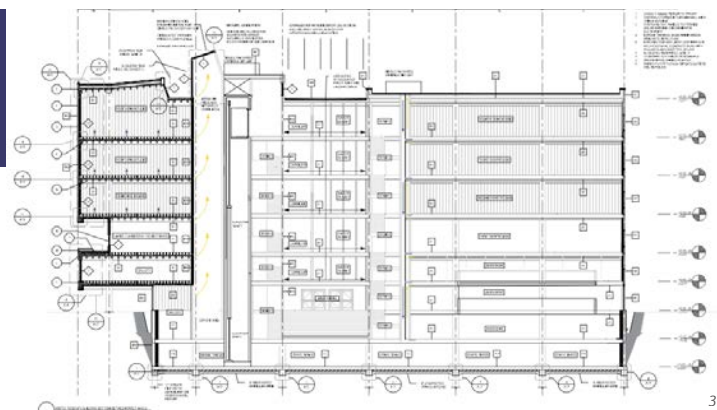


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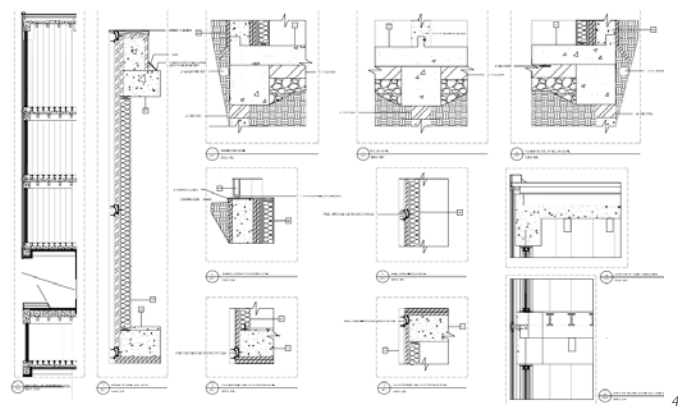
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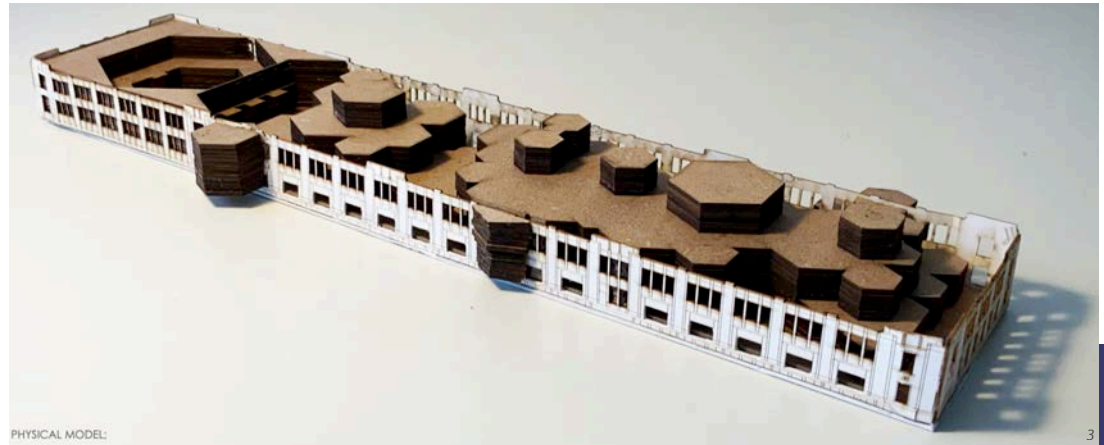
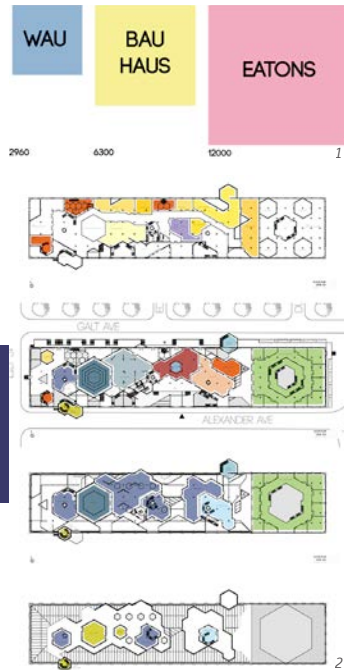


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Konstantin Gutsch - Size Comparison Diagram (1); Building Plans (2); Physical Model - Hexagonal geometry is the basic form for the Bee Hive within the former Eaton's warehouse. A modular system is devised to allow for the addition of spaces within the confines of the existing column grid. (3); Building Section (4); Building Elevations (5-6)







“In order to change an existing paradigm, you do not struggle to try and change the problematic model. You create a new model and make the old one obsolete.”

- Buckminster R. Fuller

Proposals location at The Forks: 1) Zhongbai Lin: Retention ponds and Research Centre; 2) Sean Vandekerckhove: Smoke/Garden; 3) Tom Gharagyozyan: Mechanical advantage: Brick factory; 4) Sophia Leopold: Garden scaffolding; 5) Claudia Parrott: Air-Filtering Play-Installation; 6) Alxia Lacerna: Paghalad: A courtyard theatre; 7) Cait Pele: Conservatory at The Forks; 8) Alex Squire: Slow mechanisms: Public laundry; 9) Daniel Brosas: River connections

NEW FUTURES STUDIO

Our climate is inextricably linked to every aspect of our way of life. Not only in the obvious ways – including food security, resource availability, biodiversity and the like – but also in ways that implicate our life and practice. As the climate changes, so too must our norms, our conventions, our practices, even our relationship to culture and society. For as the climate continues to evolve based on a changing ecosystem, so too will the life we will live within that new environment.

We are not in a crisis of the climate, we are in a crisis of the imagination. We are not dreaming forward and animating our future. Our practice, while acknowledging the impacts and projections of climate change has not yet collectively found a meaningful way to link science, traditional knowledge, empirical experience and our observations to what we are designing and planning for. We largely are planning for a future that looks like today, when the truth is, we must prepare for a new future that is coming and has not yet arrived.

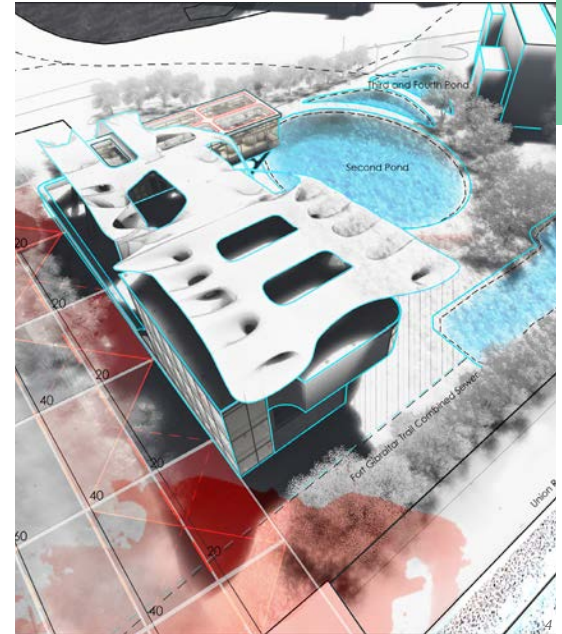
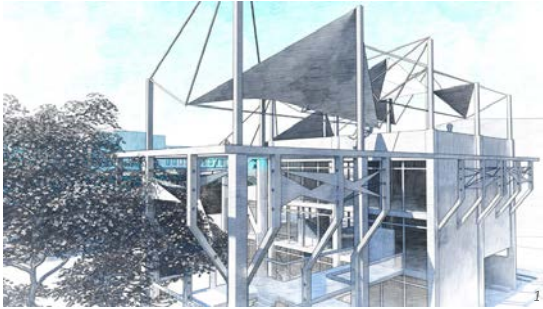
We must prepare for a new future that is coming and has not yet arrived.

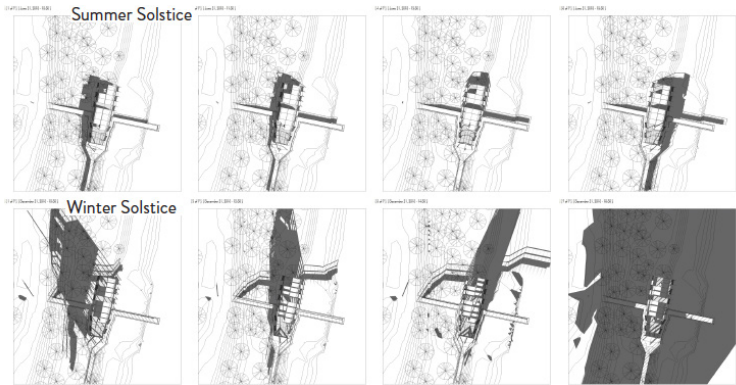
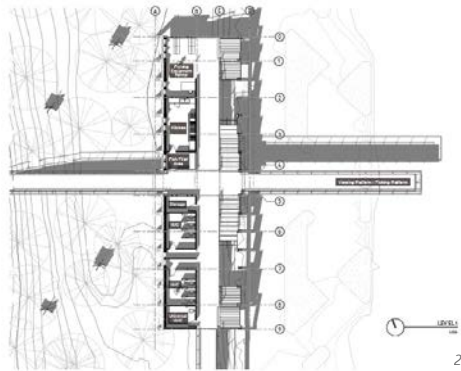
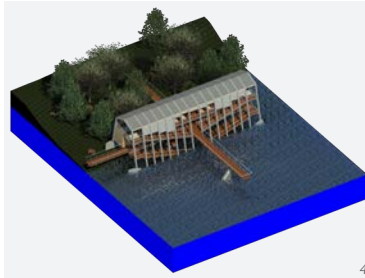
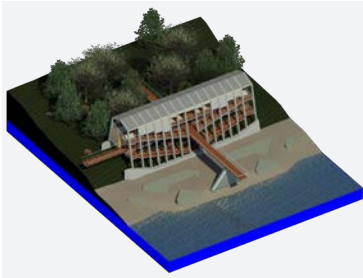
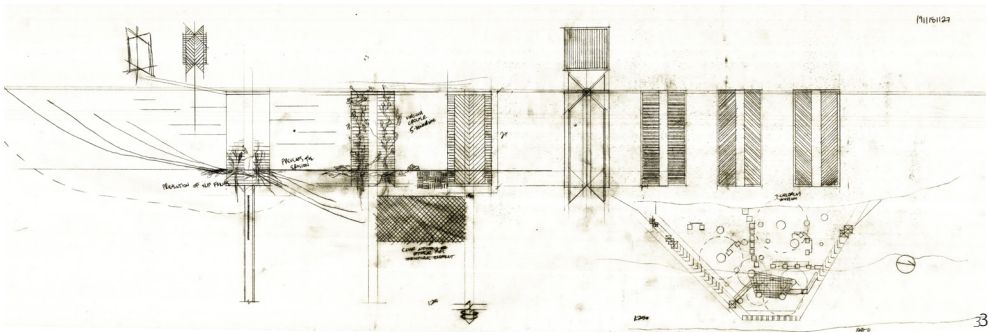
And despite best intentions, strategies in the architectural field and construction industry that seek to achieve a net zero impact on pollution or energy usage, this approach will not prevent climate change from happening. We are at a place in history where we must walk and chew gum and juggle at the same time. Although we need to continue to find more effective ways to reduce our impact on our global resources and local ecologies, we must at the same time prepare for a new type of a future than the one we have always relied on.

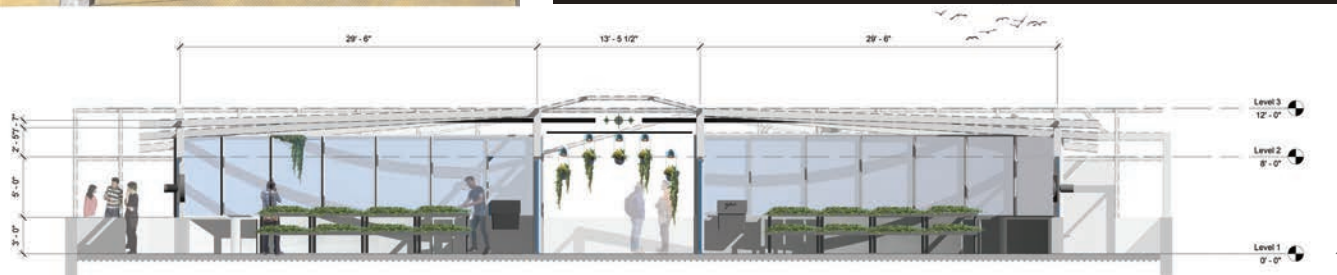
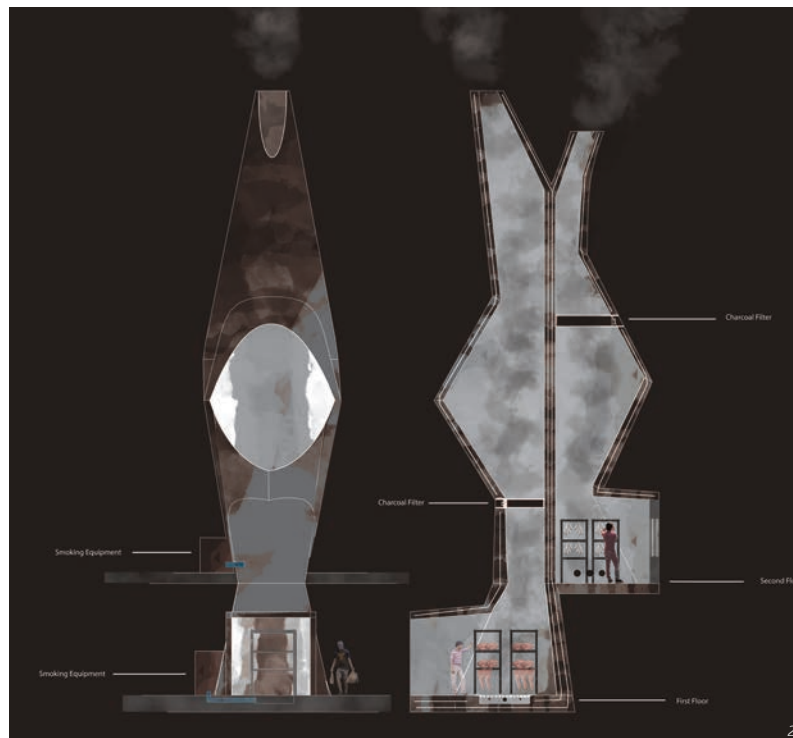
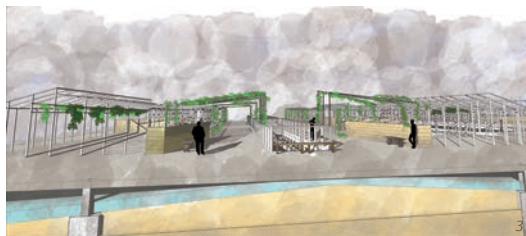
Architectural practice is well positioned to do this. Not only does it have a responsibility to provide an improved quality of life for the individual and society, it also has a direct influence on our environment and its future adaptation to global challenges. From how material and energy reliance

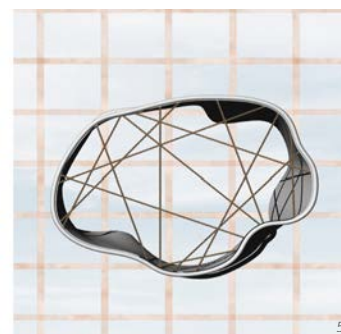
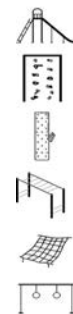
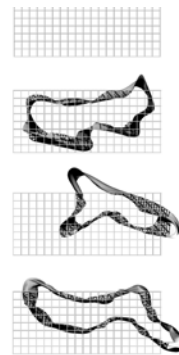
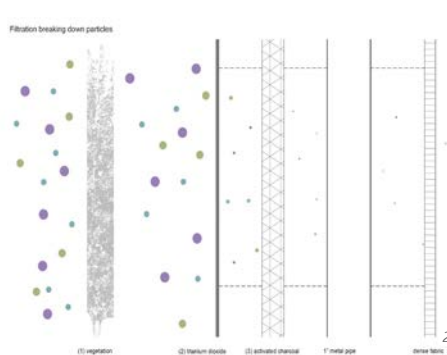
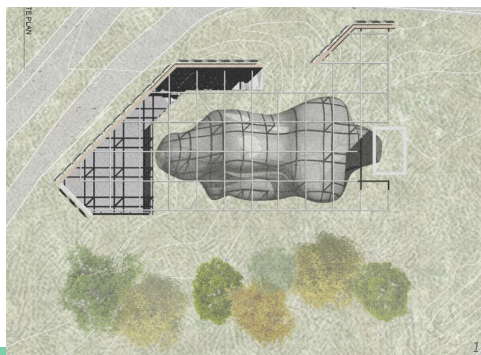
is chosen, to the design of the physical interface to the site, to the mediation and integration of the ecosystem of the site and city, to acting as a cultural link to our surroundings and each other, architecture has a profoundly consequential relationship to the human and, as David Abrams describes, the more than human world.

This studio proposes to take on the issue of climate change from a standpoint of an expanded, informed and proactive position. An optimistic one at that. Not a naïve optimism, but an aware and functional one. This studio will propose an engaged approach to designing wherein what is designed for not only is sensitive but active and participating in productive ways with the human and natural ecologies it resides within. Regenerative design and biomimetic design are examples of approaches to architectural thinking that supports an engaged and holistic vision of buildings as active actors and potential game changers in current environmental challenges.

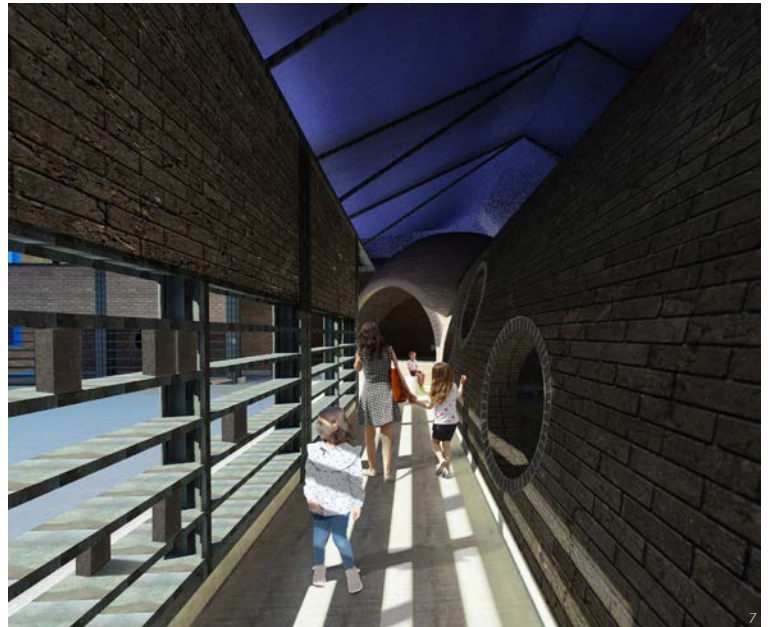
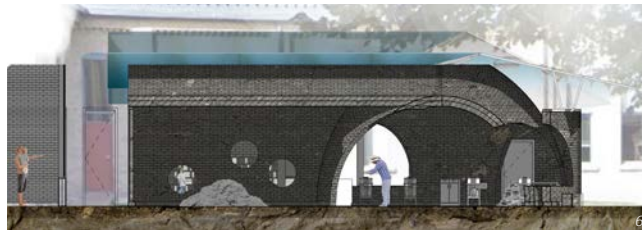
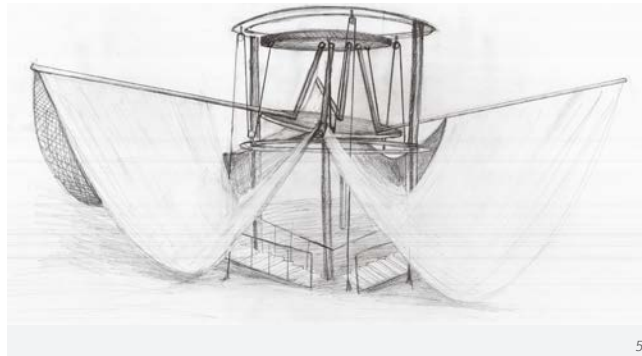
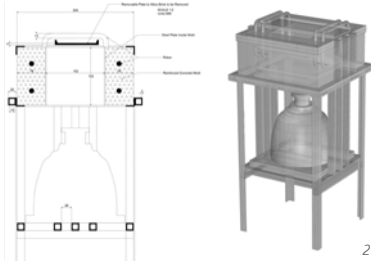


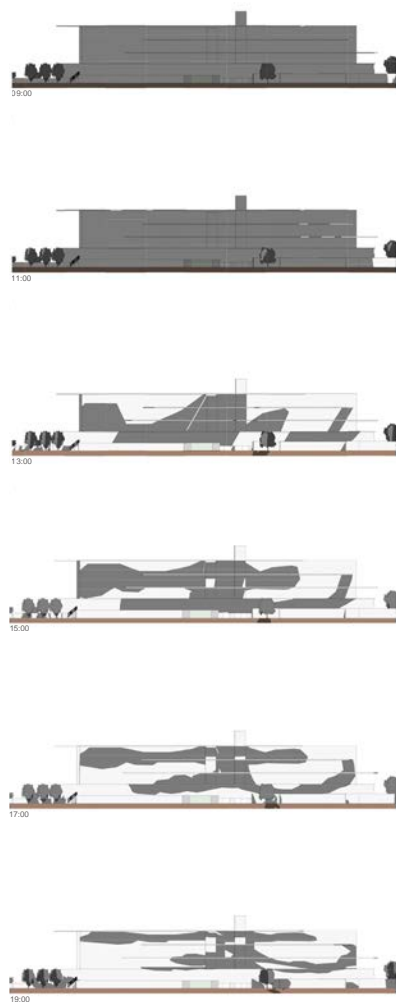




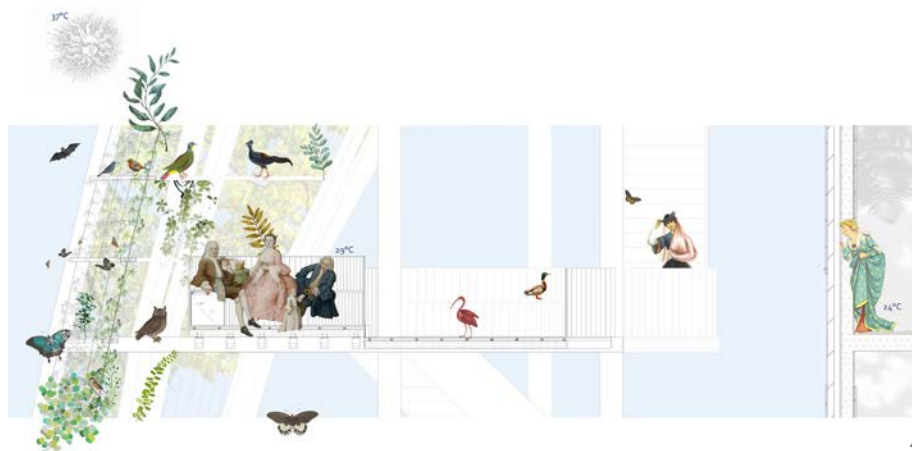


Tom Gharagyozyan - Sample of silt deposits at The Forks (1); Dry press drawing and digital model (2); Dry press prototype (3); Dry pressed brick with silt deposits (4); Conceptual drawing: The building as a machine (5); Section of Brick factory (6); Hallway. Dry pressed bricks and fabric roof (7)

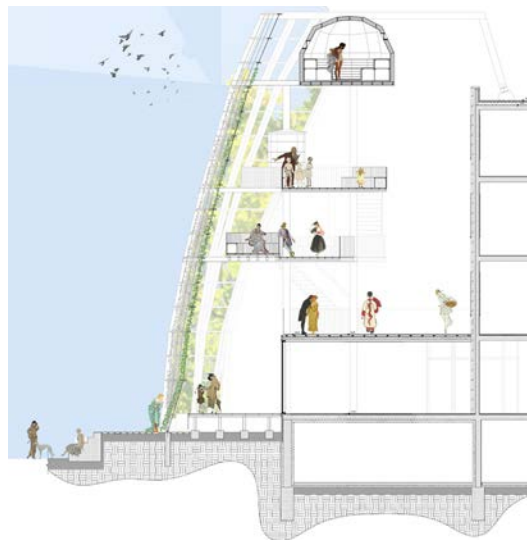




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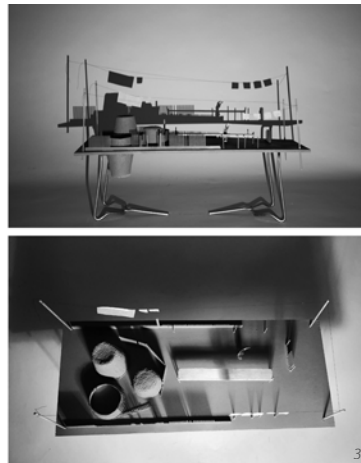


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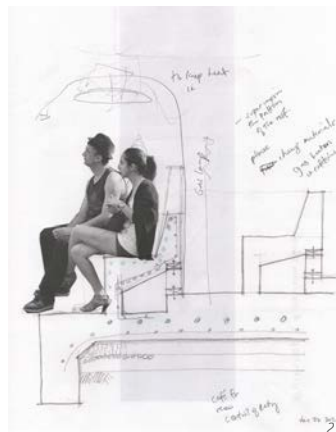
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Alex Squire - Conceptual drawing (1); Collaborative model: Water tower and smoke house (2); Exploratory model: Laundry shadows, cast as spectacle (3); Site plan (4)





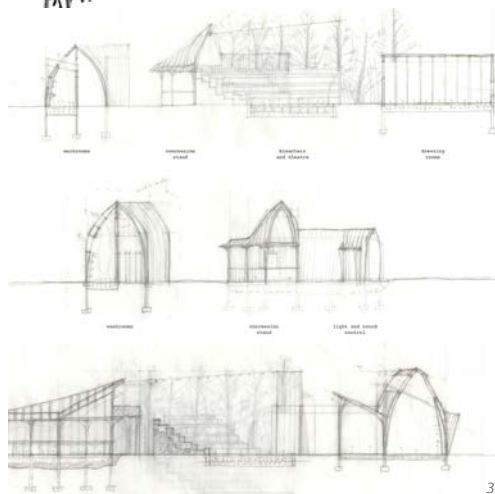
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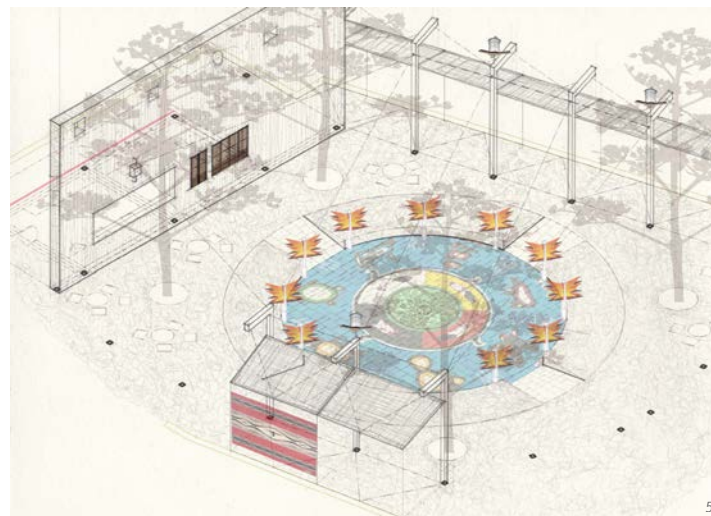
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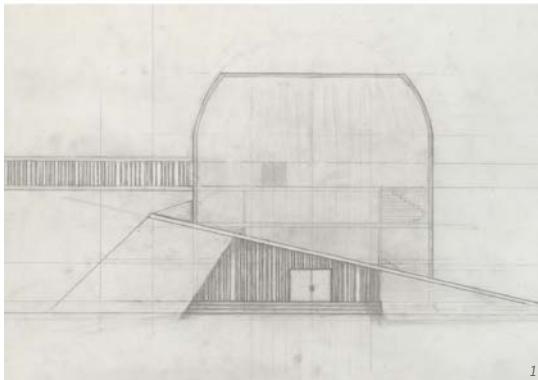
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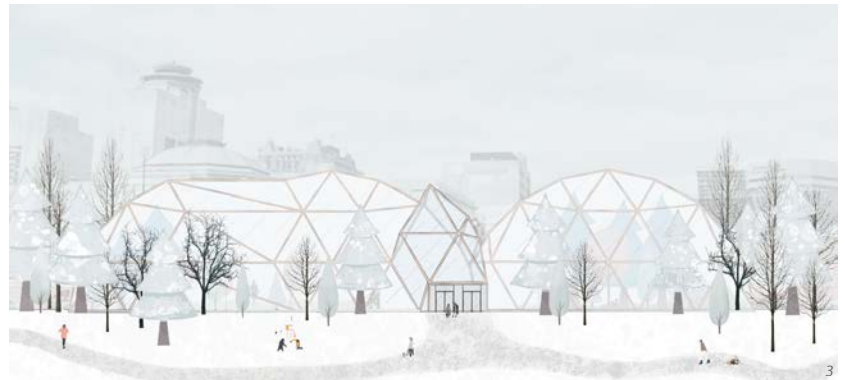
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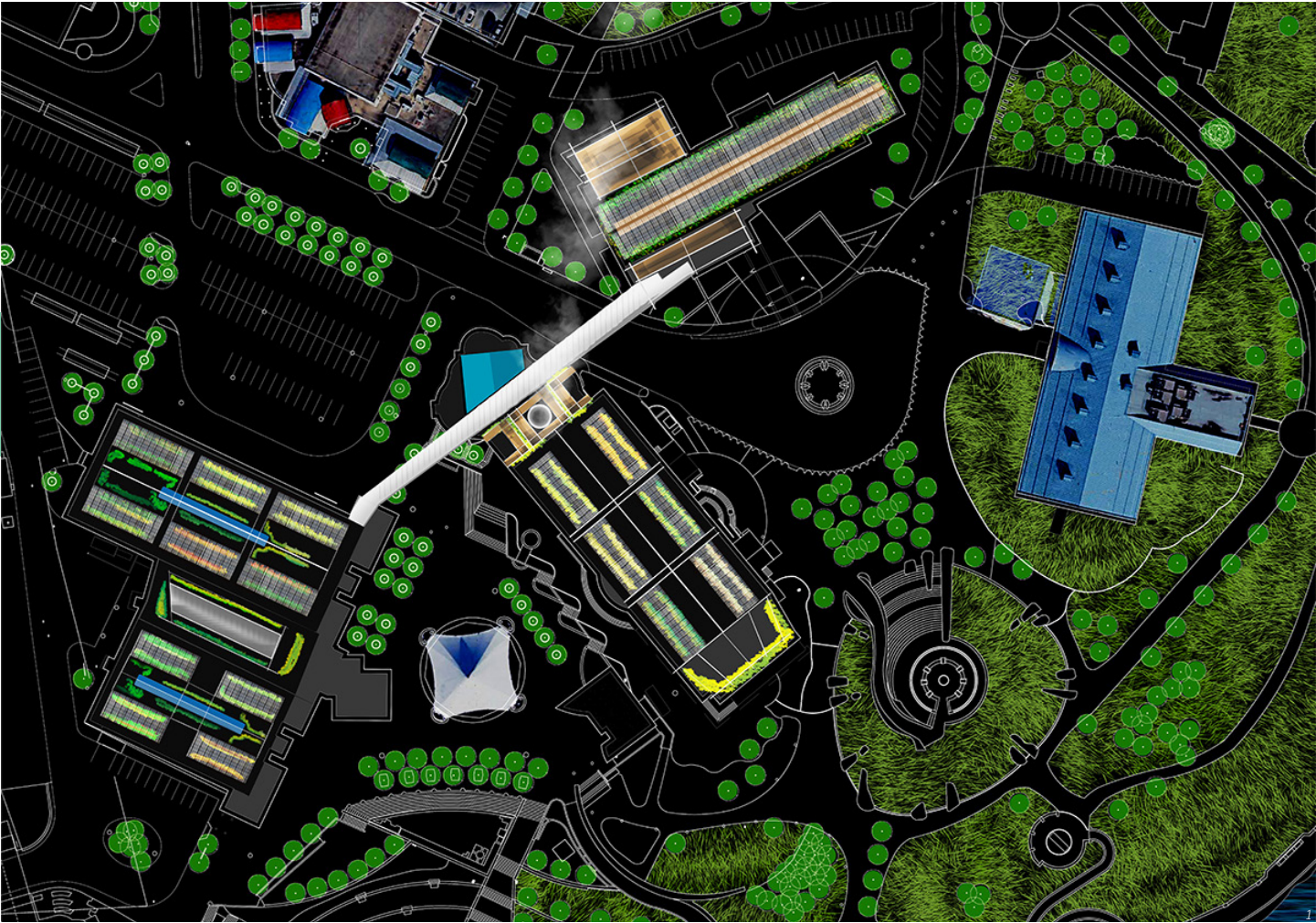
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*How often, beside a well, on the old stone covered with the sorrel
and ferns, have I murmured the name of distant waters, the
name of the buried world? How often has the universe suddenly
answered? O my things, how have we talked.*

- Gaston Bachelard

RE-CREATION: ARCHITECTURING THE CITY

In the context of our design studio, Re-Creation is an open concept which admits multiple interpretations and encompasses relevant meanings:

From a theoretical perspective, Re-Creation refers to the generative process of the project as an act, or set of actions, rooted in tradition but creatively open to poetic transformation, and metaphoric amalgamation, or metamorphosis. It means as well to design based on knowledge, memory and experience, since we cannot re-create what we do not know. Re-creation therefore challenges common assumptions about originality, and is at the core of what we call creative action. Reflecting on poetic world-making as a form of re-creation, G. Bachelard wrote:

How often, beside a well, on the old stone covered with the sorrel and ferns, have I murmured the name of distant waters, the name of the buried world? How often has the universe suddenly answered? O my things, how have we talked.¹

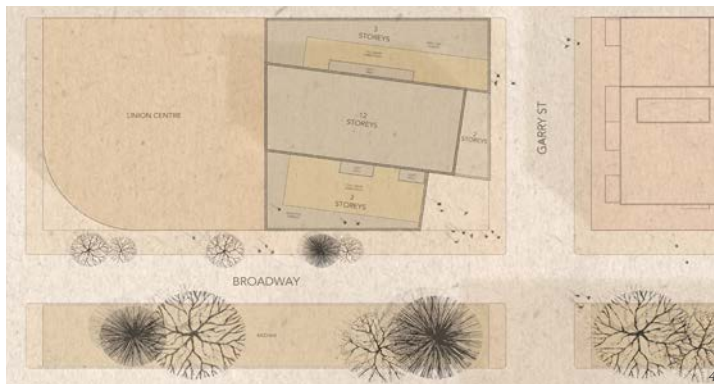
In terms of urban design, re-creation indicates a continuous process of city making which is informed by pre-existences: meaningful traces and latencies, memories, experiences (poetic imagery) coming from the site and its immediacies, but also from remote, metaphorically brought or translated, relevant other places and experiential images.

Winnipeg yielded itself as the main laboratory, after the studio travelled to Greece: a meaningful inspirational source and laboratory for experiential re-creation.

The studio was conceived as an architecture and urban design interdisciplinary project, in collaboration with Richard Milgrom, Head of our Planning Department: ED4 Architecture, and Master Planning students. a meaningful place, inserting our **Re-Creation**.

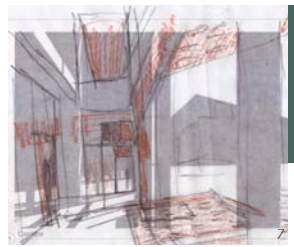
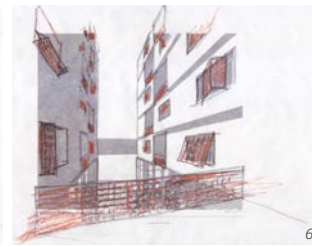
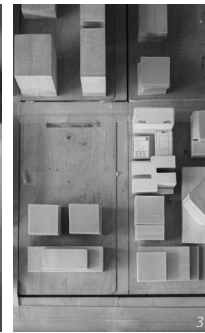
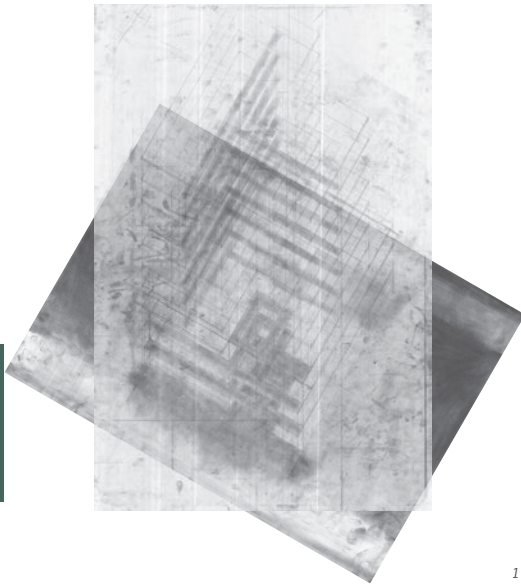
The winter term provided the collaborative framework necessary to reveal the strengths and potential of our earlier

analyses and design proposals by putting them under further investigation while working closely with urban design studio. Although the work in that term was collective in spirit, and collaborative, deliverables were specific to each discipline. Students mapped context in factual and qualitative ways, creatively interpret and meta-morph referents, culminating our investigations and creative explorations with an individual design made manifest as a mid-scale, mix-use infill ranging between 1,500 – 5,000 SQM. Interdisciplinary groups collaborated a vision of a particular street block, and architecture students demonstrated the potential of the collective vision. This final proposition revealed our gained understanding of architecture that makes good cities, drawing together our comprehension and insight while seeking to catalyze urban re-creation.



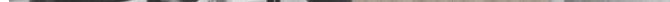
Breanne Baydock - The street (1); The corner (2); South elevation (3); East elevation (4); Level 5 residential perspective (5); Double-height voids and a social staircase are centered around the circulation core, where light wells contribute to a vertical interplay of spaces linked through angled sight lines (6); Level 2 office space (7)





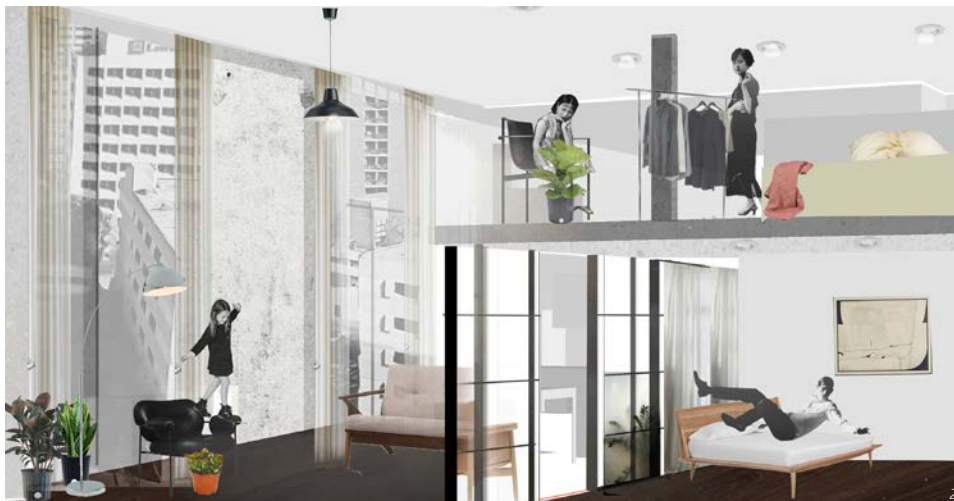








Serena Tonnu - Shared mezzanine elevation (1); Typical corner residential unit perspective (2); Typical middle residential unit perspective (3); Second floor typical middle residential unit (4); Commercial space perspectives (5-7); Shared terrace perspective: winter scene (8)





GUATEMALA STUDIO

The Guatemala Studio arose from the intersection of three trajectories central to the work of Ralph Stern as former Dean of the Faculty of Architecture and as Professor in the Department of Architecture: 1) Indigenous Achievement, 2) internationalization and 3) a long-standing interest in Guatemala and, in particular, its Indigenous peoples—descendants of the Maya who have populated the Central American jungles and highlands for millennia. Students participating in the Guatemala Studio had the unique opportunity to engage a stunningly beautiful country as well as a deep and richly layered culture often overlooked in North American architectural education.

The Maya are comprised of more than a dozen linguistic groups and have maintained a cohesive identity in the face of centuries of oppression and exploitation by, first,

the Spanish Conquistadores and subsequent forms of colonization that—by the mid-twentieth century—subjected the Indigenous population to the geo-politics of Cold War militarization undertaken by the United States government. Guatemala served as a testing ground for US interventions throughout the Caribbean, Central and South America, including those in Cuba and Chile.

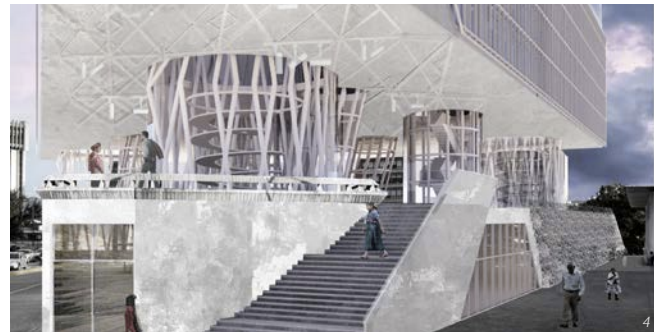
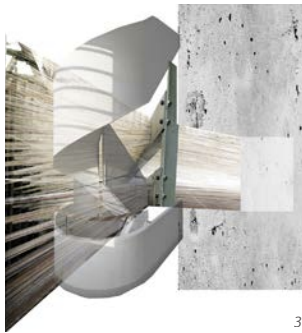
The Guatemala Studio addresses fundamental issues of architectural and urban form in relation to remembrance and healing in light of the genocidal actions undertaken by the Guatemalan government against the Indigenous population and non-Indigenous activists. Working together with students and faculty of the Universidad Rafael Landívar, the Guatemala Studio chose as its urban context the complex mid-century intervention named Centro Civico. The Studio's Guatemalan hosts

were welcoming and generous, and the work by those students in the context of their Studio (running in tandem with the UM Studio) is also included below.

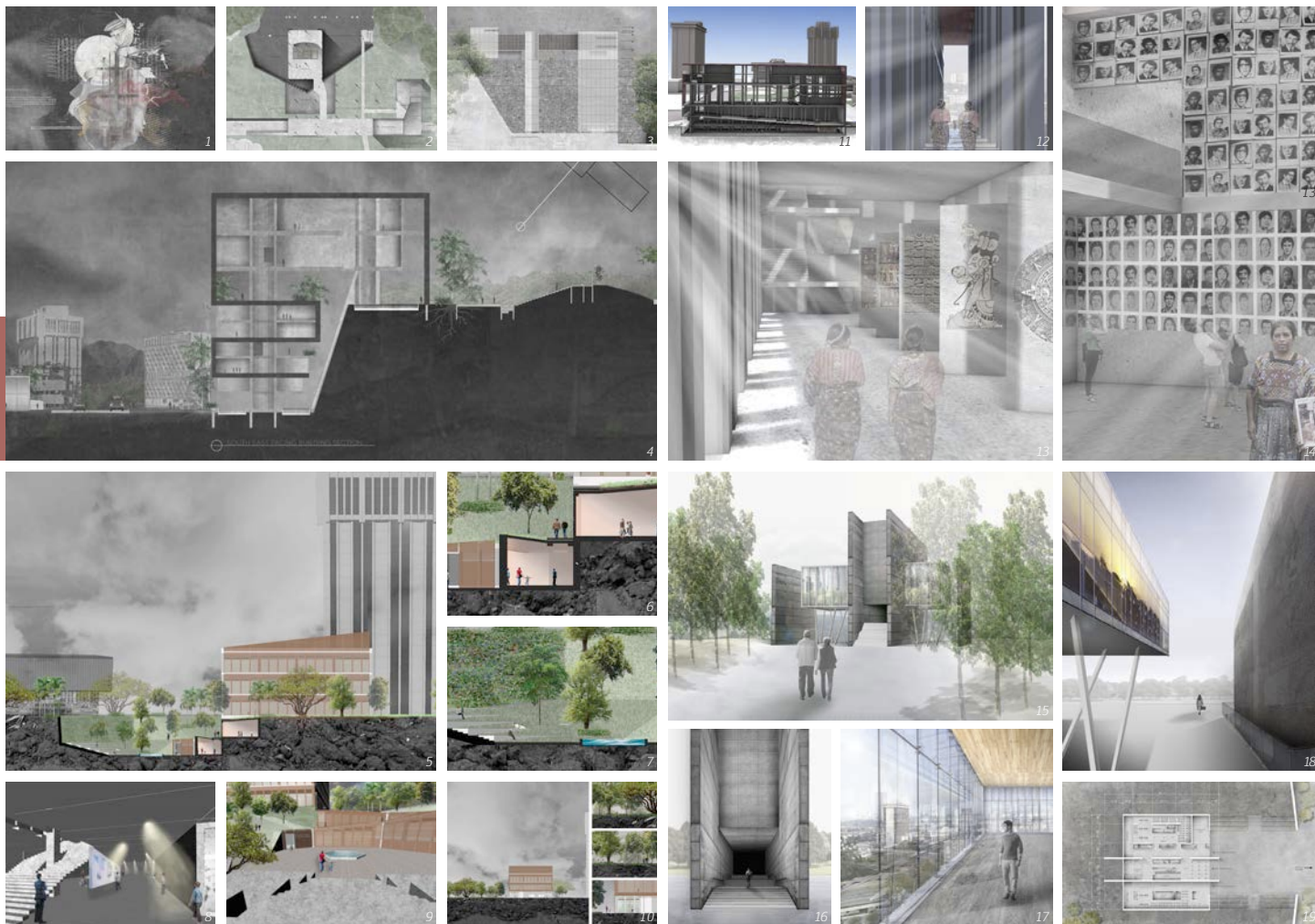
Located immediately to the south of the historical city centre, the Centro Civico physically follows the principles of the C.I.A.M.. Ideologically, the Centro Civico is a European modernist extension of a Spanish colonial city bracketed by architectural and urban symbols of Latin American dictatorship and US economic imperialism. Projecting a public museum dedicated to the genocide and remembrance of Indigenous Mayans, progressive reformers, and student activists into a site framed by architectural symbols of colonial, military, and imperial rule comprised the basis of the studio brief. Thus, the Studio projects are inserted into both the heart of the city and the heart of the matter.

For images of student work and project descriptions, see the online exhibition:
<https://www.yearendexhibition.com/home/ed4/architecture/guatemala-studio/>

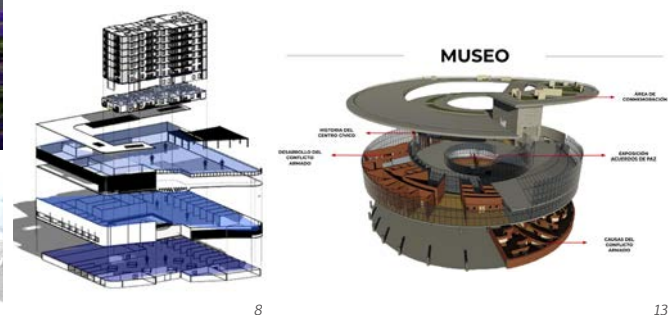
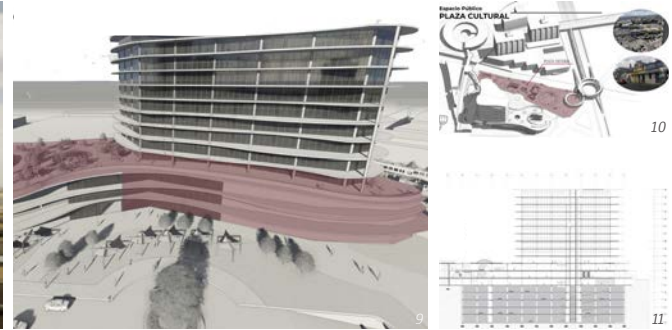
Andrea Garcia - Concept collage (1); Expression Gallery (2); Concept collage (3); Mayuul The Indigenous Mayan Museum of Expression and Memory exterior view (4); Museum West elevation (5); Museum elevation (6); Archives (7); Interior view (8)



1-4: Kayla Heppner - *The Myth of Exche*: Concept collage (1); Ninth floor plan (2); South West elevation (3); South East facing building section (4) **5-10:** Meghan Pratt - *Section (5-7); Interior perspective | Perpetrator Exhibit (8); Exterior perspective | Plaza of Contemplation (9); Entrance elevation (10)* **11-14:** Andrew Lawler - *West section (11); Terrace (12); Mayan Gallery (13); Missing people gallery (14)* **15-19:** Coral Ross - *Exterior perspective (15); Concrete core perspective (16); Glass gallery space (17); Elevated glass structure (18); First floor plan (19)*



1-4: Cívico 1: Alejandro Mejía, Esteban Motta, Jorge Orozco - Espacio Público Y Movilidad (1); Cívico 1 (2); Mercado Gastronómico Despiece (3); Mercado Gastronómico Vistas (4) 5-8: Paseo la Habana: Josué Ávila, Alejandra Carías, Alejandra Ixcot - Galle las Letras (5); Terreo de Parques (6); Proyecto Detonante (7); Proyecto - Edificio uso mixto (8); 9-13: Interconexión: Adriana Castañón, Rosario González, Azucena Hernández - Equipamiento Comercio (9); Espacio Público Plaza Cultural (10); Edificio Usos Mixtos Sótanos (11); Site plan (12); Museo (13)



Utopía Maya: Jorge Azmitia, Diana González, Byron Ruano - Proyec Centro Cívico "Utopía Maya" (1); Vista Panorámica al nuevo carozón de ciudad "Utopía Maya" (2); Vistas u/ maya apartamentos & sacbé hotel (3); Recorrido "esperanza" (4); Vista galería de arte (5); Vista u/ maya apartamento (6); Vistas tik4l & galería arte (7)





SOUNDS FROM A SAFE HARBOUR; REYKJAVIK, ICELAND

The 2019-20 MI-Studios 5 & 6 were created to explore regional and urban site characteristics. Site influences on building design included geology, topography, geophysical form, and environmental considerations – wind, water, weather, and time. Our research led to new abilities in synthesizing geophysical, environmental and climatic influences with architectural design. Sites were located across Western Iceland in the municipalities of Árneshreppur, Norður-Ísafjarðarsýsla, Barðastrandarsýsla and Súðavíkurbreppur in the West Fjords; Snæfellsbær to the west, and Rangárvallasýsla on the south coast. Students composed individual programs related to loosely described an Icelandic School of Music, and – as we now realize, and inclusive of all new modes of music creation in analogue and digital spheres – understood as a School of Sound. Their on-site approach was highly participatory and experiential. Together with three electro-acoustic music composition students they immersed themselves in the regional soundscapes through audio production, sonic capture, physical 'probes' and performances. The night recording in the concrete tank at Djúpavík, leaning into a blizzard on the western slopes of Langjökull, and cutting/crushing black ice under the south coast sand storms were other-worldly encounters.

These experiences and exercises with the a Swedish composer, a Canadian geologist, an Icelandic explorer

led to a greater understanding of regional climatic and geographic contexts. An important outcome was the assembly of a supporting Program Document of collected research forming the evidentiary basis for speculative situational explorations and creative internal organization, experimental materials, and inventive structure.

The first term situational research and corroborating involvement with weather and land will continued to inspire the architecture of the Wintere Term Sounds from a Safe Harbour project in Reykjavik. A number of metaphors were imaginable. The foremost inclination is to bring the outside in – creating channels and spaces within the proposed structure that play a mnemonic role, creating a sense of an impermanent and everchanging light-land interchange. Our preoccupation with light diffusion is suggestive of transformative experiential devices. Inherent to the theme of architecture and sound is the configuration of spaces that amplify and augment or dampen and mute sound (pressure) and reverberation through form and material. In that sense the building will be musical and comprised of sonic chambers alive and resonating with instruments, voices, and technologies – analogue and digital, singular and in collaboration.

In Reykjavik the fundamentals of urban design require both a response to the larger urban context and the consideration of the harbour as a very real and present influence linking the city to the sea. Having rebounded from the financial collapse of 2008, Reykjavik is in a period of aggressive development in the downtown precinct, much of it related to tourism. Increasing emphasis is being placed on the creative sector now recognized as a significant aspect of Iceland's economic recovery and expansion.

This project outlines strategies for expanding a cultural presence that can coexist with historic uses – particularly in consideration of the industrial working harbour.

Acknowledgments:

Dr. James Gardner, Geologist; Professor Emeritus, Natural Resource Institute and former Vice President (Academic) and Provost, University of Manitoba

Gunnar Gudjonsson, Mountain Guide, Facilitator and Mentor in Iceland

Kelly Hearson, Past President, Crosier Kilgour & Partners

Carson McCance, Project Architect, LM Architectural Group, Winnipeg

Tanis Paul, Director of Design, Abode Architecture, London, UK

Saša Radulovic, 5468796 Architecture, Winnipeg

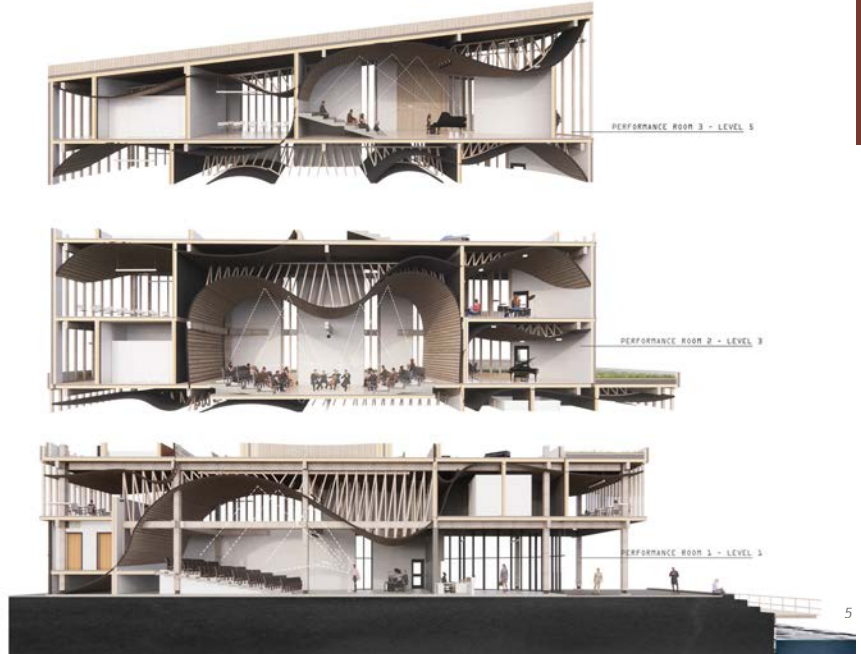
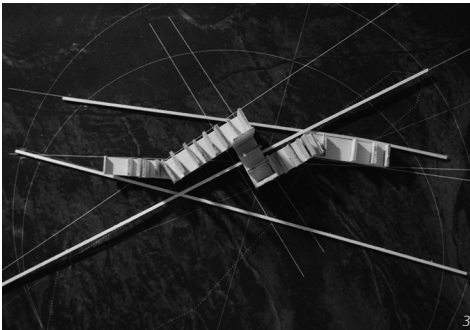
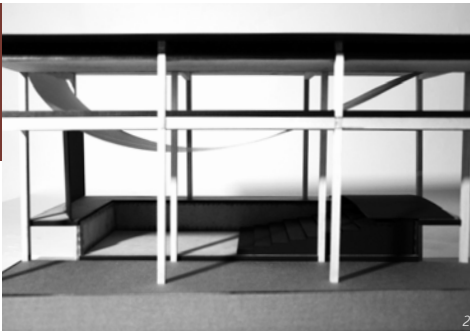
Örjan Sandred, Professor of Electro-Acoustic Composition and Performance, Desautel Faculty of Music

Jim Siemens, Partner, Oxbow Architecture, Saskatoon

End Note:

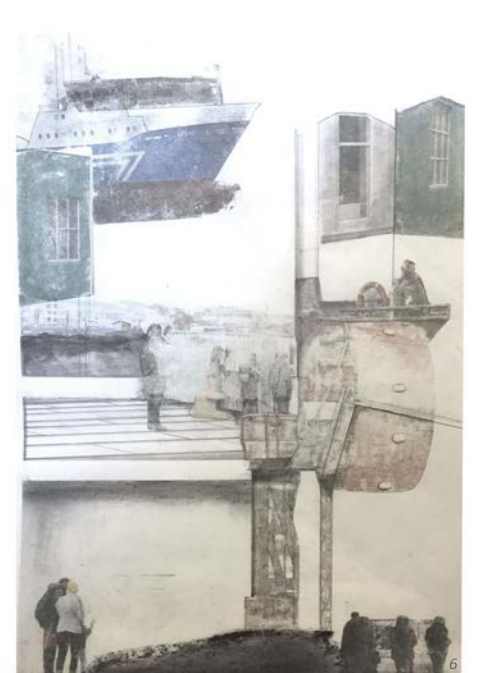
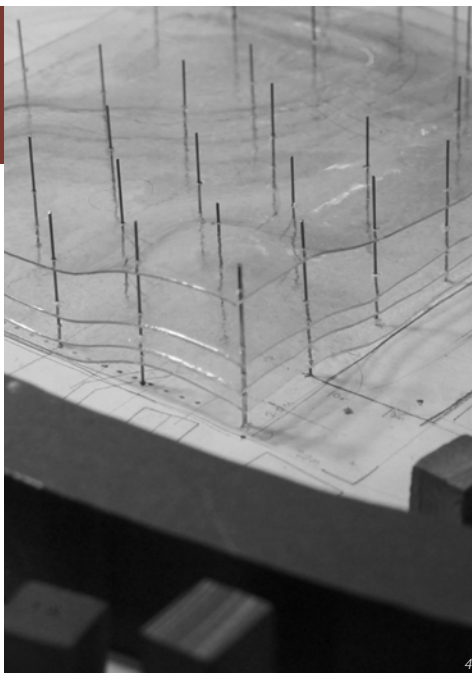
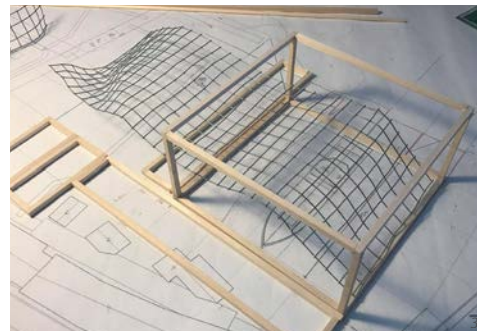
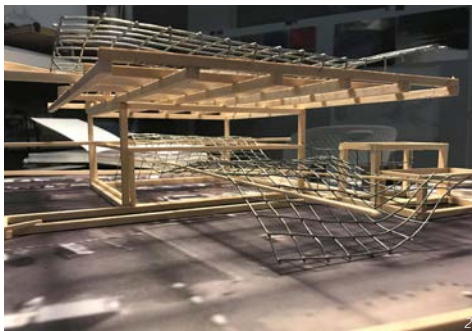
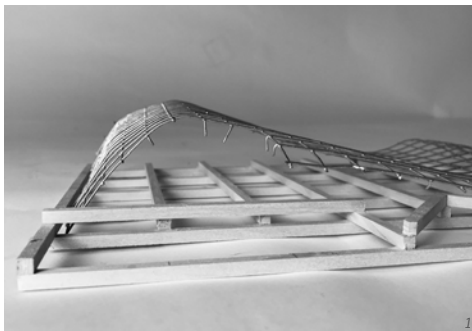
'Sounds from a Safe Harbour (A Spiritual F**king Thing)' is the name of an intense experimental music festival in Cork, Ireland. <See <http://soundsfromasafeharbour.com/>>

Laurie Aftanas - Study model of an interchangeable performance space (1); Model testing the acoustic of a ceiling (2); Study of how the surrounding landscape conditions and research starts to form a weaving structure (3); Collage representing the transparency between spaces (4); Diagram showing the sound deflections of each performance space that was generated by the model (5)

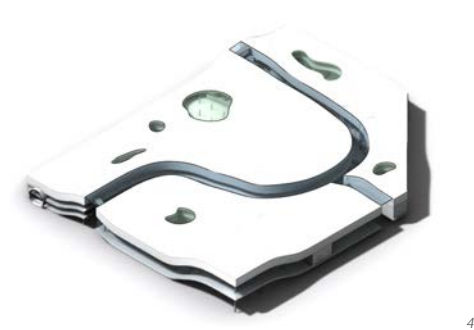


Laurie Aftanas - View looking onto the music building, interacting with the harbour (1); View of the study space (2); View of one of the experimental performance space (3); View looking from the harbour onto the building (4); Aerial view of the School of Sound (5); View looking from the lobby to the ramp leading to a performance space (6)

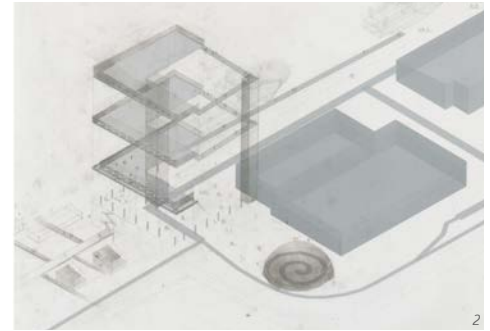
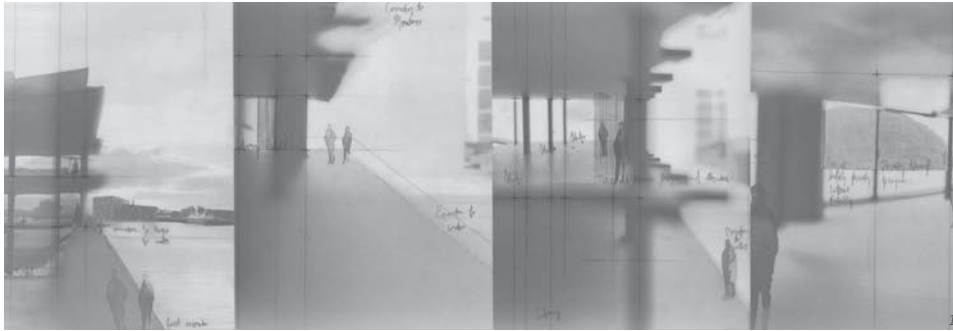




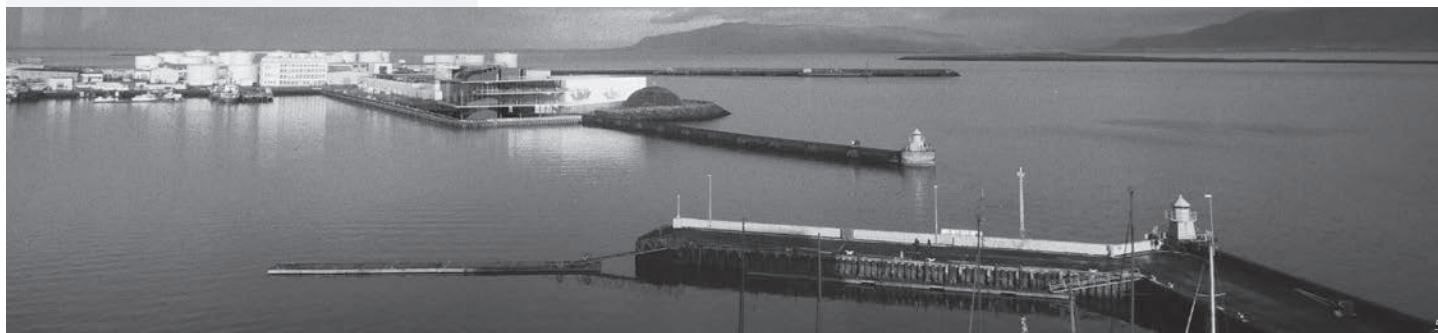
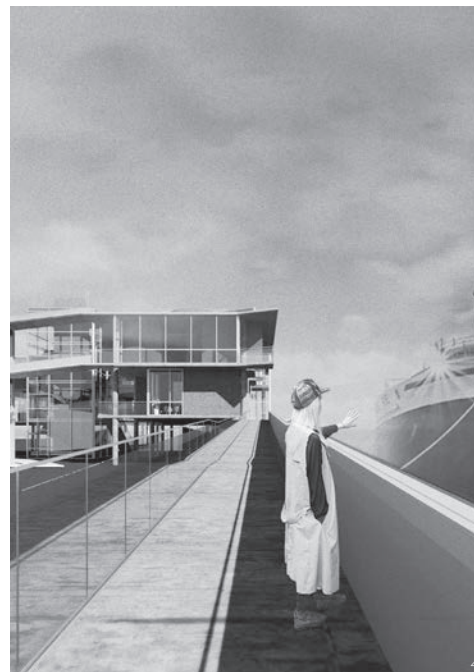
Jonathan Bailes - View into exterior/interior space (1); View of lower space - digital art display and music performance (2); View of lounge space looking into Reykjavik Harbour (3) Isometric view of building (4); View of interior use of space adjacent to shipyard (5); West building section (6)



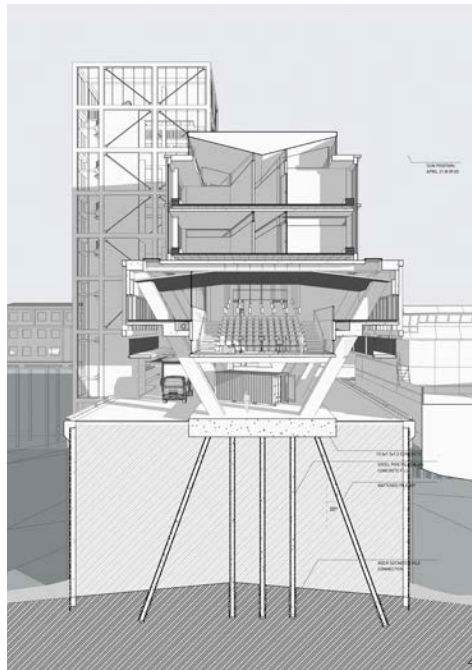
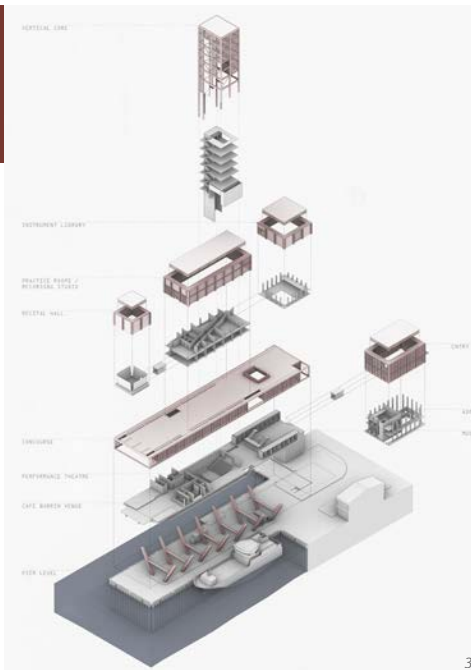
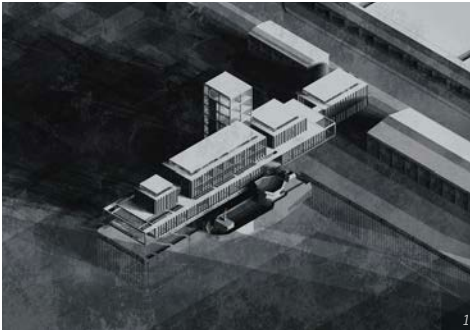
Tali Budman - Sequential experience highlighting the proposal's relationship to the city (1); Study of circulation on ground level (2); Light study: how can light guide a ritual? (3); Fabric formwork as a study on the language of a material and its consequence in a space (4); Plaster cast: how can material be intentionally manipulated to guide a ritual? (5)

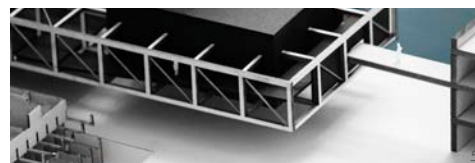
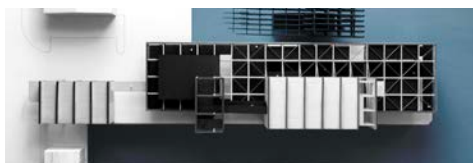
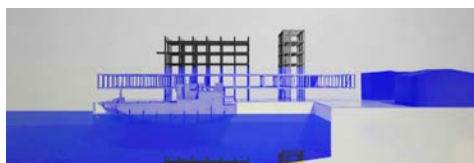


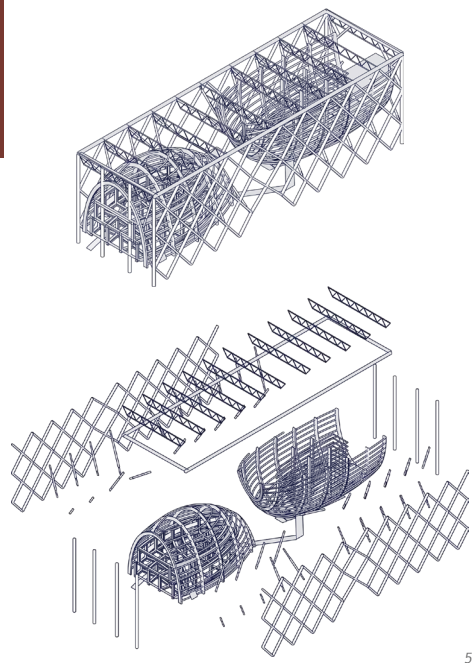
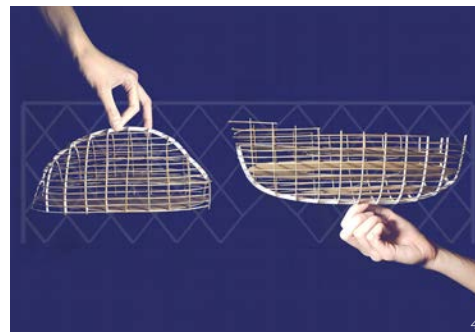
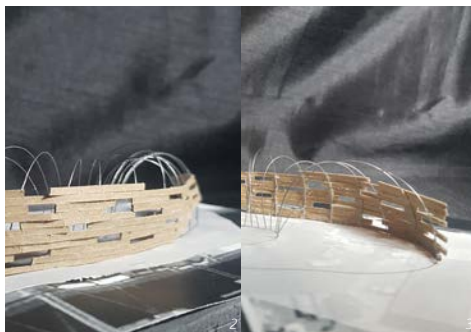
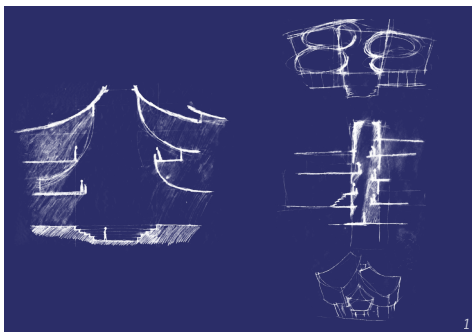
Tali Budman - Public library intended both for students of the school of music as well as the citizens of Reykjavik (1); Rehearsal studio for students of the school (2); View of proposal from boat passing by (3); View of proposal from main access ramp highlighting relationship to adjacent boat (4); Aerial view of proposal from the Harpa Concert Hall (5)

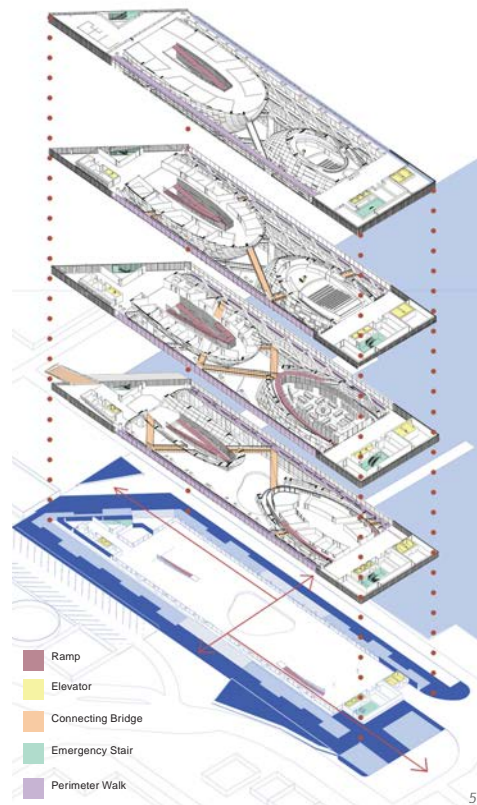
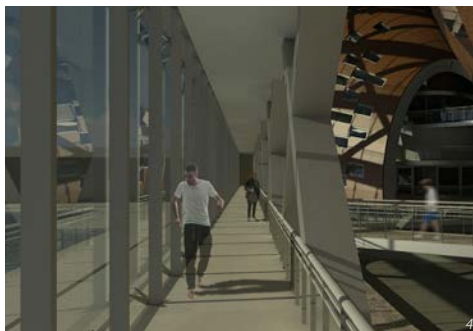
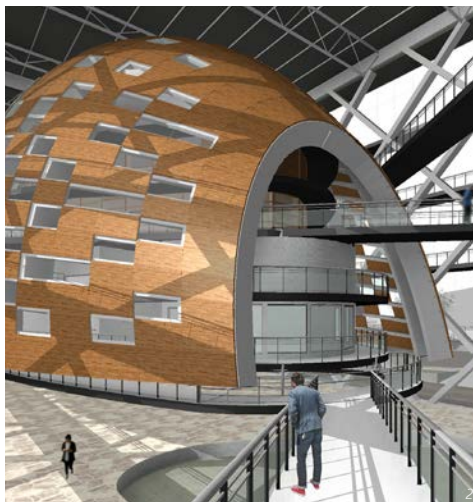
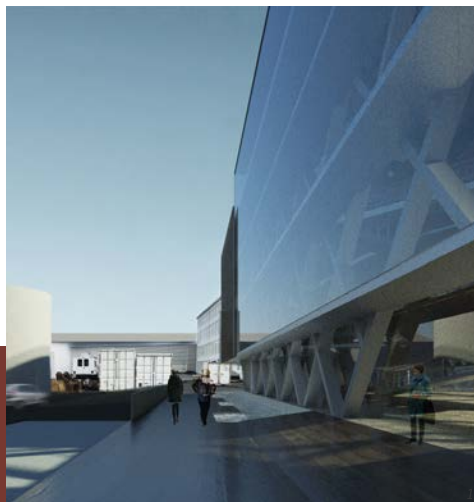


Lucas Druet - Low Icelandic daylight (1); Visual noise of the Harbour (2); Exploded axonometric (3); Section perspective reveals structural systems (4); Sectional model 1:100 (5)











The ideal library
symbolizes everything a
society stands for.

-Alberto Manguel

There is not such a cradle of democracy upon the earth as the Free Public Library

— Andrew Carnegie

If architecture provides anything at all, it is a platform for enquiry.

— Douglas Darden

Anyone is free to enter a library and enjoy.
It is a place of mutual trust.

— Anni Vartola, Mind-Building (Venice
Biennale, Finnish Exhibition Catalog

a library is as much a portal as it is a place
— it is a transit point, a passage.

— Susan Orlean, The Library Book

STUDIO BIBLIO

Studio Biblio explored the history and future of public libraries as they have transformed over thousands of years, from 'treasure houses of knowledge' to **palaces for the people**.

Libraries are cherished today as free public spaces providing community service and social connection, while fostering local knowledge and global imagination. Just as public libraries have expanded far beyond their role in collecting and circulating books, students re-imagined libraries as sites of social infrastructure, fully integrated into the life of the city.

Studio Biblio began by reading in public spaces in Winnipeg's historic downtown. In this opening adventure, students read not only stories but the surrounding city, observing the narrative potential of found **Reading Places** embedded in the urban fabric. Students were invited to interpret and inhabit the city as an open book. Their personal and public readings, sketches, observations and speculations led to the creation of pop-up micro-libraries as places for public exchange. Proposals were entered into the 2019 RAIC Student Design Competition on 'The Future of Public Engagement in Architecture.' Four Studio Biblio students were among the finalists: Alex Bartmanovich, Hasti Fakouri, Brendan Klassen and Alan Vamos.

Following field trips to impressive libraries in diverse cities - London, Paris, Los Angeles, Toronto and Winnipeg - students collaboratively produced a large interpretive site model, creatively capturing the urban collage of street-scapes crossing the East & West Exchange District. This site research, **Reading the Exchanges**, helped students choose sites and invent programs for the next phase of Studio Biblio: designing multi-storey, mixed-use, infill reading places, that contribute meaningfully to the city.

Students developed comprehensive program reports informed by several new Winnipeg public libraries, which we toured with local architects, and by study of exemplary libraries from around the world, including Snøhetta's Calgary Central Library and Bibliotheca Alexandrina in Egypt; ALA Architects' Oodi Library in Helsinki; Mecanoo's LocHal Library at Tilburg and T.U. Library at Delft (NL); Alberto Kalach's Vasconcelos Library in Mexico City; OMA's Seattle Public Library and Qatar National Library in Doha; Gunnar Asplund's Stockholm Public Library; Gunnar Birkerts' National Library of Latvia; several splendid libraries by Alvar Aalto, recently celebrated at the 2018 Venice Biennale; and many others.

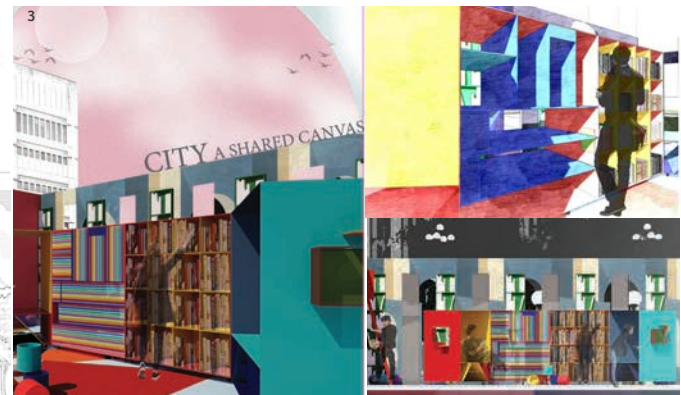
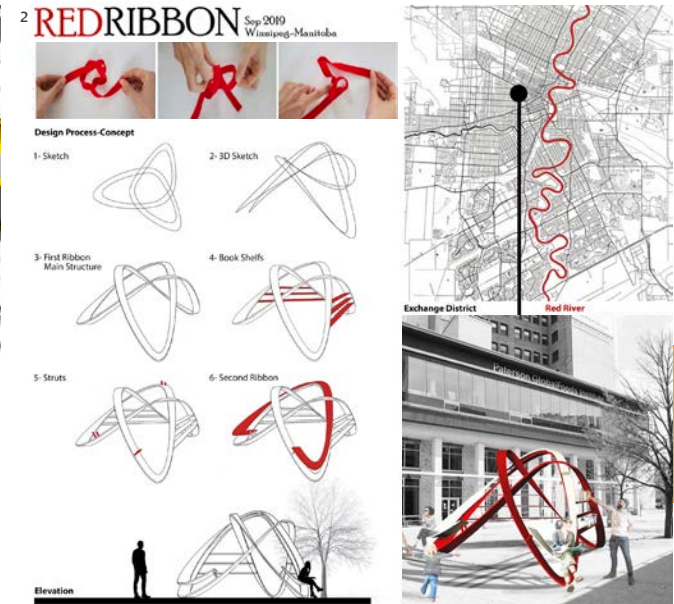
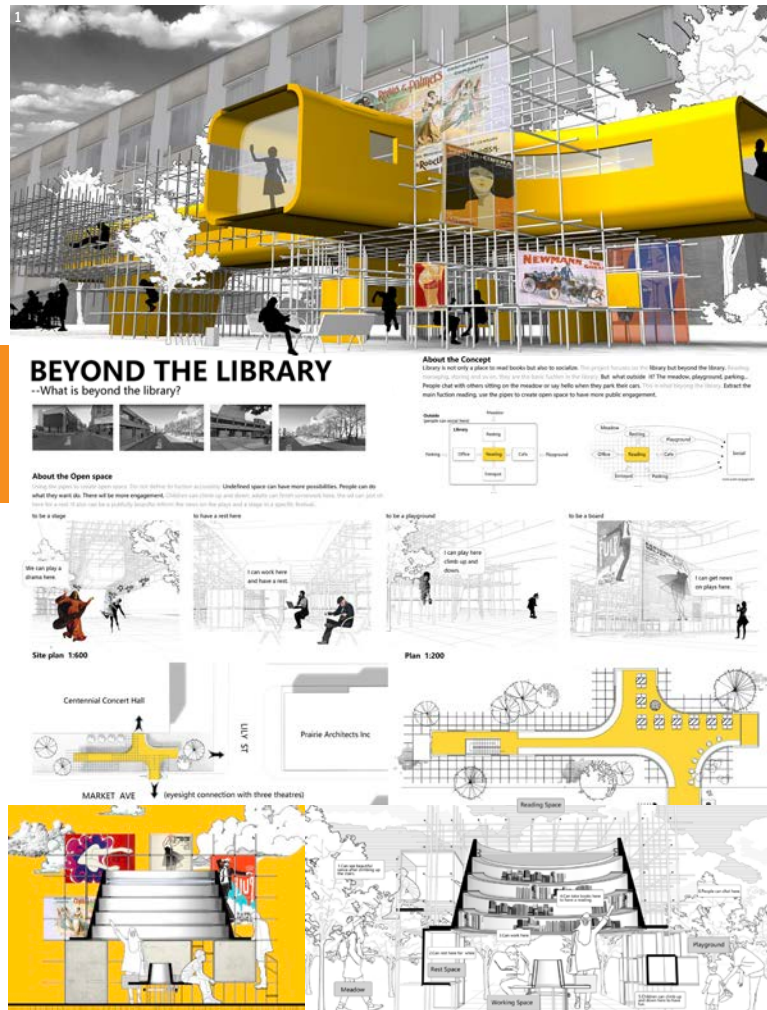
As a Comprehensive Design Studio, students considered manifold architectural criteria and facets of design - cultural, urban, environmental, technical, and artistic - working across a wide spectrum of scales: from furniture and cabinetry details; curtain walls and building envelopes; to the street-scapes, skylines and characters of the

surrounding milieu. This meant designing everything from book-nooks to skylights, while also imagining varieties of inhabitation to discover and enliven the city.

Students proposed a panoply of programs to complement their public libraries, including galleries, cinemas, co-working spaces, collaborative studios for mixed-media and graffiti art, a full service grocery with outdoor market stalls, public auditoriums, social service offices, affordable multi-family and single-occupancy apartments, an Indigenous hostel and cultural center, bookstores, digital pawnshops, restaurant bars and cafés, urban amphitheatres, and rooftop sculpture gardens.

Studio Biblio discovered not only the regenerative agency and potential of public libraries, but also the nurturing and transformative role of public architecture. Studio Biblio opened a way of reading the imaginative terrain of urban environments as a crucial story in the human world: reading between the lines of the city, reading places, and the activity of people themselves as part of a continuum of social media and mediation. From bamboo scrolls to digital screens, from billboards, kiosks and alleyway graffiti to intentional and unexpected rendezvous at the intersection of daily life, students explored architecture as a fundamental social medium, vital to the experience and making of contemporary life - **a never ending story**.

ARCHITECTURE OF PUBLIC ENGAGEMENT (RAIC Student Competition): 1: **Qiwen Lu** "Beyond the Library" a climbable Fun-Palace kiosk for Winnipeg's Fringe Festival that prefigures her "Reading City" library and cinema; 2: **Hasti Fakouri** "Red Ribbon," a sculptural free-library connecting people to the endless river of global imagination; 3: **Apoorv Chopra** "Shared City Color Garage," sparking curiosity and enlivening chromatic space.

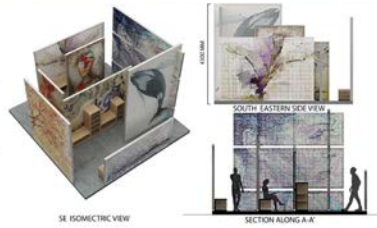


4: Ritam Niyogi "Canvas Jaali," an interactive space of juxtapositions; 5: Alan Vamos "Part-Allez," exploring the city's inbetween spaces; 6: Chenqu Zhao "Book Pavilion," a portal in the garden of Assiniboine Park; Klassen "Peg City Knowledge Market" with books carts from across the city; 8: Alex Bartmanovich pop-up "Book Worm" on Albert Street; 9: Bianca Dahlman "Link," a portable book-nook for urban thinkers.

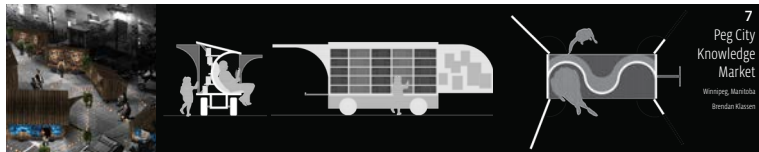
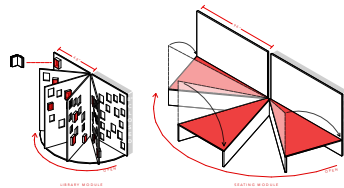
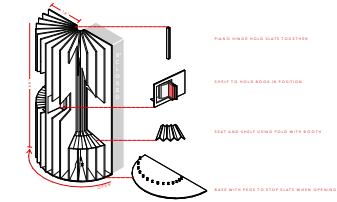
7: Brendan

4 CANVAS JAALI

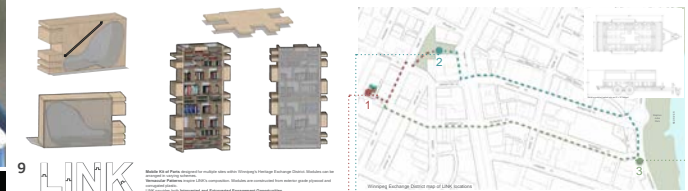
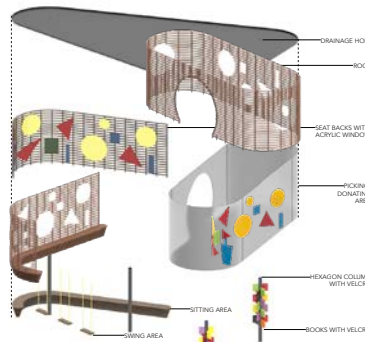
JAALI in the Indian language means perforated stone or latticed screen, usually with an ornamental pattern generated through calligraphy and geometry for created semi-enclosed spaces.



5 PART-ALLEZ (PARTAGER)



6 BOOK PAVILION



Studio Biblio

DIRECTORS
Lisa Landrum & Ted Landrum

ZOOM REVIEWS

TUESDAY, APRIL 14, 2020 9:30am-5pm

GUEST CRITICS

Howard Davies
Pulitzer Big City, Montreal
Andrew Lewthwaite
Public City Architecture
Sasa Radulovic
9468799 Architecture

Prepare to be
astonished!



Magritte

Market Junction

ALEX BARTMANOVICH



Market Junction Library enhances social infrastructure in Winnipeg's Exchange District. Occupying a historic lot across from Market Square, it provides access to learning, technology and social development services. Its open pedestrian corner, elevated light-filled reading rooms, and generous rooftop also serve as public theatres to stage and view civic festivities and every day events.

It is a place to read books and the city.

If architecture provides anything at all, it is a platform for enquiry.

- DOUGLAS DARDEN

I have always imagined paradise as a kind of library.

- JORGE LUIS BORGES

The archive is never closed. It opens out of the future.

- JACQUES DERRIDA

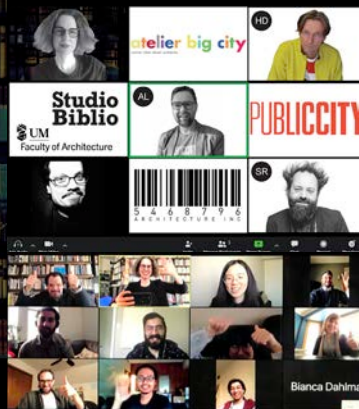
The ideal library symbolizes everything a society stands for.

- ALBERTO MANGUEL

Studio Biblio

explores the **regenerative** architecture of public libraries, and the **vital** practices of reading, reading places and reading life and forms of the city.

Libraries are **living** archives of knowledge and crucial catalysts for **imagining** futures and fostering community **interaction**. Through research and design, the future architects of Studio Biblio have devised a variety of mixed-use multi-story libraries with diverse strategies for **public engagement**.



Nexus Library

APOORV CHOPRA



Situated at the juncture of the Red River and the East Exchange District, the **Nexus Library** mixes library and co-working programs and links essential nodes of urban, natural and social engagement. At street level, transparency provokes dialogue between the inside and the outside. The building's vertical movement - with its Red Ribbon stair - provides dynamic spaces of interaction, relaxation and sensation with opportunities to gain and share knowledge and discover new views of the city fabric.

Neeginan Place

BIANCA DAHLMAN



Neeginan, Cree for 'Our Place,' honours Indigenous development visions. The project is a mixed-use building dedicated to library services, multi-family housing, and hostel accommodations. Shared spaces between library and housing programming include a community kitchen and a multi-purpose penthouse for pow-wow, drumming, making, feasting, story-telling, and more. Neeginan Place seeks to build relationships between Indigenous and Non-Indigenous Winnipeggers.

Paradox Gallery & Library

HASTI FAKOURI



Paradox Gallery & Library occupies a curious corner of Winnipeg's Exchange District. The new building preserves the most charming features of the site's former Antique Shop—with its large glass windows and heavily painted masonry evocative of a ruin—while incorporating a multi-media library, cinema, gardens and galleries. Its design and collection celebrate the combination of old and new, heavy and light, fast and slow, and many other contrasts wrapped up in the urban narratives we share.

Magic Lantern Library

RITAM NIYOGI



The **Magic Lantern** merges a community library, grocery store and street market – within a **colorful illuminated envelope** – to **spark curiosity** and activate street edges, while providing much-needed amenities in the area. Surrounded by theatres and historic masonry buildings, the Magic Lantern's façade performs as a glowing screen and spectacle in the East Exchange. Above busy shops are diverse study spaces. At night, when streets are dark and quiet, the study spaces **glow** with readers' curiosity.

Market Avenue Library for the Performing Arts (MALPA)

BRENDAN KLASSEN



MALPA aims to support, encourage, and exhibit the deep heritage of performance in Winnipeg by collecting works and material to be made available to the general public for study and engagement. Designated archives, study carrels, and collaboration spaces are designed to facilitate various methods and strategies of apprehension, discourse, and further appreciation of the history, technique, and value of various performative arts such as dance, theatre, and music.

Wandering Book Library

ALAN VAMOS



The **Wandering Book Library** re-thinks how books are sorted and circulated, where each item has many homes and browsing will lead to new possibilities. The library is integrated with an urban art centre where wandering graffiti artists come under one long roof to teach what was once learned in the shadows of the alleyways and rooftops. Instead of a monolithic block, the library complex is made up of various structures which reflect the varying programs inside.

Bamboo Book Forest

CHENQU ZHAO

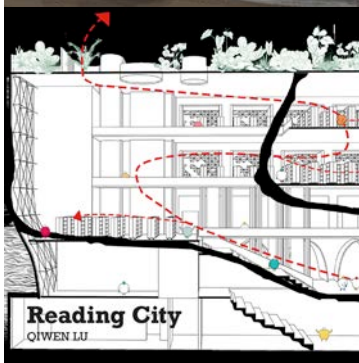


The goal of **Reading City** is to give people not only a place to read, but a place to read the city they are themselves part of. This new multi-media institution enables visitors to explore the character of urban space in the cultural core of Winnipeg's Exchange District, while increasing interaction between people in and around the building. It has a book market, a variety of reading rooms attuned to different senses, and a wild roof garden for **urban fantasies**.

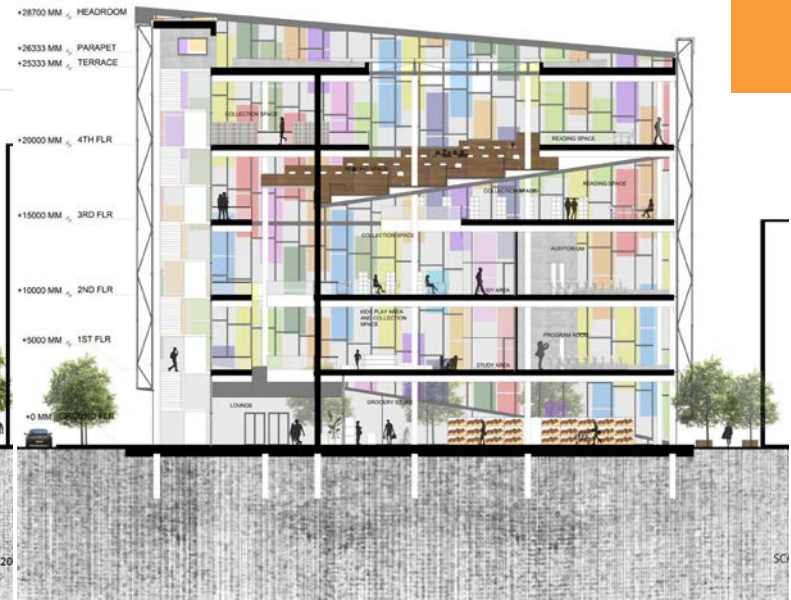
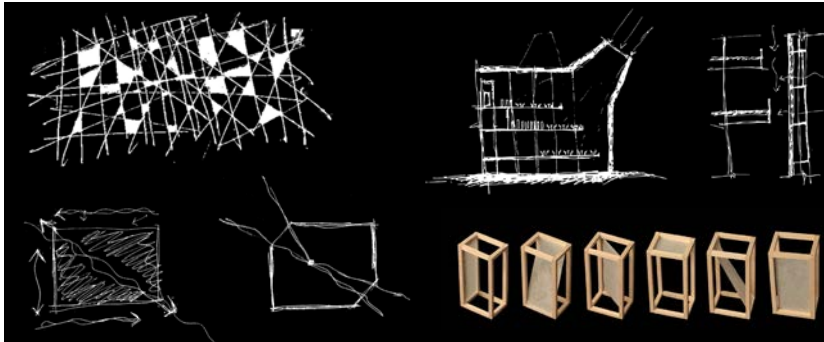
Inspired by bamboo wooden slips, a traditional Chinese writing media before the use of the paper, this library offers interactive ways to experience the written word. While absorbing knowledge and finding identity, people can wander through the **Bamboo Book Forest** and feel the materials, which are smooth and fluent and full of logic and imagination. The landscape around the library provides more leisurely public space connected to river trails and community.

Reading City

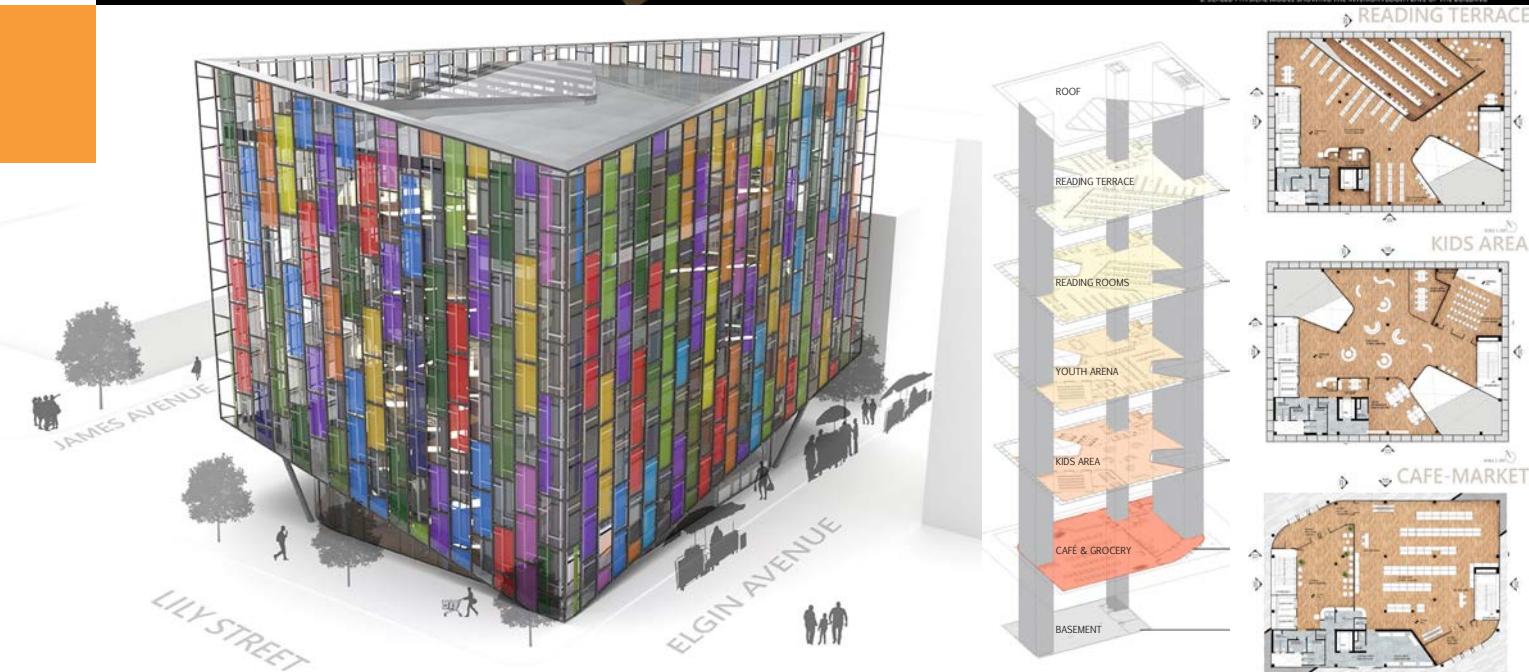
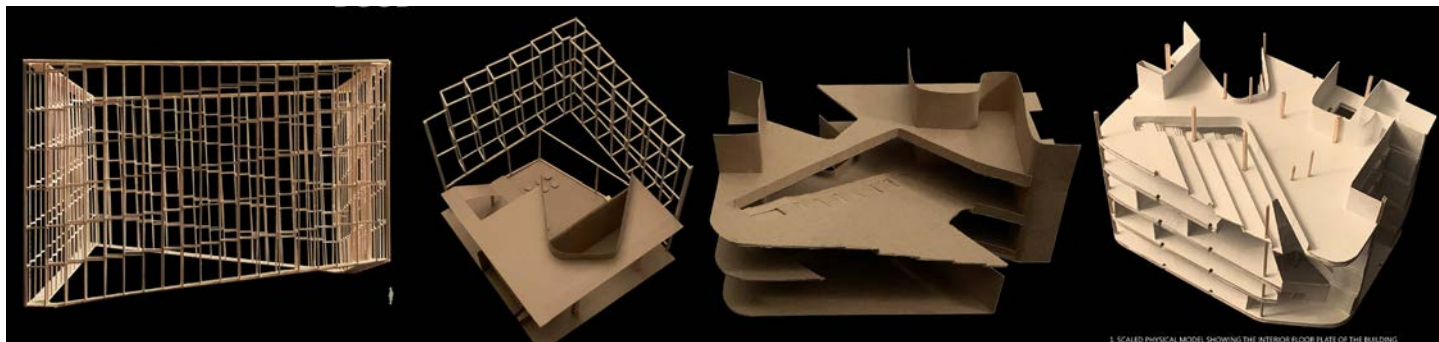
QI WEN LU



Ritam Niyogi "Magic Lantern" library and grocery. This social infrastructure expands the existing laneway market of the East Exchange with a gigantic lantern of light, color and civic activity.

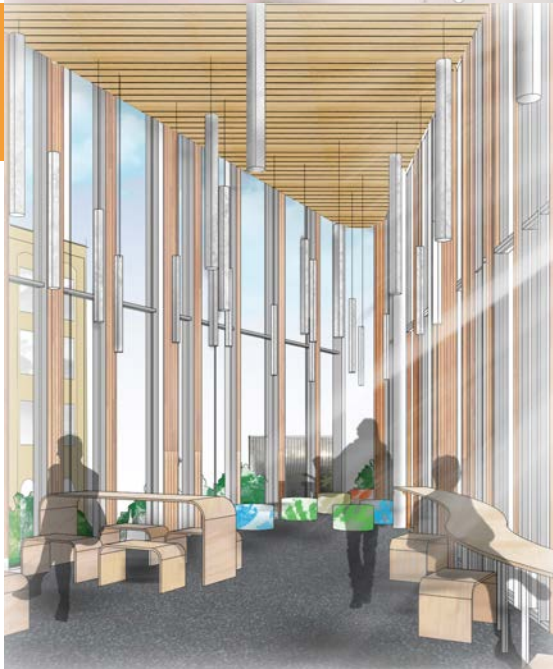


The shifting panels of the façade and the diagonal bridges of the library, weave together people and activities, while connecting inside to outside, and animating the neighborhood 24/7 as a cultural beacon, aglow with the vital colors, textures and rhythms of urban life.

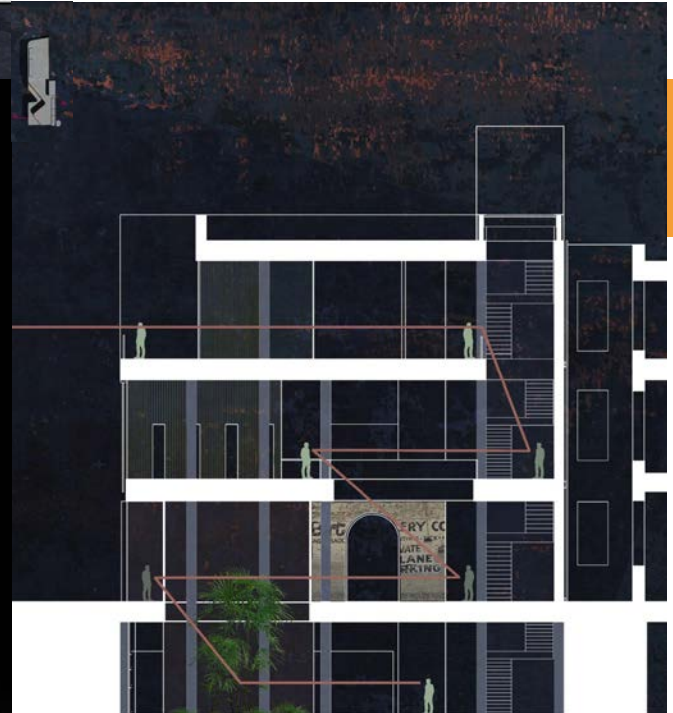
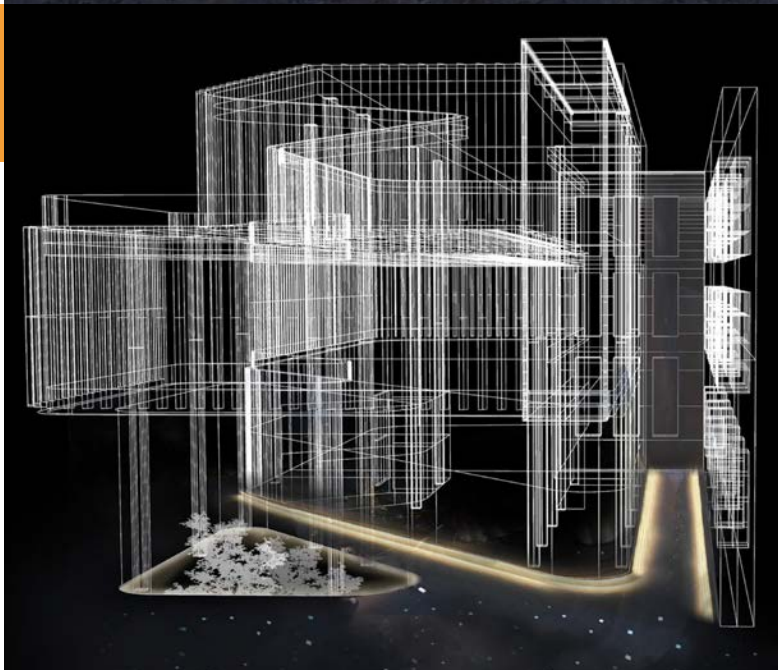


Alex Bartmanovich "Market Junction Library" is located at one Winnipeg's most intimate and charmingly irregular intersections, where bikes, cars and pedestrians all slow down to navigate safely while seeing and being seen in the heart of the city. It is a place to read books and to read the city. Reducing the building footprint only enlarges its scope by allowing activities to flow into the enveloping streetscape and tree-scape.

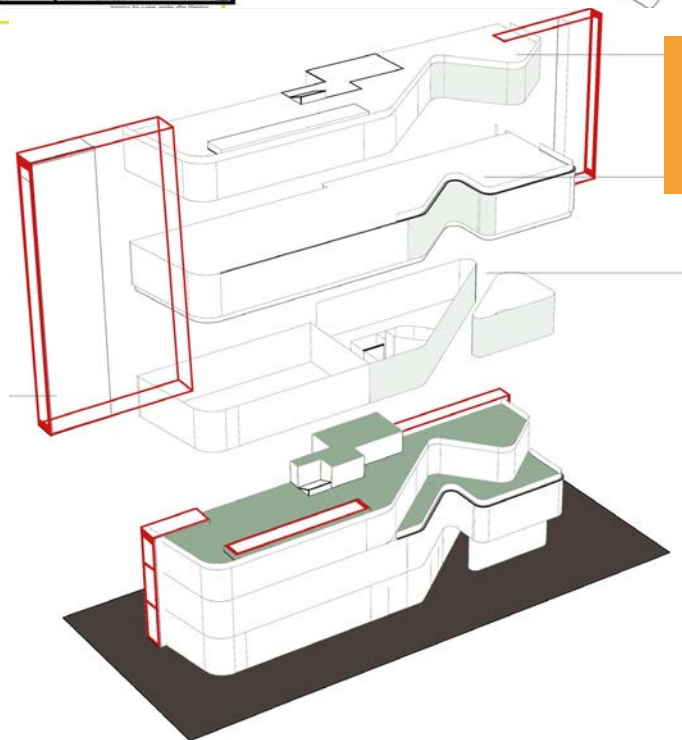
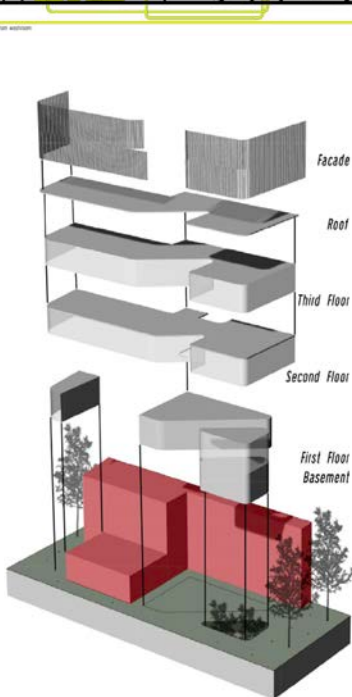
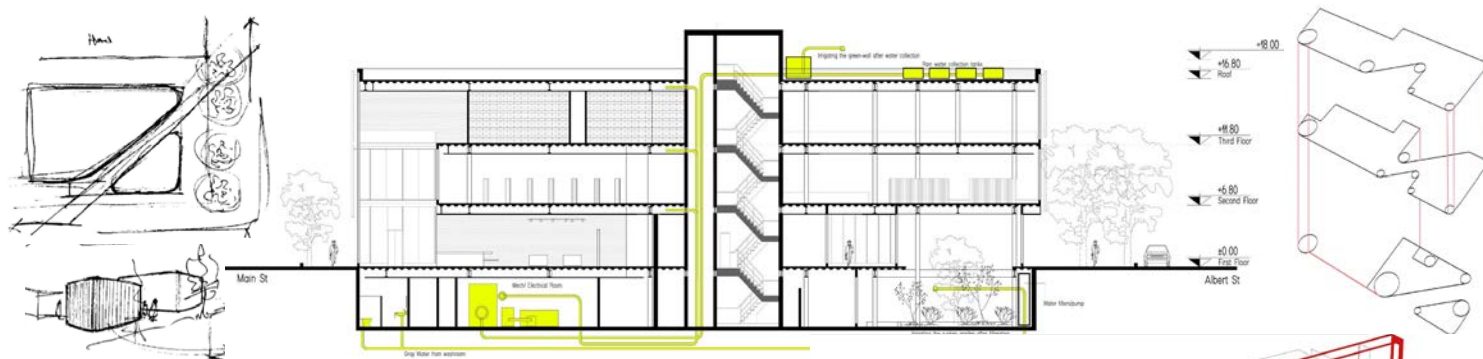




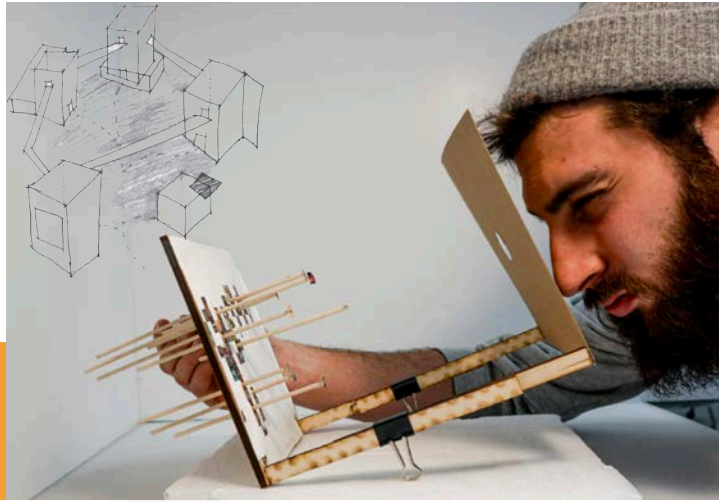
Hasti Fakouri "Paradox Garden Gallery Library & Cinema" expands on the best qualities of a former historic antique shop. It provides a gateway between the East & West Exchange District, while accommodating a pedestrian short-cut to narrower streets of the neighborhood and drawing people in to the multifaceted programs.



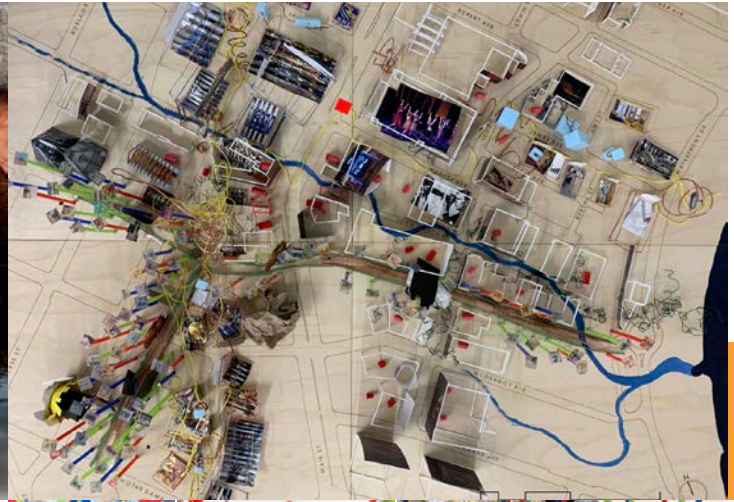
A sunken garden on the West corner, is balanced by a secret cinema on the opposite upper level. Skylights, gardens, sliding panels and displays punctuate the space with light, artifacts and greenery. Passing through one has the paradoxical sense of occupying many places and moods at the same time.



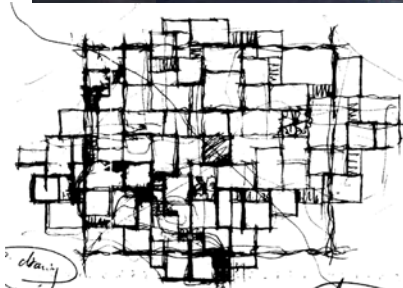
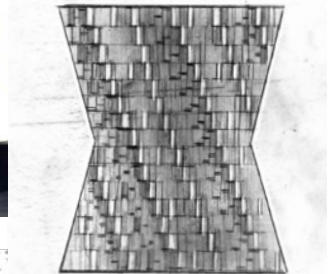
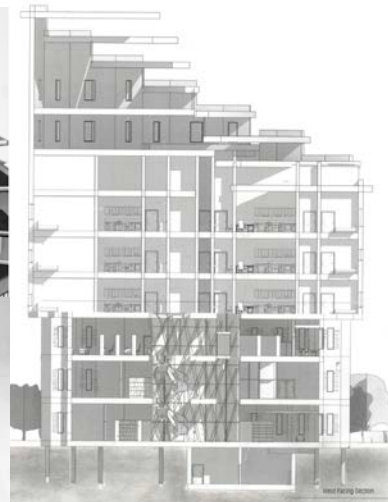
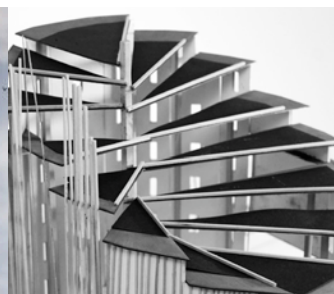
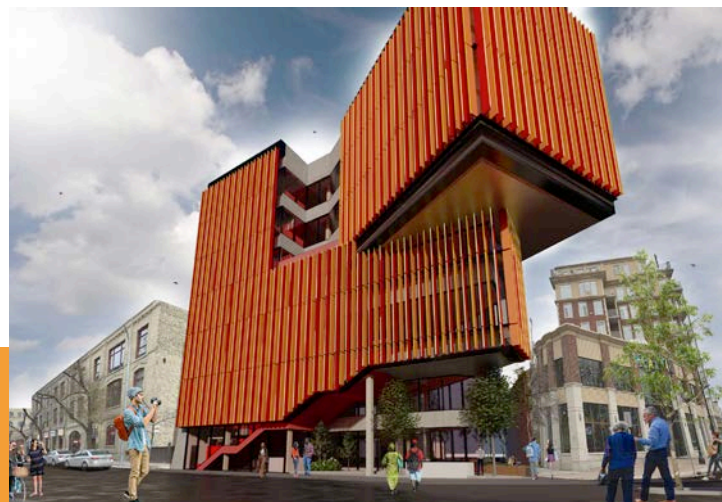
Alan Vamos "Wandering Book Library" generative study model and articulated building section with views into the warehouse laneway network.



(top): Reading the Exchanges: group interpretive site model of Winnipeg's East & West Exchange Districts; (btm): Chenqu Zhao "Bamboo Book Forest" street-scape study of rhythmic waves of fast/slow & opaque/porous.



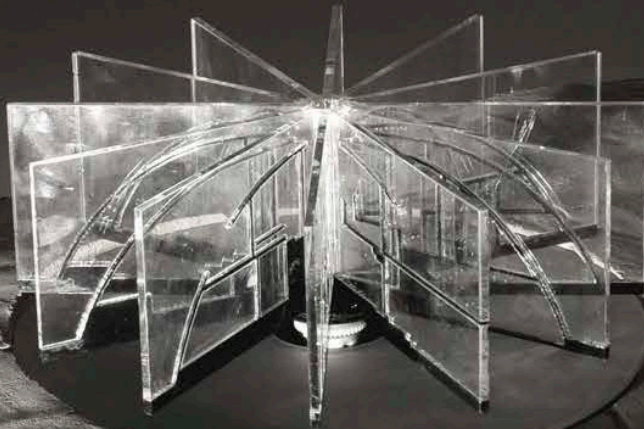
(top) Apoorv Chopra "Nexus Library" a crossroads of districts, paths, programs, cantilevers and river views;
(btm) Qiwen Lu "Reading City" lively sketch and model for multi-media library and cinema.



Bianca Dahlman "Neeginan Place" is an indigenous focused library with living and community spaces above, topped by a light-filled ceremonial space and wrapped by articulated screens.

**“An architecture which is alive is one
that embraces the phenomenal realm
and instability of meaning”**

- Excerpted from studio brief



HUNTING THE SHADOW

ARCHITECTURE MEANT TO BE EXPERIENCED: LIVING, BREATHING, UNGRASPABLE

This studio explored the process of constructing an architecture that is palpable, felt and not static or dead; an architecture which is alive is one that embraces the phenomenal realm and instability of meaning. In its best version, this architecture is comprehended by individuals on their own terms and they don't tire of it, instead, it is expansive and revealing. It possesses an embodied uniqueness, complexity and strength.

The studio was titled after a Jonathan Hill chapter in *Immaterial Architecture*. In this studio, the shadow was the back story, a student's own shadow, the fourth dimension, the shifting nature, the intangible. The reason that Adolf Loos would not allow his buildings to be photographed, 'because one can simply not taste the dust in the sofa.' is the shadow that is being tracked here.

STRATEGIC CONTRADICTIONS IN STRIVING FOR INSTABILITY: THEMES

1. WEAK ARCHITECTURE

Weak architecture is the diagonal, oblique and or transverse cut through recollection. Philosopher Sola Morales describes the lingering resonance of poetry after it has been heard, with the recollection of architecture after it has been seen. Weak architecture gains strength from a position of weakness, of not being centered and aggressive and dominating but tangential and weak.

2. RADICALLY IMPERFECT

The radically imperfect will provide the traction for advancing ideas into architecture. SHADOW STUDIO is interested in how these can become charged places of

meaning within an architectural investigation. Can giving up some control to changing environments, enacting situations still yield poetic and rich work? Can we yield to the things that we don't have control over and make these critical places where meaning can generate architecture, can structural deflection in a wood frame building or the tolerance in dimensional lumber or other seemingly real annoyances and imperfections be affirmed critically to generate embodied work. This exploration requires a will over reason, DIY, positivistic attitude where one makes no excuses and has no regrets.

3. LOGIC OF THE LIMIT

The studio will focus on the development and distillation of a student's own beliefs in a series of related and sequential projects through the lens of a chapter in Ignasi Sola Morales book *Differences*. This chapter relies very heavily on philosopher Eugenio Trias' ideas around the logic of the limit.

In studio, students chased shadows of exemplar architectures including Antonioni's house in Costa Paradiso, Casa Malaparte in Capri, Scarpa's Brioni cemetery in Altivole, Palladio's Bridge in Bassano. All aspects of these projects were explored: tectonics, personalities, ghosts, sites, philosophies, materiality, psychology. This studio asked students to expose their own self and their vulnerabilities.

4. SPECIFIC HOUSING

Students designed a medium scale housing project guided by their own beliefs

5. CPCI FRAMEWORK

Students explored their ideas in a tectonic physicality in precast concrete.

FIELDTRIP: Sardinia, Venice, Bassano del Grappa, Urbino, Altivole, ITALY

1. SHADOW Precedent:

Students studied qualities [physical and poetic] of an exemplar densely ungraspable precedent. [could be building or part of] They visited these precedents either in the Northern Italian Studio Tour or via a local site tour. [Tectonic precedent study in Pre-cast or site cast Concrete or might be able to be built in precast concrete]

2. INSPIRED BUT SUBJECTIVE Speculation:

The research was then manifest in an architectural proposition that extended and embodied the qualities of the precedent. The architecture was relatively simple programmatically.

3. Physical Mockup:

Construction of scaled Mockup of Proposition. Finally, the goal is to construct that proposition at a 1:10 scale that understand the joints and seams and interfaces and poetic embodiment. Several physical iterations were necessary to develop the project.

4. Comprehensive Program report

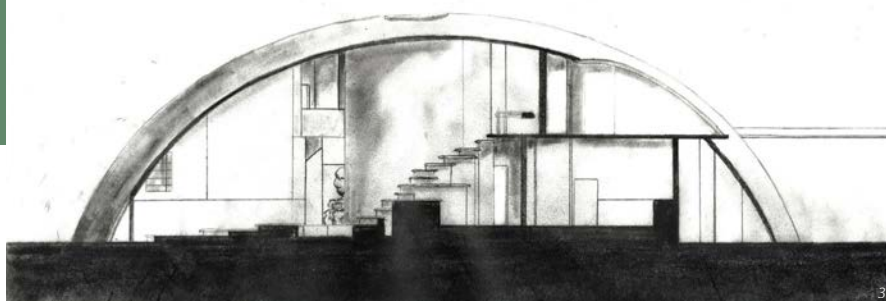
Students developed program and site for second term comprehensive project.



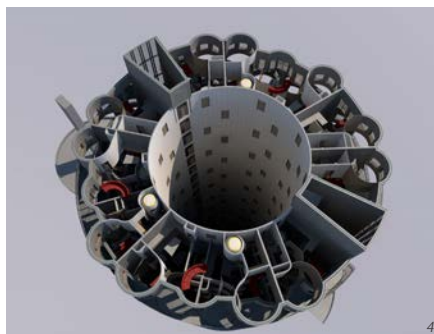
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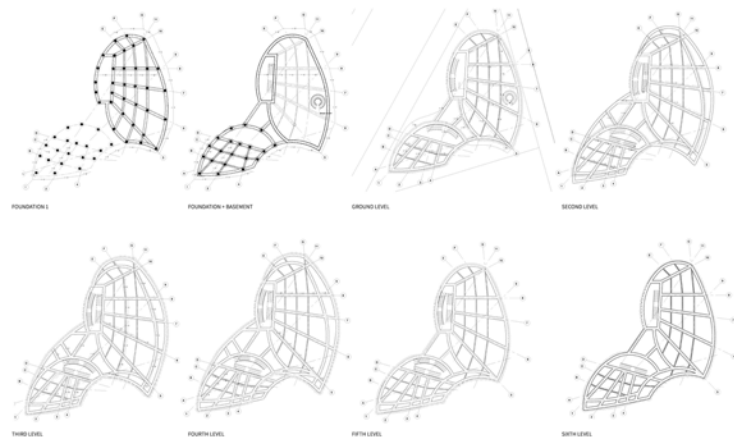


North Floor

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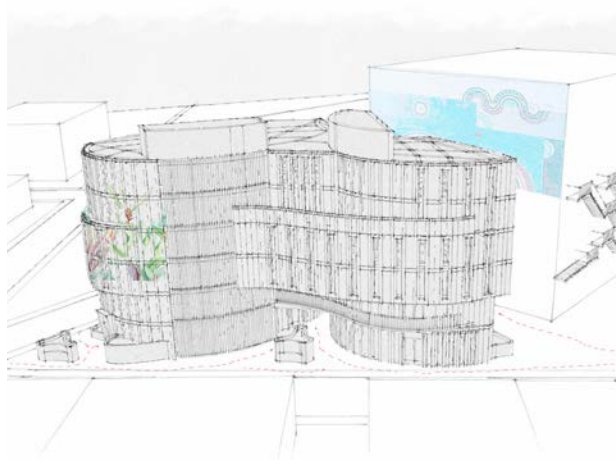


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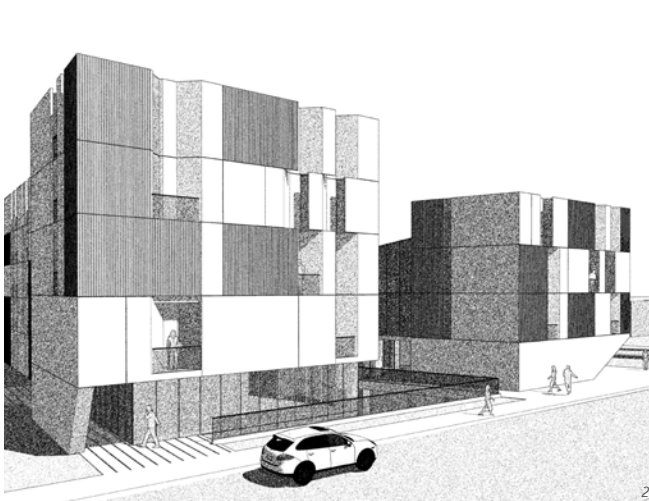
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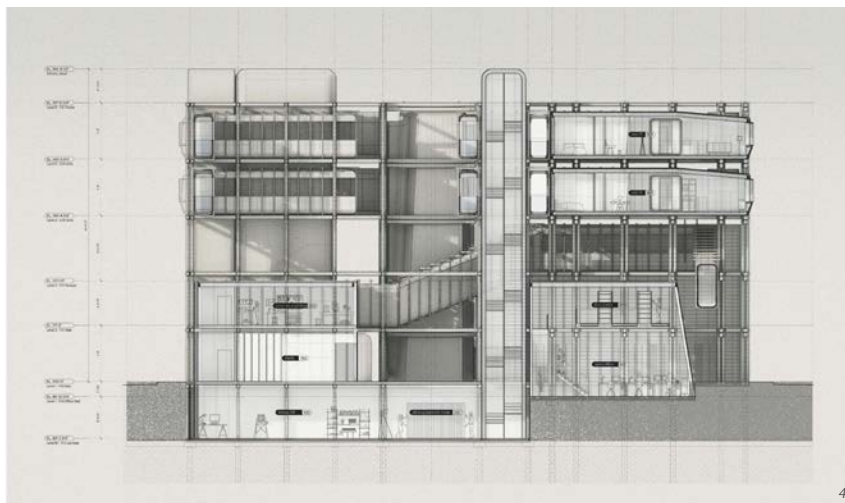


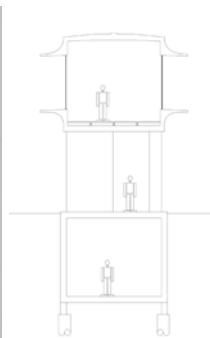
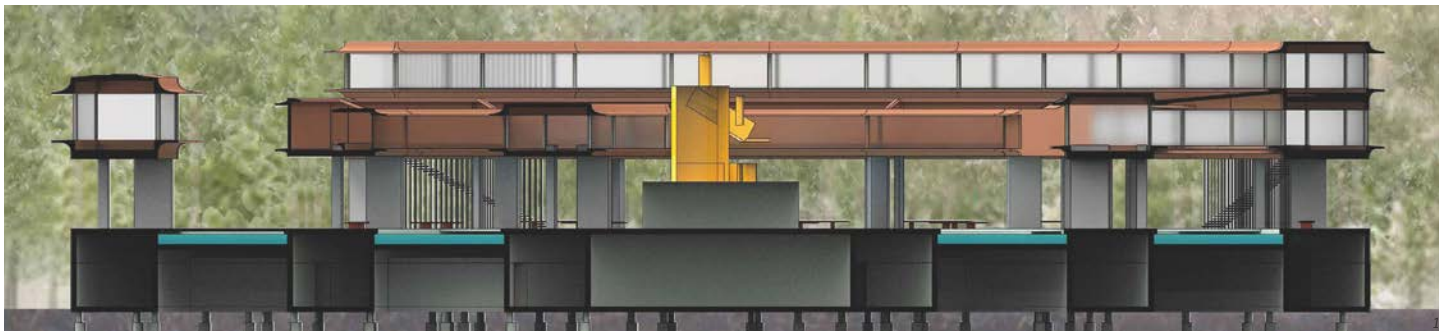
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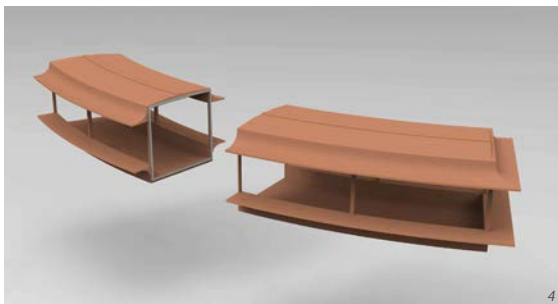
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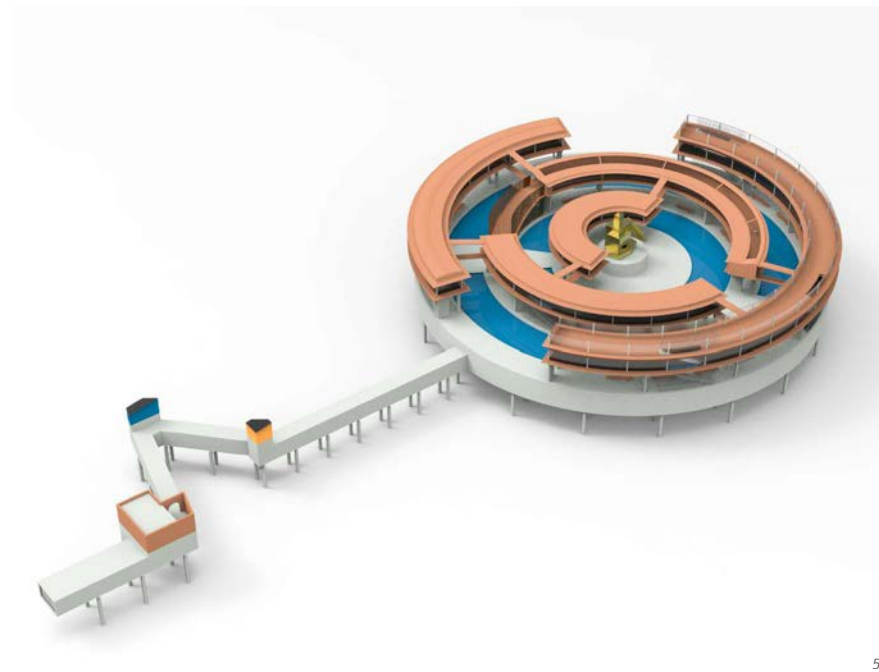




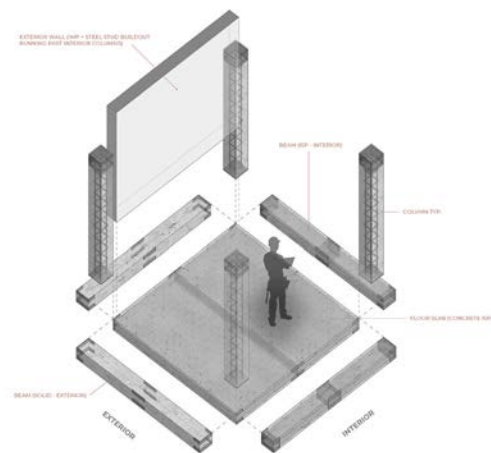
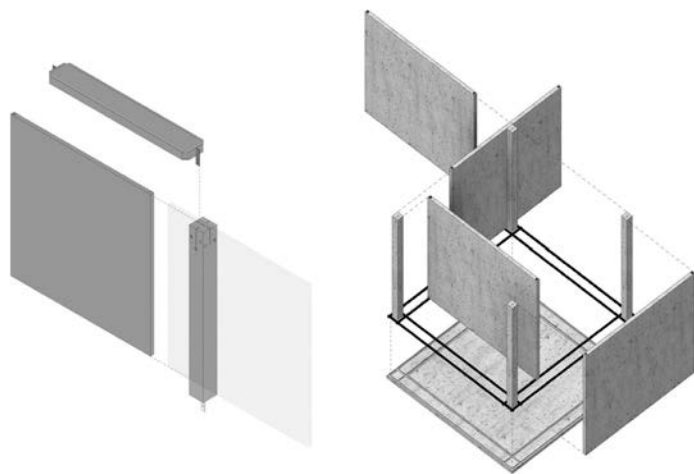
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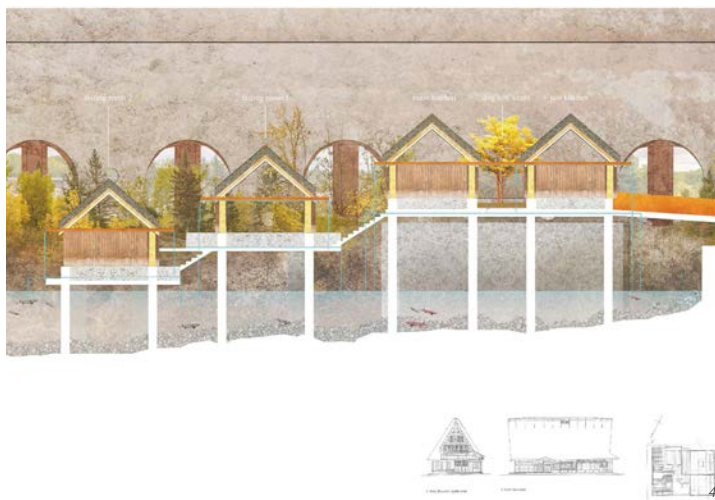
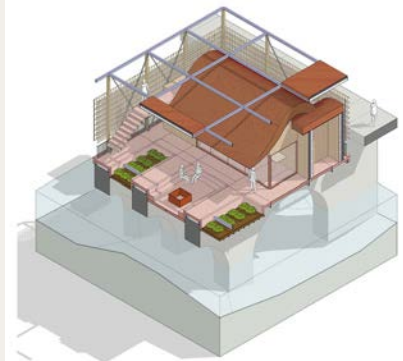
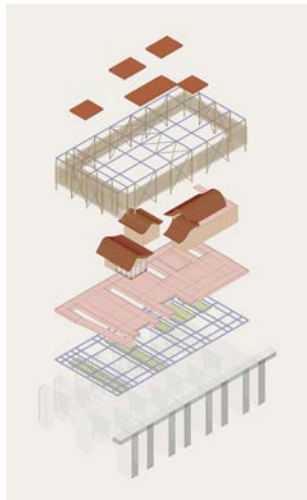
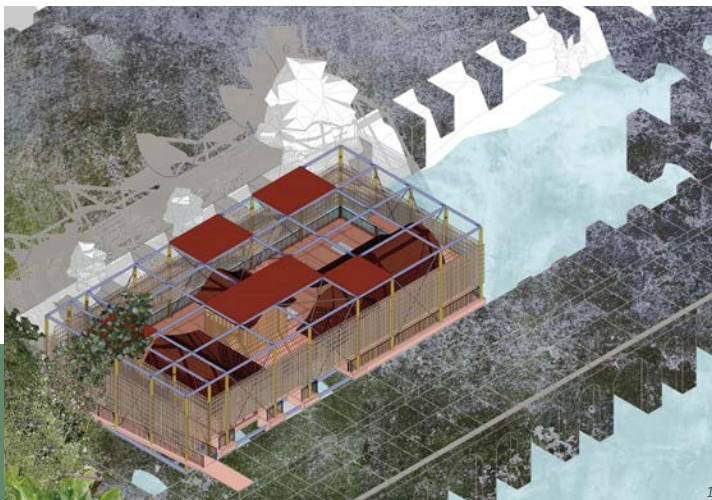
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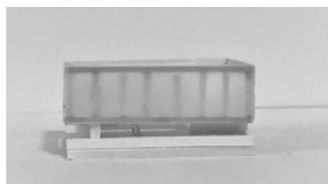
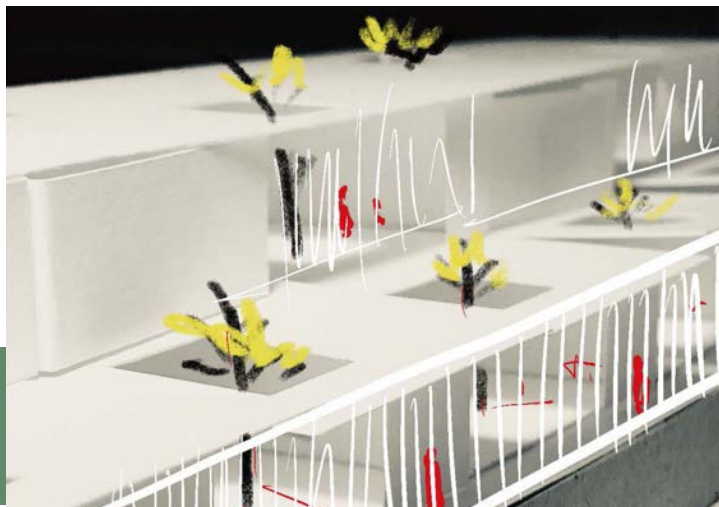


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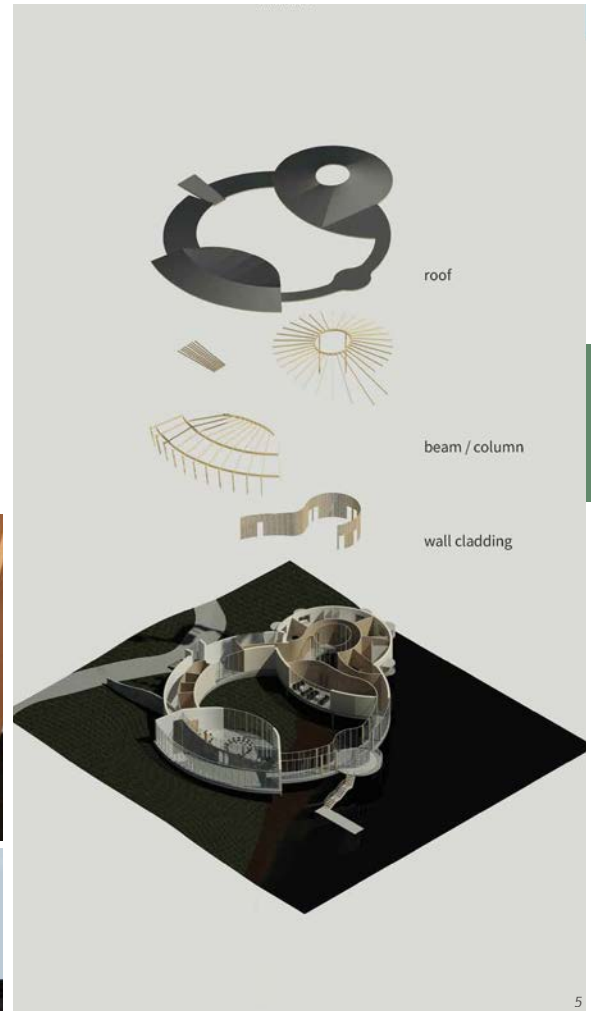
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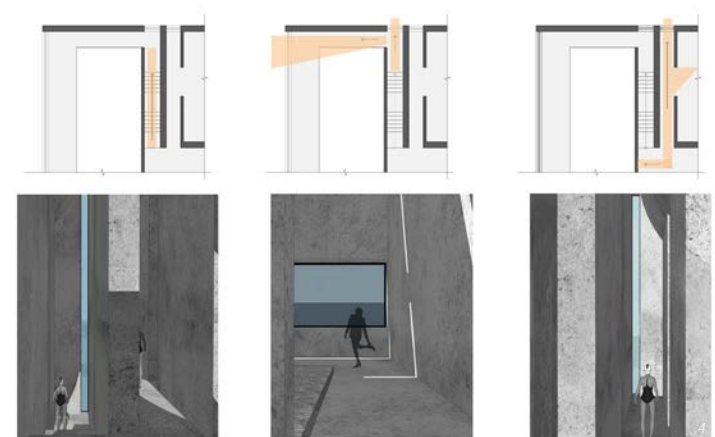
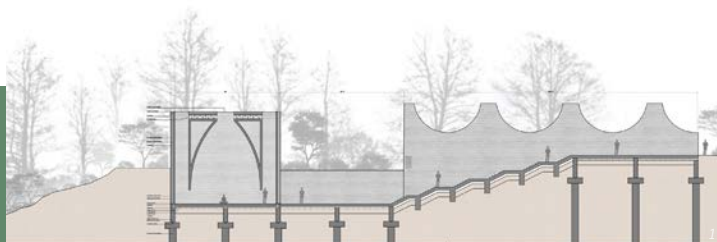
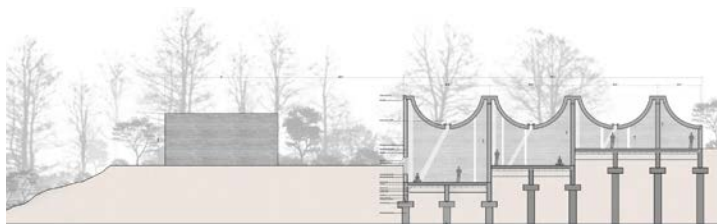
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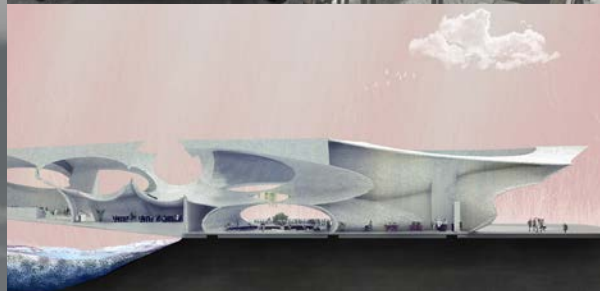
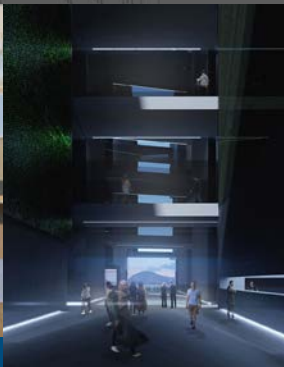


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THESIS COMMITTEE: Terri Fuglem (Coordinator), Lisa Landrum, Carlos Rueda

THESIS ADVISORS: Eduardo Aquino, Shawn Bailey, Lancelot Coar, Herb Enns, Ed Epp, Terri Fuglem, Mercedes-Garcia-Holguera, Neil Minuk, Carlos Rueda

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DESIGN THESIS

Design Thesis in the Department of Architecture at the University of Manitoba allows for a wide scope of approaches to architectural questions: from radical theoretical explorations, to focused investigations into complex technical issues, to a comprehensive architectural proposition at a scale typically engaged in the profession. Unlike many professional schools, students demonstrate their ability to tackle a comprehensive and complex project in the year preceding their final year (M2), freeing them to address focused architectural issues in directed research in the first term (pre-thesis research studio) of the M2 year, and propositional, synthetic project in the Design Thesis term. The Department adopts the point of view that design work in the academic setting entails a form of speculative work, and as such, a self-directed line of inquiry is an integral part of the work.

This year presented an unusual set of circumstances that were felt worldwide: the COVID-19 pandemic and subsequent closure of our University (along with other Canadian universities) on March 13, 2020. Students still had a critical month of work to complete before final reviews, yet they were given only a couple days to pack up and continue their work in their home setting. All facilities of the University closed: studios, libraries and archives, the bookstore, loan pools, printers, scanners, computer and digital fabrication

labs, the wood shop and assembly rooms could not be accessed under any circumstances. Furthermore, face-to-face instruction was off-limits, and outside the University commercial ventures deemed non-essential were shut down. It was a bit like the music being cut-off in a game of musical chairs: where you were on March 13th is how you landed. Those who had homes with good internet facilities, personal support, adequate computers and private space were at an advantage; those without had to cope as best they could. But no matter what situation students found themselves in, they had to adapt quickly and retool -- with the help of their advisors and colleagues over the phone and internet -- their approaches and expectations. For most, models were impossible. Computer rendering was also difficult with the closure of the CadLab. All presentations of work for the final thesis examinations were to be held, for the first time in the history of the department, entirely online. Students were given, in total, a two-week extension. No-one was quite sure as to how this would turn out.

To the credit of the students, faculty and support staff, the quality of the Design Thesis was of truly excellent caliber. Due to the students' skills and work ethic, they pulled together online and carried through. A great range of architectural subjects were explored: the presence First Nations culture in downtown Vancouver on ancestral

The Design Thesis is an independently driven creative work developed within a focused subject of inquiry and directed by architectural questions. It is carried out through intensive research, study, and design explorations that culminate in a thoroughly developed architectural proposition. It is to be fully recorded in a final document.

land; urban densities in the suburbs; flexible modular prefab housing; restructuring the family farm; the future of wanderlust on the highway; an inter-cultural monument for Abuja; a retreat for recovery from addictions; a sea-side market in Busan; the adaptive re-use for climate change; -- these are a few of the diverse topics tackled by our students. The nimble adaptability and the dedication to sustained inquiry and invention of our students is admirable.

The format of the future term for the academic year 2020-2021 is still uncertain, as is the career trajectories of new graduates. As the accelerating crises of our times mount -- climate change, species loss, authoritarianism, economic uncertainty, racial disparity, colonialism, global tensions, and the existing and new pandemics -- architects will need to anticipate and address challenges, seen and unforeseen. The work carried out in Design Thesis as structured at the University of Manitoba is intended to teach students to probe deeply, to think, to invent, and to adapt and think on their feet. If viewed in with the right approach, the current crises offer opportunities for deep structural change: social, environmental, political, economic and architectural. As the coordinator of Design Thesis, I believe our graduates have the motivation, imagination and resources to make critical change happen, both as citizens and architects.

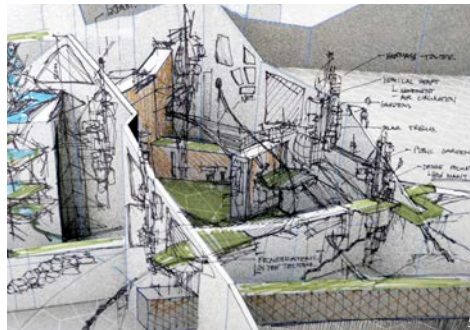
NEW DESERT SHORES: COMPOSING NEO- SETTLEMENT FOR THE POST-FLOOD WORLD

The Coachella and Imperial Valleys in Southern California exemplify naturally radical locations because of their extreme temperature, earthquake risk, fire risk, and future flood risk from the rising Pacific Ocean. They are also socially radical, as they host heterotopian settlement which is unique to the desert and its proximity to the Salton Sea. With numerous variables in these areas being noticeably affected by human induced climate change, these sites exist as hinges of extremity between humanity's current and future living conditions.

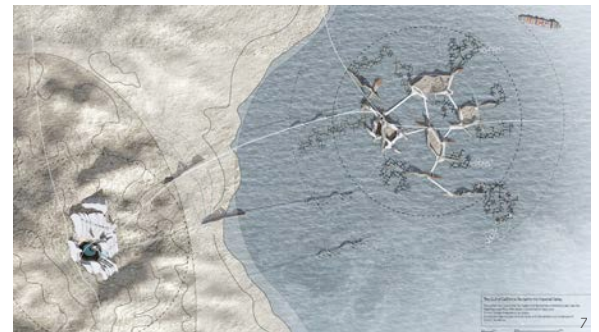
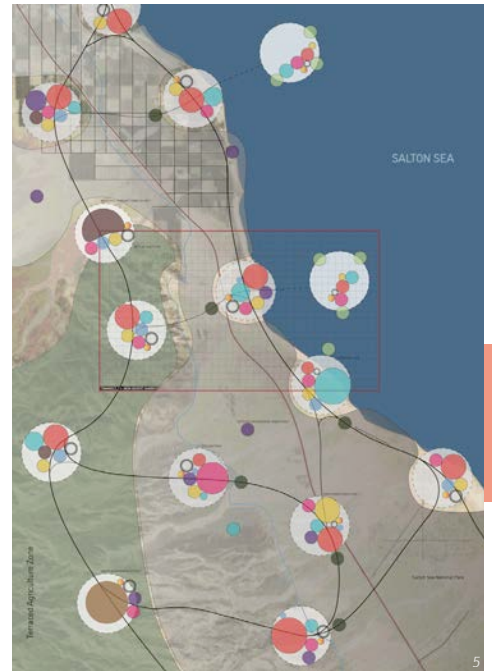
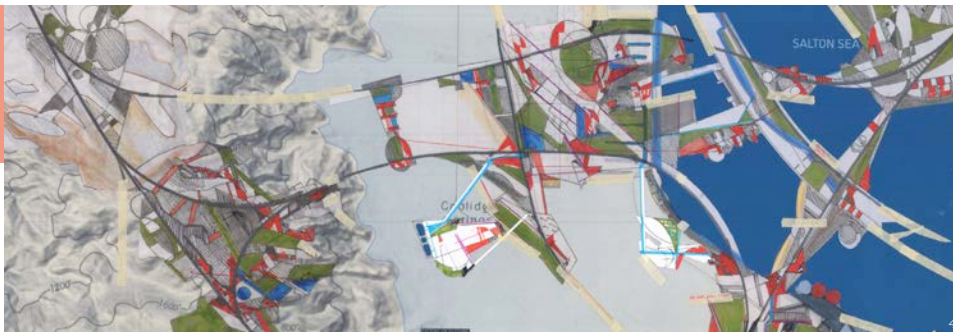
A simulation is proposed in which this site will change based on projected climate metrics. An anticipated flood resulting from the collapse of one of the world's three major ice sheets (East Antarctic, West Antarctic, or Greenland) will impose a radically changed site - the Salton Sea will swell to six times its current size. The volatility of this site will test how architecture can be a crucial component in responding to future consequences of climate change. In particular, the town of Desert Shores CA is seen as an ideal testing ground for architectures which are resilient to the proposed site conditions due to its proximity to the Sea and the southern tip of the Santa Rosa Mountain Range.

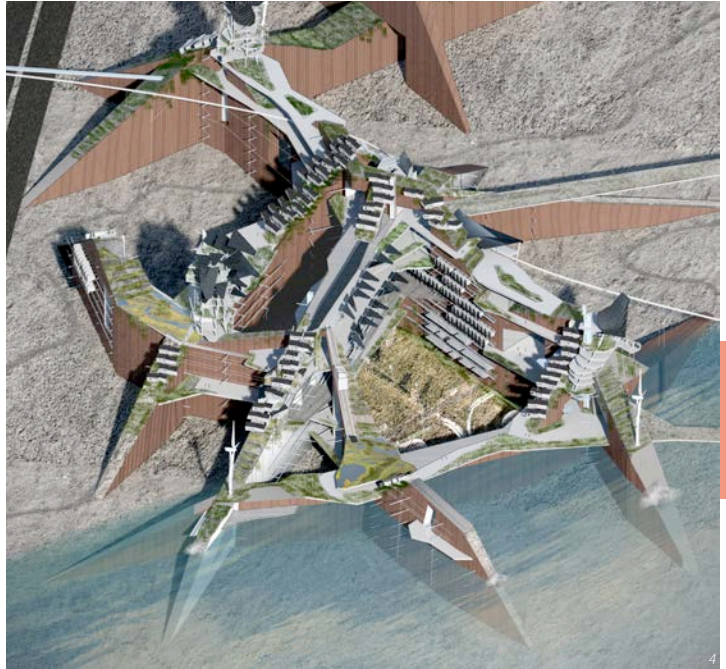
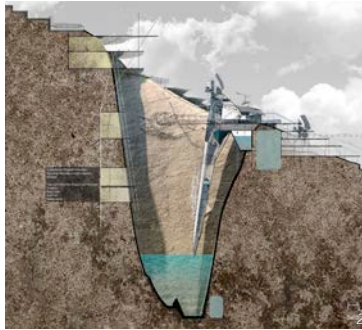
New Desert Shores is a speculative settlement project located on the shores of the Salton Sea which aims to challenge the infrastructural and morphological status quo of the modern western city. The city composition is considered in three zones: Mountainous Desert, Flat Desert, and Sea. Each zone is intended to host distinct districts of substantial architectural and systemic variety which support each other to form a resilient, self-regulating network of settlement. For example, in order to withstand flooding on the flat desert, it is proposed that massive land form constructions - known as terramorphic profiles - are designed to act as a primary infrastructure on which to construct parasitic architecture.

Embedded within the drawings is a projection of a society in which such construction would be possible. Similar to how current cities exist as traces of political and cultural trends, New Desert Shores in its construction hints at both subtle and radical changes in societal makeup.

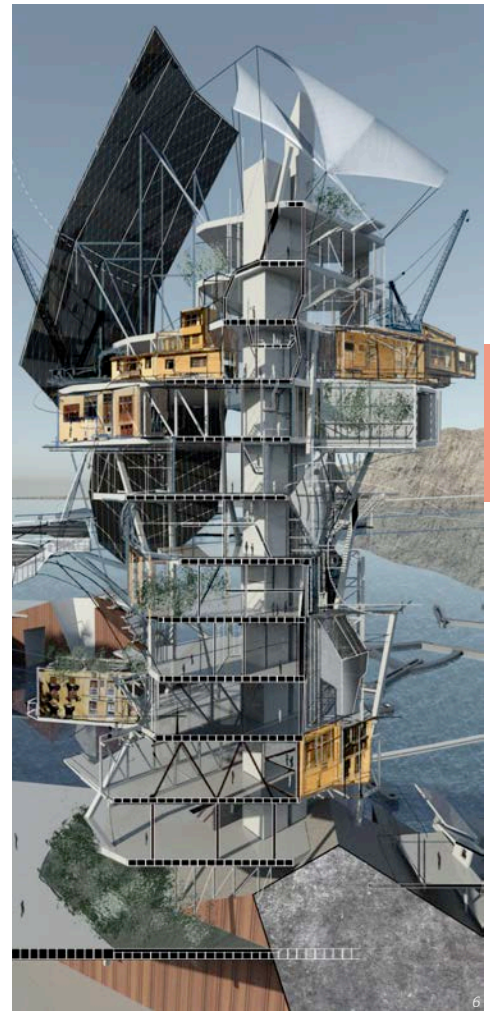
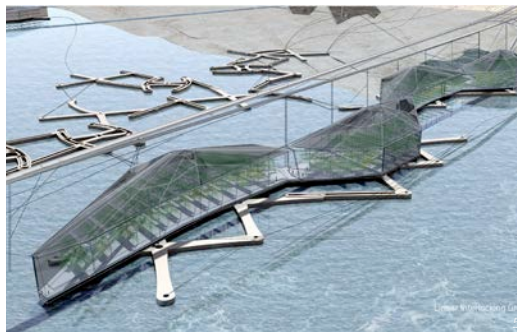
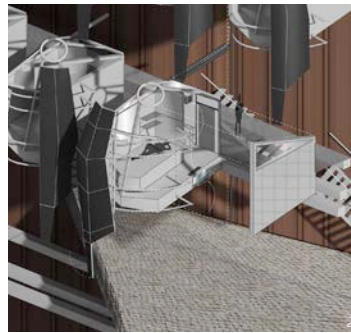


Context Map (1); Present Site Forces (2); The Mother of all Desert Floods (3); Composition v (4), New Desert Shores Master Plan: A Decentralized Regional Network (5); New Desert Shores Pre-Flood Transect Plan - Districts Terrace Forma, Terraform, and Gerridae (6); Flooded Transect Plan - District Terraform becomes an island, with floating infrastructures connecting Terramorphic Constructions (7)





Central Market @ Primary Transverse Grade (1); Single Person Dwelling Capsule (2); Cascading Single Family Dwellings, Wetland Platform (3); District Gerridae (4); Linear Interlocking Greenhouses (5); The Towers - Conceived as hybrid public/private structures, towers are composed of basic infrastructure and systems which may be plugged into by groups of individuals seeking to build and co-live. They are constantly under construction, and re-construction (6)



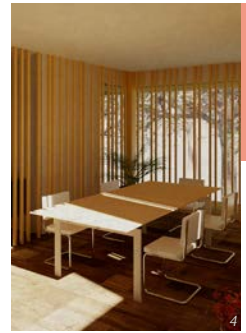
HOME AWAY FROM HOME: HOLISTIC DESIGN FOR ALS PATIENTS AND THEIR FAMILIES

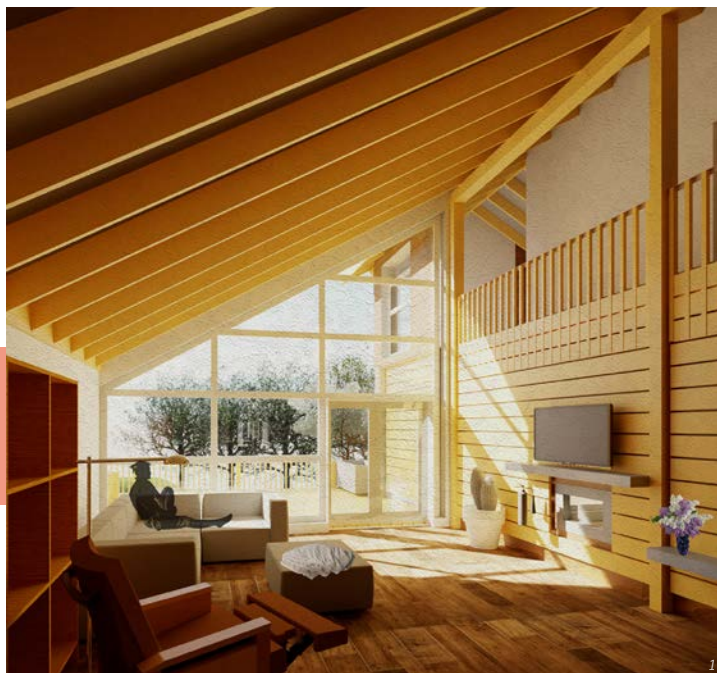
Is it possible to design a temporary sanctuary offering support and a sense of familiarity for family members faced with a paralyzing disease? This design thesis will explore how architecture can create a Home Away from Home for Amyotrophic Lateral Sclerosis (ALS) patients and their families. ALS is a terminal disease which slowly paralyzes the patient, eventually losing their ability to walk, talk, eat, and breathe. This means the world becomes smaller each day; no longer able to participate in family meals, communicate with their loved ones, or move around their home. I experienced this, as ALS not only took parts of my grandfather's life away, but also took parts of our family's life away, eventually restricting us to use only parts of their home.

ALS effects each patient differently, although 80% of patients pass two to five years after diagnosis.¹ While this terrible disease is taking your loved one from you, the family is forced to quickly make major decisions; "Do we go through with major surgeries?" and "Do we extensively modify our home to make it more accessible, or do we put it up for sale?" My family decided to renovate my grandparent's family room into a bedroom and washroom for my grandfather. In the end, he was only able to use this space for two weeks before he passed, and we unfortunately lost a great family space which held many memories.

This thesis will explore what a Home is for an ALS patient, pulling from my own experiences, meeting with other families, and mapping out existing and renovated spaces. Can architecture create a space for ALS patients and their families to experience their last moments together?

¹ "About ALS." ALS Society of Manitoba, 2014. Accessed September 10, 2019. <https://alsmb.ca/about-als/>.



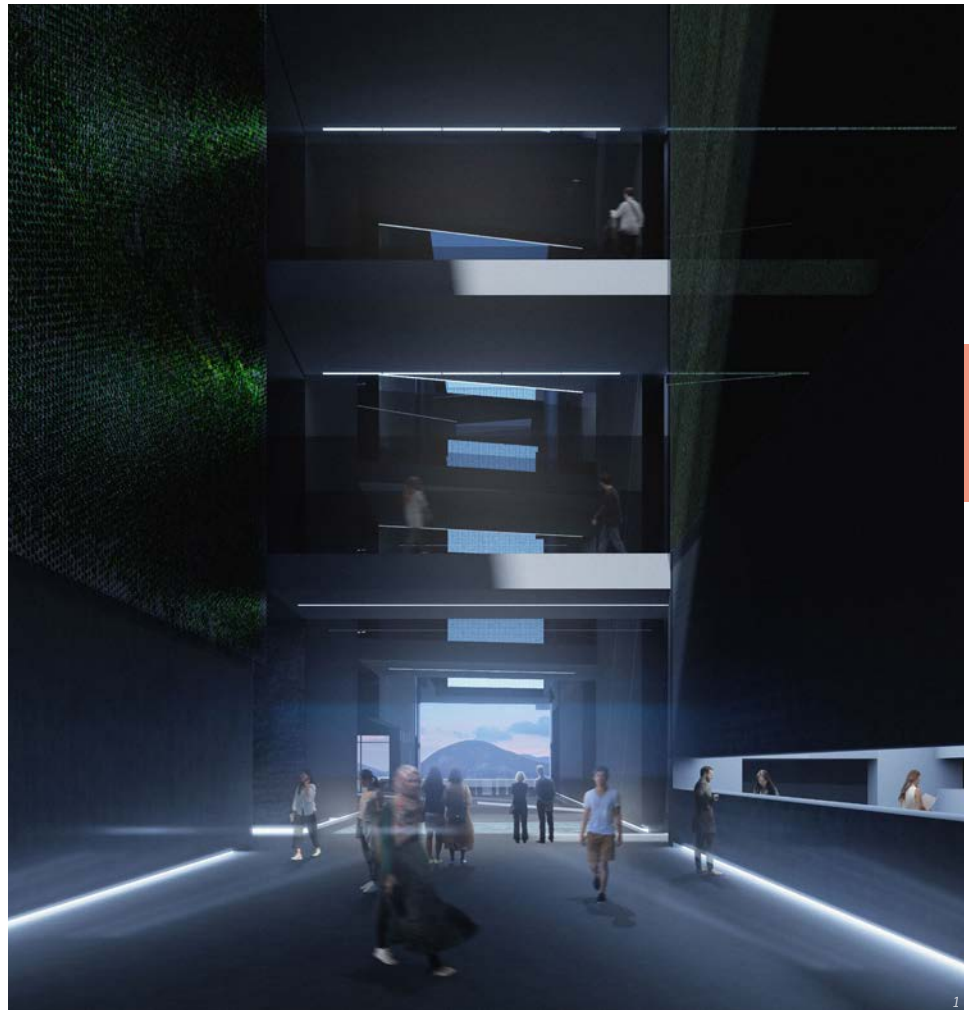


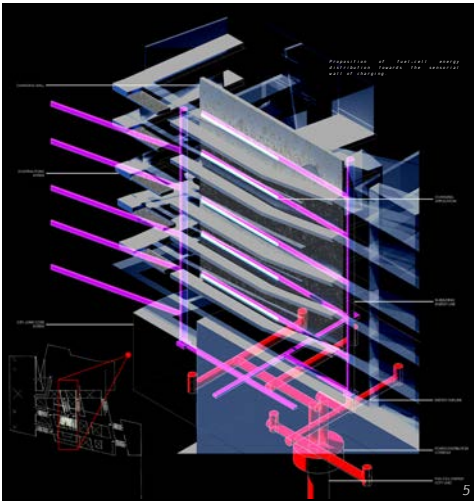
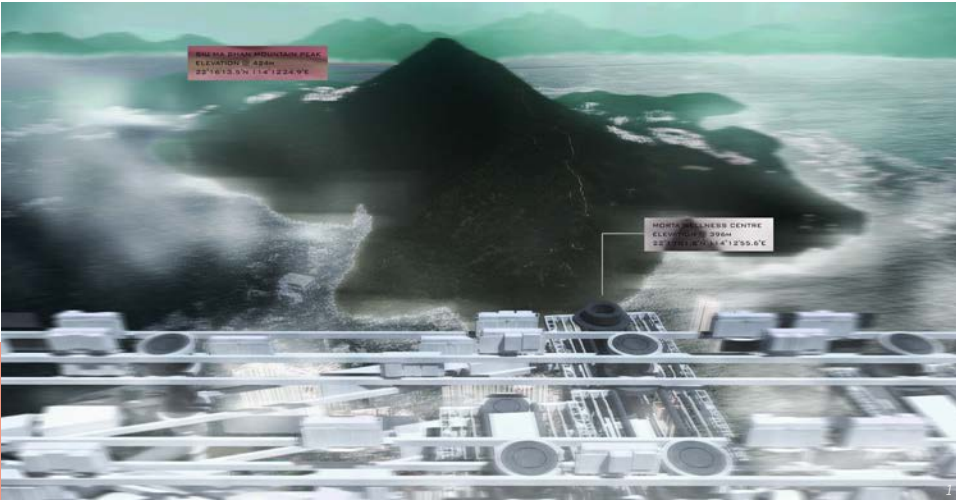
THE SUFFERING IN TRUE NATURE:

AN ARCHITECTURE OF MENTAL HEALING FOR A TECHNOLOGICALLY ENHANCED-HUMAN SOCIETY

In a fictitious 'technologically-enhanced human' society where people are forced to modify, enhance, or optimize the physical attributes of their bodies through technology (that is presumed to occur in the future, such as advanced prosthetic, cybernetic technology, or integration with the physical environment) because of over-population and natural resources diminishing; natural resources that are vital for natural growth and ecological systems which benefits the human society through nature. Society searches for an unnatural alternate habitation to survive. Fragments of existing megacities, such as Hong Kong, are to be built above the dying earth so that the population will have a chance to avoid the rising sea levels which are destroying their city.

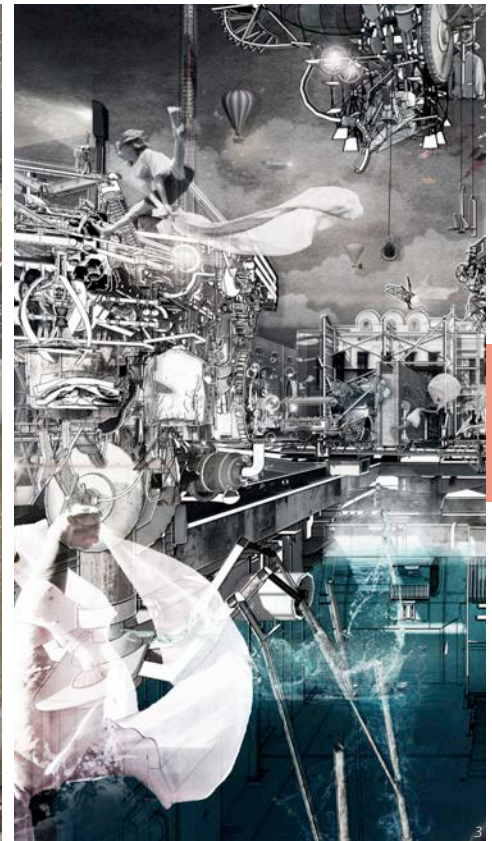
The result of this transcendence from nature and a phenomenal imbalance between mind and body due to an implementation of technology being fused with the natural body. How will the mental health of individuals be affected? How will a mental health institution be created and adapted for this dystopian future? This project will endure research on the anatomy of the present human body, metaphorically, providing a vision towards the implementation of technology that could replace and optimize the physical attributes that many are currently engaged in. The severe mental health of these fictitious beings is left to be treated, using research on the effects of technology in every aspect of living a human life in this day of age, thus extracting a methodology of how a mental health institution should be designed in a new environment far from true nature, but towards a new nature.



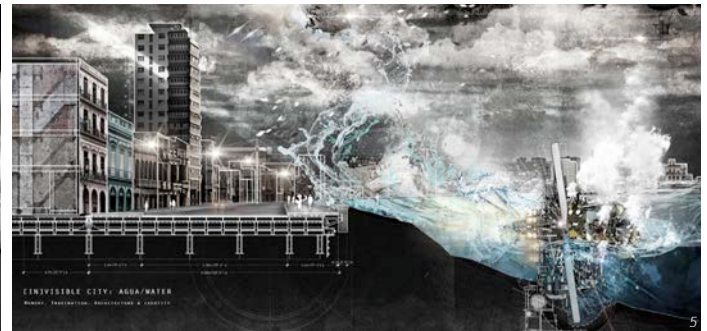
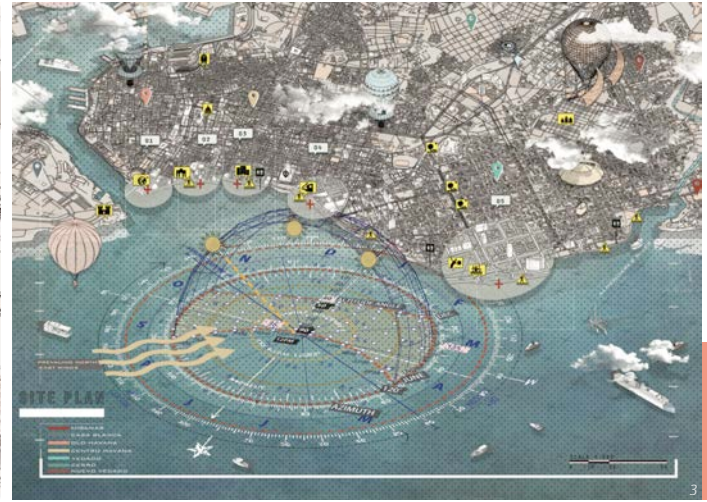
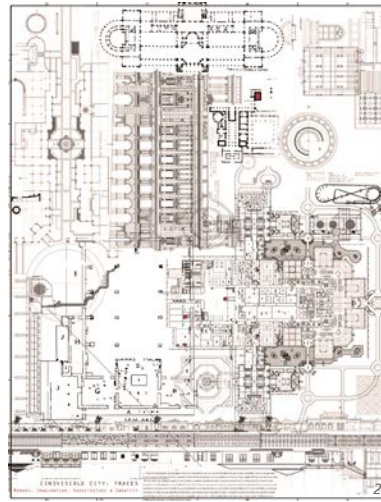


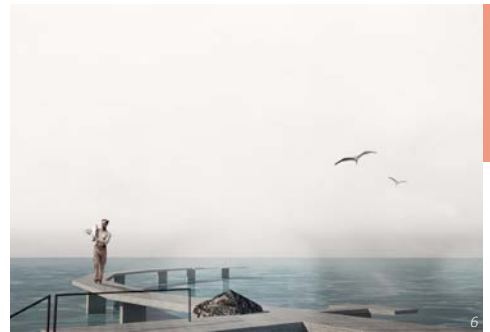
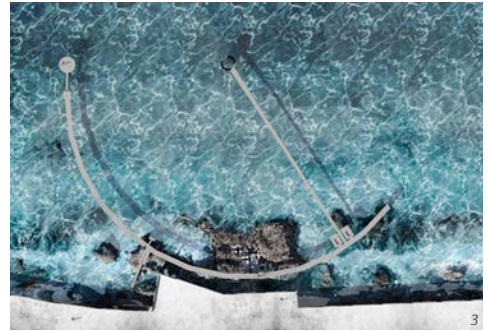
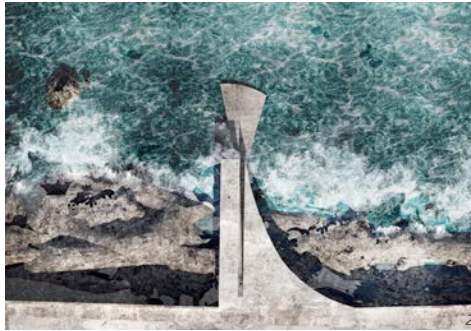
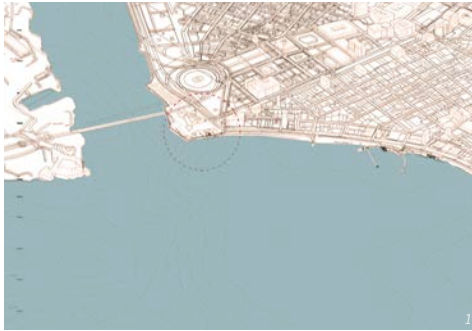
【IN】VISIBLE HAVANA: MEMORY, IMAGINATION, IDENTITY AND ARCHITECTURE

This thesis explores the phenomenology of colonization, revolution and the rebirth and transformation of Cuba's collective memory and identity through Architecture. The purpose of this analysis is to examine and investigate the role of architecture, imagination and dreams into the active creation of a nation's collective memory and identity. Collective memory is, as Halbwachs defined, a socially constructed notion. Hence, it is proposed that in the active act of collective memory formation of a given community, the role of personal dreams and imagination aid the collective to form ideas of how a community chooses to act and in what way it decides to remember. These investigations will be present within the context of Havana, Cuba and the Havana's existing seawall 'El Malecon'; and further translated into [6] architectural interventions alongside its shoreline.

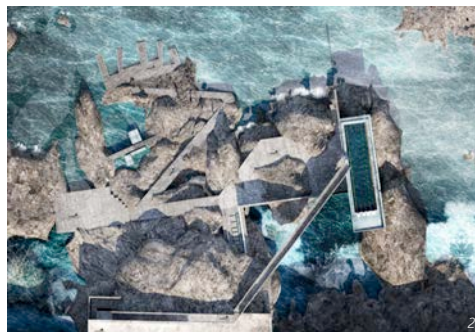


Concrete Exploration (1); Analytical drawing of the existing buildings along the Malecon (2); Sun Study and Context Map (3); Sketch inspired in the makeshift embankments made during the cuban rafters crisis in the 1990's (4); Invisible City: Water (5); Site Elevation (6)





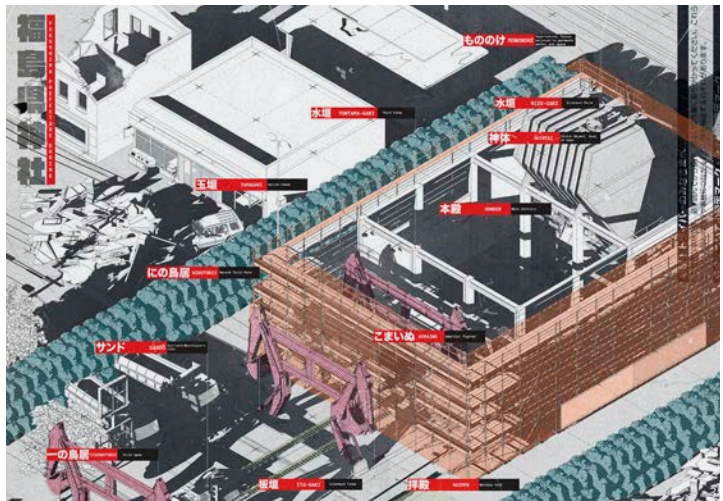
Site 4 - 'Yemaya Assessu' Site. A celebration to the Goddess of the ocean, mother of nature and symbol of protection (1, 4, 7); Site 5 - Swimming Areas (2, 5, 8); Site 6 - Light Beacon (3, 6, 9)

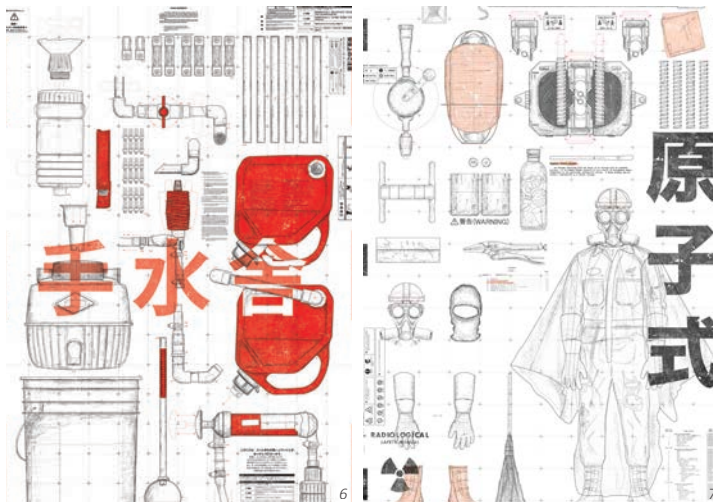


IN THE SPIRIT OF SHIBUI: RE:ANIMATING THE RUINS OF FUKUSHIMA

Shibui is a Japanese word that does not have an English equivalent, but is used to describe a profound, unassuming quiet feeling. A Shibui object is something simple yet rich with subtle detail, which allows one to find new meanings or stories within, causing the aesthetic value to grow over time.

The root question of this thesis is, can buildings be described as living things? Are they not machines that are animated through their occupation? Le Corbusier called a home a Machine for Living, but can we not paraphrase this and consider architecture a living machine? If we consider architecture as alive, therefore can it die? And finally, is the life or history of the building of more importance than the physical form or typology of the architecture?





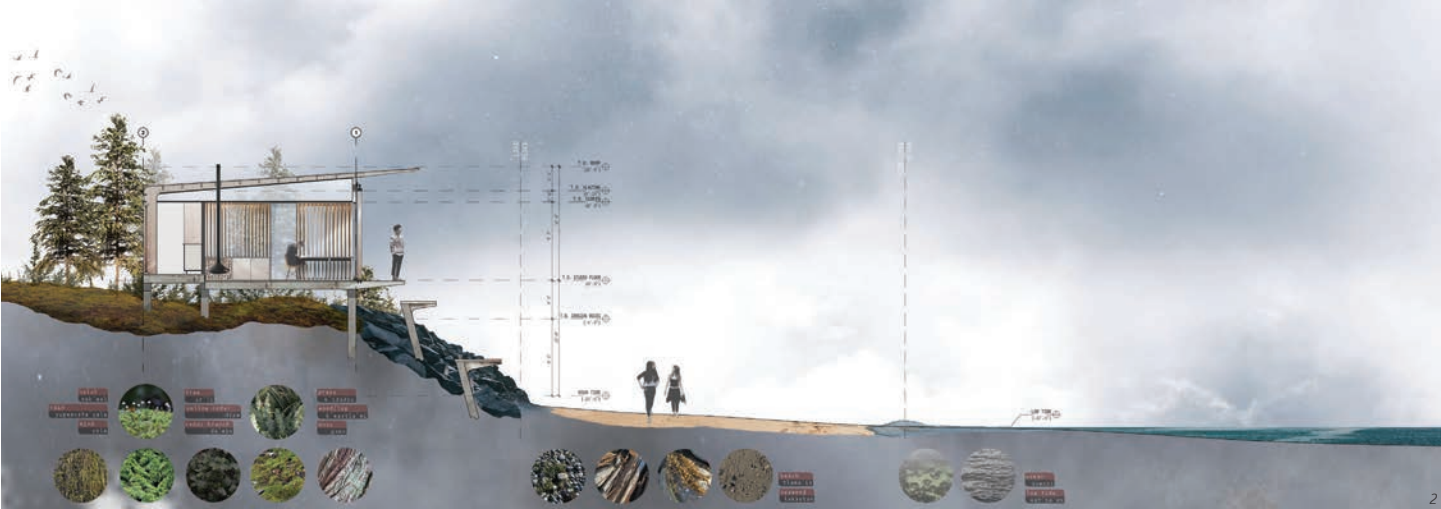
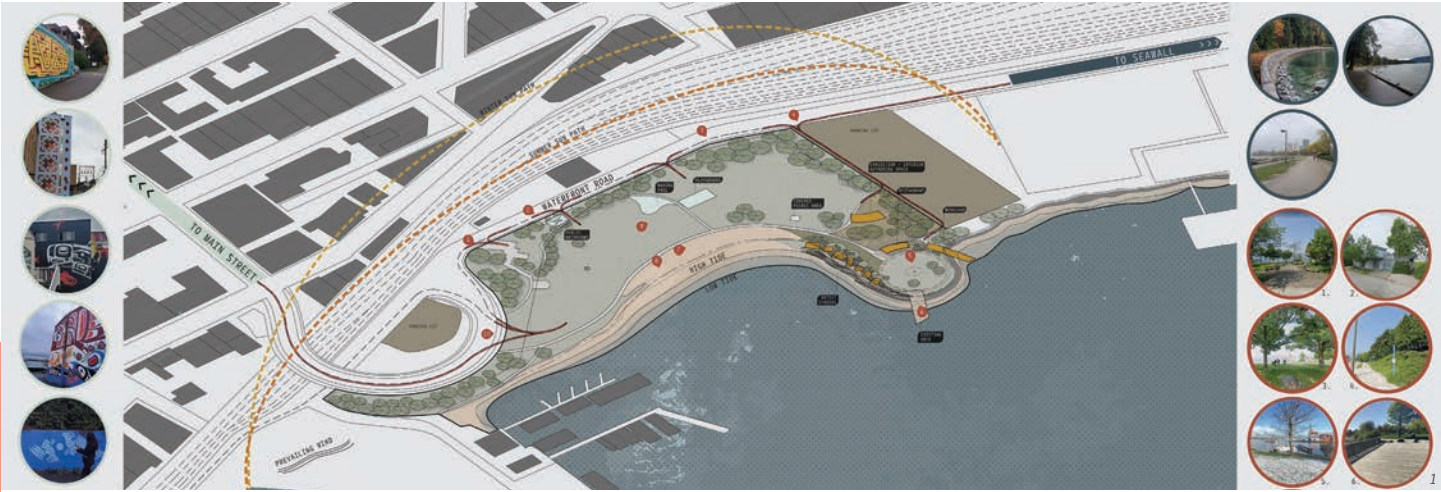
K'AP'IGA'LIT KWA A LAS: GATHERING TOGETHER - THE PLACE WE ARE : INDIGENEITY IN PUBLIC SPACE

In the city, the spaces between buildings play an essential role in the urban landscape, often becoming the places for shaping and experiencing the local identity. Jan Gehl believes that public spaces "in nearly all situations, rank as more essential and more relevant than buildings themselves"⁴ when shaping the identity of the urban environment. These spaces are often the setting for calling attention to larger social and political issues at hand within the city.

According to Statistics Canada, over half of the Indigenous population, and nearly two-thirds of the Métis population, live in metropolitan areas⁵. Indigenous culture is rich; expressed through language, storytelling, and ceremony. However, a complicated and often painful relationship to a colonial past exists, one that continues to impact current generations; many within cities growing up disconnected from their language and culture. This thesis project will explore how the design of public spaces can become places of cultural expression for urban indigenous populations, and create shared spaces to celebrate, witness, and learn about indigenous cultures. How are public spaces designed as the framework for inhabitation by the local population? I will explore the importance of narrative and storytelling within indigenous spaces, and how it can be applied to architecture, public spaces, and the urban environment. Decolonizing methodologies within research and my own processes will be an essential foundational approach, as well as my own experience within a third space of being both from both an indigenous and non-indigenous background.

If narrative and storytelling play such an essential role within both public space, and within indigenous reclamation of power and self-determination; I believe the commonality of these two ideas together has the ability to create spaces of healing within the city. And how can day-to-day experiences within the city provide more opportunities for common experiences, instead of relying on a top-down government approach which pushes papers to try to mend a relationship of colonialism between those that are visitors to this land, and those that came first? I will observe the connections of storymaking, land, language and their relationships to place-making. Ultimately, questioning the role that architecture plays within the conversation of indigeneity within cities.





THE CITY, THE SEA AND SPACE BETWEEN

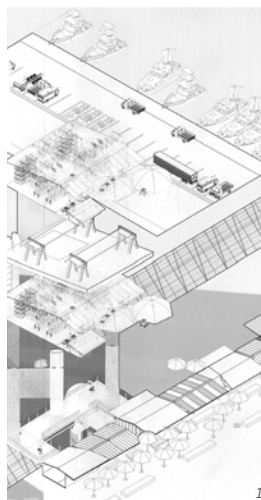
In Busan, the city and the sea are in constant tension. Located at the southern tip of the Korean Peninsula, the city is pressed between the Geumjeong Mountain and the Sea of Japan. Compressed between its natural boundaries, Busan's urban character is defined by collisions. At the frontline of the city's inherent spatial tension is its port, a space defined by the relationship between the city, the sea and, in recent years, the increasing gap between them.

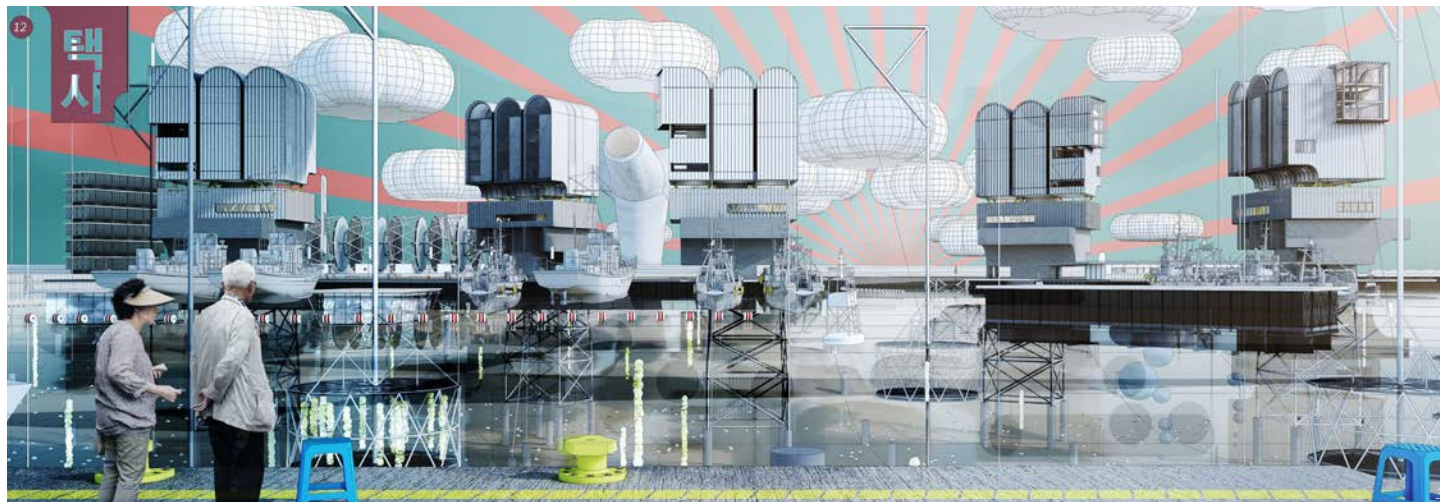
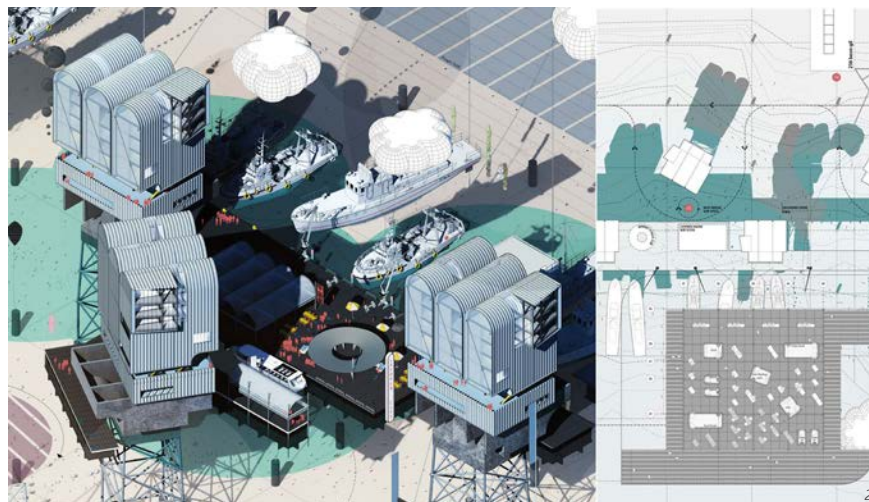
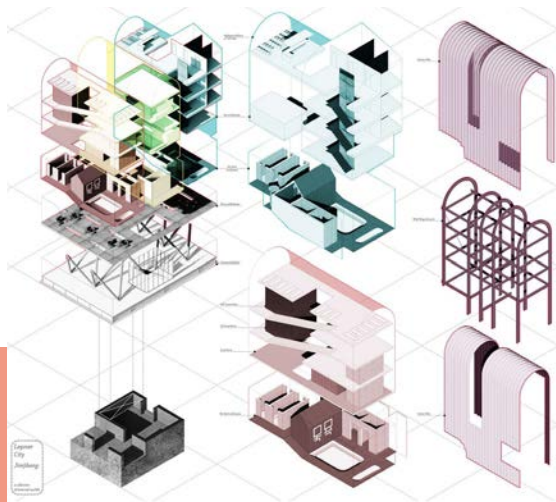
Here, informal and formal architecture are pressed against one another with no boundaries to dull the richness of their interaction. Urban areas are dense and alive with the hum of shared space. Buildings spill into the street and vice versa. Smells, sights and sounds are passed between spaces with little to filter their potency. Free of spatial and sensorial margins, Busan's architecture and urban spaces collide into one another and are made all the richer for it.

As a compressed city, Busan is free of margins. On a page, margins are left for a printer, the blank borders providing space for the wheels of the printer to grab and move the page past printing heads ready to apply ink. In the city, margins also appear, the results of social, political and economic forces. While compression serves to create collisions within the city, margins buffer them.

Within the port of Busan lies the Jagalchi fish market, the largest fish market in Korea. Like Busan itself, the Jagalchi fish market is a compressed space, pressed between the harbour and a hard urban edge. While the market remains a rich environment, formal boundaries built over the last fifteen years have divorced the market from the sea, the one no longer palpable in the space of the other. Where boats, piers and urban markets once extended the city into the harbour, today, large-scale infrastructure has created a thick band of industrial and utilitarian spaces, reducing the once-liminal boundary between city and sea into a binary condition. This thesis proposes that the modern port is neither city nor sea but rather a third space, one which, if it is ever to be urbanized, must be understood as distinctly different from those that border it.

This thesis looks to investigate architecture and the space of the margin. Using Busan as a case study, the project looks to examine the shifting, liminal and undefined nature of the port, the city and the boundary between them.





PHOTOGRAPH | DRAWING

Research through drawing and modeling have long been standard practice for architects. The mediums have been thoroughly explored and continue to experience innovation. In contrast, there has been little evolution in how photography is used to represent architecture and the environment. Contemporary architecture photography is used to sell the building to tenants or used to document projects for portfolios.

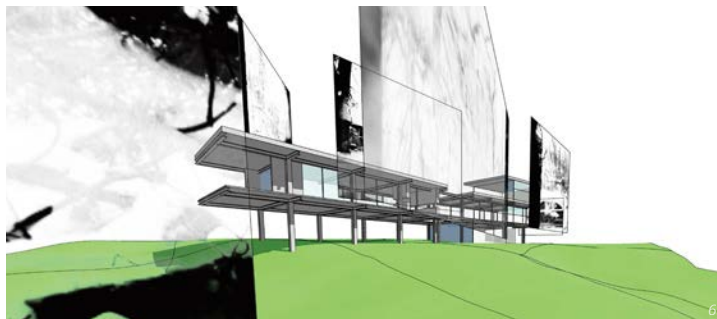
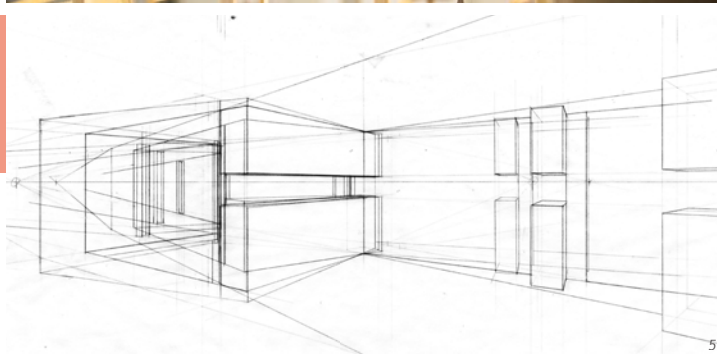
Andreas Gursky and Michael Wolf have indirect/unique approaches to their images. Their works use specific framing, inclusion and/or exclusion of elements to achieve an abstract, surreal, visually interesting image. These images, however beautiful, maintain their quality of a document, rather than a generative work.

In their drawings of the Retreating Village, Smout/Allen layer multiple stages of movement of the buildings slowly shifting back from an eroding coastline. Peter Cook drew an instruction manual for Instant City to show the impact of the work and acclimatization of the city throughout the intervention of the work. While these architects created the drawings for, at the time unrealized projects, Nat Chard explored a tangible space in the drawing series *Durational Space*. They attempted to capture what the spatial experience of walking through a room would entail for the traveler to better understand the phenomenological experience imparted through an architecture.

I seek to find another way of researching site and architecture using photographic means, challenging what has become the standard of photographic representation. Photography has the ability to be generative, not simply to document.

By building photo-imaging devices specific to the site that photograph using overlapping perspectives, focal planes and other experimental imaging, I endeavor to create a body of work that allows the viewer to enter the environment differently, to observe the otherwise unknowable. The images created will be used as a tool to generate an architecture with more contemporary methods of exploration.





TO EXPERIENCE A PLACE: ARCHITECTURE, NATURE AND THE SEASONS OF LIFE

This thesis explores the relationship between architecture and the phenomenological conditions of experience within nature. Specifically, within the context of the rural municipality of Gimli's Spruce Sands / Bay Heights community.

Characterized as a place to sense local forestry and lake Winnipeg, this environment has hosted generations of individuals experiencing this land's qualities throughout the seasons. However, the accessibility to such experiences must be questioned, since the region boasts a prominent retirement community. Though that may be the case, existing retirement dwellings offer largely inadequate or non-existent connections to the experiential qualities of the natural surroundings and overall local context.

The search for an architecture that relates to its context - forming a relationship with the land and its people - has culminated in the development of an accessible inhabitation project for retirees, that celebrates experience over prescription.



Exterior Central Gathering Space (1); Exterior Walkway Connecting to the Surrounding Neighbourhood and Overhanging Sam's Creek (2); Section Cut Through the Community Building Depicting from Right to Left: the Community Garden, Central Interior Gathering Space, Exterior Central Gathering Space and Fitness Room (3); Section Cut through Exterior Walkway (4); Beach Seating and Access Path (5)

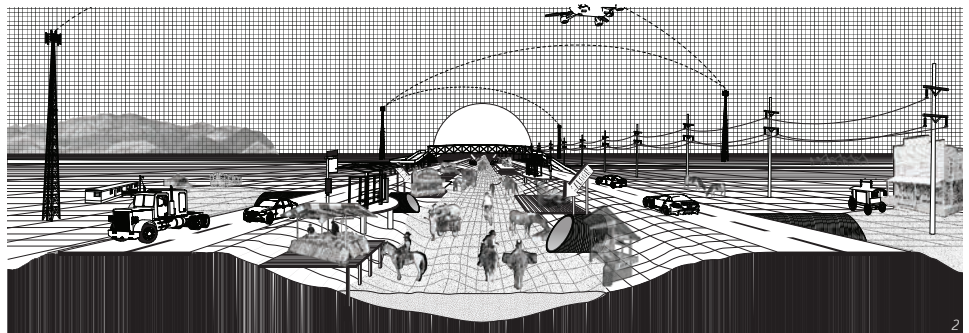
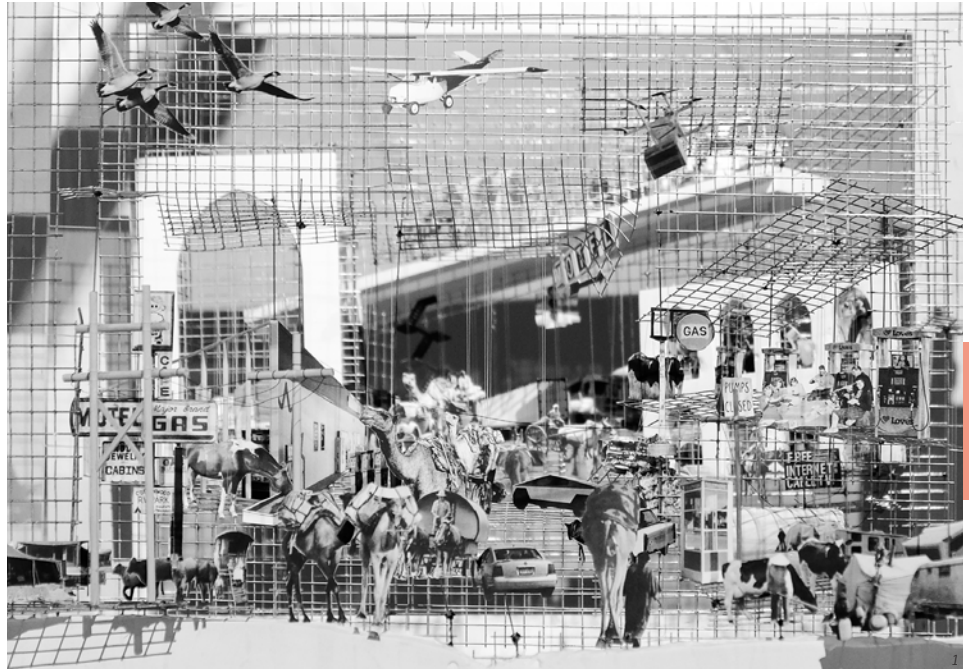


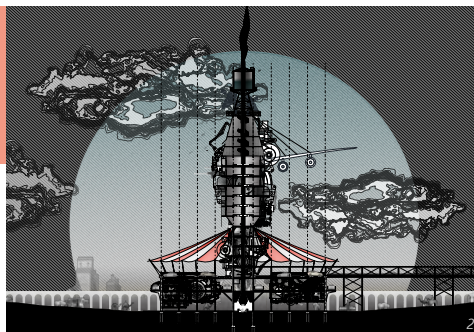
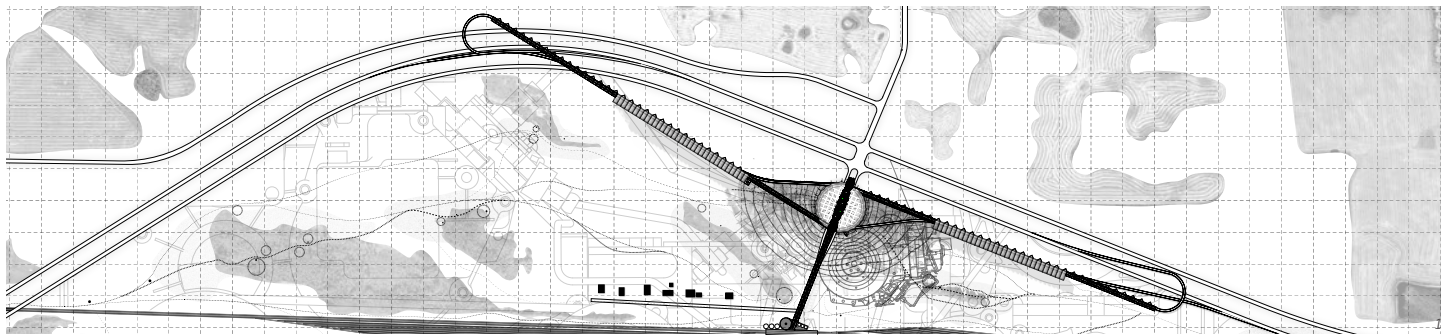
MANIFEST VELOCITY: INHABITING THE OPEN ROAD

The road is a place defined by its liminality; made up of ambiguities at the intersection of place and placelessness, speed and stagnation, nostalgia and harsh realities. The reality of the road diverges from the road as a cultural symbol in its endless pursuit of homogeneous efficiency. The ultimate symbol of unconstrained travel and individual freedom, the road finds its ironic apotheosis in stagnant 6 lane interstates with well marked exits and highly regulated movement. The myth of the road is dead, or is it?

This thesis dreams into what the highway of an uncertain future may look like and who and what may inhabit it. It culminates in an unfamiliar roadside motel where the roaming inhabitants of the uncertain road find themselves at a stand still. This thesis explores the road as a contradictory place that is both ripe with myth and heavily grounded in the perils of efficiency.

Collage depicting the imagined future road (1); Making space for a multiplicity of speeds on the road (2)



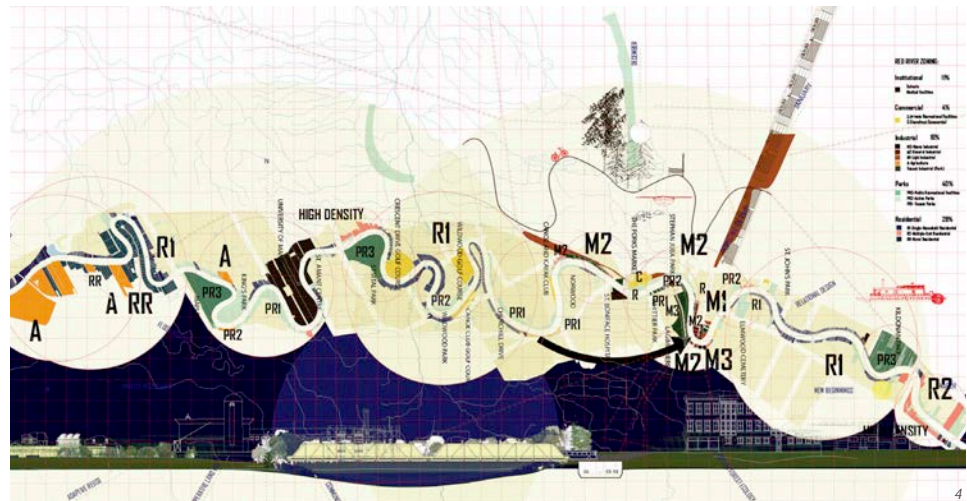
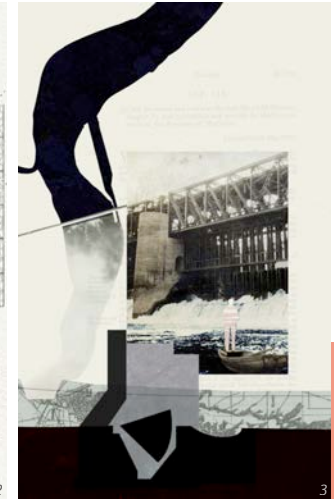
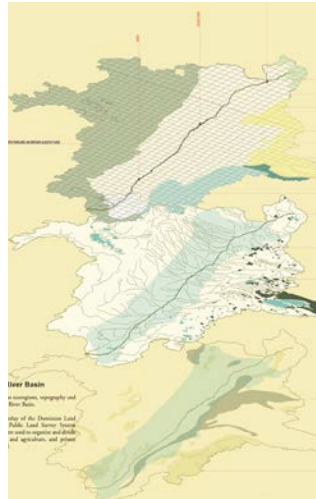


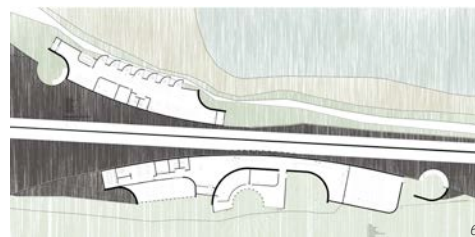
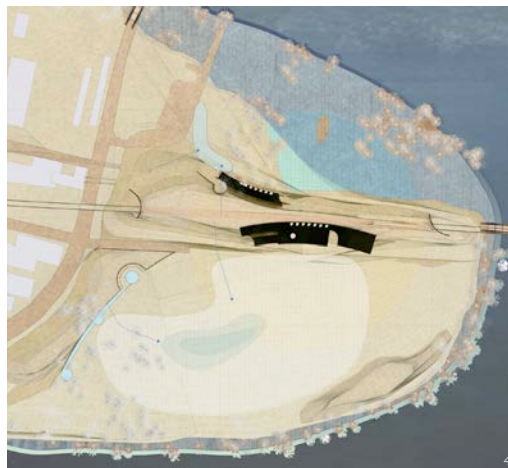
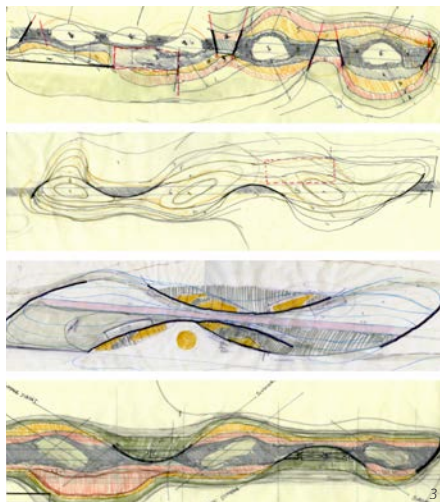


FLUID BOUNDARIES: RELATIONAL ECOLOGIES OF PLACE ON THE RED RIVER CORRIDOR

The research for this design thesis focuses on the Red River in Winnipeg, Manitoba, where pre-treaty boundaries still define contemporary urban form. The natural boundary between land and water will served as a point of departure for developing a study of social, political and ecological systems operating along the corridor. This design proposal is situated at the intersection of two boundary conditions; the C.P.R. Main Line Rail Bridge and the Red River. Slated as brownfields, the land adjacent to the railway illustrates an interface between political and ecological boundaries that have diminished the land and created a series of fragmented, discordant, and polluted territories along the river.

This design thesis supports the ongoing process of conciliation by honouring the land within which the architectural project is situated. An ethical framework that considers how the architecture responds to, heals, and supports the surrounding. The project utilizes architectural strategies to reconnect the surrounding communities to the Red River, and in doing so, begin to diffuse the boundary conditions presently delineating the site. This led to an architectural proposal for a community centre dedicated to urban ecology. The Mouscoupi Centre for Urban Ecology is a place to connect to the land and to learn about the Red River Valley; its inhabitants and its heritage. It is a place for active investigation of the landscape: learning traditional ecological knowledge, and related active and passive forms of learning and recreation. The library and archive are dedicated to the telling stories of the Red River Valley, both Indigenous and non-Indigenous.



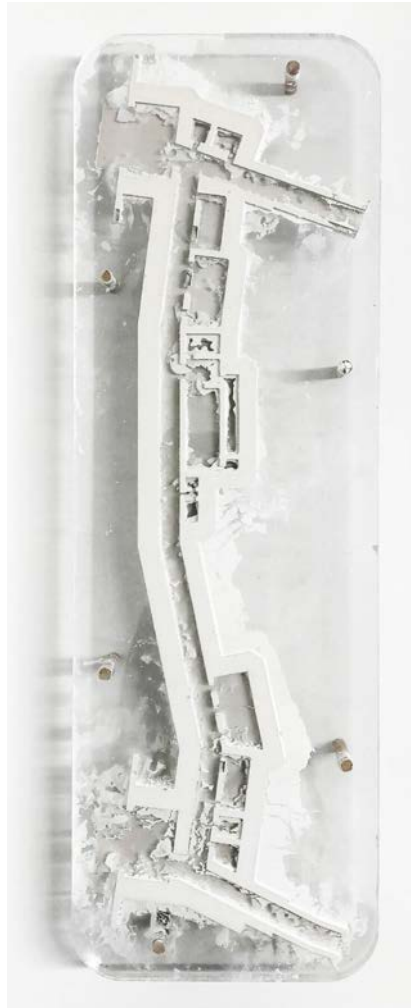


BLACK SITE BLIND

Architecture is perceived as a complex assemblage of tangible and intangible qualities. With the primary pursuit of the architect being to curate space and experience, the intangible qualities — sound, smell, atmosphere— challenge the architect's authority, presenting a set of variables that exist out of the grasp of control. Black Site Blind probes the space between the tangible and intangible; the space where perception diverges from that which is concretely seen, and where the intangible and variable are embraced, as opposed to shut out or reigned in. In a time where architecture is so often reduced to a single, signature image, this thesis proposes to explore the value of a modest and layered architecture, one that embraces the ambiguous and fleeting qualities of space that make it unique and memorable to the inhabitant.

The program of an outpatient treatment facility for individuals dealing with a variety of substance-based addictions aims to utilize the existing camouflaged bunker as a space of refuge, rehabilitation, and healing, while in tandem, providing a platform to investigate the project's stated architectural curiosities. The facility, which is designed to accommodate patients for up to a 6-month stay (the established threshold at which treatment in outpatient settings starts to become effective), aims to incorporate proven and conventional treatment methods - such as the 12 step program - with more contemporary and experimental treatments that match the complexity and nuance that research has come to understand addiction disorders to possess. Based in the staggering statistic that 60% - 80% of patients with an addiction have another mental health disorder, and 40% - 60% of those with a mental illness also have a substance abuse disorder 1, the facility will be rooted in a psychiatric approach to treatment, including both drug and therapy based methods, as well as identity reformulating strategies which have become a cornerstone of contemporary addiction treatment.

Black Site Blind speculates an architecture that responds to the contentious site, polarized socio-political views, while providing a safe space, sensitive to the psychological challenges patients, loved ones, and staff face as they embark on the treatment process.



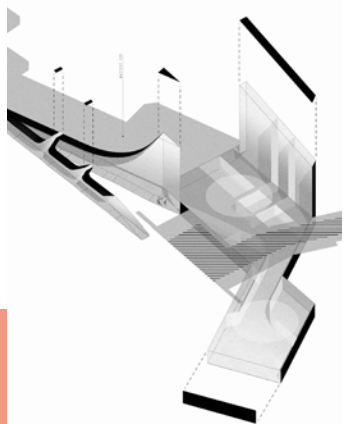
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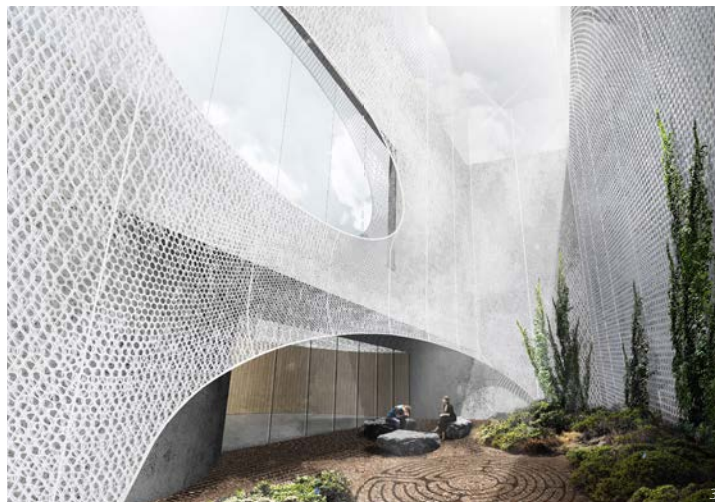
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BIOLOGICAL ARCHITECTURES: REGENERATIVE URBAN DESIGN IN WINTER CLIMATES

This thesis proposes a fundamental transition away from the current industrial, globalized, and colonial system towards a sustainable, regenerative way of living and working. Sustainable practice is pursued through the careful consideration and valuation of community and environmental factors as the primary drivers of urban and architectural development. Effectively, this approach combines the geographic, climactic, cultural and historic framework of vernacular architecture, with applied biological systemic thinking as a potential way of designing, working, and living.

This work proposes the reclamation and restoration of the CP Rail Yards in central Winnipeg, but the project is not an attempt to literally restore the site back to pre-colonial contact. Even if it were physically possible to do so, what value would such an initiative have at the individual, community, or urban level? Instead, the project critically examines the current needs at each level (individual, community, and urban) and attempts to synthesize and project a strategy to move into the future in a way that is productive for both human and natural systems.

Programmatic site mapping (1); Broader site context related to water and energy (2); Urban site context within the City of Winnipeg (3); Biomimetic diagram of integrated prairie systems (4); Sketch section of regenerative development on site (5)

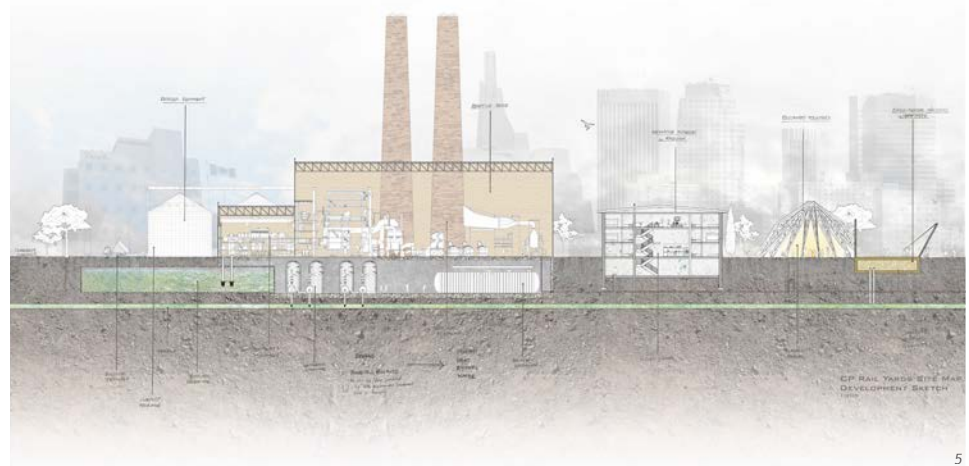


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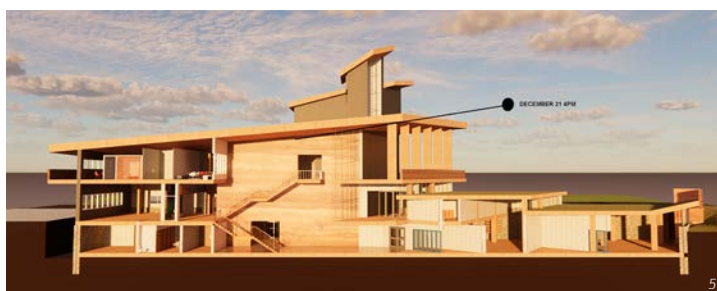
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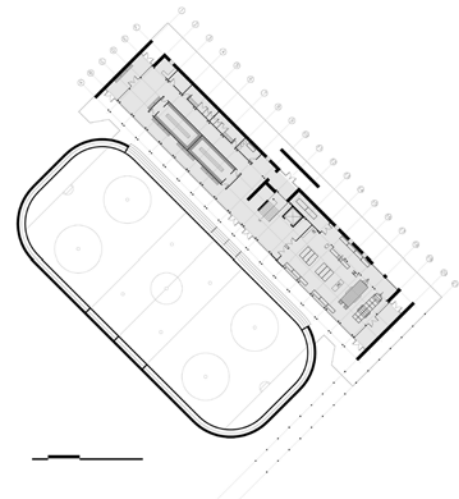
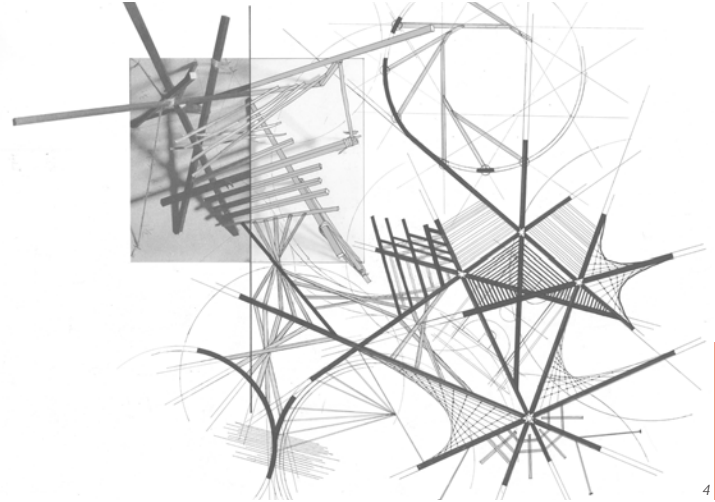
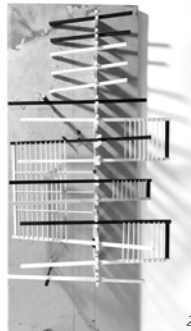
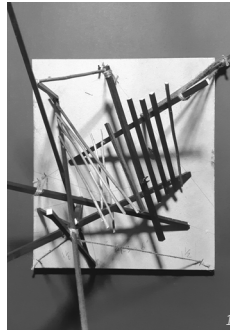
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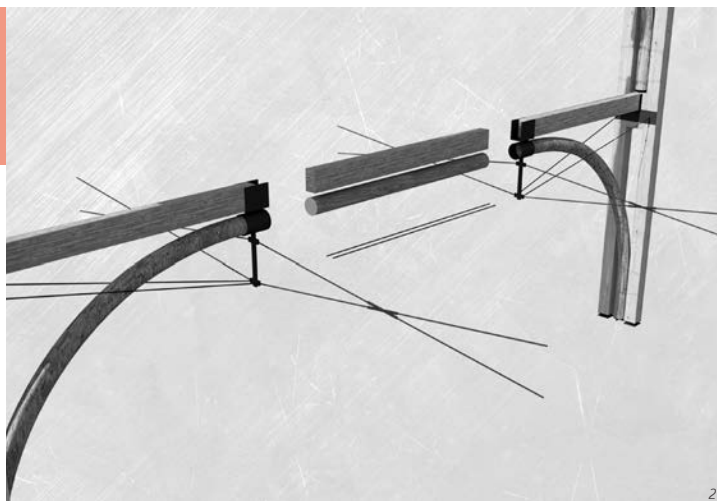
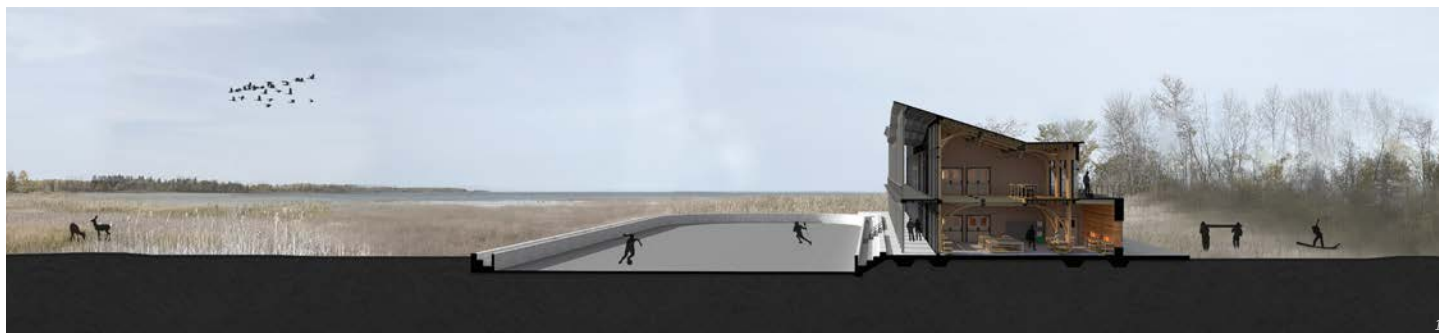
Site map of intervention at an architectural scale (1); Mycelium brick (2); Biodegradable mycelium architecture/sculpture (3); Passive building strategies in winter and summer (4-5); Fulcrum Community Centre entrance into biocentric build zone (6); Fulcrum Community Centre entrance into mid-rise, mixed-use development (7); Overview of Community fulcrum within the developed context (8)



THE MENTAL GAME: THE CULTURE OF TRAUMA, HEALING AND ARCHITECTURE ON INDIGENOUS COMMUNITIES

This architectural thesis will attempt to explore the interconnectedness between trauma and healing, as well as the relationship between culture and identity on Indigenous communities. This thesis will look to question the role of architecture and design and how it can play a more active role in the overall healing process as a result of intergenerational trauma. The overall intent is to propose a new holistic architectural language that actively engages with the Indigenous youth. In order to effectively address these issues, this thesis will ask two fundamental questions in an attempt to further engage with the conversation surrounding mental health and suicide on Indigenous communities. The first question is concerned with how can architecture and design assist in the healing process of intergenerational trauma suffered and experienced by Indigenous youth? The second question is concerned with how can architecture and design reinforce both a cultural and personal level of identity amongst the Indigenous youth? The first question essentially addresses the healing component that architecture can have on a physical, mental, emotional and spiritual level. The second question is intended to promote an architectural language that establishes a dialogue that reinforces a balance of cultural and personal identity. Both of these inquiries will seek to further aid the conversation regarding the current disconnect between youth, culture and architecture found on many Indigenous communities across Canada. The chosen site for this thesis exploration will be the communities of Camperville and Pine Creek First Nation, Manitoba. Both communities have strong Métis and First Nations roots, and offer a unique opportunity to incorporate the traditional vernacular building strategies of both cultures into the contemporary construction practices of today. This holistic approach aims for the architecture to naturally evolve from its immediate context, rather than be imposed upon, and become a part of the healing process that consistently engages with the identity of the land, culture and community for all future generations to come.





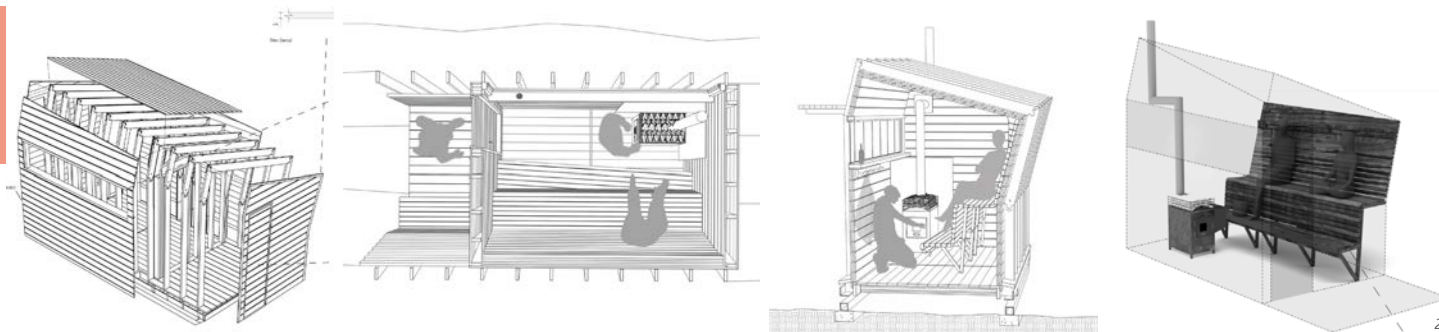
THE FINNISH(ED) SAUNA: EXPLORING CRAFT AND MAKING IN THE DIGITAL AGE

Traditionally, structures of different cultures were typically built with a high level of craftsmanship and stood as a symbol for that specific culture. To name a few, for the Aboriginal Peoples of the Plains it's the Tipi, for the Navajo it's the Hogan Dwelling, for the Japanese it's the Teahouse, and for the Finnish it's the Sauna. This thesis is focused architecturally on the craft of making a sauna. Since the Industrial Revolution the process of making and the definition of craft has changed drastically and even more so in the Digital Age. Thus, the meaning and processes leading to craft have become blurred within contemporary society. Manual forms of making (i.e. traditional hand tools) have become increasingly less involved with the process of design and making which, arguably, has marginalized the role of the hand. Contrastingly, digital tools (i.e. laser cutters, CNC machines etc.) have become widely utilized in the present-day. What are the consequences of digital tools on the role of the hand in the process of design and making? Can we consider digital tools to be extensions of our hand and mind?

This thesis questions the meaning and role of craft in the Digital Age. It seeks to explore manual, digital, and hybridized forms of making through a sauna design and build project located in Gimli, Manitoba. This project explores wood joinery prototypes for specific connections such as wall to floor, roof to wall, interior and exterior finishes, and sauna furnishings while working within the constraints of the client and site. Constraints for the project include program, siting, aesthetics, budget, and connections without the use of "off the shelf" fasteners. Digital and manual tools are used to explore solutions for these constraints.

Sauna Sketch (1); Crafting a Bowl (2); The bowl is broken, then repaired using digital fabrication (3); Joinery Series (4); Ground Sauna (5); Water Sauna (6); Air Sauna (7); Context Map (8)



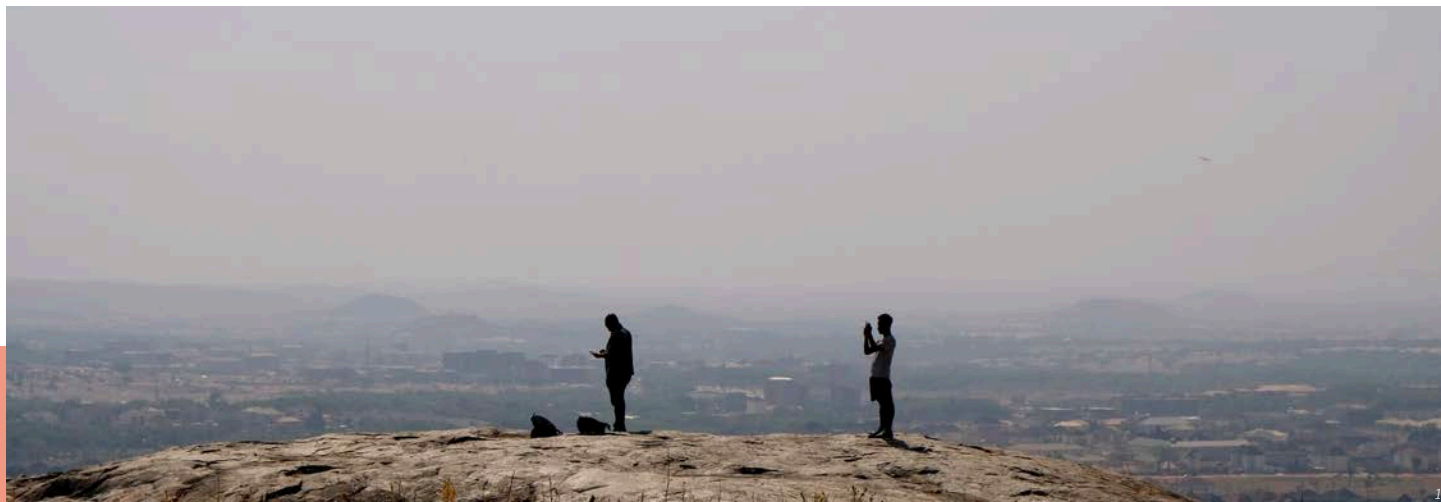


HOUSE OF THE KING: A PLACE TO HEAL

An unfortunate side effect of our modern existence is the isolation we tend to feel from one another and even from our own selves. Modernity has caused a shift in focus, steering us away from nature and the fundamentals of human experience. Inadvertently, the contemporary individual is in a constant state of stress and social isolation, two of the major causes of emotional and societal disorientation, which leads to various health challenges today. Focusing on a contemporary African setting like Nigeria, one possible explanation for this disorientation is the disconnect from a way of life that is natural to them; spiritual, in harmony with their natural environment and their sociocultural way of life due to external influences like colonialism, trade and globalization. This way of life was reflected in different aspects of the traditional African culture such as dance, music, art and even architecture.

This thesis intends to rethink our public spaces, specifically those we rely on for spiritual refuge and fellowship with others, to return the focus to ourselves and nature. By firstly investigating and exploring the relationship between the spiritual; art, music, dance, prayer, meditation- and healing, the thesis will culminate with a spiritual centre at the heart of Nigeria, Abuja. Inspired by the traditional African culture and its teachings, the spiritual center will offer a retreat from the struggles of modern life, providing a platform for reflection, healing and social interaction. It will attempt to reconcile the contemporary Nigerian with their natural environment and inspire a sense of shared identity within the society.



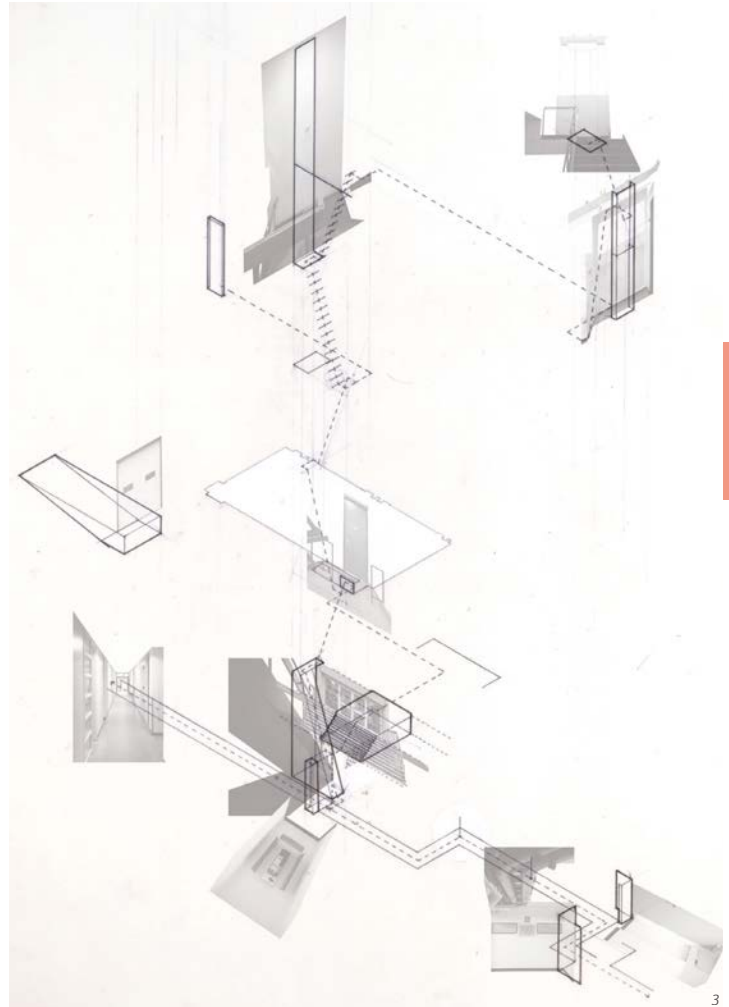


FLIP MODE: SUBVERSION+USE

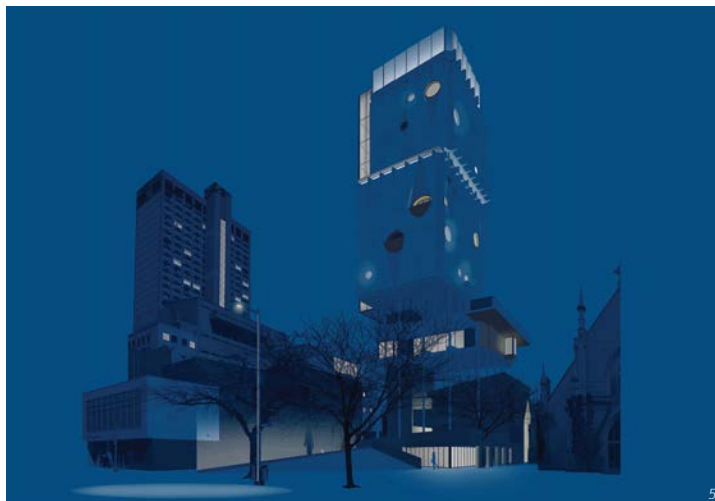
The contemporary urban environment is, for many North American cities, a homogeneous condition born of modernist ideologies and capitalist ambitions which tend to inhibit authentic adaptation in favor of prescription and routine. Author and historian Iain Borden identifies this condition (via Lefebvre and Barthes) as the 'urban degree zero', in which urbanity has, "lost the characteristics of the creative oeuvre and of appropriation".¹ For this thesis, the fundamental concern with this condition lies in its propensity to generate apathy towards manners of urban inhabitation, both transitory and permanent, as it is suggestive that one's experiences there have been reduced to the most basic modes of function and exchange.

The area of downtown Winnipeg known as South Portage is this project's primary concern, as this neighborhood is recognized as one fraught with the many banal characteristics resultant of 'urban degree zero'. The intent of this thesis is therefore to propose a work of architecture which is subversive to Winnipeg's urban paradigm in an effort to provoke a return to the city as oeuvre;² that is "the unintentional and collective work of art, richly significant yet embedded in everyday life."³ The project operates under the premise that a return to this heterogeneous mode of urbanity will require the collaborative effort between architect and user. The aim is therefore not only to facilitate, but also to celebrate the critical role of the user in architectural space making.

This thesis posits that urban architecture designed with indeterminacy as its core tenet will yield conditions more conducive to use, expression, vibrancy and life, through its potential to offer the urban inhabitant an atypically elevated level of agency over their environment. Notions of designed indeterminacy at multiple scales are explored through the proposal of a mixed-use architectural intervention which will aid in the support and development of the community at large by providing space for living, craft, leisure, dining, gathering, work and unforeseen and spontaneous use. To this end the architecture will challenge the typical modes of the city's urbanity while endeavouring to attract and instill new users and rhythms to the downtown.



Building section (1); Residential layout (2); Curtain facade model (3); Facade operation rendering (4); Night rendering (5)



LIVING IN CHAOS: CHALLENGING THE ARCHITECTURAL ETHOS

Our world is in a state of turmoil; socially, economically, and environmentally. Yet, as a collective, our civilization is moving forward with little regard to the consequences of our current consumption habits. With the built environment accounting for nearly 40% of global carbon emissions, the role that architecture plays in the climate crisis cannot be ignored. The design industry has the ability to shift the norms in building methods and material acquisition. The thesis unfolds over two parts and challenges the current ideals of continuously building new, our consumption habits, our way of living, and aesthetic standards.

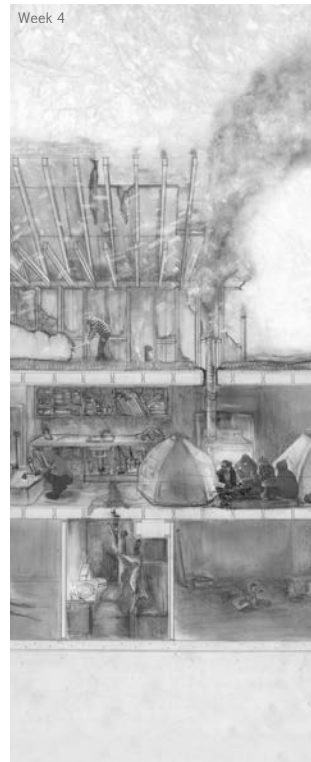
Part One: 2030 - Surviving Disaster

Part one consists of an initial research exploration of a disaster scenario that forced those residing in the prairie provinces to shelter in place during a severe winter storm, with no power, for 12 weeks. The case study explores how both the contents and the building materials found in a home can be re-tooled to aid in survival. Lessons learned about fundamental human needs and material reuse were applied in part two.

Part Two: 2020 - Optimism in an Uncertain Future

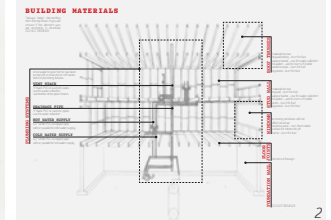
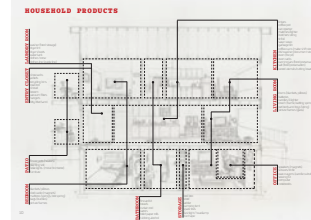
Part two of the thesis comes back to present day and explores how we can move into our uncertain future with optimism and innovation. It questions how we can develop resiliency through social infrastructure without furthering the damage to our planet. The final proposal revolves around retrofitting a big box store in Winnipeg, Manitoba, while utilizing reused materials harvested from the surrounding city.

The proposal radically reduces consumption habits and the destruction of our natural resources by providing the infrastructure to localize production and promote reuse. It transforms the big box store to a project that supports local businesses, food production, and housing for those who have been displaced by disaster. By diversifying and localizing production and material acquisition the project strives to grow community connections, increase resiliency in the face of disaster, and encourage a lifestyle less centered on consumption.

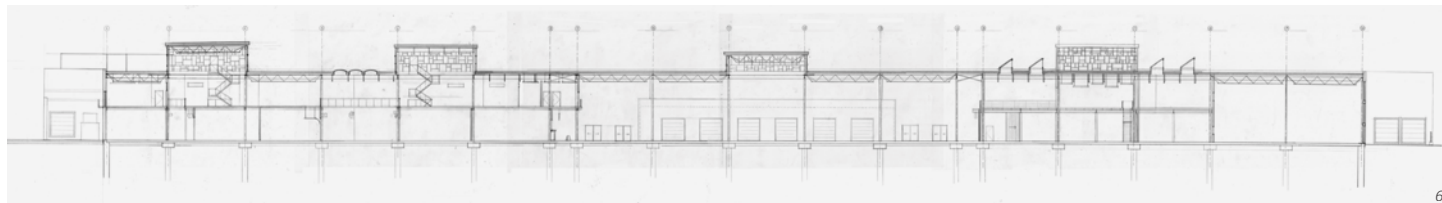
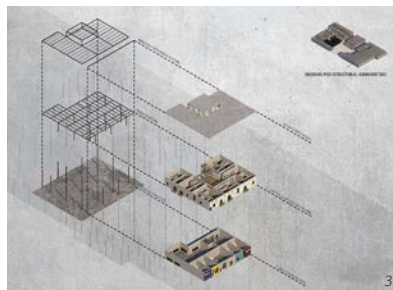


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- 2. Introduction
- 3. Background
- 4. Research
- 5. Design
- 6. Conclusion
- 7. Appendix
- 8. Glossary
- 9. Index



Site Plan (1); Interior render of new lane-ways within the existing big box store (2); Exploded axonometric of housing pods (3); Exterior render depicting the replacement of existing surface parking lots with community garden plots (4); Interior render of residential space and new roof extrusion (5); retrofitted building section of the big box store (6)



Eduardo Aquino

THE ARCHITECTURAL SECTION AS REVELATION OF SPACE

Why the section? This topics course intends to bring to surface a design tool often neglected in favour of other representation elements of the project like the plan, the elevation, or the infamous 3D rendering. There is a shift of perception in architecture after the second postwar, where architects gradually distanced themselves from questions of space towards questions of the image and representation. This process made the section assume a secondary role, almost as an afterthought to the design process. The section always comes later in the design process, when in fact it should be developed simultaneously with the plan, and all the other aspects of the architecture (structure, materiality, site, envelope, etc.).

This topics course sought to discuss the section as a way of thought, a form of language. The section reveals the genesis of many projects that are born of this procedure, to announce the spatial continuity of desires between interior and exterior, land and construction. This is where one measures the space referenced to the human scale, where one determines the relationship between the building and the ground, unlike what happens with drawings in plan. Topography is always evident and the plot falls apart in a direct relationship between architecture and territory if it is not carefully considered, the design of the floor. As reminds us critic Sophia Telles on the Museum of Sculpture by Paulo Mendes da Rocha: "If the section is the flipped ground and the plan is the fold of the site, the result of this equation withdraws the site from its mere trimming condition from the urban map, to restore the body's and the ground's physicality."

STUDENTS: Michael Bellstedt, Bianca Dahlman, Mackenzie Swope, Andrew Fritschij, Andrea Garcia, Ben Greenwood, Kataun Habashi, Mackenzie Hammond, Dylan Hewlett, Brittany Hince Swicki, Alyssa Hornick, Marina Jansen, Brendan Klassen, Xinzhu You, Alix Lanyon-Taylor, Odudu Umoessien, Victoria Lovell, Thomas Nuytten, Yang Peng, Chenqu Zhao, Bahnaz Rafeei, Teron-Jordan Richard

"Instead of the nineteenth century flat-footed figure-ground space, twenty-first century metropolitan space is more active in section. We rise and fall in elevators and escalators while our points of view open and close in amazing sequences.... Increased spatial energy directly related to a high degree of sectional development allows for fresh dimensions of urban living."

Steven Holl



Exhibition at Pool Room, Architecture 2 Building. Modelling by topic course students.

Exhibition design by Cassidy Cantafio, Nurielle Gregorio, Jami Holden, Ali Impey, Kenyo Musa, Owen Toth, Kendra Wile

STUDENTS: M1 Jonathan Bailes, Alex Bartmanovich, Apoorv Chopra, Austin Dorn, Hasti Fakouri, Mackenzie Hammond, Emily Jones, Darian McKinney, Nicole Luke, Reanna Merasty, Ritam Niyogi, Royce O'Toole, Thilakam Rachuri, Nushinsadat Samavaki, Mackenzie Skoczylas

TOPIC HISTORY & THEORY

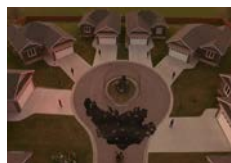
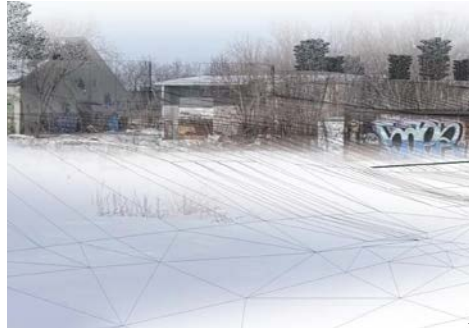
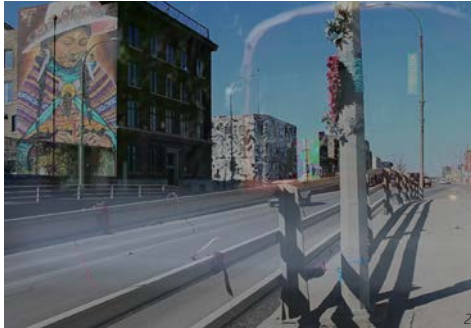
Lawrence Bird

SHADOW CITIES: WINNIPEG ON FILM

From the earliest films, moving images have played a privileged role in our perception of cities and architecture - a role that is expanding explosively across media today.

The appearance of architecture and cities in moving image media raises interesting questions about representation, authenticity, and place. The seminar was conceived in dialogue with Canada's contribution to the Venice Biennale 2020, *Impostor Cities*, which addresses such questions in the context of the tendency for Canadian cities to stand in for others on the global stage. It is interesting that, even as an impostor city, specific aspects of Winnipeg's character are frequently harvested by film makers: its grit, its oddness, its fragmentation. Such qualities are cited more directly in independent film - from Terrence Odette's "Heater" (1999) to Guy Maddin's "My Winnipeg" (2007).

The seminar addressed this phenomenon while reading urban and media theory and viewing key city films. The seminar concluded with a presentation from Métis filmmaker Rhayne Vermette. Together we posed these questions: Why are certain aspects of Winnipeg's spatial environment so prevalent, and poignant, in media shot here? Where do such spaces come from? What do they mean? Each student created a short film or essay on an aspect of Winnipeg's form to which their eye had been drawn by media.



IMAGES: 1) Alix Lanyon-Taylor "Postcards from Winnipeg"; 2) Reanna Merasty "Hostile Urban Spaces"; 3) Jonathan Bailes "Sunday"; 4) Wilrose Pingol "Across the Line. Bottom row l-r: "Horsemen" (2009); on-set photograph, "Flag Day" (in post-production); "No End House" (2017); "Tales from the Loop" (2020); "Heater" (1999); "St. Anne" (in post-production)

Mercedes Garcia-Holguera

INTRODUCTION TO BIOMETRIC DESIGN

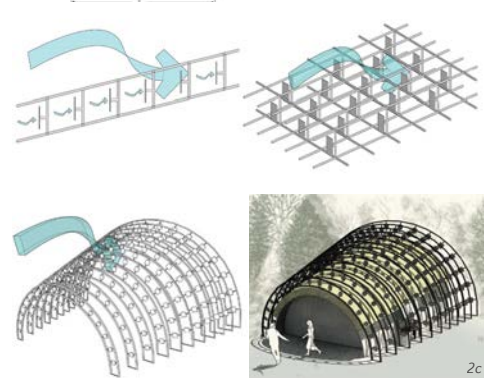
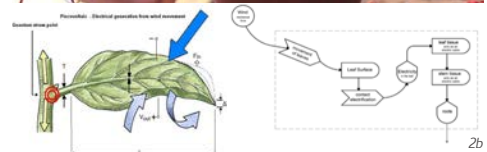
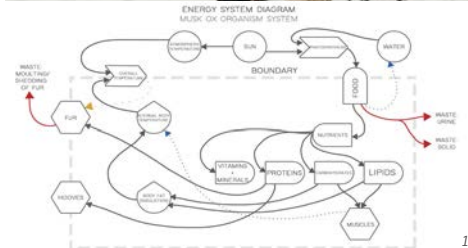
"The good news is that wisdom is widespread, not only in indigenous peoples but also in the species that have lived on Earth far longer than humans."

J. Benyus, 1997. Biomimicry: Innovation inspired by nature.

This is an introductory level course where students explore the principles of biomimetic design and their application to design projects. Students learn about and discuss current methods and tools used in biologically inspired design with a special focus on ecological systems. The ideas of systems dynamics and complexity are explored using tools from ecological engineering and environmental fields, and implemented in a self-directed biomimetic project.

The combination of tools from different disciplines, together with a balanced access to existing databases and publications on biology, ecology and architecture, comprises a powerful and effective package that enhances students' creativity while addressing compelling environmental issues.

STUDENTS: Tali Budman, Apoorv Chopra, Austin Dorn, Kataun Habashi, Alyssa Hornick, Brendan Klassen, Andria Langi, Alix Lanyon Taylor, Ritam Niyogi, Behnaz Rafeei, Luxmy Ragunathan, Teron Jordan Richard, Nushinsadat Samavaki, Tia Watson



IMAGES: 1a) Musk Ox; 1b) Energy System Diagram of the Musk Ox and its thermal regulation strategy; 1c) Shelter proposal including strategies learned from Musk Ox, lichen and root systems (Tali Budman, Andria Langi, Luxmy Ragunathan); 2a) Measurement of contact electrification in leaves; 2b) Detail of leaf and Energy System Diagram of leaf biological strategy; 2c) Implementation details of biological strategy in roof system and general axonometric of shelter proposal (Kataun Habashi, Alix Lanyon Taylor, Behnaz Rafeei, Nushinsadat Samavaki)



SYNDESIS: An Architectural Theory for the Contemporary World is an exploration on the concept of *Syndesis* (Greek/Latin word from *sundein* to bind together; σύν *syn-* + δειν *dein*, to bind) for creative

SYNDESIS: AN ARCHITECTURAL THEORY FOR THE CONTEMPORARY WORLD

processes in architecture and other related disciplines, in the context of some distinctive characteristics of contemporary global societies. *Syndesis* primordiallly is conceived as a characteristic of creative work, and a potential indication of method, not a strict methodology. The course was structured around three interrelated concepts: *fiction*, *temporality*, and *transculturation*. *Fiction* refers to the subjective nature of reality as fragmentary construct, and, in disciplinary terms, it addresses the possibility of coexistence of the imaginary, the magical and multi-temporal as part of what we call reality. *Temporality* was explored as non-linear, multiple or exploded, and involves notions of memory, and poetic uses of historicity. **Transculturation** refers to the global conditions of “liquid modernity” (Z. Bauman) and pervasiveness of “de-territorialized” (Deleuze-Guattari) planetary communities. The topic is explored making use of examples in diverse creative disciplines, primordiallly: architecture, literature (short-story, novel and poetry) and music (jazz and contemporary fusion). We revisited precursors, or initial manifestations, of *syndesis* in the work of already modern classics like Le Corbusier, Scarpa, Kahn, Lwerentz, Aalto; following with contemporary masters like Moneo, Siza, Salmons, Zumthor; and conclude, concentrating on in-progress practices like Olgiati, Pezo von Ellrichhausen, SPMB, Solano-Benitez, Vilalta-Aranda-Pigem, Aravena, Studio Mumbai among others. On philosophical grounds, we revisited subjects of phenomenology, hermeneutics, and post-structuralism as related to architectural theory.



IMAGES: 1) *Syndetic Mash-up* by Jessica L. D'Toste; 2) *Syndetic Mash-up* by Nushinsadat Samavaki

Shawn Bailey

STUDENTS: Laurie Aftanas, Michael Bellstedt, Melissa Folk, Andrea Garcia, Dylan Hewlett, Emily Jones, Nicole Luke, Darian McKinney, Reanna Merasty, Lexis Nizio, Yang Peng, Mackenzie Skoczylas, Xinzhu You, Chenqu Zhao

TECHNOLOGY & INDIGENOUS KNOWLEDGE

Students explored how traditional indigenous knowledge, values and construction techniques can influence contemporary processes of making and thinking about architecture. The objective was to introduce – through an architectural lens - a symbiosis way of knowing and crafting that adopts current practices steered by Indigenous ways of knowing.



IMAGES: 1) Mackenzie Skoczylas; 2-3) Michael Bellstedt; 4-5) Mackenzie Skoczylas; 6-8) Reanna Merasty

Instructor: Eduard Epp
with Keith Millan and Jason Hare
Guest collaborators: Lisa Kirton and Apollo Au
Industry Sponsors: 5468796 Architects, 24-7 IN-TOUCH

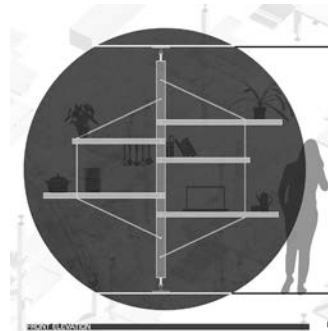
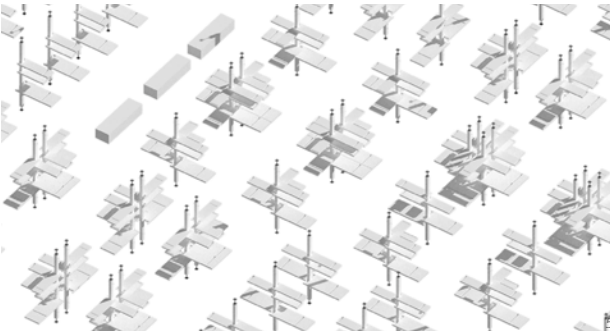
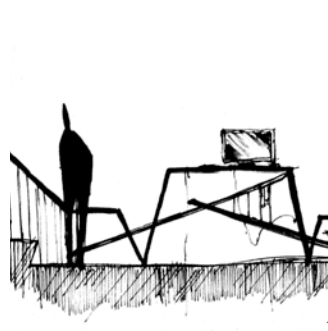
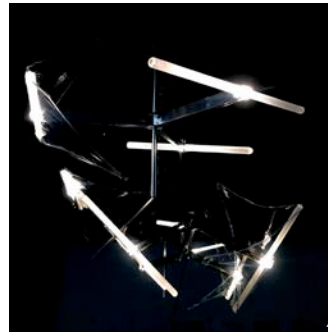
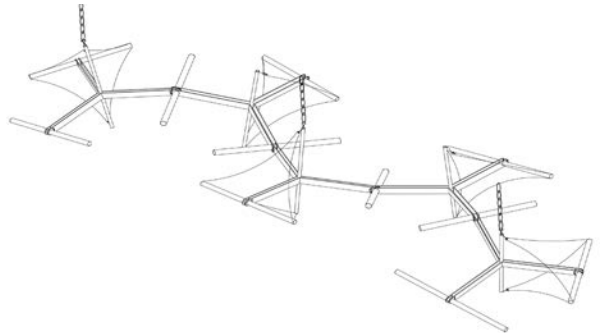
APD/B ADVANCED PRODUCT DESIGN/BUILD: HOME/WORK

This course examines the theory and practice of manual and digital forms of 'making' including the design, fabrication and production of environmentally, socially and culturally responsive projects that enrich the human experience in the built environment. Contemporary workshop modes of proto-typing and construction will be used alongside emerging digital modeling and fabrication technologies – to explore the process of product design from concept to artifact. Projects will vary in scale and kind and with programmatic requirements set out in collaboration with research and industry partners.

Two fundamental questions will be investigated in this course:

- how to make a workplace in the home? and;
- how to make a home in the workplace? [homing*]

We are interested in designing products, furnishings and architectural elements that have a direct connection between the human body and the domestic and work spaces we inhabit ... design prototypes that will allow a person to engage the built environment more easily, fully, legibly, safely, responsively, accountably, happily, deeply. Beginning with the human body as the site, we are going to study the physical, physiological and psychological requirements of a person in both the home and the workplace. We will then research the tools, equipment, furnishings, architectural elements and spaces that we 'need' and 'desire' to engage a range of activities associated with work and with living.



IMAGES: 1) Alix Lanyon-Taylor - Suspended Lamp; 2) Lamp In-Situ; 3) Michael Bellstedt - Folded Steel Coffee Table; 4) Integrated Fold Workspace Sketch; 5) Marina Jansen - Tensile Workstation Configurations; 6) Tensile Desk Elevation

Ted Landrum

The word **masonry** comes (via French & German) from Old English *Mecian*, meaning 'to make'. The word '**make**' derives from Greek *maza*, a kneaded mass (like bread or clay), and kindred etymons for '**mate**' & '**match**'.

HANDS ON MASONRY

You can make a joint that's so magnificent that joint-making (and the joint) is the beginning of ornament... the whole idea of making a single thing which comes together with another single thing.
—Louis Kahn,
Silence & Light

The history of architecture is virtually synonymous with the history of masonry. For this reason, a course on masonry cannot avoid a long span of exemplary projects and methods. In Hands on Masonry students cover—and therefore discover—how the continual mixing of innovation and tradition is the essence and strength of any living tradition. This is true of architecture in general, but is perhaps especially true of masonry.

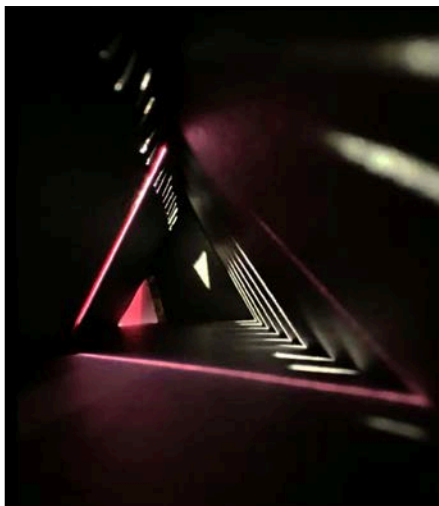
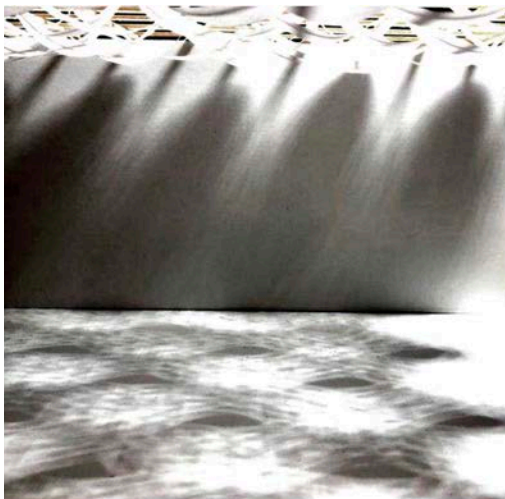
As the name suggests, students in this course gain a mix of direct experiences. They get their hands on physical samples and installations. They participate in a brick-laying, arch-building workshop, where they also learn from full size mock-ups the difference between load-bearing masonry and insulated cavity wall construction. They take photos and charcoal rubbings of intricate masonry details on campus. They take a mind-blowing, ear-shattering, eye-popping tour of the local Tyndall Stone quarry, where they get close (but not too close) to monstrous diamond-toothed, water-splashing, stone-cutting devices, and visit the relatively calm drafting office—where meticulous shop drawings are made. Students meet with diverse experts. They also get their hands on intense reading material, discovering the inspiring history and potential future of masonry. Students research exemplary masonry precedents, and a massive array of techniques and concepts. They craft and share detailed presentations, and assemble a final masonry booklet, gathering all they've learned into a single well made artifact.

This course benefits from generous support of the Manitoba Masonry Institute, Gillis Quarries, Red River College. (Special Thanks to Brian Gebhardt, Keith Gillis & Graham Bergeron)



IMAGES: L. to R. T. to B. 1) Natural Peridotite Carbon Sequestration; 2) Valletta City Gate, Malta, Renzo Piano 2015; 3) 3D Hex by Brian Peters, Kent State 2013-2017; 4) Future Master Masons: Emily Jones, Andria Langi, Qiwen Lu, Wilrose Pingol, Yang Peng; 5) Laurie Aftanas

STUDENTS: M1 Jonathan Bailes, Alex Bartmanovich, Apoorv Chopra, Austin Dorn, Hasti Fakouri, Mackenzie Hammond, Emily Jones, Darian McKinney, Nicole Luke, Reanna Merasty, Ritam Niyogi, Royce O'Toole, Thilakam Rachuri, Nushinsadat Samavaki, Mackenzie Skoczylas



TOPIC ADVANCED TECHNOLOGY

"Architecture houses all techniques. Electricity sheds light on them and animates them."

— Francis Ponge

Ted Landrum

"What light makes casts a shadow and the shadow belongs to light..."

— Louis Kahn

ARCHITECTURAL LIGHTING & SHADOWS

Lighting is one of the most interesting, poetic and fun facets of architecture. Slight changes in lighting can dramatically transform the atmosphere, perception and experience of a place. Without light we simply cannot see. Without the depth and definition of shade and shadow, we cannot perceive edges, volumes, textures, colors, nor any visible quality of surface, space or place. Furthermore, if — as Louis Kahn suggests — all materials are "spent light", then architecture itself is a kind of shadow.

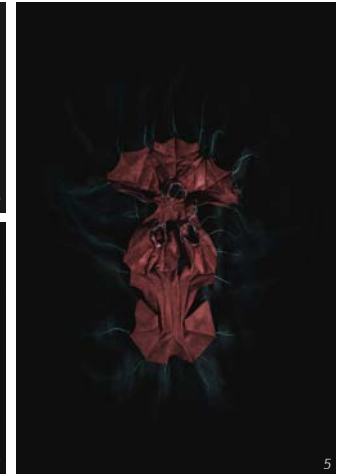
In this course, students discover ways of exploring light and shadow as integral elements of architecture and design. Students study the exemplary light and shadow play of leading artists and architects. They meet with lighting experts and have a chance to inspect contemporary lamping equipment. Students visit local sites where daylight is crucial to architecture, and meet with architects involved in lighting design. Students construct their own solar path diagrams with help from a gnomon, and rediscover architectural implications of the solstice and equinox, and the power of solar orientation. Students learn about lighting concepts and vocabulary, units of measuring light, and methods for modeling light digitally and physically. Students are exposed to a wide array of literature on the subject—technical, artistic and theoretical. Throughout the course students work on their own light and shadow experiments, building 1:20 scale models of lighting conditions, studied through careful iterations and photography (depicted here). Students gather highlights from all they've learned in a final Light and Shadow Book, illuminating the spectrum and depth of their discoveries.

IMAGES: (top left to right) Hasti Fakouri, Ritam Niyogi, (bottom row left to right) Austin Dorn, Apoorv Chopra.

Frederik Petersen
C.A.S.T. Researcher in Residence

STRUCTURAL ANTHROPOMETRIES: COMPACTOS AND INFLATABLES IN FABRIC FORMED PRE-CAST ELEMENTS

Structural Anthropometries develops techniques for the construction of formally complex and intellectually ambiguous pre-cast elements. Compactos are used to control the spherical expansion of the formwork while pneumatic inflatables make it possible to obtain cavities in the pre-cast elements. The combination of multi-piece formwork, compactos, and inflatables with dedicated digital modeling and unfolding tools affords the designer an array of approaches to control the interplay of tensile and compressive forces at play in the casting process. In parallel with its technical motivations, the project develops the characteristic formal and suggestive aspects of fabric formed structures as an active and integrated part of the built environment.



IMAGES: 1) Formwork autopsy, striped skin 2) Self forming pattern expansion test 3) Work produced by students during workshop at Centre for Architectural Structures and Technologies 4) Column prototypes 5) Formwork autopsy, red leather 6) Internal Inflatable, large prototype with seven openings 7) Cortazar, prototype for finite column with thirteen compactos 8) Internal Inflatable, formwork expansion test

C.A.S.T./The Living Systems Architecture Group (LASG)
Collaborative workshop with Philip Beesley

RESPONSIVE KINETICS WORKSHOP

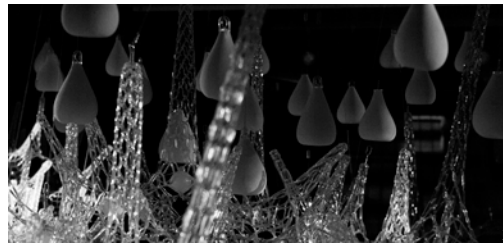
The Workshop, consisting of 30 graduate and undergraduate students of the Faculty of Architecture took place in February over the course of 7 days. The participants were invited to work collaboratively with Philip Beesley and researchers from The Living Systems Architecture Group (LASG) to design, prototype and construct an innovative lightweight suspended 1:1 canopy shell structure.

The workshop centered around strategies for creating substantial constructions while consuming minimal materials, introducing participants to form-language systems; fabrication methods for skin (forming), skeleton (plaiting), and fabric formed castings.

The workshop concluded with an impressive full-scale assemblage demonstrating a finely tuned balance between delicately suspended crustaceans-like polymer shells balanced in elevational space by the precise weight of a manifold of fabric-formed plaster ballasts.

The final installation was assembled in the space of C.A.S.T., inviting a public audience to mingle within the space of the exquisite openwork pendulous scaffold.

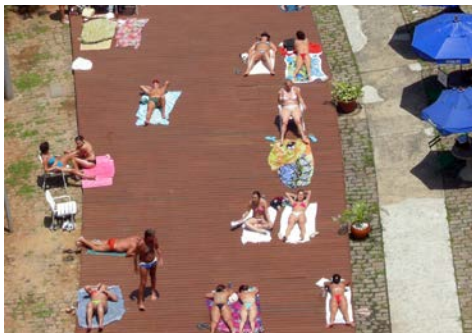
A final publication of the workshop will be available online in the fall.



IMAGES: 1-7) Photographed by Tong Yue



Feb. 27, 2020: Architect Michael Robertson of Cibinel Architecture Ltd., leads M1 students on a construction site tour of the Winnipeg Art Gallery's new Inuit Art Centre addition, designed by Michael Maltzan in partnership with Cibinel Architecture



EDUARDO AQUINO

ASSOCIATE PROFESSOR

B.ARCH. M.F.A. PH.D. CAU-SPIAB-SP
UIA ABAP IFLA

Does public space exist? Non-public challenges the notion of what constitutes “public space” to propose the view that public space in fact does not exist. What exists instead is “public value,” or what Jürgen Habermas refers as “public sphere.” The paradox is that as soon as public value turns into something objectified in the city it ceases to exist as “public.” My present ongoing research studies the conditions that make “public space” in reality non-public—its constituencies, stakeholders and claimants, its crisis and promises, identifying the real actors in the city to locate new strategies of engagement by ascertaining policy and design strategies that reclaim urban spaces for more democratic citizenries. Non-public explores this venue through the recent phenomenon of urban beaches surfacing around the world as the most reclaimed and intensely occupied urban places in large metropolises. Fluid and indeterminate, the urban beach circumscribes a type of space endowed with a flexible mechanism for negotiation between people and places, economies and cultures, architectures and the city. Non-public reclaims a post-urban possibility to reflect on alternative notions of “public.” Witnessing the beach, Non-public looks back to the city to propose strategies of other types of space, reclaiming the urban precinct to a new constituency, investing in the promise of a new role for urban design as a new form of resistance. These ideas continuously informs my teaching and practice.



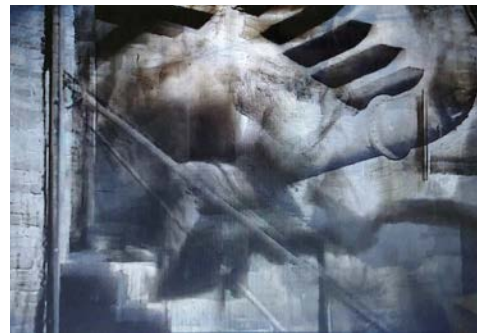
SHAWN BAILEY

ASSISTANT PROFESSOR, INDIGENOUS SCHOLAR, ARCHITECT

B.ENV.D, M.ARCH, MRAIC, OAA, MAA

Professor Bailey is a member of the Métis Nation of Ontario. Shawn was raised in an area of Lake of the Woods that depended on access to mainland by boat and winter road. This background has provided Shawn with a strong connection to the land. His research interests focus on collaborative design processes that draw connection from the land through indigenous knowledge and perspectives. Rather than focusing on contemporary trends and sophisticated visions, his work seeks to develop an architecture understanding through a process rooted in story.

His recent design studio collaborated with a fourth year Landscape Architecture studio (Prof. Richard Perron and Ryan Coates) and the northern community of Iskatewizaagegan to design a culturally based recreational park to help improve the community’s long-term financial stability and cultural awareness among visitors and community members. The ambition was to develop a place that celebrates the land and shares culture within the context of the Canadian Shield (publication pending).



LAWRENCE BIRD

SESSIONAL INSTRUCTOR

PHD. MSC. BARCH. MAA. MRAIC. MCIP.

Lawrence Bird is interested in intersections of space and image. His research, which is funded by the Canada Council for the Arts, focuses on moving images of space harvested from ubiquitous media, particularly Google Earth; images generated by malfunctioning devices (image above, still from “Mobile”); and hybrids of image and materiality generated by projection on architectural substrates. He uses this work to address another intersection: of the poignant and poetic experience of everyday lived reality, and the tremendous and bewildering political and economic forces and networks which, unless we resist them, bracket our lives as architects and citizens.

In his practise, Lawrence is most interested in ensembles of buildings and urban design; he’s captivated by “the life between buildings.” He has worked on several key urban developments in London, UK, and Winnipeg, as well as urban design guidelines in Montréal. He is licensed as an architect and a planner, and works at Sputnik Architecture. He also writes on urbanism, architecture and media art for a number of venues including *Canadian Architect* and *Leonardo*.



LANCELOT COAR

ASSOCIATE PROFESSOR

B.S. ARCH. ENG., B.S. CIVIL ENG.,
M.Arch.

As a researcher at the Centre for Architectural Structures and Technology (CAST) Lancelot explores how the dynamic properties of building materials can lead to an improved structural efficiency through adaptive building systems and new and expressive architectural forms. His focus recently has been on the use of bending active frames and fabric formed ice shells to produce large scale spatial structures. Lancelot is a Ph.D. candidate in the Department of Architectural Engineering at Vrije Universiteit in Brussels researching "Bending active fabric formwork structures utilizing principal stress lines". Another research focus involves working with Indigenous communities to better understand how cultural identity the realities of contemporary and traditional lifestyles can influence the design and construction practices with and for First Nations people living in remote Northern communities. This work has been supported by CIHR and SSHRC funding and has led to ongoing collaborations with several Canadian First Nations communities involving multidisciplinary researchers focused on these and allied issues. His research partnerships have been awarded the President's Medal for Housing Research and Excellence (CMHC) and an Honorable Mention for Excellence in Sustainability (Manitoba Conservation), among other honours. Lancelot worked previously in architectural and engineering practices in the United States and Switzerland and has an M. Arch from the University of California, Berkeley, a B.S. in Architectural Engineering and a B.S. in Civil Engineering from Drexel University.



CHAD CONNERY

SESSIONAL INSTRUCTOR

B.ENV.D. M.Arch.

Chad Connery's research and practice enthusiastically explores the interdisciplinary promiscuity of architecture. Often collaborating with Anca Matyiku under the research-creation practice MatyikuConnery, Chad's work is predisposed to playful interpretations of mundane phenomena and motivated by the intersection of material temperaments and processes with storytelling and fiction. MatyikuConnery's architectural research work has been featured in gallery exhibitions, journal publications, and at conferences in Canada, the US and the UK. Chad previously practiced with DIN Projects and Al Coppinger Architect.

In 2018 Chad was invited to collaborate with RAW Gallery and Wolf from Engineering on the 2018 RAW: Almond and RAW: Gimli temporary restaurant projects (pictured above). Both projects are featured in the February 2018 issue of Canadian Architect and received both the Commercial Wood Design and the Wood Advocacy Awards at the 2018 Prairie Wood Design Awards.

Photograph by Simeon Rusnak



HERBERT ENNS

PROFESSOR

B.E.S. M.Arch. MAA MRAIC

Professor Enns has published widely on spatial perception, cultural identity and modern design. His research includes regional culture, landscape, climate change and place. He is active in practice. Some recent examples are the MPC Staff Training Centre; the River House, including 11 unique products; the Lake House at Clearwater Bay; carbon neutral housing units for the Experimental Lakes Area; a Memorial Gathering Space for Assiniboine Residential School Survivors; and a seasonal residence on Dominique Island, Shoal Lake. Prof. Enns has participated in interdisciplinary projects, experiments and installations involving Astrophysics; Human/Computer Interaction; Music; Sociology and Indigenous Relations; and Spatial Audio. He was Chair of the Editorial Board of MOSAIC: A Critical Interdisciplinary Journal for 17 years (Dr. Dawne McCance, Editor), and was Director of the CISCO Innovation Centre for Collaborative Technologies at the University of Winnipeg. Professor Enns is a former Head of the Department of Architecture and a Visiting Fellow to the University of Texas at Austin Centre for American Architecture and Design - curating exhibitions, teaching Master's level studios and publishing Mining Location J.O. 180: Experimental Buildings at Shoal Lake. He recently Chaired the Program Review of the School of Architecture and Landscape Architecture (SALA), UBC. He served on the Winnipeg Art Gallery Board of Governors for two terms as a member of the Architecture Jury and Building Committee for the Inuit Art Centre.



EDUARD EPP

ASSOCIATE PROFESSOR

B.E.S M.LAND. ARCH. M.ARCH. MRAIC.

Ed's academic and professional pursuits span the disciplines of architecture, landscape architecture and urban design. His teaching and research include: *flood architecture / urbanism & urban design / Indigenous space / sustainable community design / housing and habitation / advanced product design / architecture and design pedagogy*. Ed has received awards and recognition for his research, teaching and studio work; for his service to the community and the University and; for his design work in the profession. In June 2020 Ed retired from academic life at the Faculty of Architecture (UM). It has been an honor and privilege to serve and he is grateful for the collegiality and friendship extended to him by administrators, faculty and support staff alike. Ed is particularly grateful to the many students that he taught through his design studio, history/theory and technology courses. A note to students: *Continue to exercise your creativity in all matters; continue to observe, to discover and to invent. Continue to question the world around you. Take care of yourself and those you love, and those who may need a hand. Strive to make the world a better place. And to quote Dr. Phil: "How you do anything, is how you do everything!"*



TERRI FUGLEM

ASSOCIATE PROFESSOR

B.ARCH (FIVE YEAR PROFESSIONAL)
M.ARCH (POST-PROFESSIONAL IN
HISTORY & THEORY)

Professor Terri Fuglem has written extensively on twentieth century Canadian architects, as well published and exhibited photographic work on the early renaissance vaults of Vladislav Hall. Her current research projects include: a monograph on the institutional and domestic architecture of Gustavo da Roza (1960 – 1975); research toward a publication entitled *Sacred & Modern: The Mid-Century Religious Architecture of Winnipeg* which will chronicle the post-war religious architecture of the 1950's and 1960's; a series of short essays on the theories of exchange and architecture; a short paper on the relationship of the poetry of William Blake to the space of imagination; and the archiving and assessment of historic student work and architectural pedagogy from 1910s to the 1970s at the Faculty of Architecture at the University of Manitoba.

Drawing scanned by University of Manitoba Archives.



MERCEDES

GARCIA-HOLGUERA
ASSISTANT PROFESSOR

B.ARCH, M.ARCH, PHD, LEED AP BD+C, COAL (SPAIN)

Dr. Mercedes Garcia Holguera is a registered architect from the Polytechnic University of Madrid in Spain, and she has worked at leading architecture firms in Canada, Mexico and Chile before joining the Department of Architecture at the University of Manitoba in 2019. She is also a LEED AP BD+C since 2009, and in she received her PhD in Bioresource Engineering at McGill University in 2018 where she coined and developed the *ecomimetic* method, an ecologically inspired design approach to optimize resource use in buildings.

Mercedes' research follows a transdisciplinary approach to environmental building science that is inspired by Nature's principles as described in biomimicry and biomimetic design theories. Biomimetic or biologically inspired design emulates Nature's successful strategies in human constructs and has the potential to contribute to climate change adaptation and mitigation, as well as increase the catalogue of environmental solutions in architecture. Mercedes' work also encompasses performance assessment of architectural solutions with a focus on BIM and energy simulation tools. Students and practitioners adopting performance simulation software tools in the early stages of the design process have more opportunities to effectively and economically integrate sustainable design strategies in their projects.



LISA LANDRUM
 ASSOCIATE DEAN RESEARCH
 ASSOCIATE PROFESSOR
 PH.D. M.ARCH2. B.ARCH FRAIC MAA ATA

In 2019-2020 Lisa led the Canadian Architecture Forums on Education (CAFÉ), involving all 12 Canadian schools of architecture in five forums to discuss and debate the role of architectural education and research in shaping Canada's future. Outcomes will help shape the vision and priorities of a developing architecture policy for Canada. More information online and on Instagram: <https://architecturecanada.ca/> @archcanadacafe.

Lisa's research is published in many books and journals, including Narrating the City (2020); Canadian Modern Architecture (2019); Reading Architecture: Literary Imagination and Architectural Experience (2018); Confabulations: Storytelling in Architecture (2017); Chora 7: Intervals in the Philosophy of Architecture (2016); Filming the City (2016); Architecture's Appeal (2015); Economy and Architecture (2015); Architecture as a Performing Art (2013); Architecture and Justice (2013); the Journal of Architectural Education, Architecture & Culture, and Montreal Architectural Review.

Lisa is a registered architect in New York and Manitoba and holds a 5-year professional B.Arch from Carleton University (1995), and a post-professional M.Arch and Ph.D. in Architectural History and Theory from McGill (2003/2011).



TED LANDRUM
 SESSIONAL INSTRUCTOR
 B.SC. B.ARCH. M.ARCH2.

Ted Landrum began teaching architecture in 2006, after a decade of architectural experience in NYC, Montréal and Ottawa. Ted's teaching is influenced by diverse interests: architecture, theatre, film, poetry & criticism.

Ted has collaborated with Lisa Landrum on many seriously-fun experiments in drama & architecture, including 'group costumes' dramatizing the social body: Giant Tongues, Giant Brain, Winged Eye/Mouth, Open Hand. His primary mode of research is 'archi-poetry'. Publications include Midway Radicals & Archi-Poems (Signature Editions, 2017), shortlisted for the Lansdowne Poetry Prize, and two collaborative poetry chapbooks: Room to Room: Poetry & Architecture in Conversation (Arkitexwerks, 2018), and Table for Four / Eccentric Crops (JackPine Press, 2020). Ted's writing has appeared in Brooklyn Rail, CV2, On Site review, Lemon Hound, American Society for Aesthetics, Warehouse and Partial Zine. Find his archi-poetry archive at ubuloca.com

Ted helps curate Winnipeg's Architecture + Design Film Festival and runs the ArchiShorts Film Contest (adff.ca)



NEIL MINUK
 ASSISTANT PROFESSOR
 M.A.A. B.A. M.ARCH. RCA.

Enacting a Spatial Realm is Neil Minuk's on-going research into subjectively understanding and representing the complexity of spatial relations and territories, both existing and designed in 'situated' architecture. The intent is to understand the qualities of these spaces and thresholds and their impact on psychological human relations. The phenomenal and non-linear enacting of an architecture is intended to be imagined in the design process and represented such that an immersive architecture that considers multiple simultaneous human relations is possible and privileged.

This research project continues work done as part of a critical architecture practice of built work and formed the subject of the DOA teaching design studios. Neil has been researching and compiling existing representation methods, including non-linear storyboards; model enactments and video; drawing; simultaneous photographic apparatuses; subjective mappings; and point cloud digital captures.

Minuk is currently constructing a house+office+office for his family, his architecture practice and his wife's film practice on a complex urban site in Winnipeg.



CARLOS RUEDA
DEPARTMENT HEAD
ASSOCIATE PROFESSOR
B.ARCH. M.ARCH2. PH.D. CPNAA.

Dr. Carlos Rueda is currently working on a research project on generative processes of place-making in architecture, related to ideas of re-creation and imagination. He is particularly interested in the concepts of metamorphosis and synderesis and how these may help to unfold creative actions which articulate memory (in terms of poetic images) and elements of history and tradition in architectural works and projects. His work includes case studies from contemporary practices, significantly by Peter Zumthor and Rogelio Salmons. Borrowing from phenomenological tradition, Rueda draws parallels coming from literature (poetry in particular) and philosophy of place analyzing place-making as a construct of fictional worlds, in the work writers like J.L. Borges (Fictions), S. Rushdie (The Enchantress of Florence), and film-makers, like Denis Villeneuve (Enemy, Blade Runner 2049).

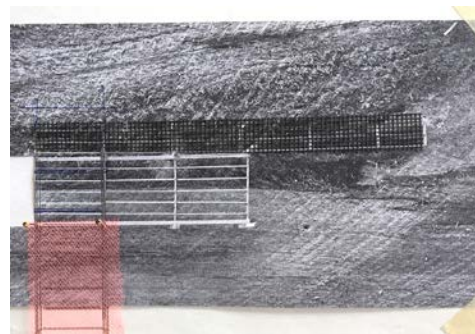


RALPH STERN
PROFESSOR
B.ARCH. DIPL.-ING. MAA. RA.

Ralph Stern is a tenured, full professor in the Department of Architecture and served as Dean of the Faculty of Architecture (2010-2015). Ralph Stern is a licensed architect in Manitoba and New York, a member of the Manitoba Association of Architects (MAA), and has served on the MAA Council since 2011. As an architect, Ralph Stern worked extensively in New York and Berlin.

An accomplished educator, he has 25 years of teaching experience in the United States, Europe, and Canada. He was a Visiting Fellow at the Bauhaus University Weimar (2016), and served as Special Advisor on Internationalization for the Faculty of Architecture (2017-2018). He has lectured at Harvard, Yale, Columbia, M.I.T., Cambridge University, The University of Chicago, The Central European University (CEU), The American Academy in Rome, The Charles University (Prague), and the London School of Economics (Cities Program) among many other venues.

The Guatemala Studio (2019-2020) continues his research in the fields of Indigenous design, social justice, memory, and identity.



LIANE VENESS
PART-TIME INSTRUCTOR
+ ARCHITECT
M.ARCH. MAA. MRAIC. LEED AP.

Liane Veness is a registered Architect, and Instructor in the Department of Architecture. She is also the Coordinator for the Centre for Architectural Structures and Technology (C.A.S.T.) and the founder and principal director of WORK/SHOP; a collaborative research, fabrication and Architecture studio. Her interest and research extends between multiple scales of the material world, working directly within the 1:1 scale of the built environment, while engaging in a myriad of material experimental processes. In both her practice and pedagogical approach Liane is interested in unbinding the spatial processes of "building" from its anticipated outcome as the leading subject of query. Her current interest is in exploring both human and ecological (material) propensities such as intuition (space of hesitation and uncertainty) as architectural provocateurs. Moving forward, her ambition is to create a collaborative and inclusive "workshop", postulating a direct dialogue between her work as a practitioner, her research as an academic and her responsibility as a conscientious citizen in effort to incite positive action and response to global challenges.

STUDENT REFLECTIONS ON THE END OF TERM (continued from page 5):

"I have a friend in the Faculty of Music who remarked learning during a pandemic shifted the focus away from musical creation to the development of media skills. I have the similar experience in Architecture, as we have been forced to rapidly adapt to new ways of presenting and collaborating in an increasingly online world."

– Brendan Klassen (M1/incoming UMAAS co-President)

"Ten years from now, what will we remember? Will plexi glass around cashier counters be a new norm? Will we design spaces to conform to social distancing rules? Will all local businesses convert to mobile deliveries? Will meeting your friends and peers all happen through zoom? How will physical design change in the new digital and pandemic age? How will we value space in an everchanging world? How should we prepare for the next big crisis?"

– Romilie Calotes (ED4, incoming M1 student)

"Design is never static, always dynamic... Just when I thought my project was nearly complete, the pandemic happened. This experience gives a new definition to dynamic architecture, as never finished and always being ready to confront unforeseen challenges"

– Apoorv Chopra (M1)

"COVID-19 opened my eyes to the different situations students had outside of school. I work largely

independently, so it wasn't a big adjustment for me. But we all have different circumstances and definitions of 'home', so at least in my case, there were times I had to either bring my effort into fourth and fifth gear or bring it down to second. It was about understanding and accommodating or finding compromises, and being resourceful so things would work together. I also understood a little about the capacity of our faculty's compassion.

In terms of long-term consequences on design, I'm worried about the amount of waste we are making due to extra cleaning. I haven't looked up the global count but I know in my house alone, we're using a whole lot more cleaning products and throwing them out without a second thought in the name of human health and safety. It's hard to think about a design 'solution' to this that doesn't end up aggravating the whole pollution aspect. I think if there is a design solution or multiple design solutions working together, they would have to guide people to drastically change their lifestyles. Putting up acrylic barriers between cash registers isn't enough!"

– Alixa Lacerna, ED4-Architecture

"Well I have to admit, what we experienced at the end of the term is very devastating in terms of health worldwide. Quarantine and social distancing seem to be helping, but my concern is how long are we going to live like this? I

personally believe that due to COVID-19 human interaction in public spaces is going to change and affect the future of art and design. The question is: how?"

– Benjamin Mujuni, ED3

"This pandemic has made us more aware of the fragility of global supply chains and specialized knowledge that support our daily lives. Yet, it has also highlighted the incredible value of the people around us. I have hope that designers will support the rethinking of social institutions, the strengthening of community infrastructure, and the expansion of local knowledge webs."

– Benita Klierer, AMP1

"Due to the unfortunate circumstance of COVID-19, we all had to stay home. During this time, I improved my software skills and switched to making most my work digitally. Personally, I see potential for using digital platforms because, in the past, access to the school's traditional exhibition and in-person lectures were limited to within the city. Now, we are having virtual exhibitions, online lectures and other open forms of digital communication. We are now more able to publish our works and access projects by other students and professors from across the globe."

– Thai Cao Nguyen, ED3

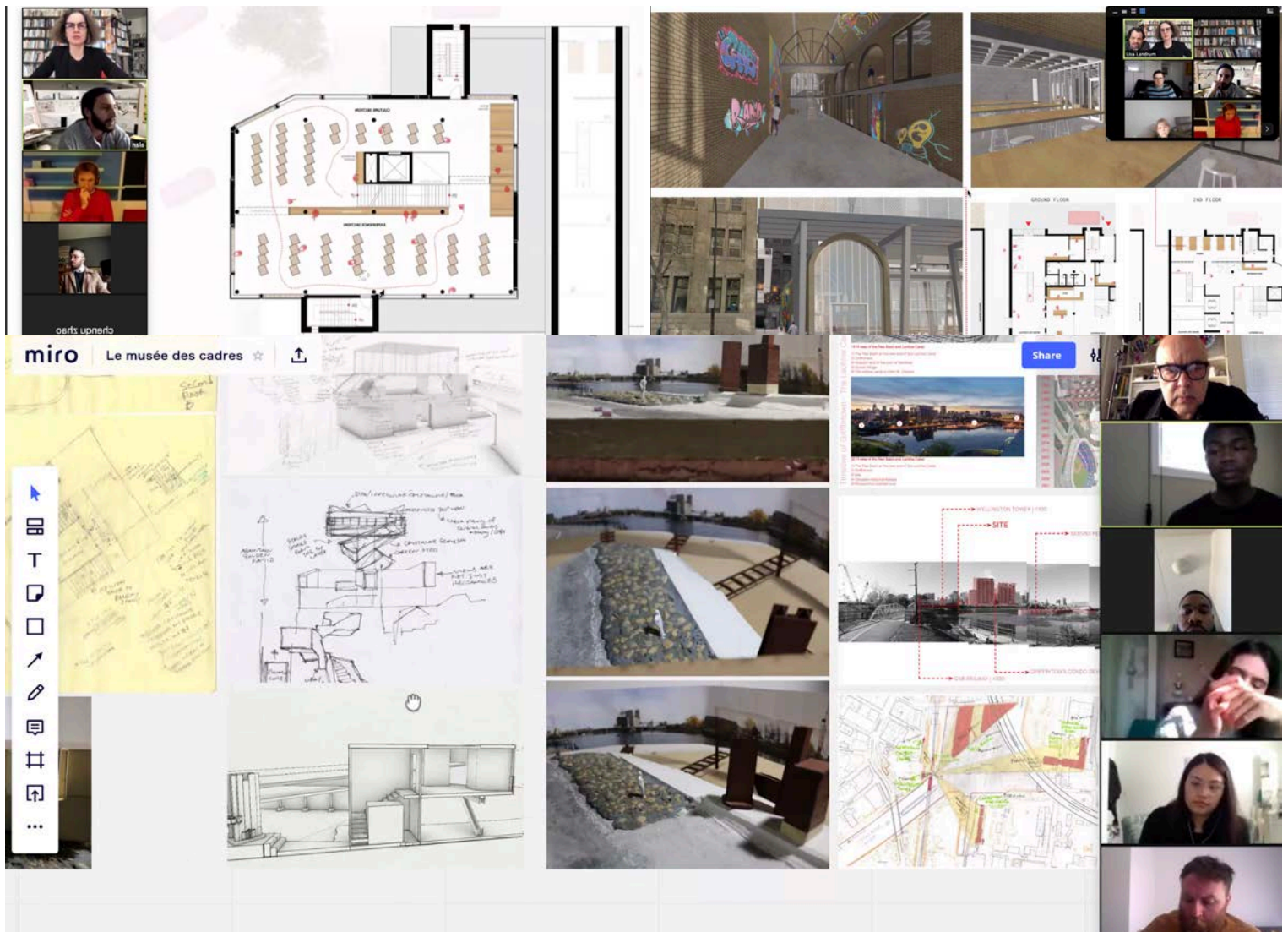


Image: Final reviews in the Department of Architecture, April 2020

ARCH 2020 FOLIO

Archfolio_2020 was produced by Erin Rawluk with the support of Lisa Landrum, Brandy O'Reilly and all contributing Department of Architecture instructors.

