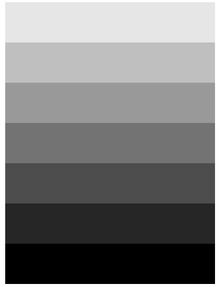

2018 | 2020

Selected Works

Richard Ranta

Richard Ranta
Bachelor of Environmental Design

rich.ranta@gmail.com / richardranta.com / +1(250)457-0945

I'm a recent graduate of UBC's School of Architecture and Landscape Architecture. The product of a rural upbringing and an intensive design education; I care about people, their peculiarities, their communities, and their environments.

Education

Sept. 2015 — Apr. 2020
University of British Columbia, Vancouver, BC
Bachelor of Environmental Design, Honours Program
Minor in Geography; Academic Excellence Award

Sept. 2010 — June 2015
Ashcroft Secondary School, Ashcroft, BC
BC Highschool Diploma
Class of 2015 Valedictorian; Senior Athlete of the Year

Extracurricular

Apr. 2019 — Apr. 2020
UBC Environmental Design Student Society
President (elected by peers):
- Represent B.En.D. student body on UBC committees
- Coordinate weekly events and career opportunities
- Lead the B.En.D. Student Executive Committee

Sept. 2018 — Apr. 2019
3rd Year Representative (elected by peers):
- Represent 3rd year students on UBC committees
- Foster a safe and inclusive community within cohort

November 2019
UBC ENDS 231: Thinking by Design (Prof. Leslie Van Duzer)
Guest Critic
- Invited to critique work of introductory design students

May 2015
Ashcroft Digital Media Kids Camp
Digital Art Instructor
- Invited to demonstrate and teach basic Photoshop techniques to elementary students

Travel

May 2019 — June 2019
UBC School of Architecture + Landscape Architecture
Eastern Europe Summer Study Abroad
- Summer studying the work of Adolf Loos, Otto Wagner, and Joze Plecnik in Czechia, Austria, and Slovenia

Work Experience

Apr. 2014 — Sept. 2019
Village of Cache Creek
Senior Lifeguard + Water Safety Instructor
- Responsible for safe operation of aquatics facility and supervision of pool staff

Apr. 2014 — Sept. 2018
Freelance
Graphic Designer
- Conceptualized and produced branding materials and artwork for various musicians, festivals, and community programs in the interior of BC

Awards

Graduation
UBC School of Architecture + Landscape Architecture
Academic Excellence Award
- Given to two graduating B.En.D. students

Entry
District Scholarships
Thompson Nicola Regional District Scholarship
- Given to one student from each district in the TNRD

Gold Trail School District #74 Scholarship
- Given to five students from BC school district #74

Local Scholarships
District Lions Club Bursary
Canadian Royal Purple Society Bursary
Ashcroft Secondary A.V.I.D. Scholarship
Second Time Around Scholarship
Kinsmen Club Scholarship
People's Drug Mart Scholarship

Skills

Software
Adobe Creative Suite (Photoshop, Illustrator, Indesign, After Effects), Autodesk AutoCAD, Rhinoceros 3D + Grasshopper, ESRI ArcMap + ArcScene, Javascript

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01 Terminus Plus

Date
16/9/2019 — 30/11/2019 (10 weeks)

Course
Urban Design Studio I

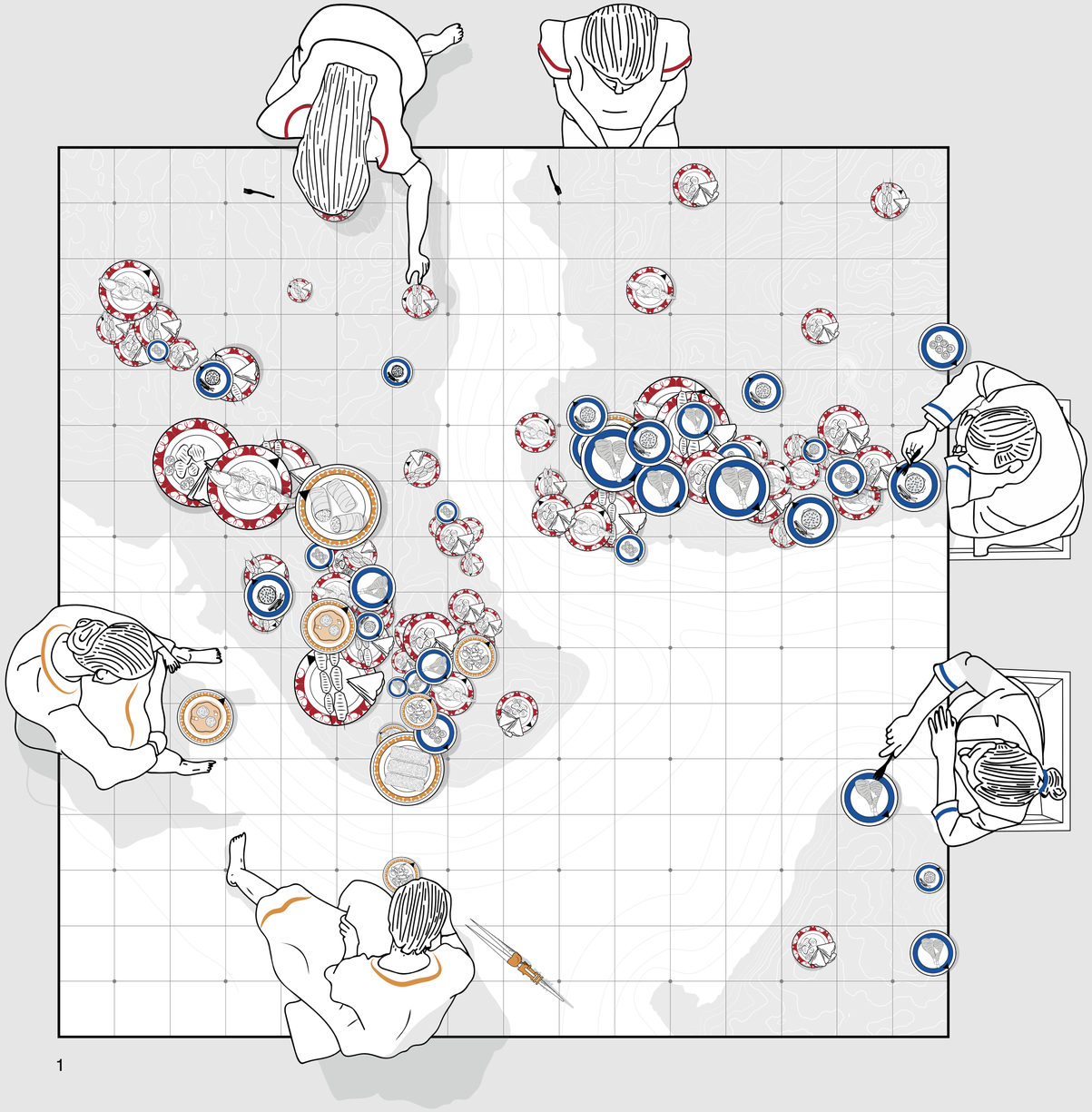
Instructor
Prof. Mari Fujita, B.En.D. Program Chair

Collaborators
Robert Ferguson (Design)
Pauline Salonga (Design)
Yuki Nakahara (Research)
Kaia Nielsen-Roine (Research)

Role
I was involved in all aspects of the project, from research to conceptualization and representation. My most notable contributions include the GIS analysis, 3D modelling and isometric drawings.

Introduction
As processes of suburbanization continue to alter the city of Istanbul, the flight of locals from the urban core leaves physical, social, and cultural voids. This project takes advantage of this new empty space, creating a “depopulation dividend” to benefit those who remain.

Analysis
Imagining the city as a mezze table, data was scraped from restaurant review websites to create a geospatial understanding of modern cuisine culture in Istanbul. Clusters of highly ranked restaurants indicate social islands throughout the city.



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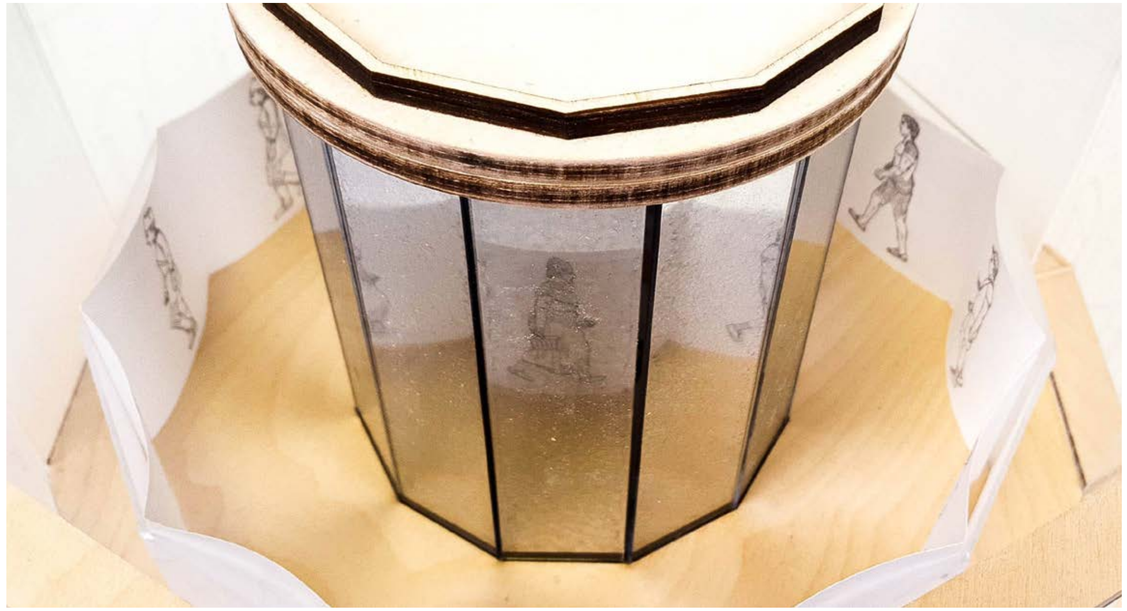
1 Plan, Central Istanbul

0 200 500 1000 m

Research

The history and culture of Istanbul was explored through conceptual modelling. This spinning zoetrope animation machine describes the relationship between the city's walls and the people who used them throughout history.



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Concept

Pre-existing transportation infrastructure facilitates a solution to the spatial dispersion caused by depopulation in Istanbul's core. Our project engages Istanbul's T1 tram line on a level beyond travel times and service schedules, rethinking the route as a continuous line of exchange that connects communities, their amenities, and their identities.

Approach

The design centres around a refurbishment of the historic Galata Bridge, adding a new tram station and urban park which together provide opportunities for play, social interaction, and learning.

1 Isometric, Site

0 20 50 100 m

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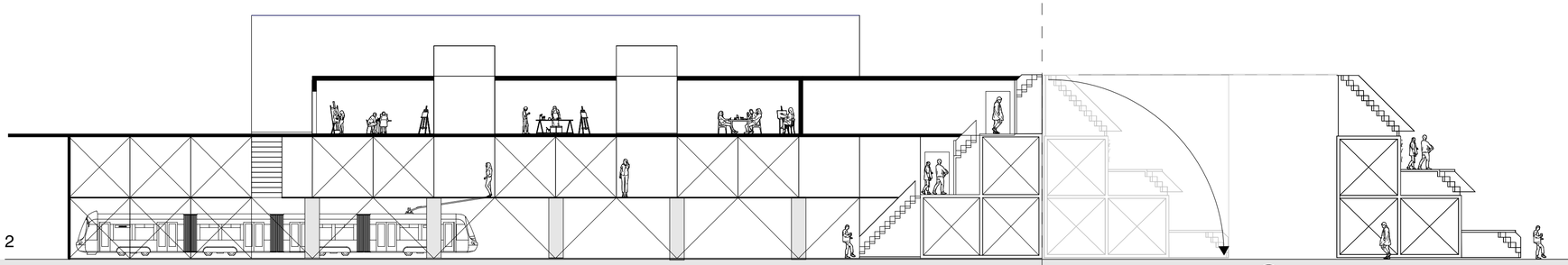

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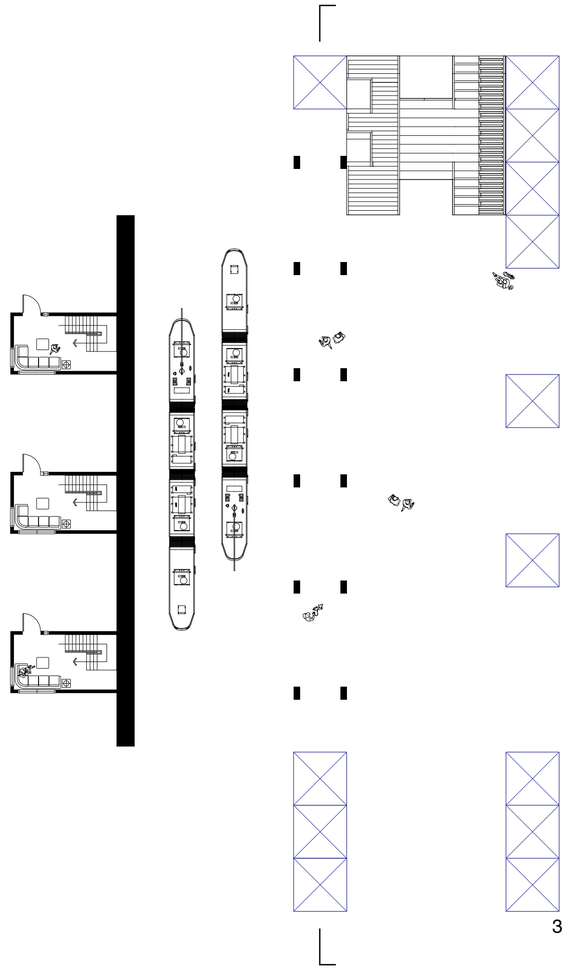


3

Design

Using the motion of the bridge's bascule, a large staircase is rotated in or out of the tram station, creating different conditions for public engagement. Local artists and craftsmen may occupy the station to display their work at a variety of temporal and spatial scales.

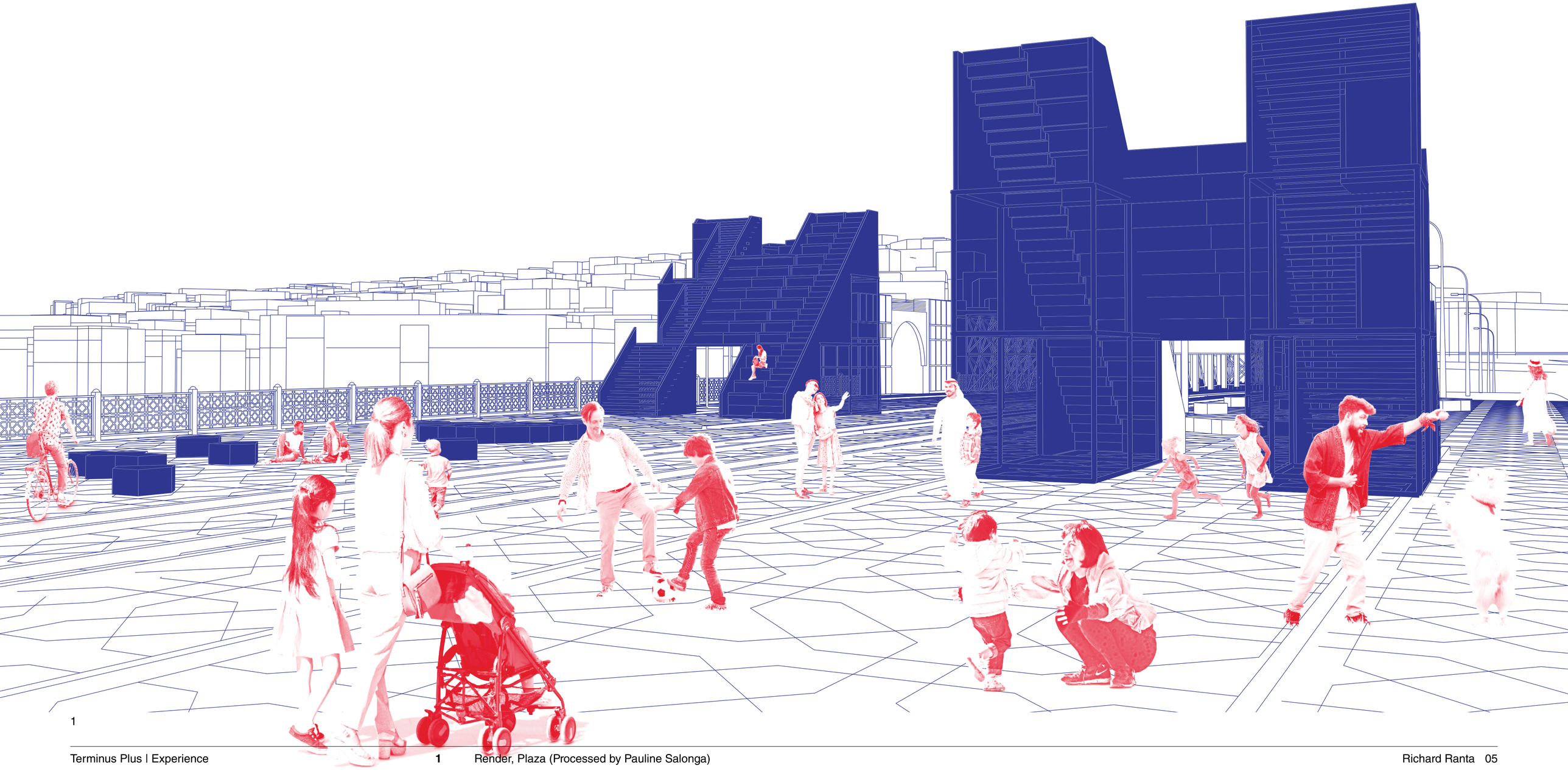
1 Render, Atrium (Processed by Pauline Salonga)

2 Section

0 2 5 10 m

3 Plan

0 2 5 10 m



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1 Render, Plaza (Processed by Pauline Salonga)

02 Urban Uplift

Date
15/03/2020 — 28/04/2020 (6 weeks during COVID pandemic)

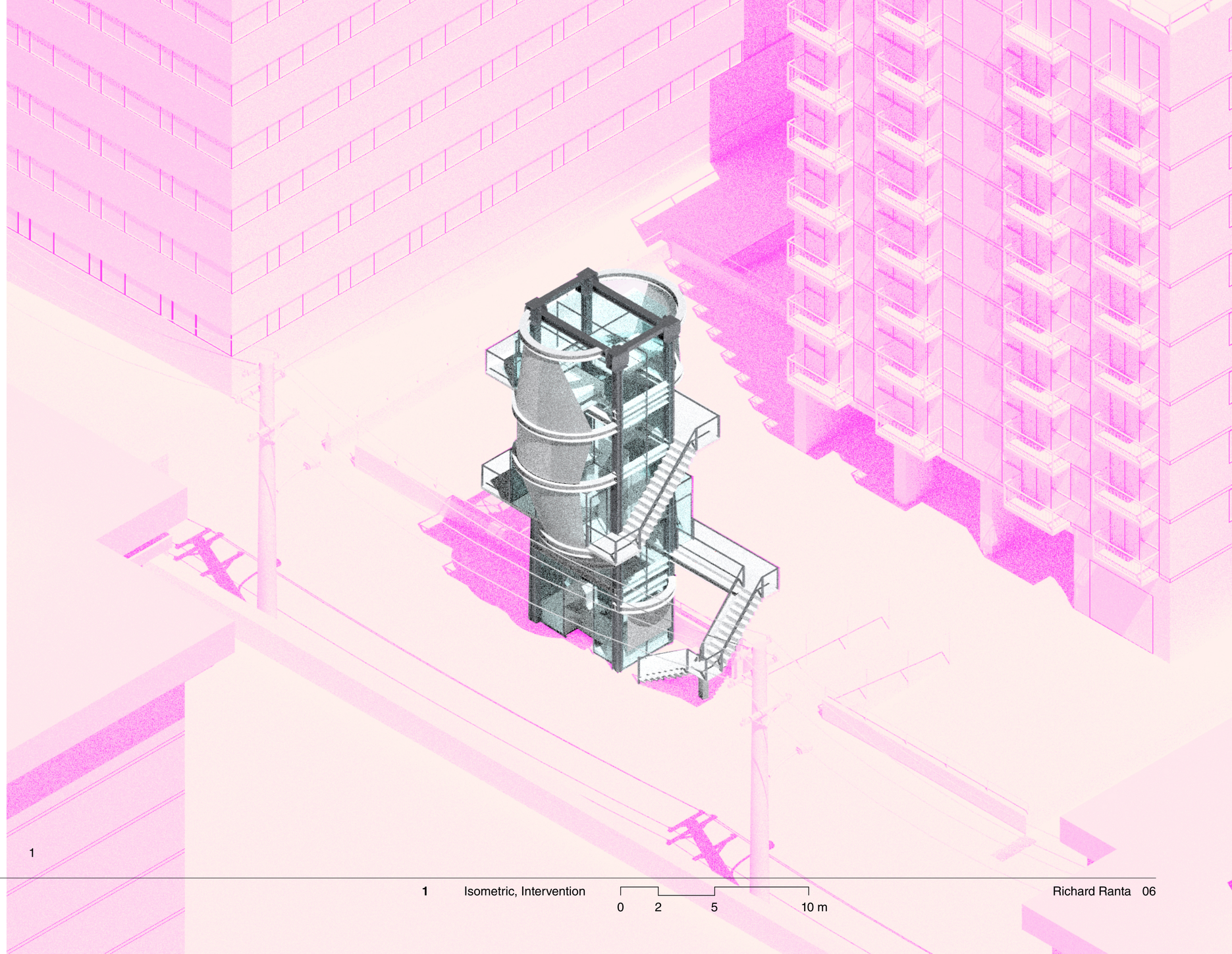
Course
Architecture Studio II

Instructor
Bill Pechet, Lecturer in Practice

Exhibition
Published on UBC SALA website:
sala.ubc.ca/work/urban-uplift

Introduction
While rent prices continue to rise in Vancouver's West End, the neighborhood's abundant laneways and parking lots hold untapped potential. This project converts parking spaces into micro homes and businesses, creating new urban communities capable of proliferating throughout the city's underused spaces.

Scenario
As a proof-of-concept, a structure was designed with a specific client in mind; a cotton-candy street vendor desiring to use the parking space as both a commercial and residential space.



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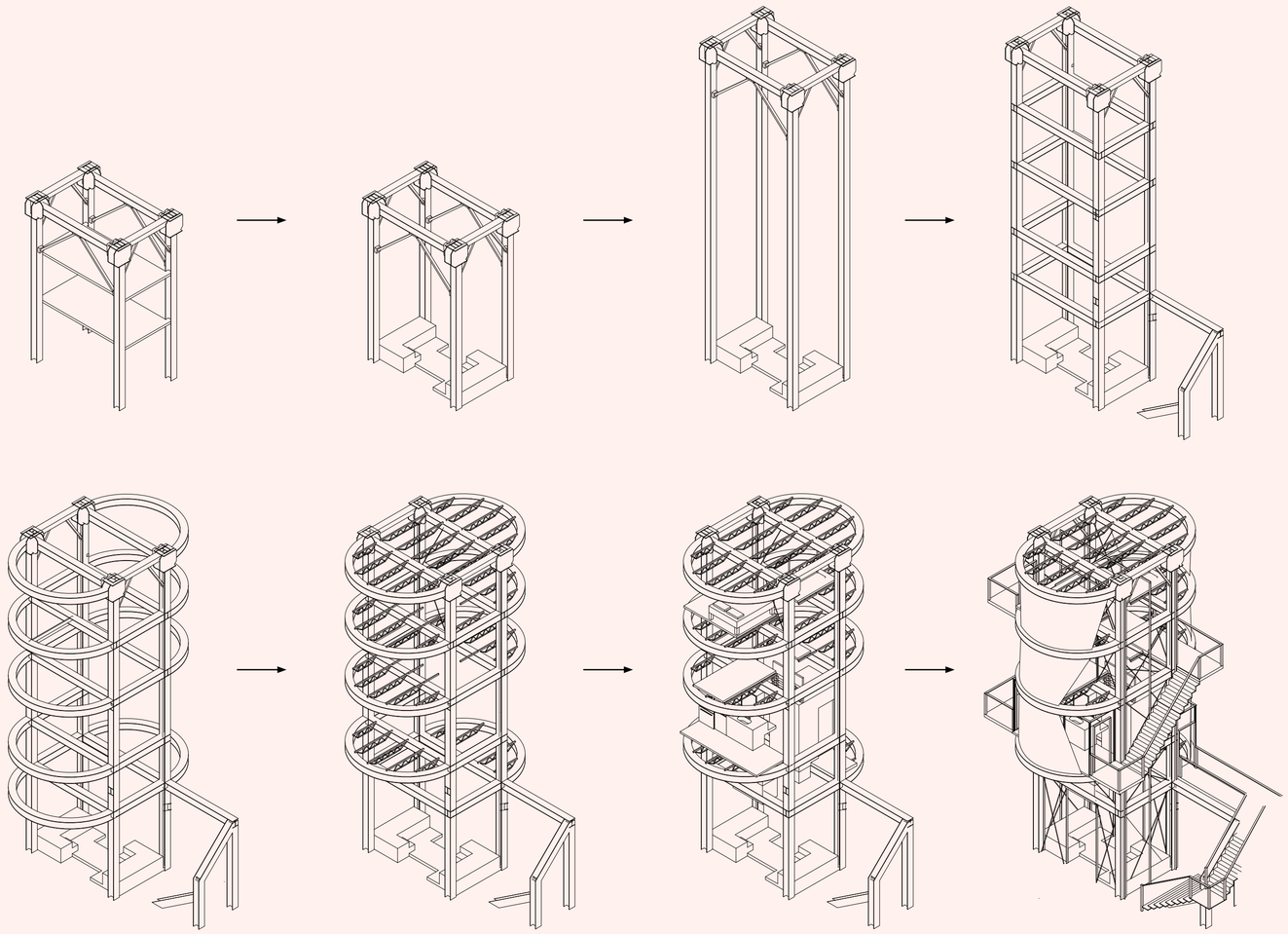
1 Isometric, Intervention

0 2 5 10 m

Structure

Each micro dwelling is constructed by retrofitting a “Bendpak PL-14000” parking lift. Spaces for residential and commercial use are cantilevered from the Bendpak’s framing, while the parking lift’s vehicle platform becomes a pedestrian elevator which raises the vendor and their customers through each level. Depending on the specific elevation of the platform when it stops, the structure’s various planes accommodate different commercial and residential functions.



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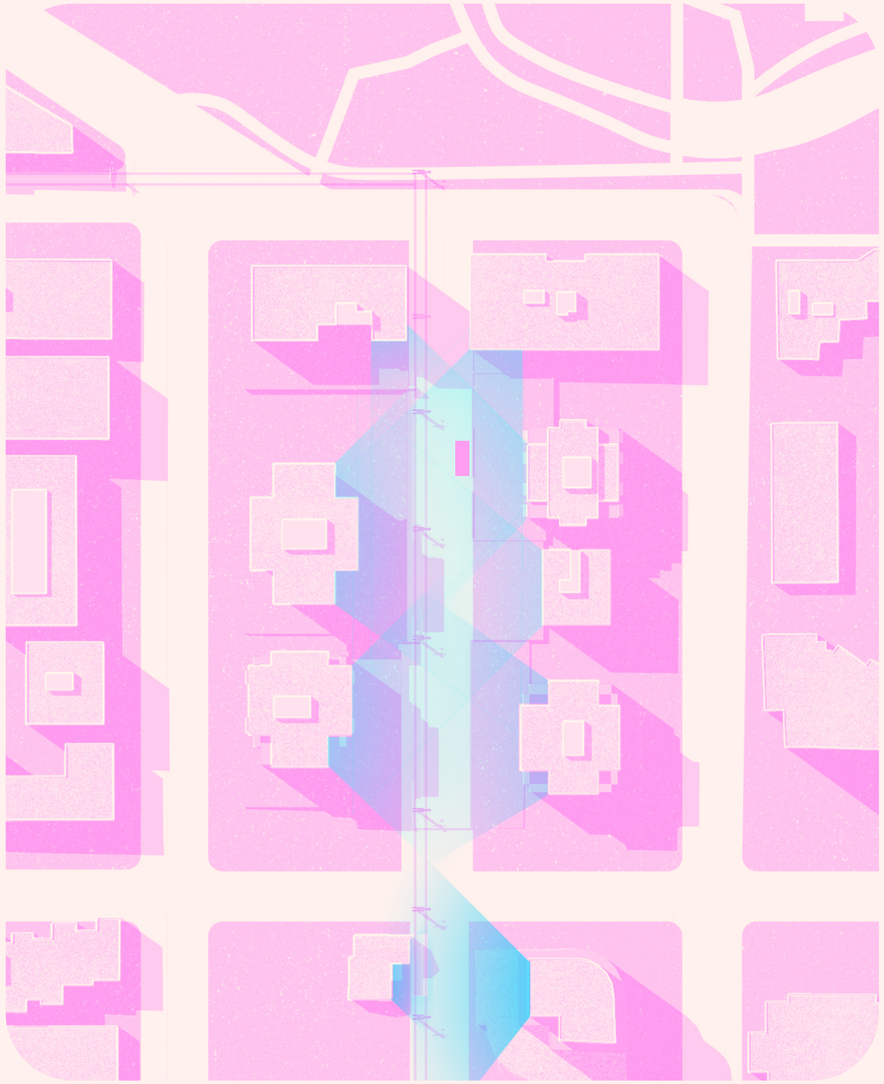
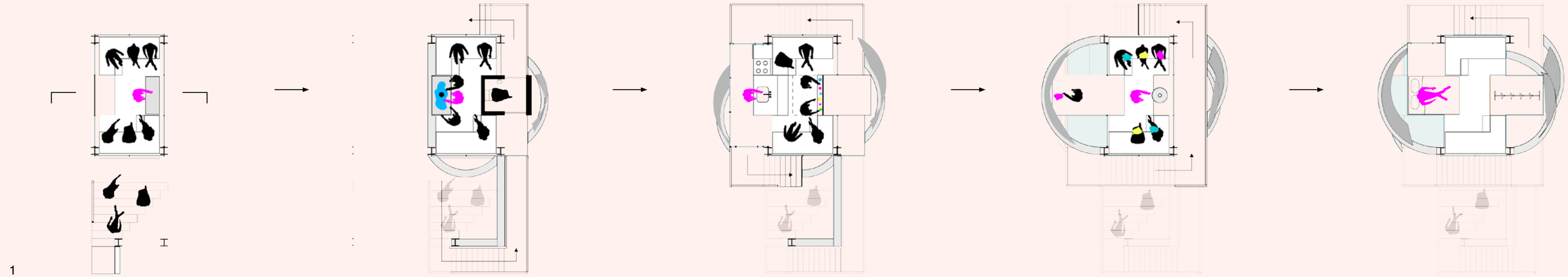


2

Sequence

During commercial operation, each plane contributes to the overall process of creating cotton candy, starting with hand-washing, selection of colors and flavors, spinning of the sugar, and eventual consumption. After hours the planes become residential, with originally commercial appliances such as the wash-basin now serving as a shower for the vendor. A tensile facade blurs and distorts views of these activities, creating a curious spectacle for the hundreds of onlookers in the neighboring buildings.

1



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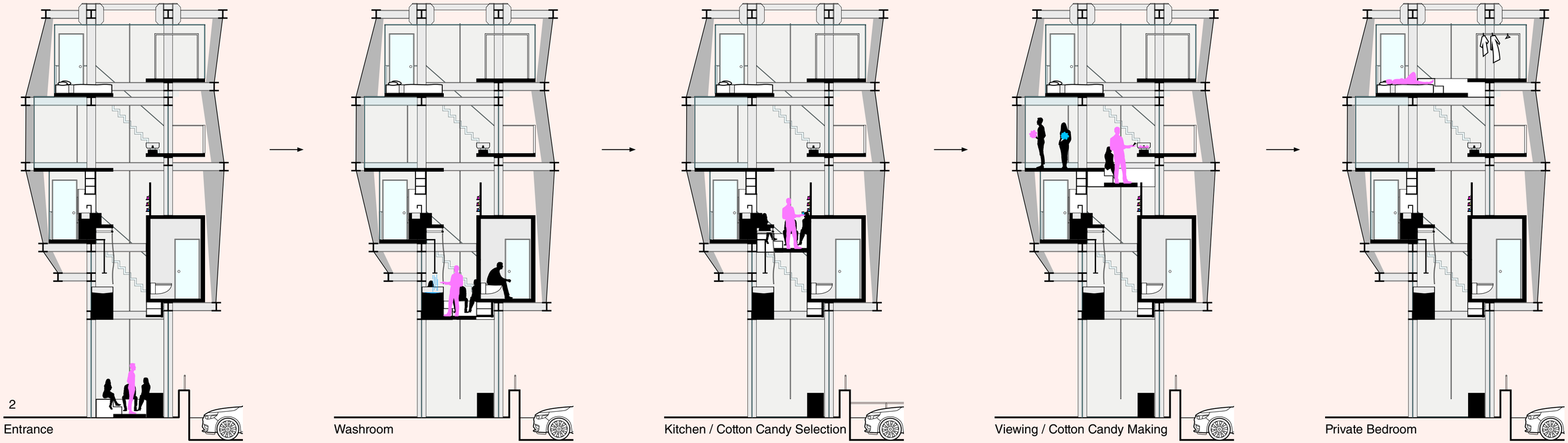

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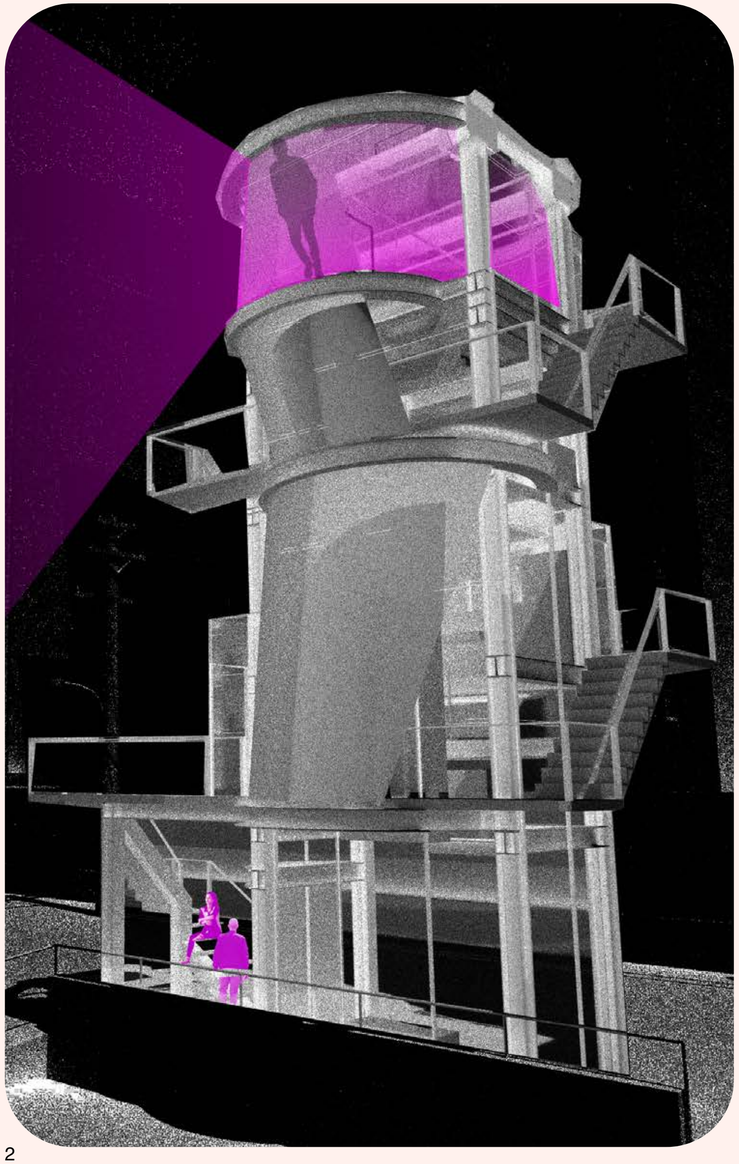

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03 Sculpting Landscapes

Date
17/10/2018 — 30/11/2018 (6 weeks)

Course
Landscape Architecture Studio I

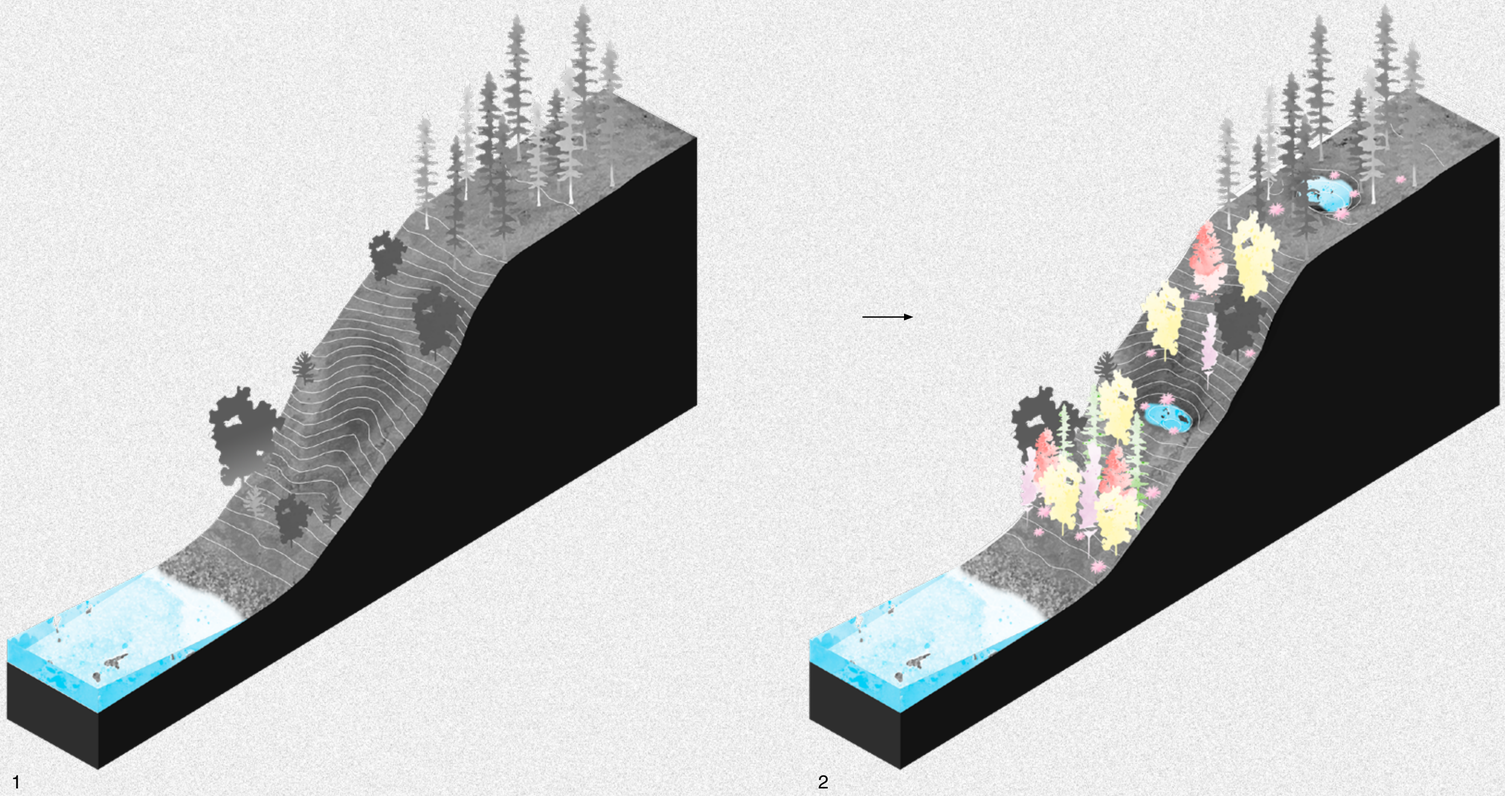
Instructor
Mary Miller

Collaborators
Gurkiran Gill
David Ho Yun Law

Role
I was involved in all aspects of the design process, from conceptualization to representation. I have retouched these drawings post-graduation for visual consistency.

Introduction
The Point Grey cliffs surrounding UBC's campus are eroding at an unforeseen rate, threatening provincial roadways and university infrastructure. Heavily engineered erosion solutions risk compromising the unique cultural and ecological qualities of the cliffs. This project instead exploits natural mechanisms to control the erosion process.

Site
The ocean tides force debris against the toe of the cliff, undercutting slopes, while a gully through the centre of the site channels its way towards the campus.

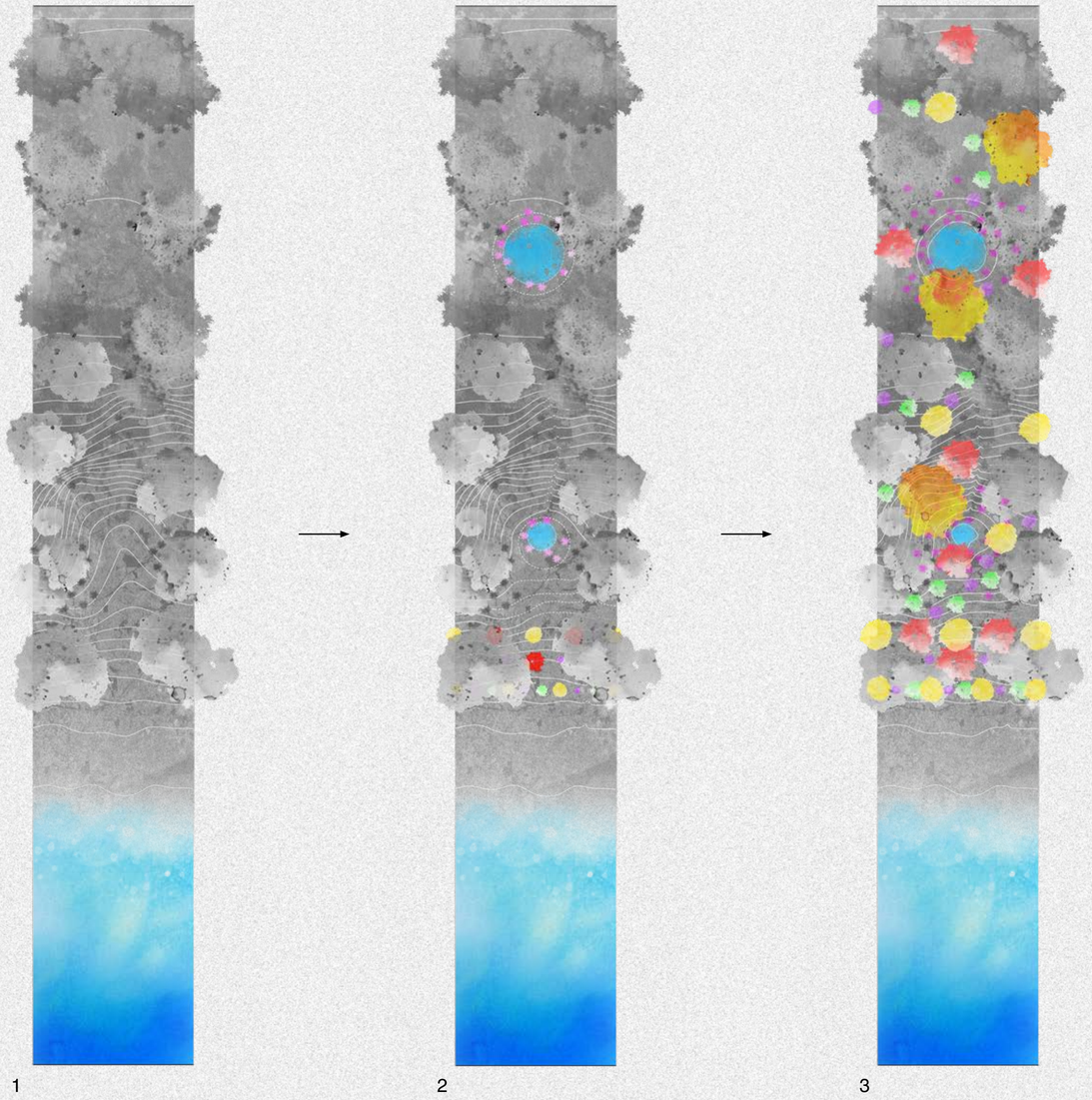


1

2

1 Isometric, Site Current
2 Isometric, Site After

0 10 25 50 m



Planting Legend

Existing *Polystichum munitum*
(Western Sword Fern)

Existing *Acer macrophyllum*
(Big Leaf Maple)

Existing *Pseudotsuga menziesii*
(Douglas Fir)

Acer macrophyllum
(Big Leaf Maple)

Polystichum munitum
(Western Sword Fern)

Populus trichocarpa
(Black Cottonwood)

Pinus ponderosa
(Ponderosa Pine)

Picea stichensis
(Sitka Spruce)

Populas balsamifera
(Balsam Poplar)

Design

The intervention centres around the excavation of a retention pool at the top of the cliff, with the extracted soil being used to plug the gully at the bottom of the cliff. Species with expansive roots will be planted along the bottom of the slope to prevent further undercutting. Coastal winds will distribute their seeds across the remainder of the cliff over time.

1 Plan, Site Current
2 Plan, Site Initial
3 Plan, Site Future

0 10 25 50 m

Strategy 1: Windbreaks + Propogation

Closely grouped vegetation redirects wind, preventing further surface erosion. The wind also carries tree seeds which will propogate across the slope.

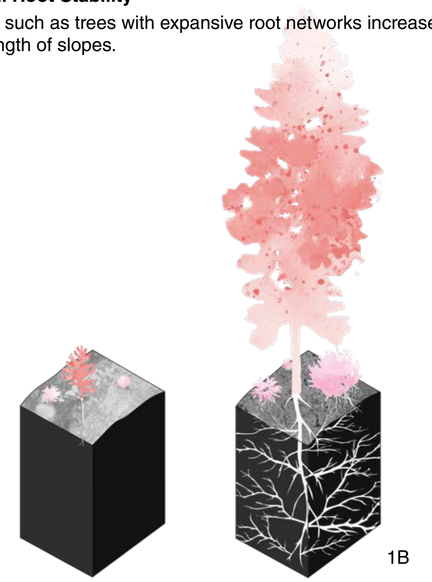
1A

Initial Design

Future

Strategy 2: Root Stability

Vegetation such as trees with expansive root networks increase the shear strength of slopes.



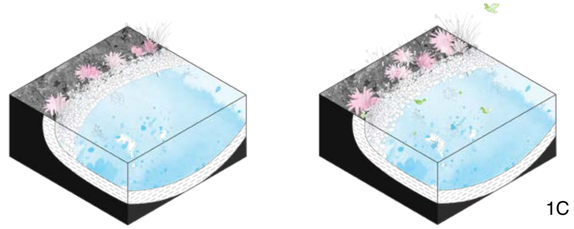
1B

Initial Design

Future

Strategy 3: Retention Pools

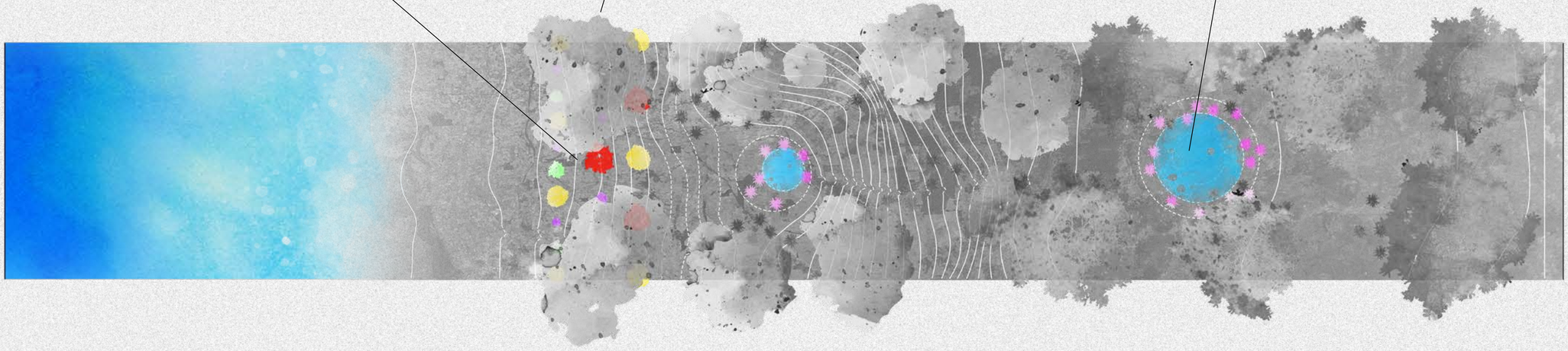
Retention pools with clay liners prevent water from running over the soil surface, allowing less erosion.



1C

Initial Design

Future



04 Linear House

Date
02/03/2019 — 04/12/2019 (6 weeks)

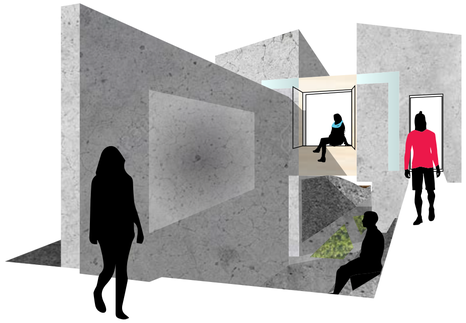
Course
Architecture Studio I

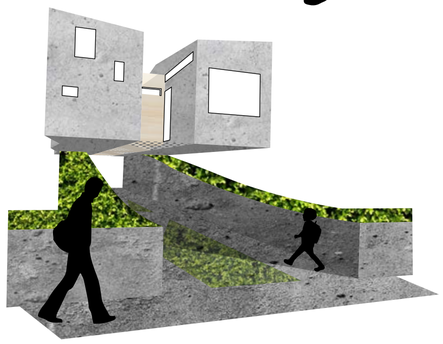
Instructor
Travis Hanks, Lecturer

Exhibition
UBC B.En.D. Graduation Exhibit

Introduction
It is said that how we spend our days is how we spend our lives. While some people live according to strict daily routines, others live more spontaneously. What if our homes were shaped around these routines?

Scenario
This project is for a sister with a strict daily routine and a brother who lives spontaneously; their differing lifestyles meaning that they rarely see eachother. By controlling how the siblings circulate throughout the house, the architecture attempts to synchronize their routines, allowing for more harmonious dwelling.





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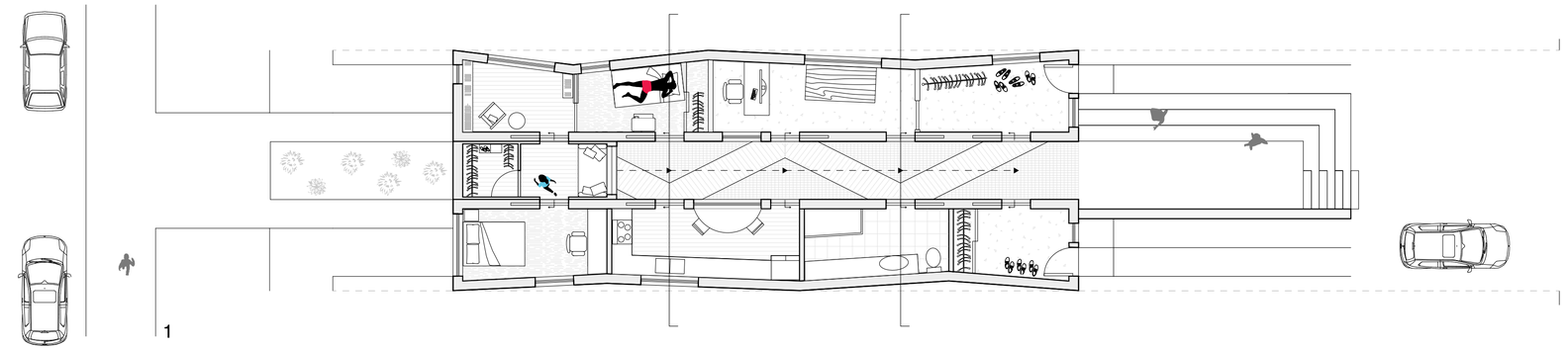
1 Renders, Assorted

2 Physical Model



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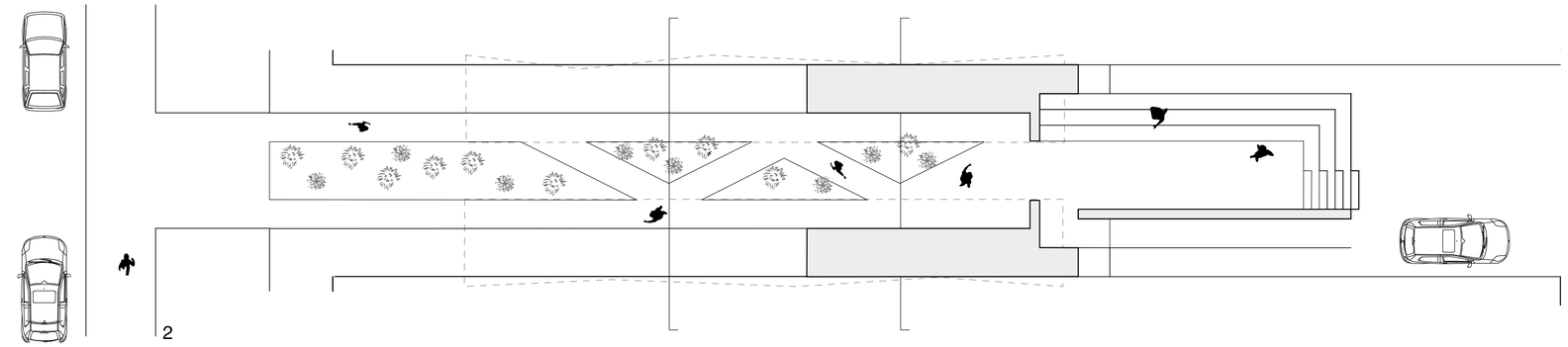

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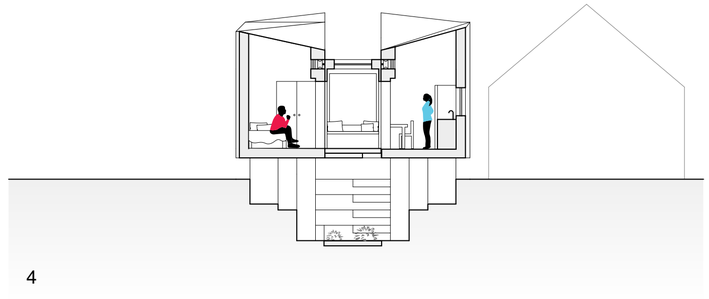

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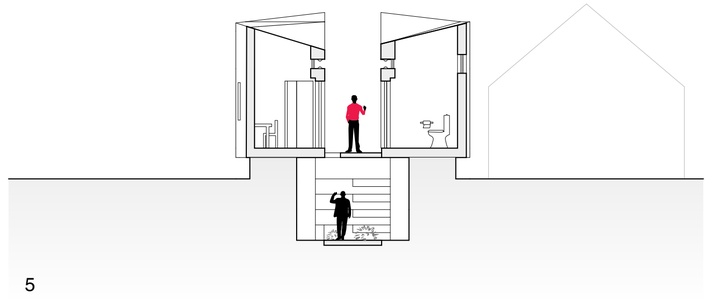


5

Design

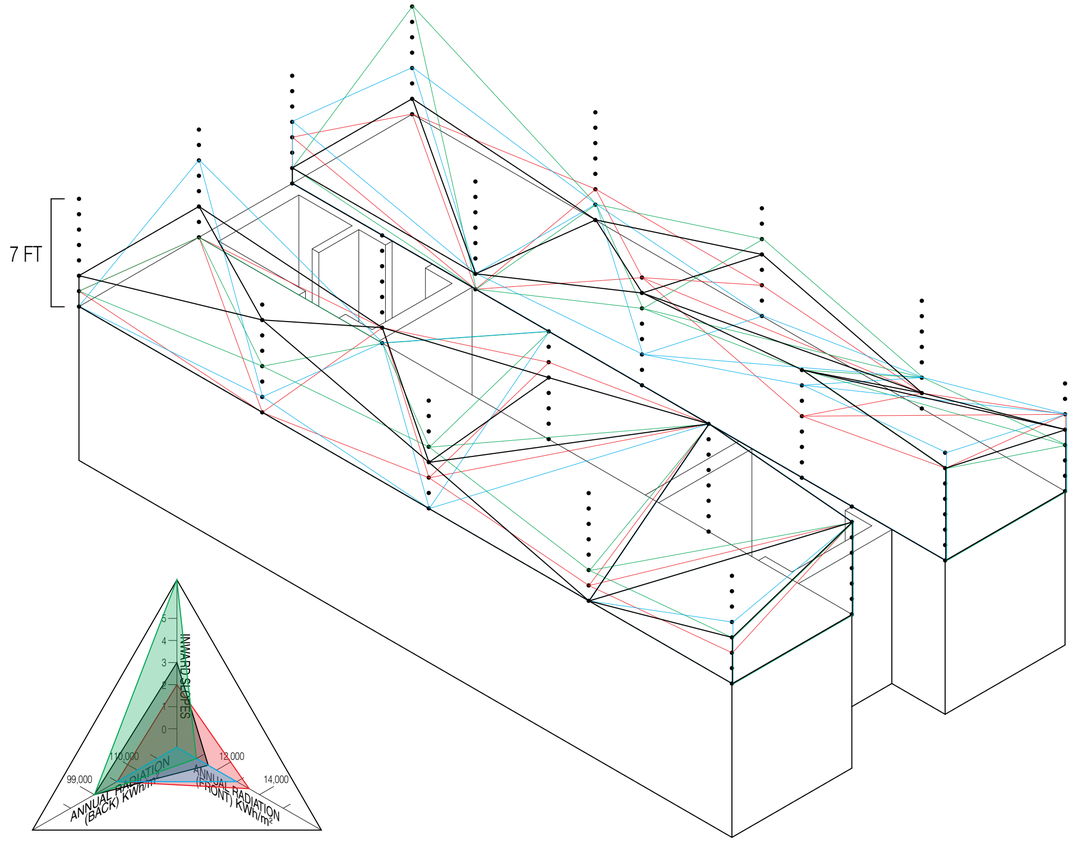
The house is split into two wings. In the west wing, spaces are organized according to the sister's routine, allowing her to move linearly through the house throughout the day. In the east wing, spaces are arranged without particular order, as the brother's schedule changes on a daily basis.

Circulation

The two residents circulate through the house in different ways. While the brother spontaneously crosses between the east and west wings as necessary, the sister controls a moving room or "horizontal elevator" which delivers her to each subsequent space. As the sliding room stops at each point in her routine, it acts as a shortcut for the brother to access the house's amenities, thus encouraging him to join his sister and adopt her routine.

Optimization

As part of a design exercise, multi-objective evolutionary iteration software was used to explore roof forms. The software was instructed to generate forms which achieved the best balance of effective drainage and sunlight access in the central corridor. The most favorble options were compared before the final roof form was chosen.



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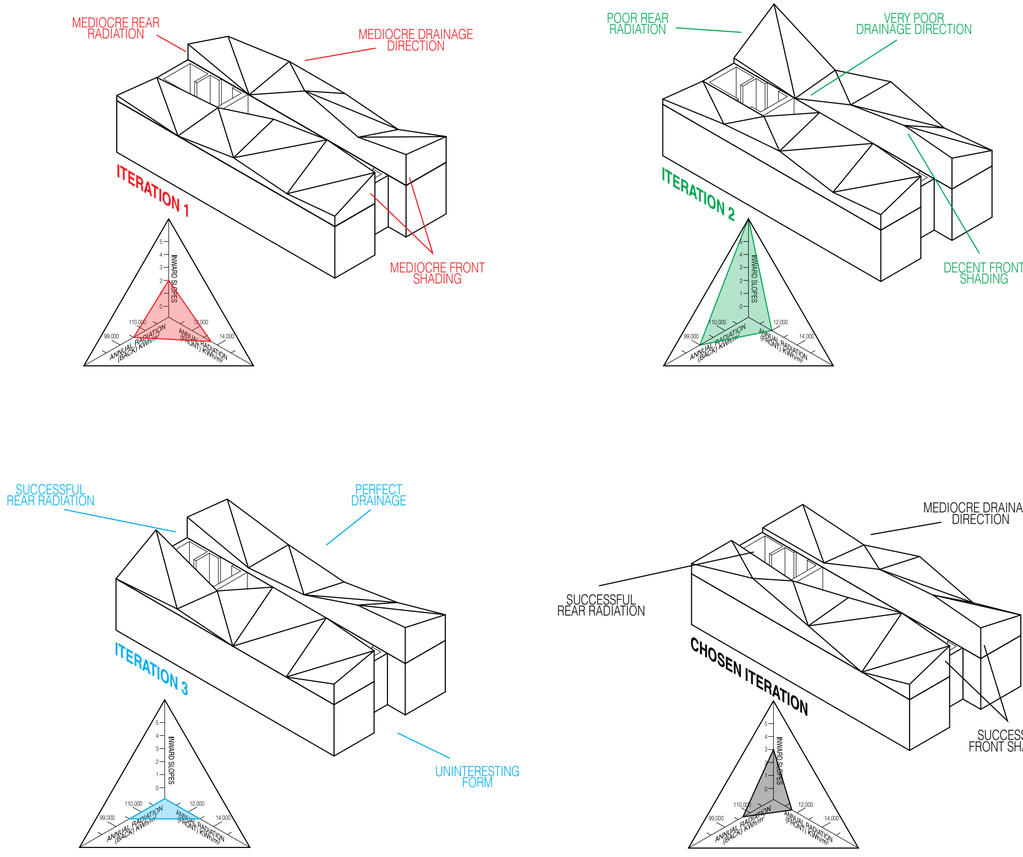


2

05 Benchmark

Date
12/12/2018 — 16/01/2019 (4 weeks)

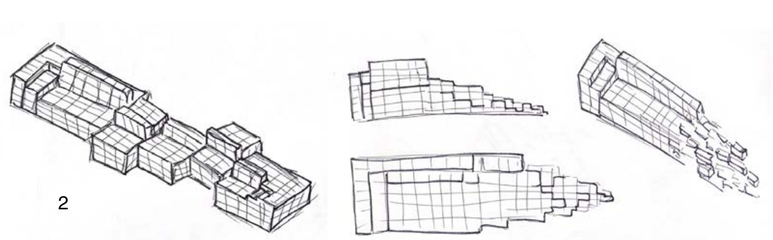
Competition
Benchmark Design Competition

Collaborators
Tosin Odugbemi (Team lead)
Robert Ferguson (Concept)
Carmen Kam (Costing)
Pauline Salonga (Drafting)
Narita Ico (Research)
Megan Berry (Research)

Role
My role in the project involved early design development and iteration, as well as the production of all render drawings.

Introduction
These benches were designed for two municipal parks in Winnipeg, Manitoba. Our priority was to create memorable bench designs using simple materials and basic assemblies, thus keeping our projects affordable.

1



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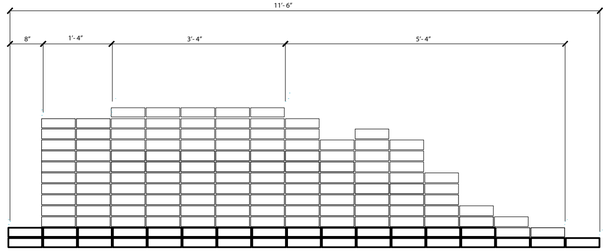
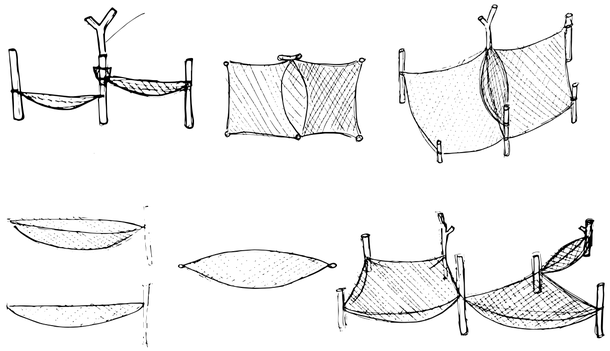


1 Render, Bench 1
2 Sketches (Drawn by Pauline Salonga)

1



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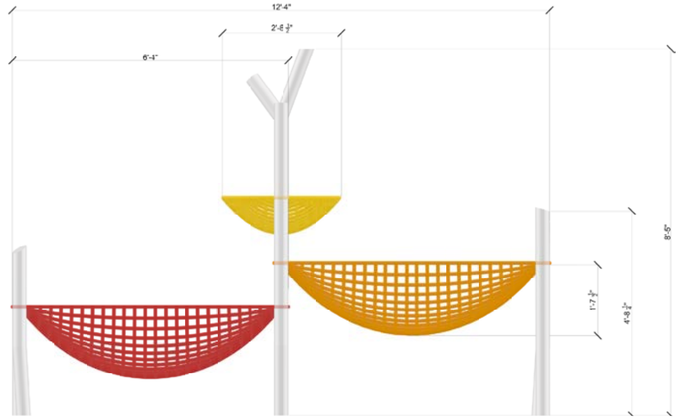
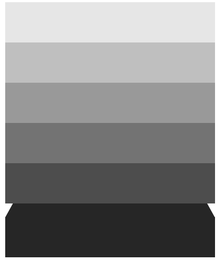




06 Averages

Date
05/05/2019 — 07/06/2019 (4 weeks)

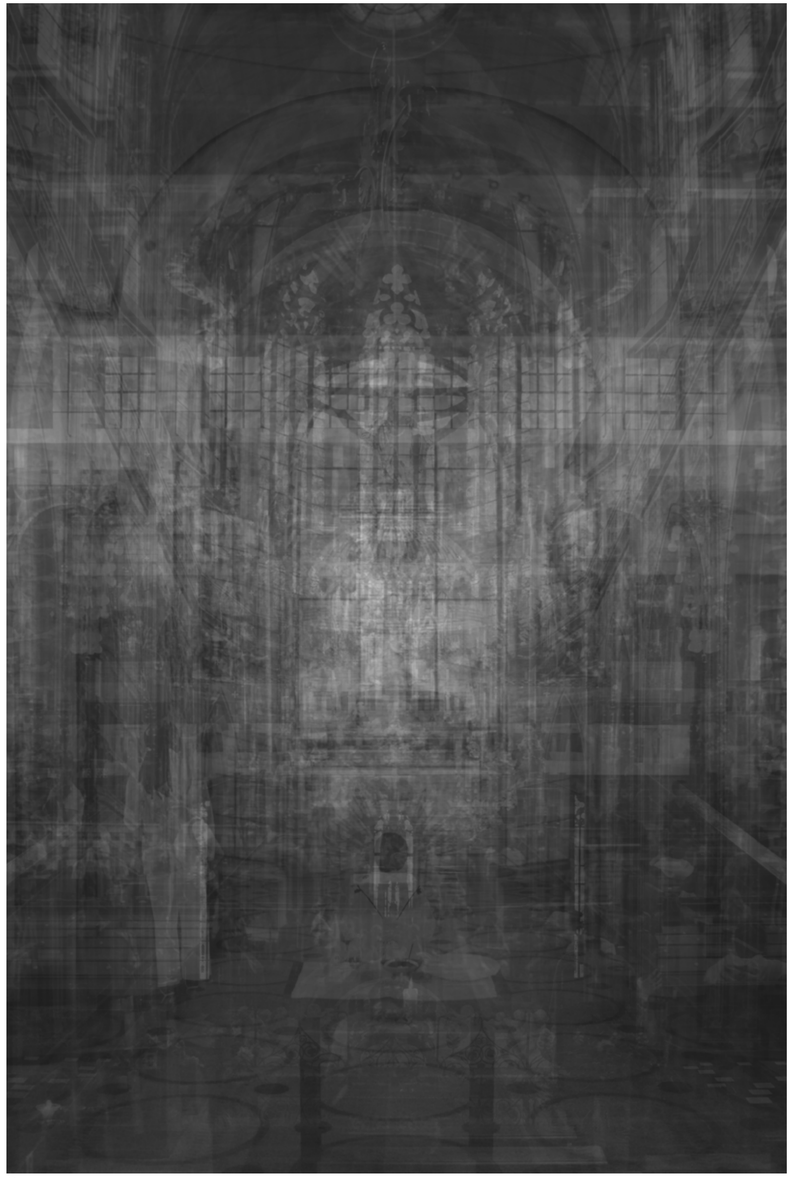
Locations
Berlin, Germany
Prague, Czech Republic
Brno, Czech Republic
Graz, Austria
Vienna, Austria
Ljubljana, Slovenia
Venice, Italy

Introduction
As part of a study abroad trip in Eastern Europe, Professor Leslie Van Duzer asked students to generate a diverse collection of architectural elements, ranging from doorknobs to corridors, in order to identify their most essential qualities. Each photograph was taken according to a strict set of pre-established rules to ensure consistency.

I later expanded on this assignment, using digital image averaging to combine the photos, allowing differences between the elements to fall into obscurity, while the commonalities of their light and form remain.

Shrines
1. The altar must be in frame
2. The camera must be pointed at the center of the wall behind the altar
3. The photo must be processed in black and white, allowing analysis of lighting conditions
4. Human figures may appear, so long as their shadows do not affect the lighting
5. The photo must be taken in portrait orientation

1



2

Corridors

1. The camera must be positioned in the smaller of two connected spaces.
2. The camera must be pointed towards the larger of the two spaces.
3. The door frame or threshold that connects the spaces must be visible along the borders of the photo.
4. The photo must be exposed for the lighter of the two spaces.
5. The photo must be taken in portrait orientation.

1

2

Keyholes

1. The photo must be taken perpendicular to a lock.
2. If the door has a handle, it must also be visible in the photograph.
3. The photo must be centered on the door's esutcheon plate.
4. The door must be closed.
5. If there is a panel which covers the keyhole, it must be down.

1

2

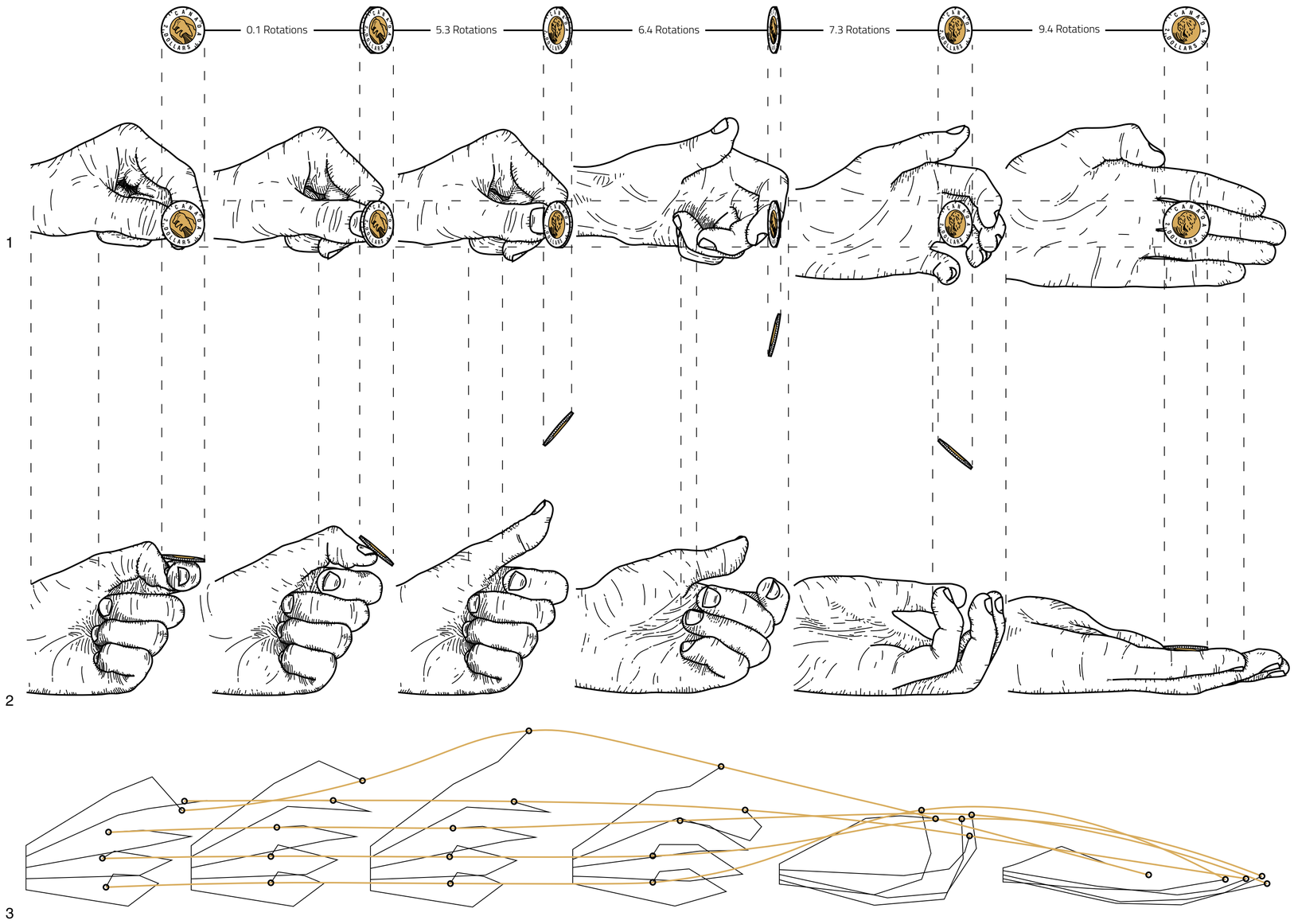
07 Coin Flip

Date
21/09/2018 — 04/10/2018 (2 weeks)

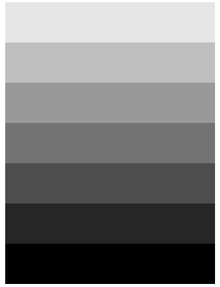
Course
Design Media I

Instructor
Travis Hanks, Lecturer

Description
This drafting exercise involved a complete documentation of a chosen hand gesture. Flipping a coin was a natural choice, as the number of rotations of the coin could be used as a reference of time between each keyframe.



1 Plan
2 Elevation
3 Skeleton Node Diagram



Thank you,

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