The overarching concept of this project is rooted in a reflection on contemporary phenomena of tyrannical majority and its ideological hegemony. While contemporary universities are vying for excellence and disciplinary advancement, there is not necessarily an equal importance attached to critical inquiry and independent thinking. Instead, conformity and homogeneity emerge as a result of, for example, the overriding necessity for students to fit into the machinery of social production, and contemporary commitments to majoritarian democracy that oftentimes grants incontestable legitimacy to whatever popular beliefs. In response to these phenomena that dwarf individuality and stunt eccentric views, my project envisions an individualist pedagogical ideal that appeals to the inward-looking monasticism and focuses on self-mastery. It celebrates idiosyncratic development, individual innovations and personal curation of researches and curriculums. Architecturally, this project plays with two extreme scales. One is 3-meter wide atomised room that acts as intellectual retreat. Its sense of solitude is enhanced through separating these rooms by large open outdoor spaces and by the imposition of a labyrinth-like organisational pattern. On the other hand, blobs have extremely large, 4-5 storey tall open spaces that serve public debate or exhibition. The intention is to present an image of a pluralistic mass of people that suggests an inevitable and everlasting contestation among a multitude of doctrines and opinions.
The Very Long Building | Extension for Université de Montréal
Ground Floor Plan

1 Museum  
2 Research Lab  
3 Medium Size Lecture Room  
4 Phd Offices  
5 Public Debate / Collective Deliberation House  
6 Interdisciplinary Library  
7 Student Residence: Communal Space  
8 Student Residence: Apartment  
9 Special Research Tower  
10 Swimming Pool and Gym  
11 Large Classroom  
12 Public Lecture Hall / Theatre
Axonometric Drawing | Dormitory and Residence for Visiting Faculties (Left)

Axonometric Drawing | Teaching Facilities (Right)

Ground Floor: Research Labs, PhD Offices, Medium Size Lecture Room, Resting Spaces

Second Floor: Student Lounge, Double Height Event Spaces

Third Floor: Offices for Faculty Members

The Very Long Building | Extension for Université de Montréal

View of the Science Complex

Individual Reading Spaces with View Towards the Science Complex
CONEY ISLAND YMCA

Core II
Independent Studio Project
Winter 2018
MIT Department of Architecture
My project is based on an understanding of Coney Island as a place where a banal reality coexists with a collective imagination about the fantastical. On Coney Island, tall social housing blocks contrast with the parachute jump, roller coasters, and many other recreational structures, which stand as a symbol for Coney Island. They define the skyline, overriding the austere housing blocks.

Coney Island as a wonderland, nostalgic, and futuristic at the same time maintains its seductive power in a contemporary context if not more beguiling. The fantastical bodies of sunbathers (along the beach) and surreal experience in Luna Park degenerate into banality as they become advertised subjects and serve mere commercial. The strange and colorful signages contrast with the underpopulated boardwalk, calling for the return of Coney Island as a wonderland that creates excessive stimuli.
This project proposes to imagine a Coney Island vernacular as a remedy. The vernacular is to be understood not only in formal terms but also in social or cultural terms, i.e., the creation of an overwhelming sensorial experience where one alternates between the enclosed and open spaces, the private and the civic. This excess of stimulation also comes from the integration of housing and communal public spaces with the gym. The gym is no longer a Modernist machine dedicated to the muscles but a wonderland where one exercises, lives, and socializes.

Moving between the tall and compressed, the enclosed and the exposed, and having unexpected views into other fantasies, one experiences the YMCA as a playground. Against the gym culture that tends to normalize and idealizes one type of body image, the Coney Island Y embraces strangeness and idiosyncrasy.
This project creates a room that transforms the identity of the institutional body by (un)masking a fake door on the first floor of Building 7 of MIT.

Conventional doors exist as diaphragms between two spaces: they bar entry, allow passage, and display certain aspects of social status. The fake door’s function is superficial: it exhibits and upholds the foyer’s classical symmetry. Nevertheless, this dead-door suggests an overlooked space: the area that the door would swing into if it could.

Our project is to fabricate the dead-door’s space. Fabrication suggests dissemblance as much as assembly. By blocking the door’s passage, we aim to re-construct the door’s function. By establishing a thickened threshold, we aim to blur the difference between the interior and exterior.
Site of Intervention | The door without handle that serves merely to complete the symmetry and upholds the monumental image of the foyer.
Board Set Up

1. Arrange board game tiles in a 5 x 5 square.
2. Each player draws a character card.
3. Distribute 2 mitigation tokens per player.
4. Place resource and housing tokens on each tile where indicated.
5. Stack the event cards face down.
6. Place the hourglass/timer alongside the board.

Game Board Tiles
The tiles depict general landscape and development conditions often found in rural contexts.

- Forest - densely treed area; accommodates:
  - 2 economic units
  - Housing units vary by tile

- Protected Land - reserved for conservation, incorporates hiking and camping sites; accommodates:
  - 2 economic units
  - Cannot accommodate housing

- Pasture - agricultural land for crops or grazing; accommodates:
  - 4 economic units
  - Housing units vary by tile

- Tourism - visitor lodging and amenities; accommodates:
  - 2 economic units
  - 2 housing units

- Lower-Density Residential - dispersed housing in a rural atmosphere; accommodates:
  - 0 economic units
  - 3 housing units

- Town Center - highest density of residences and commercial buildings, location of local institutions; accommodates:
  - 2 economic units
  - 6 housing units

Gameplay

Phase 1: Introductions and Pre-fire Planning
This phase is an opportunity for each player to introduce themselves and take mitigative or preparatory actions, with an awareness of the town’s susceptibility to fire damage, given their placement in the Wildlife-Urban Interface.

After the initial board set up:
1. Each character introduces themselves, reading their Introduction from their character card.
2. Set the timer for 5 minutes. Each character takes turns to distribute 1 mitigation token on a tile, for two rounds (one at a time), making decisions based on their motivations/goals. When placing each mitigation token on a chosen tile, players describe the mitigation action they’ve taken, as written on their character cards. Characters can coordinate mitigation strategies but should remain aware of time.
3. Each tile may contain no more than 2 tokens.

Phase 2: While the Fire Burns
1. Starting with the player to the left of the player who started the last round, players take turns drawing Fire Event cards and reading their contents, following instructions on each card as they’re drawn, before moving onto the next player. Add displaced housing units to the relevant displacement bank (see photo). Add displaced economic units to the relevant displacement bank (see photo). When do you stop drawing event cards?
2. If there are two mitigation tokens on a tile, it is immune to the effects of the card; no displacement occurs. If there’s an odd number of units on a tile and you’re instructed to remove half, remove the smaller half (i.e. if there are three houses, only remove one to the displacement bank).
Steel framing with continuous beams (W840 x 580) cantilevered at ends

Certain periphery columns are eliminated to maximize transparency

SFRS System of steel bracings
- Centre of Rigidity (39.61 m, 31.62 m)
- Centre of Mass (34.90 m, 39.08 m)

Natural ventilation through atrium (stack effect) | Openings are spaced 4 m apart at the sides of skylights that protrude slightly from the roof.

Double skin (summer scenario) | There is no opening on the outer skin to create greater thermal difference that facilitates ventilation.

Artificial lighting first layer: general lighting
Linear LED luminaires for (4000 K, CRI 80+) the main exhibitionary space, and LED downlights (narrow beam, CRI 95+) for the cafe/pub/boutique space to the west

Artificial lighting second layer: focused lighting
LED spotlights (2700 K) for the main exhibitionary space to accentuate the artefacts on display, and lights with acoustic diffusers for the cafe/pub/boutique spaces that relate to the human scale.

Daylight Autonomy | A minimum of 300 lux daylight is achieved for the entire open area of the ground floor.

Daylight Autonomy | A minimum of 300 lux daylight is achieved for the entire open area of the second floor.

Artificial lighting first layer: general lighting
Linear LED luminaires for (4000 K, CRI 80+) the main exhibitionary space, and LED downlights (narrow beam, CRI 95+) for the cafe/pub/boutique space to the west

Daylight Autonomy | A minimum of 300 lux daylight is achieved for the entire open area of the second floor.

Artificial lighting second layer: focused lighting
LED spotlights (2700 K) for the main exhibitionary space to accentuate the artefacts on display, and lights with acoustic diffusers for the cafe/pub/boutique spaces that relate to the human scale.
Site Plan
Phase 3 Full Built-Up | Four Rentable Fermentation Cellar Units with Two Grape Intake Pavilions

Phase 0 Roads and Terraces
Phase 1 Public Restaurant and Wine-Tasting Room
Phase 2 One Fermentation Cellar Unit with One Grape Intake Pavilion

Baja California Winery
Core III
Independent Studio Project
Fall 2018
MIT Department of Architecture

Aerial Axonometric Diagram of Construction
Preliminary Model Testing of Materiality and Construction Technique
Fermentation Rooms Floor Plan:
1. Entrance Courtyard
2. Fermentation Room
3. Grape Hatches
4. Bridge and Bridge Connecting to the Lower Level
5. Barrel Aging
6. Barrel Processing and Coupage Tanks
7. Site Casting
8. Indoor Dining Space
9. Storage

as Longitudinal Section
Natural Passive Ventilation Diagram (Above)

Shading Study and Glare Reduction (Below)

10 Ramp down to Reception
11 Wine Exhibitory Space
12 Indoor Dining Space
13 Storage

Views (Photo taken from the final model)