CONTENT

2021 SUMMER

1. THE NEW YORK STUDIO    THE COMMUNITY EXPRESS 7
   WITH AUTHORITY FOR COMMUNITY INVESTMENT

2. READING NEW YORK URBANISMS    LIFE BY THE WATER

3. HISTORY AND THEORY OF URBAN DESIGN    THE OPPORTUNITIES
   BRING BY AUTONOMY IN SENIOR WOMEN CO HOUSING PROJECT

4. DIGITAL TECHNIQUES FOR URBAN DESIGNERS    ANIMATION,
   SUPERCUT, DATA MAPS

2021 FALL

5. AMERICAN CITIES & REGIONAL STUDIO    ATLANTA AFTER PROPERTY:
   CABBAGETOWN: COMMUNITY THROUGH DOMESTICITY

6. LINES NOT SPLINES    DRAWING-MODEL

7. COMMUNITY ENGAGEMENT    TOOLS TO ENGAGE WITH PARTNER
   STUDENT FROM UNIVERSITY OF BELIZE

2022 SPRING

8. GLOBAL STUDIO    WATER URBANISM - BELIZE MAHOGANY BAY:
   SMART RELOCATION

9. RESILIENT COASTLINE    CASE STUDY: RESILIENT PALMA

10. VIRTUAL ARCHITECTURE: WORLD BUILDING AND
    VIRTUAL REALITY WORKSHOP    LABYRINTH

11. POINTS UNKNOWN    STORY MAP: THE RECENT REFUGEE RENAISSANCE IN BUFFALO HAS TOTALLY CHANGED THE CITY’S STREET CAPE. HERE IS HOW.
STUDIO I
THE NEW YORK STUDIO

CITY EDGES: SITES, SYSTEMS, SPACES, STORIES
THE COMMUNITY EXPRESS 7
WITH AUTHORITY FOR COMMUNITY INVESTMENT

FACULTY: Nans Voron - Coordinator,
Sagi Golan - Coordinator,
Jae Shin, Galen Pardee, Austin Sakong,
Sean Gallagher, Tami Banh,
Candelaria Mas Pohmajevic, Nupur Roy/Chaudhury

TEAM MEMBERS: Jie Kong, Shirley Chen,
Galina Novikova, Giulia Chagas
A role-play was used during the presentation to immerse ourselves in context better and try to put ourselves as real designers that communicate and persuade residents, vendors, governments, and NGOs.
DIVERSITY ALONG 7 TRAIN

STORIES OF PEOPLE

The streets feel wider and more open closer than other parts in New York. The Highline makes getting downtown super accessible by walking. I love living in Hudson Yards.

Koryn, 24 resident living in Hudson Yards area

I really go to the big park because I am always working. It would be good if I can go there and relax.

I am living in a very small room which cost $600 per month, which is a lot for me. I have no roommate.

Corona

Vendors occupy roadways spaces, makes them exposed in a danger environment.

Gentrification makes low-income population get DISPLACED

It was very hard to start my business when I first come here in Flushing. During COVID we were impacted a lot and the rent keeps increasing.

Communication with customers is challenging for me. My English is not good as an immigrant worker. But I don’t have time or money to go to a language class.

Lin, 36 small Chinese antique shop owner

Small businesses are forced to CLOSE

Chen, 20 bubble tea shop owner in Flushing
The Seven Line subway connects the most ethnically diverse neighborhoods in the world. 47% of Queens population is Foreign-born immigrants. While the seven line is a large connector of different cultures, it also reveals the inequitable income patterns along neighborhoods within the city. As an example, on one end is Hudson Yards, a wealthy district recently developed for over 20 billion dollars, while Flushing and Corona have remained bustling immigrant communities facing displacement and poverty.

The Seven Line subway connects the most ethnically diverse neighborhoods in the world. 47% of Queens population is Foreign-born immigrants. While the seven line is a large connector of different cultures, it also reveals the inequitable income patterns along neighborhoods within the city. As an example, on one end is Hudson Yards, a wealthy district recently developed for over 20 billion dollars, while Flushing and Corona have remained bustling immigrant communities facing displacement and poverty.

Small businesses are in danger of being displaced as a result of new development, rent increase, eviction and permit control. In order to protect these vulnerable communities along the seven line, we aim to provide an infrastructural framework capable of securing adequate spaces including housing and retail spaces, celebrating local culture, and strengthening a sense of place and belonging. The seven line is space for opportunity because it intersects Flushing Meadows Corona Park and Flushing Creek, as well as other underutilized space.

Hudson yards, where billions of city dollars were spent to create the largest and most expensive mixed-use development in American history. What could we have done to the other end of the line, to celebrate the local community flushing with the same investment?

After understanding the inequitable patterns along the line, we are focusing on the neighborhoods of Flushing and Corona, where these striving communities represent culture and diversity.
FOCUS ON CORONA

- Market hall, food hall, open market and plaza create the space to celebrate the local market culture.
- 2nd floor food hall connect the extended platform of the train track.
- SBA office located inside the market hall to provide support to vendor, at the same time there is lounge sleeping space, and skill training classroom.
- This built proposal really came alive with all the seating options and small vendor stall selling coffee and quick bites along the extended platform especially useful for the commuter and vendor was those information kiosks for people navigating through the market hall & food plaza.

There are also video phone booth to connect immigrant families to their distant families abroad. -

- The Central plaza in front of the market hall entrance is going to be a nice flexible public space for people to sit, relax, and enjoy the live performance when there is events or festivals. During weekends it can be used as outdoor market. -
Here at the main street we are going to have a expanded sidewalk and improved streetscape so more customers would come during day and also at night. The open rooftop dining spaces are going to benefit some of the food vendors and small local restaurants as well. I can imagine during the Spring Festival this place is going to be super populated and fun.

The streetscape also going to change throughout different time and with different events. There are also waste management system along the commercial corridor to mitigate the current street condition in flushing, in which garbage from the vendors and pedestrian can be seen everywhere.
The diverse ethnic identity is what we, the community board always want to preserve and celebrate. And what’s great about this proposal is that the affordable housing are customizable and flexible with the base architecture provided by the designers and the neighborhood can actually customize their house base on their needs and cultures. In this future envision animation of the facade of these affordable apartment, our community board members are excited about the diverse cultural identities being preserved and expressed from the architecture and the flexibility that it provide to accommodate the residents’ needs.
With the development of the city, different policies determine and promote the development of the riverside area, its function and status in the overall city are constantly changing, which also affects the composition of the people who come to the surroundings for activities, economic vitality, and future policy decisions. Through the collection of historical data and current situations, we can find this kind of action and reaction forces between policies and the people.
The Role Evolution of Min River and Surrounding Area Driven by Policies

As the mother river, the Min River and its coastal environment play a significant role in the city's overall ecological system and economic development. In the process of Fuzhou's modern planning, the government's overall and partial planning efforts have promoted the development of the South Minjiang Park area. The following will introduce the main government documents and related decisions in different periods and their influence on the site.

Photography: Skypixel — Huangping

- THE ACTION AND REACTION FORCE - PEOPLE & PARK DESIGN AND TRANSFORMATION

GOVERNMENT DESIGN & PLANNING ADJUSTMENTS

PEOPLE’S BEHAVIORS & REACTIONS

(1) Revetment Erosion & People Washing Clothes and Drowning Accident — Shore Reinforcement

(2) Bike Lanes + Sidewalks — Invite the elders and children from nearby neighborhood —
Cancel Bike Lanes & Widen Running Ways — More Exerciser — Healthier Habits

(3) Ecological Restoration — Sight obstruction & Movement Obstruction — Strengthen Pruning and Replace some kinds of Vegetations — Higher park understory space utilization —
- Leisure facilities — Increase people’s intimacy and awareness of the natural environment
HISTORY AND THEORY OF URBAN DESIGN

PAPER

THE OPPORTUNITIES BRING BY AUTONOMY IN SENIOR WOMEN CO HOUSING PROJECT

FACULTY: Noah Chasin - Professor
Charlette Caldwell - Instructor
Joseph Huennekens - Instructor
Tal Fuerst - Associate
Nupur RoyChaudhury - Teaching Assistant

INDIVIDUAL WORK

The aging population is a global challenge that calls for various renovations. It is common to see governments make efforts to carry out pension reform, retirement income system transformation, financial supports, and social services. Nevertheless, with the accelerated rise of the elderly population and longevity come with their higher quality of life requirements and growing self-awareness, the current social-economic and policy support for the elderly does not have sufficient flexibility and self-development to cope with future demographic changes. According to WHO\textsuperscript{1}, the world’s population aged over 60 years is expected to be 2 billion in total in the next 30 years, which is more than twice as was in 2015’s, and these populations appear a tendency of concentrating more on middle- and low-income counties and regions. So it’s crucial for society today to figure out financial and operational efficient ways to better fit into future scenarios.

For senior people, the basis for their life happiness and further pursuit is health. Their physical function declines, which means the scope of their activities has been reduced, and the demand for the surrounding environment and healthcare facilities therefore increase. The downward trend of independent living ability shows they require physical assistance and mental support from their family, community, and society. Moreover, after reaching the statutory retirement age, their role in the family and society is changing, reminding us to pay more attention to their access and awareness of finding

supporting social and government financial agencies and the prejudice they might face. All of these conditions inspire people to form a more integrated way of thinking and smoother working flow to construct a more livable environment to relocate the senior.

The New Ground program² in the UK, for example. The establishment of the Older Women's Co-housing (OWCH) community is one of the explorations made by the senior group themselves and of great examples to illustrate how all these considerations come together and function throughout different periods, agencies, and spatial locations.

New Ground is UK’s first senior co-housing community located in High Barnet, London, speaks for women over 65 as their representative to prove and show the value and capacity of senior women through their nearly 20 years’ fight among various social obstacles and the achievement of realizing a new form of co-housing in their own country.

Compared to traditional nursing homes for UK’s senior people, this innovation set a precedent of engaging autonomy and providing independent choices for these typically vulnerable people, therefore achieve their late years’ well-being by reducing loneliness and isolation³ and increasing sense of belonging and personal value⁴.

⁴ Maria Brenton. Oct. 2017 “Community Building for Old Age: Breaking New Ground. The UK’s first senior cohousing community, High Barnet” wrote to UK Cohousing Network Senior Cohousing Ambassador, for the Housing Learning and Improvement Network https://www.housinglin.org.uk/ assets/Resources/Housing/Practice_examples/Housing_LIN_case_studies/HLIN CaseStudy-139_OWCH.pdf
beginning, becomes the fuel of the later one for community spatial design and organic living pattern, for example, their equal view to the center lawn and flower broader, private bedroom and shared kitchen, laundry, and vegetable field, a state that can be easily switched between independent and shared. Thus, as can be seen nowadays, these women feel much more empowered and more decisive.

OWCH’s organic self-support has been tested out even during the pandemic. One of the founder members, Maria Bronton, wrote ‘New Ground’ Co-housing Community, High Barnet: resilience and adaptability (Maria, 2020) to report and reflect the residents’ reactions and post-pandemic life. The resilience and adaptability she mentioned are what autonomy is going to the community in the future phases. These senior ladies quickly adapted virtual communication through mutual help. They set up 3 to 4 people-groups to manage each other’s health conditions and set up emergency response measures if there are infected people in the community. Even they had been restricted to travel, this group of people didn’t suffer a lot from loneliness and isolation. On the other hand, they spread messages of encouragement to the elderly and children who suffered elsewhere through the Internet. And they also made food by themselves and sent them to the surrounding communities.

OWCH community has overcome many hurdles to achieve this result finally. It can bring more influence than just provide themselves a residential space; the role it’s going to play in aging society could be an incentivization for more vulnerable groups to chase for their needs and have the power to bring transformation future senior housing situation. However, this autonomy is still in need of further improvement. Although it realized the cost-efficiency by mutual inner support and mental plus physical care by customizing personal life patterns, it still could be difficult for the disabled and the diseased elders to operate likewise. Traditional nursing homes still have their indispensable parts to play because of their medical care. It’s a prior choice for a normal family since they don’t have enough time, money and energy to care for the diseased elders and wait for the customized community to be built. But we can still see the breakthrough in various homecare and aging in place programs, which could potentially be combined with co-housing to form a further upgraded and specialized autonomy community workflow. It’s doable because of the smaller scale compared to normal nursing houses. The reduction on the workload of healthcare workers could provide a better service to the group, thus avoiding inadequate care and inefficiency, which are very common and urgent to be solved. The future of the development of co-housing can be expected.

6 Community Led Housing, London. “Older Women’s Co-Housing”
https://www.communityledhousing.london/project/older-womens-co-housing/


https://en.wikipedia.org/wiki/Nursing_home_care_in_the_United_Kingdom
Bibliography

https://www.communityledhousing.london/project/older-womens-co-housing/


Maria Brenton, Oct. 2017 “Community Building for Old Age: Breaking New Ground. The UK’s first senior cohousing community, High Barnet” wrote to UK Cohousing Network Senior Cohousing Ambassador, for the Housing Learning and Improvement Network
https://www.housinglin.org.uk/assets/Resources/Housing/Practice_examples/Housing_LIN_case_studies/TILIN_CaseStudy-139_OWCH.pdf


UK Co-housing. “New Ground co-housing development is an inspiring example not only of how we might live as we get older, but of how to live in cities at all” Accessed July 14, 2021.

https://en.wikipedia.org/wiki/Nursing_home_care_in_the_United_Kingdom


DIGITAL TECHNIQUES FOR URBAN DESIGNERS

ANIMATION, SUPERCUT, DATA MAPS

FACULTY: Richard Chou - Coordinator
          Eric Huntley - Instructor
          Paul Kamuf - Instructor
          Joy Wu - Teaching Associate

TEAM MEMBERS: Jie Kong, Shirley Chen,
               Galina Novikova, Giulia Chagas

Role-Play Animation

This is precisely why we come to meet you today. Mr. Adams. There has been lots of design proposals came out in the past few years to support these group of people, but most of them are neglected.

https://www.youtube.com/watch?v=l_UM2AU2jJw&ab_channel=ShirleyChen

Manifesto Supercut

https://www.youtube.com/watch?v=bW8b2IzAHE8&ab_channel=ShirleyChen

2021 - SUMMER
STUDIO II
AMERICAN CITIES & REGIONAL CONTEXTS

ATLANTA AFTER PROPERTY
CABBAGETOWN: COMMUNITY THROUGH DOMESTICITY

FACULTY: Emanuel Admassu - Coordinator
Nina Cooke John, Chat Travieso, Lexi Tsien
Nupur Roy - Teaching Associate

TEAM MEMBERS: Jie Kong, Shirley Chen,
Jake Tiernan, Sydnee Sampson
Cherokee Families

The Cherokee family structure was matrilineal, meaning children joined their mother’s clan and rarely saw their fathers. Domestic relations were based on communal ties rather than household ones, with extended family and clan members flowing freely between houses as needed.

Domesticity In the 19th Century

Europeans introduced more rigid domesticity, with women expected to stay home and provide childcare while men work. The domestic became grounded to the property one inhabits and immediate blood relations rather than communal ties.

Cabbagetown Background

The mill was constructed in Cabbagetown in 1886, and further expanded on European domesticity. Single-family housing was created and rented to workers, with many including multiple generations under one roof.

Speculation

However, as the mill shutdown, owners sold many of the factory homes out from under residents. Investors seeking to make Cabbagetown a “Gingerbread Village” bought up properties, which then sat vacant due to speculation and transforming the homes into AirBNB’s.
Due to the Fulton Bag Mill being shut down, owners sold many of the factory homes out from under residents. Investors seeking to turn Cabbagetown into a “Gingerbread Village” bought up properties, which then sat vacant due to speculation and transforming the homes into AirBNB’s.

To disrupt the speculation over vacant and AirBNB homes, these homes are then re-organized around a new domestic structure and support the needs of multiple families by blending them in the process. As this unfolds, the barriers of the domestic space breaks down by bleeding to the outside.

By adapting and transforming the typical shotgun house floor plan allow different uses of the space and various degrees of openness. With sliding doors placed at the facade and interior wall, a fluid circulation can be created from front to the back, from alley to alley. The flexible interior organization created by the sliding and folding walls generate different degrees of porosity, and these interior arrangements can be determined by the spatial needs for the occupants.

For the transformation and extension of the porch, we categorize them into three groups: foldable and flexible porches; porches that expand to the interior of the house and exterior; vertical expansion of the porch to higher levels of the house.

Adaptation and transformation of the typical shotgun house floor plan allow different uses of the space and various degrees of openness. With sliding doors placed at the facade and interior wall, a fluid circulation can be created from front to the back, from alley to alley. The flexible interior organization created by the sliding and folding walls generate different degrees of porosity, and these interior arrangements can be determined by the spatial needs for the occupants.
Flexible interior organization combined with the extended porch further blurred the boundary between interior and exterior.

Spaces created by the Lilong elements extend the interior space to the alleyway between the houses, making a communal corridor that allows the indoor activities to spill to the outside of the house.

All together, the lilong and extended porches connect the street, houses, and backyards, encouraging diversity in activities and interactions as well as a semi-nomadic lifestyle.

The porches are used to create different levels of connections and expansion to both the public realm and domestic sphere, generating a series of interweaving platforms that blur the boundary between domestic and public spaces.

Self-constructed, flexible communal spaces would be created in between houses, becoming a series of connecting tissues across the street and backyard for more fluid movement and circulation.

The occupation and construction are based on what people need. The semi-nomadic lifestyle leads the community to expand the domestic beyond property and blood relations.
This new domestic structure unfolds the neighborhood, where the interior can be turned into exterior, backyards become front porches, and streets can be used for group activities or production, etc. The distinction between and the definition of spaces become ambiguous, and a semi-nomadic lifestyle arises.
From Neighborhood to Mill

The notion of the street and porch continues to evolve inside the mill. Balconies on the mill become like the porch, while the hallways become the backyards.

The folding and sliding walls at each floor also give the space flexibility that breaks the traditional apartment floor layout to create fluidity that allows for single resident occupation or production.
Unfolding to the Mill

The mill becomes a varied interior space, where residents can produce goods or services that require a scale the home or porch cannot provide. Additionally, for those residents who wish to live more privately, they can claim a small portion of the mill and live more removed from the rest of Cabbagetown.
We envision a future for Cabbagetown where property is not the central pillar of domesticity. Legacy residents can return, while also inviting those who are in need of homes. Semi-nomadic occupation of houses will expand domesticity beyond property and blood relations to the community at large.

At the end, we imagine this semi-nomadic lifestyle in Cabbagetown is going to thrive and spread out to other communities in Atlanta.
LINES NOT SPLINES

WORKS SELECTION

DRAWING-MODEL

FACULTY: Christoph a. Kumpusch, PhD - Professor

INDIVIDUAL WORK
“IT CHANGES RANDOMLY WITH THE PASSAGE OF TIME AND THE POSITION OF THE OBJECT”
The shadow may be illusory. It appears and disappears from time to time, there is no entity that can be touched, and it changes randomly with the passage of time and the position of the object. Where there is shadow, there is light. When we expose ourselves to light, the light will illuminate the deep corners, casting shadows in the dimensions we can see. Shadow is the carrier and medium. It magnifies everything, the true personality, the reason for action, the twists and turns of the heart; what we can see and what we cannot see, what can be touched and what cannot be touched; what is brilliant, those who are brave enough to face it, and those who are declining, broken, and eager to avoid; self-denying, self-appreciating, self-deception, self-concealing, everything.
The shadow may be fleeting. It appears and disappears from time to time, there is no entity that can be touched, and it changes randomly with the passage of time and the position of the object. Where there is shadow, there is light. When we expose ourselves to light, the light will illuminate the deep corners, casting shadows in the dimensions we can see. Shadow is the carrier and medium. It magnifies everything, the true personality, the reason for action, the twists and turns of the heart, what we can see and what we cannot see, what can be touched and what cannot be touched, which is brilliant, those who are brave enough to face it, and those who are declining, broken, and eager to avoid self-denying, self-appreciating, self-deception, self-concealing, everything.

Light and shadow can magnify an object, which means that the light source is not directly facing the object. The unrealistic scale it produces leads to bystanders who don't know the truth. But it still reflects what is real existing but hardly to see. People use light and shadow at night to entice their thoughts, tell stories, and form a specific space. It carries human imagination and reflects inner thoughts and wishes. The shadows of trees swaying at night are projected on the bricks and tiles in the house. Some people see the soft and bright moonlight, while others see the dark shadows like ghosts. Someone then felt the gentle breeze and the rustle of trees, while others felt the bone cold and the bleak sound of the wind passing through the window. What we are perceiving usually just a few aspects of what we are facing with, and from which we can take a glance inside our deeper mind, to learn about ourselves better.

The shadows and lights in design can play as vital media to produce atmosphere and express emotional feelings. People feel the change of the seasons, passage of time through the simply shift of the weight of light. The lights put the two different objects into contrast, the shadow follows.

In paintings with strong chiaroscuro, light and shadow have very unique functions. Light describes flow, and shadow outlines stillness. They are two very different forces.

One of the functions of shadow as a simple shape is to maintain the position of the composition, similar to the role of bass in music. The shadow is quiet and static, conveying the weight of the painting object while holding the light. The light flows like water on the surface of the object, depicting movement, and guiding the viewer's sight through the composition. In presentation aspect, lights and shadows also provide great sense of weight and pace.

The Dutch golden age painter Vermeer Johannes, his paintings are particularly good at expressing the sense of interior and space. Representing "The Girl Weaving a Pearl Ring", the use of light and shadow making the pictures come to life. This kind of "real" action, in order to impress people, is the gift's utter desire, which seems to be sad, and the faint light forms a strong visual impact with the completely black background. Another artist, Rembrandt, lived in a completely different era. It is almost impossible for his environment to make his education and influence to be equal to today's civilization, the influence he received was only a transmission from the present to civilization. Our nervous system is formed under today's living conditions which is completely different from that of Rembrandt. However, there is a connection that seems to be in common with Rembrandt's that is, we have deep sympathy for human beings and life. Both are not trying to capture the essence and core of life with the medium of choice.

At the same time, shadow could erase the actual appearance of the object and replace it with a vague outline, which brings people into the illusion. Traditional Chinese shadow puppetry has a history of more than 2,000 years. The Emperor Wu of the Han Dynasty's wife Li died of an illness. Emperor Wu's thoughts were truncated, and he ignored the political affairs all day long. The minister Li Shaocheng arrived at the door one day, and when Li met a child playing with a doll in his hand, the shadow reflected on the ground was vivid. Li Shaocheng's heart moved. He cut out an image of Min Li from cotton and silk, painted it with colors, and installed wooden poles on his hands and feet. Enraged the square curtains at night, put up lights, and invite the emperor to sit down and watch. Emperor Wu looked at Long Yan Dehun and could not put it down. This story included in the "Handshu" is considered to be the earliest origin of shadow puppetry.
COMMUNITY ENGAGEMENT

ENGAGEMENT PLAN
TOOLS TO ENGAGE WITH PARTNER STUDENT FROM UNIVERSITY OF BELIZE

FACULTY: Kaja Kuehl - Professor

TEAM MEMBERS: Jie Kong, Zhifan Li, Galina Novikova, Sydnee Sampson

BELIZE STUDIO
TOOLS TO ENGAGE WITH PARTNER STUDENT FROM UNIVERSITY OF BELIZE
MANIFESTO

We seek to connect with Belize locals to co-facilitate ecological preservation and awareness, meanwhile advancing economic development with the consideration of coastal environmental value and residents’ well-being. To achieve this, we collaborate with partner students from the University of Belize to set up a comprehensive, interdisciplinary long-term communication network through the internet.

PROBLEMS & PURPOSE

To overcome the limitations caused by online site investigation and to have a profound understanding of the assigned location, we design both short-term and long-term engagement activities between Urban Design students and University of Belize students with the purpose of producing interdisciplinary knowledge, accessing insight into local culture, and fostering long-term cultural exchange, meaningful friendships. Throughout the engagement, we will use both online and in-person tactics such as games, surveys, and social media to collaborate across disciplines.
### COMMUNITY ENGAGEMENT TIMELINE

**GSAPP MSAUD 27 SPRING**

#### JANUARY
- **WEEK 01**
  - 17-20: Spring Back
  - 21-23: Initial Design Development
  - 24-27: Design/Research
  - 28-31: General Brief

- **WEEK 02**
  - 01-04: Initial Research Development
  - 05-08: Team gathering (back:week #1)
  - 09-12: Team presentation (Final Day Board)
  - 13-16: Team gathering (back:week #1)

- **WEEK 03**
  - 17-20: Team gathering (back:week #1)
  - 21-24: Team gathering (back:week #2)

#### FEBRUARY
- **WEEK 04**
  - 07-10: Team gathering (back:week #2)
  - 11-14: Team gathering (back:week #2)

- **WEEK 05**
  - 15-18: Team gathering (back:week #2)
  - 19-22: Team gathering (back:week #2)

- **WEEK 06**
  - 23-26: Team gathering (back:week #2)
  - 27-30: Team gathering (back:week #2)

#### MARCH
- **WEEK 07**
  - 01-04: Team gathering (back:week #2)
  - 05-08: Team gathering (back:week #2)

- **WEEK 08**
  - 09-12: Team gathering (back:week #2)
  - 13-16: Team gathering (back:week #2)

#### APRIL
- **WEEK 09**
  - 14-17: Team gathering (back:week #2)
  - 18-21: Team gathering (back:week #2)

- **WEEK 10**
  - 22-25: Team gathering (back:week #2)
  - 26-29: Team gathering (back:week #2)

- **WEEK 11**
  - 30-03: Team gathering (back:week #2)
  - 04-07: Team gathering (back:week #2)

- **WEEK 12**
  - 08-11: Team gathering (back:week #2)
  - 12-15: Team gathering (back:week #2)

- **WEEK 13**
  - 16-19: Team gathering (back:week #2)
  - 20-23: Team gathering (back:week #2)

- **WEEK 14**
  - 24-27: Team gathering (back:week #2)
  - 28-31: Team gathering (back:week #2)

- **WEEK 15**
  - 01-04: Research Development
  - 05-08: Research Development

### NOTES
- Research team switch to Design Development
- Design Development
- Team presentation (Final Day Board)
- Spring Back
- Routine Communication
- Design / Research Development
- Group Presentation
- Final
Over the course of the Winter Break, the Workshop, and the Semester both UD and Belize students will collaborate to produce knowledge and frame narratives for their Design, actively engaging urban ecological and cultural issues. Through short-term and long-term engagement strategies are led by students. Session 1 and Session 2 aim to build trust and connect students outside of the research to dive deeper into daily experiences while also practising skills of storytelling from the very beginning of their projects.

PARTNERS AND COLLABORATIONS

+ Belize CZMAI
+ Belize Ministry of the Blue Economy
+ Belize Fisheries Department
+ Resilient Reefs Initiative, Great Barrier Reef Foundation
+ University of Belize
+ UNAM - Academic Unit of Coral Reef Systems
+ Columbia Climate School - Coastal Resilience Network

TBD
+ Columbia Business School / Tamer School Capstone
+ Columbia SIPA Masters of Sustainability Capstone

ENGAGEMENT OVERVIEW

STUDENT COLLABORATIONS

Columbia GSAPP MSAUD Students will be partnering with University of Belize students, with the purpose to exchange knowledge and collaborate across disciplines and territories.
METHODS AND TOOLS USED

1. Survey

In order to prepare for the upcoming January Weekshop with stakeholders, UD students will be sending out a survey to the University of Belize students to kick start the engagement process. The survey will act as a catalyst to form an understanding about interests, preferences for communication, and environmental concerns within their communities. The other side of the survey will invite Belize students to ask UD students any questions they might have in return.

2. Questionnaire Game

Is a visual questionnaire that aims to share knowledge between both universities through the art of asking questions and storytelling over the course of 2 Sessions to take place during the Weekshop. This will be an online interactive dialogue that involves Zoom Breakout rooms and teams made up of both UD and Belize students and each team will have a designated Miro board where UD students will be the note takers.

3. Social Media

Based on the survey responses, we will get a better understanding of communication preferences. We plan to create an Instagram and Facebook page for the group to interact with and share processes and events over the course of the semester. Weekly posts regarding design content and drawings will be mandatory for each team, serving as a collaborative post to inform the public and spread knowledge about coastal issues in Belize.

SHORTTERM TIMELINE

- JANUARY 10-12: Survey and questionnaire
- JANUARY 24-28: Weekshop
- JANUARY 31: Social media and presentations

WINTER BREAK ➔ WEEKSHOP ➔ PHASE 1 ➔ PHASE 2 ➔ PHASE 3 ➔ SHORTTERM ➔ LONGTERM
WEEKSHOP SCHEDULE

SESSIONS I + II

The first session will involve moderating “What I think I know Questions”, using found images to simulate visual readings of responses to be placed within a Photo Dictionary. The second session will involve collaboration to create a story using the found images from the previous session about Belize. This narrative will then be presented to the class.

WINTER BREAK ➔ WEEKSHOP ➔ PHASE 1 ➔ PHASE 2 ➔ PHASE 3
**METHODS AND TOOLS USED**

**RULES OF THE GAME!**

Step 1: A designated UD student will lead and communicate the rules of the game.

Step 2: Students from both universities will team up to gather questions and post them in each category ring.

Step 3: Once questions are gathered, students will take turns answering questions and posting photos to the picture library to visualize what students are sharing.

Step 4: Students from UD & Belize will create a story from the selected photos from the picture library.
METHODS AND TOOLS USED

SESSION 2
STUDIO III
GLOBAL STUDIO

WATER URBANISM: BELIZE & YUCATAN
ENVISIONING A RESILIENT MESOAMERICAN REEF
&SUSTAINABLE DEVELOPMENT FRAMEWORKS FOR
THE REGION

MAHOGANY BAY: SMART RELOCATION

FACULTY: Kate Orff - Coordinator, Geeta Mehta,
Adriana Chavez, Thad Pawlowski, Lorena Bello Gomez
Kalene Eck, Chief Resilience Officer Belize
Cecy Castillo, University of Belize
W/ Johanna Lovecchio, Center For Resilient Cities &
Landscapes & Amy Armstrong, Resilient Reefs
Tori Vuono - Teaching Associate

PARTNERS: Resilient Reefs Program, | Great Barrier
Reef Foundation
Belize Coastal Zone Management Authority & Ministry
of the Blue Economy & Civil Aviation, CZMAI
Columbia Climate School and Researchers from CCSR

TEAM MEMBERS: Jie Kong, Zhifan Li,
Siyu Lei, Kenny Zhou
- San Pedro’s current model of consumer-based tourism and unchecked development is unsustainable for the future. Unjust land ownership and increasing climate threats further exacerbates these issues.

In order to preserve locals’ livelihoods and to sustain the strong tourism economy, we propose to the Belize government a pilot to develop a long-term smart relocation and eco-tourism initiative. -
System for Smart Relocation + Eco-Tourism

- Bomba Inland Community: water-based, transit-oriented development
- Mahogany Bay: national park
- Belize City: transportation hub

Travel Times:
- Inland Community - Belize City: 45mins - 1hr
- Inland Community - Coral Reef: 35-40mins
- Inland Community - Mahogany Bay: 40-45mins
Project Framework

Sustainable Tourism for economy

Re-naturing Mahogany Bay for ecology

Smart Relocation Inland for local community

Current Stakeholder Relationship

Developers → Tourism Industry

Tourism Industry → Local Community

Investors → Local Community

Current relationship: Extractive → Sustainable

Future Stakeholder Relationship

Developers attract, invest in Tourism Industry

Tourism Industry attract, invest in Investors

Investors support, benefit Local Community

Local Community support, benefit Investors

New Policy

Limit tourism capacity by not clearing/dredging land

Implement infrastructure for eco-tourism

Establish water-based transportation community inland

By following...
<table>
<thead>
<tr>
<th>Phase 1 Preparation</th>
<th>Phase 2 Construction + Relocation</th>
<th>Phase 3 Growth</th>
<th>Phase 4 Regional Smart Relocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement Infrastructure for eco-tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish water-based TOD inland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invest in local community for better economic mobility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limit tourism capacity by not clearing/dredging land</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inland Community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement Infrastructure for eco-tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish water-based TOD inland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahogany Bay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement Infrastructure for eco-tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish water-based TOD inland</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2022</th>
<th>2032</th>
<th>2050</th>
<th>2100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inland Community Construction</td>
<td>Inland Community Construction</td>
<td>Inland Community Construction</td>
<td>Inland Community Construction</td>
</tr>
<tr>
<td>Mahogany Bay Park Construction</td>
<td>Mahogany Bay Park Construction</td>
<td>Mahogany Bay Park Construction</td>
<td>Mahogany Bay Park Construction</td>
</tr>
<tr>
<td>Light touch eco-lodge construction off-site</td>
<td>Light touch eco-lodge implementation</td>
<td>National park infrastructure construction</td>
<td>Regional environmental restoration initiative</td>
</tr>
<tr>
<td>Waste infrastructure maintenance</td>
<td>Light touch eco-lodge implementation</td>
<td>National park infrastructure construction</td>
<td>Expand eco-tourism to entire M. Bay area</td>
</tr>
<tr>
<td>Environmental restoration</td>
<td>Light touch eco-lodge implementation</td>
<td>National park infrastructure construction</td>
<td>Regional environmental restoration initiative</td>
</tr>
</tbody>
</table>

- No rebuilding after climate disaster
- No more land clearing/dredging
- Invest in inland affordable housing
- Invest in inland community Infrastructure
- Introduce property + tourist tax
- 20%+ of all new investment goes toward helping locals
- Reduce tourism capacity to only what the land + infrastructure can handle
- Foreign owned land: voluntary 1/1 land swap
- Relocate most vulnerable local population
- Establish connection with Maskall town
- Invest in community public amenities
- Promote collaboration with Mennonite community in Neuland
- Continued building + infrastructure maintenance
- Relocate rest of local population
- Foreign owned land: mandatory relocation
- Regional smart relocation initiative
- Regional environmental restoration initiative
- Light touch eco-lodge construction off-site
- Waste infrastructure maintenance
- Environmental restoration
- Ship houses to inland
- Move residents to San Pedro town first
- Move residents in San Pedro town to inland
- Regional environmental restoration initiative
- Expand eco-tourism to entire M. Bay area
Site Selection
Criteria for site selection
- existing cleared land
- located near river
- inland enough

Phase 1
Preparation
Create a sustainable stakeholder relationship, begin infrastructure work to prepare for relocation

Phase 2
Construction + relocation
Interim residential and tourism model while construction + relocation are in progress

Farm Co-op
Bomba
Bomba Dock
Local Community
RESILIENT COASTLINES

CASE STUDY

RESILIENT PALMA

FACULTY: Kate Orff - Professor

TEAM MEMBERS: Jie Kong, Zhifan Li, Rotina Tian
Palma's Battle Against Climate Change

Subject to constant coastal floodings and future sea-level rise, the city of Palma is under increasing threats of climate change. With the lack of financial capability and a lack of infrastructure to protect the communities, recoveries from storms have become more and more difficult. The local people rely heavily on fishing and marine resources. As climate change makes a direct impact on the fish stocks and other marine-reliant ecosystems, the livelihoods of local people become very unstable, leaving them even less money to rebuild after storms.

Unsustainable Resource Extraction in the Region

In 2011 one of the world's largest gas reserves was found in the province of Cabo Delgado, which lead to a total of 60 billion dollars in investment, including Africa’s three largest liquid natural gas (LNG) projects. The international companies established large-size campuses and gated communities to serve the extraction activities. During the process, local communities are displaced to make room for their expansion, and the promised jobs and economic compensations are never been realized.

“Resource Curse”, a term used to describe how the long-term health and prosperity of societies and ecosystem can be compromised for short-term profits that usually ends up in the hands of a lucky few, is the best way to describe the current situation of Palma (Columbia Center for Resilient Cities and Landscapes, 2019).

What accompanies the poverty and disputes caused by exploitation in Cabo Delgado are long-term neglections and political marginalization from the Mozambique government, partially due to its remote geographic location. As a result, extreme groups started an armed strike against the campus of one LNG project, forcing them to pause the operation in the region. The strike was exacerbated and turned into a regional conflict, imposing violence and instability which make the situation even worse. According to the Armed Conflict Location and Event Data Project (ACLED), which monitors political violence globally, there have been more than 570 violent incidents from January to December 2020 in Cabo Delgado (BBC, 2022).

Challenge of the “Business-as-Usual” Model

In her book Rising, Elizabeth Rush spoke up about the environmental inequality in the coastal communities, where under-served communities are more prone to climate change: "A small seaside community split down the middle between those who came from centuries of money and those who worked in the weather residents controlled" (Elizabeth, 2018).

When we look at the country as a whole, Mozambique is an economically struggling country, yet it owns enormous nature capital. According to the UNDP Human Development Indicators, is a financially poor and inequitable country with a large gap between genders and social classes. In contrast, according to the World Bank report, Mozambique has a natural capital worth 1,059 million dollars while its priced capital is 478 million dollars.

Most of Mozambique’s major cities are along the coast, where swampy mangroves and wetlands are the predominant geological characters. Climate threats and coastal urbanization are the biggest conflicts. Moving inland, forests had been cut down to grow crops which caused serious deforestation, undermining the country’s wonderful natural resources.

Transitioning to a more regenerative growth model from the business-as-usual mindset is necessary to overturn the future of the country. The report from the Climate School lists a series of issues under the current “business-as-usual” scenario. We can’t stop but wonder, what is at risk when we don’t prioritize natural capital?

Resources extraction, rapid urbanization, and climate change can combine in ways far outside any imagination. Profit-driven investors continually benefit from the extraction of natural resources, expand urban boundaries by filling wetlands to make level ground, and create urban enclaves which exacerbate social inequality. In the meantime, people who lived on farming and fishing were left with barren land and scarce natural resources. Floodings, cyclones and constantly eating up their living space. The entire community is at risk when natural resources are exploited and stripped.

Palma is a mirror that reflects all the issues that are happening across the country. The endless consumption of natural resources without limit and the pursuit of economic profit at the price of long-term social welfare are making things worse for its coastal communities.
The existing policies prioritize short-term economic growth; the corruption at the government level only adds to the problem, leaving poverty and disasters to the people of Mozambique. From what we understand, policy and government regulation is necessary to turn the situation.

**An Alternative Pathway toward a Resilient Future**

On the bright side, the situation can be improved with a change of mindset that preserves and restores its natural assets with a combination of proactive planning and proper implementation. The country had developed a National Nature Capital Program to guide the transition. According to this, the critical step Palma should take right now is to institutionalize natural capital to prevent further damage. Secondly, a dynamic regional resilient eco-infrastructure network needs to be set up to protect the area from natural disasters. Institutionalization means the government or other organizations should provide education programs to teach people that natural resources are more than just money; they mean the future for their children and the grandchildren of their children. What should happen is the proper mindset and sustainable practices that are centered on natural resources and incorporate both economic growth and community stewardship into the picture. The regional resilient eco-infrastructure network will provide a regional collaboration among governments, NGOs, residents, and other stakeholders, who can make a joint effort to better understand the needs of each other and cultivate a more dynamic, sustainable eco-infrastructure that can support future growth.

The Resilient Palma report also provides a list for a resilient future in Palma, including nature-based infrastructure, capacity building, community planning and new building codes as shown in the above image. The critical features include the living infrastructure along the coast to mitigate storm surges, development and implement regulations for marine resource management to help local fisherman groups, waste management, and ecological resource protection around urban areas. The proposed scenario also includes an urban growth boundary to prohibit unregulated development; eco-tourism to generate revenue for the protection of Palma’s coral reefs, seagrass beds, coastal beaches, dunes, mangroves, and marine forests; natural coastal protection, to protect against more frequent and damaging coastal storms with vegetated dunes; floating off-shore gas extraction to protect coral reefs and reduce the LNG footprint in the ecologically sensitive coastal zone, and allow a reduced presence in less vulnerable deep water, also reducing costs of shipping and pipeline; protected and managed forests to provide carbon sequestration, aquifer recharging, sustainable forestry, flood risk reduction, soil conservation, and biodiversity habitat; increased mobility to provide inter-city high-speed transportation options to link Cabo Delgado to the other fast-growing economic centers in the region and reduce the demand for private car ownership. Last but not least, providing adequate health service to serve Palma’s current and future population with up-to-date medical technology and expertise. On top of that, the fisherman villages along the coastal zone need specific attention. Fully exposed to the climate pressure, they can be wiped out by coastal storms and cyclones. The resilient strategy for the community should include the living infrastructure along the coast to mitigate storm surges, development and implement regulations that will transform the current situation into something more sustainable.

**Framework of Resiliency Strategies**

We categorize all these efforts and scenarios into four quadrants to serve as a guiding principle for Palma’s future coastal adaptation development. The four categories are resistance, avoidance, communication, and accommodation. In a nutshell, the strategies function together as a holistic resilient urban development plan for Palma. By implementing new policies, the government can regulate the ways how different entities use natural resources and establish a new sustainable economic development that leads to resiliency; this new economic structure can steer Palma towards sustainable development and a positive economic cycle.

The document “A Blueprint for Coastal Adaptation” emphasizes the importance of political power in transitioning to a resilient “We have lots of plans, perhaps too many, and not enough political will. Missing from reports to implementation has been a challenge - one we aim to address.”

Coastal communities around the globe are facing similar challenges as Palma. It is important to act proactively and establish a resilient framework anticipating the pre-collapse scenario by allocating the existing resources and activating local players in the social, economic, and environmental aspects.

**Bibliography**


VIRTUAL ARCHITECTURE: WORLD BUILDING AND VIRTUAL REALITY WORKSHOP

UNREAL ENGINE PROJECT

LABYRINTH

FACULTY: Nitzan Bartov

TEAM MEMBERS: Jie Kong, Shannon Li, Praditi Singh
THE RECENT REFUGEE RENAISSANCE IN BUFFALO HAS TOTALLY CHANGED THE CITY’S STREETSCAPE. HERE IS HOW.

FACULTY: Michael Krisch, Juan Saldarriaga

TEAM MEMBERS: Jie Kong, Ruonan Du, Polina Stepanova

In 2019, refugees from the following countries were mostly placed in Erie county: Burma, Colombia, Democratic Republic of Congo, Eritrea, Ethiopia, Iraq, Kenya, Malaysia, Somalia, Sudan, Syria, Tanzania, Thailand, Turkey, and Uganda. This has made Buffalo much more diverse and contributed to its economy right before the pandemic started.
The stories of refugees that change Buffalo are stories of resilience and strength. Steven Sanyu, the founder and the president of Burmese Community Services, arrived in Buffalo in 2000 as a first Burmese refugee.

Now, he says, Burmese refugees' count in Buffalo has one up to 10,000. Ever since Steven’s arrival, he adjusted to living in the United States and became a prosperous business owner. Burmese Community Services, Steven’s non-profit organization, helps asylees from Burma to adjust to life in the United States. American government supports the refugees for the first three months, and the goal is to bring them to the point where they are self-sustaining. However, most refugees do not know English language at all, and some of them can not even write in the native language! Steven does an important community job by helping the refugees past the 3-month mark established by the Department of Homeland Security. We thank him for giving us an interview and helping so many people!
The city itself was established back in the 19th century. The arrival of refugees started happening in the beginning of 2000s, and now they comprise a considerable proportion of the Buffalo economy.
NEIGHBORHOOD 2: Emerson Neighborhood

The second neighborhood in Buffalo that caught our attention is Emerson. The area is shaped by the diverse religious practices brought in by the international migration. Emerson is known for growing produce and vegetables, which become a fundraiser for the refugees among it. Also, the neighborhood is located near the International Market, which is a popular destination for residents.

In Wire Works Co., they either create a training video with subtitles for those refugees who don't fluently speak English or develop a "buddy system," which pairs a new hire with one who speaks the same native language but has been in the company longer and has acquired advanced English-speaking skills. Further, the company can attract more workforce.

Religious Influence in Emerson

Masjid Zakaia has celebrated its 35-year anniversary in 2023. It was established with the intention of being a big and resilient community on Buffalo's East Side. During the 1990s, Masjid Zakaia was founded by imam Zaid Shafi. According to Max Davis, everyone here enjoys working with them as they grow with the community in Buffalo, whether it be working on their English skills, math skills, interactions with people, and their culture as well.

"Their work ethic is second to none, really. We enjoy working with them as they grow with the community in Buffalo, whether it be working with them on their English skills, math skills, interactions with people, and our culture as well. Just helping them grow in the personal aspect is a great, rewarding thing for us to see." --- Max Davis, Buffalo Wire Works' president

NEIGHBORHOOD 3: Broadway - Fillmore- Clinton Bailey Neighborhood

The post-impression of the Broadway-Fillmore district might be full of crime scenes, accompanied by the bleak sight of empty houses and storefronts. However, when you walk into the streets, there are a lot of beautiful homes with fruit and vegetable gardens, which are surrounded by many open spaces. Seniors relax on their porches with kids. The changes were realized by the Bangladeshis, the city's new immigrants. They used low prices to buy what other people thought were junk properties, and restore the house by themselves.

With their settlement, the criminal rate of the neighborhood declined dramatically, and more and more retail stores and religious places have opened since then, which adds to the vitality of the community.

In Wire Works Co., they either create a training video with subtitles for those refugees who don't fluently speak English or develop a "buddy system," which pairs a new hire with one who speaks the same native language but has been in the company longer and has acquired advanced English-speaking skills. Further, by using the interpersonal network of refugees, the company can attract more workforce.

"Their work ethic is second to none, really. We enjoy working with them as they grow with the community in Buffalo, whether it be working with them on their English skills, math skills, interactions with people, and our culture as well. Just helping them grow in the personal aspect is a great, rewarding thing for us to see." --- Max Davis, Buffalo Wire Works' president
The conclusion is inevitable - streets of Buffalo are changing due to the influx of various cultures and the development of its economy due to these forces. Small restaurants, legal services, masjids, grocery stores – the refugees overcome their initial struggles and establish their own businesses, bravely venturing out into the unknown. They truly deserve an applaud: not only are they securing their own future but they are also driving Buffalo’s economy upwards. We want to thank them for working through their initial adjustment and language barrier in order to flourish in their new home.

Sources:
- Department of Homeland Security.