

# Questions & Propositions/Hypotheses

Add your 1 (or 2) slides below

# Valuing Tsunami: Impact of Tsunami Vulnerability on Hotel ADRs in Oahu, Hawaii

\* ADR: average daily rate

What percentage of hotels in Honolulu can be said to be vulnerable to potential tsunami risks?

Even so, are the hotels in tsunami-vulnerable areas charge higher ADR than hotels in safer areas?

H1: Out of total hotels in Honolulu, at least half of the properties are located within the tsunami risk plain

H2: if other factors remain controlled, increase in the ADR thanks to the proximity to the coastline is larger than the decrease in the ADR due to the tsunami risks.

**1 Physical Environment Variables**

**2 Socioeconomic Variables**

**3 Hospitality-specific Variables**



Focus

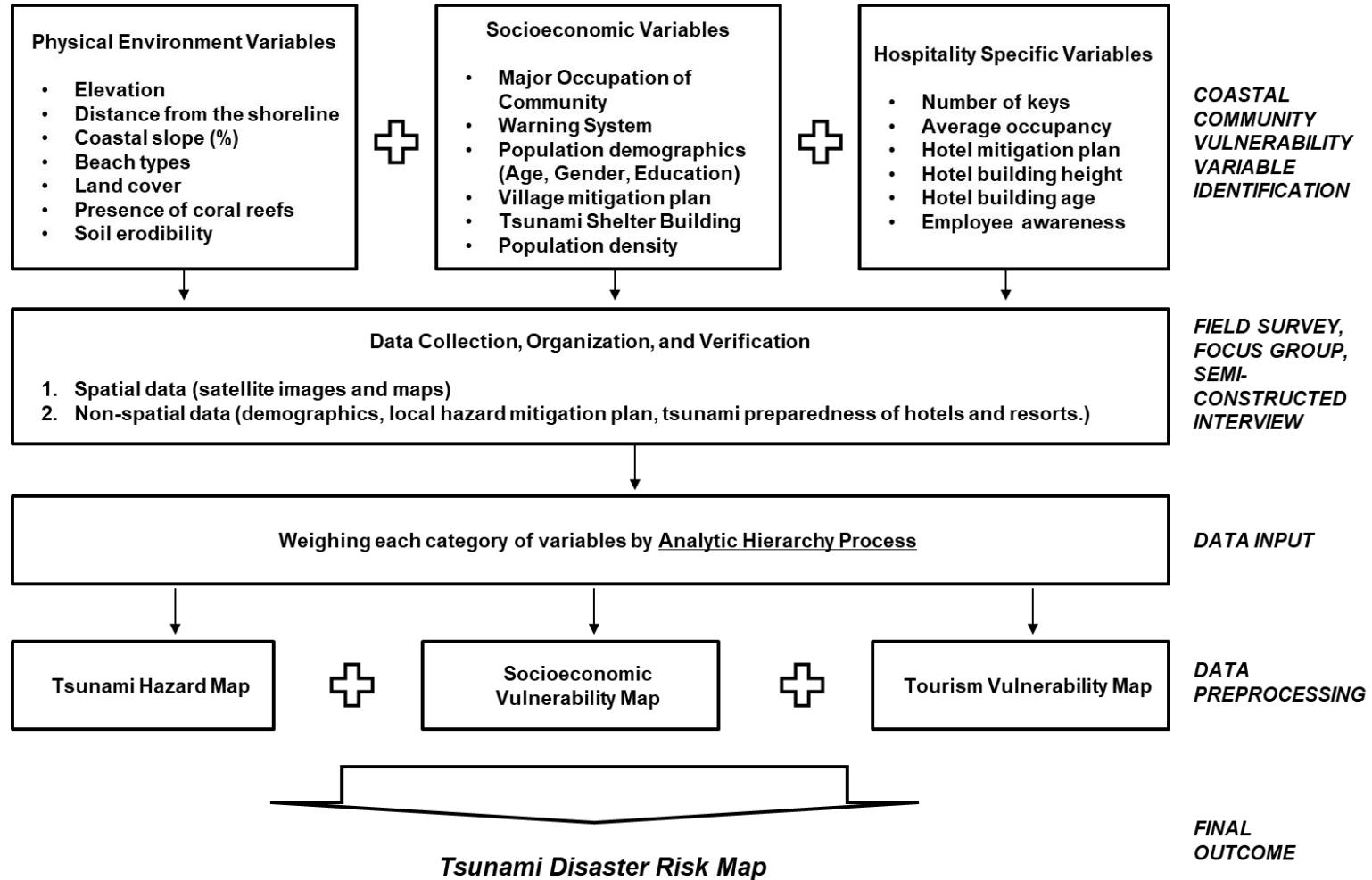
GIS MAPPING THROUGH THE ANALYTICAL HIERARCHY PROCESS IS ESSENTIAL. THE HOSPITALITY TSUNAMI RISK MAP WILL BE SLIGHTLY DIFFERENT FROM THE GOVERNMENT TSUNAMI RISK MAP.



$$\ln(\text{ADR}) = \alpha X + \beta Y + \gamma Z - \delta \text{Tsunami} + \varepsilon$$

The natural log of the ADR in a hotel is equal to the sum of hotel amenities ("how many stars"), neighborhood amenities, and proximity to the coastline minus the vulnerability of tsunami plus the error term.

THIS HEDONIC REGRESSION MODEL WILL TEST IF THE TSUNAMI RISK IS MORE INFLUENTIAL IN DETERMINING THE ADR THAN THE OCEAN VIEW PREMIUM - IF THE OTHER VARIABLES ARE CONTROLLED,



# Rethinking the Buenos Aires metropolitan governance structure for adapting and mitigate climate change effects - Joaquin Tome - MUP 23'

The current urban governance structures of the Buenos Aires Metropolitan Area (BAMA) respond to a conventional institutional order designed to address traditional problems, not new ones, such as the climate change mitigation and adaptation strategy.

In 1976, Buenos Aires City prohibited private waste incineration and closed the plants in activity, creating the **Cinturón Ecológico Área Metropolitana Sociedad del Estado - CEAMSE** (Belt Ecological Metropolitan State Society) integrated by the **Buenos Aires City** and the Buenos Aires Province Government.

The purpose of this company is to transport waste from the transfer plants to the final disposal landfills and administer these. **Buenos Aires City and 36 municipalities disposed of the waste in these landfills.**

Above: Biogas plant at CEAMSE facilities. Below: Norte III Landfill expansion



# Rethinking the Buenos Aires metropolitan governance structure for adapting and mitigate climate change effects - Joaquin Tome - MUP 23'

This urban issue became relevant in the Buenos Aires Metropolitan Context because the current landfills will end their capacity in 2023. There is no room for expanding it and no public consensus on what location to build a new one.

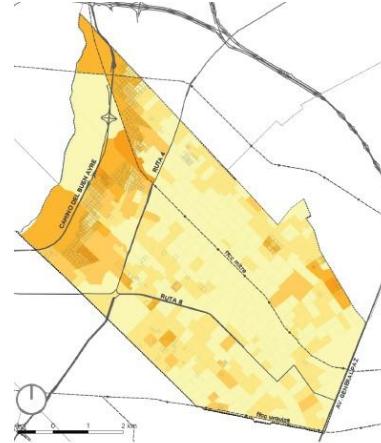
Although the CEAMSE outcomes were good for the urban environment from implementing a garbage management collection and final disposal system, it also brought about the appearance of informal settlements, the lack of an environmental adaptation policy (green spaces) and the concentration of poverty nearby the landfill.

**My proposition is to consider the new urban governance consensus that a new CEAMSE plant requires as an opportunity to implement new a climate change mitigation plan, and build a path dependence strategy for adaptation policies.**

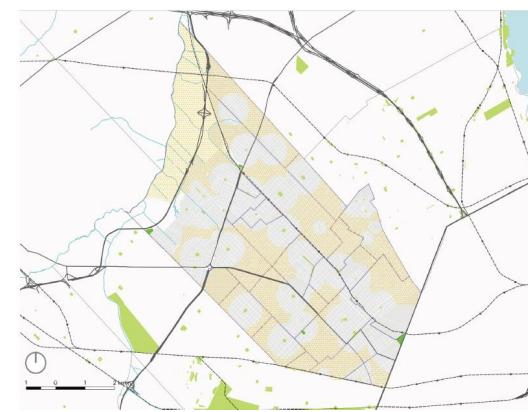
Informal garbage landfills



UBN



Green Spaces



SITUACIÓN AMBIENTAL

- CEAMSE
- Basurales a cielo abierto
- Cuenca Reconquista
- Villas y Asentamientos
- Espacios Verdes

CANTIDAD DE HOGARES C/NBI

- 0-12
- 12-31
- 31-67
- 67-130
- 130-202

TIPOLOGÍAS Y RADIOS DE CAMINABILIDAD

- Parque - RC 1.000 m
- Plaza - RC 500 m
- Plazoleta - RC 200 m
- Rotonda - RC 200 m

Source: CEEU, 2019.

## ***The Research Question Formation Process:***

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*topic:* Local governments have created open data portals (and sometimes open data dashboards) to make data to be “more open and accessible to innovators and the public”.

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*indirect question:* so, i want to find out if open data hosted by city government is accessible to the public

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*motivation:* to understand the extent to which open data is necessary for ensuring the public's right to their city

## ***The Research Question:***

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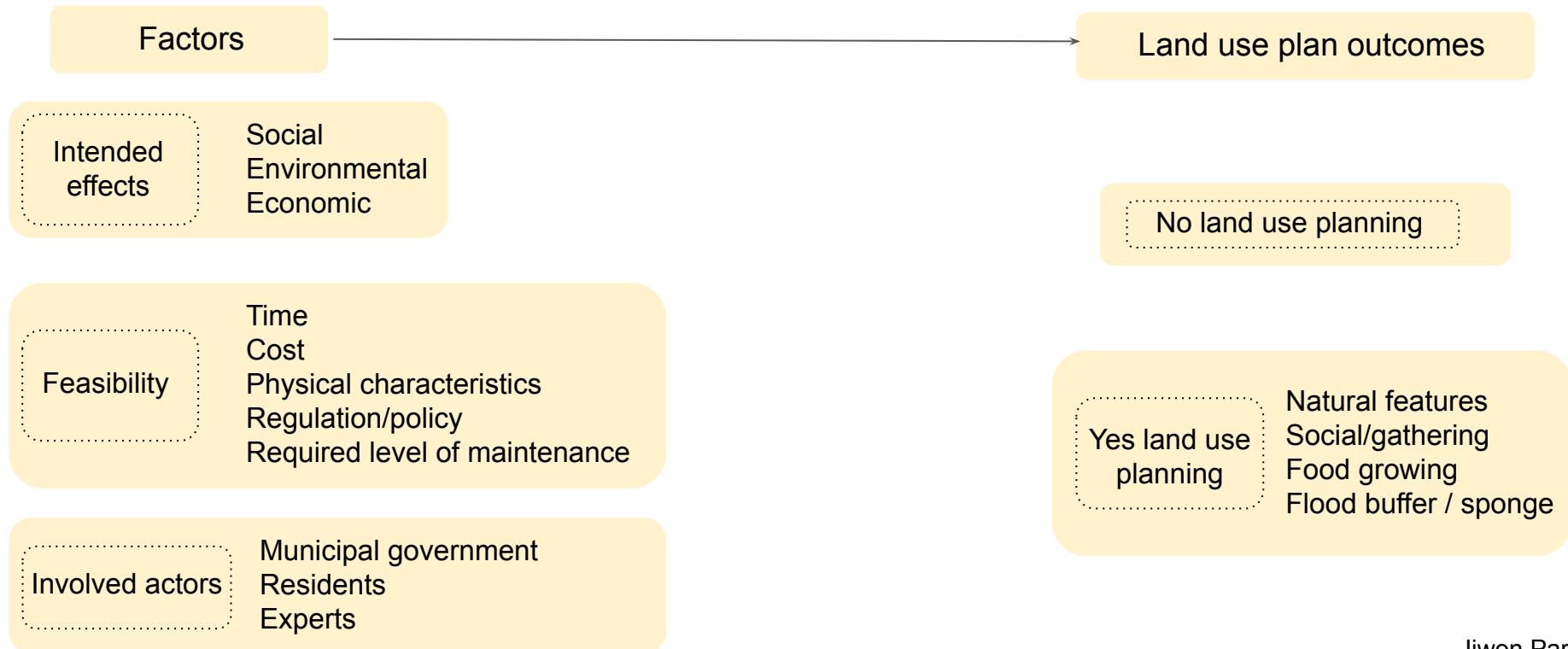
Are city-level open data portals designed in a way that fosters government transparency and provides a channel for public discourse? How do well designed open data portals support the public's right to the city?

## ***The Research Methodology:***

Drawing from a survey on assessing the quality of open data portals for 40 U.S cities; I will conduct a in-depth review of three to five cities based on their unique and diverging qualities from one and other reviewing the portals ability to foster government transparency and provide a platform for constituent engagement. The qualitative analysis may include interviews, a content analysis, and a survey to provide a diverse perspective and, essentially, audit of city open data.

**Q: What are the determining factors of land use plan on vacant lots after major buyout project?**  
(City of Gatineau, Quebec, Canada)

Premises : Those vacant lots cannot be redeveloped into uses that require permanent establishment of human-living buildings (residential, commercial..)





**Walk of life:** A group of migrant workers from Madhya Pradesh, who started their journey back home from Hyderabad, walking along the railway line near Gimma in Adilabad district on Friday. ■S. HARPAL SINGH



**India's urban social safety is a patchwork defined more by gaps than coverage**

## **80% of India's workforce**

participates in the informal economy, which means they are subject to:

- income precarity
- non-standard employment contracts
- limited labor rights

The nature and conditions of informal work confound easy answers:

- one cannot assume enforceable contracts
- workplaces range from public streets to landfills to private homes
- the “employer” is an uncertain category in complex supply chains
- workers are mobile
- many are outside formal systems of ID cards and bank accounts



I worked in many sectors here but mostly,

### QUESTION:

How does one strengthen patchwork? Does one incrementally fill in, or expand the borders first? Do we layer, differently at each end, or try and standardize?

How do we do so, when the work itself is hidden under categories of “unrecognized” and “informal” employment, or when the workplace is unrecognized, such as in the case of a vendor on a public street?

### PROPOSITION:

By using the informal market we are building as a pilot project, I will document the process of bringing an electric charging station (a formal municipal service) to an informal space.

# Transit Service Area Segregation

## Question:

Analysis addresses the question of whether block-based isolation indices at the metropolitan level suggest less or greater isolation than those within transit service areas

- I will examine isolation in terms of race, income, and nativity
- This analysis will include Los Angeles and Chicago (may change)

## Hypothesis:

Isolation indices will suggest greater isolation in transit service areas than metropolitan

## Why is this important?:

### Truly a public good

- Public transportation is a “useful social actor” rather than just a provider of mobility (Allen H., 2008, p. 1)
- Those with greater interaction with people of a different race and class are more tolerant and more likely to care about issues that affect other people (Gibbons, 2018)

# Transit Service Area Segregation

(...cont.):

## Crucial to Social Inclusion

- ❑ To build resilient and sustainable communities, communities must be easily connected to “markets, employment, health services, and education” (Allen H., 2008, p. 7)
- ❑ The question of access becomes much more relevant in areas highly segregated by income and race (Manville et al., 2018)

## Minimize Inequality and Poverty

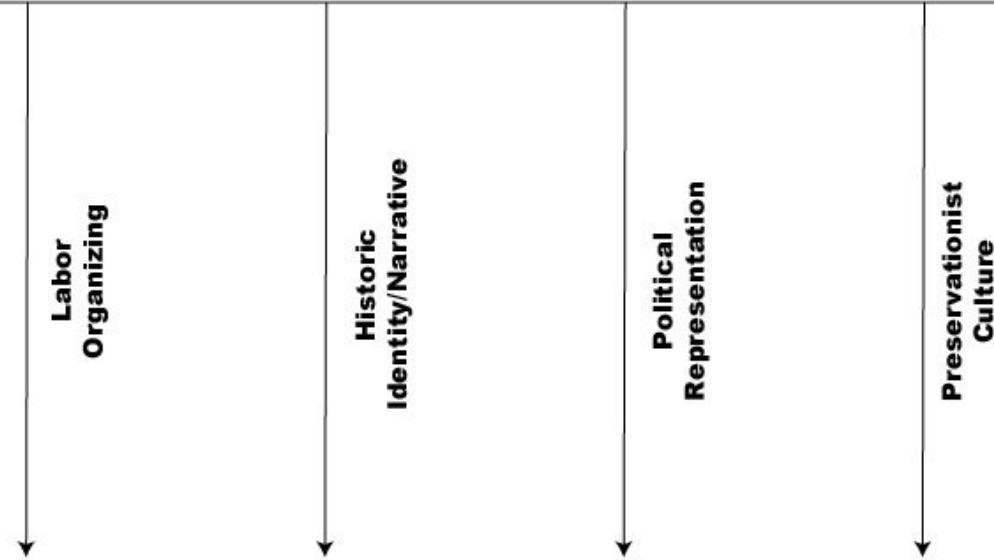
- ❑ Connecting low-income individuals with economic opportunity, education, and healthcare as well as by expanding interaction among people of different races and classes (Gibbons, 2018)

## References:

1. Allen, H. (2008). Sit Next to Someone New Everyday: How Public Transportation Contributes to Inclusive Communities. International Association of Public Transport, 1-11.
2. Gibbons, A. (2018). City of Segregation: 100 years of Struggle for Housing in Los Angeles. Verso Books.
3. Manville, M., Taylor, B., & Blumenberg, E. (2018). Falling Transit Ridership: California and Southern California. UCLA Institute for Transportation Studies.

**QUESTION:**

Why has Chicago's Pullman neighborhood not suffered from the concentrated poverty or gentrification that plagues most other south side Chicago neighborhoods?



**HYPOTHESIS:**

A variety of factors, including a history of labor organizing, a community effort to identify and preserve this history, diverse political representation, and an architectural preservationist culture, have allowed for Pullman to thrive amidst a declining urban area.

Michael Zajakowski Uhll

# Rural Realities

In an continuously urbanizing world focused on the extraction of **energy**, what role does **rurality** play in imaging sustainable forms of human habitation?

questions:

*How have historic systems of **governance** regulated and shaped rural resource extraction? ...in the Black Belt Region?*

*How do **discourses of rurality** effect individual lived conditions and perceptions of sustainability? ...in the Black Belt Region?*

*What has the potential to stimulate the transition from mono-economic systems to **economic diversity**? ...in the Back Belt Region?*

propositions:

Examine qualitative descriptions and definitions of the rural space and explore **policy's role** in supporting energy extraction (Shand 2016; Scott, Gallent, and Gkartzios 2019).

Gather quantitative data and conduct **ethnographic study** to map discourses of rurality and their relationship to perceptions of energy (Woods 2011).

Explore **circular economy** principles, propose implementations, and imagine the built reality (Dannenberg and Elmar Kulke 2015).

# REFUGEE URBANISM

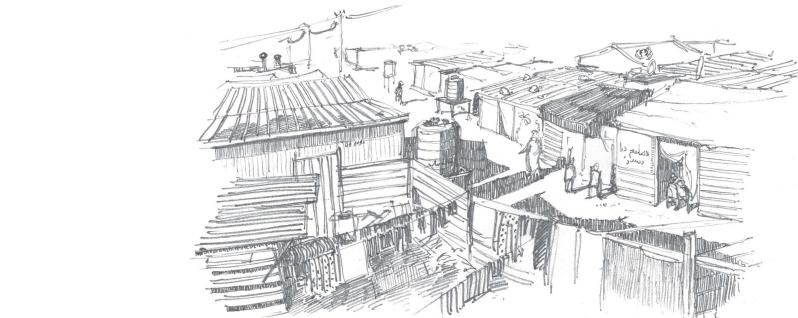
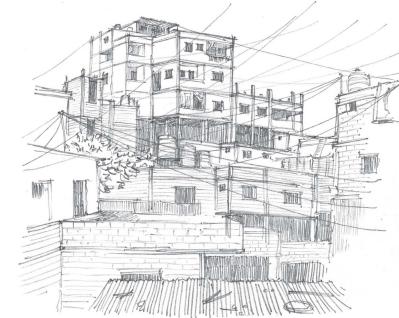
## How Displacement Has Affected Jordan

### THE QUESTION:

Through the lens of architectural history, refugees have not been put into crisis. Refugees are usually tended to be understood as human surplus. They are humans not recognized by national borders.<sup>01</sup> A refugee exposes the difference between human and citizen. A citizen is a human born on its territory. A refugee is a person that has been displaced, lost the right to have rights. Whether they are a refugee, migrant, or immigrant, they all have a major impact on a nation-state; politically, economically, socially, and spatially. How do the displaced play out in space, architecture, and territory? What does this mean for the social and spatial arrangements? How can design react to these sites and conditions?

### THE PROPOSITION:

To discourse the relationship between refugees and the built environment, spatially from architecture to territory by looking at the urban reality of Jordan. To understand how it is been shaped into and in turn how this has shaped political, economic, and social practices in the country.



01 - Herscher, Andrew. *Displacements: Architecture and Refugee*. Germany: MIT Press, 2017.

02 - Drawings and Designs by P. Piraud-Fournet 2017

# What elements/key words/situations of mega-event planning processss incite the strongest public reaction/interest? (ie. how does the timing of large protests or support campaigns align with press releases of events?)<sup>1</sup> Then, how might planners advocate for changes in mega-event processes?

Past literature on mega-events seems to critique two things: 1) the event itself (like suggesting that mega-events connect to cultural heritage projects)<sup>1</sup> or 2) the motivations that inspired decision makers to host events.<sup>2</sup> For the literature that exists on participation during the event-planning process,<sup>3</sup> examination is given to whether participation could benefit the process and yield different results. What if we took a step back to understand when in the event planning process is the public providing strong reactions (and perhaps an indication of what event components are of more interest).

Is there a way for planners to learn from the public's prior responses to mega-events (such as the timing of protests in relation to when the government or private entities release information) to distill the common issues that concern the public most? and when? The frequency and scale of Milan's mega-events provide a case study to examine how Milanese residents reacted to a variety of mega-event types.

## Proposition One:

### It's a Question of Event Scale + Frequency.

The scale and reoccurrence of mega-events leads to subtler, more dispersed public reaction, while the one-time, larger scaled rebranding for other mega events (ex. Olympics) leads to more eruptive, but more predictably timed occurrences. On one hand recurring events become ingrained in the culture of the city, while one-time, bigger scale events open a more comprehensive look at the city's image.

## Proposition Two:

### It's a Question of Agency + Entrepreneurial Urbanism:<sup>3</sup> Sponsors, Starchitects, and Politicians.

Event funders and political motivations for an "Icon Project" dominate conversations about the event and allow developers the biggest seat at the planning table. Public reaction occurs the strongest whenever a large private entity is identified and their mission either is seen as strongly aligning or not aligning with the public's self-image of their city.



CAPTION: Thousands of Protestors Gather in Milan during the opening the city's Expo 2015. (Source: Luca Bruno via Bloomberg's "Protesters In Milan Really Don't Want the World Expo," 30 April 2015)

<sup>1</sup> Jones, Zachary M., and Davide Ponzini. 2018. "Mega-Events and the Preservation of Urban Heritage: Literature Gaps, Potential Overlaps, and a Call for Further Research." *Journal of Planning Literature* 33 (4): 433–50. doi:10.1177/0885412218779603.

<sup>2</sup> Lambert, Lucio, Giuliano Noci, Jurong Guo, and Shichang Zhu. 2011. "Mega-Events as Drivers of Community Participation in Developing Countries: The Case of Shanghai World Expo." *Tourism Management* 32 (6): 1474–83. doi:10.1016/j.tourman.2010.12.008.

<sup>3</sup> David Harvey's "From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism" (1989) in *Geografiska Annaler*.

## WHAT WE KNOW

- Must simultaneously consider: “*rising sea levels, changing rainfall patterns (non-conclusive), increasing temperature and rising groundwater levels*” and their effect on “*flooding, storm surge, and high intensity wind patterns*”
- *High income* households are staying in areas that are *at risk*
- Economically *disenfranchised* being *bought out* and out priced
- *South East Florida Regional Compact* major driver for climate response
- According to survey, *leaders* across communities on board with *addressing climate change*
- “*residents by far prefer what is known as green infrastructure: layered coastal protection from a mix of dunes, sea grasses, coral reefs and mangroves*”
- *Current projects/innovations include (mostly hard innovations):*
  - *Pump system, Stormwater treatment areas, Reservoirs, Weirs, Spillways, Dikes & Levees, Culverts, Canals, Dry Ditch, Mangroves, Sea wall*



## WHAT WE HAVEN'T ASKED

1. What *smart city* technology can we incorporate into miami to give us *better climate predictions/innovations?* (differing precipitation projections and sea-level rise projections. Also using regional approach rather than pinpointing with local approach)
2. How can we use the *sea-wall to better connect the city* and provide more economic opportunities?

## WHAT COULD POSSIBLY PROPOSE

1. *Identify places* to place the smart city climate instruments
2. *Scenario designs* for different sea wall heights

## WHAT WE CAN HYPOTHEZIE

1. *Smart city integration* can be done, but should be done *without minimizing economically disadvantaged communities* (newer technology is normal used by the affluent first)
2. The *sea wall* can potentially be a major *socio economic divider* within the city



**Design Thesis Prompt:** What are strategies to build more pleasure into transportation networks?

In this thesis, I want to look at three separate dimensions of pleasure by asking the sub-questions

1. What strategies are there to make public transportation systems more pleasurable in light of **extreme temperatures?** What are the costs and challenges associated with implementing these strategies?
2. What are ways to **narrow the autonomy gap** between public transit and single occupancy vehicles?
3. How could public transportation center '**leisure**' as well as '**commuting**'?

(a few) COMPONENTS OF PLEASURE

Physical Pleasure	Emotional Pleasure	Enabling Pleasure
Relief from Weather Extremes	Autonomy + Control	Physical Access
Playful or Enjoyable Sensations	Self-Expression	All Hour Access
Comfort	Aesthetic Beauty	Free Rides
Saved Effort	Speed	Safety

**Hypothesis:**

There are ways that planners can make transportation more pleasurable and liberatory.

## Extreme Temperatures:

What are current strategies to cool or heat bodies in transportation systems?

- What were some ways that humans cooled or heated bodies prior to electrification (public fountains, OvenStoves/HeatWalls)
- What are formal/informal ways that are currently used to cool/heat transportation stops?
- What are other places transportation planners could turn to for inspiration? What are amusement parks/sports stadiums doing to manage weather?

## References:

Kris De Decker, Low-tech magazine

Guo, Qinghua. "The Chinese Domestic Architectural Heating System [Kang]: Origins, Applications and Techniques." *Architectural History*, vol. 45, 2002, pp. 32–48. JSTOR, <https://doi.org/10.2307/1568775>. Accessed 23 Sep. 2022.

## Autonomy Gap:

Roughly speaking, a person with a car has an analogous amount of agency over the street grid as a transit rider has about the layout of transit stops. But the car owner has an enormous advantage in that they can set what time the vehicle runs and what places they want to connect. How could transit riders acquire more of this kind of autonomy?

- What is the precedent for participatory voting for transit routes?
- Is there precedent for some form of “chartered” or on-demand public transit?

## Centering Leisure

How could public transportation center ‘leisure’ as well as ‘commuting’?

- What are the trade-offs of having the last bus depart before last-call?
- What are best practices for having public transit serve big events such as concerts, sports games, or festivals?

--> Personnel at stops: Replacing security guards with drug dogs with mental health workers with therapy dogs

--> Making waits times more tolerable through psychology insights

--> Sound Buffers at stops by freeways

--> Voting System for transit input

--> misters and heaters at stations

# Are Public-Private Partnerships (PPP) the Solution to the Affordable Housing Crisis?

## Assessing São Paulo's enabling markets approach.

- Hypothesis to be tested:
- Q1: How has the state of São Paulo shaped its new role in the provision of affordable housing?
- Q2: To what extent has the landscape of affordable housing provision shifted with the introduction of PPPs?

PPPs will bring private sector investment and expertise into affordable housing production.

Objective: Document and describe the key public and private actors involved in the production of affordable housing, and offer a thorough picture of the scale, origin, and nature of international and national private investment flows in the provision of affordable housing.

Objective: Qualitatively evaluate the impacts of new investment landscapes on the governance of affordable housing provision through a case study of major shift in affordable housing governance, attempting to identify who 'governs' and what is governed and with what effects.

subject: data centers, cloud servers

network:

- data infrastructures as “nodes” of a larger network that may contribute to renewable energy generation and / or as flood deterrence structures

questions:

how can we optimize the environmental + social utility of data infrastructures through design?

what opportunities can we identify to from the site(s) to inform a better design?

local

- address the ecological and socio-economic impact of the data infrastructure footprint

# propositions

what do data infrastructures need:

- proximity or access to a waterbody for cooling
- reliable energy supply
- stable, moderate climate temperature
- security from physical and virtual trespassers
- within 500 miles of the corporations they serve

what do data infrastructures produce:

- heat
  - opportunity to be harnessed and converted
- noise
- e-waste pollution

hypotheses?

- an ideal data infrastructure location has environmental conditions that allows access to water, renewable energy sources and proximity of less than 500 miles to the urban fabric where most of their clients are
- an ideal data infrastructure can 1) harness its own heat as energy to meet some of its power demand, 2) can reduce its e-waste, 3) become a node in a larger network to contribute to its community in environmental and/or socio-economic ways. for instance, as a flood deterrent structure.

How to test?

- Survey architecture and networks of existing data infrastructure
- Research on future of the industry's needs, e.g. how would 5G's infrastructural demands affect existing architecture and infrastructures?

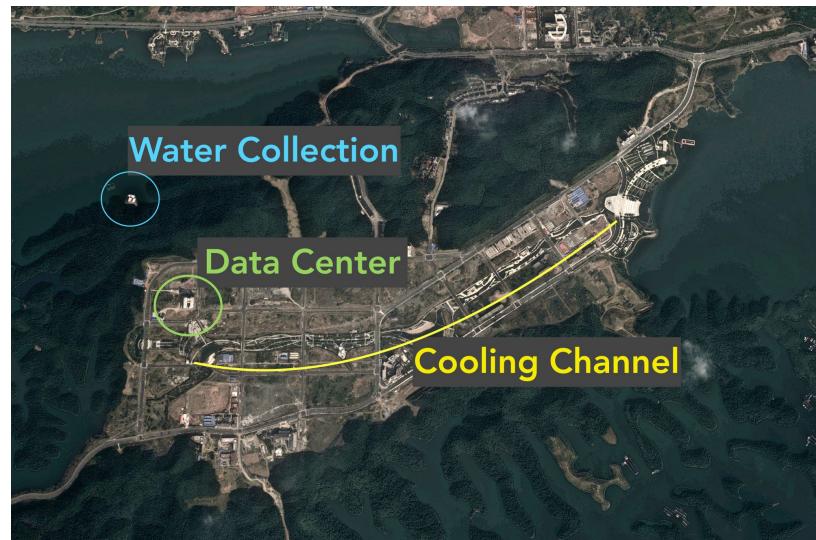


Image: [Alibaba Cloud Qiandao Lake Data Center that harnesses cold lake water to cool their systems \(Ruora, 2015\)](#)

# Gendered experiences in São Paulo - towards a more equal city for all

Liene Asahi Baptista | MAUD 23'

advisor: Malkit Shoshan

- “In São Paulo, women are the majority in active and collective transportation” (summit mobilidade news portal).
- “in sp, 70% spend more than an hour commuting to work” (exame portal).
- “In Brazil, each 1.5 second a woman is victim of harassment on the street” (IDB newspotral).

\_women's autonomy in the city is deeply connected to the public sphere through their access to public spaces and need for mobility.

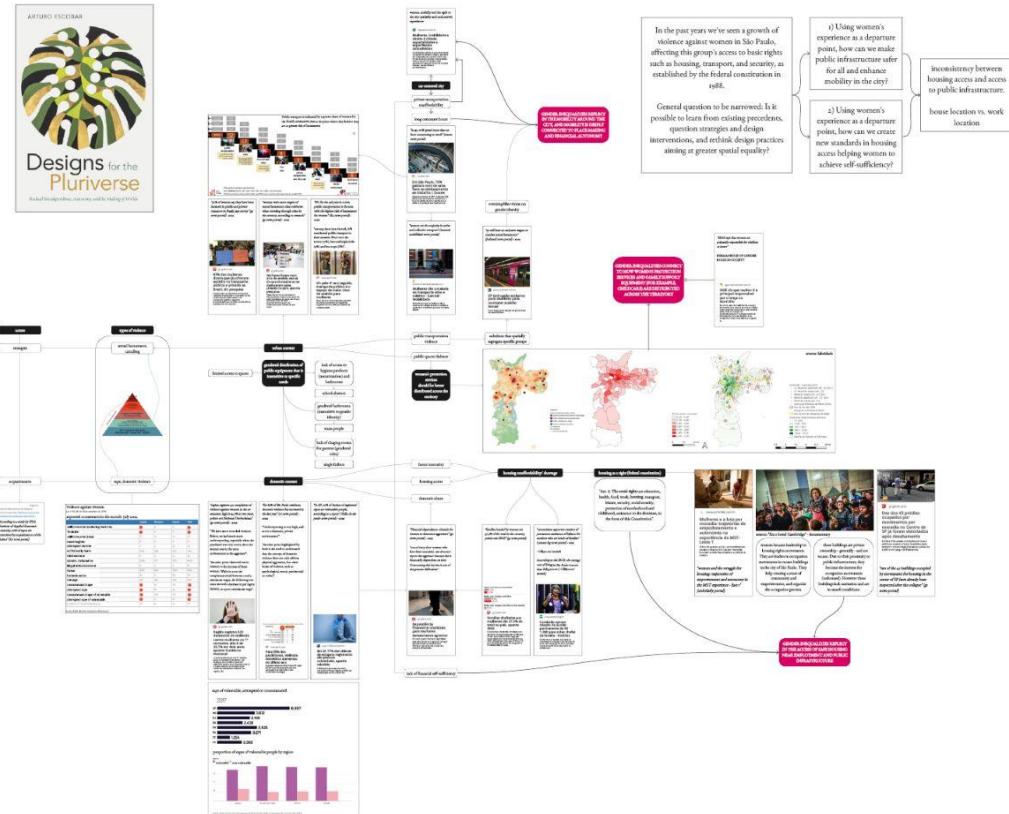
1. in their daily routes in the seek for financial self-sufficiency: “*women continue to make more trips to perform household*”.

2. in their sense of belonging

“*62% of women are afraid of violence in São Paulo and 33% are afraid of going out at night, in a city that never stops*” (Viver em SP: Mulher).

3. in their daily household needs - protective services, daycare, etc: the waiting list for daycare places, (SP Department of Education): “*1287 in Grajaú, 716 in Capão Redondo, 1254 in Cidade Ademar*” (SOF).

\_Long commute times , lack of access to services, sense of insecurity in public spaces are some of the concerns that affect women daily.



# Gendered experiences in São Paulo - towards a more equal city for all

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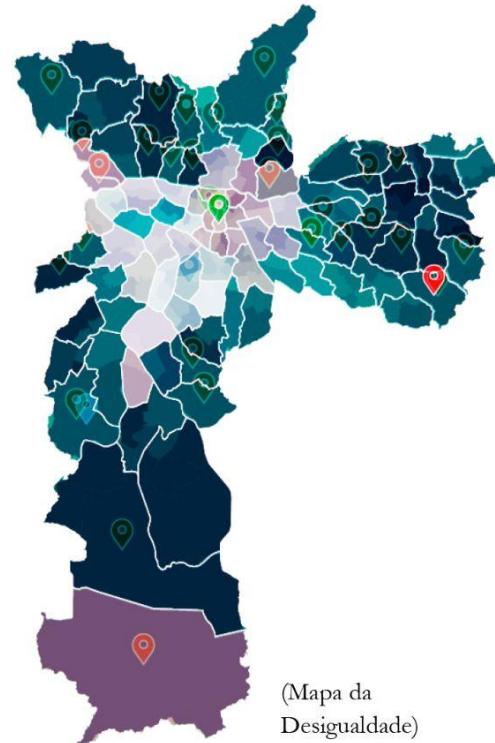
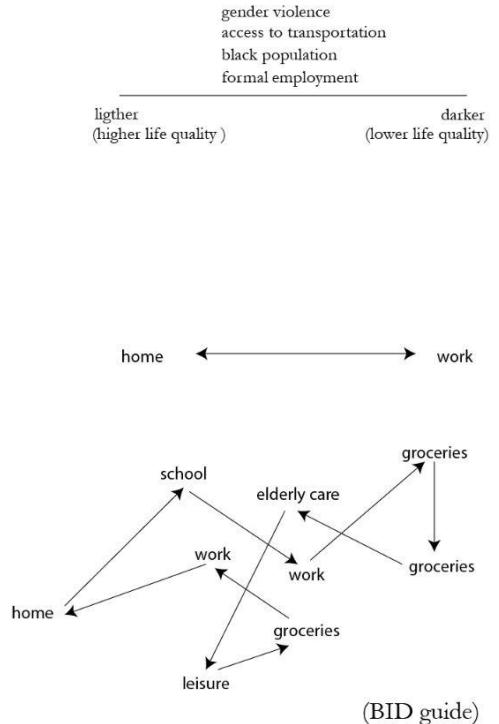
advisor: Malkit Shoshan

\_Active urban mobility such as walking and cycling are those that position the body as an extension of public space and - therefore - more sensitive to its stimuli.

\_Public spaces have always been seen as opportune places for popular uprisings and although nowadays women are a daily presence in these spaces, historically their presence was morally contained in the domestic environment - although poorer women have always been present in the workforce.

*Research question:* Is it possible to create public spaces that are more inviting and suited to women's routines and needs?

*Proposal:* Women's autonomy largely resides in their ability to move freely around the city. However, passive public transportation focused on origin and destination (for example, subway and buses) is insensitive to women's active mobility experiences in the intermediate spaces between origin and destination (squares, streets, bus stops, etc.). The research proposes to reflect on these spaces and how to make them safer.



# How the West Was (Really) Won: Water and the Emergence of Los Angeles

*Los Angeles must reexamine and reimagine its relationship to water as it increasingly becomes a scarce resource.*

## *Research Question:*

How can urban infrastructures be designed for a future where water is a depleting finite resource?

## *Hypothesis:*

Currently, 90% of Los Angeles's water supply is sourced from aqueducts extracting water from hundreds of miles away. Can local water sources sustainably supplant this aging network to become the city's primary water supply?



# The Storied Landscape of Tkaronto: Climate Adaptation Informed by Traditional Knowledge

GRANT FAHLGREN - MLAUD '23

Downtown Core Park Network



Historic Water Courses



Don River Valley



Public Works Landscape Architecture. TO-Core: Parks and Public Realm Master Plan. City of Toronto, 2018

## Topic

I am studying the potential for climate adaptation informed by traditional knowledge in Toronto

## Conceptual Question

because I want to understand how Indigenous ways of knowing can be applied to urban environments

## Conceptual Significance

So that readers can see Indigenous knowledge as relevant to contemporary environmental challenges and essential to addressing climate change

## Potential Practical Application

So that they might support policies and projects that embed Indigenous knowledge systems in the design and function of cities

and so that Indigenous peoples can continue to engage the environments from which their cultures emerge and generate new knowledge and stories.

## Research Question

How can the expanding green network of Toronto support climate change adaptation strategies informed by traditional ecological knowledge?

## Proposition

Traditional knowledge has developed through engagement with local ecosystems over thousands of years during which Indigenous peoples witnessed immense environmental change that hold lessons for adapting to future climate change and better aligning the design and planning of Toronto with its environment.

# The Storied Landscape of Tkaronto: Climate Adaptation Informed by Traditional Knowledge

GRANT FAHLCREN - MLAUD '23

## Who

Local First Nations, Torontonians, Toronto and Region Conservation Authority, Toronto Parks, City of Toronto, Province of Ontario, local design and planning professionals, and developers

## What

Public space, built and natural infrastructure, rainwater strategies, ecological restoration, habitat networks, biodiversity, and environmental education

## Where

Network: Toronto parks, ravines, shoreline, greenways, transmission corridors, and greenbelt.

Sites: (4-5 sites from) Credit, Humber, Don, and Rouge Rivers, High Park, Toronto Island, Oak Ridges Moraine, and Toronto Harbour

## When

Today to 2100 (the period of available climate projections and existing strategies)

## Why

Canada has initiated a process of reconciliation which has largely been symbolic gestures but Indigeneity does not exist within symbolism but within ongoing practices that engage local environments requiring cities that are committed to reconciliation to create spaces and opportunities for the practice of traditional knowledge

## Indigenous Research Areas

- Oral histories
- Village sites
- Community structure
- Trails
- Place names
- Cultural expression and art
- Territorial connections

## Ecological Research Areas

- Climate change projections
- Watersheds and drainage
- Wetland extents
- Lake levels
- Lake conditions (temperature, nutrient, plant communities)
- Geological maps
- Soil maps
- Habitat maps

## Policy Research

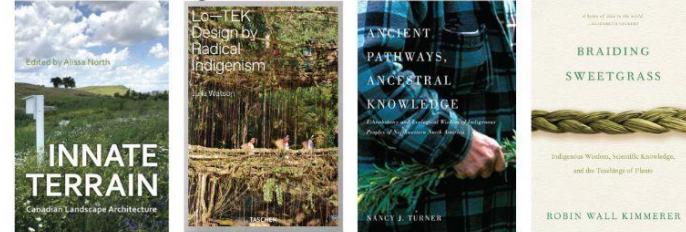
- Conservation
- Housing
- Land Use and Zoning
- Transportation
- Parks Planning
- CO<sub>2</sub> Reductions
- Social Infrastructure
- Waterfront Toronto

## Frontiers of Knowledge

### Indigenous design



### Traditional Knowledge



There are two key gaps in the discourse of Indigenous design and traditional knowledge:

- 1) Indigenous design has looked at individual sites, buildings, or projects and not at broader territories in which traditional knowledge is situated.
- 2) Traditional ecological knowledge research has not contemplated the application of traditional ecological knowledge in contemporary or urban contexts and has treated it more in terms of heritage



*Can coastal cities adapt for climate resiliency?*

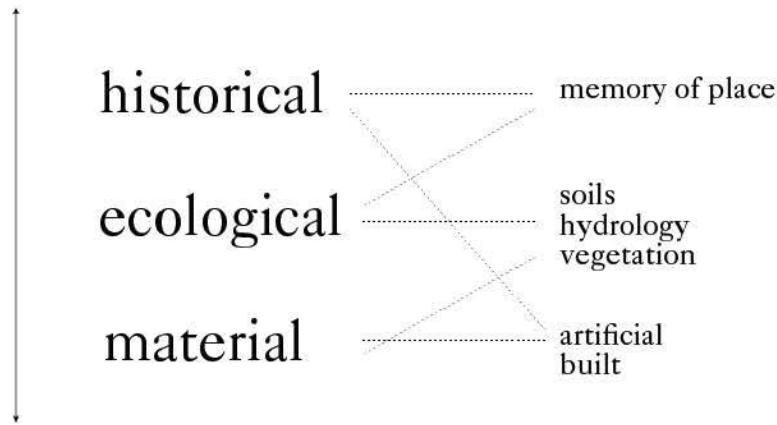
*Can human-damaged environments be repaired?*

*Is a commerce-driven economy enough to sustain well-being in cities?*

*What does a transition look like?*

Gerardo Corona, MAUD

# *repair*



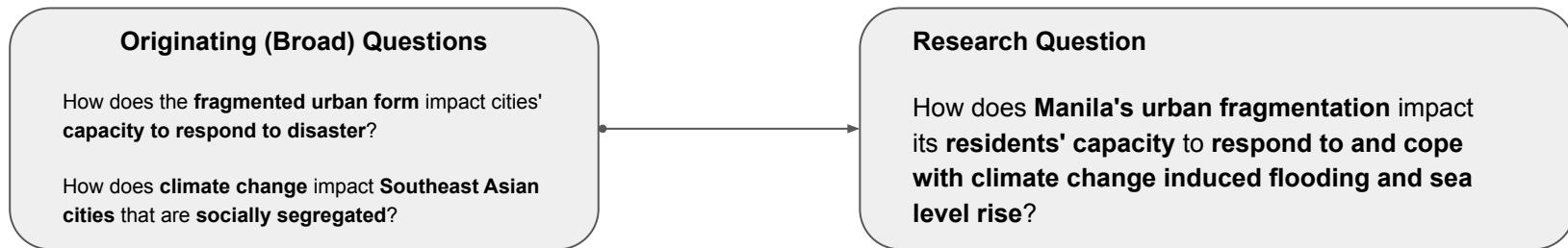
## *Hypothesis*

The architectural labor of repair of materials, the environment and placemaking can be successful at the territorial scale.

Gerardo Corona, MAUD

# Urban Fragmentation and Climate-related Disaster Response (1 of 2)

Eunsoo Hyun



## 1. Examining disparities

	<b>Urban Fragmentation/Segregation</b> (Disparities between gated and non-gated communities)	<b>Disaster Resilience</b> <sup>1</sup> (Capacity or lack thereof in managing floods, storm surges)
<b>Physical</b>	<ul style="list-style-type: none"> <li>- Architecture (building size, type, material)</li> <li>- Infrastructure (water, electricity, transit, etc.)</li> <li>- Location (in relation to the city)</li> </ul>	<ul style="list-style-type: none"> <li>- Architecture (built-in measures)</li> <li>- Infrastructure (dikes, levees, safe houses, etc.)</li> <li>- Location (flood-prone geographies, etc.)</li> </ul>
<b>Non-physical</b>	<ul style="list-style-type: none"> <li>- Legal status (land tenure)</li> <li>- Economy/income (types of industries located)</li> <li>- Relationship with municipal gov't (policy reach)</li> <li>- Constituents' political stance and power</li> <li>- Constituents' social status</li> </ul>	<ul style="list-style-type: none"> <li>- Disaster governance and gov't management</li> <li>- Investments in preparedness</li> <li>- Warning, evacuation, information dissemination systems</li> <li>- Rebuilding/recovery policies and resources</li> <li>- Awareness and Education</li> </ul>

<sup>1</sup> Items of investigation inspired by UNISDR, 2015. *Sendai Framework for Disaster Risk Reduction 2015 - 2030* (Geneva: UNISDR, 2015), available from <https://www.unisdr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>

## Urban Fragmentation and Climate-related Disaster Response (2 of 2)

Eunsoo Hyun

### 2. Examining division

	<b>Urban Fragmentation/Segregation</b> (Divisions between gated and non-gated communities) <sup>2</sup>	<b>Disaster Resilience</b> (Capacity or lack thereof in managing floods, storm surges)
<b>Physical</b>	<ul style="list-style-type: none"> <li>- Gates, fences, and walls</li> <li>- Proximity</li> <li>- Scale of fragmentation</li> </ul>	<p>?</p> <ul style="list-style-type: none"> <li>- Physical obstructions?</li> <li>- Difficulties in cooperation?</li> <li>- Deterrances in municipal level coordination?</li> </ul>
<b>Non-physical</b>	<ul style="list-style-type: none"> <li>- Social imaginary of “inside and outside” the walls</li> <li>- Socio-economic divide / reliance</li> <li>- Political divide</li> <li>- Fear and anxiety of the “other”</li> </ul>	

#### Proposition 1

The physical disparities caused by urban segregation have caused differing capacities to cope with floods and other climate related disasters.

#### Proposition 2

The physical division of communities create physical and non-physical obstructions in coping with floods and other climate related disasters.

<sup>2</sup> Garrido, Marco Z. 2019. *The Patchwork City : Class, Space, and Politics in Metro Manila*. Chicago: University of Chicago Press.