

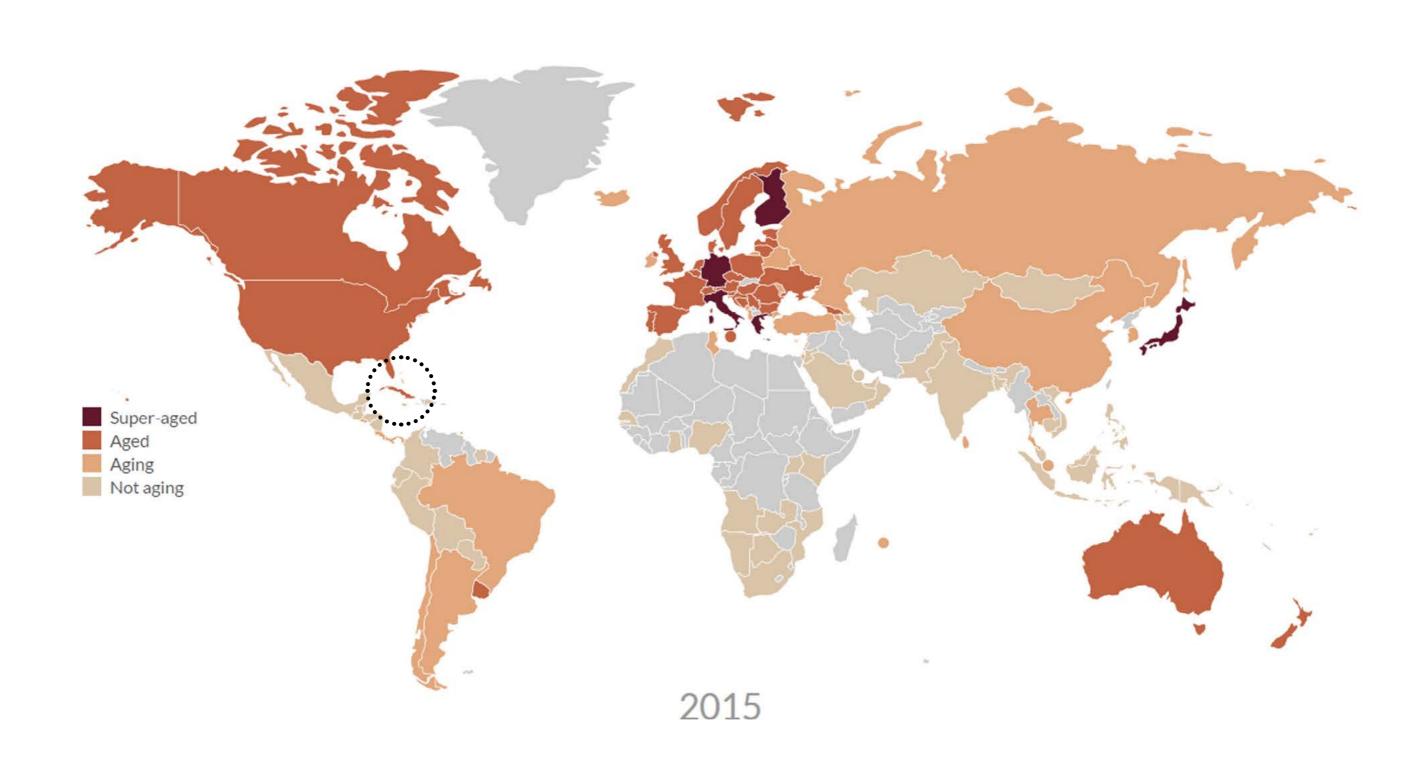
#### HAVANA STUDIO - ALAMAR

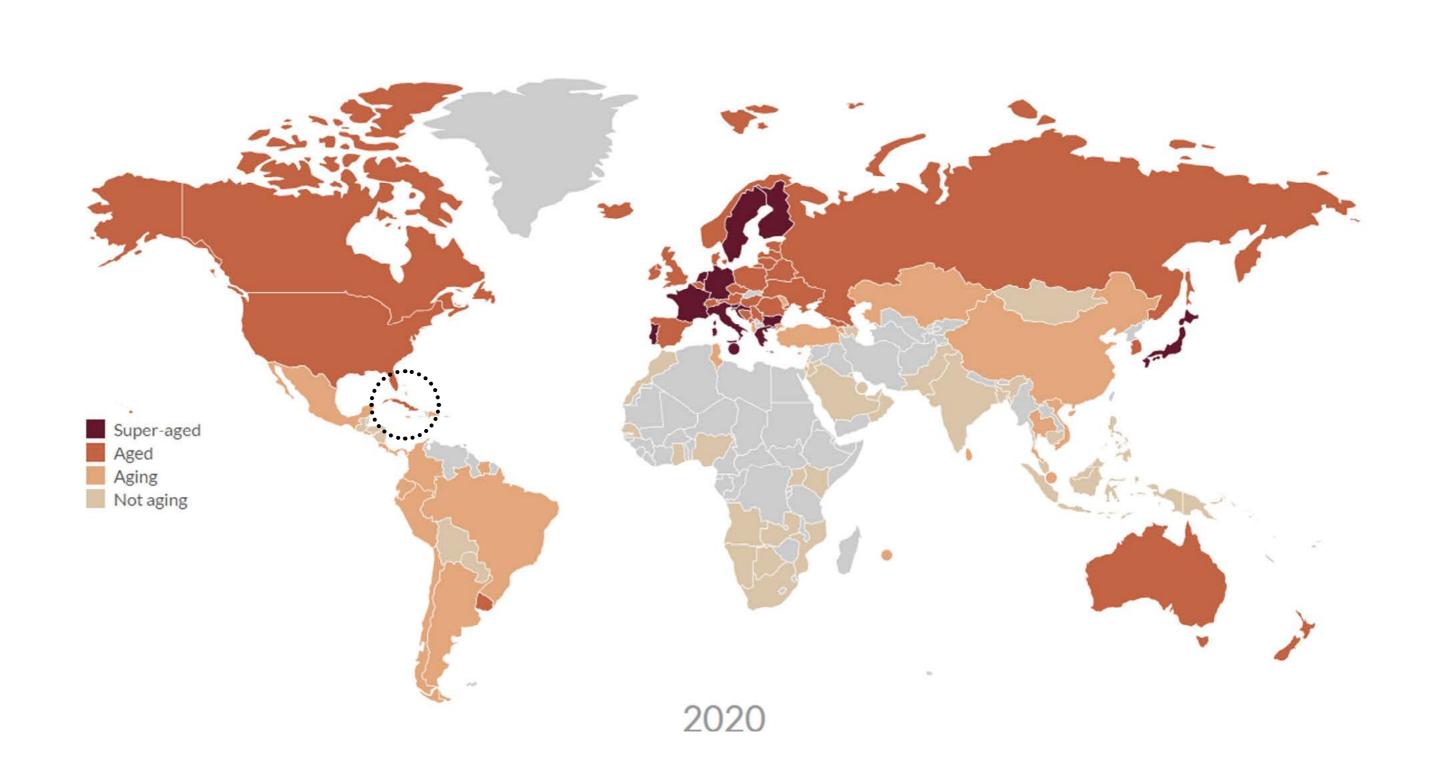
CHI ZHANG - 4474617

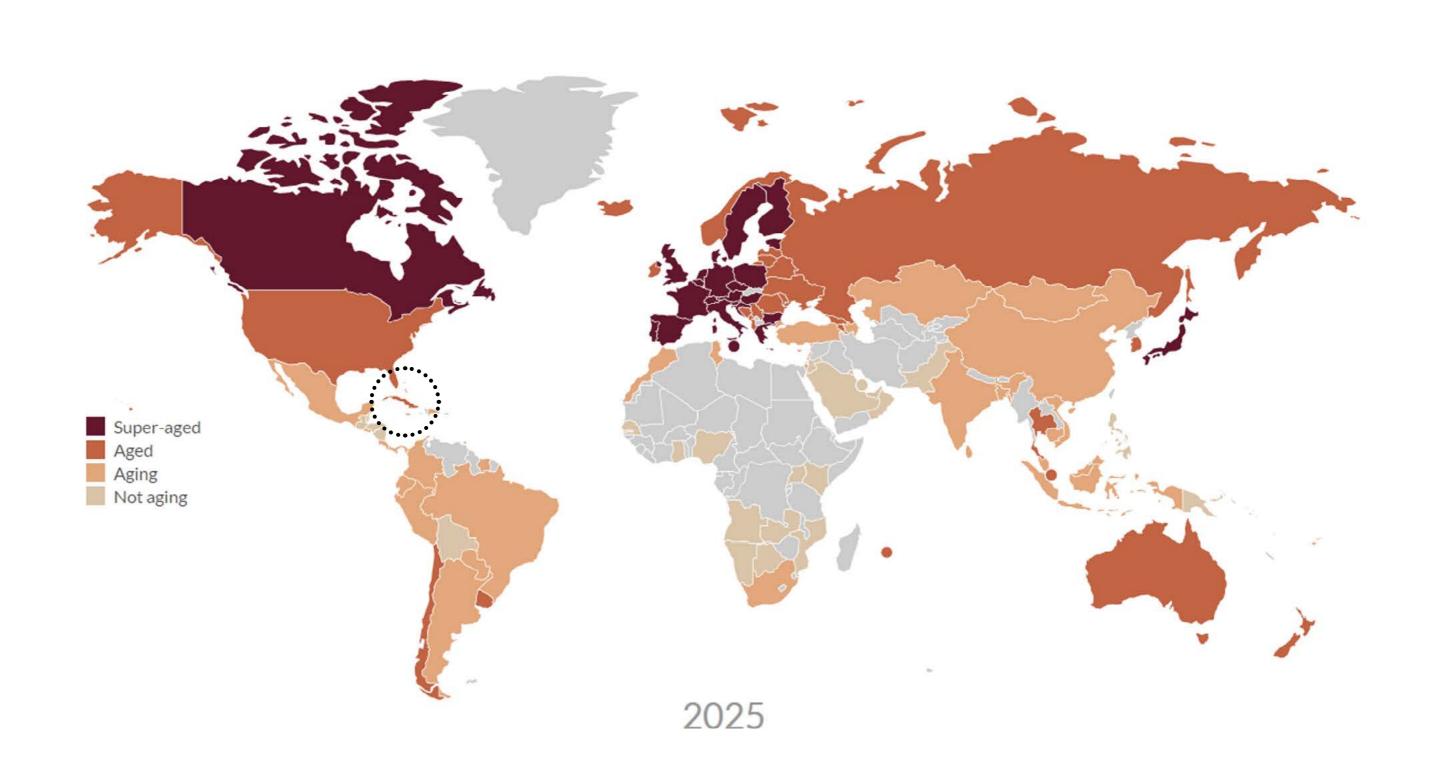
•INTRODUCTION
•THESIS TOPIC
RESEARCH QUESTION
•PROBLEM STATEMENT
THEME STUDY
•TYPOLOGY STUDY
□STRATEGY•

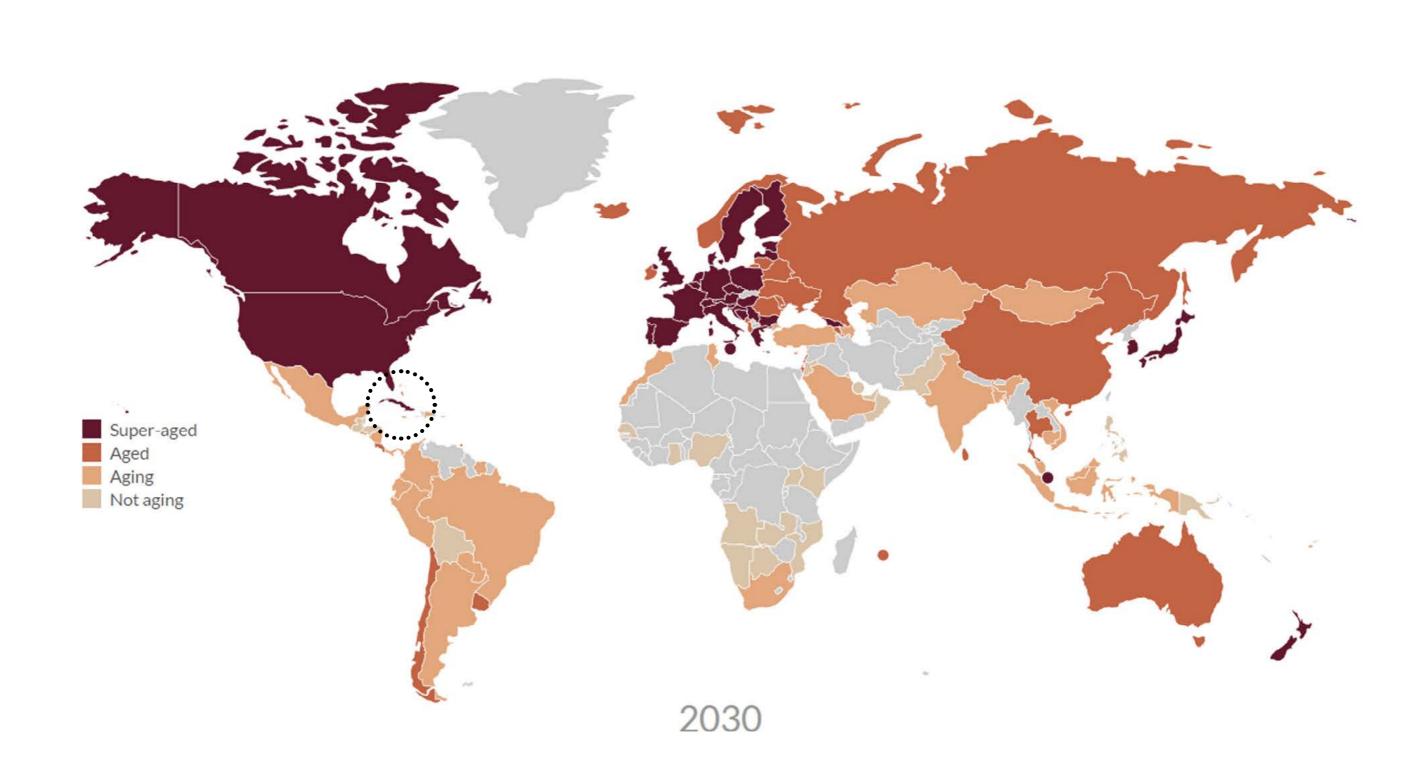
INTRODUCTION

### Population aging of the world

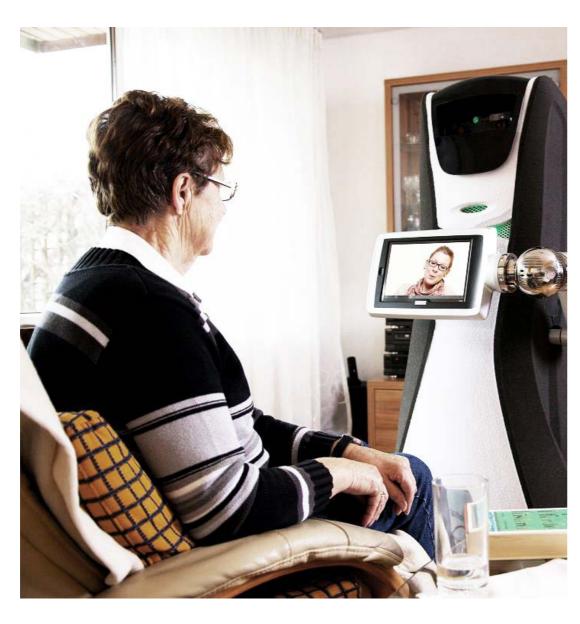








# Technological delveopment





# Quality of life

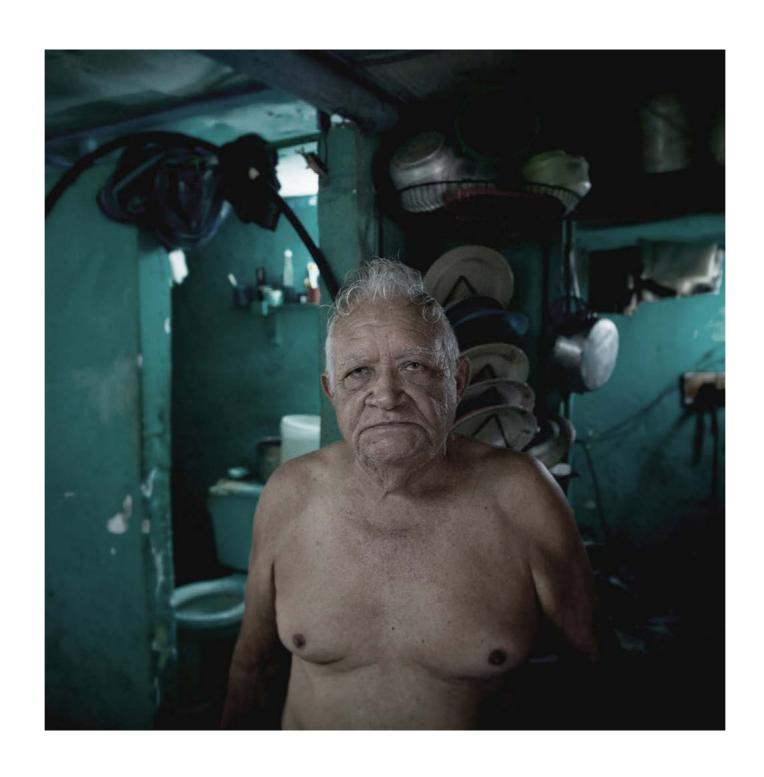


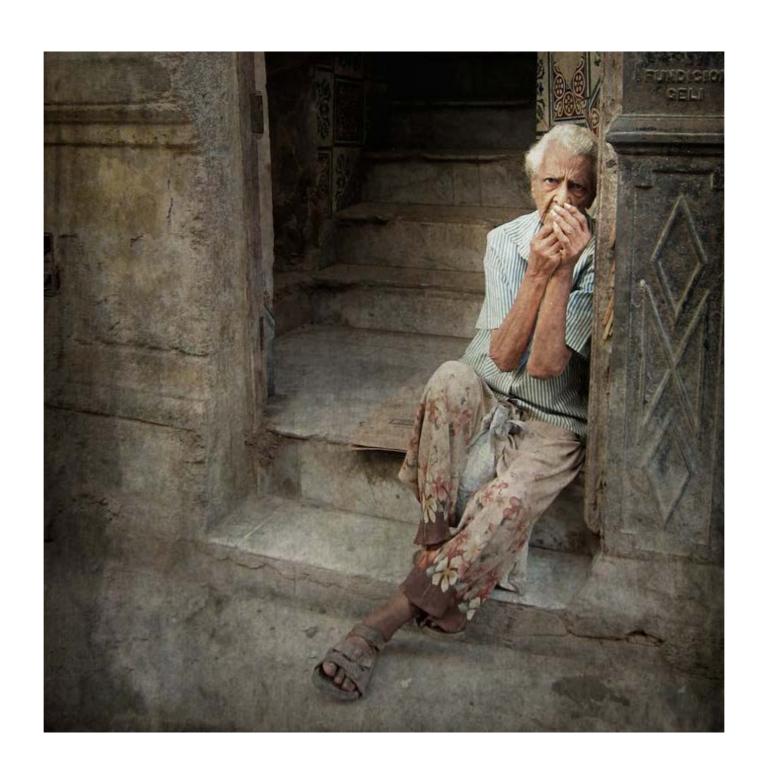


### Migratory pattern









#### THESIS TOPIC

Tackle the issue of frail elderly in Cuba whithin the social, culturual and economical background of Cuba

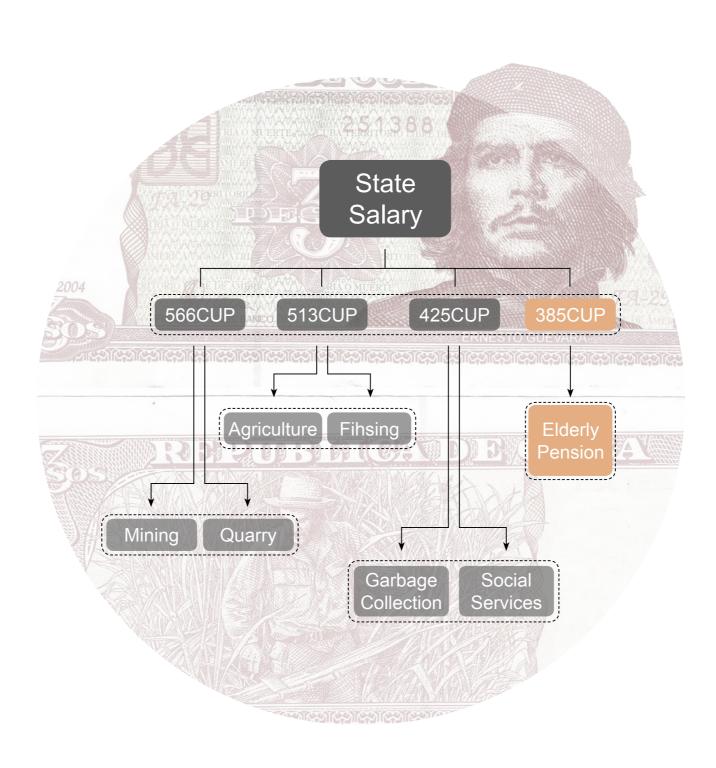
### Isolated by The Society



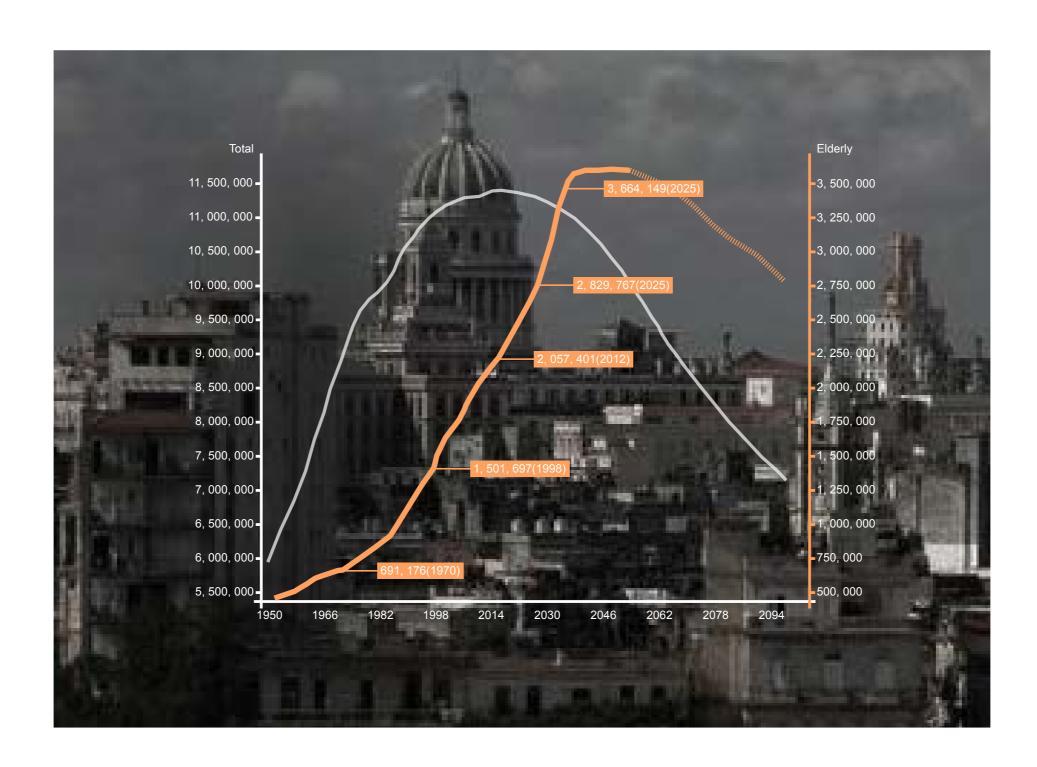
# Elderly Sell Stuff for Living



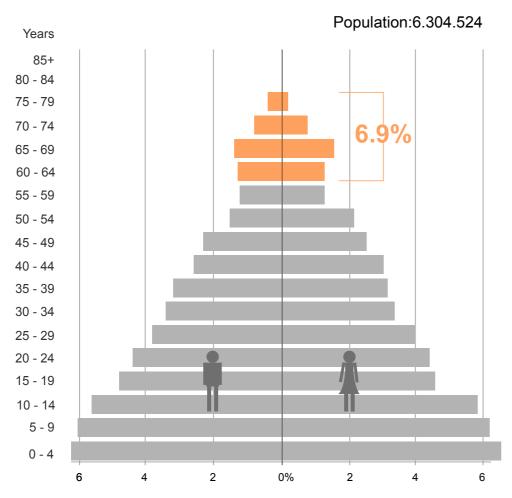
#### Low State Salary of Elderly



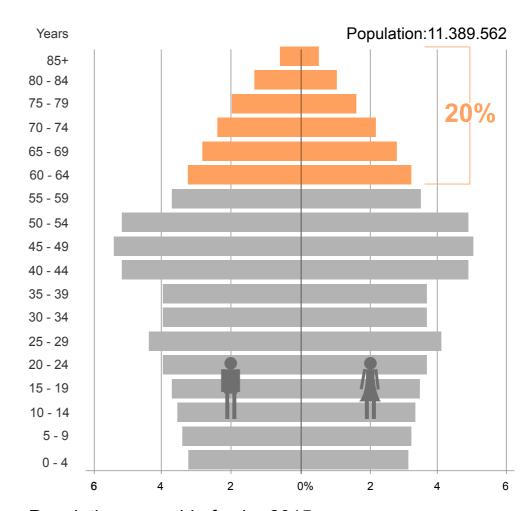
#### Increasingly Growth of Aged Population



#### High Percentage of Elderly

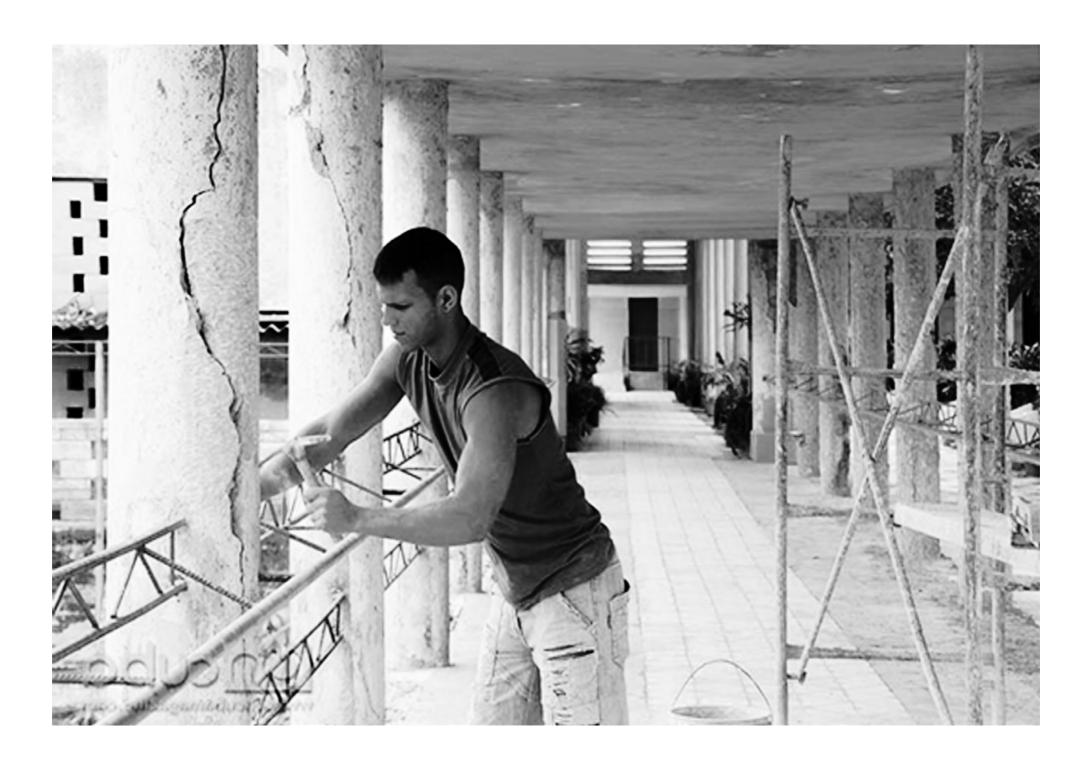


Population pyramid of cuba 1953

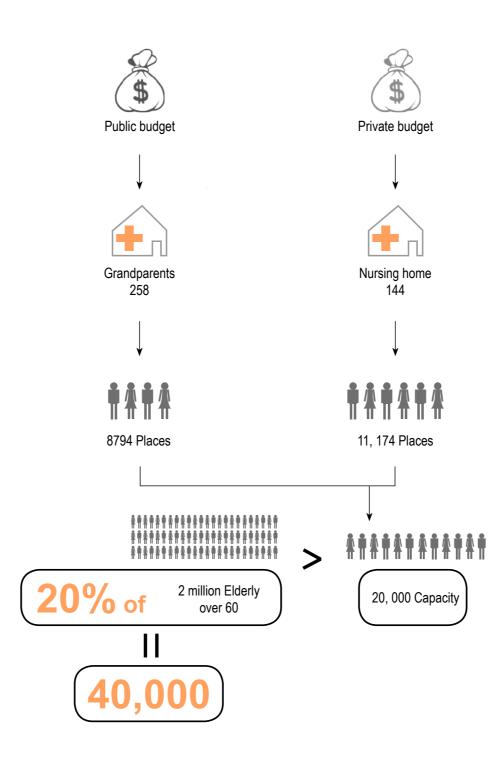


Population pyramid of cuba 2015

# Insufficient Number of Nursing Home



### Calculation of Needed Nursing Home



### Inequality of The Society - Tourism Oriented



#### Inequality of The Society - Poverty



# Dilemma Between The Policy and Reality





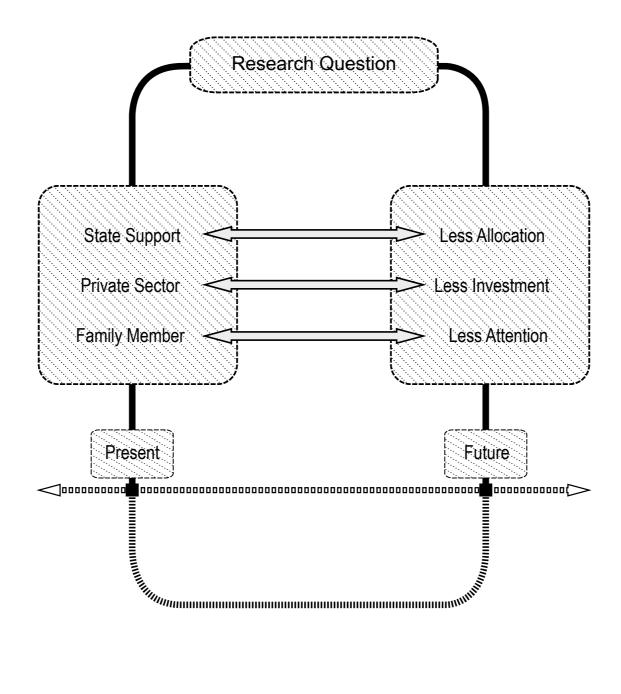


#### PROBLEM STATEMENT

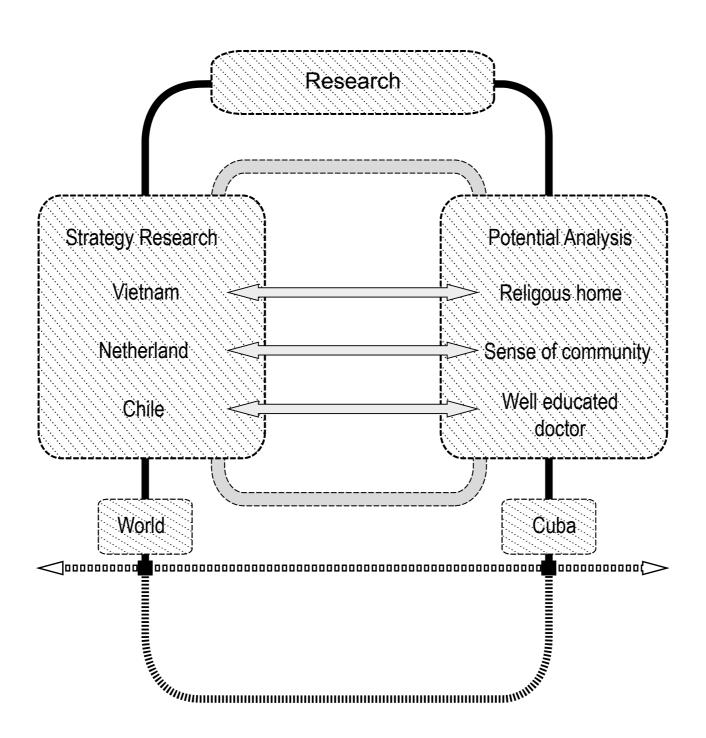
The contradition between the lack of attention from the society and the need for dealing with increasingly growing number of frail elderly

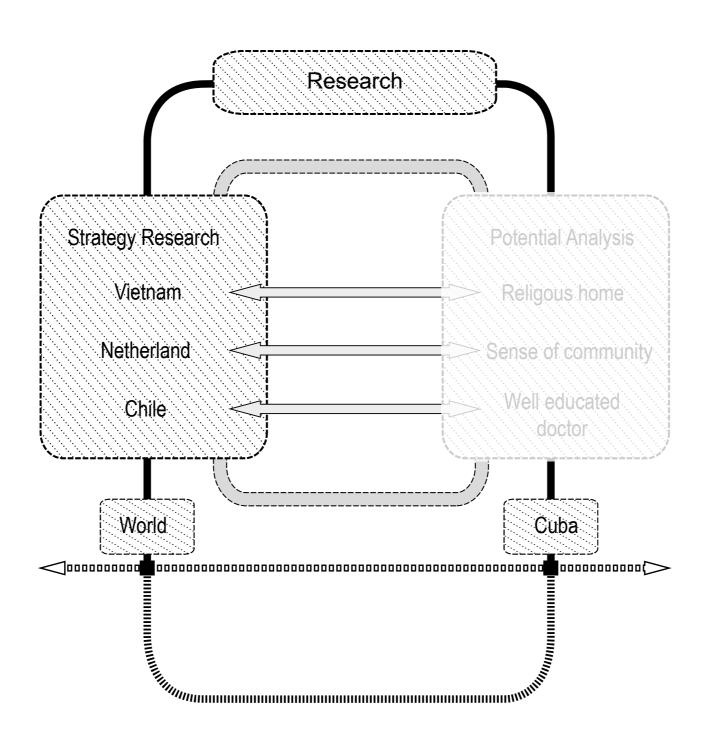
#### **RESEARCH QUESTION**

How to improve the living conditin of the elderly with less allocation by government, less investment from private sector and lack of attention from family members



THEME RESEARCH

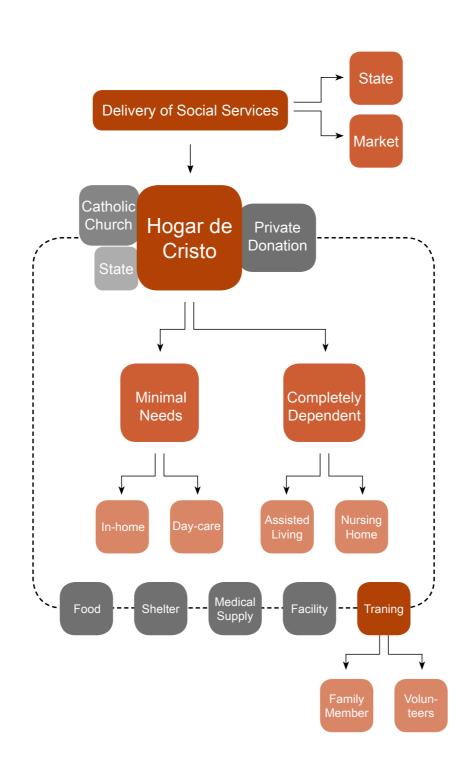


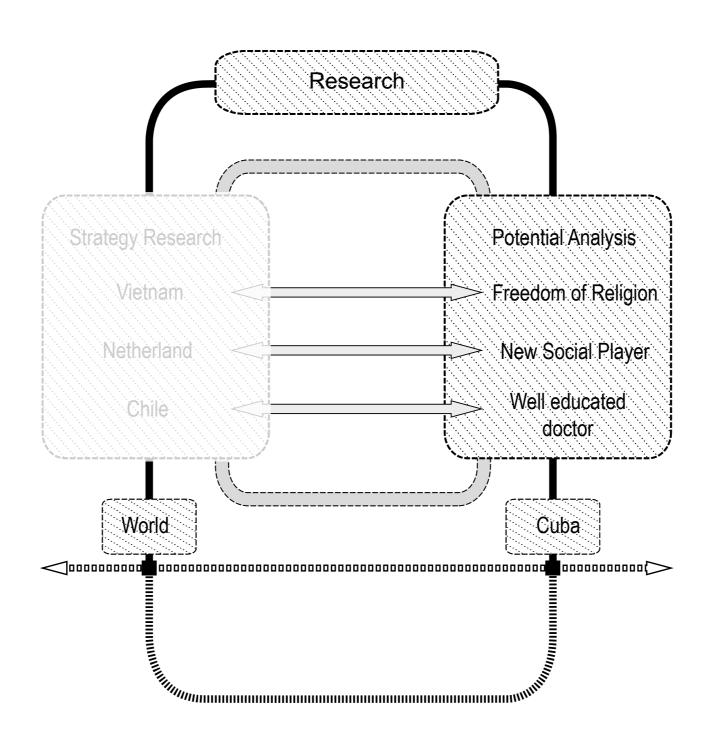


# Elderly Care in Chile(South-America)

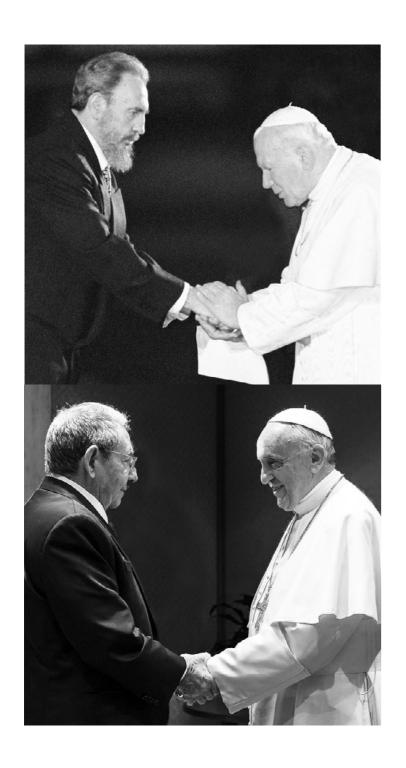


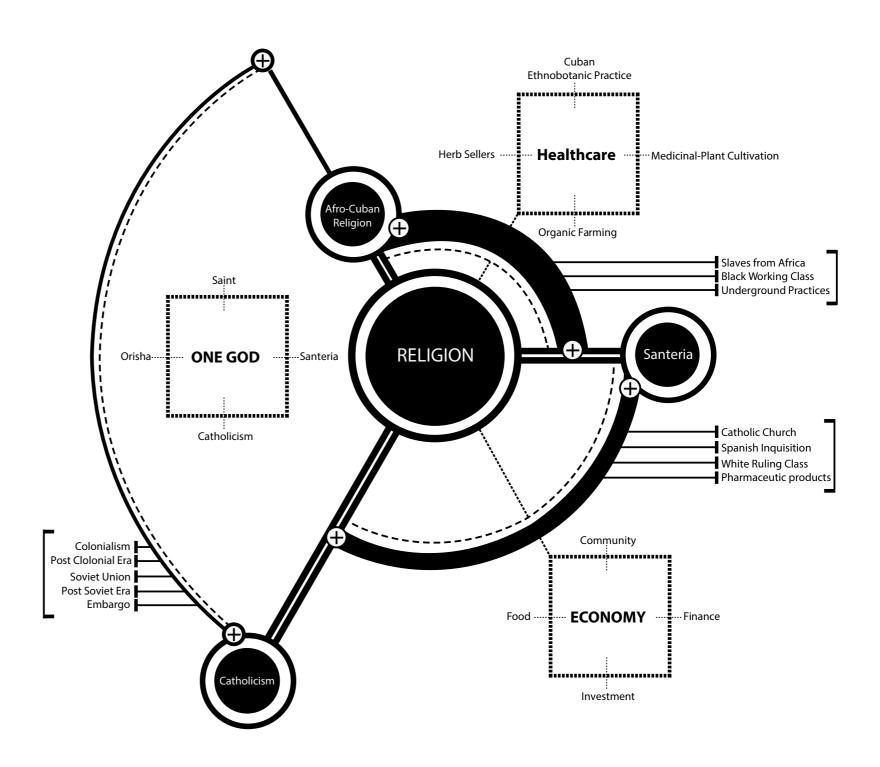
### Elderly Care in Chile(South-America)



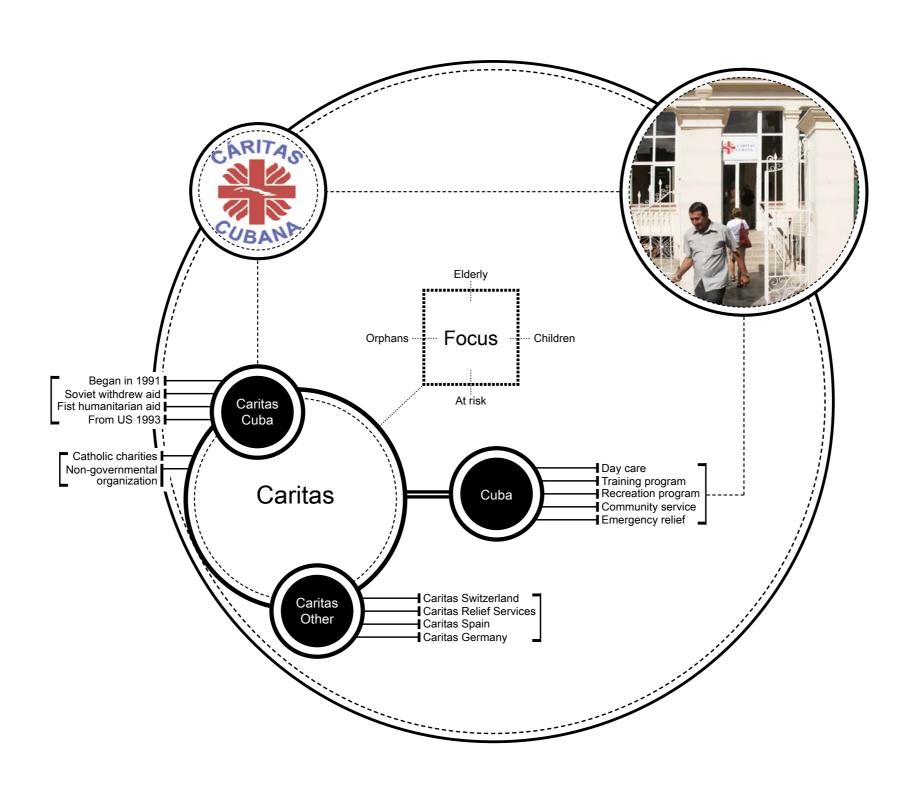


#### Religious Background of Cuba



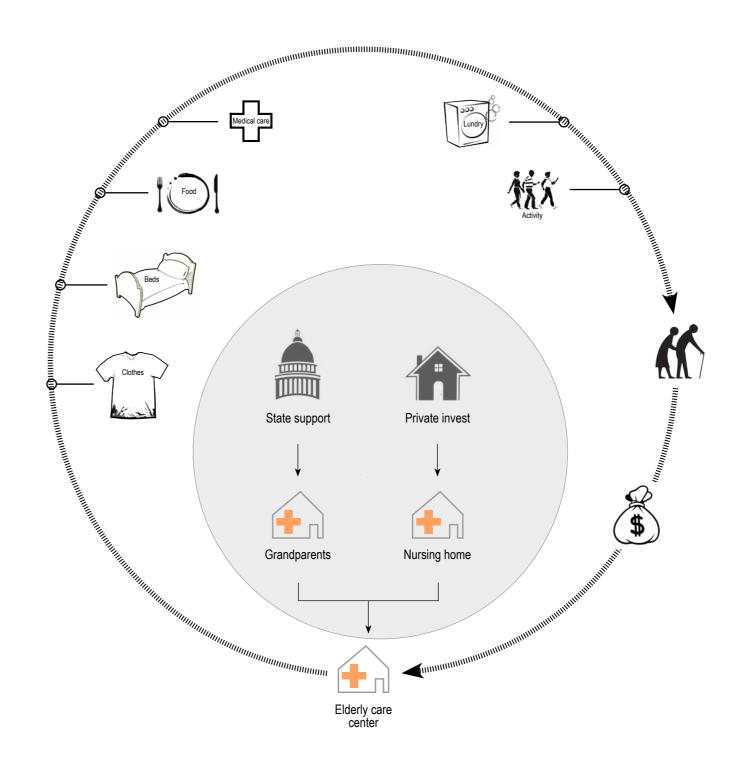


#### Local NGO in Cuba



#### **Current Religious Nursing Home**





#### Well Educated Doctors and Nurses



#### **AMBITION**

New bridge between elderly and the community which links them together both physically and mentally. At the same time redefining the centrality within the neighborhood by creating hierarchy.

### SITE RESEARCH

Why alamar

Choice of location

Site photos

SITE RESEARCH

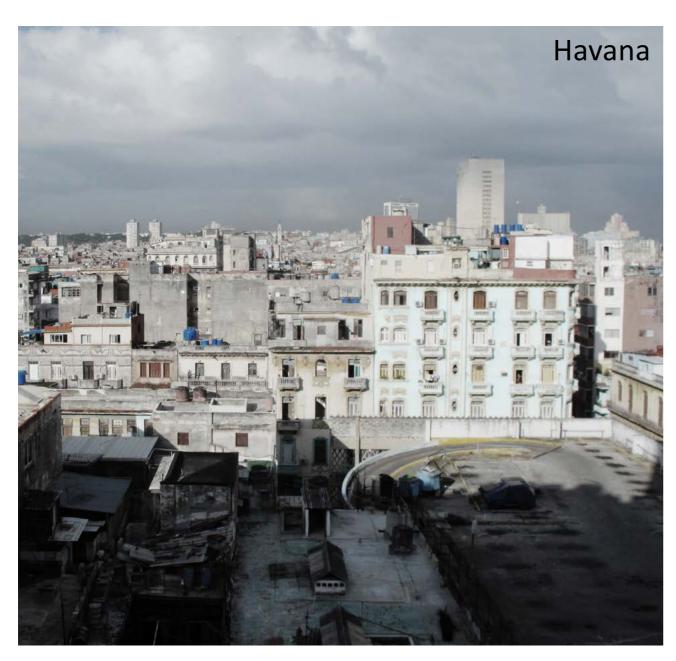
Why alamar

Choice of location

Site photos

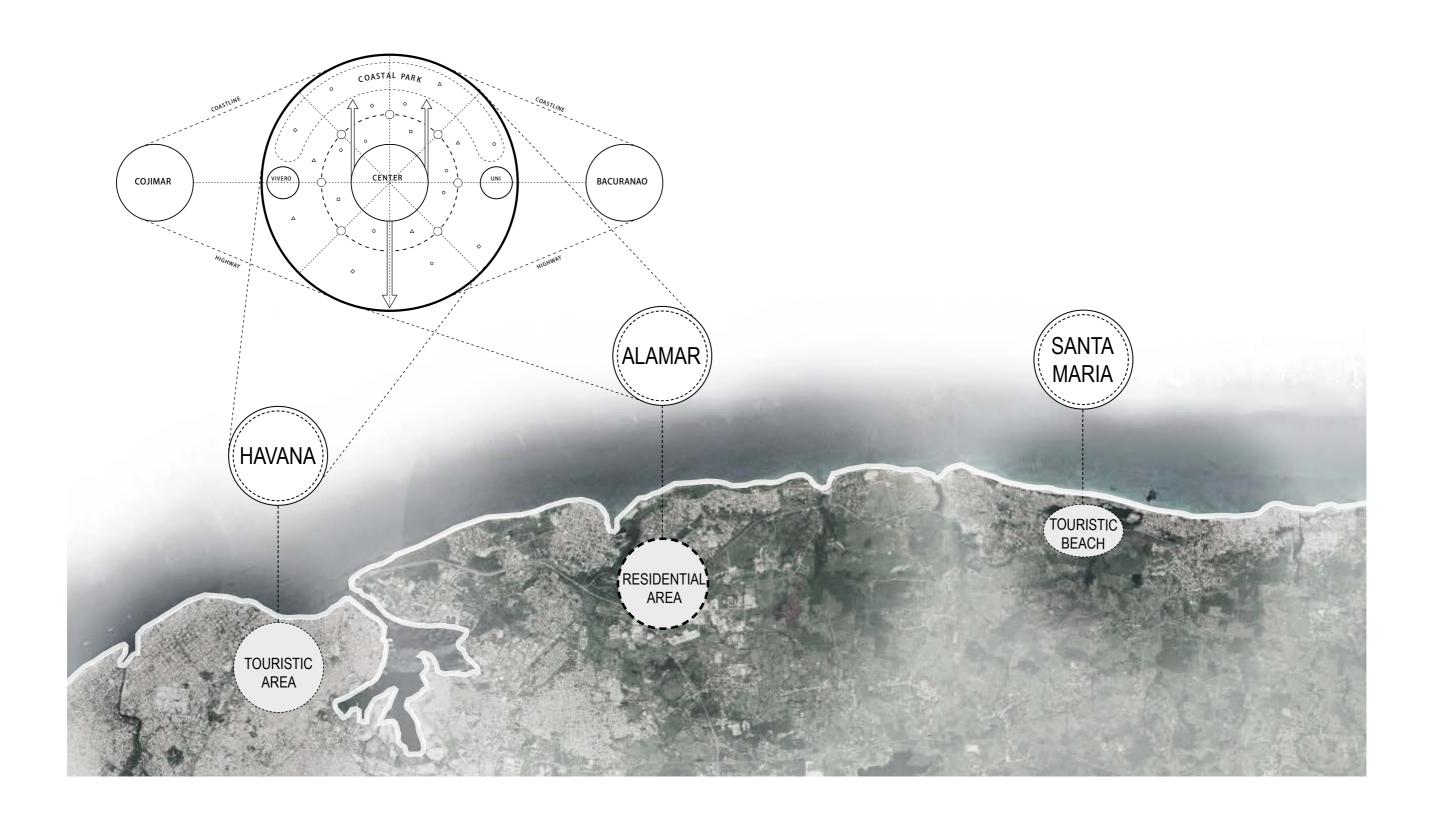
### Isolation Makes it an "Untouched" Green Land



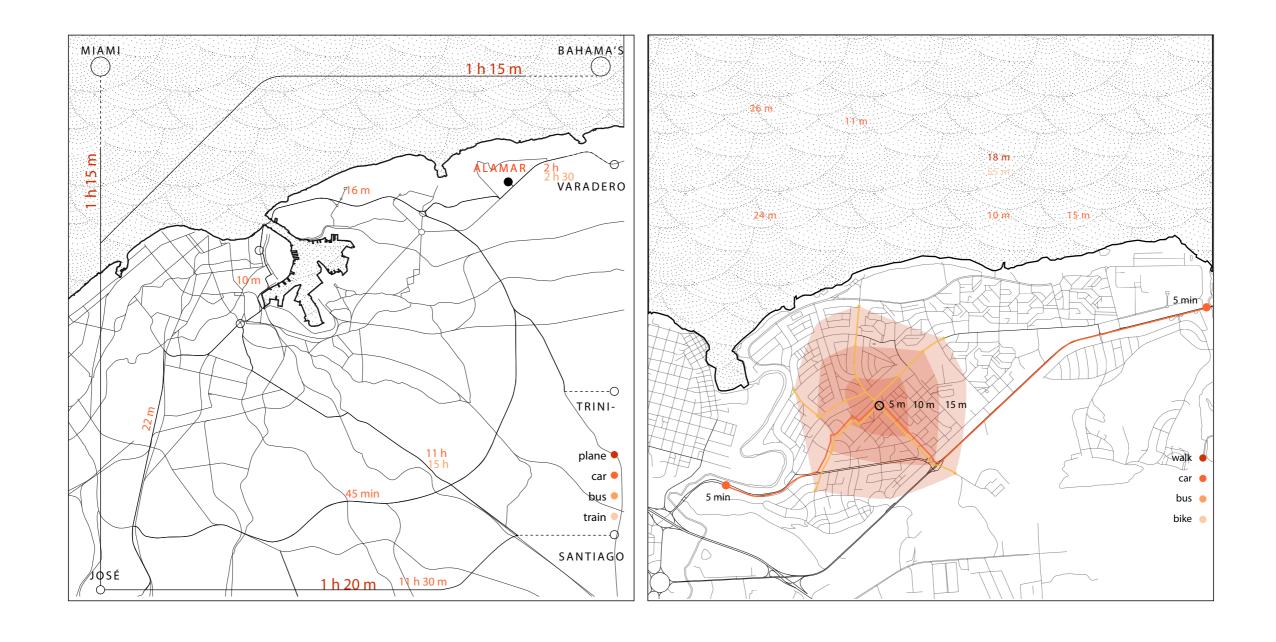




## Vision of Alamar



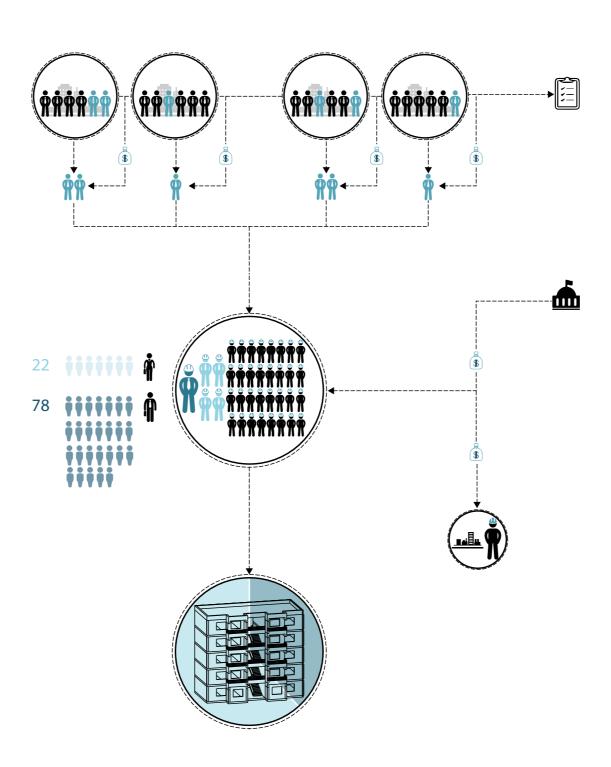
### Ideal Residencial Area - Short Traffic Time



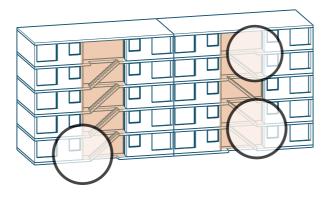
# Alamar Potential - Microbrigades



## Working System of Microbrigades



## **Strong Sense of Community**









### Incresingly Growing of Elderly In Alamar



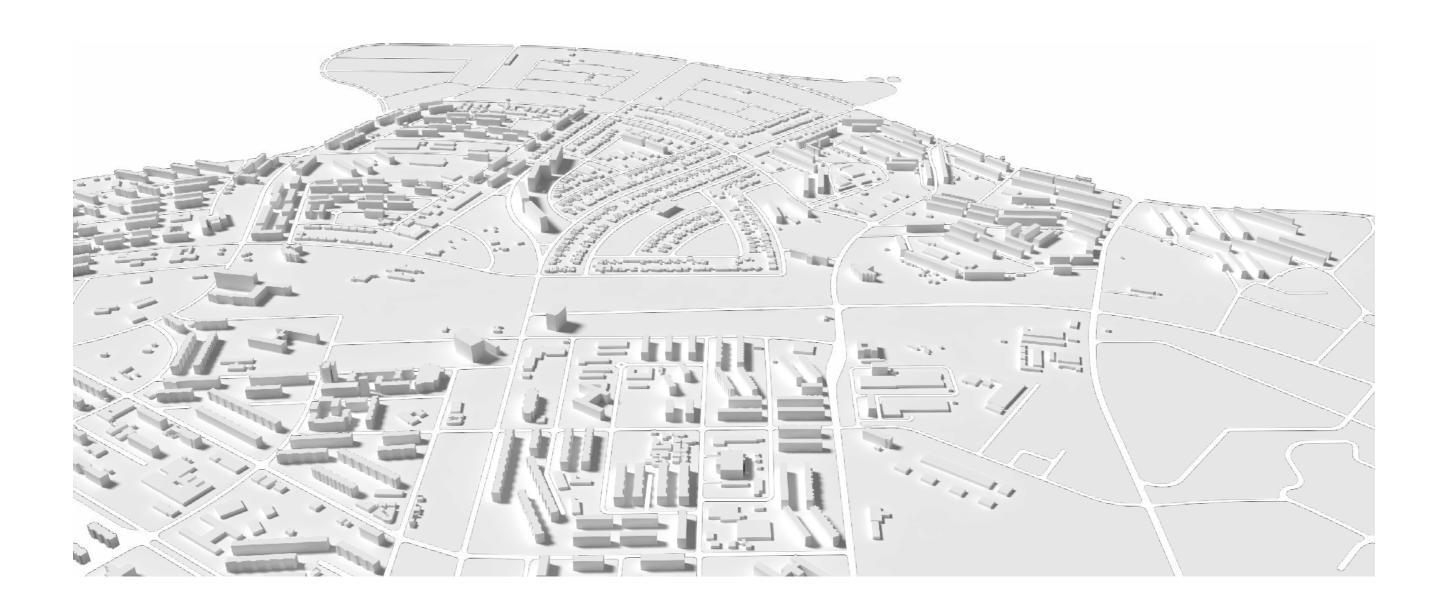
SITE RESEARCH

Why alamar

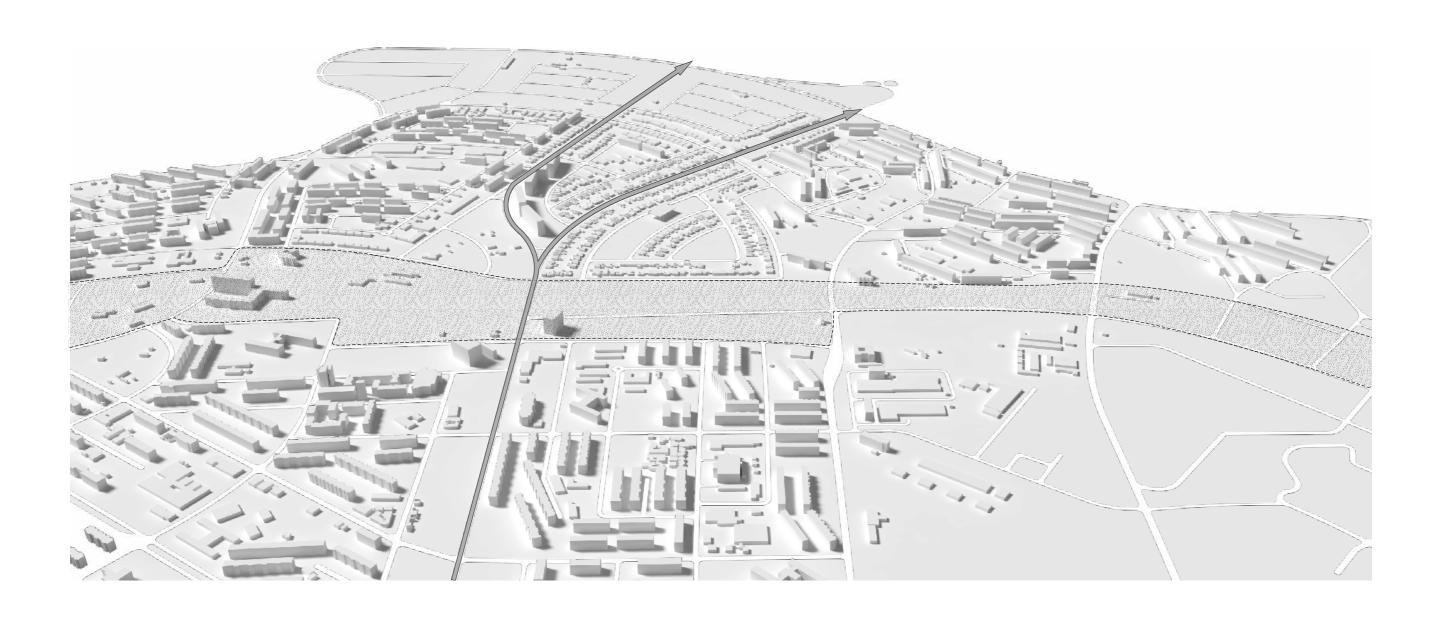
Choice of location

Site photos

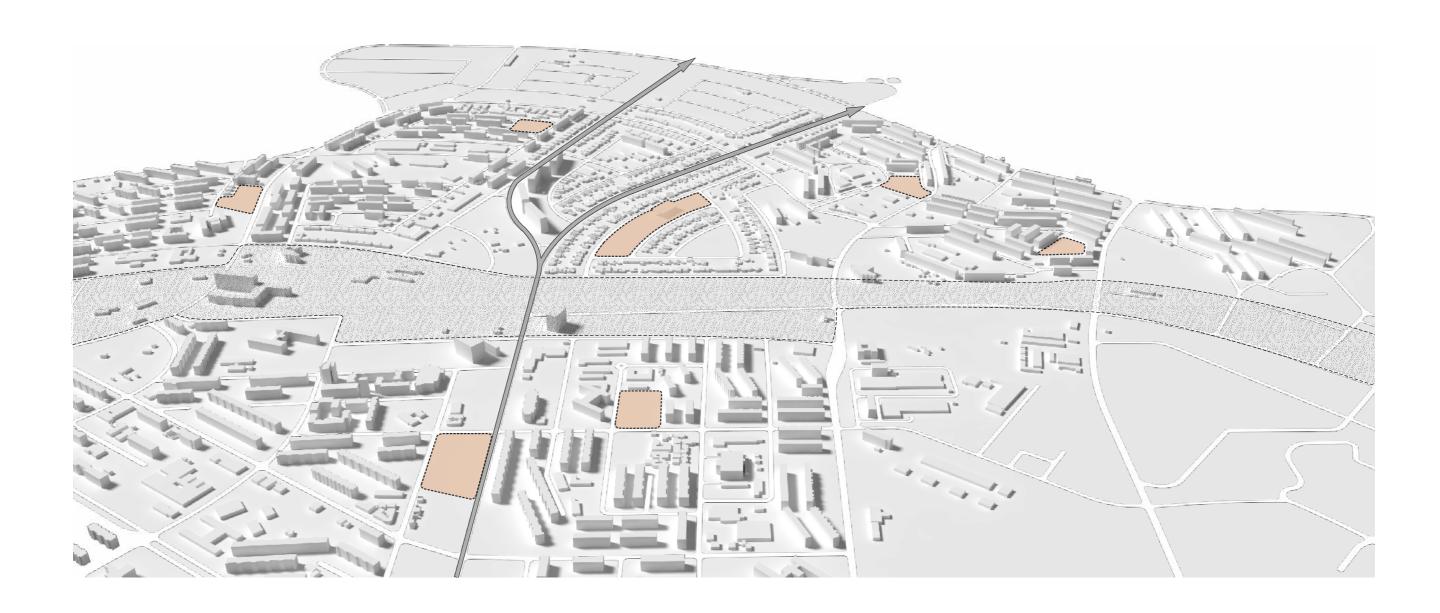
### Site Overview



### Site Urban Condition



### Disconnected on Urban Scale



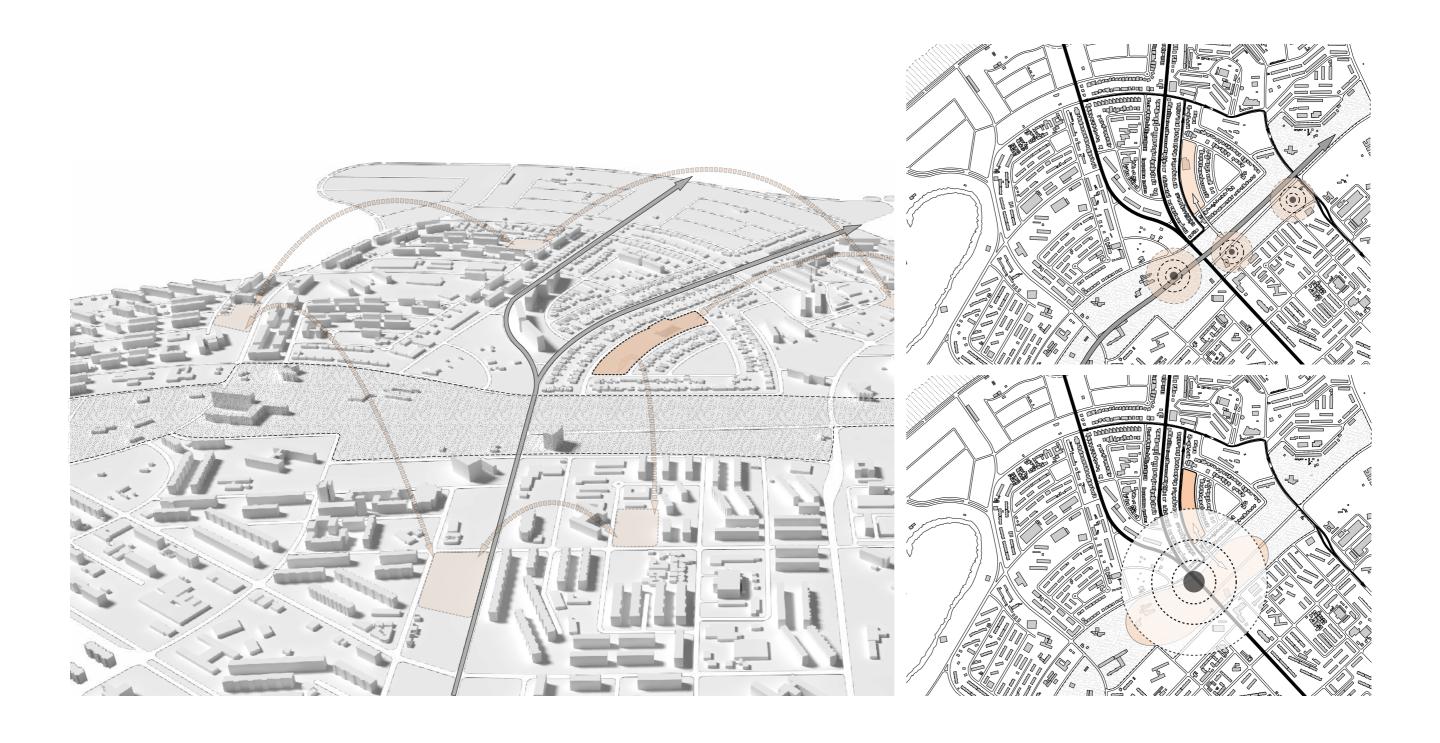
# Network of Neighbourhood



## Disconnected on Neighborhood Scale



# Typical Neighbourhood



SITE RESEARCH

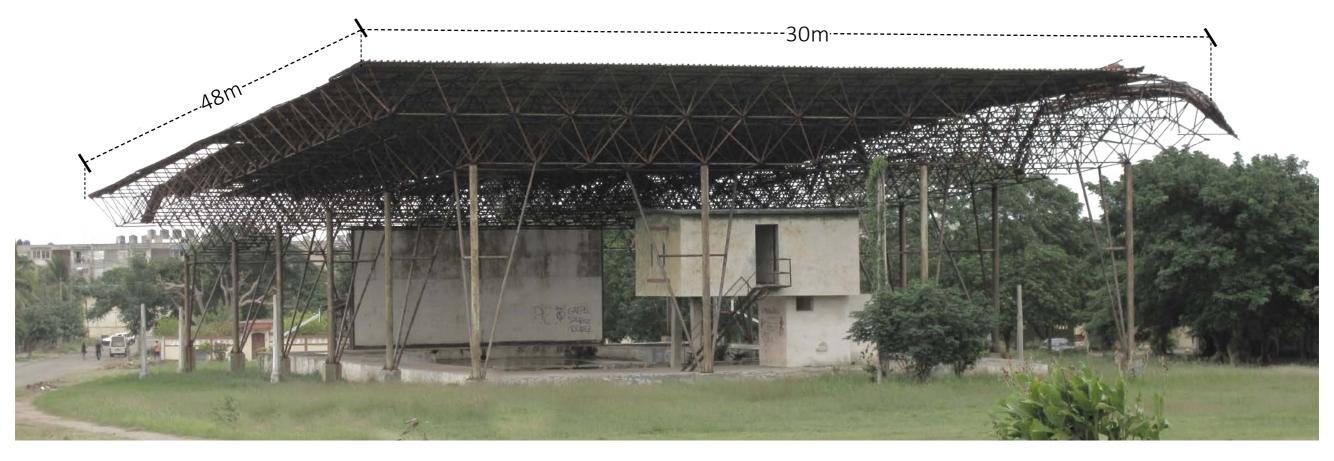
Why alamar

Choice of location

Site photos

### Site Photos





### TYPOLOGY RESEARCH

Catholic Charity Institution

92-Bed Nursing Home

Dependent Elderly Care Center

### **Catholic Charity Institution**

### 92-Bed Nursing Home

### **Dependent Elderly Care Center**











### Conclusion of Typology Research

### Catholic Charity Institution

#### Daycare Center- 40 Places

- 1. Reception.
- Administration area.
- 2. Social Area
- Multipurpose computer rooms, TV and coexistence.
- 3. Dining area
- For users with mental dependence and elderly residence
- 4. Day center
- Kitchen, services, hygienic, wardrobe, laundry.
- 5. Area Professionals
- Security controls, barber Shop.
- 6. Occupational Therapy Unit
- Psychologist, Therapist, Physiotherapist, Chiropodistand Den tistry.
- 7. Medical Unit
- Multi-purpose medical unit of continued care, Control Doctor, room of cures / 7 places, pharmacy.
- 8. Social Unit / Rehabilitation:
- rehabilitation. Social unit room. Pool heated hydrotherapy. Bio-healthy park. Therapeutic garden.

#### Nursing Home - 150 Places

- 1. Non-smoking rooms
- (Users with moderate dependence, Light or valid).
- 2. Single rooms adapted
- (Users with moderate dependence, Light or valid).
- 3. Single rooms for large dependents.
- Individual rooms for usersWith mental dependence.
- 4. Non-smoking rooms
- (Users with moderate dependence, Light or valid).

### 92-Bed Nursing Home

#### Daycare Center 3000

- 1. Reception.
- Administration area.
- 2. Social Area
- Multipurpose computer rooms, TV and coexistence.
- 3. Dining area
- For users with mental dependence and elderly residence
- 4. Day center
- Kitchen, services, hygienic, wardrobe, laundry.
- 5. Area Professionals
- Security controls, barber Shop.
- 6. Occupational Therapy Unit
- Psychologist, Therapist, Physiotherapist, Chiropodistand Den tistry.
- 7. Medical Unit
- Multi-purpose medical unit of continued care, Control Doctor, room of cures / 7 places, pharmacy.
- 8. Medical consultation

#### Nursing Home - 92 Places 1700m2

- 1. Non-smoking rooms
- (Users with moderate dependence, Light or valid).
- 2. Single rooms adapted

#### Adiministration 240m2

- 1. Staff dressing room
- 2. Technical rooms
- 3. Deliveries area.
- 4. Office

### Dependent Elderly Care Center

#### Daycare Center

- 3000m2
- 2. Activity room, workshop, relaxing space
- 3. Dining area
- For users with mental dependence and elderly residence
- 4. Day center
- Kitchen, services, hygienic, wardrobe, laundry.
- 5. Area Professionals

1. Main reception lobby

- Security controls, barber Shop.
- 6. Occupational Therapy Unit
- Psychologist, Therapist, Physiotherapist, Chiropodistand Dentistry.
- 7. Medical Unit
- Multi-purpose medical unit of continued care, Control
- Doctor, room of cures / 7 places, pharmacy.
- 8. Social Unit / Rehabilitation:
- rehabilitation. Social unit room. Pool heated hydrotherapy.
- 9. Gardens

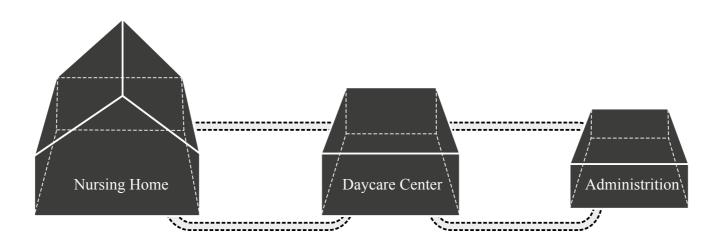
#### Nursing Home - 118 Places

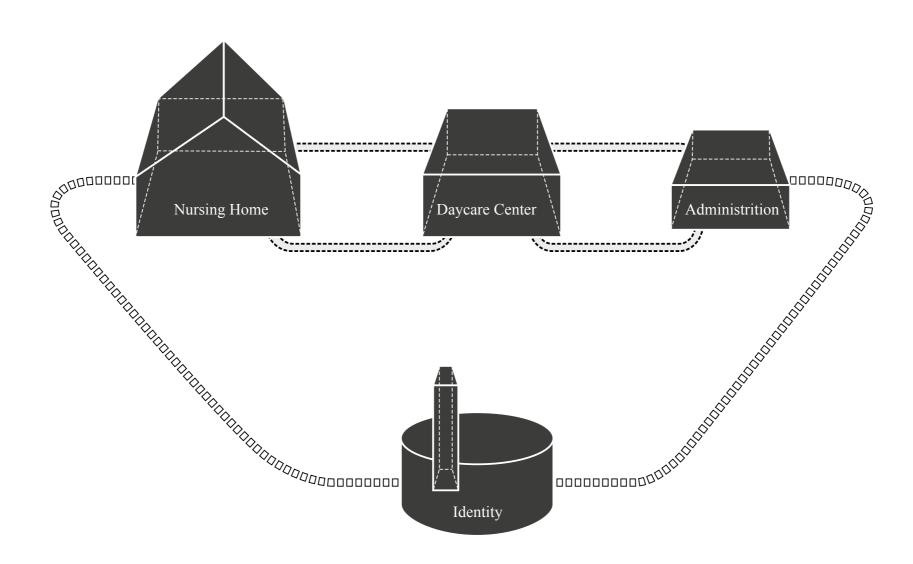
- 1700m2
- Single rooms for large dependents.
   Individual rooms for users

#### Adiministration

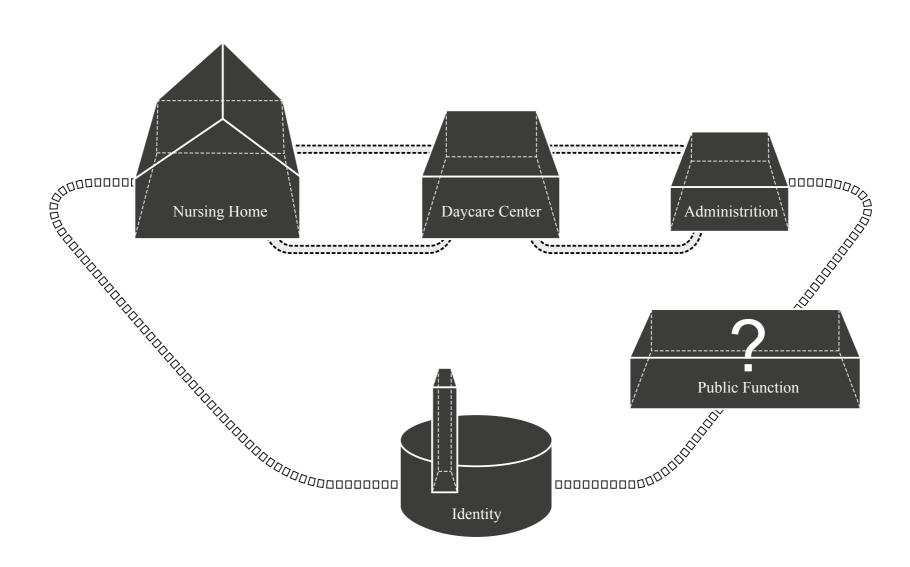
- 1. Staff dressing room 240m2
- 2. Secretary room
- Technical rooms
- Deliveries area.
- 4. Office

# Conclusion of Typology Research



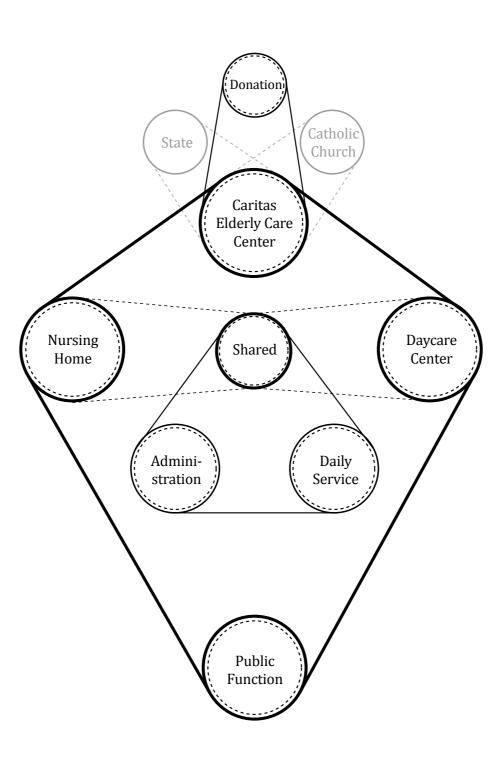


# Conclusion - Lack of Public Function (For City)

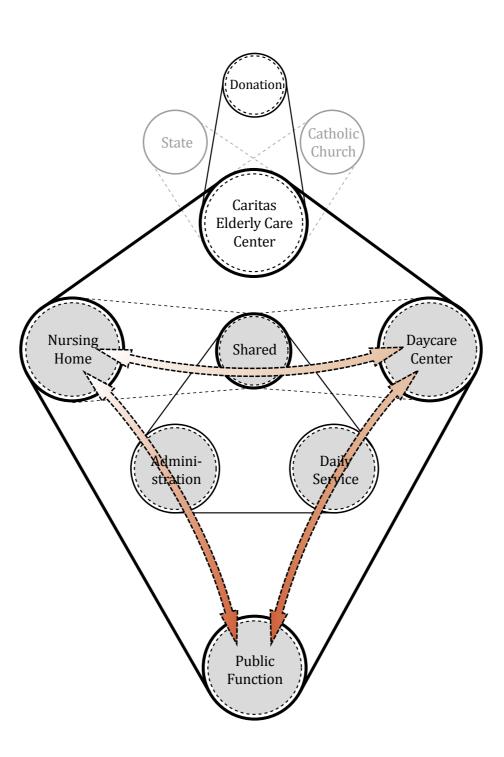


STRATEGY

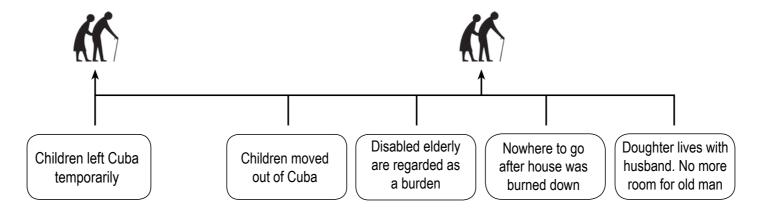
## Proposal

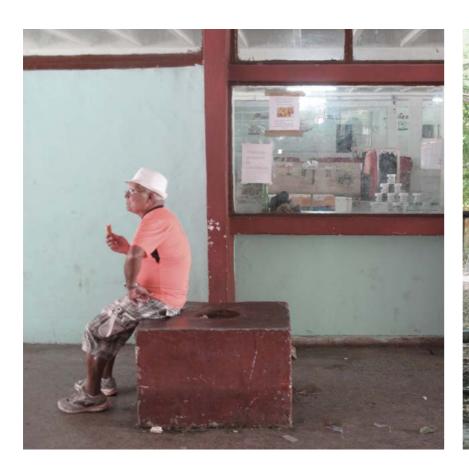


## Proposal



### Targeting Group - Elderly

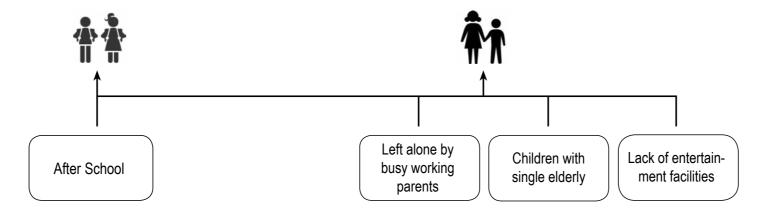








### **Expecting Users - Children**









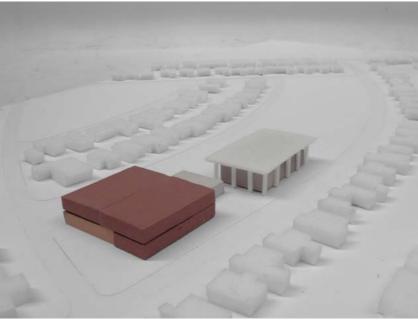
### **Urban Strategy**

### Location of Intervention

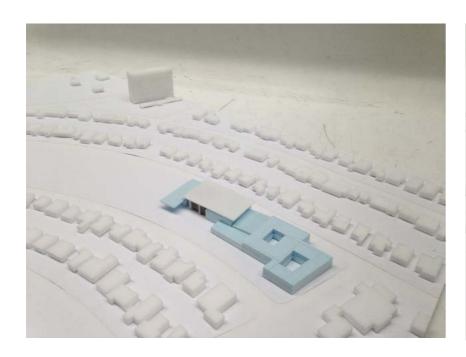


# Mass Study

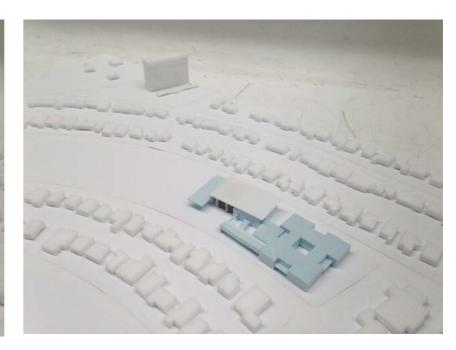




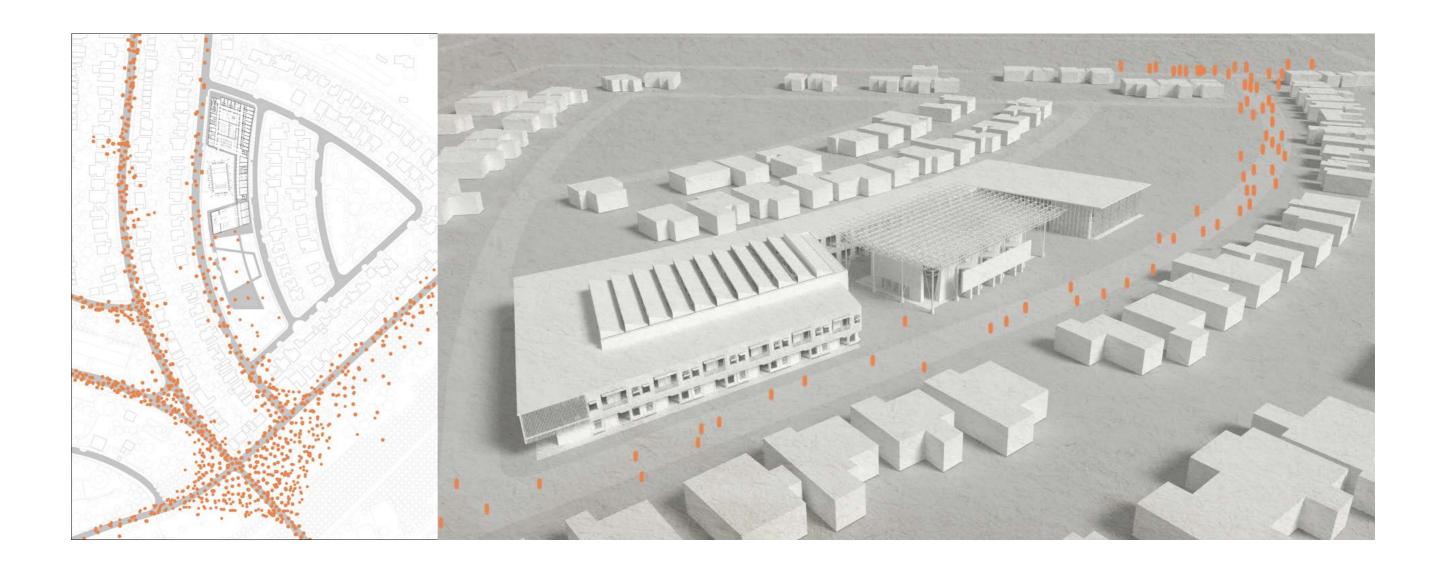






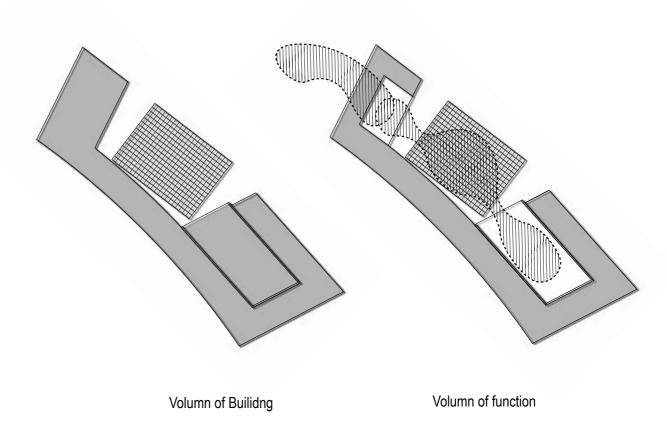


## Bird view

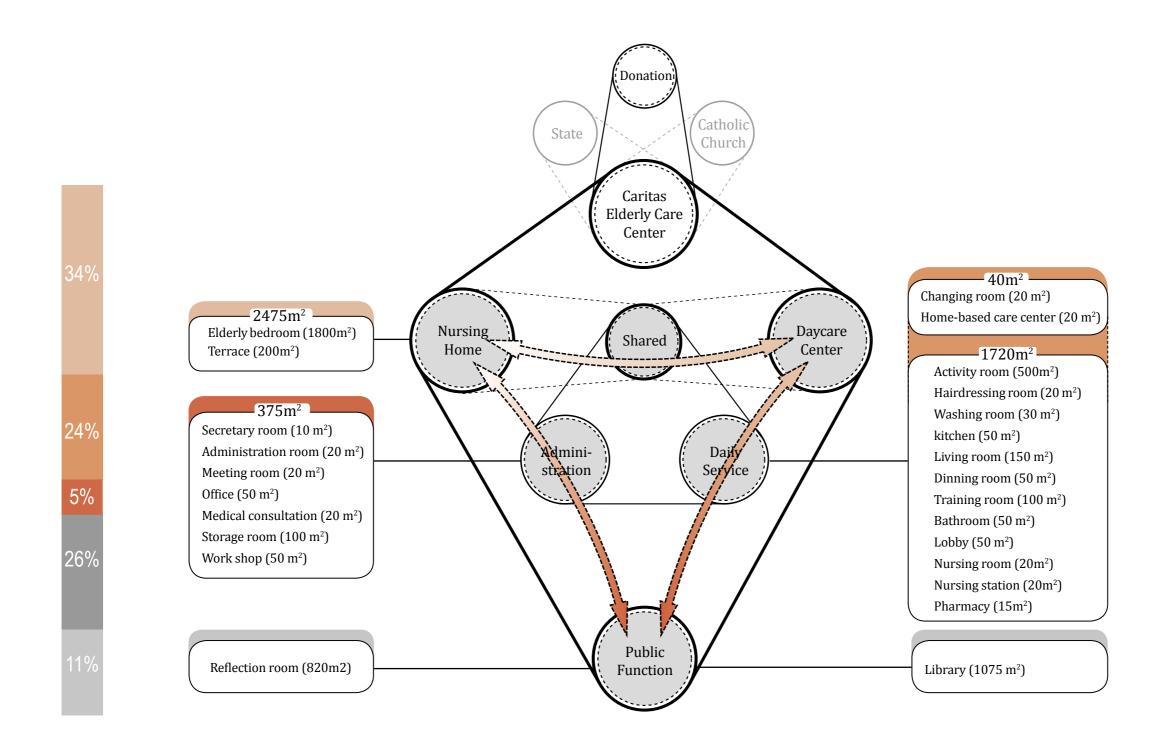


## Final Result of testing





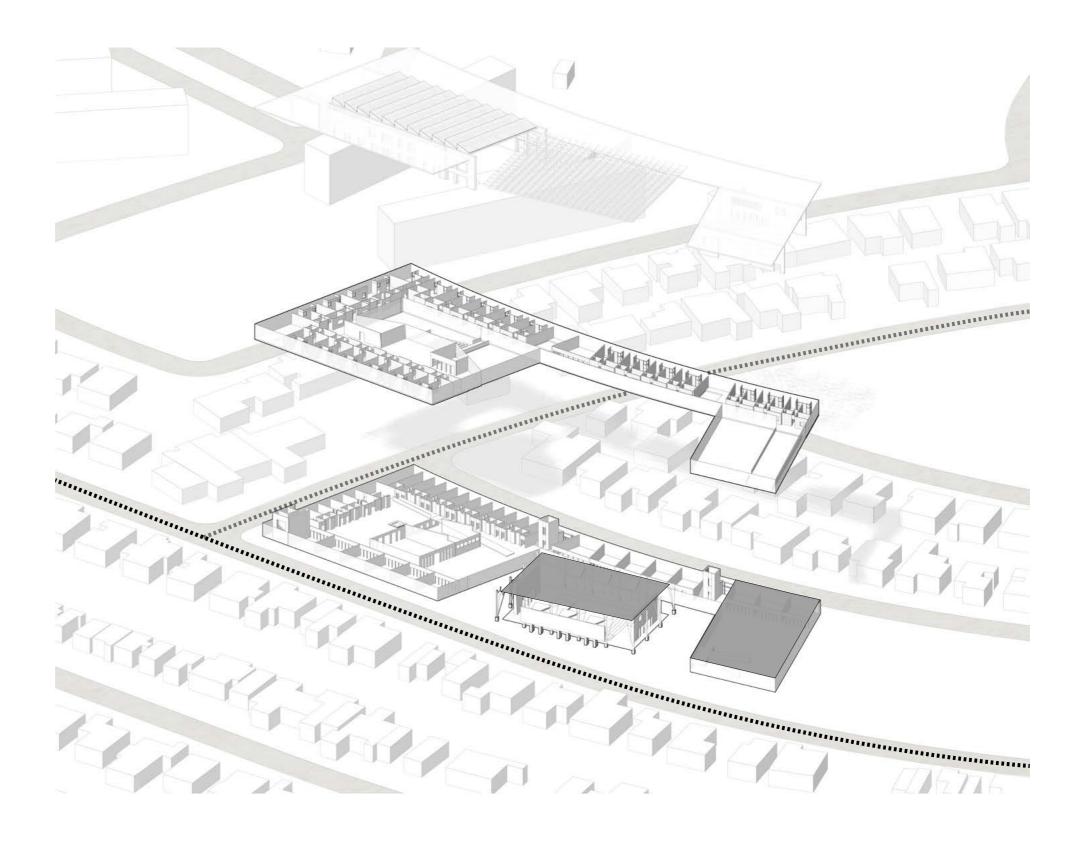
### Program



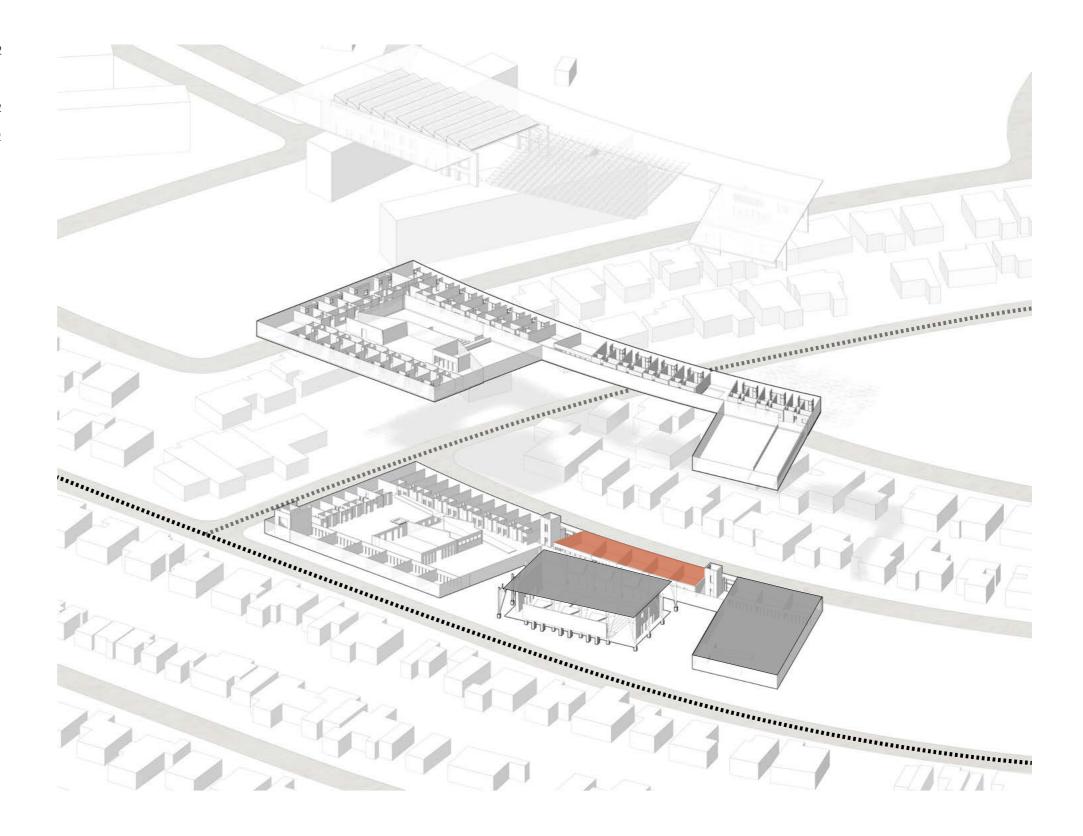
### **Function Organization**

Public Function: 1895m<sup>2</sup>
Administration: 375m<sup>2</sup>
Daycare Center: 1720m<sup>2</sup>
Nursing Homes: 2475m<sup>2</sup>

Circulation: 775m<sup>2</sup>

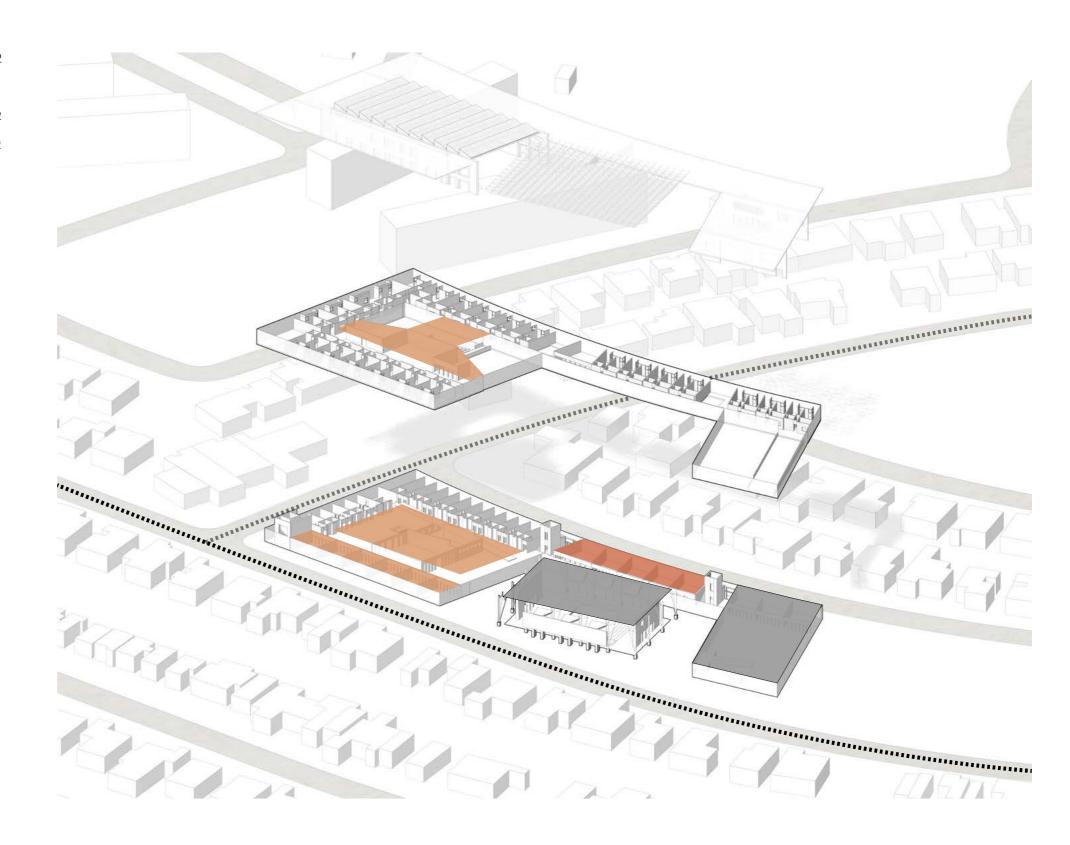


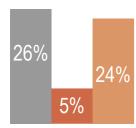
Public Function: 1895m²
 Administration: 375m²
 Daycare Center: 1720m²
 Nursing Homes: 2475m²



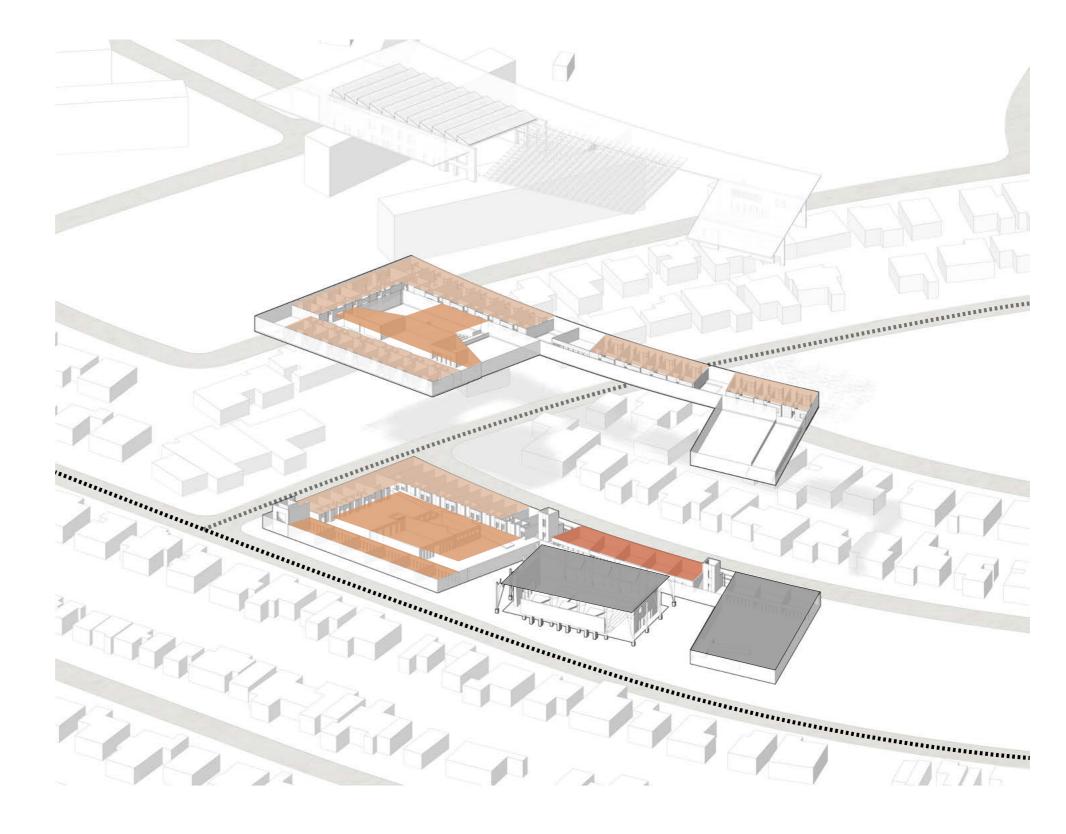
Public Function: 1895m<sup>2</sup>
Administration: 375m<sup>2</sup>
Daycare Center: 1720m<sup>2</sup>

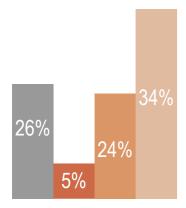
Nursing Homes : 2475m<sup>2</sup>



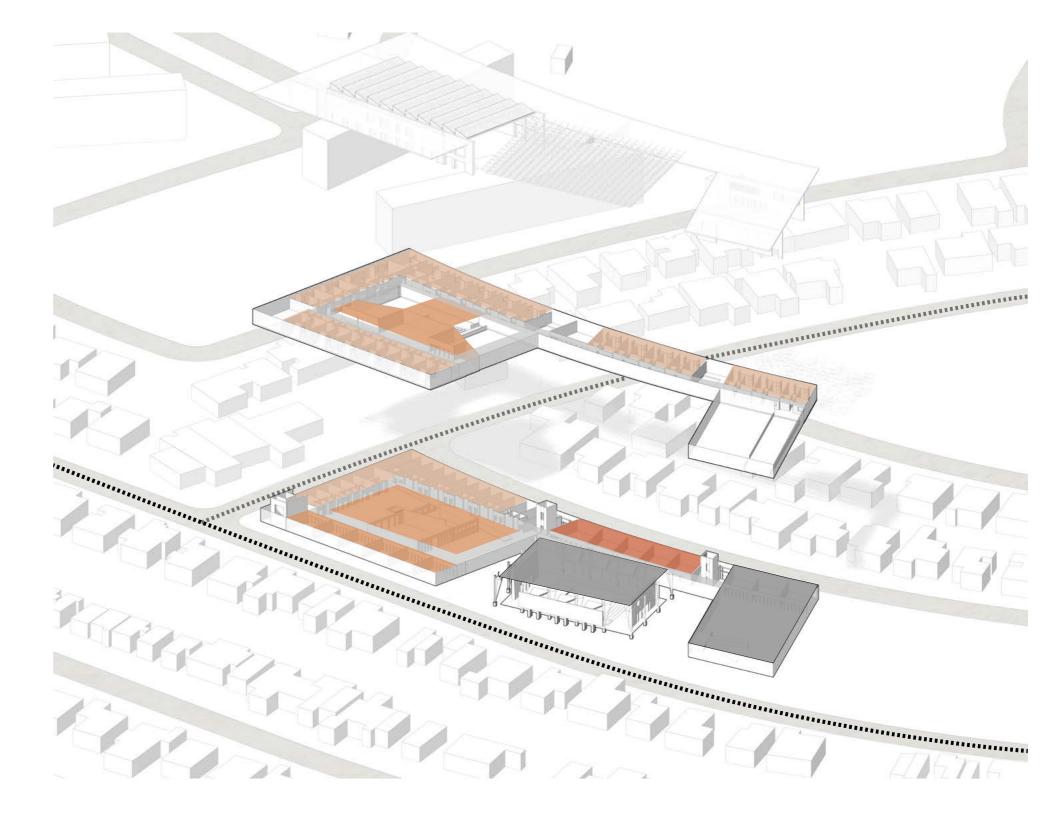


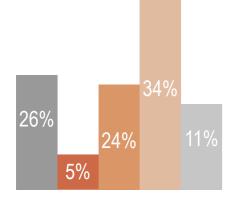
Public Function: 1895m<sup>2</sup>
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Public Function: 1895m<sup>2</sup>
Administration: 375m<sup>2</sup>
Daycare Center: 1720m<sup>2</sup>
Nursing Homes: 2475m<sup>2</sup>



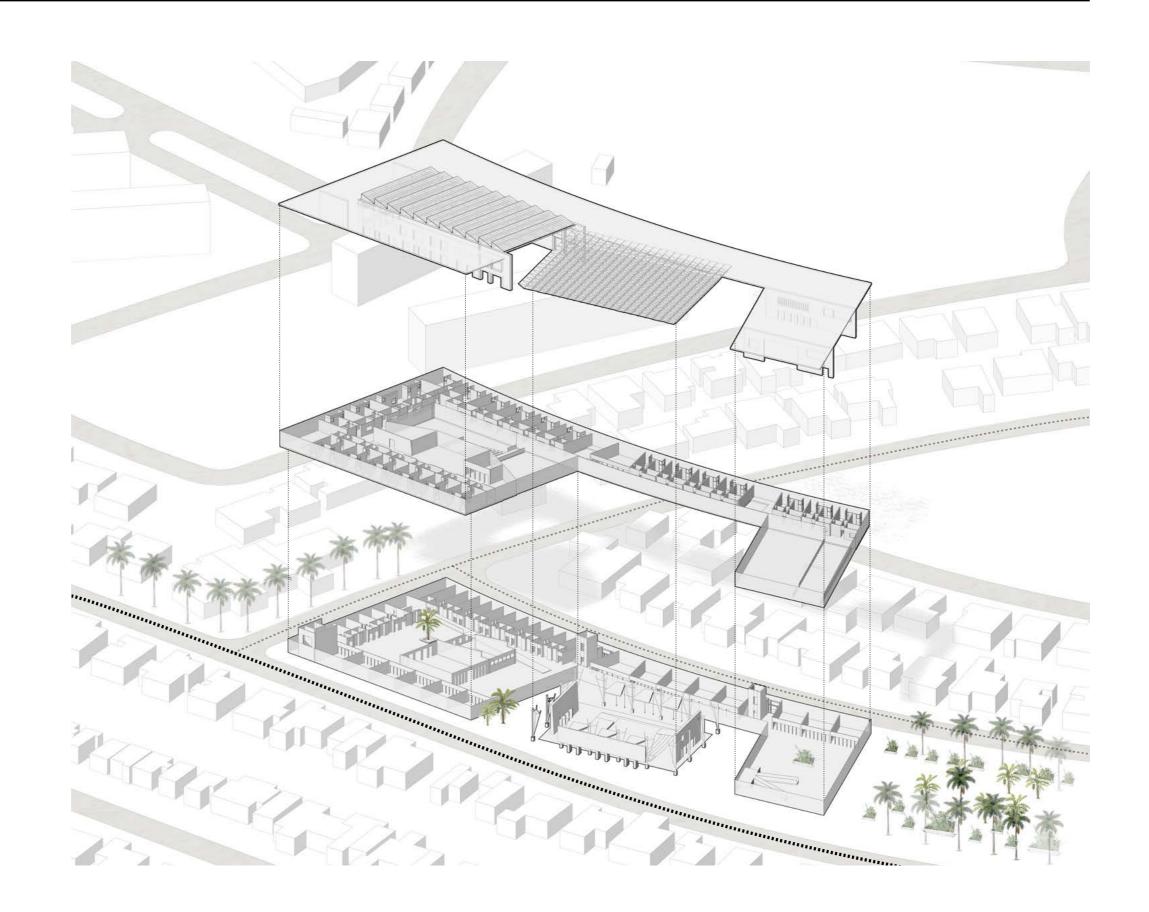


### Axonometry

Roof Level Skylight Existing shed

First Level
Nursing Home
Living Room
Open Theatre
Library for Elderly

Ground Level
Nursing Home
Administration
Public Service
Workshops
Training Rooms
Reflection Room
Public Library

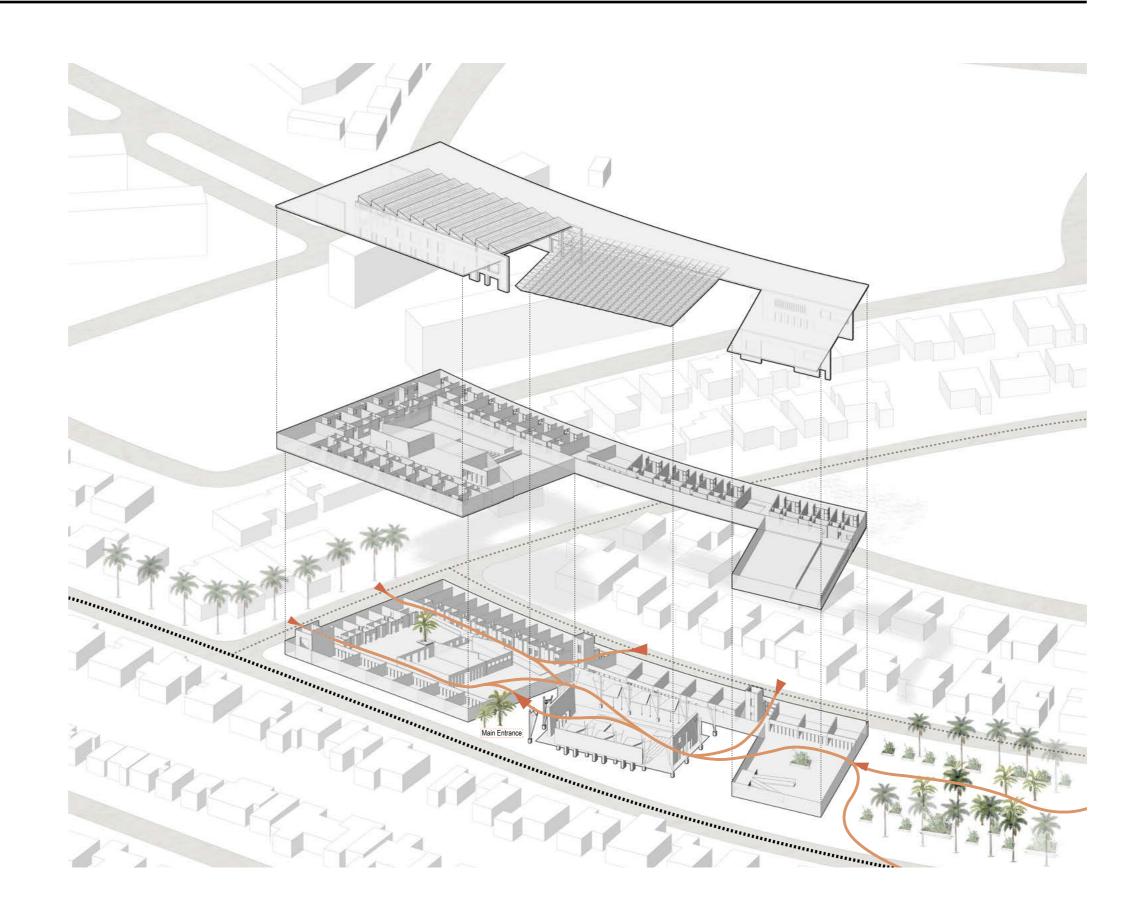


### Site Circulation

Roof Level Skylight Existing shed

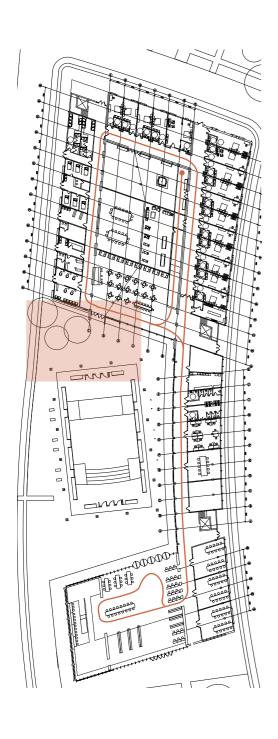
First Level
Nursing Home
Living Room
Open Theatre
Library for Elderly

Ground Level
Nursing Home
Administration
Public Service
Workshops
Training Rooms
Reflection Room
Public Library

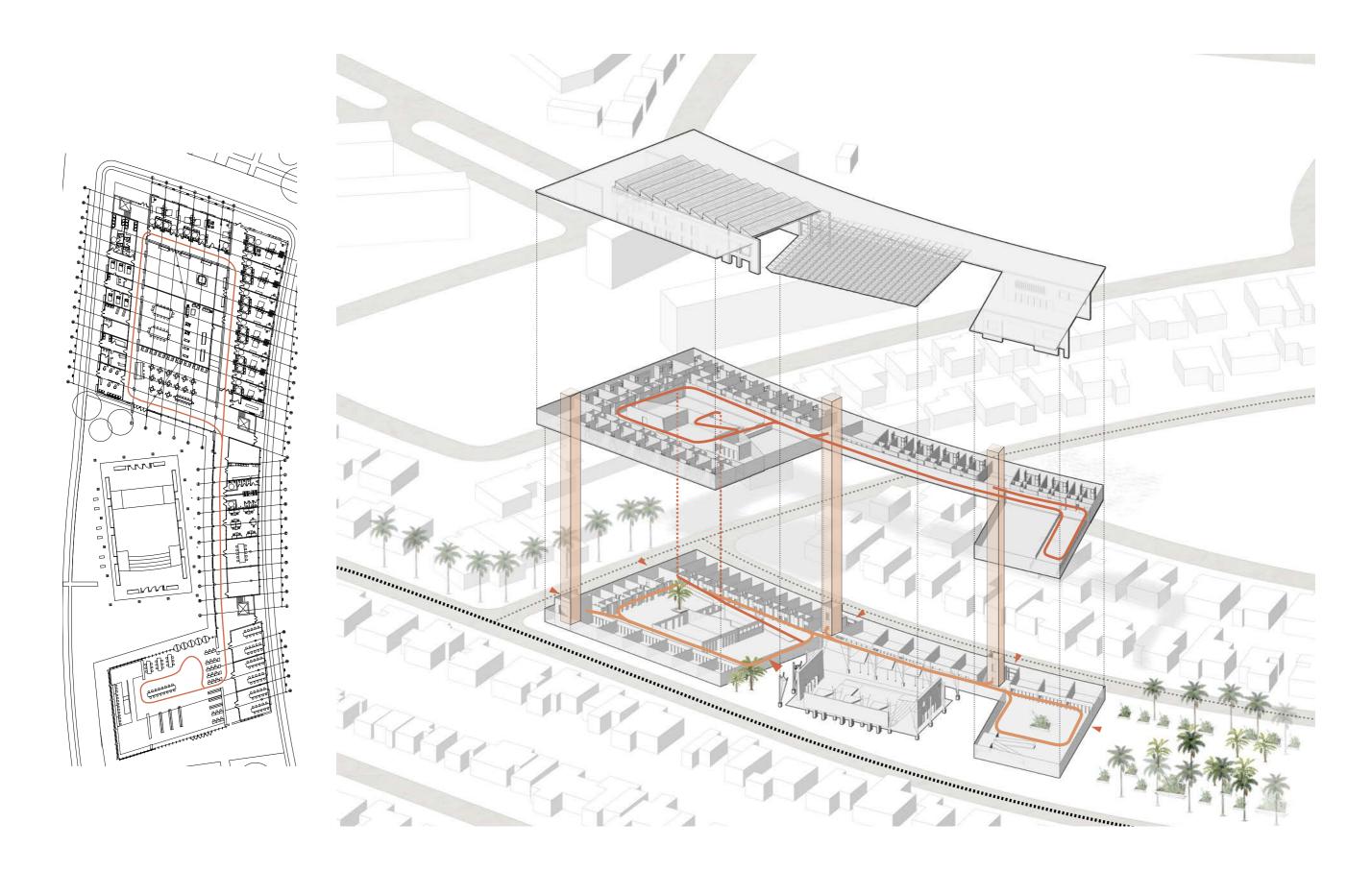


# Basic circulation

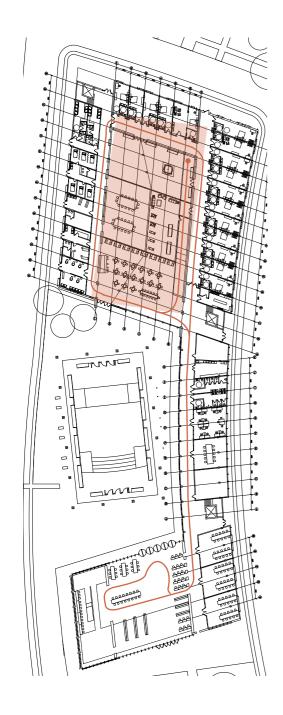
### Main Entrance



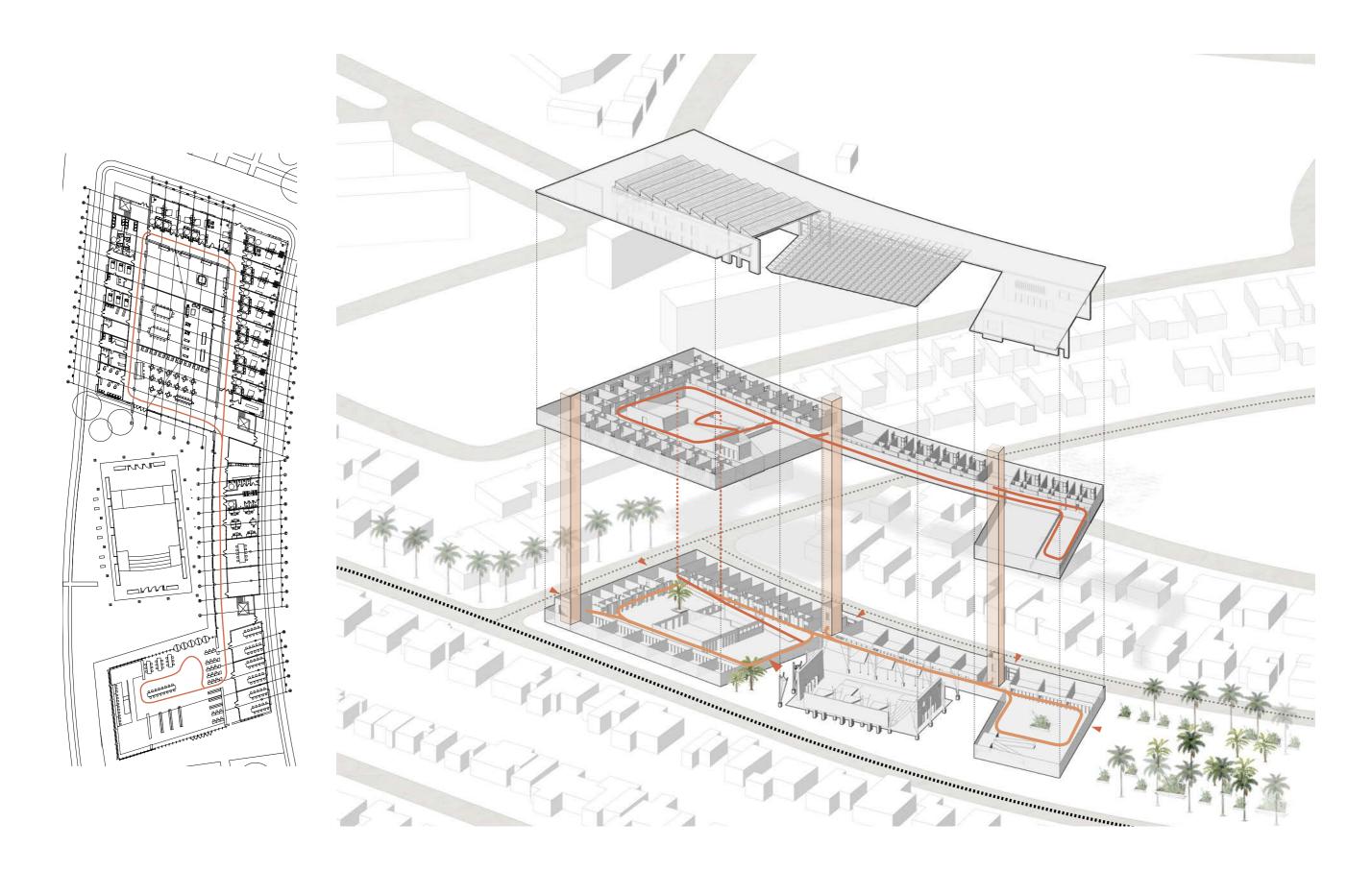




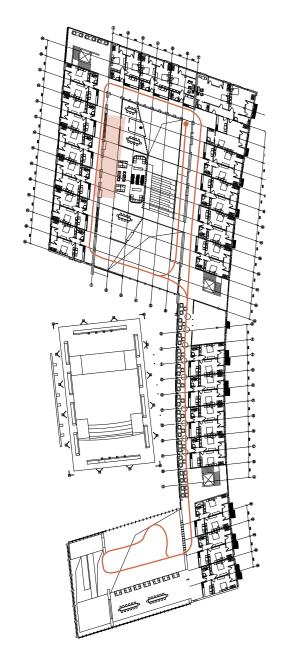
### Cental courtyard

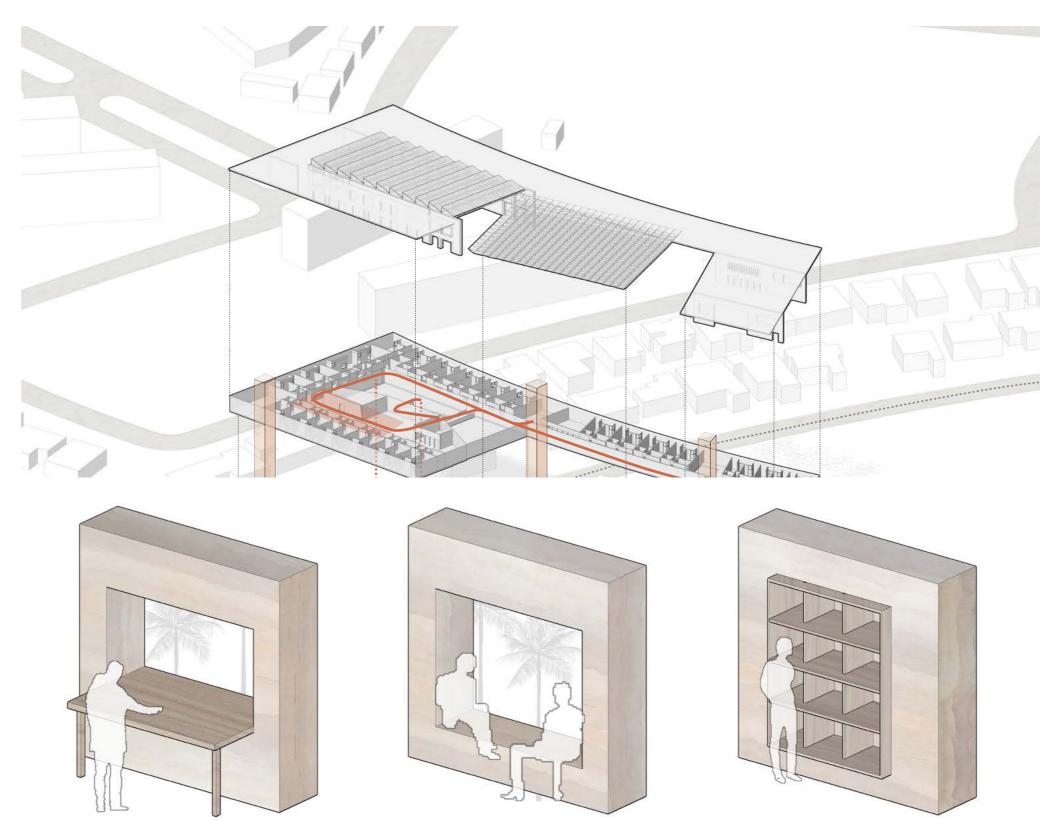


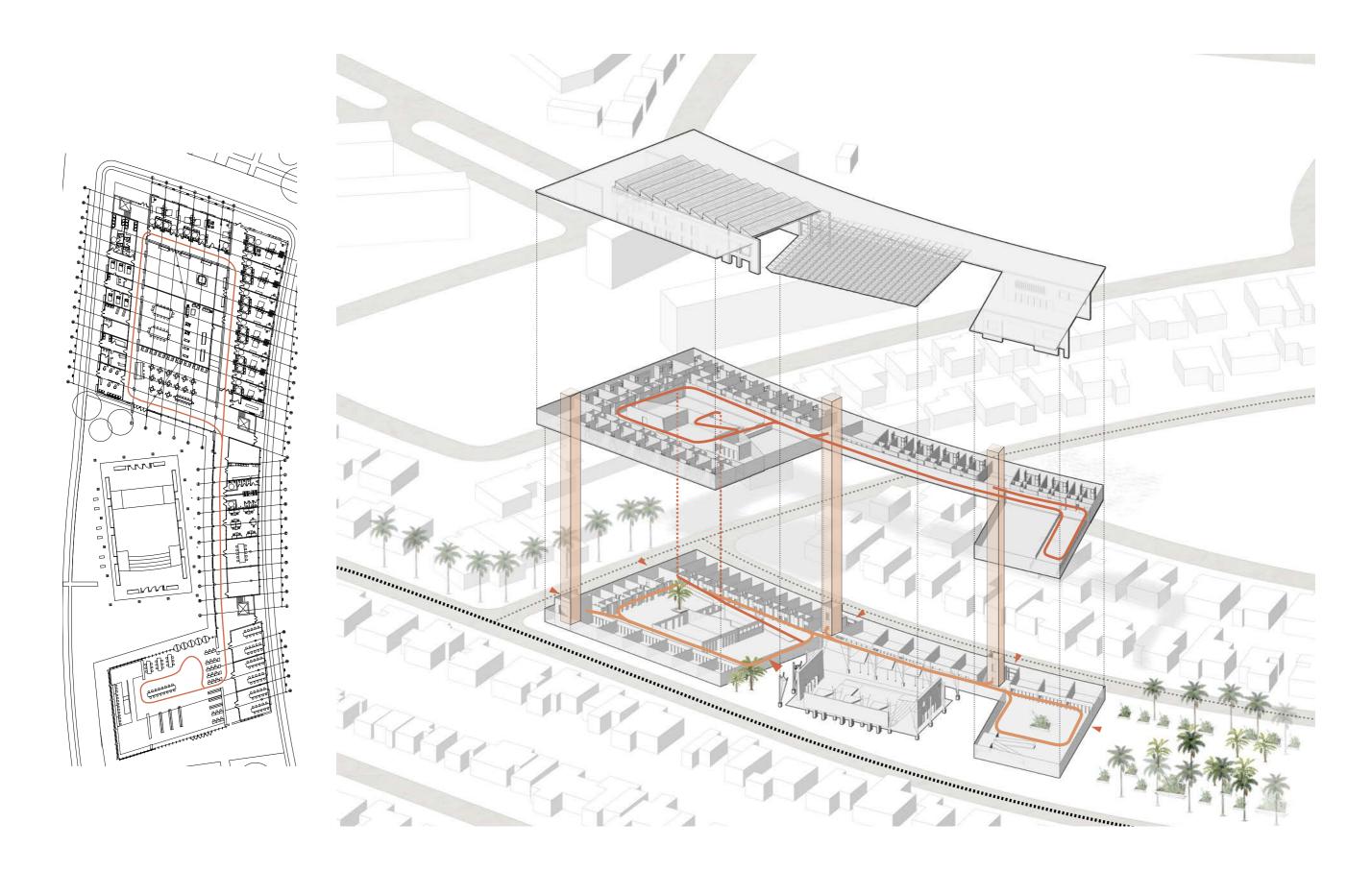




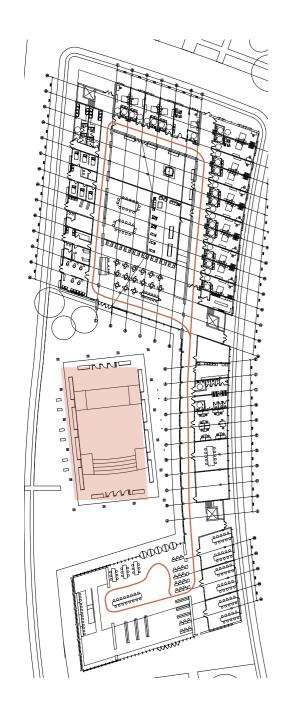
# Corridor/Wall as Furniture



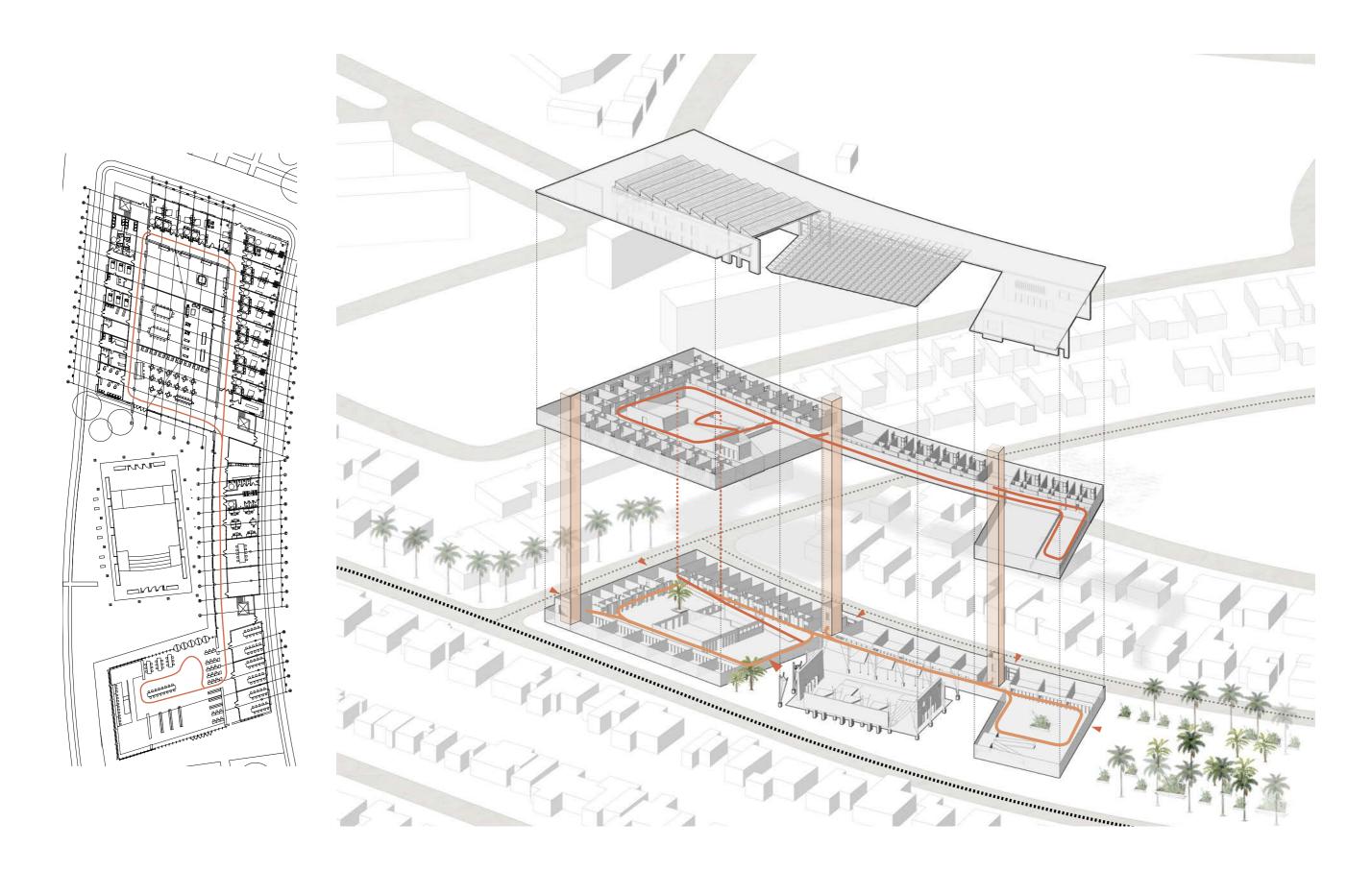




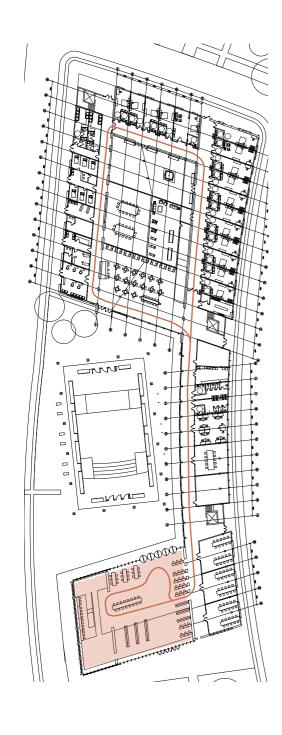
### **Reflection Room**





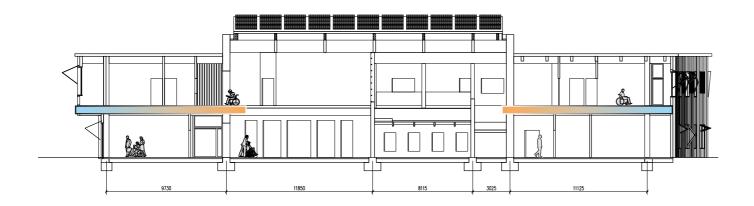


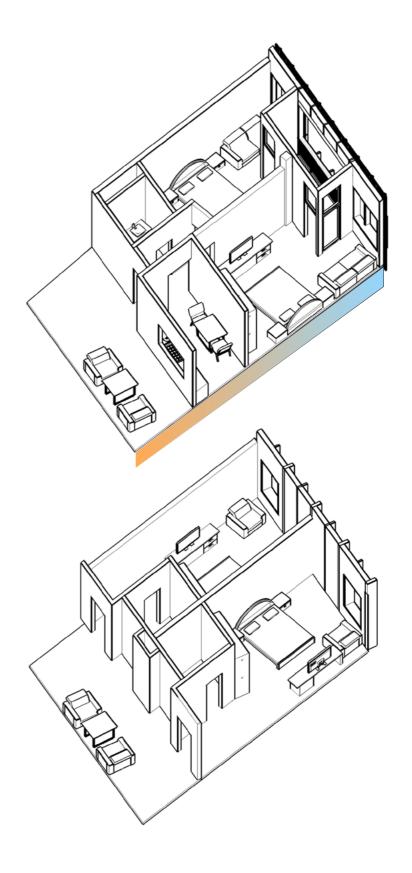
### Library



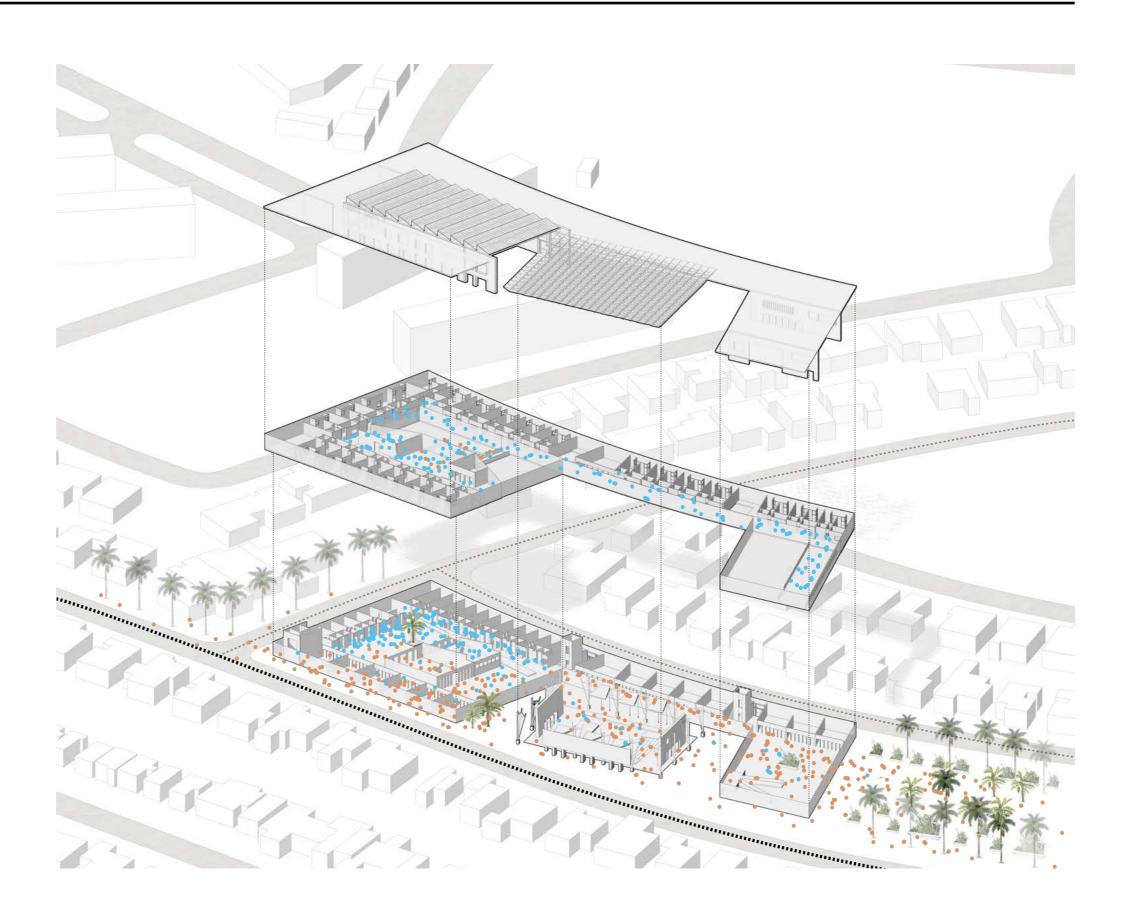


# Room unit / Corridor Hierarchy of living space

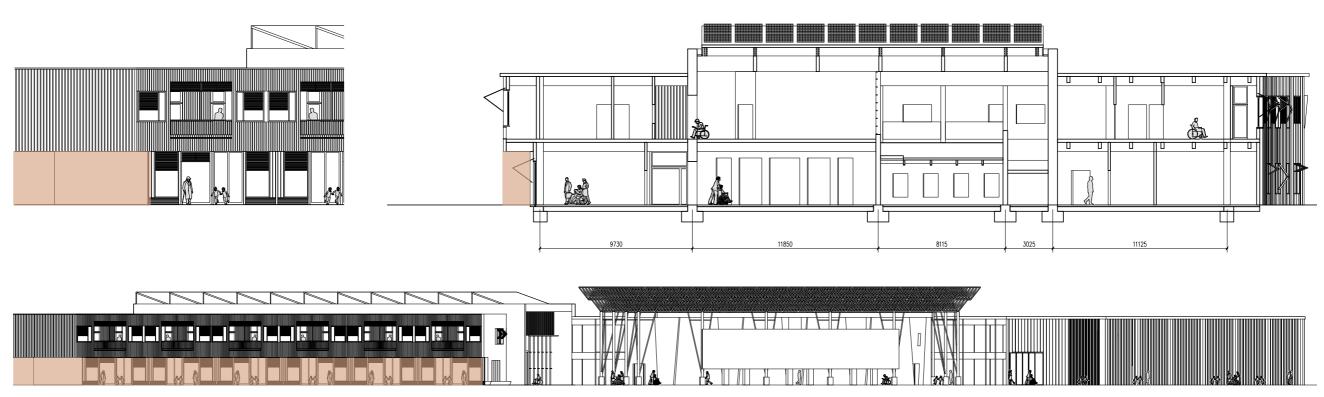




### **User Density**

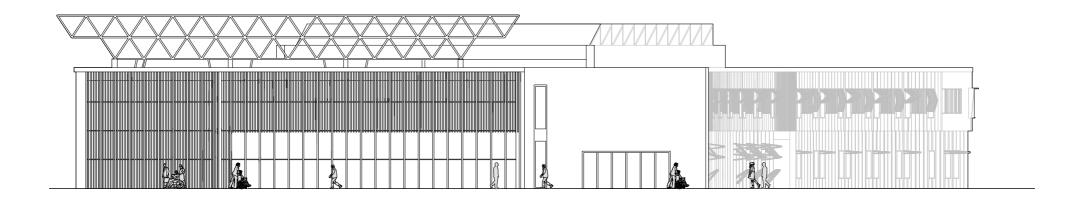


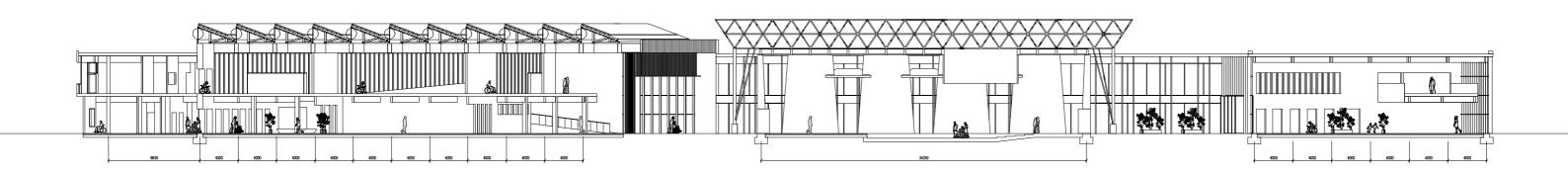
# **Cantilevering Balcony**



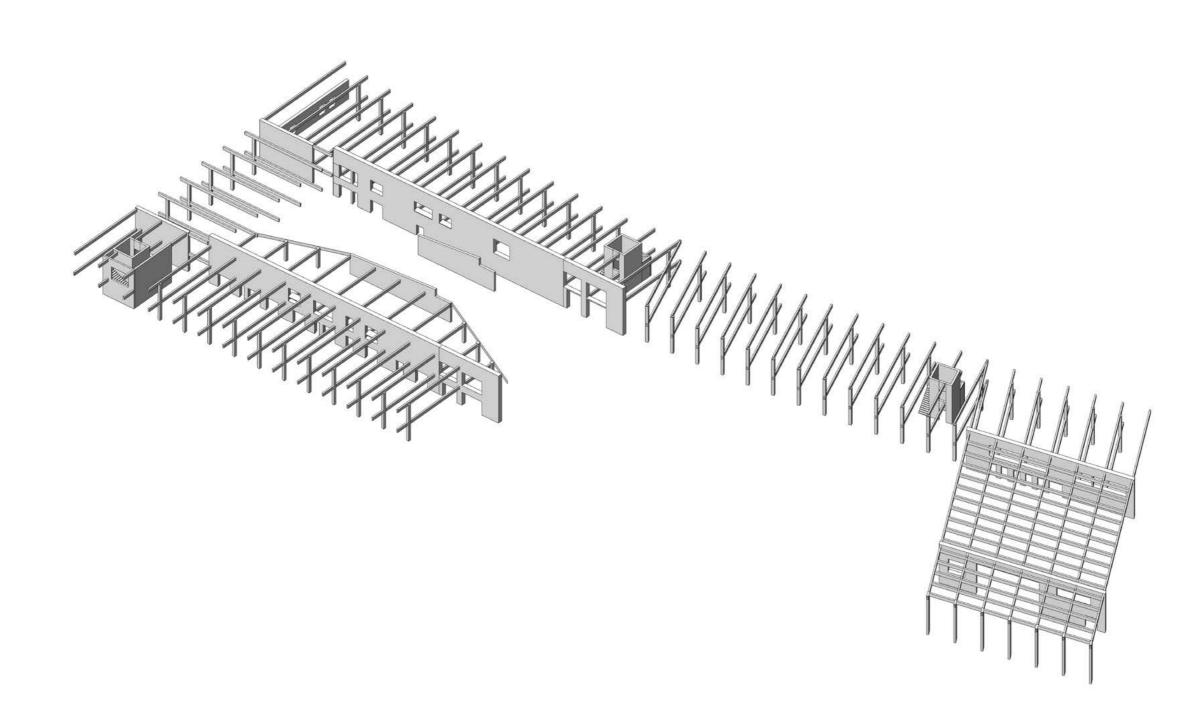


### Section/Elevation



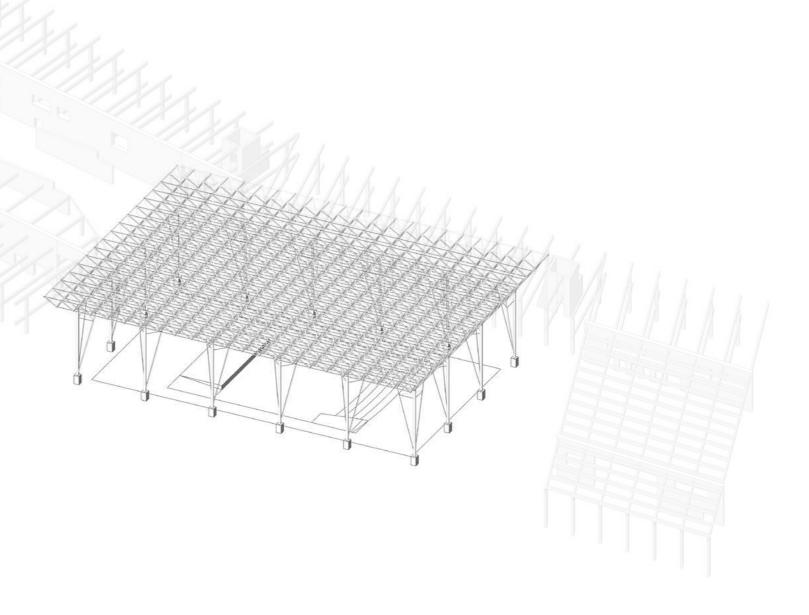


### Structure Design

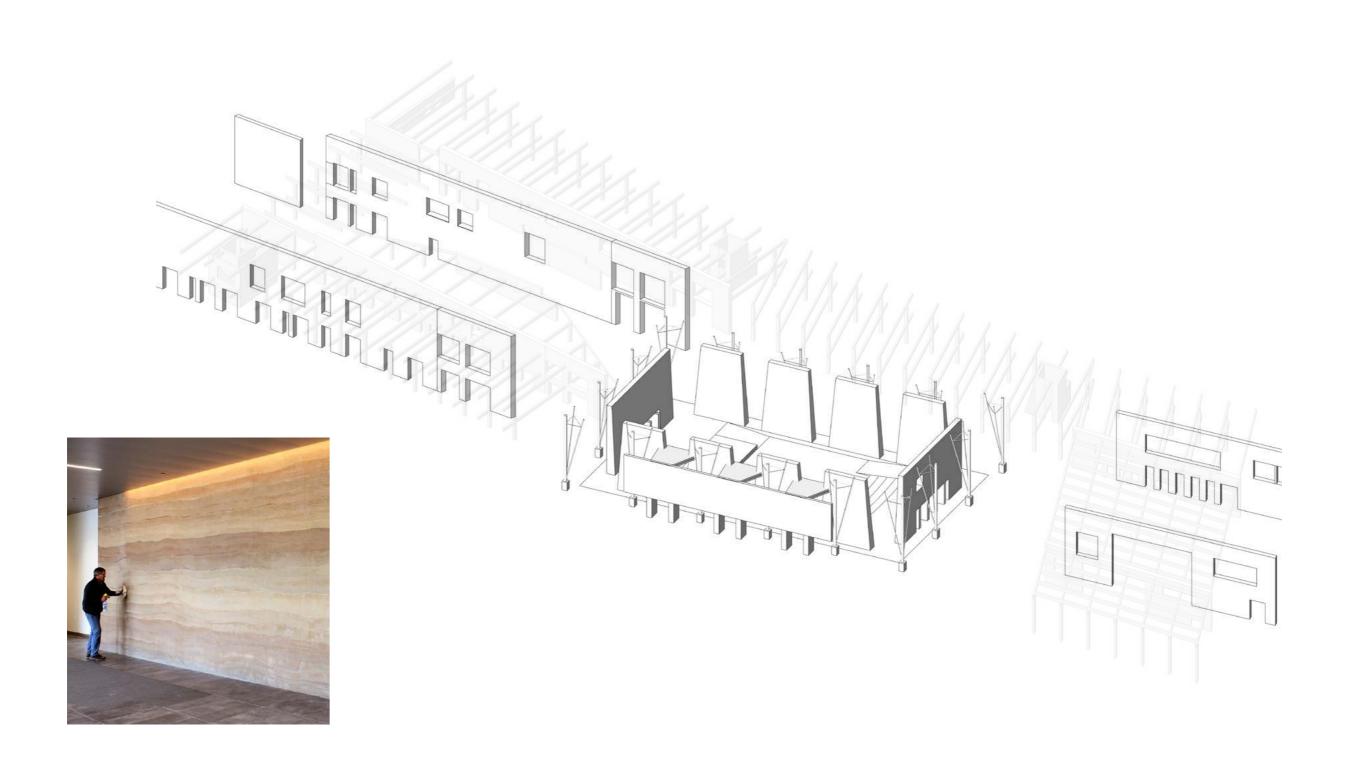


# **Existing Structure**

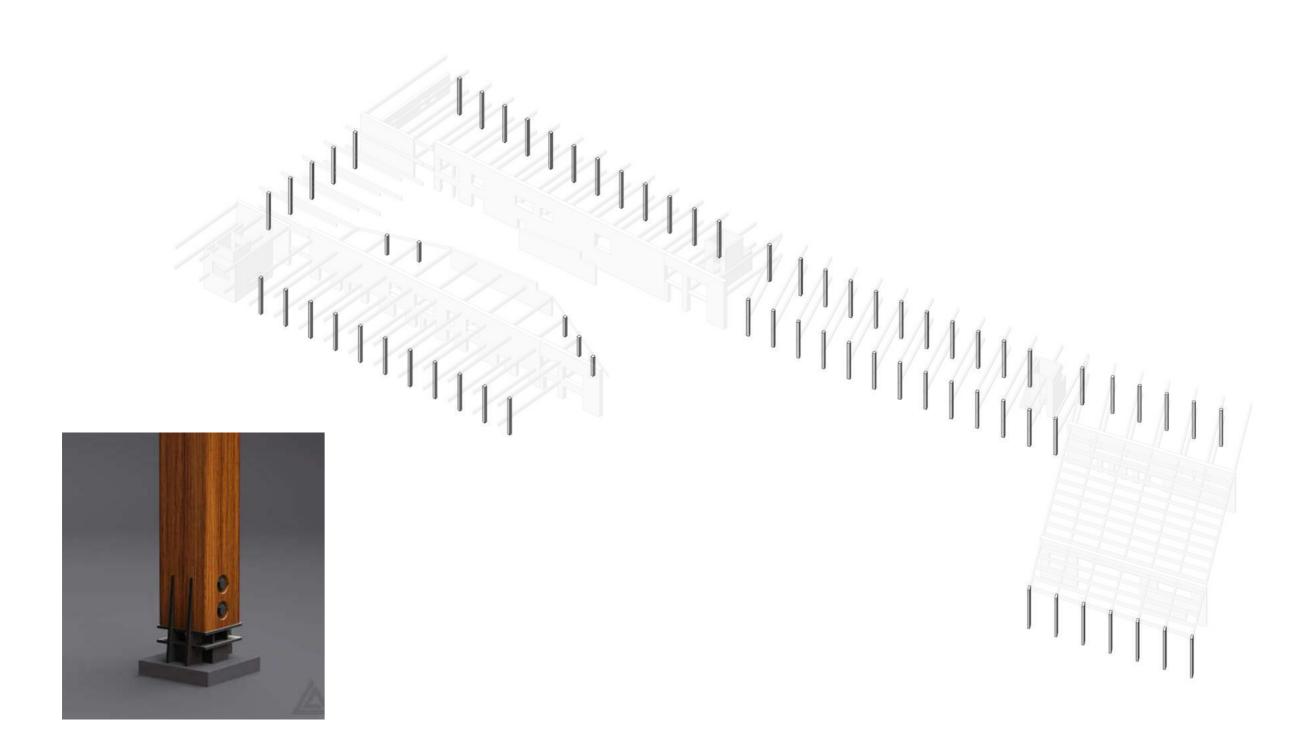




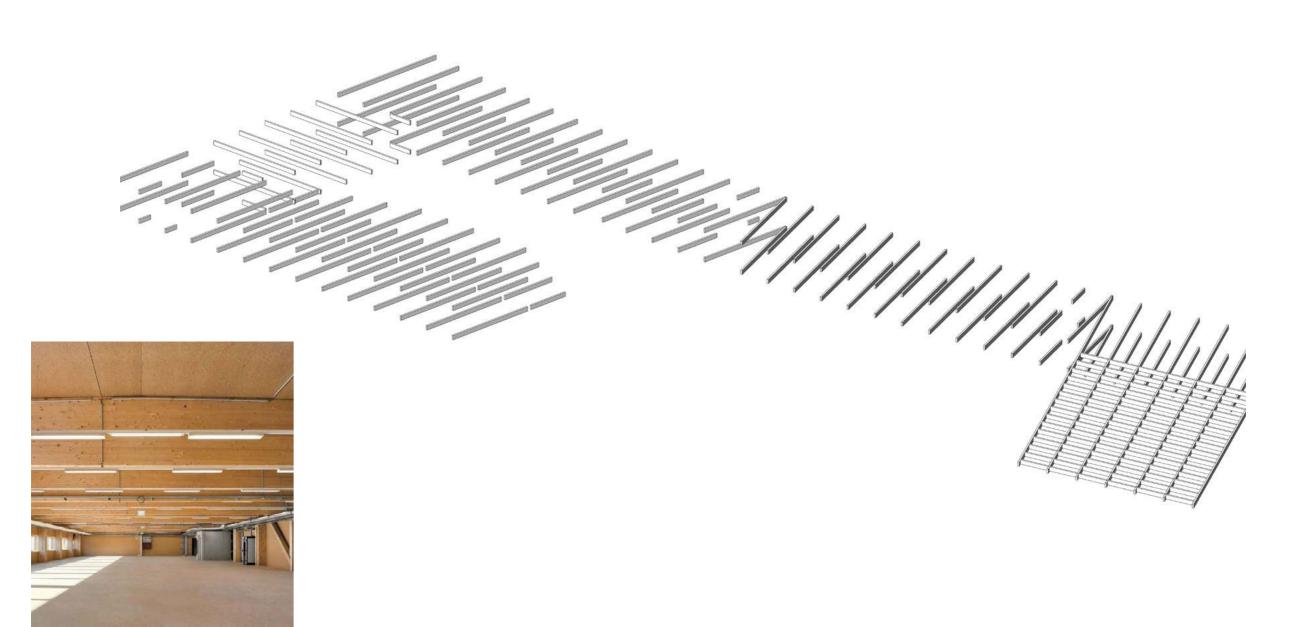
### Primary Wall Structure Rammed Earth Wall



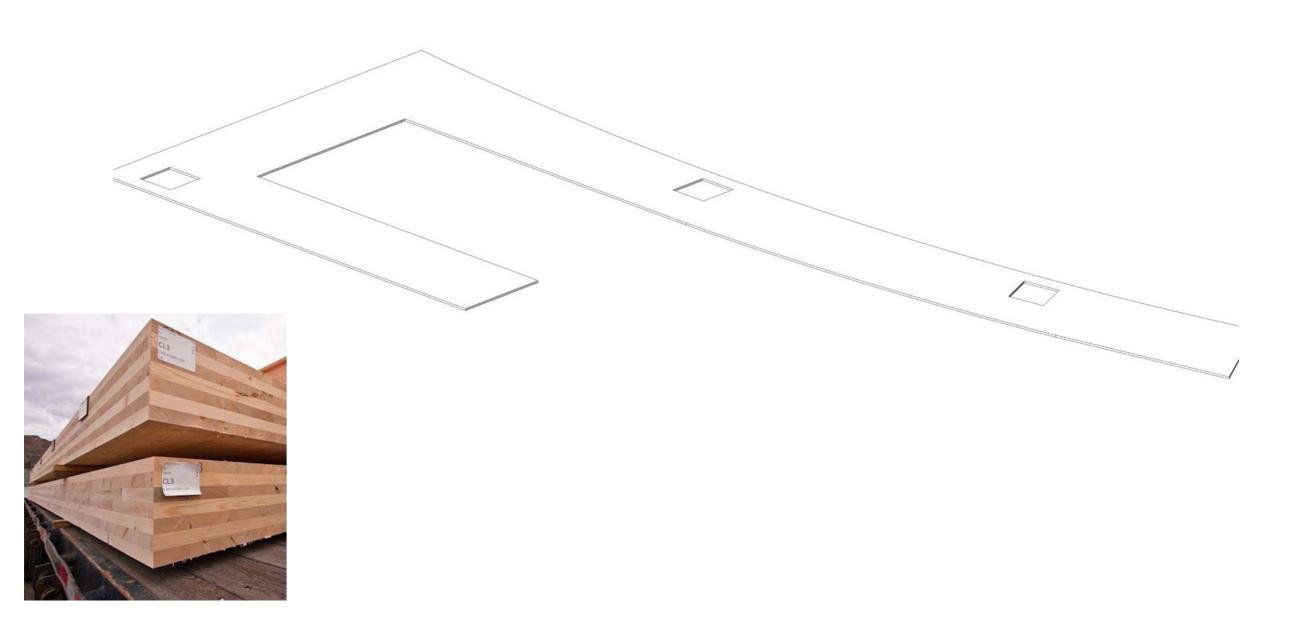
### Primary Column Structure Timber Column



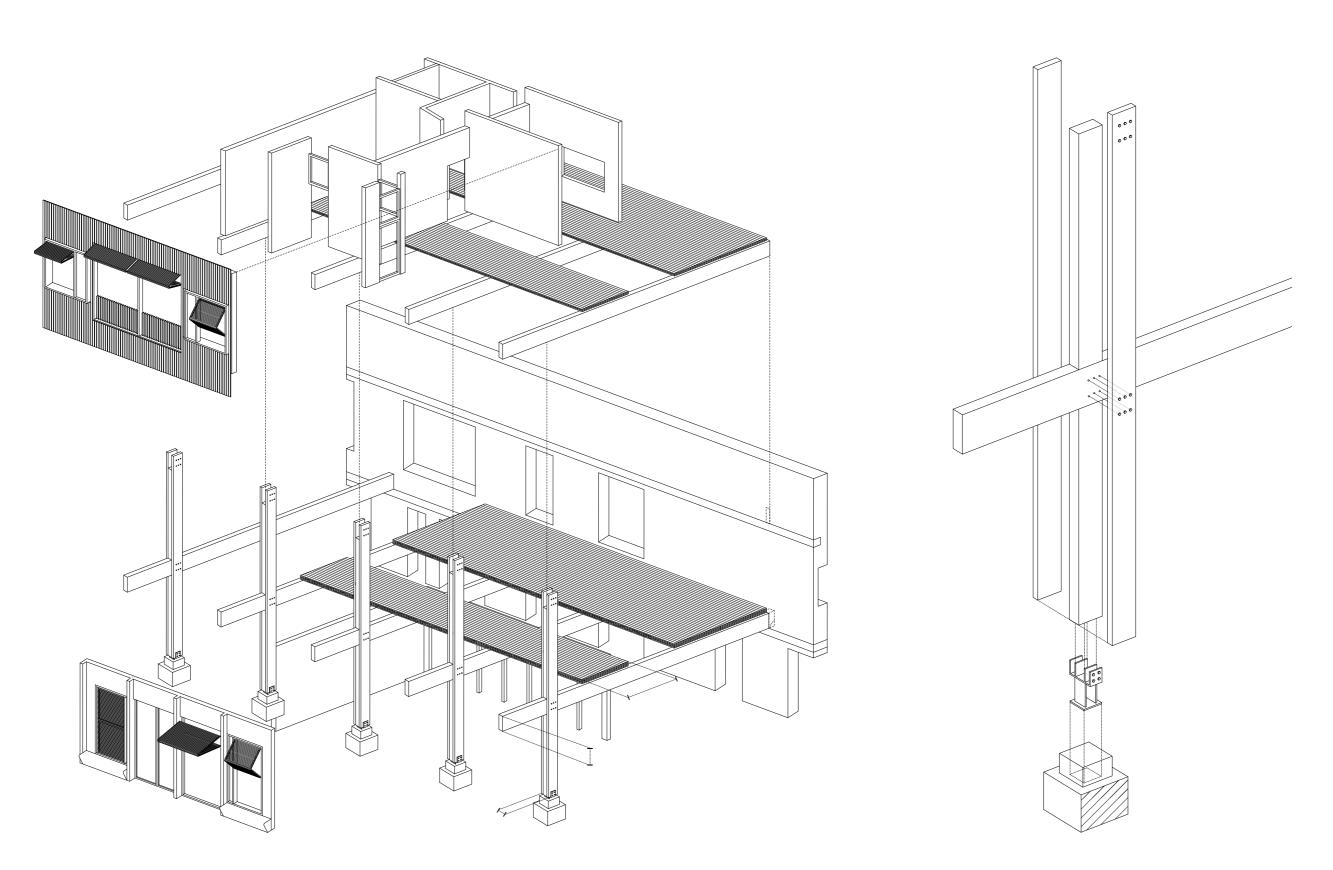
### Primary Beam Structure Timber Beam



# Secondary Floor Structure CLT Panel



# **Assambly Scheme**



# Sustainability Scheme

