Havana & Alamar
“FORUM”—Creating Centrality for Alamar Community
by Promoting Self-Employment in Alamar

Zehui Li 4511492
Tutor: Olindo Caso, Gilbert Koskamp
Complex Projects Havana, Cuba
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AR3CP010
INTRODUCTION

Introduction | General Context
Research Thesis | Research Questions
Methodology | Intervention(Role)
Central-Planning model/ Rely on USSR
Cuba Economy — After Revolution

- U.S. embargo against Cuba
Cuba lost its partner.

1991—USSR & COMECON Collapse

NOWADAYS, the traditional sugar industry, upon which the island's economy had been based for three centuries, is centered elsewhere on the island and controls some three-fourths of the export economy. But light manufacturing facilities, meat-packing plants, and chemical and pharmaceutical activities have also been maintained, with declining, albeit still significant, foreign exchanges now based on tourism, remittances from Cuban emigrants, and the sale of seafood, rum, tobacco products, and other goods.
1993—Self-employment legalized

- Economy Reforms
- Reduce state sector & increase non-state sector
The development of Self-employment

The collapse of the Soviet Union.
1993.9—Self-employment was legalized as a part of a series of liberalizations.
1993.12—70,000 Cubans had obtained licenses for self-employment.
1994.5— the number of the self-employed had reached 150,000
1995.6— the government announced the addition of 19 new occupations to the list of legal activities.
1995.6— the ban on participation of university graduates in the self-employed sector was lifted.(They are not allowed to become self-employed in their professional field)
1995.12—the number of the self-employed had reached 208,000.
1995.12—the government instituted Cuba’s first income tax in 37 years.
1996.6—the government opened 40 new activities for self-employment to 162.
1996—the government tried to create a self-employment union

2010— The end of central planning was officially announced.

The development of Self-employment

Self-Employment Trends in Cuba
(1995 - 2011)

- Self-employed, total (% of total employed)
- Self-employed, male (% of males employed)
- Self-employed, female (% of females employed)
Non-state Economy Booming

Employment in Cuba 2009-2012

- **Non-State Sector**
  - 2009: 822,900
  - 2010: 1,100,000
  - 2011: 2,000,000
  - 2012: 4,000,000

- **State Sector**
  - 2009: 4,178,100
  - 2010: 4,984,500
  - 2011: 7,774,300
  - 2012: 11,217,000

**Percentage**
- 2009: Non-State 16%, State 84%
- 2010: Non-State 16%, State 84%
- 2011: Non-State 23%, State 77%
- 2012: Non-State 25%, State 75%

**Total Employment**
- 2009: 5,072,400
- 2010: 4,984,500
- 2011: 5,010,200
- 2012: 4,902,200

**Non-state economy is growing**
Self-Employment Booming

Self employment sector is dramatically growing

<table>
<thead>
<tr>
<th>TYPE</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Employed Workers</td>
<td>143,800</td>
<td>147,400</td>
<td>391,500</td>
<td>391,500</td>
</tr>
<tr>
<td>Private Sector</td>
<td>591,300</td>
<td>589,400</td>
<td>928,500</td>
<td>1,005,300</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>231,600</td>
<td>231,600</td>
<td>231,600</td>
<td>231,600</td>
</tr>
</tbody>
</table>
Self-employment—benefits

Viable alternative for people who are wishing to improve their incomes.

Important source of tax.

Increase the flexibility of Cuban economy.

Cuban Index Of Economy Freedom
Self-employment—Problem statement

Lack of knowledge, skills, in specific fields.

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menor de 6th/ Less than 6th grade</td>
<td>1</td>
</tr>
<tr>
<td>6th grade</td>
<td>5</td>
</tr>
<tr>
<td>9th grade</td>
<td>33</td>
</tr>
<tr>
<td>12th grade</td>
<td>44</td>
</tr>
<tr>
<td>Tecnico Medio/ Vocational/ Technical school</td>
<td>10</td>
</tr>
<tr>
<td>Universitario/ University</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Statistics from the Provincial Department of Labor and Social Security, Havana.
Self-employment—Problem statement

Lack of working and employment experience.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers with no employment affiliation</td>
<td>80,660</td>
</tr>
<tr>
<td>Workers also hold state sector job</td>
<td>19,862</td>
</tr>
<tr>
<td>Retirees</td>
<td>15,929</td>
</tr>
</tbody>
</table>

Source: Statistics from CubaDebate, 2014
Self-employment—Problem statement

The Most Common Occupations For Self-Employment

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Preparation &amp; Sale</td>
<td>57,776</td>
</tr>
<tr>
<td>Passenger transportation</td>
<td>47,733</td>
</tr>
<tr>
<td>Residential renting &amp; leasing service</td>
<td>29,952</td>
</tr>
<tr>
<td>Contracted workers</td>
<td>91,978</td>
</tr>
</tbody>
</table>

Small scale of micro-entrepreneurs
Self-employment—Problem statement

Cuban Bank to Offer Loans to Self-employed Without Collateral
ESCAMBRAY
Wednesday, 2 September, 2015.

The emerging Cuban self-employed sector will have access to loans up to 10 thousand Cuban pesos to be granted by the Banco Popular de Ahorro (BPA).

Lack of financing and policy support
Self-employment—Problem statement

The youth of self-employed Cubans is probably a function of the physically demanding nature of the typical self-employed occupation. While not every occupation is as grueling as that of the bicycle-taxi

Lack of public infrastructure and public space

However, a group of economists, acting under the auspices of the Catholic Church, had organized regular meetings of the local self-employed. According to one of the founding economists, the meetings were designed to “offer the self-employed the space to reflect upon their situation. We discuss new regulations, the tax system, and answer any questions they have.” She told me that the state prohibits such meetings, but that the Church offers protection from the authorities. In the Cuban Catholic Church-sponsored magazine, *Virtud*, the group publishes occasional articles directed to the self-employed to explain regulations and the tax code.

The Self-Employed in Cuba: A Street Level View

autonomy and ability to act on social issues. By forging ties with the self-employed, two forces for whom political change would be clearly beneficial are united. Their union could have important ramifications in the near term for the evolution of the Cuban political system.

Political and Macroeconomic Effects

Self-employment has clearly contributed to the recovery of the Cuban economy, but whether or not it is indispensable is not so clear. The government, in an unprecedented admission that the state could not provide work for all its citizens, has announced that employment is no longer a function of the blue-sky view.
Conclusion

Self-employment has the great potential to be the important force of Cuban economy
—To be improved and developed further
How does Alamar realize the centrality (functionally and socially) today in Cuban context?

What does the centrality of Alamar mean for the city of Havana?
Economic and Social Effects

Self-employment leads to the revolution.
Research Thesis

“FORUM”

Creating Centrality for Alamar Community

By Promoting Self-Employment in Alamar
Research Questions

- How does Alamar community realize its unexplored centrality with self-employment, as a response to its homogeneity and fragmentation, in order to provide itself the strong basis for future development?

- How does Alamar position itself and define its future in today’s Cuban context? (Urban)

- By what means can the Alamar community obtain a strong and well-functioned community public realm, as a starting point of the further development of the whole Area? (Architecture)

- How does the project react to the Cuban context, such as local material, construction method, and social involvement, etc? and create public space of high-quality for Alamar people? (Technology and Atmosphere)
Methodology

**RESEARCH**

- **Diachronic**
  - Past
- **Synchronic**
  - Politics
  - Economy
  - Culture
  - Society
  - Urban Space

**DESIGN**

- **Strategy**
- **Reflection**

- **Urban**
  - Potential
  - Program
  - Space
  - Materialization

- **Building**

**CUBA**

- Europe
- Latin-America

**WORLD**

**Manifesto**
Relation between Self-employment and Centrality in Alamar.

- **Self-Employment Center**
  - Improvement of public space
  - Improvement of infrastructure
  - Integration of knowledge, skills, experience

- **Centrality**
  - Integration of Social function
  - Update/creating of public domain
  - Increase density
  - Promote economy & wealth

- Provide starting point for future development
RESEARCH & STUDY

Problem Statement
Alamar Study | Typology Study | Program Study
Site Analysis
Conclusion | Ambition
Wide-spreading, Mono-Functional Homogeneous, Fragmented

Alamar—The bedroom city.
Lack of Hierarchy

The open space misses a hierarchy that adds to a sense of loss of orientation.

Problem Statement

Plan El Olympo under construction
Lack of Public Space and Facility

Abandoned Open Theatre
Casa de la Cultura Habana
Amphitheater Alamar
Enguayabera

Mal-function of public buildings
Employment—Small Scale Economy

Informal stalls and kiosks

Problem Statement
Mono-functional Approach
Bedroom Community

Hybrid way of living is missing in Alamar.
Problem Statement

Hardware  Software
Site Defining

Site Analysis

- Site Defining
- Crossing Area of two axis
- COASTAL AREA
- GREEN AXIS
- CONNECTING BOULEVARD
- AMUSEMENT PARK
- ENTRANCE POINT
- TO TOURISTIC BEACH
Site Area
Bonding Point

Transfer point to other projects

Site Analysis
RESEARCH & STUDY

INTRODUCTION

BUILDING DESIGN
Urban Condition

Anchor Buildings

Public land-use
Conclusion

React to urban condition
Provide public space on urban level
Typology & Reference

SH2-Sundbyoster Hall II

Seattle Library

JÅTTÅ VOCATIONAL SCHOOL IN STAVANGER

Gennevilliers Training Center
BUILDING DESIGN

Design Ambition| Approach
Urban Strategy| Masterplan
Building Strategy| Concept| Program
Building Technology| Materialization| Sustainability
THE CONCEPT
Approach—Mixed-use Development

LIVING + LEARNING + SELF-EMPLOYING

Housing + Library + Commerce

Centrality & Hybrid—Self-Employment Complex
INTRODUCTION

RESEARCH & STUDY

BUILDING DESIGN

Blending of Function

Pilot Building

Density

Centrality & Hybrid— Self-Employment Complex
Library & Self-Employment Learning Centre
- Information & Learning space
- Place for working/renting
- Place for Career Consultant & Support

Employment/Commerce-Retails
- Provide place for self-employment in Alamar
- Entrepreneurship

Housing—Living-Working Units
- Ensure 24/7
- Density
- Introduce new types of Housing & Living condition

Public Space—Urban Quality
Target Users

- Self employers
- Technicians
- SE Learning Center
- SE Tech Support
- SE Learning Area
- SE support institutions

Housing
Library
Alamar People
Commerce Retails

Centrality & Hybrid— Self-Employment Complex
Urban Strategy
Urban Strategy
Cross-Shaped Public Realm & Infrastructure Spine
Masterplan

infrastructure belt + pedestrian system.
“+” Space as main Public Spine

Connecting+Defining Space

The hierarchy of two axis

Green Corridor
Promenade/Greenery
Cultural/Public/Urban
Culture Corridor
“Culture” Passage — Urban Living Room
“Gallery” Space—Space in between

Canopy—Protected from sunshine and rainwater

Exterior & Interior Space

Bridging—Connecting & Communicating Space
"Green" Passage—green belt

permeable pavement
Building Scheme & Program

Housing Tower with roof Garden
Duplex Housing with roof Garden
Community Library
Self-employment Learning Centre
Retails & Commerce

Level 0: Retails
Level 1: Self Employment + Library
Level 2: Duplex Housing
Residential Tower
Public Space—“+” Gallery

Lv.0 Retails
Lv.1 Self Employment + Library
Lv.2 Duplex Housing
Residential Tower

INTRODUCTION
RESEARCH & STUDY
BUILDING DESIGN
## Programme

### Library

<table>
<thead>
<tr>
<th>Program</th>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book Collection</td>
<td>1,200m²</td>
<td>21%</td>
</tr>
<tr>
<td>Reading Unit</td>
<td>1,200m²</td>
<td>21%</td>
</tr>
<tr>
<td>E-Reading Sector</td>
<td>100m²</td>
<td>14%</td>
</tr>
<tr>
<td>Computer Resources</td>
<td>700m²</td>
<td></td>
</tr>
<tr>
<td>Administration &amp; Logistics</td>
<td>200m²</td>
<td>3%</td>
</tr>
<tr>
<td>Multi-function</td>
<td>500m²</td>
<td>9%</td>
</tr>
<tr>
<td>Service Room</td>
<td>100m²</td>
<td>3%</td>
</tr>
<tr>
<td>Exhibition Gallery</td>
<td>100m²</td>
<td>2%</td>
</tr>
<tr>
<td>Media Centre</td>
<td>350m²</td>
<td>15%</td>
</tr>
<tr>
<td>Auditorium</td>
<td>500m²</td>
<td></td>
</tr>
<tr>
<td>Archive</td>
<td>300m²</td>
<td>5%</td>
</tr>
<tr>
<td>Children's Area</td>
<td>150m²</td>
<td>3%</td>
</tr>
<tr>
<td>Teen's Area</td>
<td>300m²</td>
<td>5%</td>
</tr>
<tr>
<td>Library</td>
<td>5,800m²</td>
<td></td>
</tr>
</tbody>
</table>

### Self-Employment Learning Centre

<table>
<thead>
<tr>
<th>Program</th>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Consultant</td>
<td>150m²</td>
<td></td>
</tr>
<tr>
<td>Tech. Support</td>
<td>200m²</td>
<td></td>
</tr>
<tr>
<td>Organization Office</td>
<td>150m²</td>
<td></td>
</tr>
<tr>
<td>Financial &amp; Policy Support</td>
<td>150m²</td>
<td></td>
</tr>
<tr>
<td>Self-Employment Lecture Room</td>
<td>150m²</td>
<td></td>
</tr>
<tr>
<td>Self-Employment Learning Room</td>
<td>400m²</td>
<td></td>
</tr>
<tr>
<td>Collective Space</td>
<td>300m²</td>
<td></td>
</tr>
<tr>
<td>Studio &amp; Office</td>
<td>500m²</td>
<td></td>
</tr>
<tr>
<td>Self-Employment Learning Centre</td>
<td>2,000m²</td>
<td></td>
</tr>
</tbody>
</table>

### Commerce

<table>
<thead>
<tr>
<th>Program</th>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Retail</td>
<td>5,000m²</td>
<td>96.15%</td>
</tr>
<tr>
<td>Restaurant &amp; Bar</td>
<td>200m²</td>
<td>3.85%</td>
</tr>
<tr>
<td>Commerce</td>
<td>5,200m²</td>
<td></td>
</tr>
</tbody>
</table>

### Dwelling

<table>
<thead>
<tr>
<th>Program</th>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duplex-Living &amp; Working Units</td>
<td>1,700m²</td>
<td>15%</td>
</tr>
<tr>
<td>Tower-Living &amp; Working Units</td>
<td>6,600m²</td>
<td>56%</td>
</tr>
<tr>
<td>Roof Terrace &amp; Garden</td>
<td>2,500m²</td>
<td>21%</td>
</tr>
<tr>
<td>Daycare</td>
<td>900m²</td>
<td>8%</td>
</tr>
<tr>
<td>Dwelling</td>
<td>11,700m²</td>
<td></td>
</tr>
</tbody>
</table>

### Basement-Logistics & Storage

<table>
<thead>
<tr>
<th>Program</th>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>3,500m²</td>
<td>60%</td>
</tr>
<tr>
<td>Parking</td>
<td>1,600m²</td>
<td>28%</td>
</tr>
<tr>
<td>Service</td>
<td>700m²</td>
<td>12%</td>
</tr>
<tr>
<td>Basement</td>
<td>5,800m²</td>
<td></td>
</tr>
</tbody>
</table>

In total-30500m²  (24700m² without Basement)
Building Hierarchy—Plan 0

Ground Floor—Retails & Commerce
“Green” Corridor—green belt

The extension of green belt.
Building Hierarchy
—Plan +1

Floor +1 — Self Employment Center & Community Library
INTRODUCTION

RESEARCH & STUDY

BUILDING DESIGN

Floor +1 — Self Employment Center & Community Library

Self-Employment Support
Institution & Organization

Self-Employment Collective Learning Area

Self-Employment Tech Support & Consultancy

Public Area Of Library

Collective Learning Area

Self-Employment Learning Centre
Building Hierarchy — Plan +2

Floor +2 — Semi-public and collective space for inhabitants
Floor +2 — roof-top garden for inhabitants
Roof-top Garden
Building Hierarchy—Conclusion

the axis of higher hierarchy
Building | Accessibility

Diagram showing various entrances and labels such as Library Entrance 2, Housing Tower Entrance 1 (Main), Duplex Housing Entrance, Library Entrance 1, and Amusement Park side. The diagram also indicates Private vs. Public areas.
Building | Accessibility — retails
Building | Accessibility — library
Building | Accessibility—Housing
Building | Circulation—Library
The Library—the extension of urban public space
Building Logistic
Building Logistic—Library
Building Logistic—Retails
Building Logistic—Housing Tower
Building Logistic—Duplex Housing
THE EXPERIENCE
Space Under Canopy — Defining Public

Canopy defines the public and private in the complex.
Space Under Canopy — Defining Public

Canopy promote the quality of being outside in Cuban climate and culture.
Space Under Canopy — Defining Public
Space Under Canopy — Defining Public

Canopy promote the quality of being outside in Cuban climate and culture.
Space Under Canopy
— Defining Public

Space under canopy
Climate | Greenery under canopy

Greenery all around
Climate | Greenery under canopy

Roof top garden
Space Under Canopy — Defining Public

Canopy promote the quality of being outside in Cuban climate and culture.
Building Material—Concrete

Pre-cast concrete element

microbrigrades

concrete cast in situ
Building Material—Red Brick
Building Material—Wood

blend the exterior and interior space
Structure Concept

- Wood Frame
- Pre-Fabricated Waffle Slab
- Concrete Frame Structure
- Roof Canopy

Level 0 — Retail
Level 2-3 — Library
Structure Concept +1,+2

Waffle slab construction

Duplex Housing
Wall-slab Structure

Library
Waffle slab Structure

Self-employment Center
Concrete frame Structure

Library
Waffle slab Structure

Retail
Concrete frame Structure
Structure Concept 0

9 Concrete cores as stiff elements
Waffle Slab System

High Load-Bearing
Better Sound insulation
Long Span & Flexibility
Lighter Construction
Waflle Slab System
Waffle Slab System
Waffle Slab System—Installation
Facade & Appearance

- Semi-transparent
- Library
- Brick Cladding
- Transparent
- Commerce
- Concrete—Plinth

facade reference
Facade & Appearance

All around Colonnade
Facade & Appearance

a building face to surroundings
Facade & Appearance
Facade & Appearance
Interior Space—Library Stair as tribune

hardware—space for events
Interior Space—Library
Stair as tribune

Space with skylight
Interior Space—Library
Stair as tribune

Atrium space with skylight
Interior Space—Library

Stair as tribune

Central Green Belt

In-between Gallery

Culture Plaza

Hardware—Heart Space of Library, "panoramic" view
THE TECHNOLOGY
Climate | Ventilation

ventilation concept
Climate | Sunlight & Solar Radiation

abundant solar radiation
Climate | Sunlight & Solar Radiation

Average Temperature

- Average high/°C
- Average low/°C
- Average sea/°C

Sunny | Partly cloudy | Overcast | Precipitation days
canopy + plan layer to prevent the building from being overheated
Climate | Rainfall

**Precipitation**

- **mm/month**

- **Dry days**
- **< 2mm**
- **2-5mm**
- **5-10mm**
- **10-20mm**
- **20-50mm**
Climate Drainage Design

drainage details
Climate | Drainage Design

drainage concept
Climate | Drainage Design

organized drainage
Climate | Drainage Design

rain water for plant irrigating
Climate | Drainage Design

permeable pavement and slope for drainage
Transluscent solar panels
Sustainability | Photovoltaics

Total Area Photovoltaics = 5950 m²

Cuba

5 kW·h m²/day

Total Energy = 5950 x 5 = 29750 kW·h

Culture+ Commerce Consumption
5340 kw.h

solar energy station
Future Development

Starting point of future development
Thank you!