12-9-2010

REhabilitate the Urban Context by REhabilitating Individuals through the REhabilitation of Buildings

Paloma del Mar Riego
Syracuse University

Follow this and additional works at: https://surface.syr.edu/architecture_theses

Part of the Architecture Commons

Recommended Citation

del Mar Riego, Paloma, "REhabilitate the Urban Context by REhabilitating Individuals through the REhabilitation of Buildings" (2010). Architecture Senior Theses. 18. https://surface.syr.edu/architecture_theses/18

This Thesis, Senior is brought to you for free and open access by the School of Architecture Dissertations and Theses at SURFACE. It has been accepted for inclusion in Architecture Senior Theses by an authorized administrator of SURFACE. For more information, please contact surface@syr.edu.
REhabilitate the Urban Context by REhabilitating Individuals through the REhabilitation of Buildings

Paloma del Mar Riego
December 9, 2010
Committee Advisors: Anda French & Bruce Abbey
Syracuse University School of Architecture
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis Statement</td>
<td>4</td>
</tr>
<tr>
<td>Glossary</td>
<td>7</td>
</tr>
<tr>
<td>Discussion for Thesis Statement</td>
<td>8</td>
</tr>
<tr>
<td>Challenging Healthcare Design</td>
<td>9</td>
</tr>
<tr>
<td>Creating New Typologies</td>
<td>11</td>
</tr>
<tr>
<td>The Rehabilitation of Buildings</td>
<td>13</td>
</tr>
<tr>
<td>The Rehabilitation of Individuals</td>
<td>16</td>
</tr>
<tr>
<td>Drug Addiction in Puerto Rico</td>
<td>19</td>
</tr>
<tr>
<td>Rehab Centers in Puerto Rico</td>
<td>20</td>
</tr>
<tr>
<td>The Rehabilitation Environment</td>
<td>23</td>
</tr>
<tr>
<td>Program</td>
<td>25</td>
</tr>
<tr>
<td>Site</td>
<td>27</td>
</tr>
<tr>
<td>Old San Juan</td>
<td>29</td>
</tr>
<tr>
<td>Program Precedents</td>
<td></td>
</tr>
<tr>
<td>Cite de Refuge</td>
<td>42</td>
</tr>
<tr>
<td>Paimio Tuberculosis Sanatorium</td>
<td>44</td>
</tr>
<tr>
<td>Cedars Cancer Center</td>
<td>46</td>
</tr>
<tr>
<td>Building Precedents</td>
<td></td>
</tr>
<tr>
<td>Center for AIDS Services</td>
<td>47</td>
</tr>
<tr>
<td>Old Butter Factory</td>
<td>48</td>
</tr>
<tr>
<td>La Minoterie</td>
<td>50</td>
</tr>
<tr>
<td>Casa Sacerdotal Diosesana</td>
<td>52</td>
</tr>
<tr>
<td>Architectural Elements Precedents</td>
<td></td>
</tr>
<tr>
<td>Ventana Vista Elementary School</td>
<td>55</td>
</tr>
<tr>
<td>Joel Schnaper Memorial Garden</td>
<td>56</td>
</tr>
<tr>
<td>Avenue Number 5</td>
<td>57</td>
</tr>
<tr>
<td>Film Precedent</td>
<td></td>
</tr>
<tr>
<td>Dark Days</td>
<td>58</td>
</tr>
<tr>
<td>Existing Conditions</td>
<td>59</td>
</tr>
<tr>
<td>Design</td>
<td>65</td>
</tr>
<tr>
<td>Renderings</td>
<td>71</td>
</tr>
<tr>
<td>Annotated Bibliography</td>
<td></td>
</tr>
</tbody>
</table>
CONTENTION_Due to high numbers of drug addicts who find themselves homeless in urban centers the vacant buildings suffers great misuse and decay. This thesis intends to rehabilitate vacant buildings in urban centers. The architectural transformation of these structures into multipurpose buildings that will provide housing, recreation and rehabilitation programs for the individuals of the communities as a consequence will rehabilitate the urban context.

INTRODUCTION_In order to have a healthy world, all of its components (i.e. continents, countries, cities and individuals) must in turn be balanced and healthy. I have chosen to focus into two aspects that cause imbalance: architecture and drug addiction. I intend to ascertain how the Urban Context can be REhabilitated by REhabilitating Individuals through the REhabilitation of vacant/dysfunctional Buildings.

"Urban decay is a result of the interaction between social, economic and social changes in cities.(Skifter)" All of this changes play an integral part in the rapid emergence of vacant buildings in city centers. Furthermore, decaying cities become the "home" for the homeless and drug addicts who are looking for spaces where they won’t be segregated from; since these cities are developing segregated spaces.
In the island of Puerto Rico both issues are becoming evident even more so in the main urban centers. For purposes of this thesis I am looking at two urban centers of the city of San Juan which have more than 25% decaying buildings in their city center; the Historical Center of Old San Juan and Rio Piedras. Consequently both cities have a high population of homeless drug addicts which inhabit public plazas and vacant buildings. Initially, both sites will be analyzed. After the initial site analysis, a vacant building with strategic location and potential for architectural intervention will be chosen for the purpose of the design problem.

In terms of program healthcare typologies will be challenged to create new typologies that will provide the rehabilitating addict as well as the residents of the community with interactive wellness, merging wellness and greening wellness. Furthermore, the rehabilitation of the building and the new architectural interventions will be developed in a man friendly construction manner. The intention is to create a multipurpose building integrating the existing structure and building shell with an innovative architectural element.
Rehabilitate_ to restore to its former state

Rehabilitate Someone_ to be restored to health or normal life by training and therapy after addiction

Rehabilitate a Building_ “the act or process of returning a property to a state of utility through repair or alteration that makes possible an efficient contemporary use while preserving those portions or features of the property that are significant to its historical, architectural and cultural values” US Secretary of Interior Standards

Non-Conforming_ when a person or a building is not fulfilling the expectations of society
The main focus of this thesis is to portray the relationship between rehabilitating individuals and rehabilitating buildings. For the context of this thesis, the term rehabilitate should be understood as the way to restore to a former condition. In the aspect of individuals they are to be restored to health or normal life by training and therapy after addiction. As for buildings, they are to be restored to their former condition through an architectural intervention that will improve their purpose.

In order to accomplish a coherent manifesto of how to rehabilitate the urban context by rehabilitating individuals through the rehabilitation of buildings I have driven this thesis through the analysis of three parallel subjects.

1. Architecture’s Role in the Healing Process(Healthcare Design)
2. Rehabilitation of Buildings
3. Rehabilitation of Individuals

The question of how architecture can influence an individual can be traced back to the late eighteenth-century: the conviction that the designed environment contributes to the healing of patients. This premise leads into exploring healthcare design.
The way in which healthcare architecture has evolved shows how the buildings have always reflected the medical and institutional practices.

How to challenge hospital typologies?

- Manipulating form into conventional building types.
- Integrate nature.
- Integrate to the city.
- Integrate program that promotes social interaction.

Emerging from this point, finding a way to challenge Healthcare Design was the next step. In Amsterdam the Architecture of Hospitals has been questioned and explored since the late 1990’s. As a result, the book The Architecture of Hospitals was published. As part of the publication, the Berlage Institute submitted a project “Building Hospitals – Hospital Building” which transform hospital typologies into performative typologies that appropriate existing architectural typologies forms. The concept of creating non-institutional spaces that would enable patients recovery was highly fancied.
Medical companies are able to plug themselves into the facility which supports the patient with efficient infrastructures.

The issues of logistics allows a flexible distribution of various programs.

The program is arranged in relation to the infrastructural hub.

Various spatial qualities which are related to the height of the building offer patients different types of accommodations.

The treatment facilities are separated from the wards which offer unique character of being at home.

Vacant buildings host temporarily treatment facilities according to requirements of the city.

In a green surrounding each patient will get his individual accommodation.

Functions are stacked due to different demands on spatial qualities.

Medical treatment is structured according to themes in a green environment.

The central treatment and ward areas in the healing garden are flanked by commercial facilities.

Source: Berlage Institute, The Architecture of Hospitals.
Interactive Wellness
- Integration of Active program:

Merging Wellness
- Integration of addicts to the city by inhabiting buildings in the urban centers as rehabilitation.

Greening Wellness
- Integration of nature in buildings at urban centers that will house rehabilitation facilities.

From the diagrams illustrated on the previous page, three of those models were selected: the Theme Park(4), the Internet Cafe(5) and the Roman Bath(6). Specific programmatic elements were added to create three new Typologies of wellness:

Creating New Typologies

SICKNESS in the CITY

WELLNESS in the CITY

park
health-park
playground
forest
cinema
exhibition

playground
forest
cinema
exhibition

health-park

health-green

health-green+house+machine

health-green+house+machine

PUBLIC

PATIENTS
From the three new typologies, two were selected as possible strategies that would have architectural potential with the existing structures of San Juan. The Merging Wellness offers the possibility of dealing with sloping site conditions where the public spaces can be accessed through one way and the private spaces can be accessed through another. This also would offer discreteness to the rehabilitating individuals. The Interactive Wellness offers the possibility of using courtyard spaces found in existing structures as a way of connecting different programs.
The notion of non-conforming conditions is one that has been present in our society for a very long time. But how can we establish that a building is in a non-conforming condition? When a building is no longer being functional, when it becomes vacant and most importantly when it contributes to the decay of its context. We have idealized conditions and the existing one’s, which usually are the non-conforming conditions.

The second aspect that has driven this thesis is the Rehabilitation of vacant/decaying Buildings. The influence that the rehabilitation of a vacant building can have in the revitalization of its urban context is major. Taking into consideration Building Rehabilitation Guidelines, the rehabilitation process of the building intended for this thesis can lead into ways of integration with the rehabilitation of individuals.
Building Rehabilitation Guidelines

1. Make every effort to **use the building for its original purpose**.

2. Do not **destroy** distinctive original features.

3. **Recognize** all buildings as products of their own time.

4. Recognize and **respect** changes that have taken place over time.

5. Treat **sensitively** distinctive stylistic features or examples of skilled craft work.

6. **Repair** rather than replace worn architectural features when possible. When replacement is necessary, new material should match old design, composition and color.

7. **Clean** facades using the gentlest methods possible. Avoid sandblasting and other damaging methods.

8. **Protect and preserve** affected archeological resources.

9. Compatible **contemporary alterations** are acceptable if they do not destroy significant historical or architectural fabric.

10. **Build new additions** so they can be removed without impairing the underlaying structure.
Negotiating Rehabilitation

1. Individuals are physically rehabilitated by the reconstruction of the building.
2. Individuals are socially interacting with the community while rehabilitating the building and revitalizing the urban context.

Architectural Implications

1. Conserve the shell of the building
2. Since the function of the building will be different, interior alterations will be done.
3. Fusion of existing structure with contemporary architecture.(prefab?)
The third aspect driving this thesis is the Rehabilitation of the Individual. Going back to the non-conforming notions of society, individuals who are addicted to drugs and don’t serve as productive members of society enable the decay of their surroundings. We live in a society where we have the idealized social conditions in which everyone has a home, everyone is employed and everyone should have equal access to environmental amenities. Realistically and specially in the current situation of our economy we are certain that we are living non-conforming conditions where not everyone has a home, individuals have lost their jobs and some even work from home, and public infrastructure is not available for everyone.

This non-conforming notions of society have created a strong stratification in the structure of society. There is a clear distinction between healthy and unhealthy (drug addicts) individuals.
Society creates a barrier between the productive (healthy) and unproductive (unhealthy) members of a community. Within the drug addicts population there exists a social structure. Usually depending on how long they have been addicts/homeless they start off as loners. A few months in they start creating communities and when they have lived in these conditions for more than a year they try to integrate with healthy individuals but this usually results in rejection.

For the purpose of this thesis, I have looked at the methods of rehabilitation from leading rehab organizations to learn from their techniques. Also the twelve steps of rehabilitation showed in the following page have a certain relationship with the rehabilitation process of buildings.
12 Steps of Alcoholics & Narcotics Anonymous Rehabilitation

1. We admitted we were powerless over alcohol and/or drugs—that our lives had become unmanageable.

2. Came to believe that a Power greater than ourselves could restore us to sanity.

3. Made a decision to turn our will and our lives over to the care of God as we understood Him.

4. Made a searching and fearless moral inventory of ourselves.

5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.

6. Were entirely ready to have God remove all these defects of character.

7. Humbly asked Him to remove our shortcomings.

8. Made a list of all persons we had harmed, and became willing to make amends to them all.

9. Made direct amends to such people wherever possible, except when to do so would injure them or others.

10. Continued to take personal inventory and when we were wrong promptly admitted it.

11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.

12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1914</td>
<td>Harrison Law- Approved by the US Congress had an impact on Puerto Rico because it provoked the black market of narcotics. Addicts are treated as criminals.</td>
</tr>
<tr>
<td>1914</td>
<td>Law No. 48 (Puertorican Law of Narcotics)- Ruled the traffic, possession, and harvest of narcotics and other drugs. It established a registry of addicts, judicial procedures and treatments.</td>
</tr>
<tr>
<td>1935</td>
<td>After the Second World War there is a boom of drug addiction in the island.</td>
</tr>
<tr>
<td>1935</td>
<td>Department of Services Against Addiction.</td>
</tr>
<tr>
<td>1935</td>
<td>Public Health Hospital @ Lexington, Kentucky</td>
</tr>
<tr>
<td>1935</td>
<td>Public Health Hospital @ Texas</td>
</tr>
<tr>
<td>1935</td>
<td>-A theory of addiction as a sickness and treatment should be given.</td>
</tr>
<tr>
<td>1935</td>
<td>-Individuals from US and Puerto Rico got treated there.</td>
</tr>
<tr>
<td>1935</td>
<td>Emergence of civic and religious organizations that patron private programs for rehabilitation: SILO, Nueva Esperanza, A.P.R.A., C.O.P.R.A., Teen Challenge, etc.</td>
</tr>
<tr>
<td>1959</td>
<td>-First Treatment Center established based on the use of Methadone as treatment for addiction.</td>
</tr>
<tr>
<td>1959</td>
<td>Law No. 48 (Puertorican Law of Narcotics)- Ruled the traffic, possession, and harvest of narcotics and other drugs. It established a registry of addicts, judicial procedures and treatments.</td>
</tr>
<tr>
<td>1960s</td>
<td>After the Second World War there is a boom of drug addiction in the island.</td>
</tr>
<tr>
<td>1961</td>
<td>First Treatment Center established based on the use of Methadone as treatment for addiction.</td>
</tr>
<tr>
<td>1970</td>
<td>Department of Services Against Addiction was officially established in July 1973 through the Law No. 60.</td>
</tr>
<tr>
<td>1973</td>
<td>-2,576 addicts receive treatment. Only 20% of the addicts in the island.</td>
</tr>
<tr>
<td>1973</td>
<td>Development of new programs such as Iniciativa Comunitaria that involve the community in the Rehabilitation of Addicts.</td>
</tr>
<tr>
<td>2010</td>
<td>-2,576 addicts receive treatment. Only 20% of the addicts in the island.</td>
</tr>
</tbody>
</table>
Drug Addiction
+100,000 (2009)

Drug Addicts Admitted to Treatment Facilities
13,669 (2009)
94%
6%

Treatment Facilities
151 (2009)

Treatment Facilities Operation
Private Non-Profit 116
Private for-Profit 14
Local Government 1
State Government 19
Federal Government 1
What is it? Communitarian based movement directed towards reeducation and the growth of character among an environment of home and extended family. It incorporates the valuable contribution of the resident in treatment and the Re-educated member of the program and the active participation of other professionals.

Length of Program
- Residential_18 months(min)
- Follow up in Community_4 years

Services Offered
- Housing
- Food
- Health Care
- Detox
- Social Workers
- Psychological
- Educative_Academic & Orientation
- Transportation
- Vocational Rehabilitation
- Interagency Coordination
- Services to Residents and Relatives
- Intervention with Relatives
- Individual and Group Orientation
- Therapies: Individual, Group, Confrontational, Occupational, Educative, Salesmanship, Urbani ty, Recreation & Sports, Training, Spiritual

Structure of the Program

Prevention
Community Orientators
3rd FASE
Workshop of Character
Growth and Re-education
2nd FASE
General Orientation
1st FASE

Moral & Ethic Values

Treatment

3rd FASE
Follow up

4th FASE

2nd FASE
Introspection
Identification & Growth

1st FASE
Induction
Existent cial Compromise
Detox
What is it? Communitarian based organization that provides health services, education and prevention to special individuals, that have been marginalized by the traditional health systems.

For Whom? Drug addicts, Prostitutes, Homeless, Young adults in risk of falling into addiction, HIV patients, excluded communities due to economic disadvantage.

Programs:
Direct Services
- Centro para la Vida: medical attention par HIV positive patients
- Compromiso de Vida I: Residential Detox Program for Women. Services include: medical evaluation, case management, psychological, family, occupational, recreative, and educational therapies. Also transitory housing is provided.
- Compromiso de Vida II: Residential Detox Program of 21 days for Men. Services include: medical evaluation, case management, psychological, family, occupational, recreative, and educational therapies.
- Nuestra Casa: Houses homeless for the day. Food is provided daily for the homeless of the Hato Rey area. (Problematic: they are serving them in tents...so they serve the homeless without a real roof.)
- Punto de Cambio- Program directed to those HIV positive or in risk. Organized in conjunction with another community based organization which is, Lucha Contra el SIDA.
As a result of the driving elements of this thesis, the idealization of a rehabilitation environment is created. A rehabilitation environment should be designed to provide three areas of improvement: physical, social and psychological. As seen in the diagram on the left, the rehab environment can contribute a great deal to the process of rehabilitation.

In order to lay out the program required for the rehabilitation space of the building, rehabilitation programs in Puerto Rico where visited and with their guidelines I created my own. One in which I stipulate the areas that they are missing and which are essential components to the rehabilitation of the individual. This diagram is found on the next page.

Throughout the process of investigation, I have found that the ideal space for rehabilitation should at least resemble a home. It is the “home” factor that most of this individuals are missing and what most of the buildings are lacking which is the sense of being the home to people, a business, or any other entity that might use them.
## Essential Components of the Rehabilitation Environment

<table>
<thead>
<tr>
<th>RESIDENTS</th>
<th>THERAPEUTIC TEAM</th>
<th>FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of Character</td>
<td>Influential Aspects to the Development of Character</td>
<td>they rehabilitate vacant buildings in the communities in need.</td>
</tr>
<tr>
<td>TRUST</td>
<td>Individual Therapy</td>
<td>Home Image, Security, Control</td>
</tr>
<tr>
<td>AUTONOMY</td>
<td>Group Therapy</td>
<td>Facilities: household items, offices</td>
</tr>
<tr>
<td>INICIATIVE</td>
<td>Occupational Therapy</td>
<td>Workshops: spaces for a diversity of workshops: cooking, art, woodshop</td>
</tr>
<tr>
<td>KNOWLEDGE</td>
<td>Educational Therapy</td>
<td>Library, study lounge with educational material, computer room</td>
</tr>
<tr>
<td>IDENTITY</td>
<td>Self Representation, Salesmanship, Recreation</td>
<td>Sign, Privacy, Sports facilities</td>
</tr>
<tr>
<td>COMPROMISE</td>
<td>Confrontation, Marathon</td>
<td>Positive Messages Integrated in facilities</td>
</tr>
<tr>
<td>GENERATED</td>
<td>Family Integration, Training</td>
<td>Maintainence: Construction Crew, Gardening crew, Cooking crew</td>
</tr>
<tr>
<td>TRANSCENDENCY</td>
<td>Spiritual Training</td>
<td>Chapel</td>
</tr>
</tbody>
</table>

Source: The table is obtained from HOGAR CREA, PR. The diagrams are produces by Paloma Riego.
This multipurpose building consists of a varied program that will serve the individuals as well as the community as well. For this reason it deals with issues of public versus private and taking advantage from the site it is able to layer the program corresponding to its urban context.

**Components:**

- **WORKSHOP SPACES**
  - Kitchen 600sqft.
  - storage 100sqft.
  - dining room 1000sqft.
  - Art Studio 2000sqft.
  - Woodshop 2000sqft.
  - Tech. Room 1000sqft.

- **EDUCATIONAL SPACES**
  - Library 750sqft.
  - Study Lounge 500sqft.
  - Computer Room 450sqft.

- **REHABILITATION FACILITIES**
  - Counceling Rooms(5) 100sqft. x 5 (500sqft)
  - Medical Rooms(5) 100sqft. x 5 (500sqft)
  - Waiting Area 500sqft.
  - Reception 200sqft.
  - Offices(3) 100sqft. x 3 (300sqft)

- **CHAPEL** 300sqft

- **SPORTS FACILITIES** 4000sqft

- **HOUSING** (65 Residents)
- **PARKING** (25)
The site selected to test this thesis is located in Puerto Rico. Puerto Rico is a 100mi x 35mi island located at the Caribbean Sea. The thesis will focus on the city of San Juan located in the Northeastern part of the island.

Due to unstable political and economical realities, the metropolitan area of Puerto Rico has suffered from a vast amount of building vacancies and decay. Also modern structures have been preferred over the historic structures. Realistically, the urban centers of Puerto Rico have run out of land to build modern structures and it has a lot of vacant real estate.

On the other hand, as you have already seen, the rapid increase of drug addiction in the last fifty years is alarming. Certainly this individuals have impacted in a negative way the urban centers of Puerto Rico.
Basic Demographics_Puerto Rico

3,967,179 (est. 2009)

Basic Housing Occupancy_Puerto Rico

1,434,649 (total)
1,210,537 (occupied)
224,112 (vacant)
27,363 (for rent)
16,248 (for sale)
12,710 (not occupied)
32,041 (for recreation)
139 (for migrant workers)
69,650 (other vacant)

Basic Demographics_San Juan

434,374 (est. 2008)

Basic Housing Occupancy

178,426 (total)
148,373 (occupied)
30,053 (vacant)
The city of San Juan is composed of 17 neighborhoods. One of those neighborhoods, the Old San Juan is the primary tourist destination in Puerto Rico. The fact that it is connected to the mainland solely by three bridges and the only means of transportation is vehicular, it is not favored as a residential sector. Currently they are proposing a project "the Walkable City" which incorporates a tram into the Old San Juan hoping to facilitate urban revitilization.

The way this thesis collaborates with the process of revitilization is by responding to the issues of building decay and drug addicts/homeless population.
Historic Trends: Relationship between Transportation and Population

Population:
- 1625
- 1792
- 1845
- 1872
- 1920
- 1950
- 1970
- 2010

Transportation:
- Foot / Horses
- Tramway
- Railroad
- Automobiles
- Airport
The Old San Juan is composed of many realities. Historic structures of worldwide relevance, rundown residential neighborhoods, stunning coastline, abandoned waterfronts, monumental civic spaces are all present in the Old San Juan.

These many districts present a wide range of economic, environmental, and social challenges that must be addressed in order to rehabilitated the area. These issues are strongly connected. Each one is strongly interlinked to the others, to the Old San Juan’s complex reality and to its rich past.

Understanding all of this positive and negative realities is essential to tackle in a project in the Old San Juan. The striking fact that there are 43% of the buildings in decay at the Old San Juan is alarming.

The following images show a series of photographs that portray the realities found in the Old San Juan.

Source: Photographs obtained from Walkable City Presentation & the City of San Juan website.
The neighborhoods of La Perla and San Agustin are characterized by poor public realm, building decay, and lack of integration with the Old San Juan.

New construction threatens to annihilate the iconic landmarks in Old San Juan from its skyline and views.

25% of urban decay in the Old San Juan.

30% of the Old San Juan is underserved by public transit.
Within the Old San Juan there are 3 neighborhoods: Puerta de Tierra to the east, San Agustín in the center and the Historic Center to the West. For purposes of creating a challenge in the design of this thesis, I have chosen a vacant/decaying building within the historic center. On the next page you find a map with all the vacant and abandoned structures in the Historic Center declared by the Urban Center of San Juan.

The building chosen is located at the corner of Calle San Francisco and Calle del Tamarindo. Right next to it the Catholic Church San Francisco. The challenges that the site offers are:
1. Decaying condition of building
2. Vacant land proximity
3. Slope condition

These challenges set up a great architectural problem and allow for a new architectural typology to emerge in this historic context.
The conditions of the buildings inhabited by these individuals may vary from fully functional buildings to completely vacant and decayed buildings like the images on the left. When they occupy healthy buildings they are restricted to inhabiting the steps or any other architectural element that may provide comfort and shelter from the floor. When they create their little communities they take over public spaces. They inhabit benches, tables, steps, platforms, etc. Basically they are looking for shelter, specially from the rain and the sun. The map on the next page shows the three main spaces that are inhabited by drug addicts/homeless in the Old San Juan.

During a site visit I was able to interview a few of the individuals inhabiting these spaces:

“I have been an addict for 15 years and homeless for 8 years...yes it is tough but one makes mistakes and this is the only way to redeem them, my family doesn’t help me...the only thing I really need is shelter.” Jose

“I have been “living” (if you can call this living) in Old San Juan for 9 months...well you know, we move around, Plaza Salvador Brau today, Plaza de las Armas tomorrow, some steps the next night...I survivie...yes, I have acquaintances but not friends, it is hard we are all looking for food and shelter...the worst is in the rain and if it’s windy forget it, living hell...” Raul Perez

“Yes there are programs but I dont like being treated as a sick person...i want to recover my sense of home...a place where I am not judged...a place where I actually can get help and get better...”Maria Ramirez
How the Spaces are Inhabitated

SITTING IN STEPS  SLEEPING IN STEPS

What are they looking for?
The building is located at a corner site on a slope. Characteristic of most of the buildings in the Old San Juan, the core building is colonial architecture in masonry construction. The vast majority of the housing buildings in the historic center of Old San Juan have the following architectural elements:

- Courtyard in the Center of the structure
- Wide Verandah
- Cloister like roofing overhangs
- Balcony running in interior and exterior
- Hardwood Supports
- Wide doors, letting ventilation through the building
- High windows on the exterior
- Deep long windows around upper story
- Wooden fretwork screens
- Double-hinged full or half doors, allowing privacy but encouraged refreshing breezes
- Pitched and tiled roofs
- Rooms were airy, with high ceilings and huge doors
- Highly ornamented interiors
- Hardwood ceilings
- Great cedar beams
- Carved embellishments
- Finely paneled doors

From these architectural elements, the highlighted ones are present in the existing building. The rest will be taken into consideration in the architectural intervention aspect of the project.
Initial Site Model
In this diagram the essential components of the rehabilitation environment are laid out in the site to show the organization of the program. Also one of the new typologies is integrated as a design proposal where the programs can overlap.
CITE DE REFUGE_SALVATION ARMY
PARIS_1933
LE CORBUSIER &
PIERRE JEANNERETT

“The idea behind this building, and one that still applies today, was not simply to house the homeless, but also to transform these outcasts into useful members of society.” Le Corb.

Le Corbusier- Big SOCIAL Move
- He unites with the Salvation Army agenda
- Interest in providing:
  --- Housing for the Homeless of Paris
  --- Comunal Spaces
  --- Rehabilitation Spaces

SITE- Urban Context
-- close to main road
-- accessible from two roads
-- close to public transportation (metro)
PAIMIO TUBERCULOSIS SANATORIUM
FINLAND_1932
ALVAR AALTO

Aalto’s starting point for the design of the sanatorium was to make the building itself a contributor to the healing process.

In the early years the only known “cure” for tuberculosis was complete rest in an environment with clean air and sunshine. Thus on each floor of the building, at the end of the patient bedroom wing, were sunning balconies, where weak patients could be pulled out in their beds.

SITE- Rural Context
--isolated site
--not very accessible

Life enhancing design-NATURE Integration
**CEDARS CANCER CENTER**
**LOS ANGELES, CALIFORNIA_1988**

**Morphosis**

Morphosis- This prototype for a more humane, patient-centered treatment process challenged us to develop new architectural solutions consistent with this spirit. As a whole, the project represented a profound exploration of architecture’s potential for communicating compassion and instilling confidence in patients’ ability to fight a life-threatening disease.

**SITE** - Urban Context
-- hospital wing
-- very accessible

**PROGRAM**
- 24 day hospital rooms
- 12 exam rooms
- 3 radiation therapy rooms
- 9 physician offices

Life enhancing design-
BODY/IMAGE CENTERED
MULTISENSORY
Morphosis - This prototype for a more humane, patient-centered treatment process challenged us to develop new architectural solutions consistent with this spirit. As a whole, the project represented a profound exploration of architecture’s potential for communicating compassion and instilling confidence in patients’ ability to fight a life-threatening disease.

SITE - Urban Context
--hospital wing
--very accessible

PROGRAM
- 24 day hospital rooms
- 12 exam rooms
- 3 radiation therapy rooms
- 9 physician offices
Old Butter Factory
Madeira, Portugal _
MSB Arquitectos

Located in a residential neighborhood of single family houses, the old plant has a characteristic image of the other houses surrounding it, defined by a typical architecture, with simple building blocks. The existing buildings are in an advanced state of disrepair. The architects rehabilitated the building in its pathologies, strengthening the structure of their walls, repairing the roof, and ensuring their finishes. The interior of the old factory was completely redone. The two floors were kept at the same level. The lower floor is divided into a kitchen, den and a large living room. The top floor houses 3 bedrooms en suite. The new program is inserted in this old building. These two buildings are faced. The intention was not to recreate the interior environment that ever existed, because the use to be made completely differs from the previous. The aim was yes, it can easily disentangle these two moments. A means of doing so was to create a “buffer” between the buildings, almost as if they were not touched.
Thus, the rooms upstairs detach themselves from external walls, are excluded. The light flows through these walls split, emphasizing that division, and revealing the new construction that seems suspended, only structured in horizontal steel beams. The appearance of the butter factory is preserved as the original. The volume that constitutes the support of the old bakery is in a state that does not allow any kind of rehabilitation. The intention was to preserve their location, their volume, and morphological characteristics. Within the program of a small house is divided on two floors. The lower floor will have a small living room and kitchen, and upstairs two bedrooms and a bathroom complete the program. This box is assumed as a novel intervention. Despite the maintenance of their location, volume, and coverage in two waters, the facades are a new dynamic with greater spans. The entire building is lined wooden plaque, showing clearly the construction and distinguishing it from the former, assuming the time it was built and in respect for the former factory. The volumes are a very close formal link, embedded in this landscape of great calm, who wished to remain unchanged in their intrinsic characteristics.
La Minoterie
Roubaix, 59, France_2008
Tank Architects

The project deals about the rehabilitation of an old flour-mill and an industrial building in lofts along the canal of Roubaix. The structure was in very bad shape, and is now open to let the natural light enlighten the flats.
The project isn’t a single renovation but also questions the notion of accommodation and offers to each flat, an outside space, a loggia, a balcony or a terrace. The extension dropped on the roof creates terraces and offers outstanding views towards the town and the canal. The technical methods to restore the concrete structure lead to a work on the brutality of material.
Source: Drawings obtained from Tank Architects
This great renovation in Plasencia, transforms an old and abandoned seminary into a residence for former priests and students. The Priest House, the first Catholic chillout world, is designed as a space that promotes conflict and controversy among its users. The Catholic Church has historically defined territory occupation superimposing two structures:
1. - ideological structure, a tree with vertex at the Vatican.
2. - Points of direct action, bishopric-nodes in an interconnected network.
This pattern of implementation has referred social relations and integration into the territory of the individuals linked to the Church.

Clerical population in Europe has experienced a fast process of aging making it difficult the maintenance of an individualized attention model. Concentration of welfare services demand from the priests seglares a reconstruction of their relationship with territory [1] and to redefine its insertion in a community.
[2] The project is the device that links this transformation by activating a set of:

[1] **Translation**: synthesis and binding approach between landscape elements and users expanded [cuts ecosystems: meadows of cork oaks and pond, valley of cherry, citrus groves, objects, memory banks, books, sun, clouds, lighting, chimneys sensitive contacts: lime plastering, paving, shade, aromas] through the mediation of low-tech devices.

[2] **invites participation**: elements that stimulate the response from residents and encourage partnerships and shared uses. Building opportunities

**WORK** rehabilitation fifteenth century building [1628m2], building rehabilitation sXIX [896m2], building SXXI [1169m2] parking [362m2], garden [794m2], terraced [413m2]. Total 5262m2.

**POPULATION** priests [some of them former students of the minor seminary] linked so far to different parishes of the diocese of Plasencia [maximum travel distance 210 km.]. Relatives, associates, assistants, visitors.

**PROGRAM** 21 individual apartments, 6 double apartments, 4 shared bathrooms adapted, 3 technical rooms, 2 rooms to visit, care 2 rooms, 2 special care rooms, 1 religious residence, 1 chapel, 1 chapel, 1 morgue, 1 parking, 1 room, 1 kitchen, 1 hall, 1 games room, 1 gymnasium, 1 library, 1 Gurugu, 1 laundry.
Lying at the base of Tuscan’s Santa Catalina mountains, Ventana Vista Elementary School is unlike most traditionally planned schools. It responds to its environment and topography, a rich learning environment is created through the use of forms, textures, pattern, color and degrees of light and shadow. Based on a series of courtyards and passages pinwheeling around a central-ized two-story library, the school itself is a teaching tool.
Joel Schnaper Memorial Garden
New York, New York
Dirtworks

The memorial garden is part of the Terrace Cardinal Cooke Health Center’s AIDS unit which houses 156 residents infected with HIV. An adjacent 3,000 sqft. sensory rooftop garden provides a therapeutic outdoor environment for the unit, a key component of their day-to-day therapy. The design focuses on the specific needs and requirements of the HIV infected resident. It responds to the human heart and stimulates the senses, creating a life-enhancing environment. It illustrates the powerful connection of nature, healing and palliative care.
Avenue Number 5
World Expo_Seville, Spain_1992

This public space project is one of five main pedestrian corridors providing access to the national pavilions at the Seville World Expo of 92. The concept is designed as a narrative experience.

Great historic environments have taught us that people relate favorably to a space in proportion to the respect it shows for their physical stature and sense of well-being. The use of intriguing visual features is essential and its captured in the expansive water wall. Equally important are elements that relate to body perception and multisensory experience, resulting in an environment that one can move through and interact with as well as hear, taste, smell and touch. In this environment, visitors feel inspired to invent relationships with others and with the physical and aesthetic elements of the design.
**Dark Days Documentary**
Director: Mark Singer (2000)
Homeless living in Amtrak tunnel in NYC.

- Sense of home/security
- Use of “trash” to build shelter/home
- They have denigrated themselves to live with trash, rats, etc.

**Community**
- Clear social structure:
  1. Loners
  2. Development of “families”
- Avoiding the real world

**New Life**
- They were relocated after aprox. 20 years
- Relocated to public housing projects.
- Success
Existing Conditions

Vacant Buildings within the historic center. Two buildings have vacant lots near them.

Vehicular Circulation

Tourist Zones

Building Site Selected
Design

Circulation

Resident  Family/Community  Homeless

This article looks at two urban parks in Iran and studies how the design promotes drug addicts to inhabit those spaces. It proposes ways in which the parks can be redesigned and this way avoids secluded spaces and promotes interaction among the community.


This article describes and assesses the process undertaken by Capital Health responsible for planning and developing a new primary care centre in an older urban, and demographically mixed neighborhood in Edmonton, Alberta, Canada. It focuses on the role of the community to have a successful centre in the area. Its approach is to describe how health centers, if they are to be fully effective in terms of meeting community needs, need more than technical excellence, they also need to fit in the community that they are being integrated to.


In this book, Barbara Crisp goes through a series of Residential, Industrial, Public, Retreats, Institutional and Health buildings as case study to formulate how they are successful as spaces for human interaction and human wellness.


This book gives a perspective into how buildings can affect their inhabitants by how they are perceived. Christopher Day talks about how they can affect the human health and even planetary health.


This article focuses on how architecture affects stress and as a consequence affects human health. It identifies five architectural dimensions that are linked to stress: stimulation, coherence, affordances, control, and restorative. These are defined and it offers way in which interior design elements may influence stress.


This paper discusses on how medical as the science and “art” of restoring human health and the art and science of designing built environment i.e. could carefully integrate from day one to plan, design and build a total wellness health care facilities which could benefit the users of all levels and complement the system of medical services. It discusses the integration of medical services and architecture from the view of Malaysia contacts in particular.

In this book you can find several projects from the David Adjaye firm, mostly in England. This projects focus on recycling, reconfiguring and rebuilding houses. It has been essential for this thesis as an example of how this architect deals with existing structures. Specially respecting the shell of the building to maintain the historic context and make an architectural intervention in the interior.


In this book the rehabilitation environment is analyzed. They have studied the sociological aspects of the rehabilitation hospitals. It has been relevant in order to understand what has been the expected from rehabilitation centers.


This book contains a study of several cities in the United States that have suffered decay and have been able to renew through urban renewal. It has been relevant in learning from them and capturing elements that can be employed in the project.


In this book Mumford describes the culture of cities from ancient civilization to his time. It has been essential in the sense that I have been able to understand how the city was expected to work.