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An introduction

This portfolio consists of some of the many works done during the years of my studies in architecture.

I was born in Tegucigalpa, Honduras. I graduated with a bachelor’s degree in science and letters at a technical institute.

Since I was very young I have been linked to architecture, as my grandfather, my father and my uncles have dedicated to the architecture and construction sector, which is why I have always lived between plans and scale models.

Thanks to my family heritage in architecture and engineering I decided to start my higher studies at the Leonardo da Vinci Institute in Sant Cugat del Vallès, where I studied a course in design and construction. Thanks to this course I started working as a draftsman in an architecture office, and gain experience in the field.

Currently I am finishing my studies in Architecture in the Escola Superior d’Arquitectura del Vallès (ETSAV-UPC). At the same time, I’ve been working for different architectural/engineering firms, which has given me practical knowledge of both the execution and drafting of projects and all the documentation necessary to carry them out. You can see how the project goes from being on paper to something real and tangible.

Since the beginning of my studies my main interest has been interior design and rehabilitation of buildings. Throughout these years I have learned to appreciate architecture, to observe buildings carefully, each of the different aspects that compose them, whether structural aspects, materials that compose it, textures, light, the space that they generate and how all this affects the user who in the end is for whom it has been designed.

I think it’s a profession that offers a wide range of possibilities to dedicate yourself to, without falling into monotony. Each project is different and requires different needs, while allowing you to work at different scales either designing furniture or the whole building. For me this has been the most important thing in architecture because although it’s a complex career it has allowed me to work in different fields and find my way.
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Location: Gotic neighborhood
Barcelona, Spain
Built area: 5,050m²

Project: Built over built.
Adapt a parking building into the new center/archive of the College of Architects in Cataluña.

The project is based on making a change of use in an existent building. It goes from being a parking building to a new center/archive of the COAC. The main objective is to reuse all the possible elements of the building and adapt it to the new needs.

It is in the Gothic district of Barcelona, near the cathedral. It is located on the corner between Copón street and Magdalenes street.

The building is composed of basement, ground level plus six levels. It is characterized by its horizontal facade formed by concrete cantilevers, being these the only enclosure. In the corner this horizontality is broken by a volume of bricks, which highlights the corner. The street level has a single entrance to the parking, and it is closed by a stoneware wall that blocks both physical and visual access to the building.

The purpose is to maintain the characteristics of the facade, enhancing the horizontality of the facade and extending it to the new volume to be built. The cantilevers are maintained and used to protect from the direct sun. A second inner skin will be created, in some gloomy areas and other glazed areas according to the needs.
Site Location: Barcelona

Open ground floor to the city

Potential horizontality

Take advantage of visuals

Organization program

Intervention plan

Current views of the parking building

Current view from c/de les Magdalenes
BUILT OVER BUILT
From parking to architecture center

Street level: Exhibition
Basement level: Exhibition hall

Street level 1:300
Basement level 1:300

Street level
Basement level

Basement level Exhibition hall
Location: Sant Martí district
Barcelona, Spain
Surface area: 16,512m²
Construction area: 13,908m²

Currently, the Escocesa is a multidisciplinary artistic production center of civic ownership that includes multiple visual arts, is part of the network of Creation Factories of Barcelona.

La Escocesa Creation Center makes available workshops for artists and manages the diffusion of resident artists through other spaces and creation entities. The aim of the project is to create social homes for the artists who work at La Escocesa.

The areas without divisions in the ground floor generate common spaces that connect the homes, the workshops and the environment, without losing the privacy. The dimensions allow different activities to be developed by the neighbors and so they can feel the spaces as their own.

The design of the houses is based on recovering the industrial character of the old factory, using features such as the brick facade, double-height spaces, large windows that generate an illuminated space and a minimum distribution so that each house can be adapted to the needs of the user.
RECOVER THE ESCOESA

Industrial collective housing

Site Location: Barcelona

images: laescocesa.org

La Escocesa creation center

Current connection

Proposed connection

images: laescocesa.org

La Escocesa creation center
The Escocesa in Barcelona

Located in the district of San Martín, the Escocesa factory occupies an important part of the block bounded by Pere IV, Selva de Mar, Fúlvia and Bolivia streets.

The building is a combination of factories and townhouses. These two uses make up a compact set where the houses are aligned on Pere IV street and the industry is behind with internal corridors that articulate the different manufacturing bodies.

From 1852, the former factory of chemical products for textiles has had different activities. Currently La Escocesa is a multidisciplinary artistic production center of municipal ownership that includes multiple visual arts. It is part of the network of Creation Factories of Barcelona.

From this center they support artists in all phases of the creative process. La Escocesa Creation Center makes available workshops for artists and connect them with the other art centers, such as Ca l’Alber (innovation center), Can Ricart (Casal dels joves), MUHBA (History museum), and NauArt (art gallery).
The combination of duplex, simplex and study, it generates a varied facade, with the terraces always separated by a double height.

On the ground floor we have commercial premises also at double height and passage spaces to the interior of the block delimited by the pillars that point the way to the common spaces in the interior of the plot.
RECOVER THE ESCOCESA
Industrial collective housing

Access Level

Level with no footbridge

House typology A & B
1:100
RECOVER THE ESCOCESA
Industrial collective housing

House typology C & STUDY
1:100
RECOVER THE ESCOCESA
Industrial collective housing

Street level
First level
Second level
Roof level
Our project is based on analyzing the relationship between the city, the sea and the mountain. How does it affect the current activities on Ajaccio Bay and the city itself?

Currently there are several physical barriers that complicate and even prohibit the passage to the sea. This is due to the fact that a large part of the maritime front is privatized (port of ferries, cruises, merchandise and parking) and also there is the barrier of the train tracks, topographical inequality and the lack of access to the existing beaches.

Most of the activities are concentrated in the area of the ciutadela, such as port activities, commerce, leisure and restaurants which are generating a single nucleus of activity.

We propose to recover the sea front by means of a huge natural park area, a new leisure area with restaurants and viewpoints with access and activities related with the water, and a new activity center at the other end of the bay, creating a connection between the two extremes. This way the Ajaccio’s bay will return to have both physical and visual connection between the sea + city + mountain.
AJACCIO’S WINDOWS
Recover the sea front
AJACCIO’S WINDOWS

Recover the sea front
AJACCIO’S WINDOWS
Recover the sea front
AJACCIO’S WINDOWS

Recover the sea front

Second Area

Transport network
Current situation
Proposal

Sea city connection
Current situation
Proposal

Main axis of communication & points of interest
Current situation
Proposal

Current situation
Proposal

Proposal

Proposal
AJACCIO’S WINDOWS
Recover the sea front
AJACCIO’S WINDOWS

Recover the sea front
AJACCIO’S WINDOWS

Recover the sea front
Ajaccio facade colors proposal

The historical center of the city is characterized by its architecture in which we can appreciate a varied palette of colors in the facade of the buildings with wooden shutters painted in bright colors, generating unique spaces.

This is the origin of the initiative to recreate this palette of colours and apply it to the singular buildings and the areas of greatest affluence in the city. In this way it is possible to unify the elements of the facades of the city and recover the singular characteristics that make the Bay special.

In order to implement the proposal, it has been located points where the painters are in the city. This generates a social movement which allows the citizens to get involved and participate in the changes of their city.

Ajaccio's Windows
Recover the sea front

Palette of colors

Current facade

After intervention

Palettes of colors
Location: Passeig de Gracia 84
Barcelona, Spain

Built surface: 11,236m²
Architects: Ramón Andreu & Núria Canyelles.
Building date: Catalan Bank 1968 / Royal Hotel 2013

Project: Analyze and constructively monitor the reform of a building.
Adapt a bank building into a luxury hotel.

The building has been owned since 1997 by the Catalan real estate group Parje, a family business of patrimonial character. They will convert the Banca Catalana into a luxury hotel, which will be called Hotel Royal Passeig de Gràcia and will have 124 rooms.

The cost of the reform, which the temporary union of the Copisa-Gerin companies have made, has been 10 million euros. The architects Ramón Andreu and Núria Canyelles sign the architectural remodeling of the building. Interior design is carried out by the same architects and designer Ángel Verdu.

The architects of the reform explained the plan to Enric Tous, one of the authors of the building. The visit of the new architects is a kind of tribute to one of the parents of the building who opted for a technological and novel architecture, using new materials and construction systems in their time. The use of stainless steel, curtain wall, plastic panels are an example of this technological architecture.

The architects intend to offer the new hotel an air of offices that keeps in memory what historically this old and valuable building meant for the city of Barcelona.
To do this, it gives a finishing of two stainless steels outside corridors and exterior metalwork between stainless steel and similar with glass following the measurements of the module.
REUSE A HISTORICAL BUILDING
From Catalan bank to Royal hotel

Site Location: Barcelona

Catalan Bank [1968]
REUSE A HISTORICAL BUILDING
From Catalan bank to Royal hotel

The building is built between 1965 and 1968. It uses an innovative architecture and is based on new technical and material industries. It stands out for its structure and its facade.

The purpose of this project was to host a series of services and auxiliary activities. Designed from a module (0.83 m), it allows the subdivision and redistribution of the different integrated systems, increasing the flexibility features and therefore their useful life.

The building consists of 3 basement floors, the office floors are arranged from the first floor to the eighth floor. The mezzanine floor, with large trusses, was used as a warehouse.
Facade

Different designs were made for the facade modules, some completely opaque, others with glazed areas and another completely glazed.

Finally, modules with completely opaque panels are chosen instead of non-practicable glazed modules. The carpentry is made of stainless steel.

These opaque panels are pieces of molded plastic, which maintain a volume on the internal and external face of the facade.

They serve to make a sculptural facade with sufficient emphasis to join that characteristic alignment that is Paseo de Gracia.

The building is exteriorly resolved by a curtain wall. The two facades are thought of as a grid of opaque and transparent elements that can be interchanged with each other.

Depending on the changes in the interior distribution, obeys a strict modulation.

They are formed by bands of horizontal windows, from floor to ceiling, which are divided into vertical modules. Some of these modules are copper reflective glass and other plastic hyperboloid shapes.

In order to leave the ground floors free of structural elements, the superstructure of the building is supported on girders.

This solution is accused in facade by means of an arrangement of the plastic panels different from that of the rest of the floors. Windows and panels are not practicable, so the building is based on an artificial air conditioning system.
We can say that in this work the strictly architectural is condensed in the structure. Everything that closes or compartments inside or outside is always design.

The pillars of the building are always arranged under the modular scheme of 83.3 centimeters. Note that only 3 pillars appear on the ground floor. One of them, originally red, which symbolizes the pal pal.

In order to leave the ground floors free of structural elements, the superstructure of the building is supported on powerful lattice girders, which reach the height of the first floor.

From the first floor the width of the lot is divided into two lights of 9 and 14 m respectively, with which the pillars are reduced to a single row in depth.
Project proposal
The architects intend to offer the new hotel an air of offices that keeps in memory what historically this ancient and valuable building meant for the city of Barcelona.

To do this, it gives finishes of two stainless steels outside corridors and exterior metalwork between stainless steel and similar with glass following the measurements of the module.

The Royal Passeig de Gracia will house a rooftop sky lounge with 360º panoramic views of Barcelona. It will be a clean space without obstacles thanks to the rationalist orthogonality of the structure.
REUSE A HISTORICAL BUILDING
From Catalan bank to Royal Hotel

Current cross section
Proposal cross section

Current cross section
Proposal cross section
The plastic panels are conserved, since they are in perfect conditions, they are only polished so that they return to have brightness and the clear color that they had originally.

The glass is held by a machinery formed by a set of suction cups, which are connected to the arm of the crane. This holds it while the operators assemble and position the crystals.

To create the second facade, it was necessary to create a stainless steel structure that supports the original facade, this structure creates an empty space between one facade and another.

A scaffolding platform is installed that reaches the first floor (mezzanine level) and from here you can access the different points of the facade by means of a forklift, which takes the materials to each floor.

The reflecting copper colored crystals are changed by translucent crystals that allow light to enter, and from the street level you can see this double skin. For this, some panels of the mezzanine floor are eliminated.

This allows to create a natural air circulation. We went from having a curtain wall (not practicable) to having a ventilated facade, where the interior facade is practicable.
Stainless steel structure that supports the exterior facade. All the carpentry used is stainless steel. The measure of the module (83.3cm) is used as reference to make these changes.

A grid is placed on the base, top and on the side of this structure. We speak of a micro perforated metal grid, which allows the entry and exit of air.

Garden terrace: technical floor. It is placed a raised technical floor with pavement of artificial stone panels.

The joints between piece and piece have no joint, so it allows the water to pass through the floor to be channeled below. This type of floor is also used on the garden terrace of the mezzanine floor.
REUSE A HISTORICAL BUILDING
From Catalan bank to Royal hotel

The structure of the building is maintained in general.

A light yard is created, which goes from the covered floor to the mezzanine floor, it is used to ventilate and illuminate the interior rooms. It also allows an entrance of overhead light to the bar area.

Creation of a structure that supports the original facade, and a second interior facade is built. To realize the light yard, it follows the patterns marked by the module (83.3cm)

In the mezzanine floor there is the overlapping of the beams, and here the bar-restaurant is placed. In the kitchen area the beams are covered and are embedded in the wall.

The interior façade is made of translucent glass to allow the structure to be seen from the outside.
The roof is cleaned and polished, profiles are added that divide the terraces of the suites. Added a structure of metal profiles that support the glass roof and skylight of the roof.
REUSE A HISTORICAL BUILDING

From Catalan bank to Royal hotel

This cover is made with wooden panels, which have a structure inside that supports the lights. In the reform what has been done is to repair some of these panels and has dyed the wood in a mahogany color.

Conclusion:
- Carrying out a project from a modulation facilitates the work at the time of projecting and making any change in the future.
- Giving a change of use to a building is not easy since each one has different needs. In our case, the problem lies in the facade.
- A structure can solve problems that are not only purely structural.
- Thanks to the vision of the future of the initial architects, the architects of the reform have had many advantages and facilities when carrying out their work.

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