REACTIVATING ABATTOIR OF CASABLANCA
TOWARDS AN ARCHITECTURAL OPEN WORK

METHODS AND ANALYSIS
GRADUATION STUDIO
CASABLANCA | MOROCCO
ACADEMIC YEAR 18-19

Meng Yang

P5 PRESENTATION 23-01-19
01 From Fieldwork to Research Question
02 From Analysis to Intervention Strategy
03 On Lightness: A Layering Approach
04 On Lightness: Two Pilot Projects
PART 1

From Fieldwork to Research Question
Lessons from P1 Research - ADHOCISM AND SPATIAL CORRECTION

ADHOCISM: A PURPOSE IMMEDIATELY FULFILLED BY RESOURCES THAT ARE AT HAND - CHARLES JENCKS
Don't climb over my wall!

I'm hot!!
The sun is burning!

It's easy to drill and no one seems to own it.

These stools look improvised, but I'm eating cheap!

More customers!!

I'm passing this alley on a daily basis!

I want to go up and use the wall for shade!

Hey, do you need some oranges?

The market is slowing us down!

My products need protection from rain and sun!

I'm hot! The sun is burning!

I'm not!

You're blocking our way!

I want to go up and use the wall for shade!

Result

Result

Result

Result

Result

Lessons from P1 Research - NEGOTIATIONS AND COMPLEXITIES

Lively Everyday Scene

The Hidden Deficiencies
Lessons from P1 Research - NEGOTIATIONS AND COMPLEXITIES

OPEN TO INTERPRET: A DESIGN IN WHICH DIFFERENT ACTORS IN THE ENVIRONMENT COULD FULFILL THEIR VARIOUS INTERESTS, METHODS OF USES, WITHOUT SIGNIFICANTLY INTERVENE UPON EXISTING SITUATION
Lessons from P1 Research - FROM BALANCE TO RE-BALANCE

Current as A Balance Situation

Re-balanced Situation: Bookstore Dominicanen
Lessons from P1 Research - SITE

ARCHITECTS:
Georges-Ernest Desmarest

TIME OF CONSTRUCTION:
1919-1922

Function:
Slaughterhouse, livestock market

TOTAL SURFACE:
50,000 square meters

CONSTRUCTION AREA:
20,000 SQUARE METERS

FEATURES:
Modern industrial complex with high hygiene and animal health standards
An enclave from surrounding neighborhood

FUTURE VISION:
A CULTURE PARK

Ancient Abattoir
Research Question

**HOW TO REACTIVATING THE ABATTOIR WITH A DESIGN OPEN TO INTERPRET?**

**HOW TO TRANSFORM ABATTOIR INTO A PLACE WHERE THE INTERESTS OF DIFFERENT ENTITIES, OCCASIONAL VISITORS, LOCAL CULTURE EXPERTS AND RESIDENTS FROM SURROUNDING COMMUNITIES, COULD BE FULFILLED AT THE SAME TIME?**

**HOW TO MAKE THE TRANSFORMATION OPEN TO FUTURE’S RE-PROGRAMMING AND ADJUSTMENTS WITHOUT GREATER PHYSICAL ALTERNATION?**
PART 2
From Analysis to Intervention Strategy
ANCIENT ABATTOIR

- HISTORY

Slaughterhouse in 1930s

Aerial View in 1920s
ANCIENT ABATTOIR  - LOCATION

Abandoned Slaughterhouse

LOCATION
ANCIENT ABATTOIR - FUTURE VISIONS

A Culture Park

A Place for Various Users and Needs
PAIRS OF CONFLICTS - ENCLAVE VS. THREE TYPES OF SPACE

PRESENT SITUATION

From Fieldwork to Research Question

SPATIAL VISION

From Analysis to Intervention Strategy

On Lightness: A Layering Approach

On Lightness: Two Pilot Projects
PAIRS OF CONFLICTS - LINEAR SPACE VS. OPEN SPACE

PRESENT SITUATION
From Fieldwork to Research Question

From Analysis to Intervention Strategy

SPATIAL VISION
On Lightness: A Layering Approach

On Lightness: Two Pilot Projects
PAIRS OF CONFLICTS - VAST FLOOR AREA VS. HUMAN SCALED SPACE

PRESENT SITUATION
- From Fieldwork to Research Question
- From Analysis to Intervention Strategy

SPATIAL VISION
- On Lightness: A Layering Approach
- On Lightness: Two Pilot Projects
ON LIGHTNESS - INTERVENTION STRATEGY

Spatial Mobility: Lack of Heaviness On Movement

Constructing Void: Subversion of Spatial Typology; The Quality of Little Heaviness

Light Touch: A Prefabricated Modular Approach
PART 3

On Lightness: A Layering Approach
PRECEDENT STUDY - PARC LA VILLETTE

POINTS:
Programmed events; a “rigid” conceptual frame

LINES:
Movement as a way of experience; Linkages between layers

SURFACE:
Connecting surrounding neighborhood; Changing for unprogrammed events
Compositional Rule:
Different layers follow different pattern; create the picturesque view
view and to be viewed, view change while walking
multi-way of experience
Lively, encourage exploring
PRECEDENT STUDY - CHINESE GARDEN

From Fieldwork to Research Question
From Analysis to Intervention Strategy
On Lightness: A Layering Approach
On Lightness: Two Pilot Projects
ON LIGHTNESS - CONSTRUCTING A LAYERING SYSTEM

A LAYERING APPROACH

DISLOCATION BETWEEN LAYERS

From Fieldwork to Research Question  |  From Analysis to Intervention Strategy  |  On Lightness: A Layering Approach  |  On Lightness: Two Pilot Projects
SYSTEM - A LAYERING APPROACH

From Fieldwork to Research Question  
From Analysis to Intervention Strategy  
On Lightness: A Layering Approach  
On Lightness: Two Pilot Projects
SYSTEM - A LAYERING APPROACH
SYSTEM - A LAYERING APPROACH

EXPAND THE RHYTHM AS NEW VOLUME
SYSTEM - A LAYERING APPROACH

NEW MASSING

ORIGINAL SITE

PLAZAS

GREENERY

PUBLIC SPACE ENCOURAGING EXPLORATION
SYSTEM - A LAYERING APPROACH

OVERLAY PUBLIC SPACE WITH NEW MASSING

From Fieldwork to Research Question
From Analysis to Intervention Strategy
On Lightness: A Layering Approach
On Lightness: Two Pilot Projects
SYSTEM - A LAYERING APPROACH

OVERLAY WITH INDUSTRIAL REMAINS
SYSTEM - A LAYERING APPROACH

ADJUST & FIT INTO ORIGINAL VOLUME

NEW MASSING
ORIGINAL SITE
PLAZAS
GREENERY

From Fieldwork to Research Question | From Analysis to Intervention Strategy | On Lightness: A Layering Approach | On Lightness: Two Pilot Projects
SYSTEM - A LAYERING APPROACH

- NEW MASSING
- ORIGINAL SITE
- PLAZAS
- GREENERY

HEIGHT ADJUSTMENT
SYSTEM - A LAYERING APPROACH

From Fieldwork to Research Question

From Analysis to Intervention Strategy

On Lightness: A Layering Approach

On Lightness: Two Pilot Projects

Greenery for Air Cooling
SYSTEM - A LAYERING APPROACH

Green Belts on Site
From Fieldwork to Research Question

From Analysis to Intervention Strategy

On Lightness: A Layering Approach

On Lightness: Two Pilot Projects
From Fieldwork to Research Question

From Analysis to Intervention Strategy

On Lightness: A Layering Approach

On Lightness: Two Pilot Projects

Program Distribution

01 Reception
02 Administration Office
03 Administration Office
04, 05, 06 Cinema
07 Children Centre
08, 09, 10 Office
11 Theatre
12, 13, 14, 15 Archive
16 Market
17 Cafe & Restaurant
18 Music Studio
19 Youth Centre
20, 21 Exhibition
22 Exhibition / Office
23 Intercommunication Hall
24 Library
25, 26 Archive
SYSTEM - ANALYSIS

- Rain Water
- Reused Water
- Heated/ Cooled Water

From Fieldwork to Research Question
From Analysis to Intervention Strategy
On Lightness: A Layering Approach
On Lightness: Two Pilot Projects
SYSTEM -ANALYSIS

- Restrict Control Zone
- Buffer Zone
- Fresh Air
- Exhaust Air
- Noise

Climate Scheme-Ventilation

Greenery Filter the Air

Wind Tower

From Fieldwork to Research Question | From Analysis to Intervention Strategy | On Lightness: A Layering Approach | On Lightness: Two Pilot Projects
PROCESS - NEEDS DETECTED FROM FIELDWORK

THE ISSUE OF PROTECTION
- Need for covering
- Need for shading
- Need for preservation
- Need for safety
- Need for security

THE ISSUE OF IDENTITY
- Need for showing use
- Need for distinguishing
- Need for differentiation
- Need for attention
- Need for branding

THE ISSUE OF CAPACITY
- Need for more space
- Need for shop
- Need for indicating space
- Need for terrace seating

THE ISSUE OF MOVEMENT
- Need for redirecting
- Need for access
- Need for regulating
- Need for separating flows
- Need for obstruction
**PROCESS - NEEDS FROM THREE TYPES OF USERS**

- **Programmed Event**
  - Direction
  - Separating Flow
  - View

- **Facilitated Event**
  - Direction
  - Separating Flow
  - View
  - Climate

- **Unprogrammed Event**
  - Exploration
  - Continuing Surface
  - View
  - Climate
PROCESS - TOOLS

Change of Material
- Separating Elements
- Surface Width/Height
- Change of Material

From Fieldwork to Research Question | From Analysis to Intervention Strategy | On Lightness: A Layering Approach | On Lightness: Two Pilot Projects
PROCESS - THREE SCENARIOS

From Fieldwork to Research Question  |  From Analysis to Intervention Strategy  |  On Lightness: A Layering Approach  |  On Lightness: Two Pilot Projects
PROCESS - THREE SCENARIOS
PROCESS - THREE SCENARIOS
PROCESS - BORDER CONDITIONS

From Fieldwork to Research Question
From Analysis to Intervention Strategy
On Lightness: A Layering Approach
On Lightness: Two Pilot Projects
PART 4

On Lightness: Two Pilot Projects
ON LIGHTNESS - TWO PILOT PROJECTS
ON LIGHTNESS - LEARN FROM CASE STUDY HOUSING

AN AUTHENTIC EXPRESSION OF EACH ELEMENT BY DISLOCATION
HOUSE C BY KILLINGSWORTH, BRADY AND SMITH

DISSOLVE THE VOLUME THROUGH EXPLOSION OF MASSING
CSH 16 BY CRAIG ELLWOOD
ON LIGHTNESS - STRATEGIES ON ARCHITECTURE DESIGN

Form: Explosion of Solid Volume

Materiality: Light Weight & Translucent
A FLOWING BALLOON: An Authentic Expressions of Each Elements
ON LIGHTNESS - TWO PILOT PROJECTS
ON LIGHTNESS - TWO PILOT PROJECTS
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS

Fill into the Original Volume
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS

Clean up for Public Activities
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS

Level Difference for Various Activities
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS

Climate Scheme: Shading & Ventilation
- Fresh Air
- Exhaust Air

Climate Scheme: Heating & Cooling
- Rain Water
- Reused Water
- Heated/ Cooled Water
- Controlled Zone
- Buffer Zone
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS
PILOT PROJECT - REGENERATION OF ABATTOIR REMAINS

From Fieldwork to Research Question
From Analysis to Intervention Strategy
On Lightness: A Layering Approach
On Lightness: Two Pilot Projects
PILOT PROJECT - THE LANDMARK
PILOT PROJECT - THE LANDMARK

Plug into Balloons
PILOT PROJECT - THE LANDMARK

Exploded Outer Facade
PILOT PROJECT - THE LANDMARK
Thank you