L’ USINE ÉLECTRIQUE, A FACTORY FOR KNOWLEDGE

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Content

- Introduction
- Analysis
- Conclusion
- Masterplan
- Program
- Design
Introduction
RMIT & the assignment

Vacant NL, exhibition by RAAAF, Venice Architecture Biennale 2010
L’Usine Électrique
10th Arrondissement

Peripherique

Hausmann blocks

Modern typologies

NORTH
10th Arrondissement
Location
Alignment: Setback of newer buildings
Location

Discontinuous facade
Building
Usine Électrique of the Compagnie Parisienne de l'Air Comprimé, 1895-1897, Architect: Paul Friesé
Original design
Interior
Generating electricity

1. Water reservoir
2. Temporary storage coal
3. Coal bunker
4. Canals around the building
5. Conveyor belt coal

Coal → BOILERS → Water → Steam → ENGINES → Energy → DYNAMO → INDUCTOR → Electricity

- Coal
- Slag coming out
- Manual route coals
- Water going in
- Water coming out
Building development

- Administration 1895
- Boilerhall 1895
- Serving buildings 1895
- Expansion 1929
- Expansion 1959
- Ateliers 1959
- Transformation 1981
Current situation
Current situation
Facades

Transformation of 1929

Machine hall from 1895

Front facade of administration from 1895

Form due to coalbunkers

Crown

Middle

Plint
Conclusion
Conclusion

Industrial versus Recreational Use

Discontinuous & Chaotic

Incoherent & Confined spaces
Masterplan
Program

What and for who?

MASTERPLAN:

Canal as pleasant public space for recreation

BUILDING

Unique industrial monument in need of renovation

Interior spaces with potential
Library

800,000 Travelers

People in need of education

Local residents

MEETING

LEARNING

Connecting

Parisians

Students
Library of the Future
Library of the Future

WHAT IS THE ROLE OF THE LIBRARY IN THE FUTURE?

Meeting

Exchange

Knowledge
Design
Concept

Library = To meet
  To consume knowledge
  To produce knowledge

Factory = History:
  Electricity - light - enlightenment
  Rational production process

L’Usine Électrique, a factory for knowledge
Design

Central meeting space
Public and accessible

2 ‘L’-shapes

Overview & meeting

Old tower for transport
Existing: Exacompta Clairefontaine
New school housing
Impression
Entrance
Atrium
Meeting square
Atrium
Atrium
Roof
Roof details
Existing building

From engine room to study room
Study room
Study room
Study room
Plan floor 02
New part
New part
New part
New part
Plan floor 03
Terrace
Terrace
Plan floor 04
Facade

Vertical lamellae
Facade
Fragment new facade
Facade
Facade
Materials
Concrete in Neues Museum by David Chipperfield
Insulation
Construction

Roof can be isolated internally

Expressive facade both interior as exterior: adding insulation will change image

Thermal bridge

Mostly reconstruction so insulation can be improved.

3D detail
Fragment

Existing facade
Installations

Winter day
Water reservoirs
Ventilation
L'Usine Électrique, a factory for knowledge, is the history and symbolism of the factory reinterpreted to the library of the future in which meeting between people and the production and exchange of knowledge are central.
Questions?
Installations

Night and day cycle