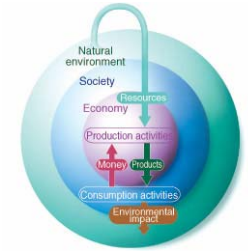
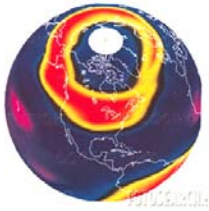
NASHCC exchange program

UNAM · Facultad de Arquitectura

McGill

Joana Moreno Rivera
8th semester





McGill – UNAM
NASHCC Program

The objectives of the NASHCC study program, focus on sustainability and housing as main themes to study.
In order to know more about this subjects, specialized courses were taken: (1) Energy, environment and building (EEB), (2) Sustainable design (SD) and (3) Housing Theory (HT); which introduce us to sustainabilty in housing.

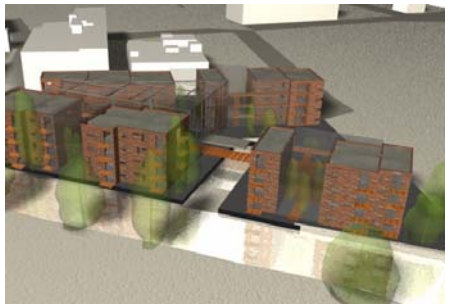
Jo Moreno and Maria Plancarte

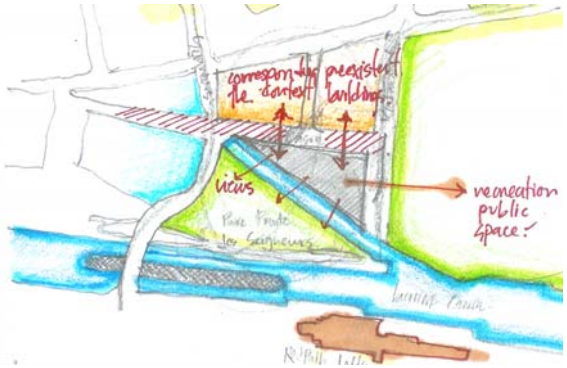
McGill School of architecture

Project 1. R.Klopp

The concept of the first proposal relied on transition spaces (greenhouses) between housing blocks to improve the temperature condition of the units...

First proposal

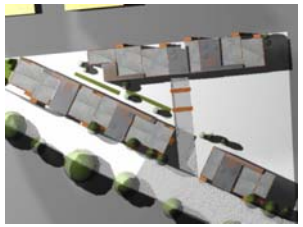


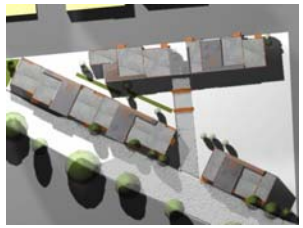


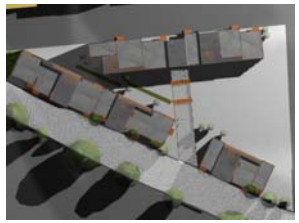
Site: Lachine Canal, Montreal

Second proposal

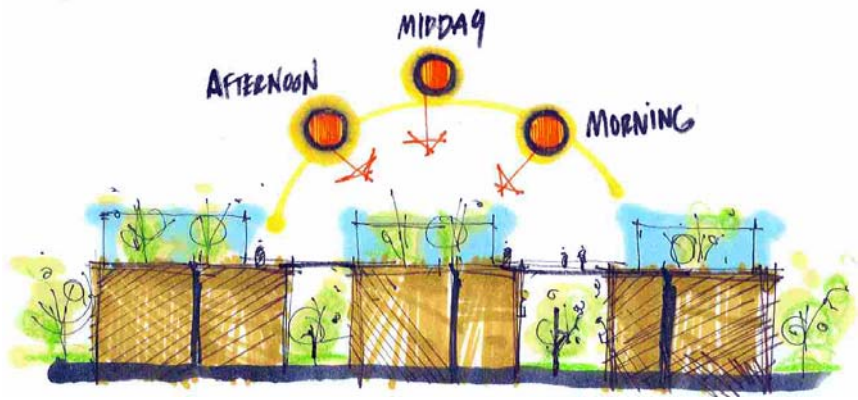
Solar studies







Because of the solar studies and the orientation of the greenhouses, we decided to do a second proposal, having the green volumes on the top of the housing blocks as a communal space...



"Eco-living" in the Lachine Canal...

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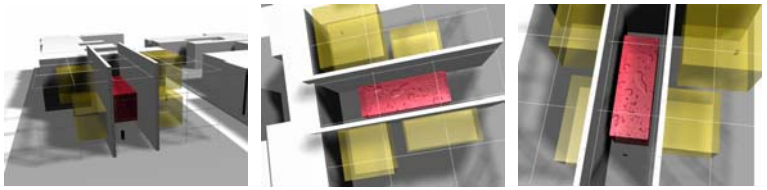
Project 2. **A.Sheppard**

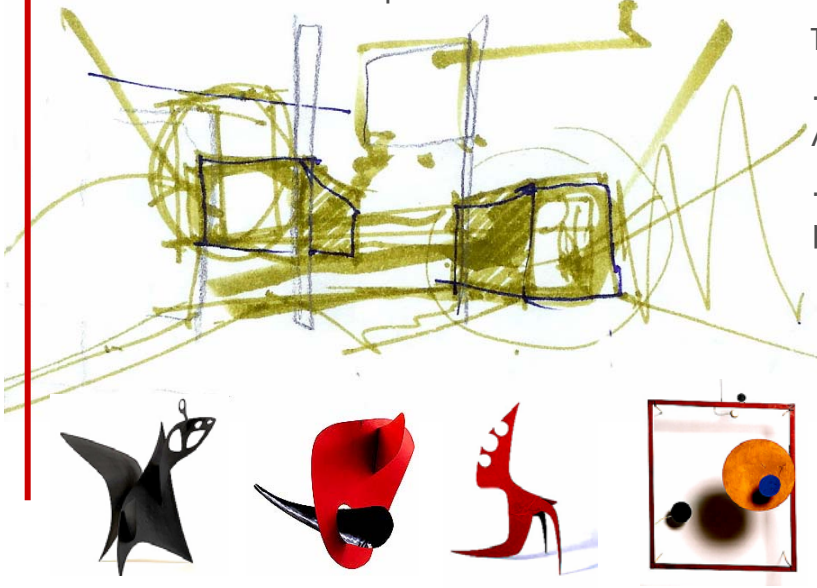
Studio U3

Site during fall



Site during winter

Schemes and conceptual sketches



The objectives of this project are:

· The creation of galleries inspired and based on the analysis of Alexander Calder's work.

· The intervention of Place Roy as an extension of the Museum to a public space.

ALEXANDER CALDER MUSEUM - Montreal

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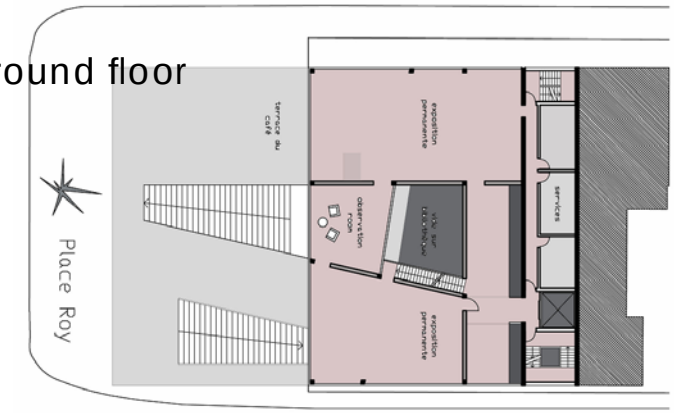
Project 2. A.Sheppard

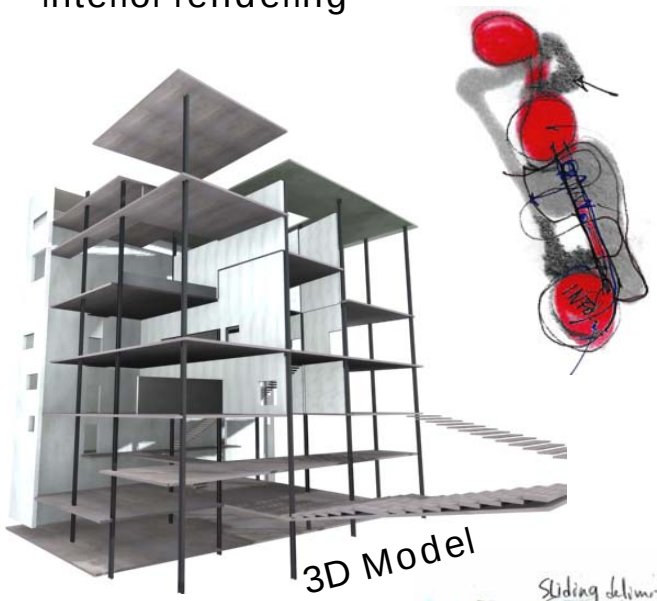
Ground floor



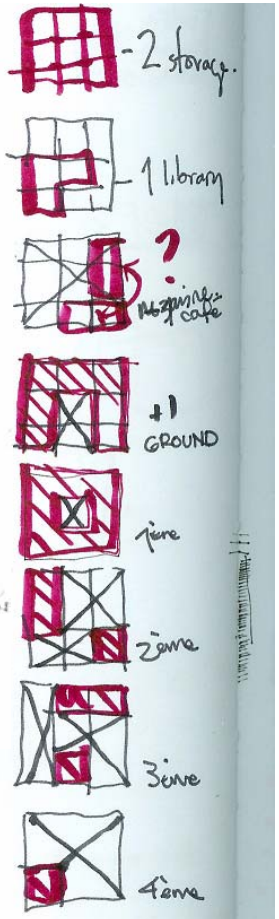


Interior rendering

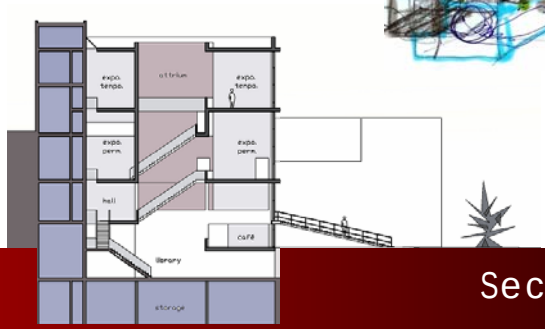
We intended to create different types of galleries in terms of physical characteristics (illumination and height) for the wide gamut of Calder's work, such as mobiles, paintings and sculptures.



3D Model



Perspective



Section

ALEXANDER CALDER MUSEUM

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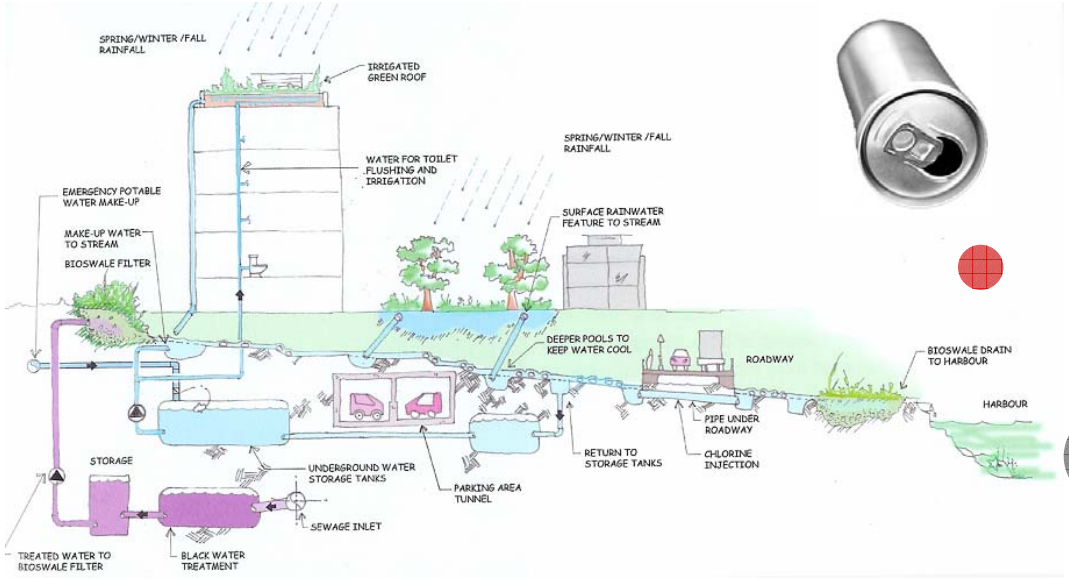
Energy Environment & Building

During the EEB course, we were given some examples of Green Architecture in North America, explaining their technologies and concepts to save or generate its own energy. We learned also how can the efficiency of a building can be increased using these strategies.



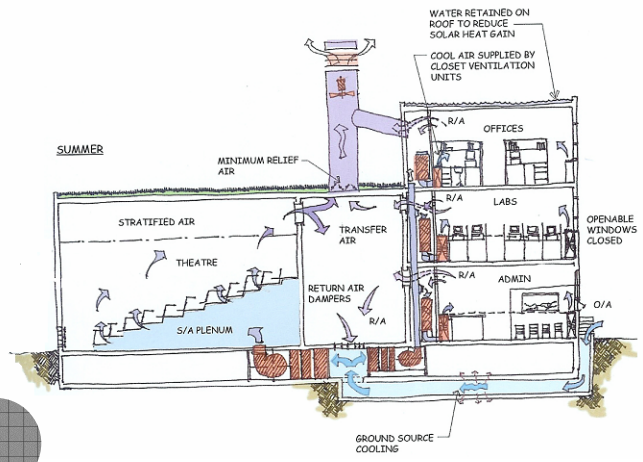
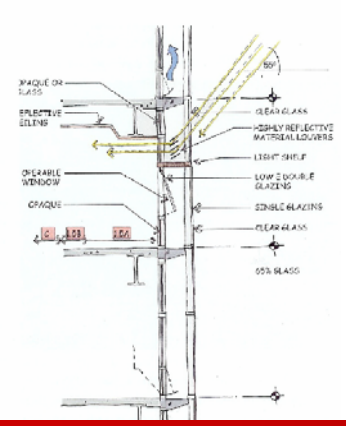


Diagram showing the wind circulation during summer.

Double glazing façade



We visited a couple of precedents located in Montreal rated as Green Buidings which allowed us to see phisically how the spaces are being treated and some of the technologies discussed before.

Strategies for Green Architecture development

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Housing Theory

This course offered us an overview of the history of housing in North America and a deep analysis of its changes through time.
We were taught that housing can not be seen or analysed as an isolated element, but it has links to other aspects such as society (cultural values, economic conditions, demography, policies, technology etc), urban form (skyline, grid, morphology, density) and a constant factor, time.

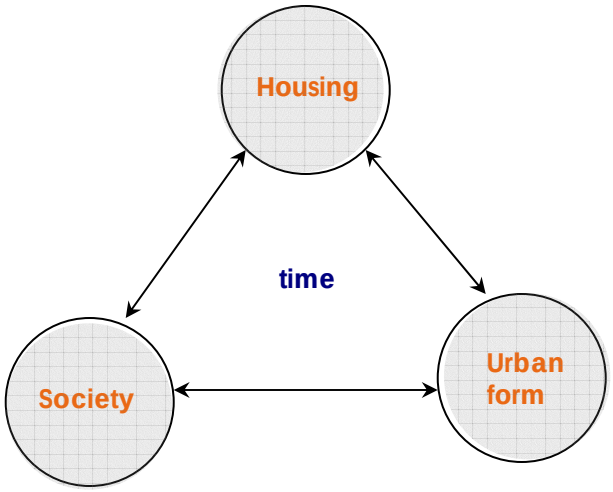
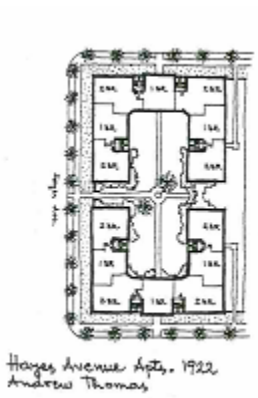
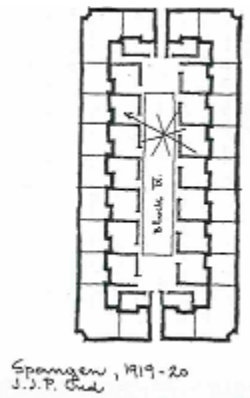
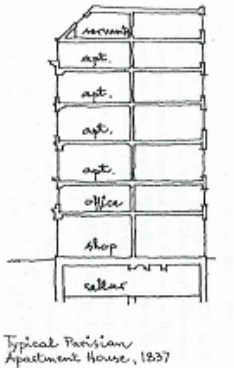


Diagram showing the concepts affecting the housing


Hayes Avenue Apts. 1922
Andrew Thomas


Spangen, 1919-20
J.J.P. Oud



Typical Parisian Apartment House, 1837

In order to understand all of these factors affecting the housing one, we chose one classification of housing form in North America and we did a research about its features and characteristics, including a full analysis of a case study in Montreal.

Besides all the architectural and urban qualities that this type of housing offers, I also tried to consider the chances to be designed towards an environmental concern and point of view.