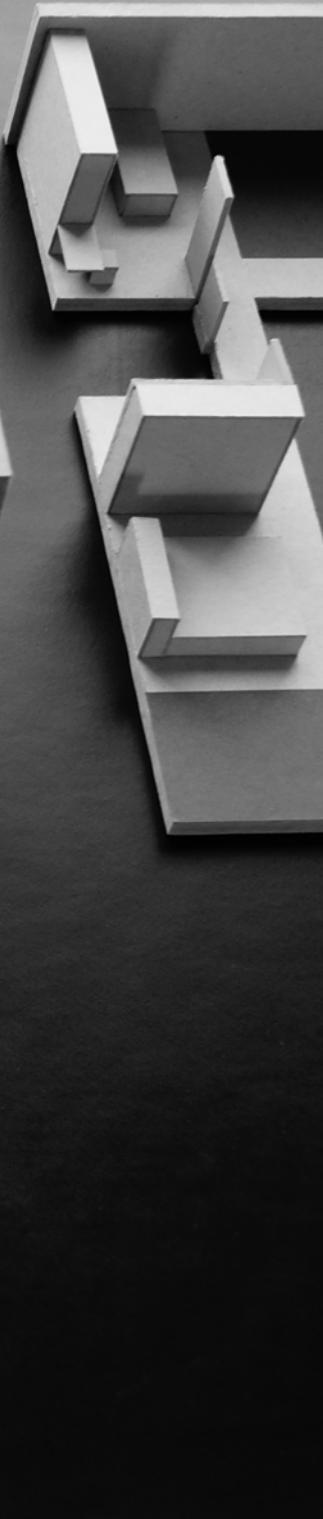
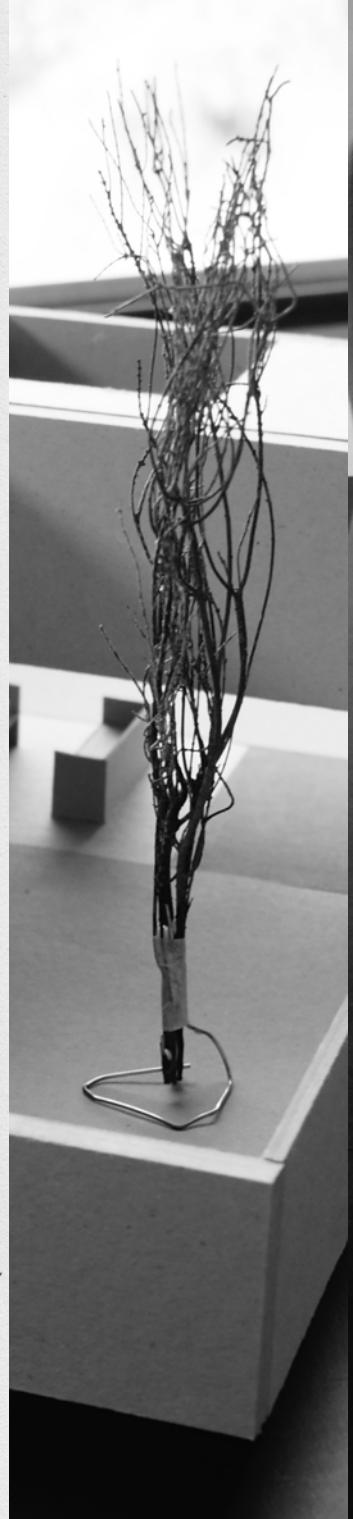


PORTFOLIO



Martín Fernández de Córdova

www.martinfdc.wordpress.com
+41 76 759 25 60
martinfdc@gmail.com

Via Giovanni Mariani 6
6850 Mendrisio
Switzerland

Architecture Projects

In this first part I show the first project I did during the first semester of the architecture university in Bolivia and four projects which I've done over the bachelor period in the Academy of Architecture of Mendrisio.

All drawings, renders, and models shown have been done by myself unless otherwise stated. All the projects are individual unless otherwise stated.



Plazuela Colón

Santa Cruz, Bolivia

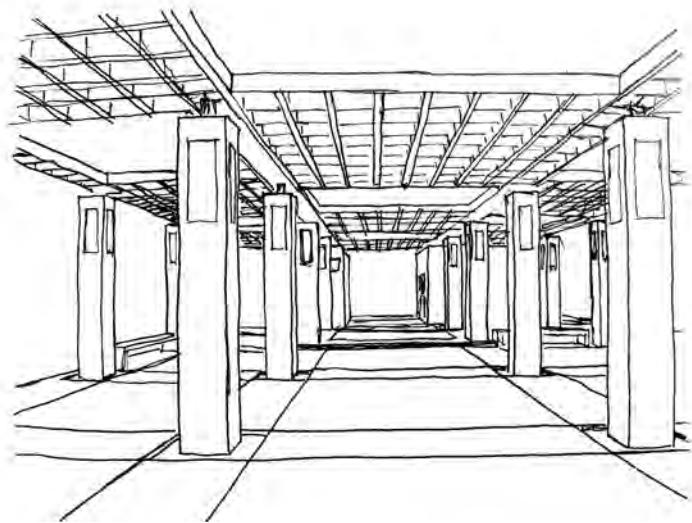
Prof. arch. Juan Carlos Simoni (juancarlossimoni@upsa.ed.bo)

Universidad Privada de Santa Cruz de la Sierra (UPSA)

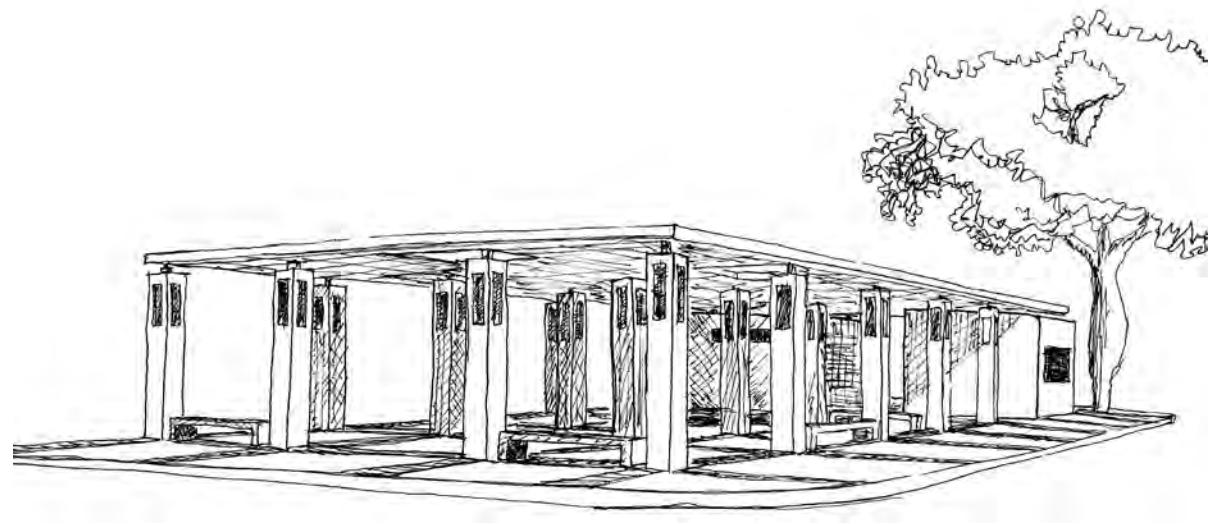
Jan. - Jun. (2009)

The project assigned was to provide a part of the historic city center of Santa Cruz a new plaza. The plaza also needed to provide bathrooms and a little kiosk. An alternating pergola supported by a grid of columns provides shade to the users and extends throughout the area of the project.

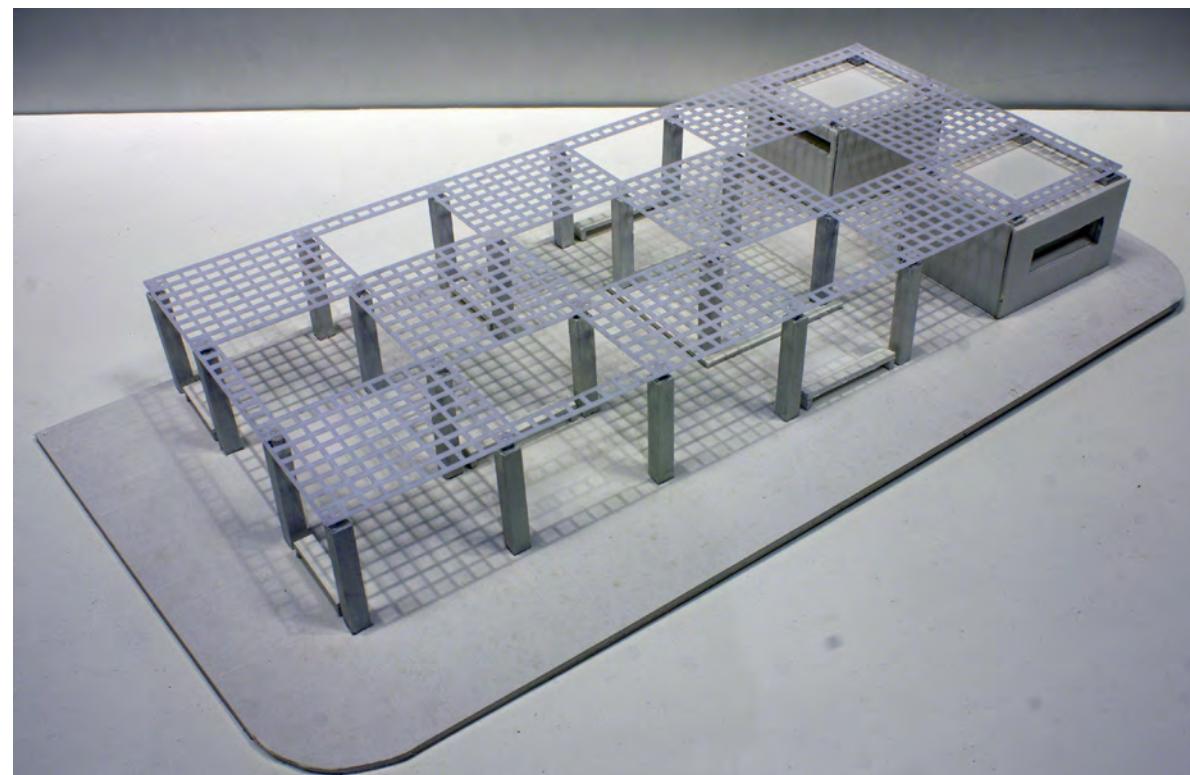
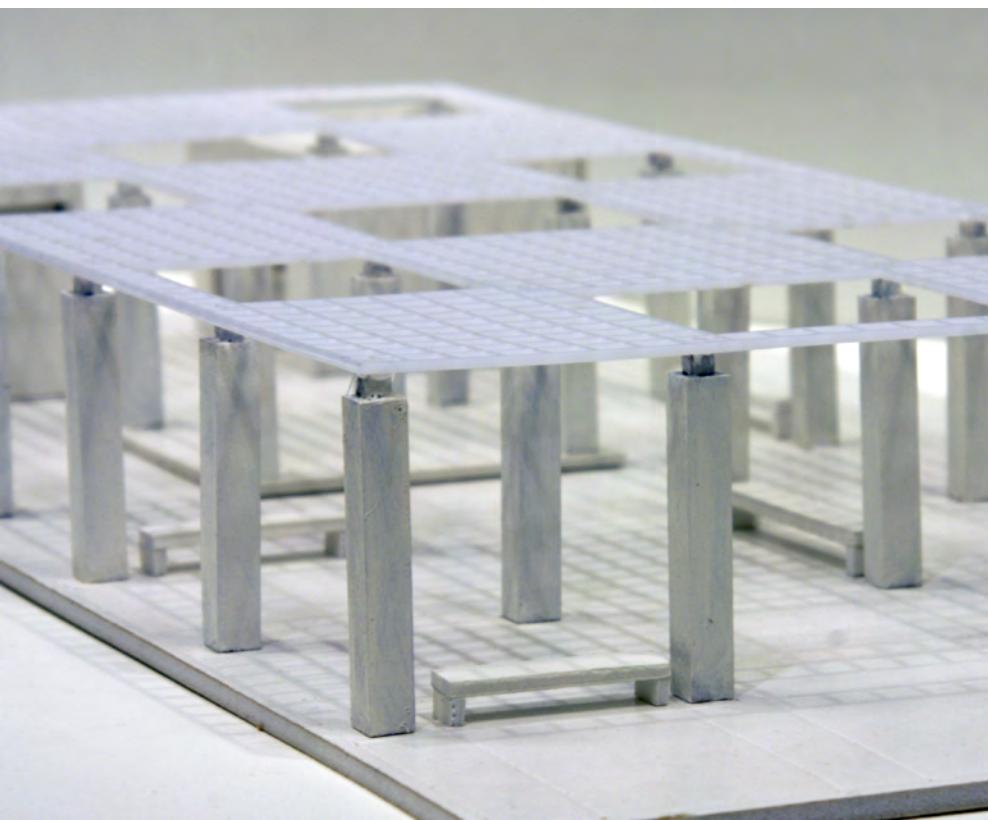
I did this project before coming to Switzerland and I'm glad to have done a semester in Bolivia. Thanks to this project I do not feel alienated from Bolivian education and I'm able to compare how design methods in Bolivia differ from those in Europe.

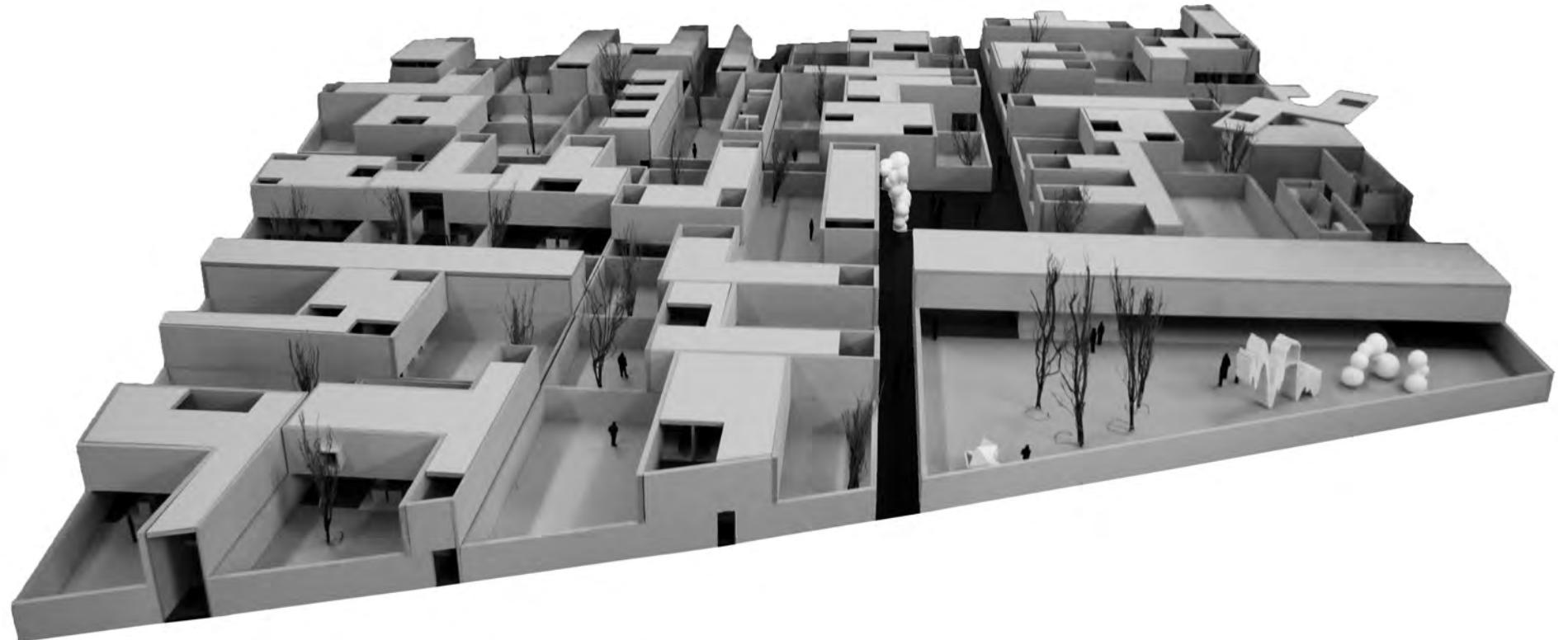


upper part
sketches of the
project spaces



lower part
photographs of the model
in 1:100





Casa Unifamiliare

Varese, Italy

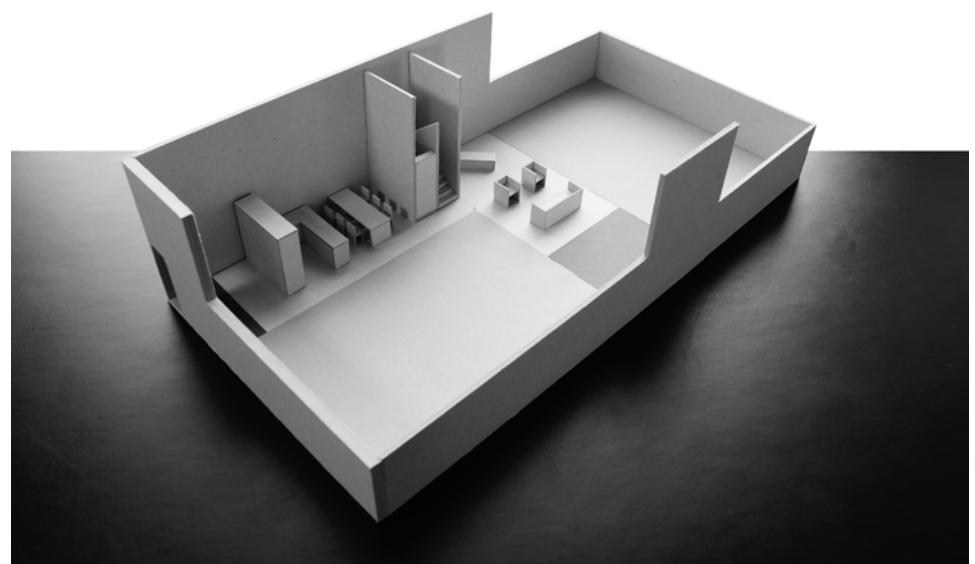
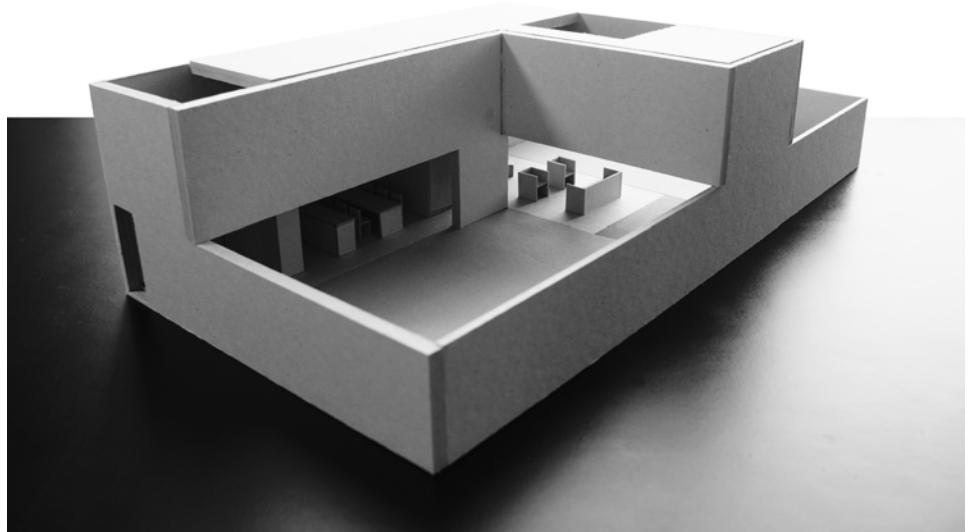
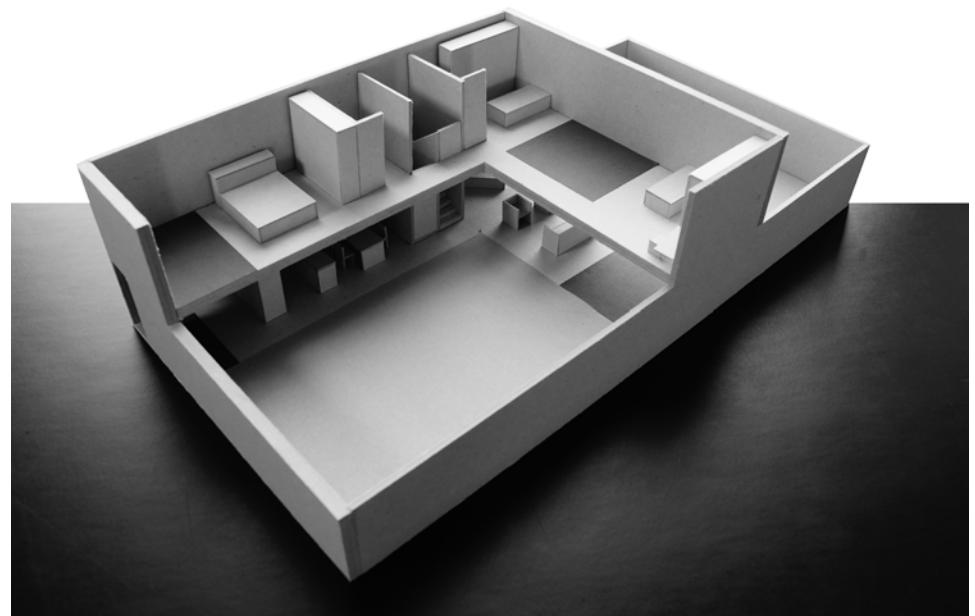
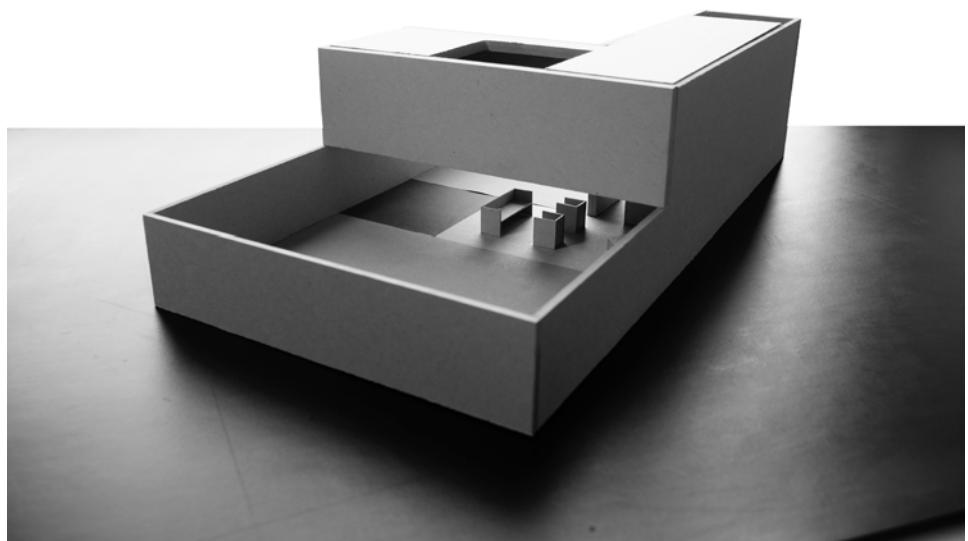
Prof. Arch. Mario Botta

Project Supervisor: Roberto Briccola (roberto.briccola@usi.ch)

Semester 2, BAC 1, 2010

Thinking and designing a unifamiliar house was the task for the second semester of my 1st year. The atelier was divided in groups and different urbanistic solutions were proposed which defined streets, building heights, ratio between garden and houses, etc. The best masterplan was chosen and each of the students in the atelier was given a house to design.

This exercise gave me knowledge to problems of privacy and program distribution in a family house. As the individual houses that the students designed then needed to compose a neighbourhood, urbanistic issues where often discussed at critics and the relation that the house had to the rest of the neighbourhood.



Model in 1:100



Retreat House

Maloja, Switzerland

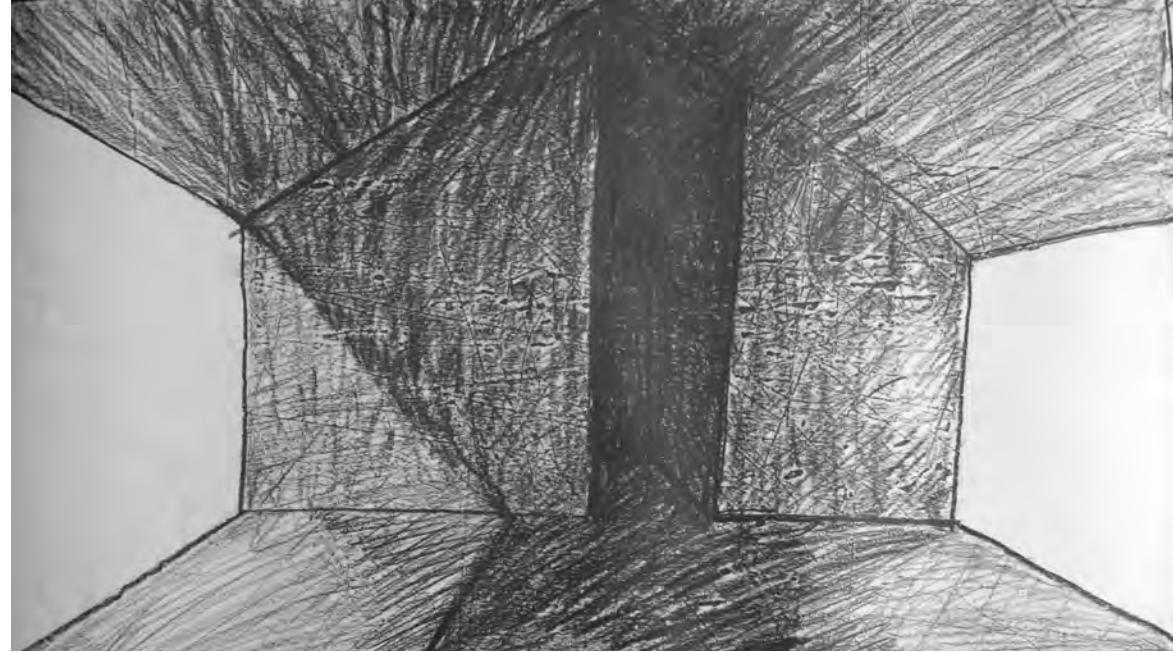
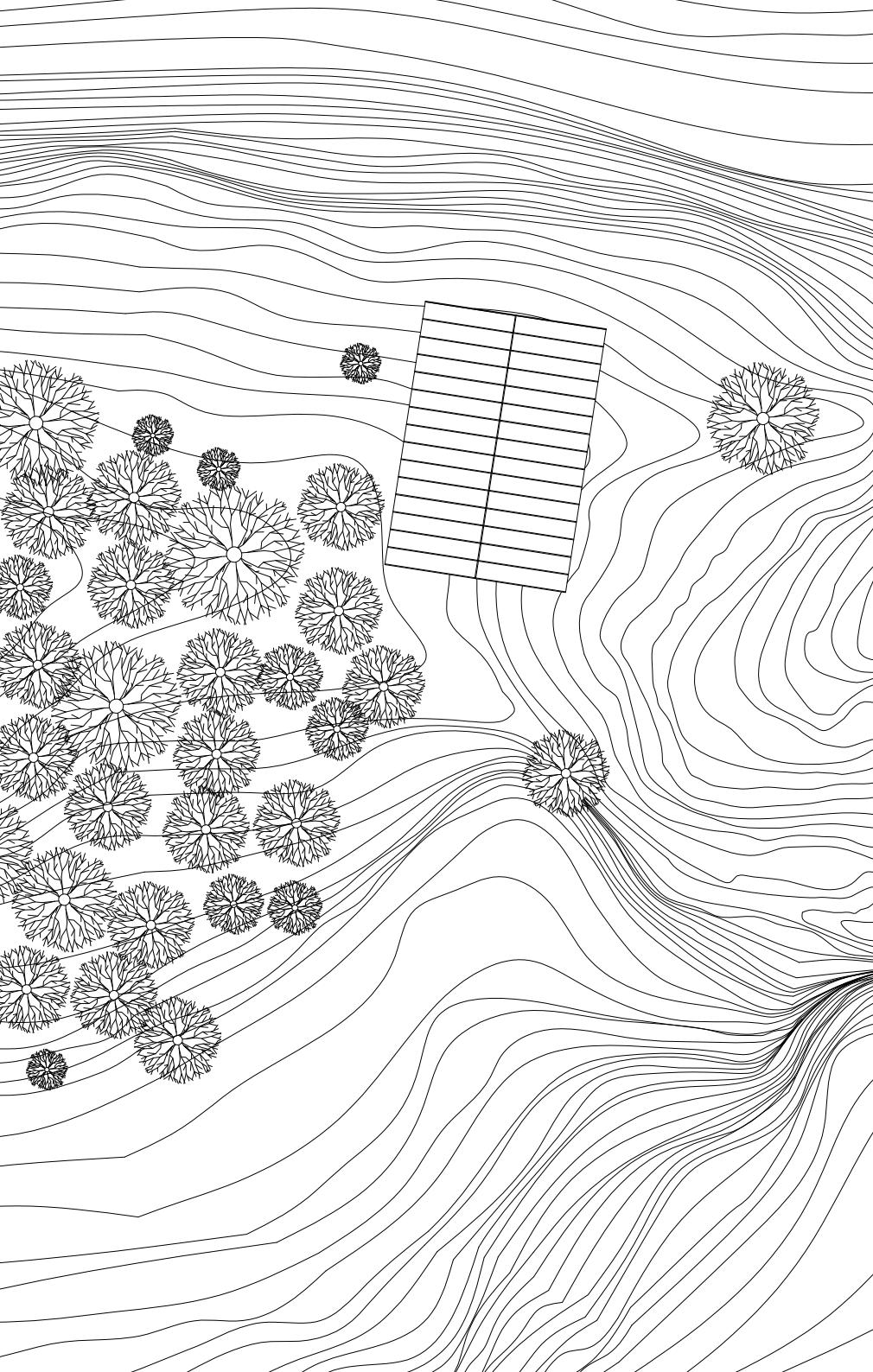
Prof. Arch. Valentin Bearth

Project Supervisor: Mihail Amariei (mihailamariei@usi.ch)

Semester 1, BAC 2, 2010

Imagining and designing a house that would serve as a retreat from the stressful, fast, contemporary way of living. The incredible landscape of the Alps served as inspiration to design a house that would establish itself in a harmonious way with nature.

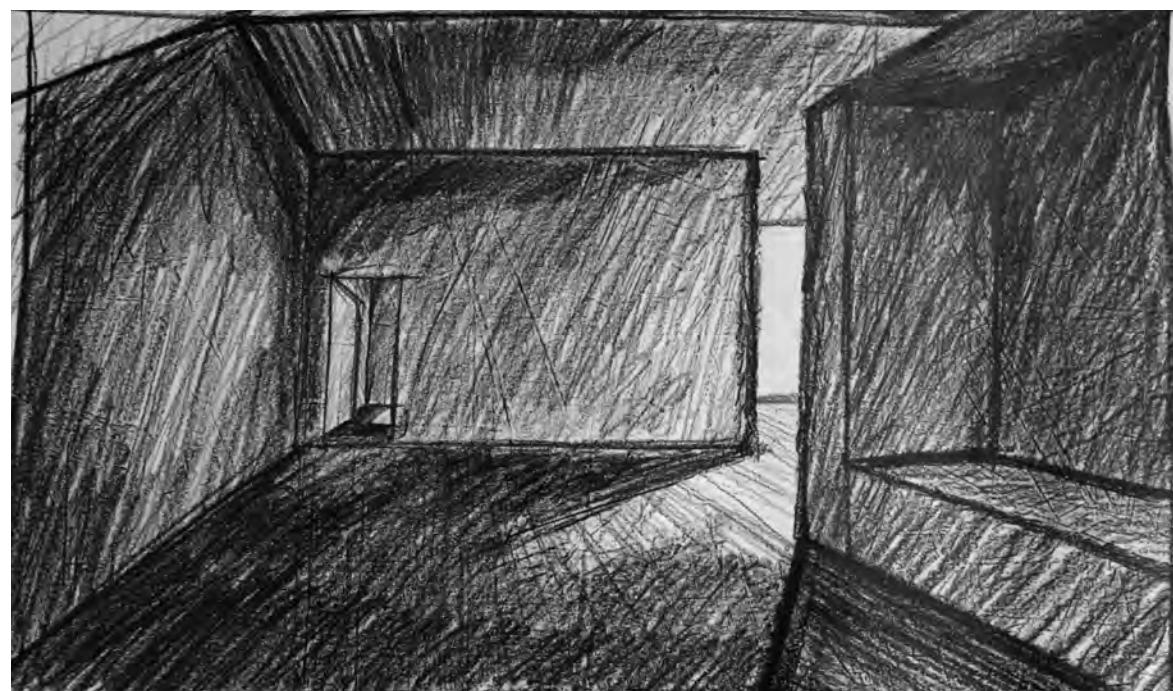
The structure of the house is made of wood utilizing the platform frame system of construction.

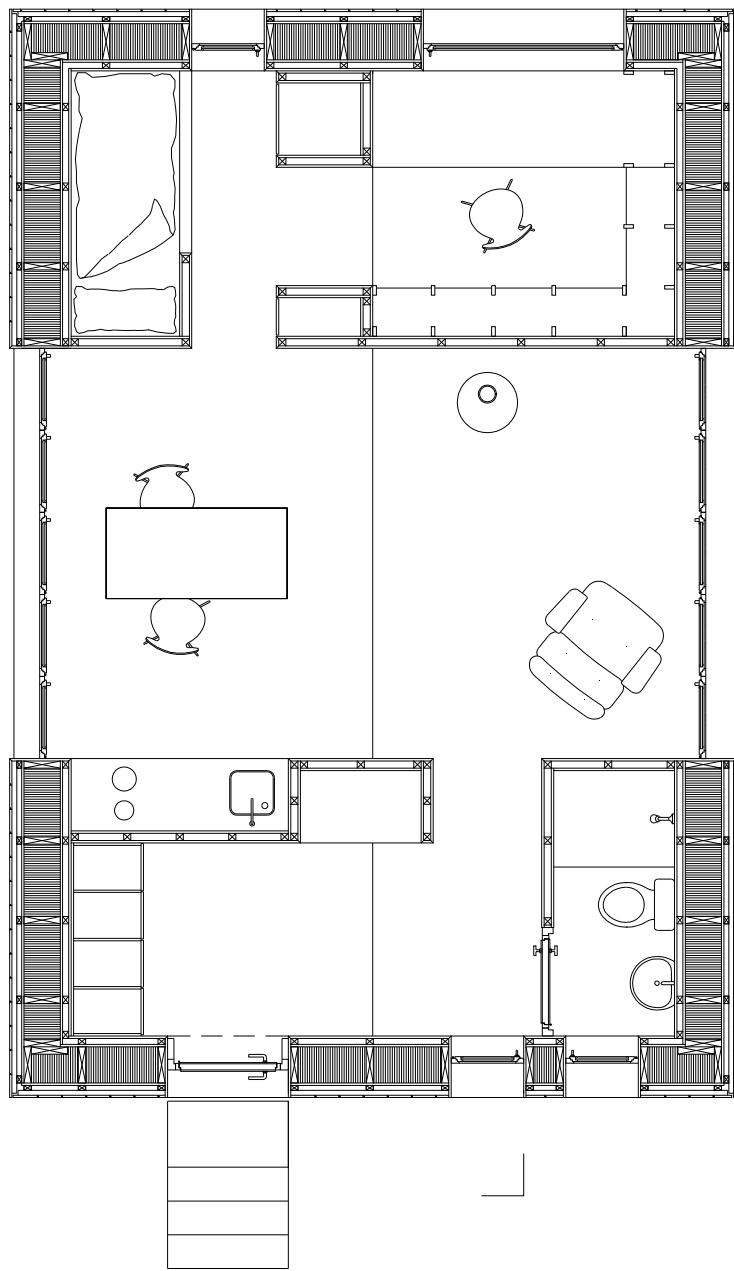


left
topography surrounding
the house

up
conceptual sketch of
interior space

down
early sketch of entrance
space to the house



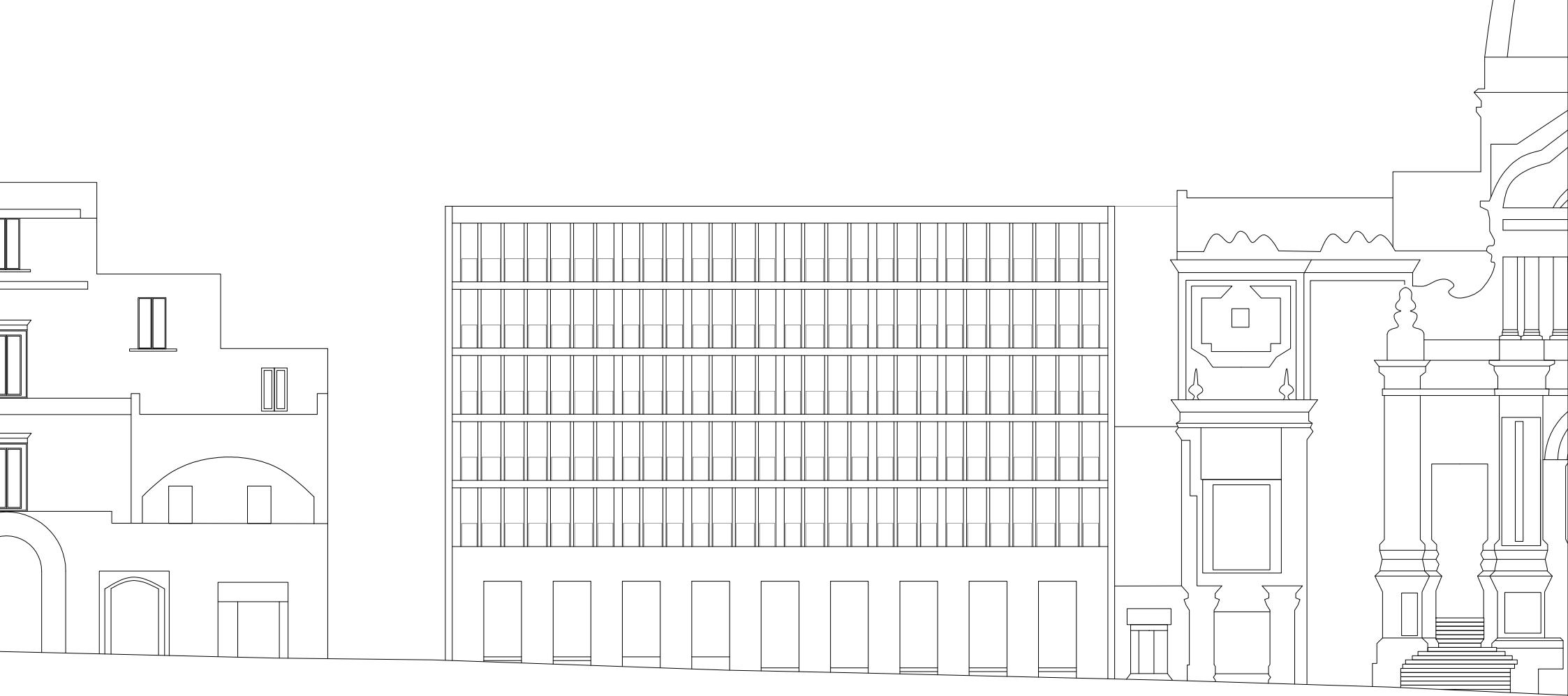


above
section through
central space

left
plan

right
model of the retreat
house





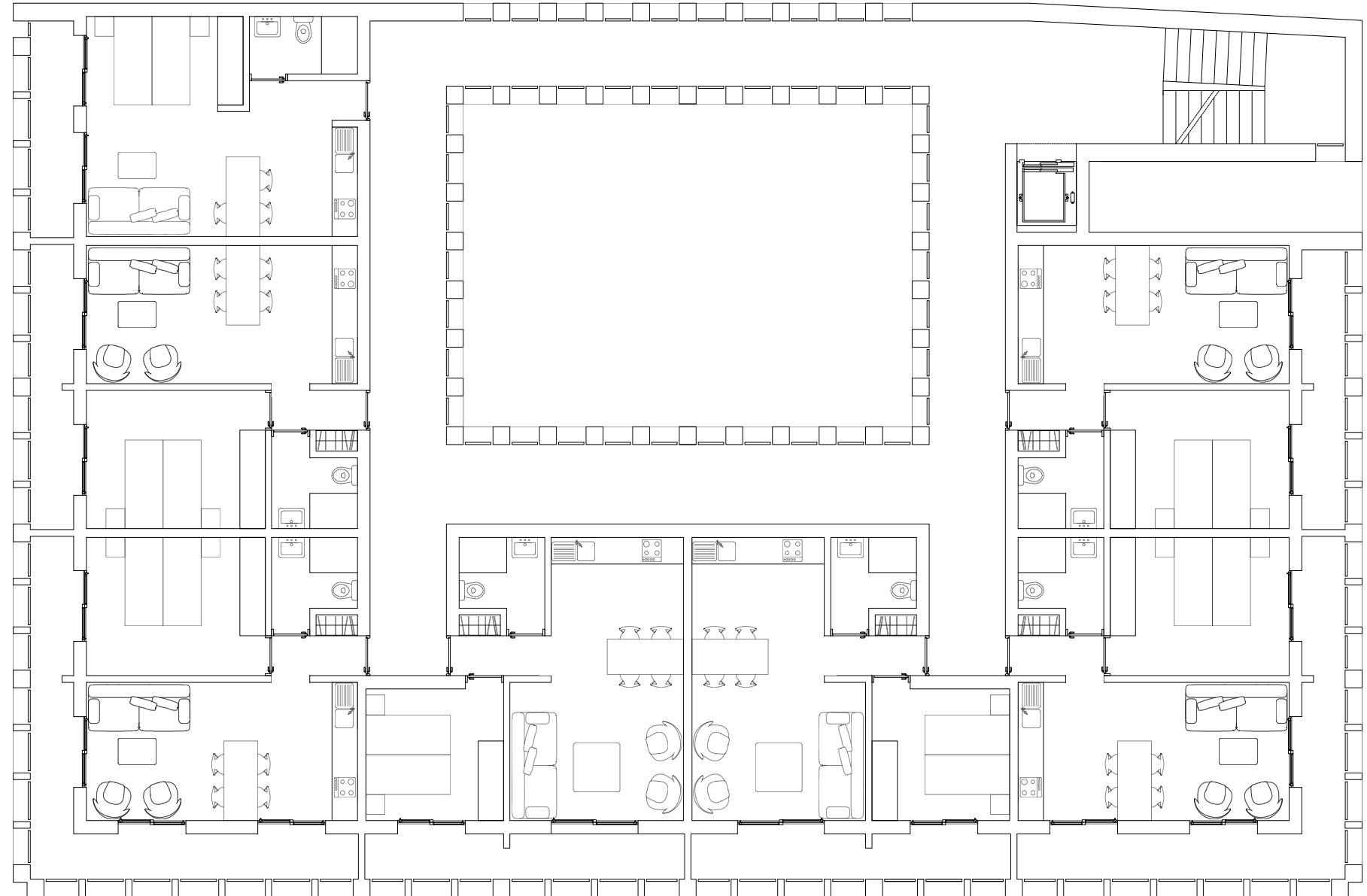
Housing in Napoli, Italy

Prof. Arch. Valentin Bearth

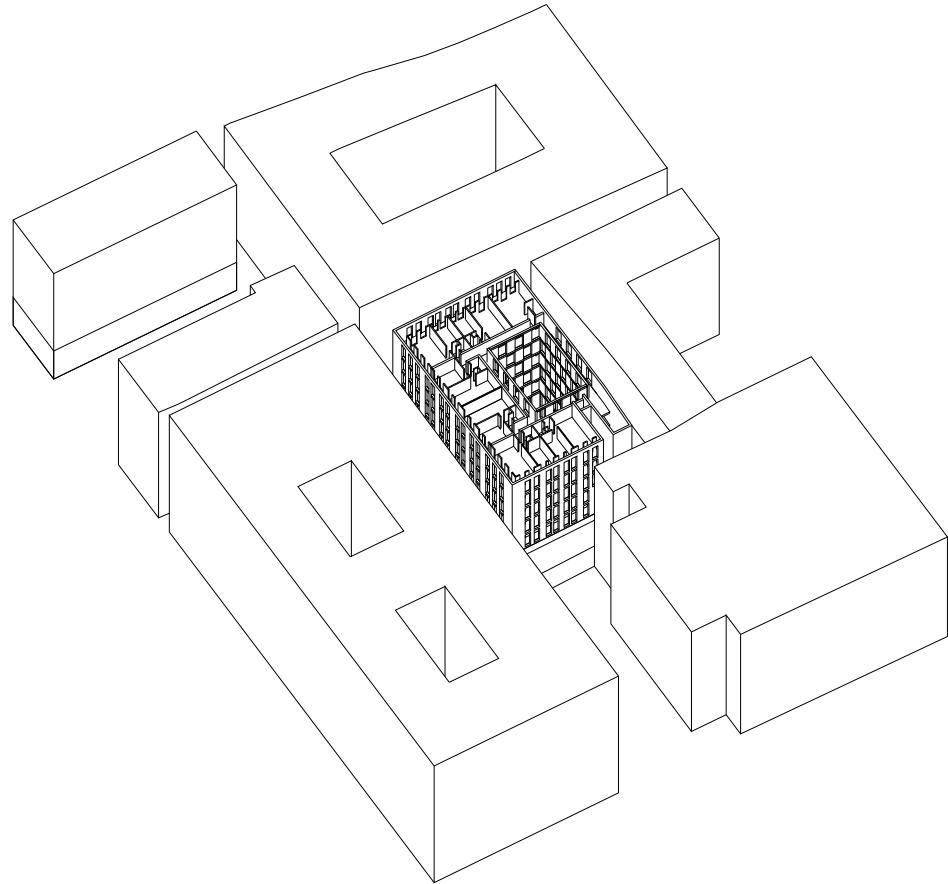
Project Supervisor: Mihail Amariei (mihailamariei@usi.ch)

Semester 2, BAC 2, 2011

Designing an apartment building in the centre of Napoli introduced the problematic of dealing with urban context. The project inserts itself into the city trying to maintain a dialogue with the historic surrounding buildings and maintain a formal relationship with the street and the volumes of the buildings surrounding it.



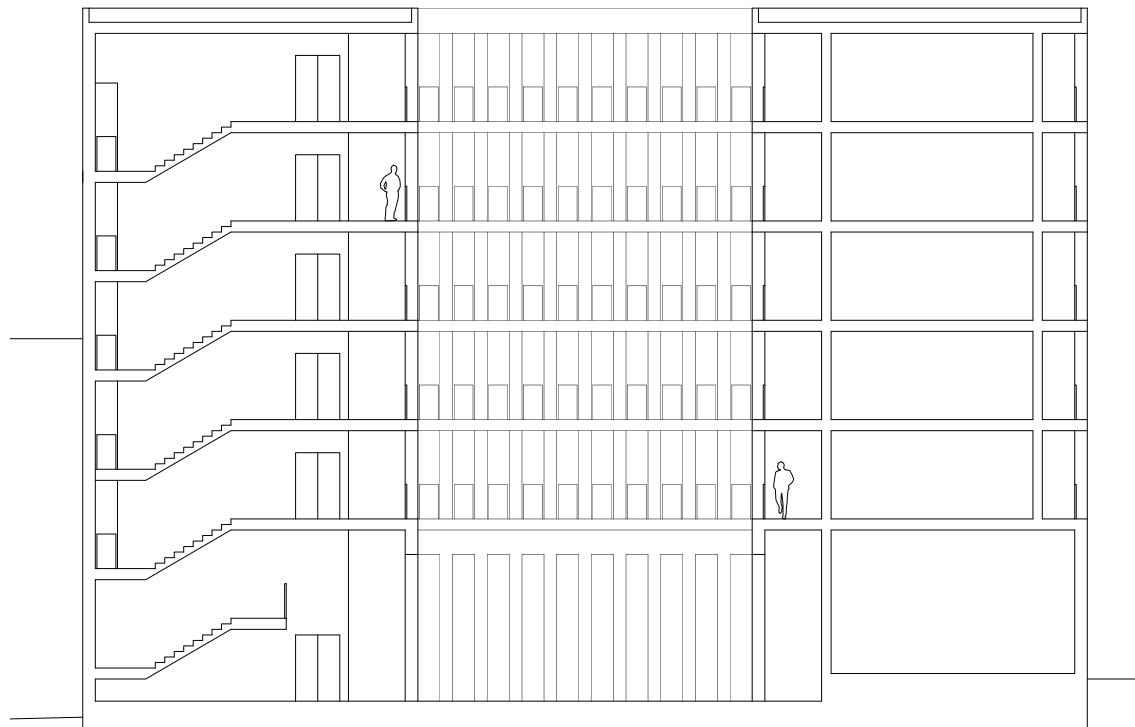
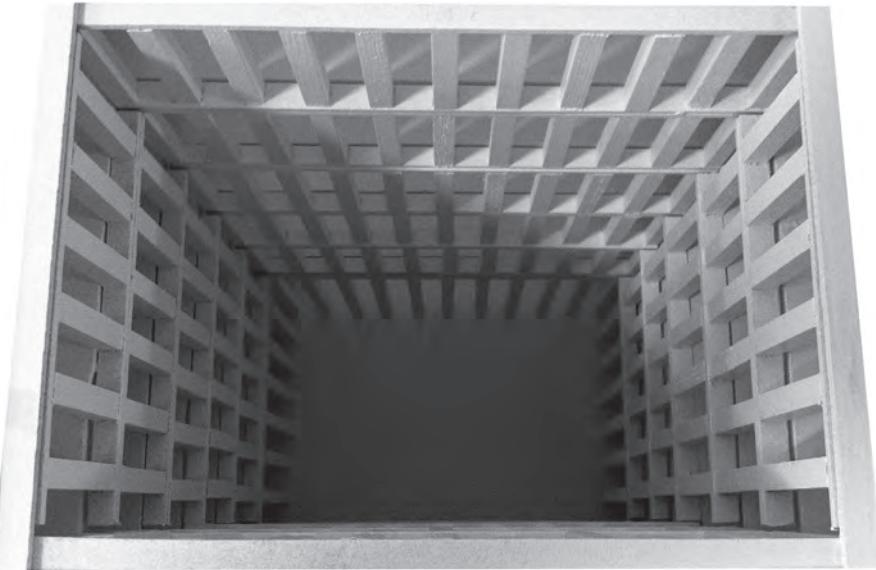
Floor plan of apartments

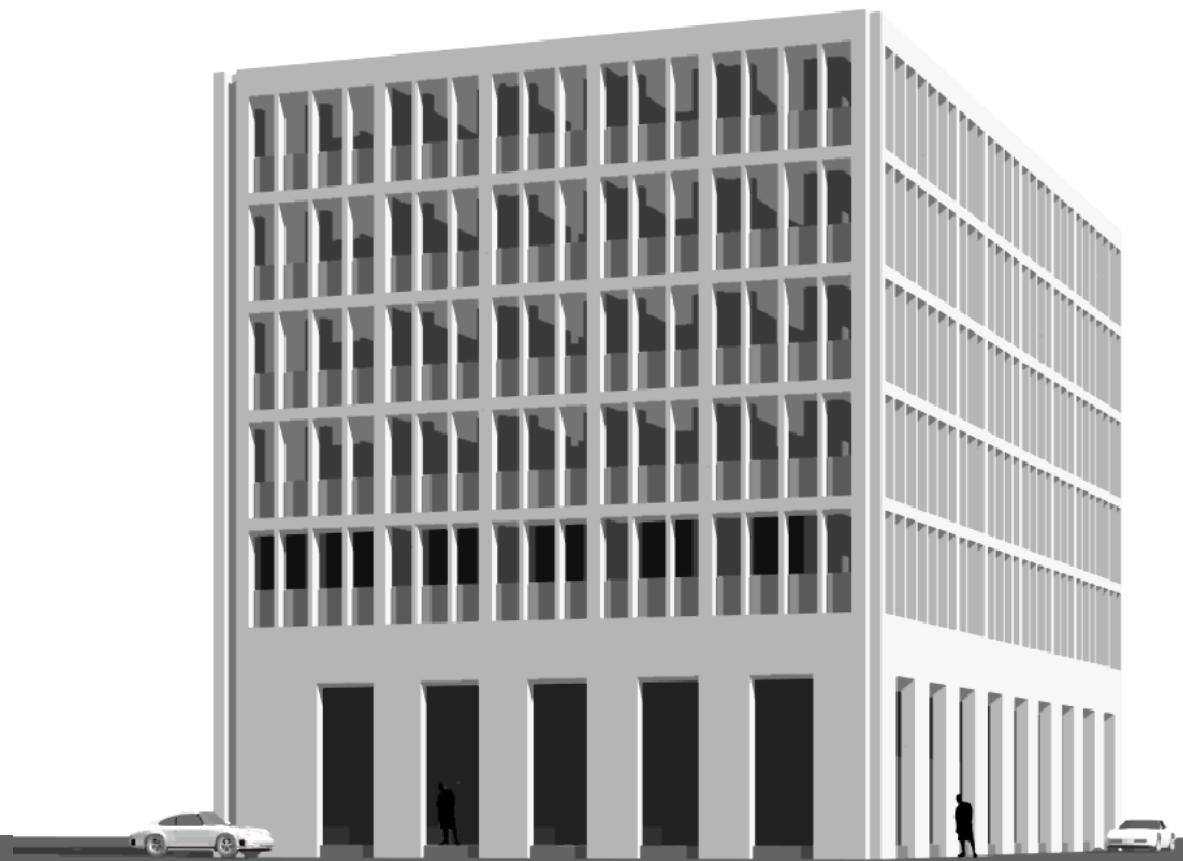


up
axonometry showing the
building in it's context

up right
courtyard, photograph
taken from model

right
section through courtyard





Study render of the building



Milano, renewal of the Porta Genova area

in light red: masterplan area

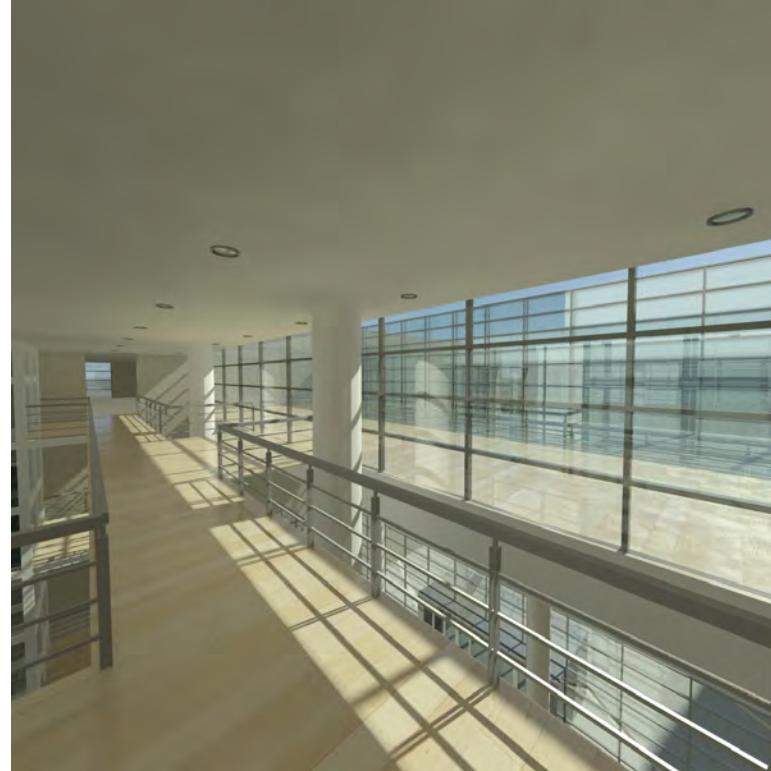
Prof. Arch. Antonio Citterio

Semester 1, BAC 3, 2012

Project Supervisors:

Gianluca Tronconi (gianluca.tronconi@usi.ch); Simona Degiuli (simona.degiuli@usi.ch)

Milan's rail system was revolutionized in the nineties with the construction of the passante ferroviario (through-routing line), which unified the state and regional rail networks and connected the suburban routes with new underground routes. This system was also integrated with urban and suburban public transport. This new infrastructural framework enabled the city to reclaim huge semi-central brownfield sites, previously occupied by the old stations and railway yards.

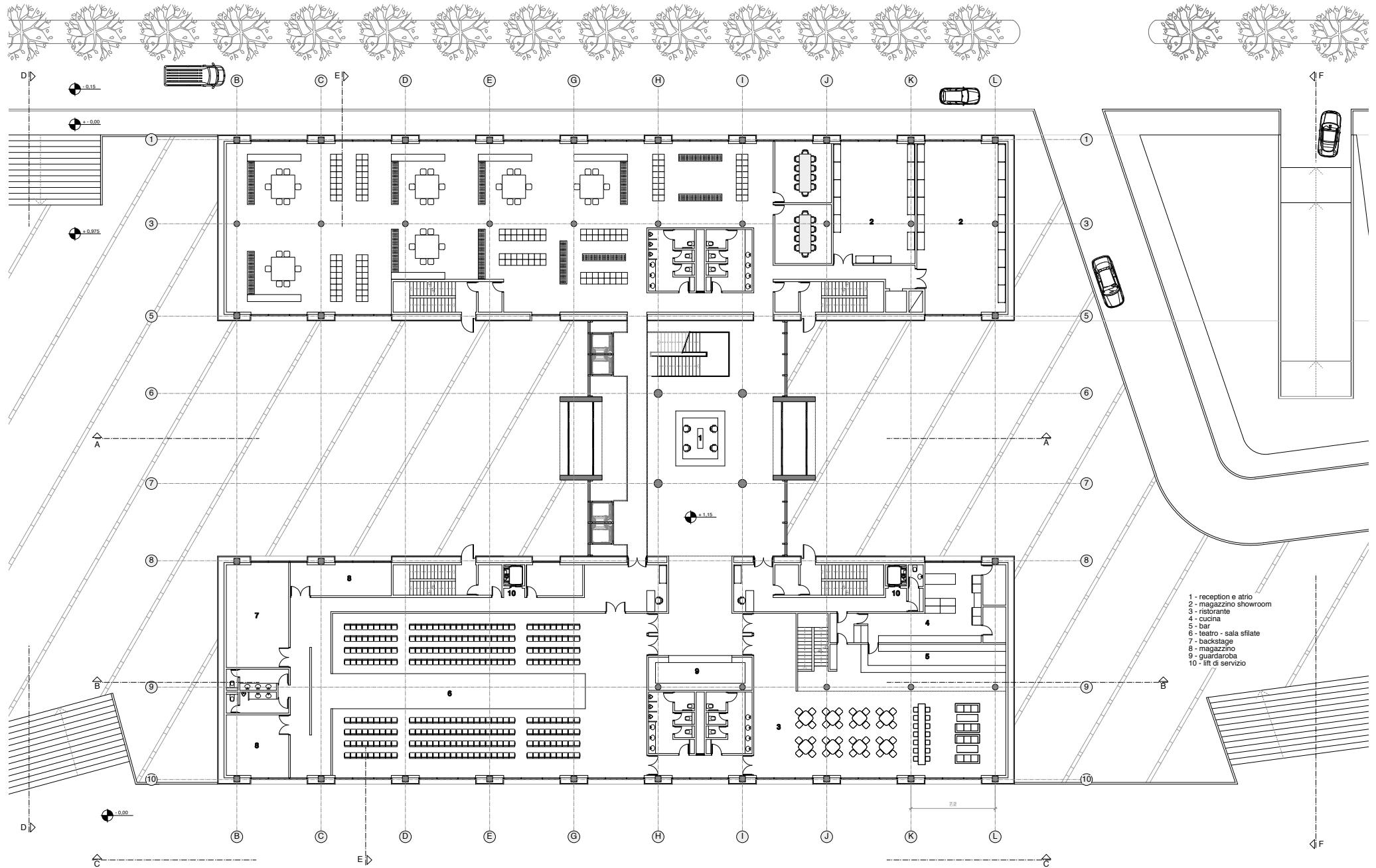


The atelier dealt with the reuse of the Porta Genova area, a long wedge of land between the historical districts of Tortona and the Naviglio Grande. Divided into groups, the atelier proposed masterplans for the area in which different programs were defined. My group proposed the masterplan above which consisted on developing a hotel, two fashion headquarters, a sports centre, the regeneration of the old train station, and various public spaces, the most important being the park overlooking into an extension of the southern canal.

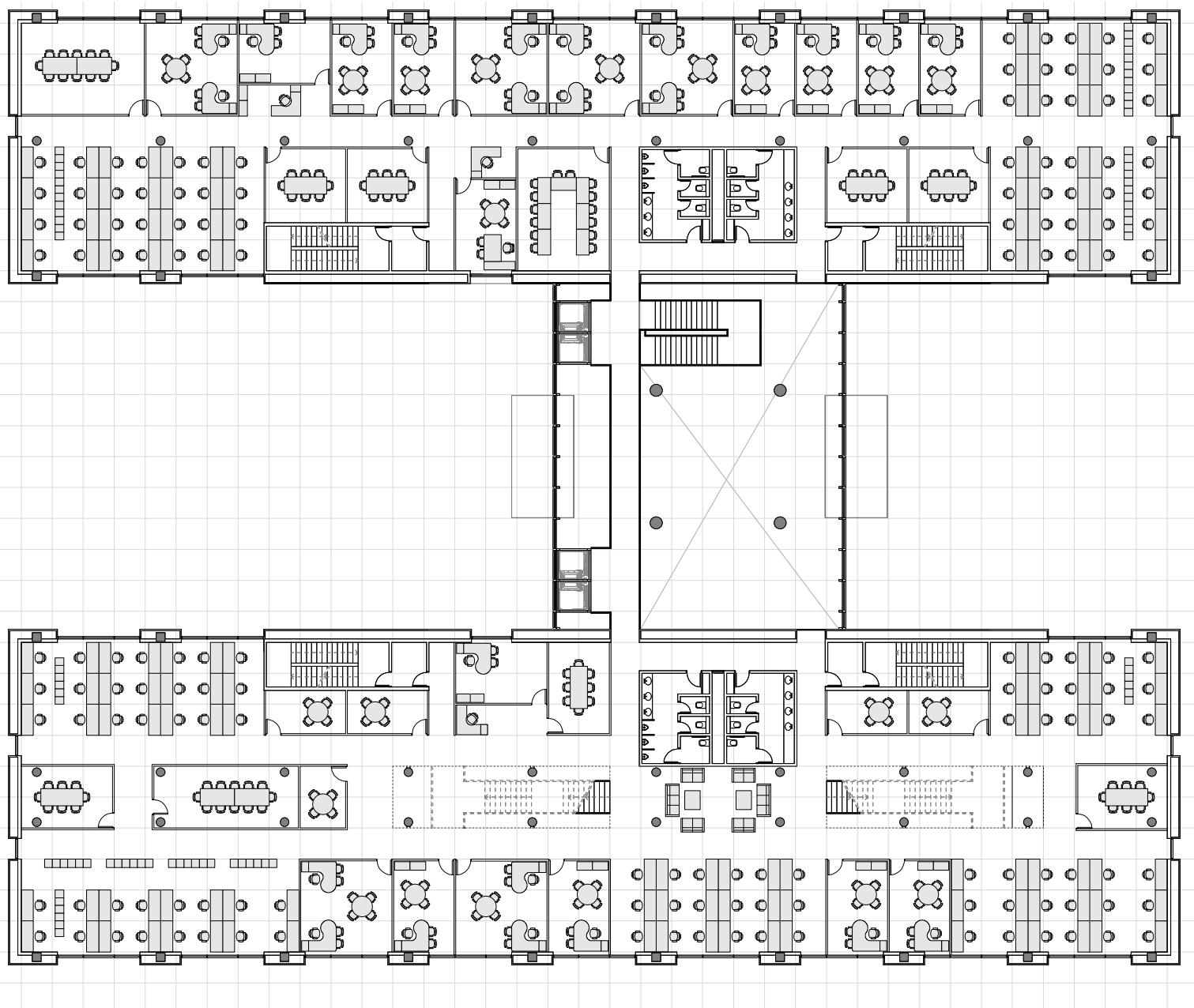
Later on, once the masterplan had been finished we could move on to design a building in the group-designed masterplan. I individually designed a headquarter for a fashion company.

Left

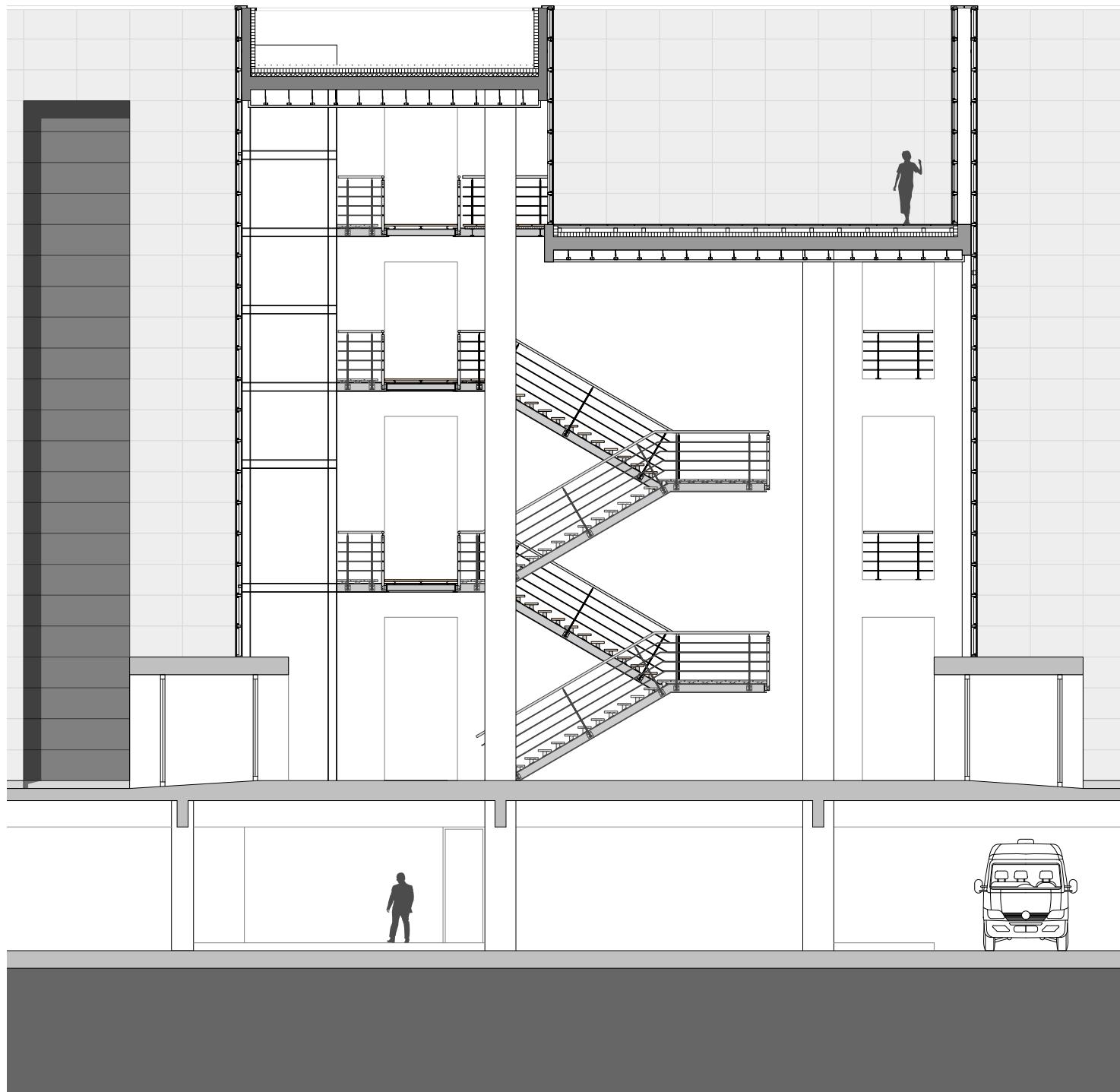
renders made by Roberto García showing exterior and interior views of the fashion headquarter



Ground floor plan



The building was designed using a module of 1.8 meters. This module is later on multiplied to obtain a column grid which serves as the structure of the building.

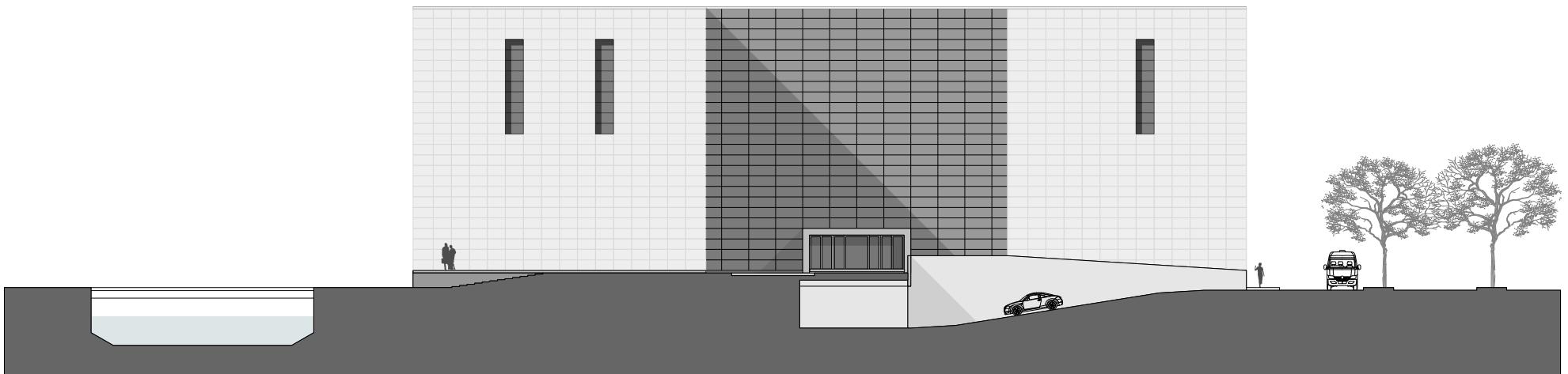


Clients and guests are received into a double height foyer in which circulation between the two parts of the buildings can be seen as bridges communicating both sides.

A deck covering the foyer can be used by workers to go outside and enjoy fresh air.



South facade



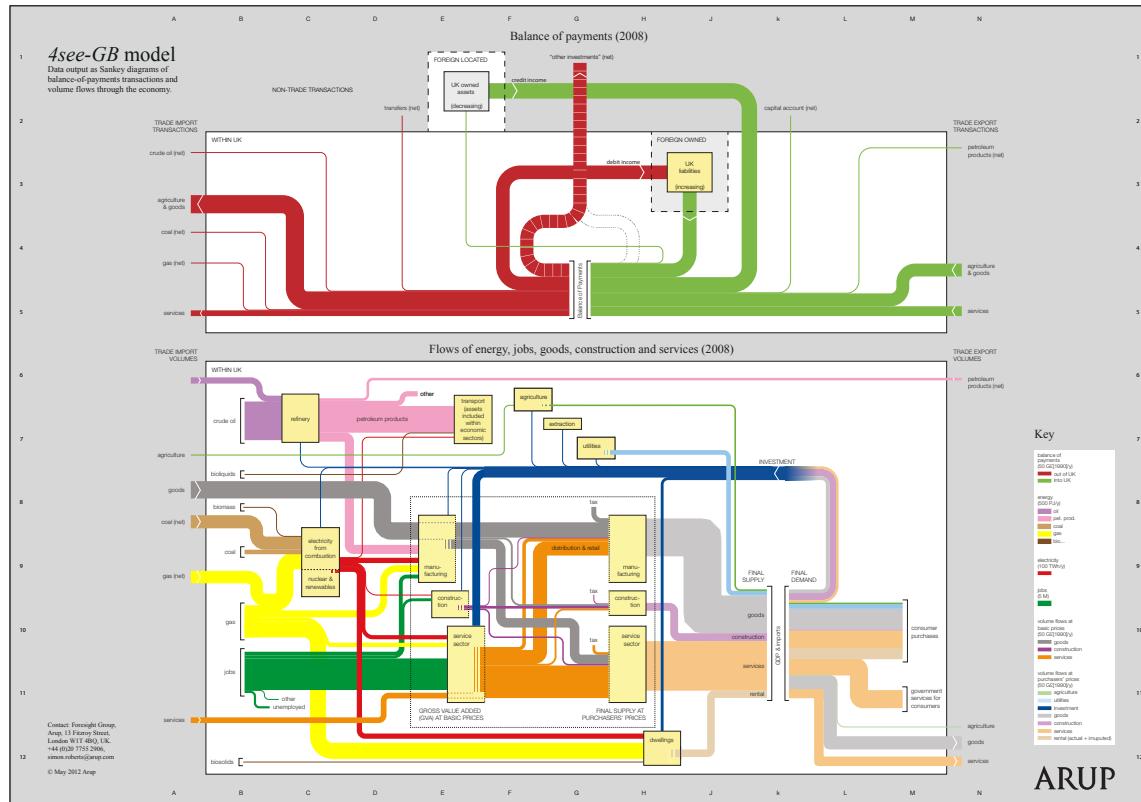
East Facade

Work Experience

After having finished the second year of Bachelor in the Accademy of Architecutre of Mendrisio, Switzerland, I worked in London for nine months in a global firm, Arup. As an intern there, I had the opportunity to understand how such a big company works and how complex design processes are taken into practice.

In Arup, I worked in the Foresight + Innovation team which focusses on identifying and communicating the trends and issues likely to have a significant impact in the built environment and society at large.

In this part I briefly explain and show a couple of the projects I've worked on.



4see framework

The framework 4see is a new approach for the analysis and integration of comprehensive statistics of economic information and employment of a country, including transport, energy and the balance of payments. The model 4see can be used for the creation of future scenarios with the utilization of historical data in combination with the investment options.

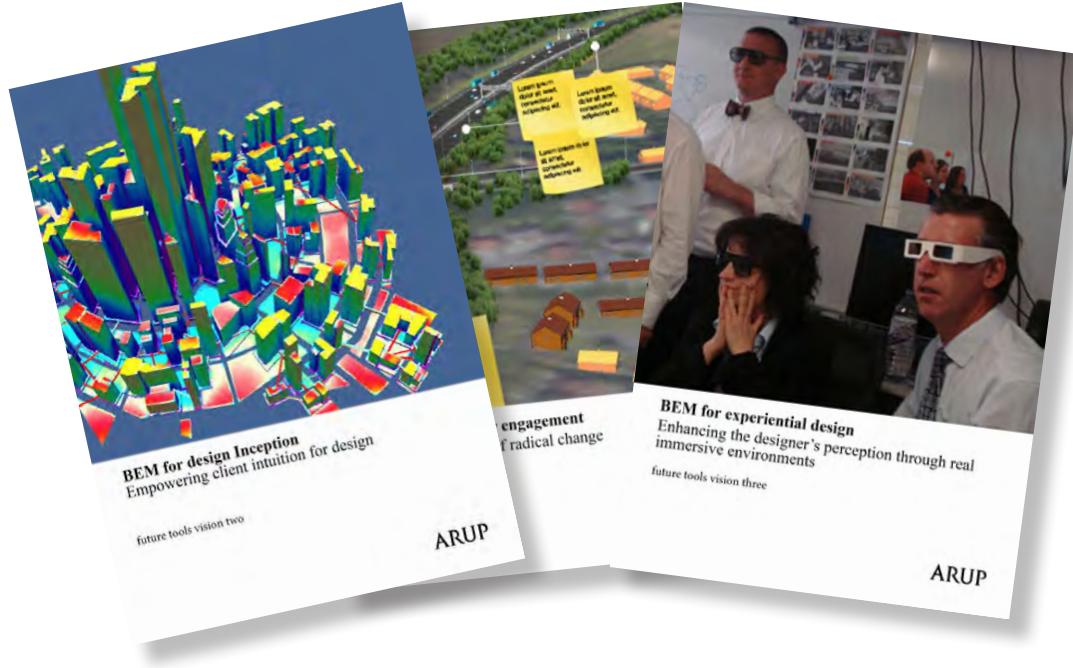
With the physicist and head of the industrial method 4see, Dr. Simon Roberts we created graphics that explain the economy of a country. I also had the pleasure to help him with the graphics that will be in a book on economics and diagrams that he used in a TED conference (<http://www.youtube.com/watch?v=CakBDV1nH5M>).

Thanks to my participation in the project I had the opportunity to meet the architectural offices of Norman Foster and Richard Rogers at a presentation held in these offices.

Phase 2

Phase 2, Arup art gallery was created as a place to explore the connections between art, design and engineering. Through its exhibitions Arup intends to work with the creative community, the general public and its project partners. During my work at Arup, I worked with Dr. Jennifer Greitchus, the general manager and curator for exhibitions.

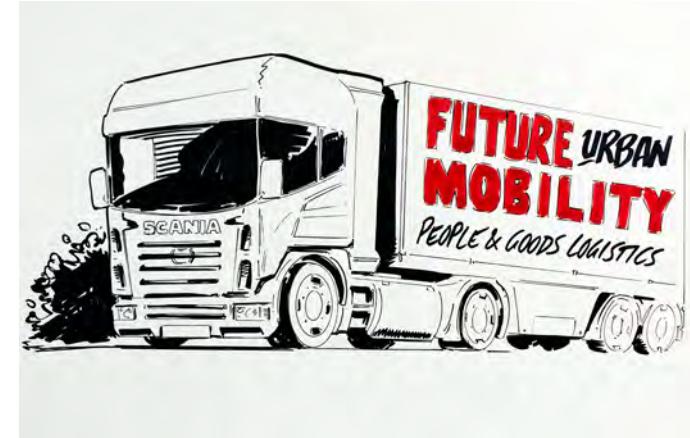
The photograph above is from the inauguration of the exhibition celebrating the 50th anniversary of St. Catherine's college in Oxford designed by Arne Jacobsen. I provided assistance to Dr. Jennifer Greitschus with the mounting and organisation of all the exhibitions held during my internship.



Built Environment Modelling

Working with the architect Alvise Simondetti I learned a lot about how designers use and could improve digital tools to have a better communication with the customer.

The three visions seek and put highlights examples of the most effective way of working with clients, engineers, and how to facilitate the work of designers. I provided graphic support for the creation of the visions.



Future of Urban Mobility

I attended a workshop in Stockholm thanks to a collaboration between the group Foresight and a Swedish car company to investigate the future of urban mobility.

Engineers and industrial designers have exchanged views on major issues that cities must face in order to have a system of effective and sustainable transport.

I provided the senior analyst, Josef Hargrave with research, design, and logistical support for the workshop.



3D Printing

Through the use of a 3D printer installed in the office, the engineers, architects, and designers could print the prototypes of structures, products, mechanisms, etc..

Having the responsibility of the 3D printer I had the opportunity to see things on which architects and engineers were working on. I could also attend and help on workshops which discussed how designers can implement 3D printing into their work flow.

top

designers discuss on how to use 3D printing

top centre

3D printed structural angle of the Leadenhall Building

right

render of the Leadenhall building designed by Richard Rogers



IHG workshop

Foresight organized a workshop with a client, InterContinental Hotels Group (IHG), which gathered more than 50 designers, architects, engineers, and hotel experts to predict what the hotel of the future could be.

I provided support for the workshop and participated in the conversations held.

top

experts from different fields share their views on how a future hotel might be

Personal Photographs

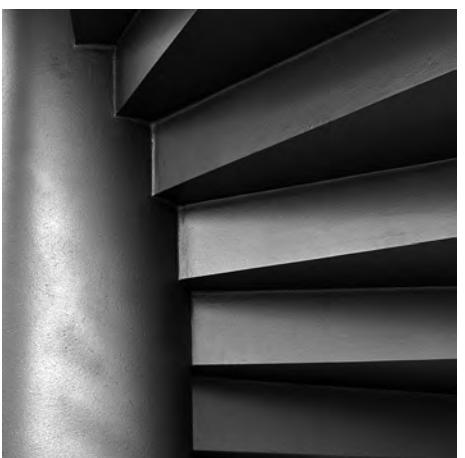
Photography interests me very much and with the help of this medium understanding and learning architecture becomes much more enjoyable and easier.

Before taking a picture, I analyze the building or scene and then compose only in the camera. I manipulate the least possible on the computer as I consider more beneficial for my compositional training taking the photograph immediately.

More photographs of mine are available here: <http://www.martinfdc.wordpress.com>



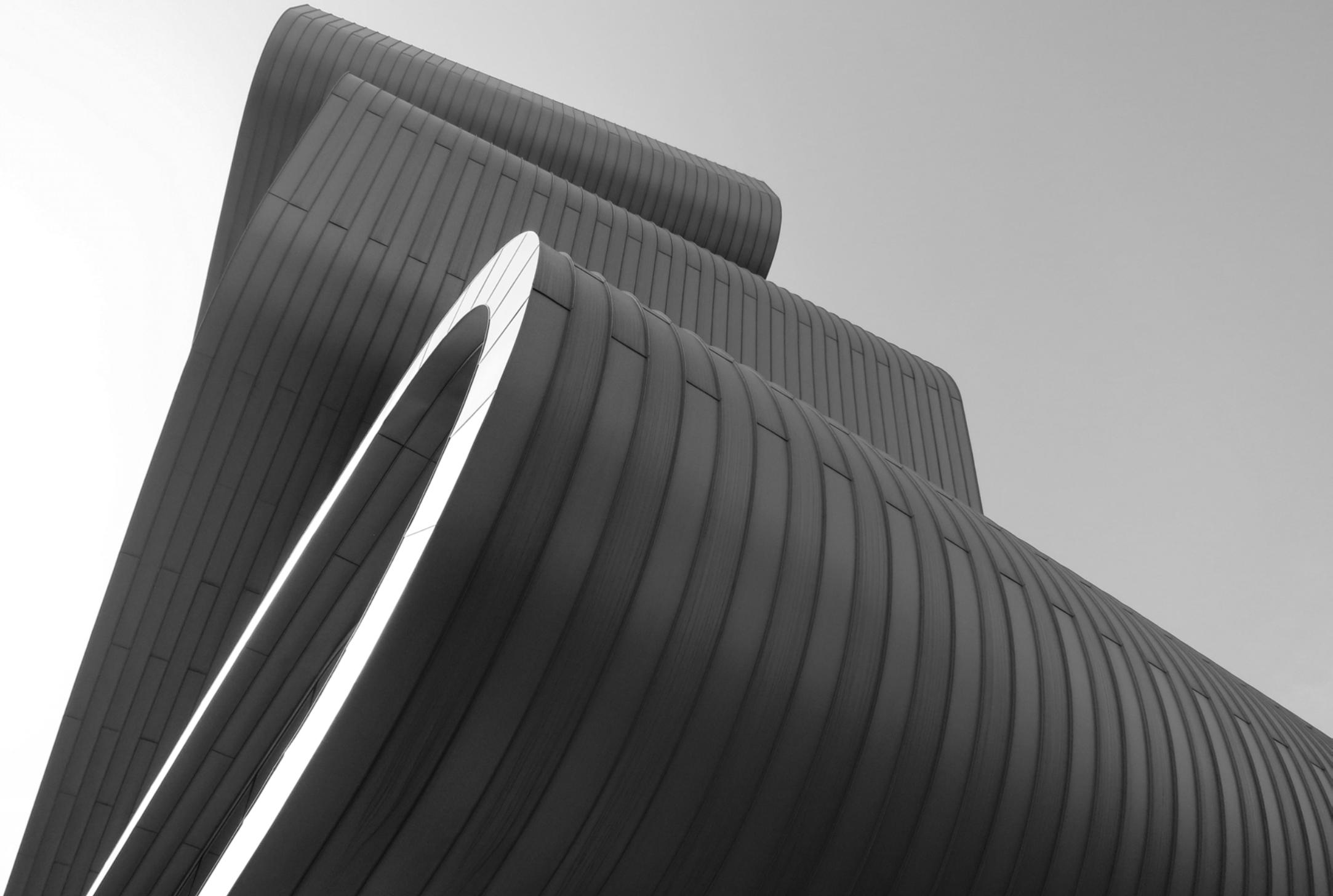
Gio Ponti's ceiling at Pirellis Tower



Study of a staircase



Detail of a building in Camogli, Italy



Detail of a building in Antwerp, Belgium



Albigna Dam, Switzerland



Pantheon in Rome