

C L E M E N T L O Y E R

P O R  
T F O  
L I O



A R C H I T  
E C T U R E  
- & -  
G R A P H I C  
D E S I G N .



# PROJECTS



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HOUSING - MEET THE BARN

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FURNITURE DESIGN - CURVILIGN BENCH

SYRIA POST-WAR HOUSING - A CULTIVATED LEGACY

A SCULPTURE BASED ON A CONTAINER - CHINA HILL



## PHOTOGRAPHY

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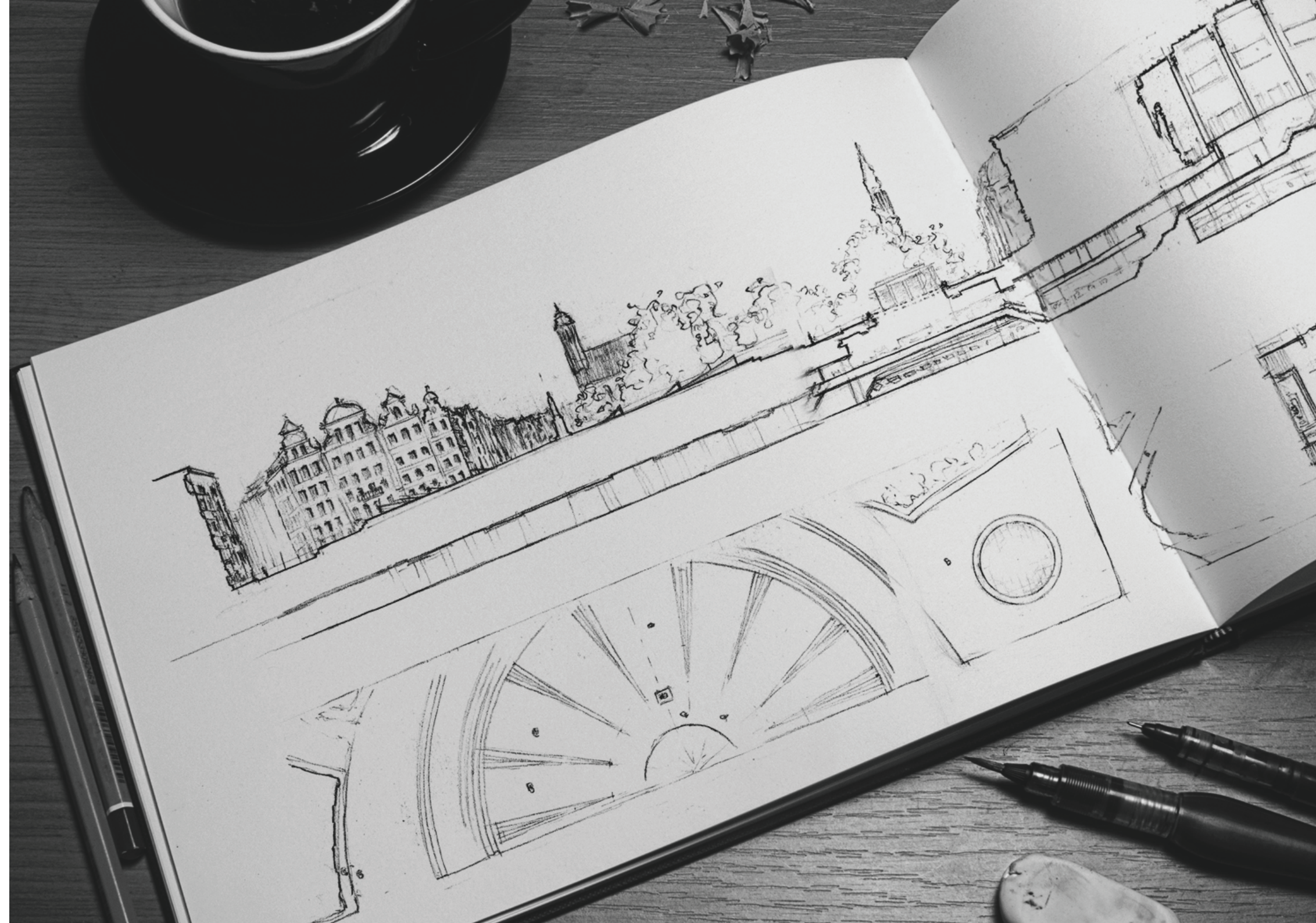


## ACADEMIC DRAWING

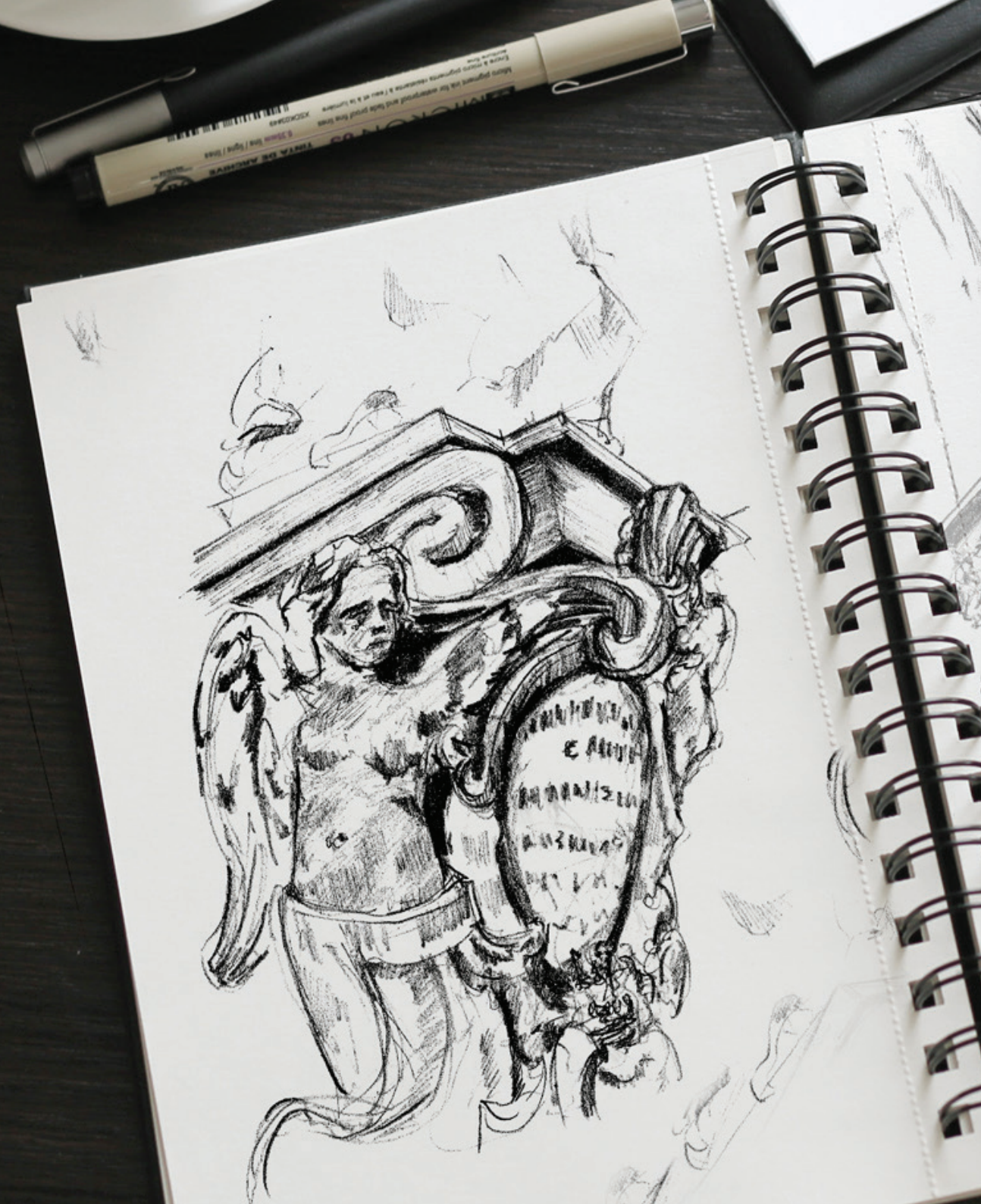
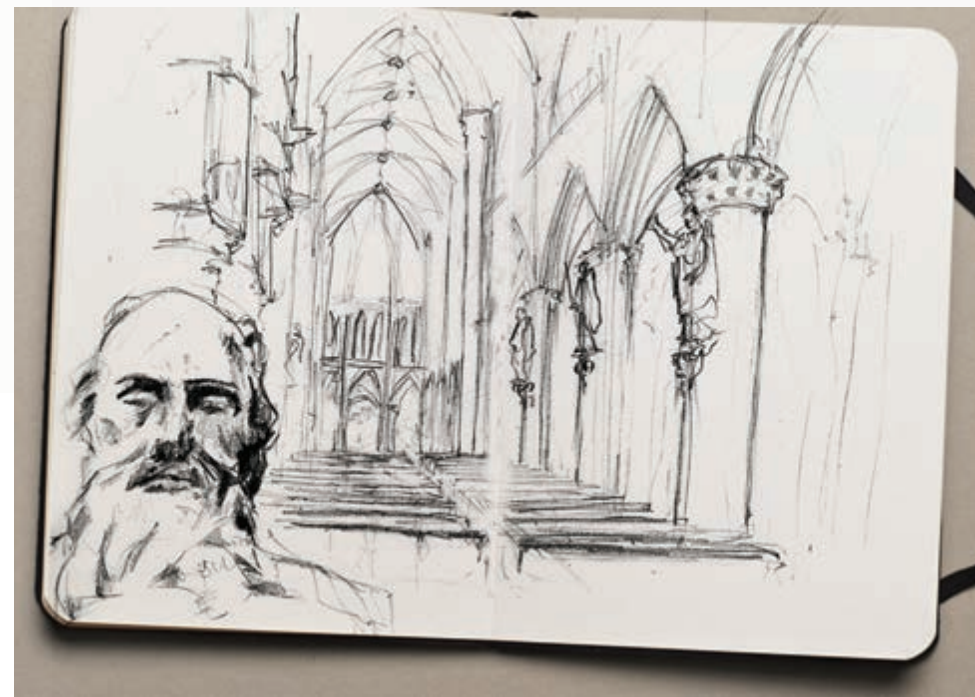
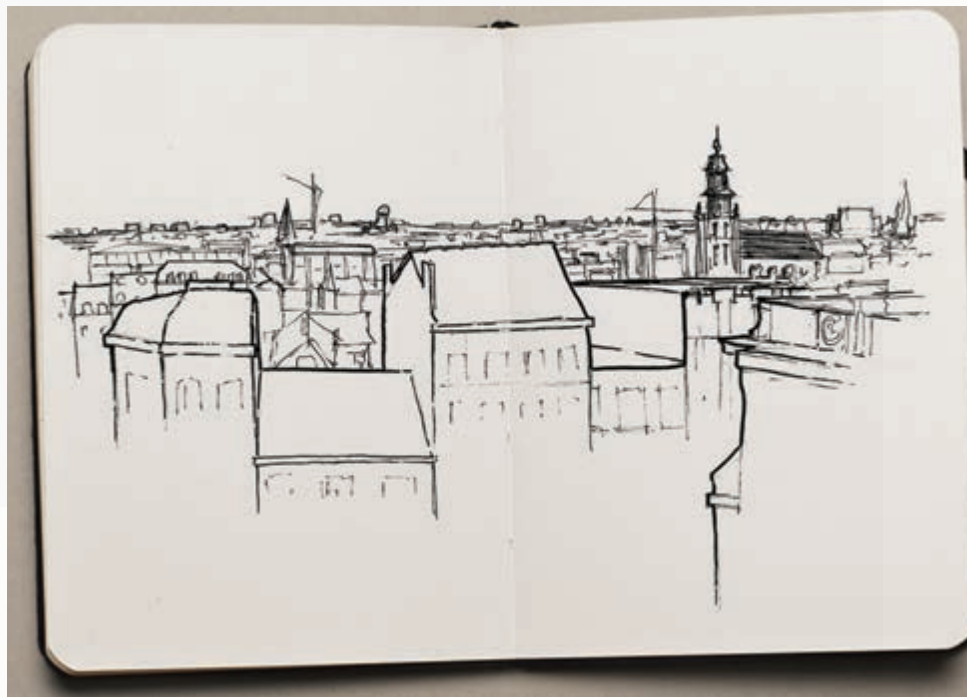
Here's some academic drawings, learning proportions, perspective and centring. All the following drawings have been made in a live environment, without instruments except pencils & paper.



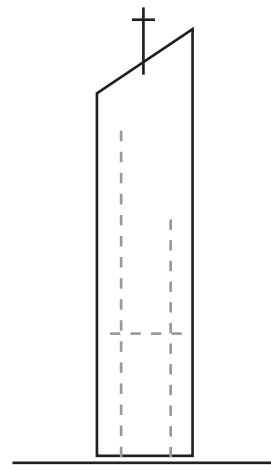
*Academic Work  
2011-2015*











## DECONSACRATED CHURCH - TRINITY REHABILITATION

**This project takes place in an existing church in the center of Bruxelles : the 220 years old Trinity Church.**

The recreated place is alternating two programs, one base don the craft workers (8am to 19pm) the other one brings the nightlife in the church, with a club and a concert scene (19pm to 4am). Bring back people in this forgotten place, celebrating the new society values.

The project aims to question nowadays relation to the sacred, placing the handwork in the center of the beliefs, as a higher value in a consumer society.



*Academic Work  
March 2014*







*Physical model  
Patrimony work on the facade*



*3D Visualization  
Patrimony work on the facade*



*trinity church*  
REHABILITATION WORK

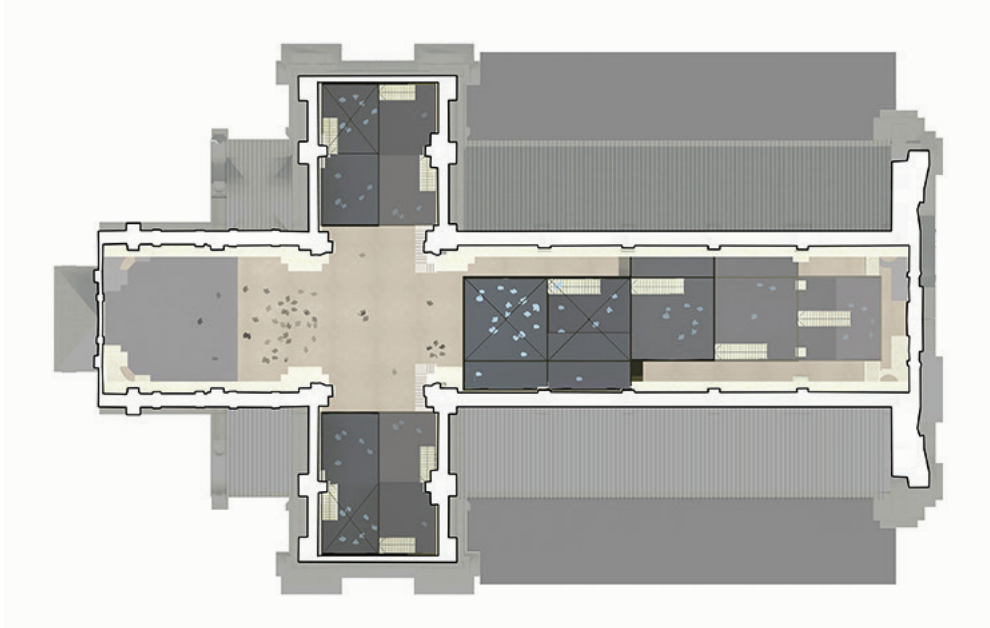
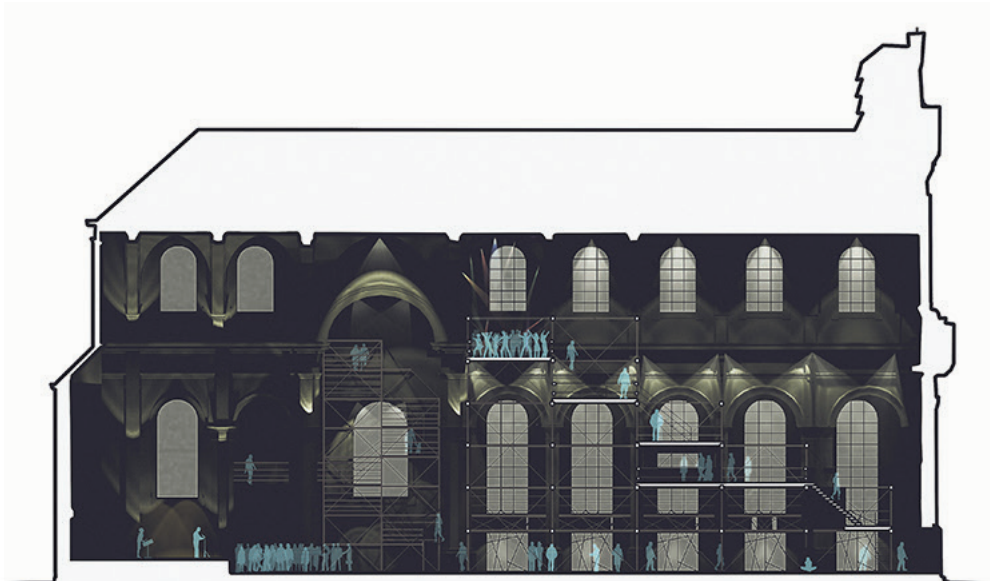




12



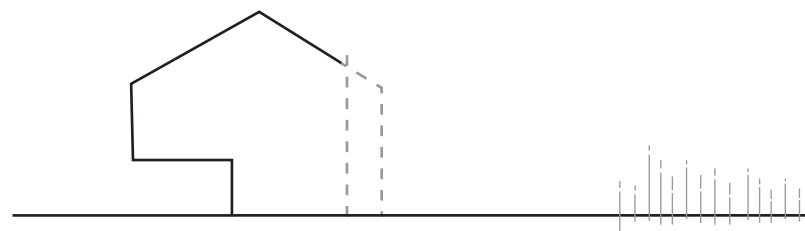
Daylight Project  
Craft Center



Night Project  
Nightlife







## HOUSING - MEET THE BARN

This project takes place in the Belgium countryside, with the responsibility to densify a small town call « Perbais » bringing 300 habitants when there's just 140 people for now.

**The willingness of the project is to complete a pre-existing schema, that insulated buildings along consolidation paths, this is to control the city growing, focusing on the edge of fields.**

The project focuses in 6 locations, with 16 housing each. The building is conceived as a set that contains all, welcoming vehicles under a common porch. Keeping link with the land, and the development of community life are the foundations of this project. Lastly, the material is inspired by industry codes, strengthening the aura of a building that acts as a signal output agglomeration.



*Academic Work  
June 2014*





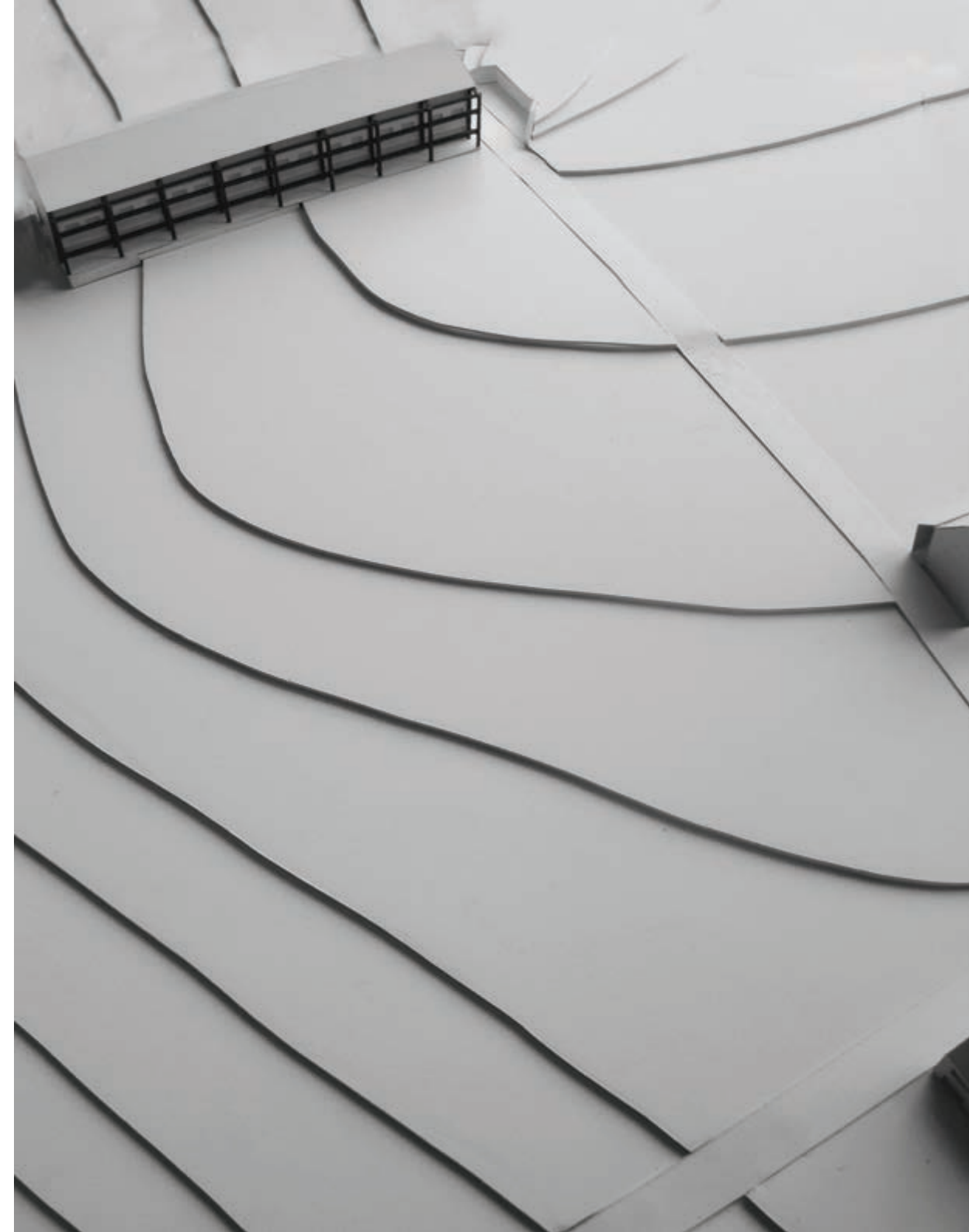



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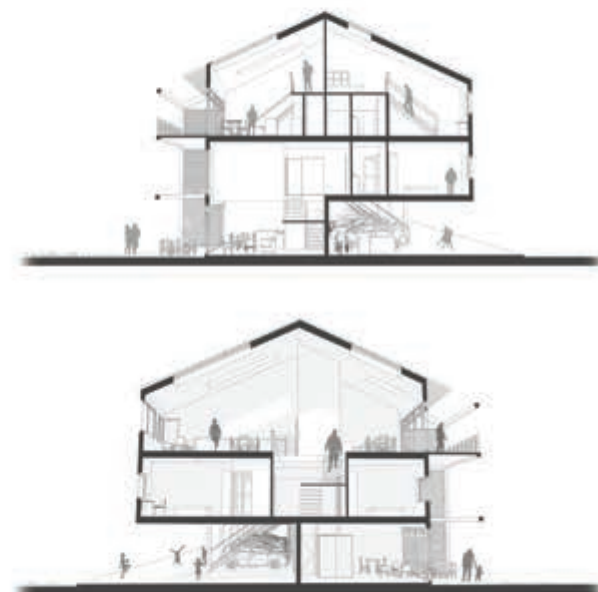
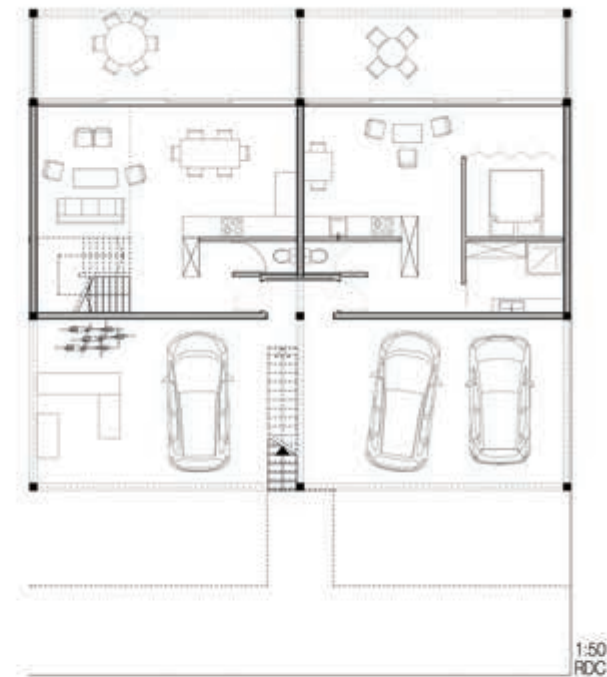
*3D Visualization*  
*Attention on the field relation & materials*

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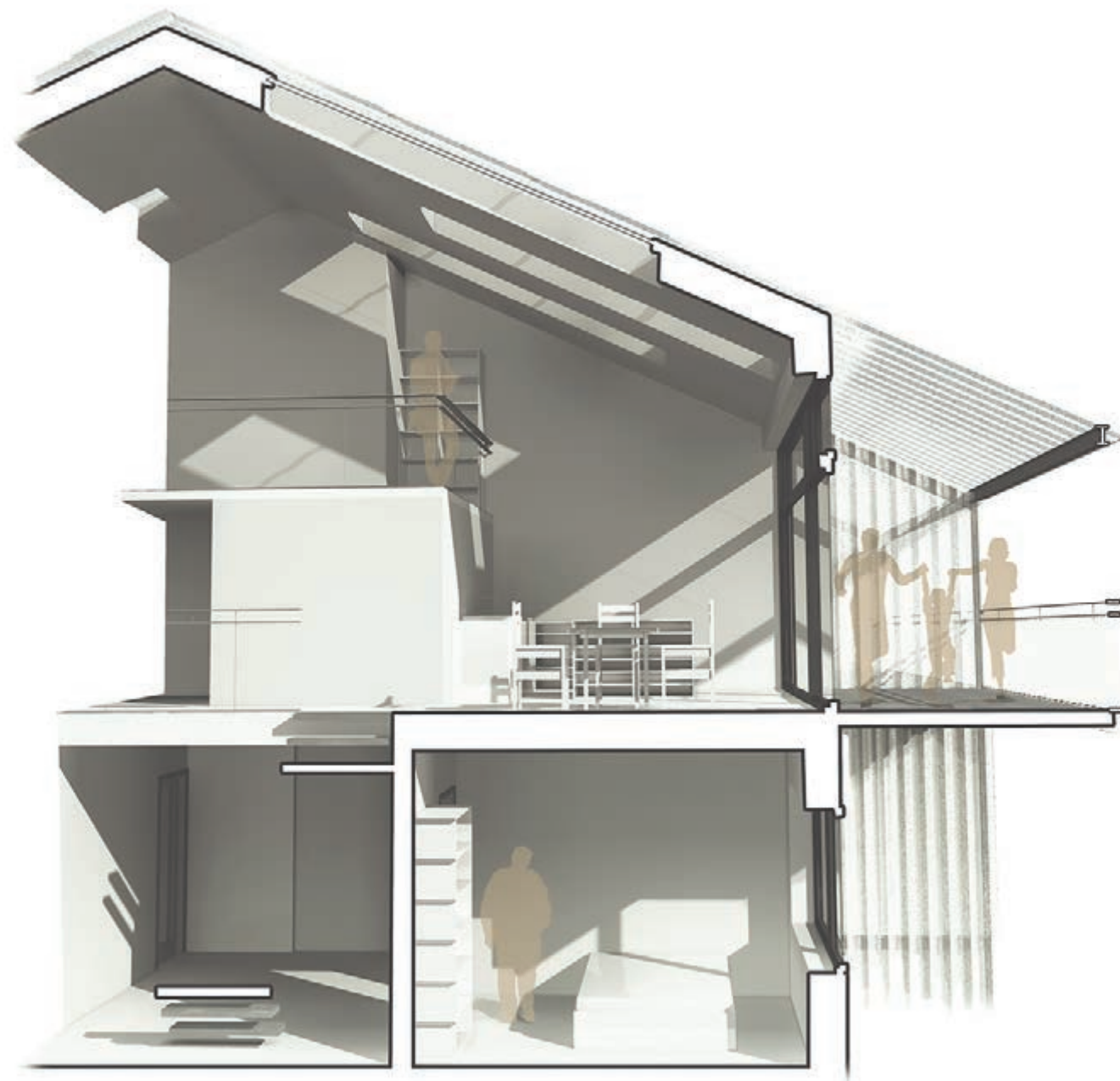
*Physical model*  
*Establishment at the field's edge*





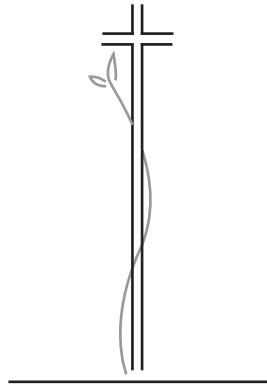


Plan & Section  
Systematize a certain quality of life



3D Visualization  
Section of upper housing





## IN THE FOREST LIES A GARDEN..

The following project was done at the « Architecture in Representation » class, led by Laurent Lescop, the purpose was to approach new architectural ways of communicating and travelling a project. The class's subject was the Cistercian order, we chose a ruined abbey : Clairmont. **The purpose was to rebuild the abbey, on a patrimony work, but also give it a new meaning by the injection of a vegetal cloister.**

Thanks to the technology and «Unity3D» we were able to recreate an interactive environment, in augmented reality (360° projection). This innovation allows us to show how Clairmont is reinvented, throughout seasons, throughout years.

The immersive aspect of Unity has allowed us to test atmosphere, spatiality, but also sounds associated with our project. Our idea of a plant cloister implies a permanent evolution of life; the software allowed us to test the installation for 1 day, 1 year, 5 years, 10 years or even 150 years .. Staging change and evolution in an abbey where time seems at a standstill.



*Project featured on the « Worship in soundscape » exhibition in Quai Branly Museum, Paris, november 2015*



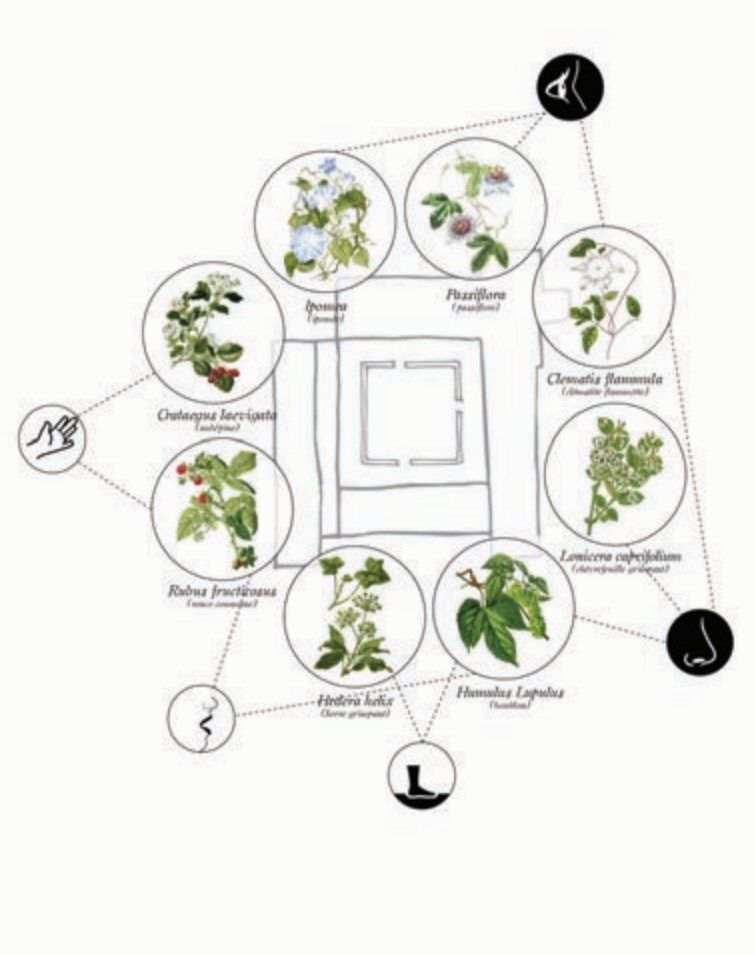
*Academic Work  
December 2015*





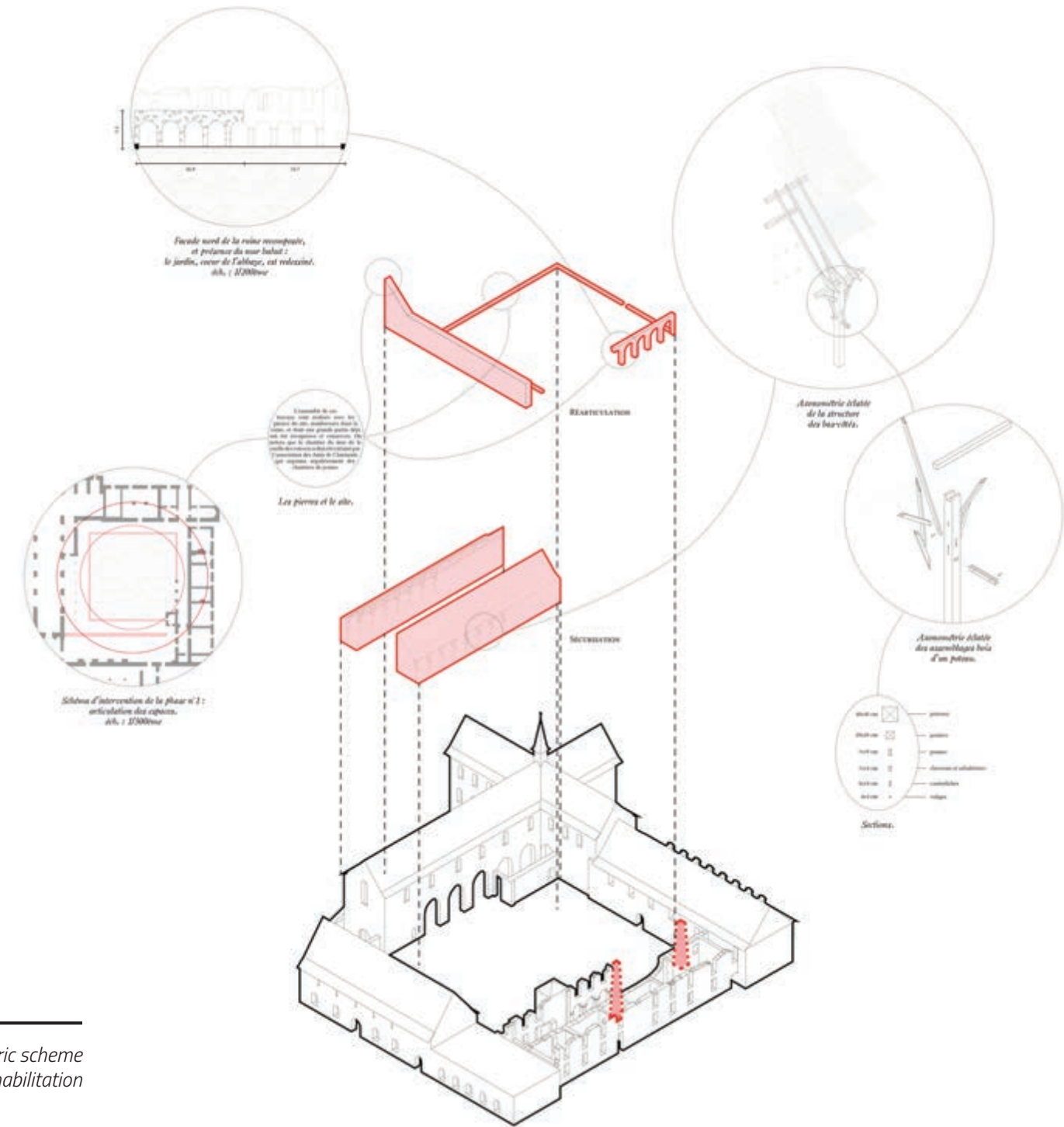


Collage concept



Flower essence &amp; distribution

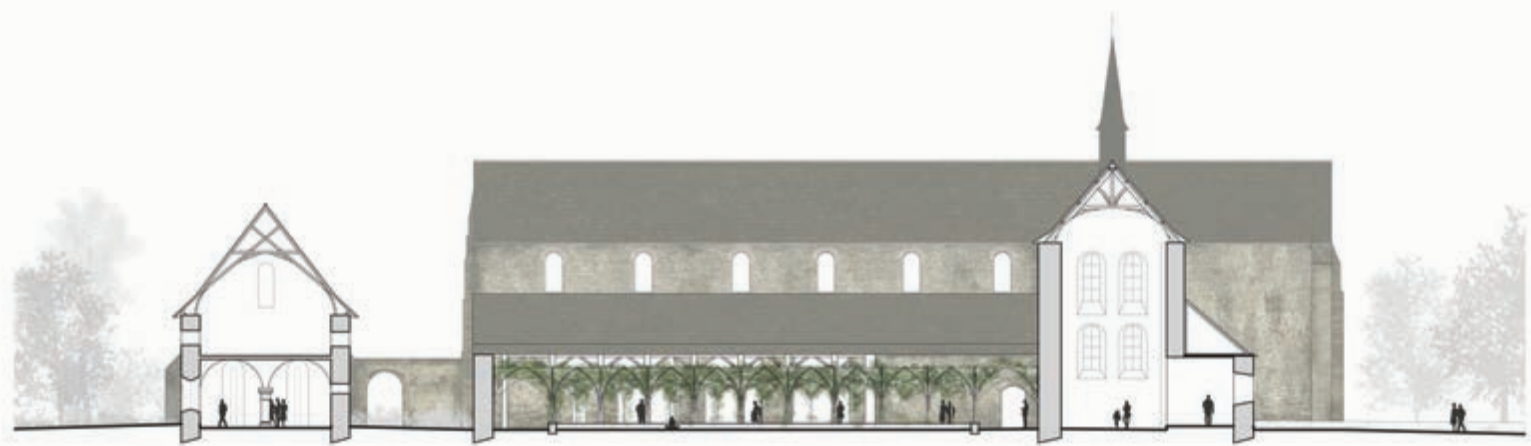
Axonometric scheme  
Abbey organisation & rehabilitation







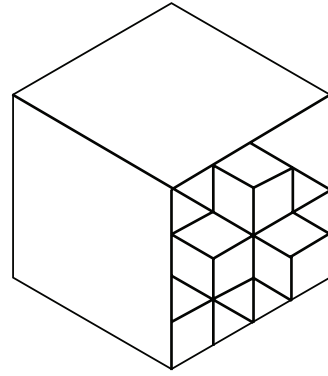
*Coupe nord-sud, Ech. : 1/2000me*



*Abbey & vegetal cloister section*







## SMART CITY - JALIS EXPLORATION

The concept here is to create a new concept of smart city, in Jaipur, India. The environment is hostile, monsoon, extreme heat & hydric stress in the middle of an Indian desert.

We decided to go along following a geometric path, trying to get profit out of the lack of resources, and imagining an expanding structure based on geometrical alteration. The Masterplan & 3D model combine the planning in terms of : transport, housing & work typology, networks, culture access, agriculture, public space and water holding.

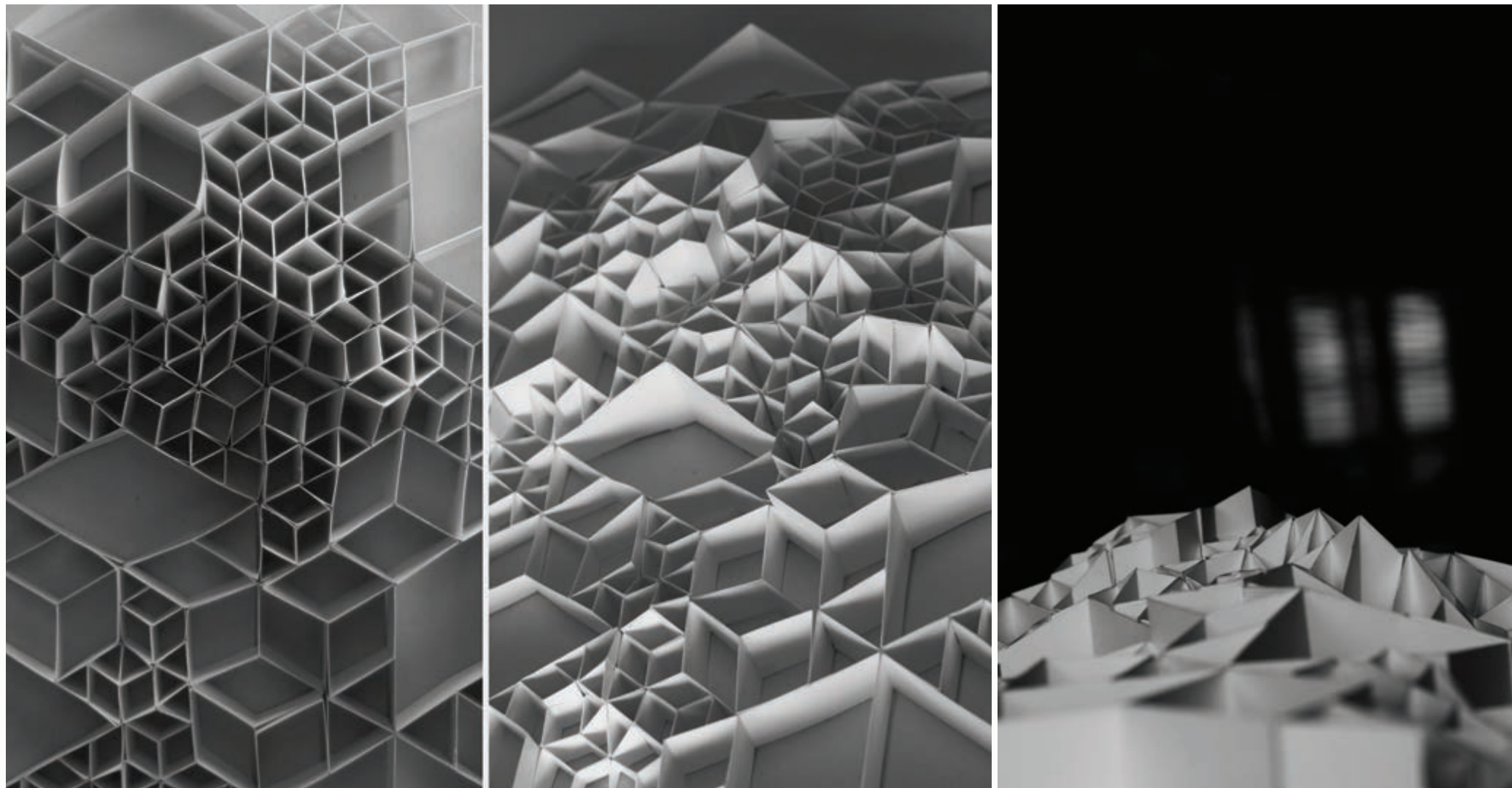
In the end, this project combines a sculptural aspect, practical knowledge and technological advances defining the city as « smart ».



Academic Work  
June 2015







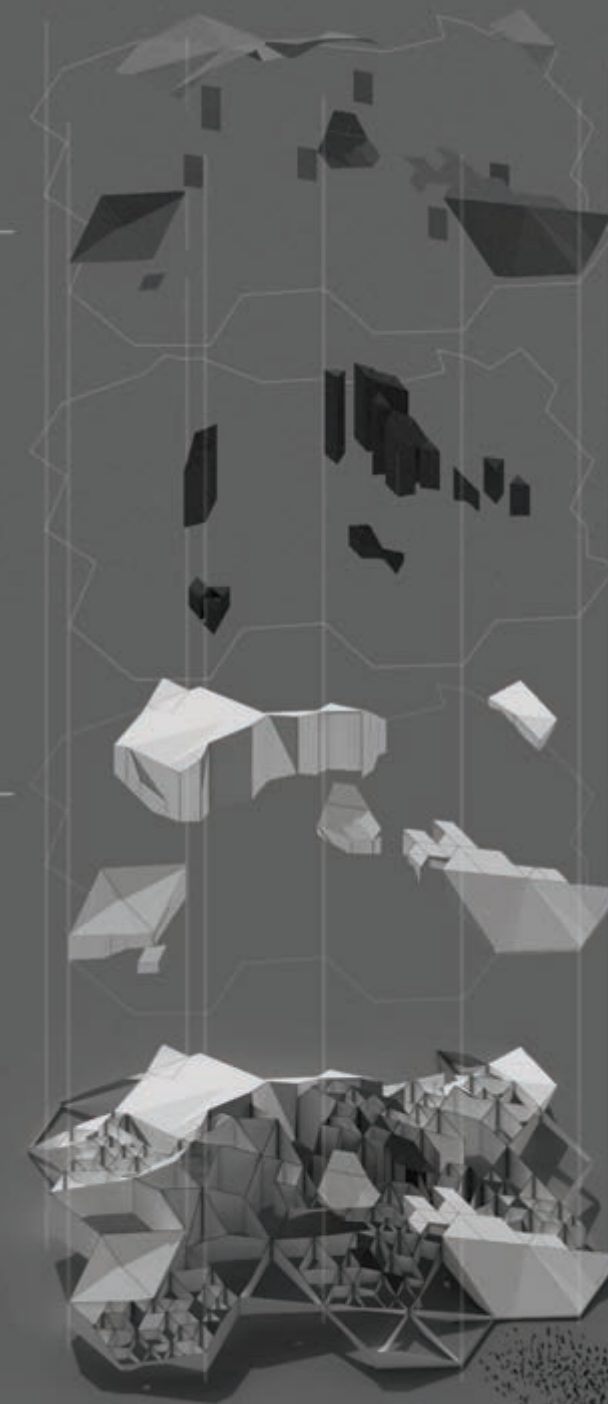
*Model*  
*Folding to allow the city to take place*

*Layered city organisation*

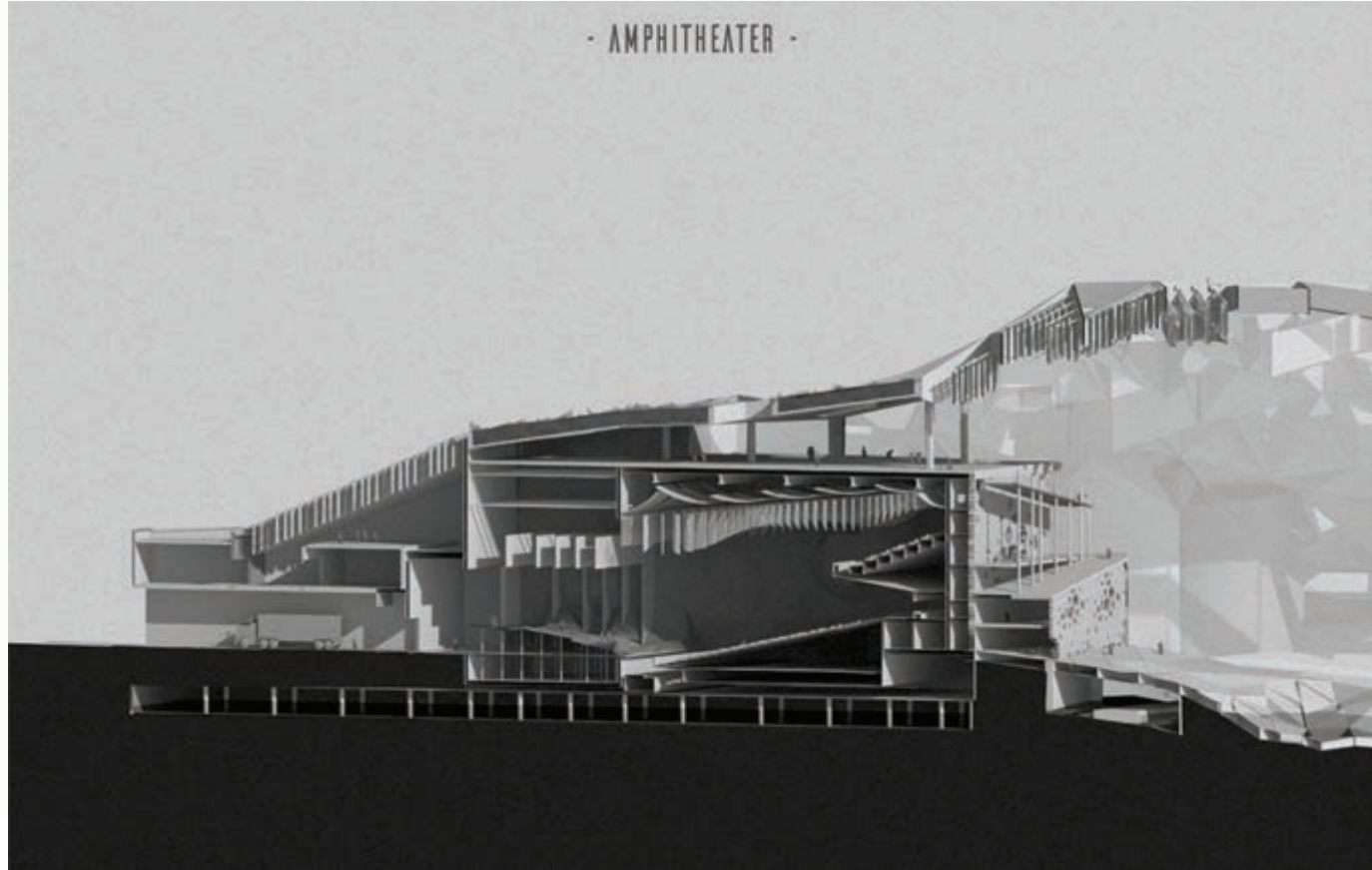
RESSOURCES

MAIN BUILDINGS

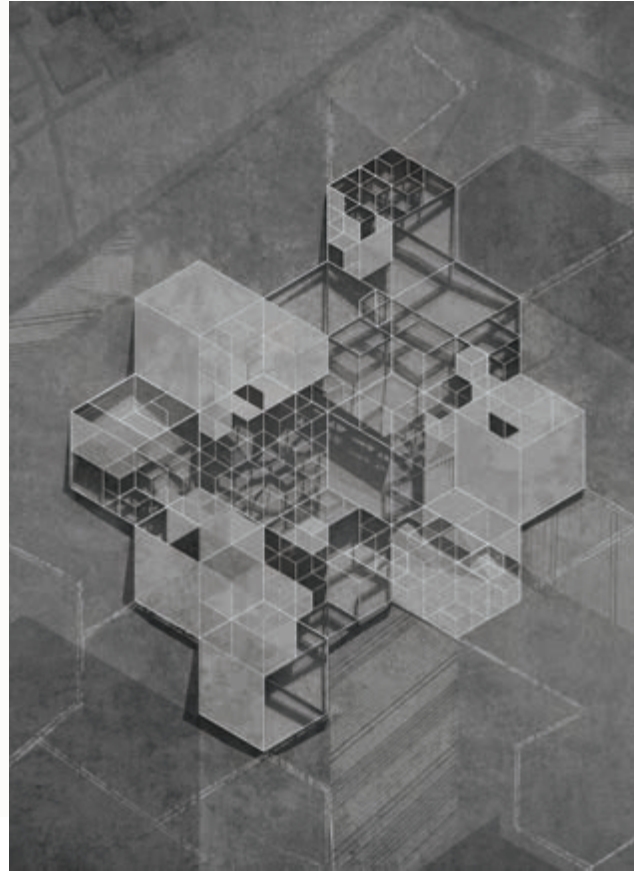
TUBE HOUSING



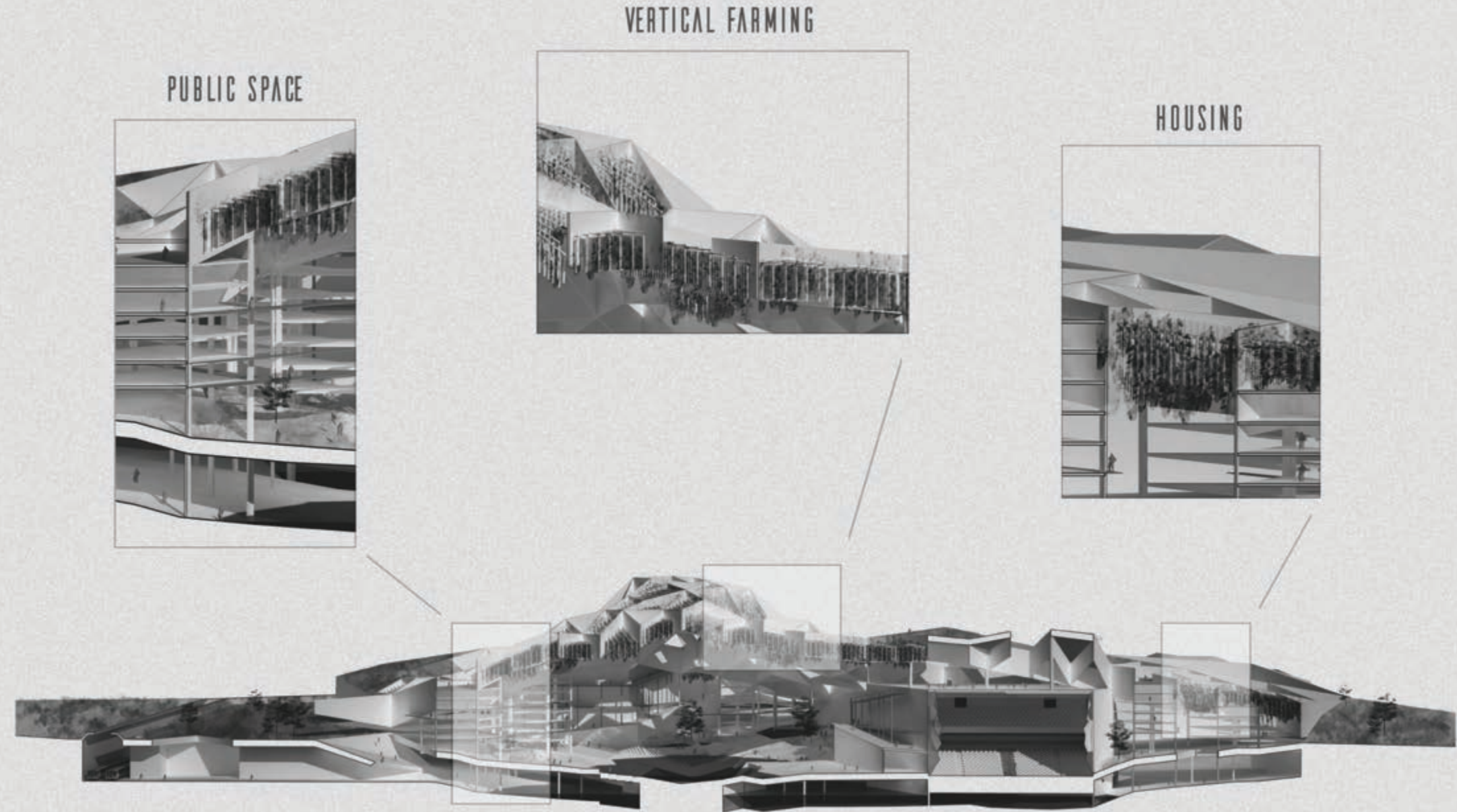




Amphiteather section



Geometric city Masterplan

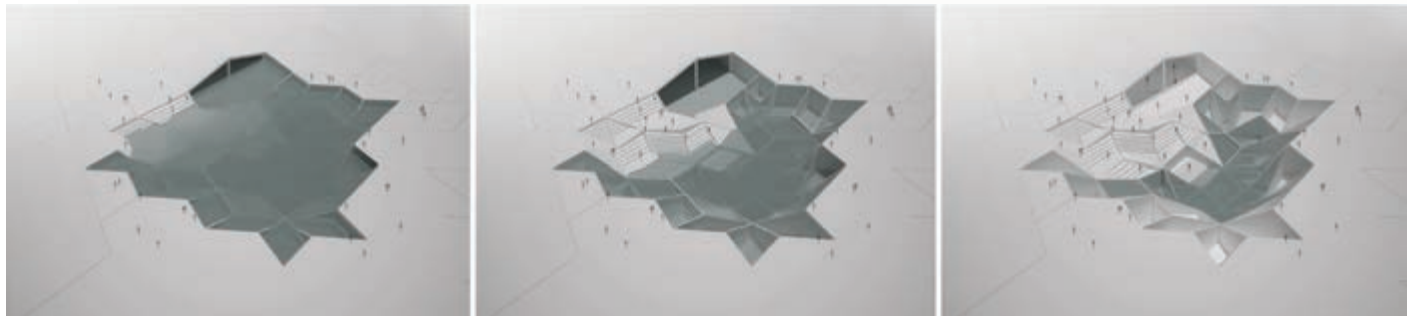




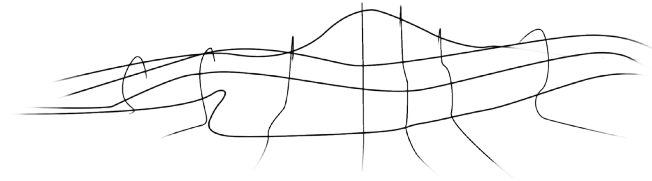
Amphitheater visualization



City watertank along monsoon







## FURNITURE DESIGN - CURVILIGN BENCH

The concept here was to create a parametric furniture, seeking inspiration in the deep sea, where form-finding meets fluidity. I wanted a stout form, that's why the whale-shark seemed to be an obvious choice.

The purpose was also to practice Grasshopper, a graphical algorithm editor tightly integrated with Rhino's 3-D modeling tools.



Academic Work  
March 2015



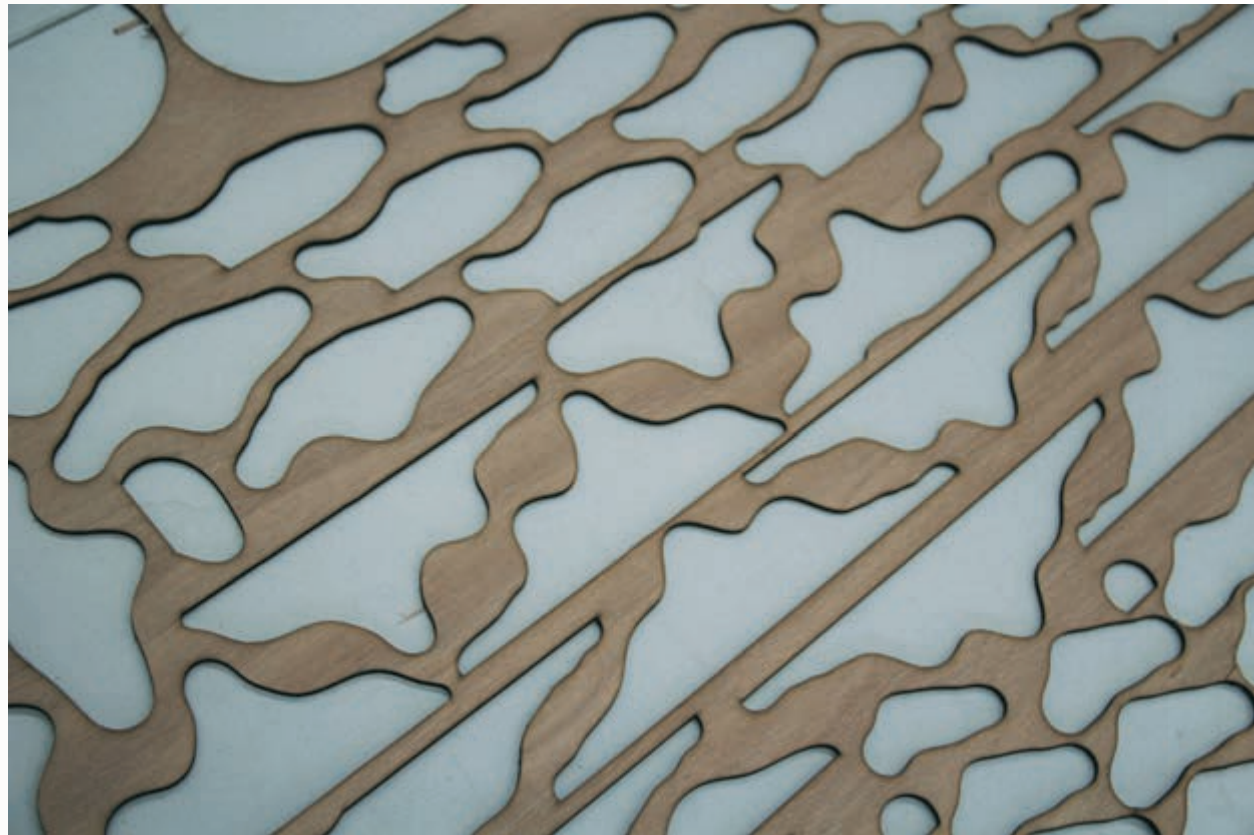




3D interior rendering



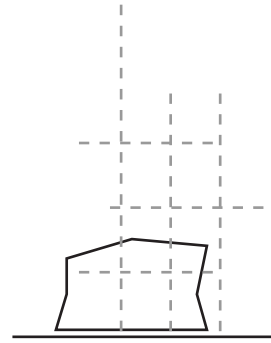




*Lasercut model  
1:20 scale*







## SYRIA POST-WAR HOUSING : A CULTIVATED LEGACY

### MEMORY

The proposal aims to accompany the Syrian people's essential grieving process on the path of a healthy recovery.

### OPEN-SOURCE

An architecture, conceived as flexible, modular and appropriated for all, will offer the possibility for the Syrians to rebuild the cities by themselves.

### AGRICULTURE

By implementing growing areas to the habitation modules, every Syrian becomes a part-time farmer, at the center of a network of commodities exchanges within a district, enhancing the interdependence of those new urban communities.

Crops and urban wastelands will grow side by side: nature and life gradually resuming their rights over those deadly symbols, letting sanctified ruins stand as the quiet witnesses of Syria's rebirth.

more info here : [www.matterbetter.com](http://www.matterbetter.com)



*Honorable Mention at the  
Matterbetter Interational Competition  
over 450 submissions*



*Personal Work  
June 2016*



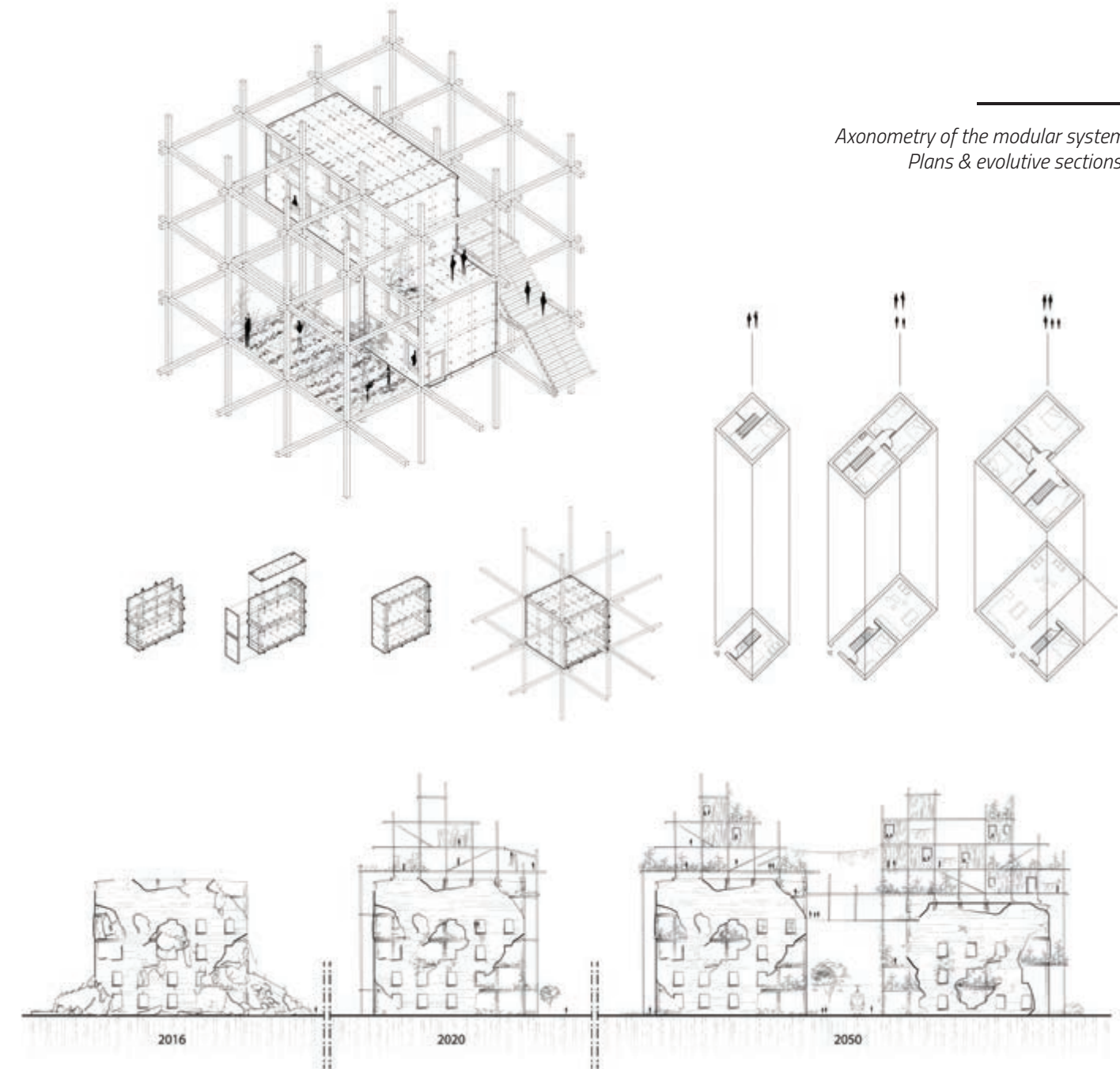




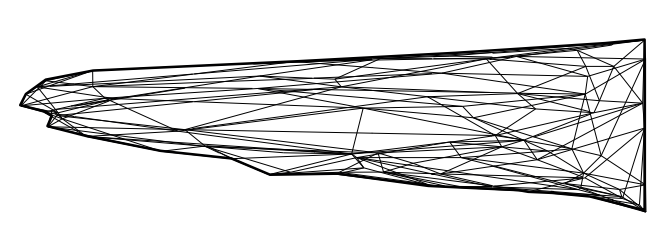
*City view from the roof of the new structure.*



*Inside of the culture growing ruin*







## «CHINA HIL» SCULPTURE BASED ON THE CONTAINER

A sponsored art sculpture based on a container, the exhibition took place in Beijing in October 2016.

This project was done with Rhino + Grasshopper, coordinating the manufacturing and the making.

The rock plays a major role in the world of Chinese scholars. Mountains, caves, landscapes or garden, the rocks are all at once. Other worlds in the heart of the world.

From a distance, the texture is rough, that of a rock, explosive. The closer we get to it, the more it becomes singular, a skilful assemblage of adjusted stones that draws the outlines of a living landscape.

more info here : [www.tetrarc.fr](http://www.tetrarc.fr)

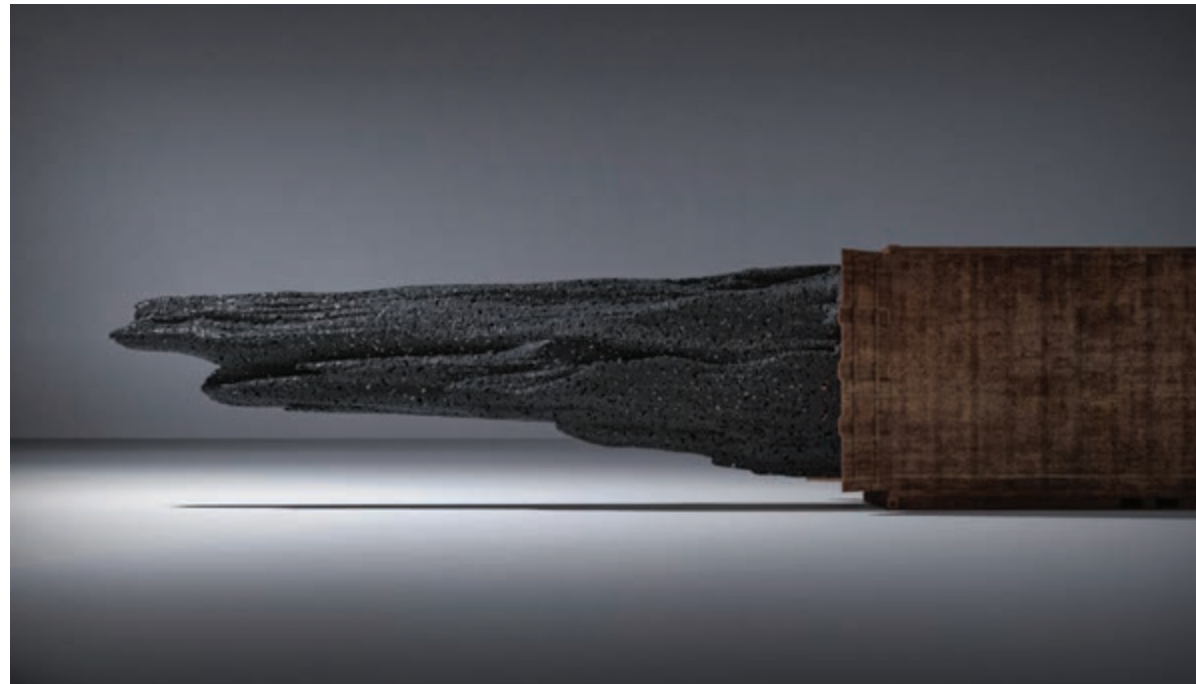


Project done at TETRARC Architects  
2016-2017

C H I N A H I L L



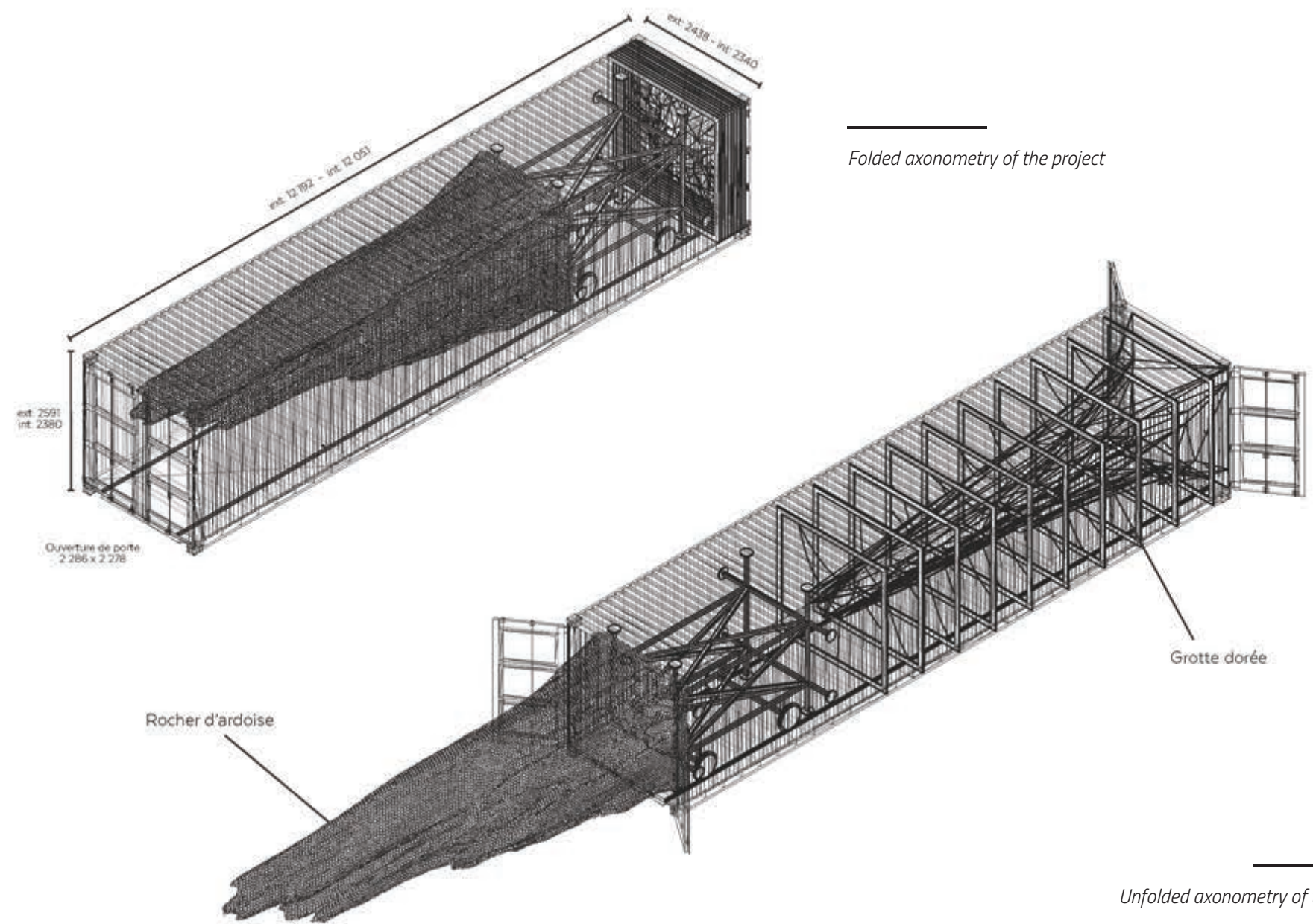




3D View

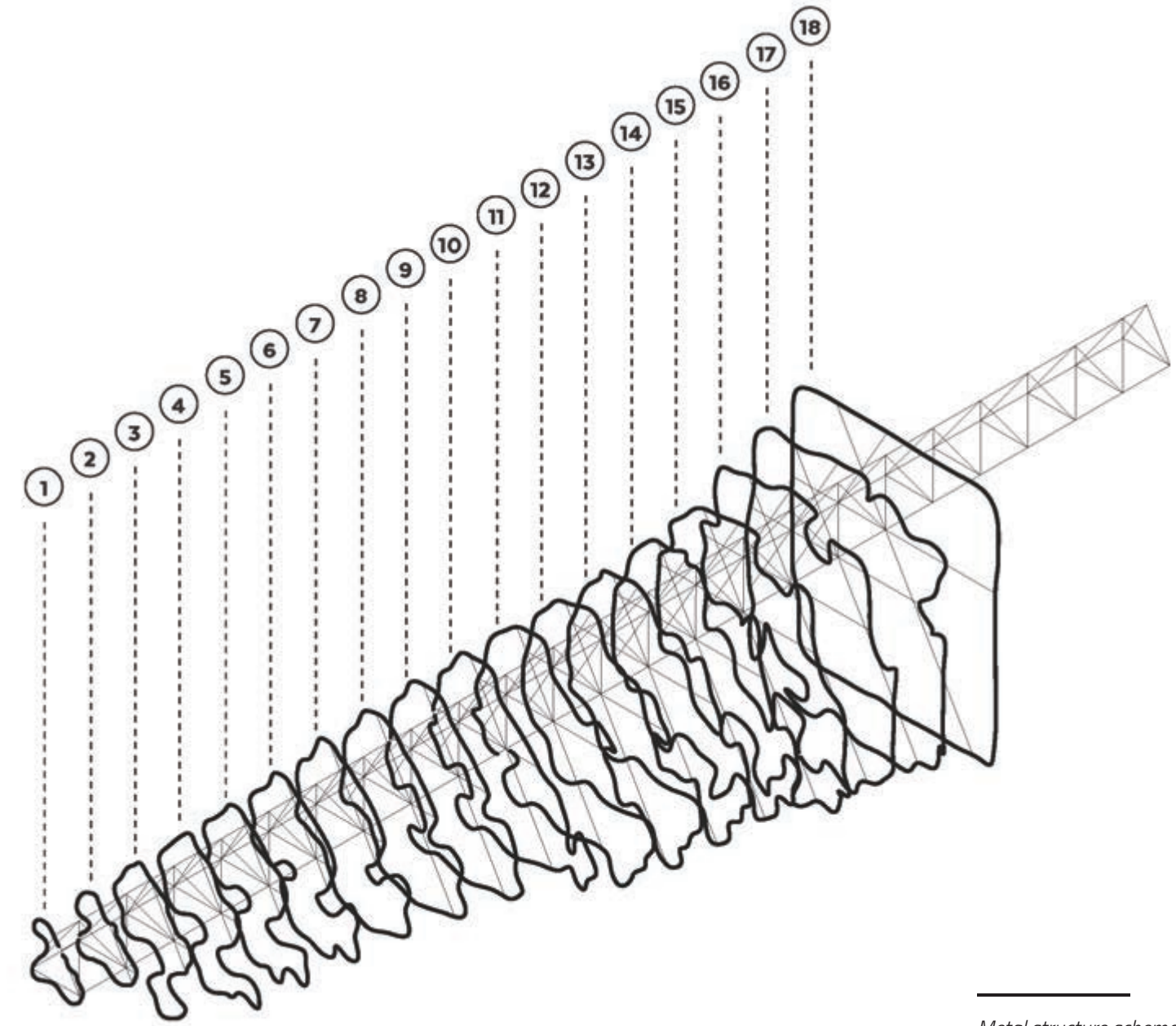
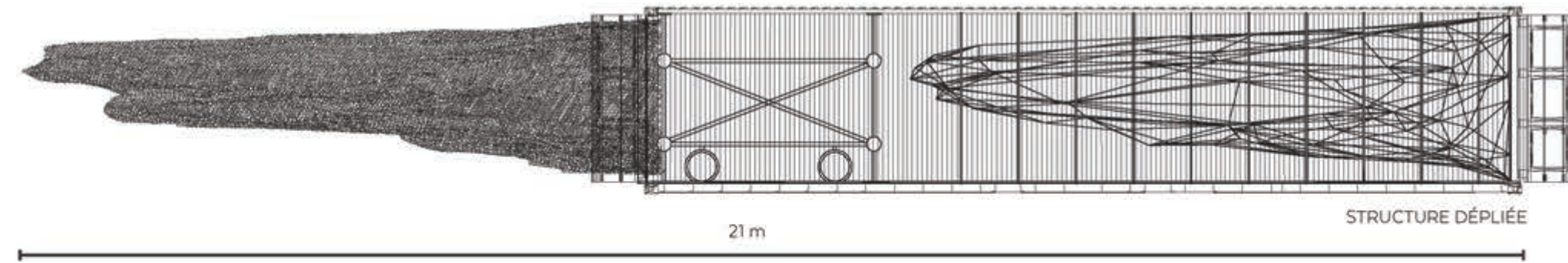
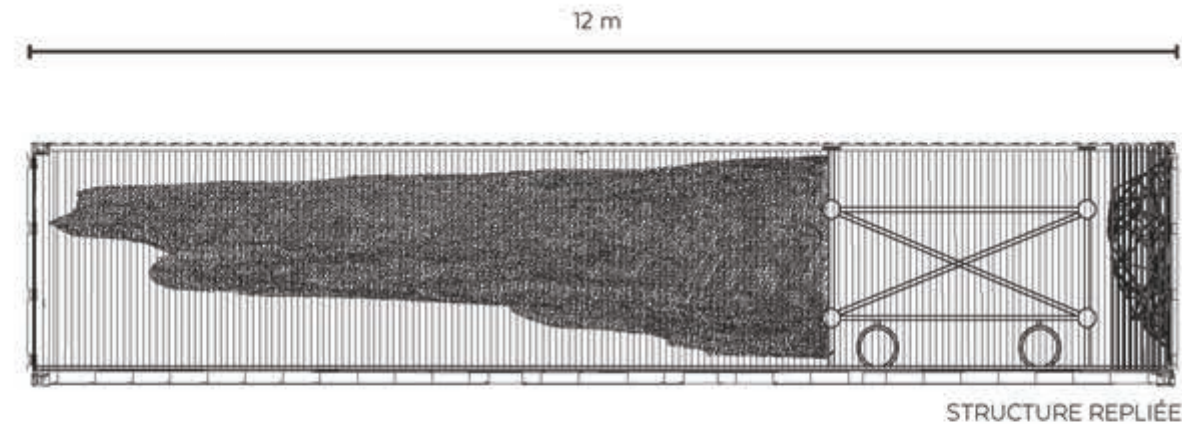


3D View



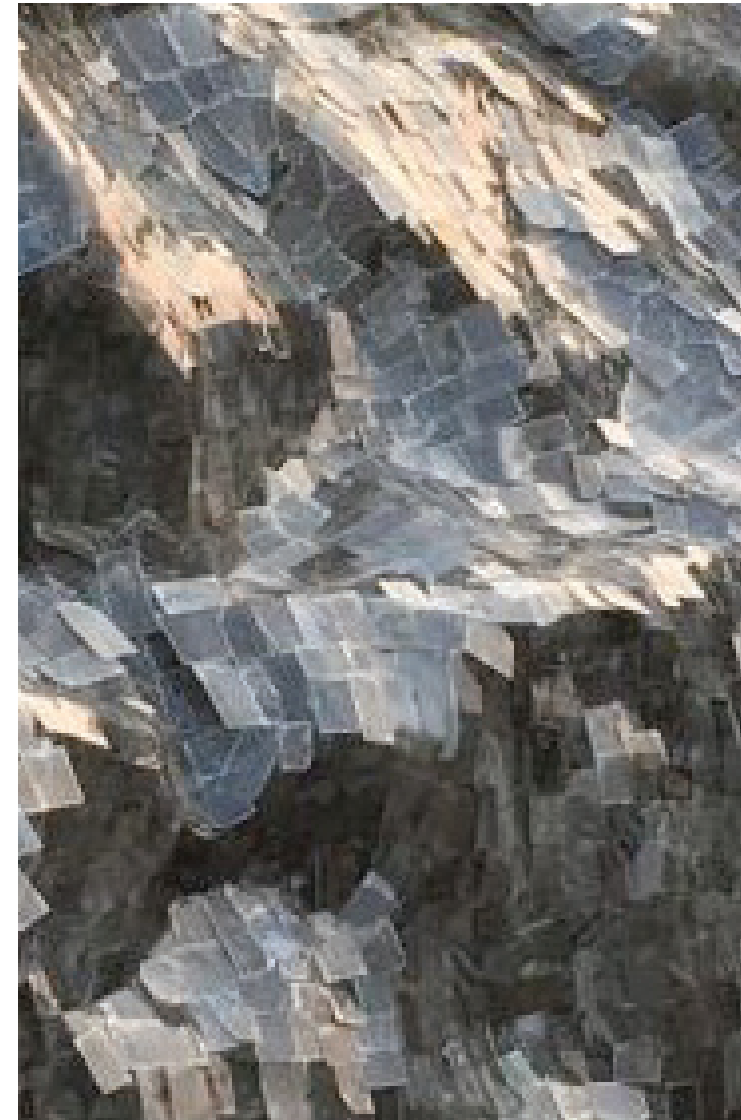


Ghost section of the project



Metal structure scheme for making






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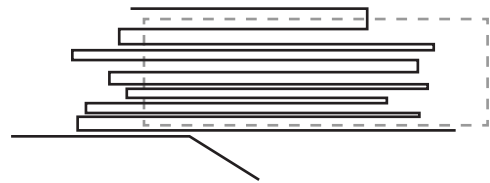
*Photography of the manufacturing, more  
than 14 000 facets*

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*Fictional integration as a tower*





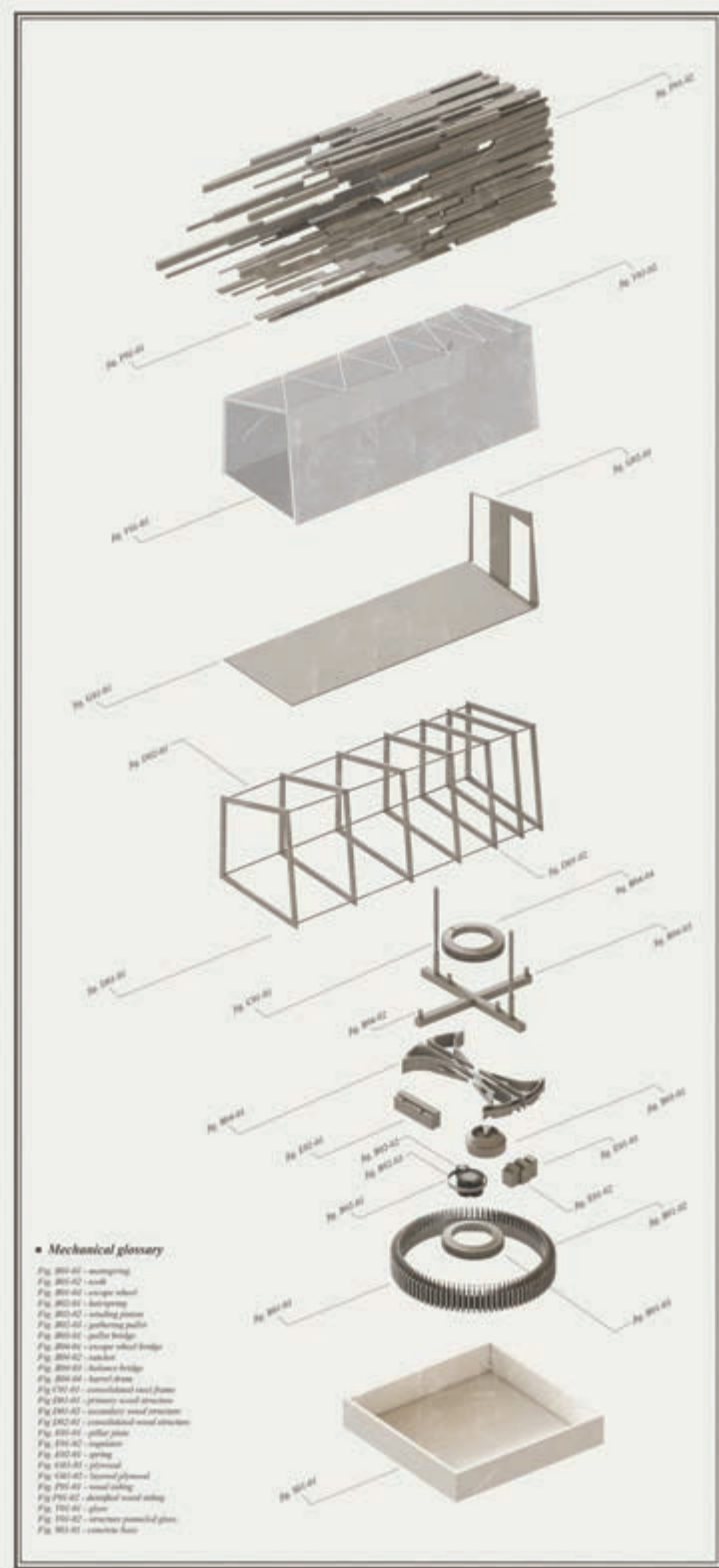


# A CLOCKWORK RETREAT - COMPETITION

Proposal for a the Northern Light Competition, participants were asked to deliver design proposals for accommodations to house permanent hosts and up to 20 temporary guests. Located in Iceland in a Northern Light scenic landscape.

**Time. Speed. Contemplation.** Take a watch. Take off the bracelet. Remove the dial. Set aside the crown. Get rid of the second hand and the hour hand. Then only remains the mechanism and a needle. Our project is this needle. And you control the mechanism, take the time you don't have. **Our proposal has only one goal: suspend time to beauty stroke.**

collaboraton with L. Midy  
May 2018







Overall view



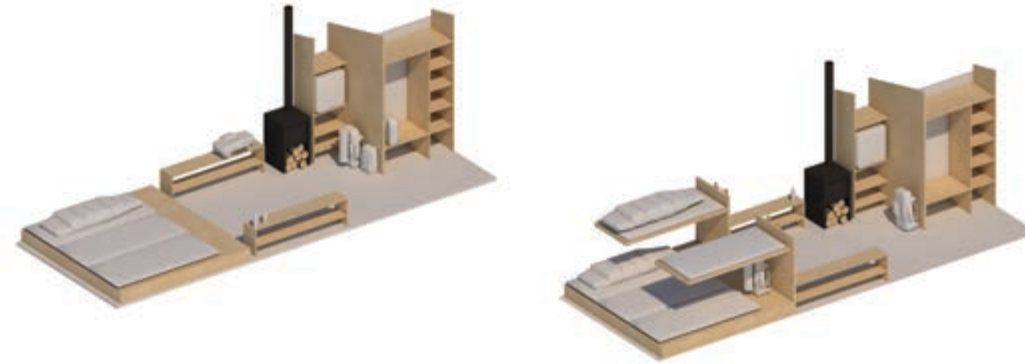
Axonometry module



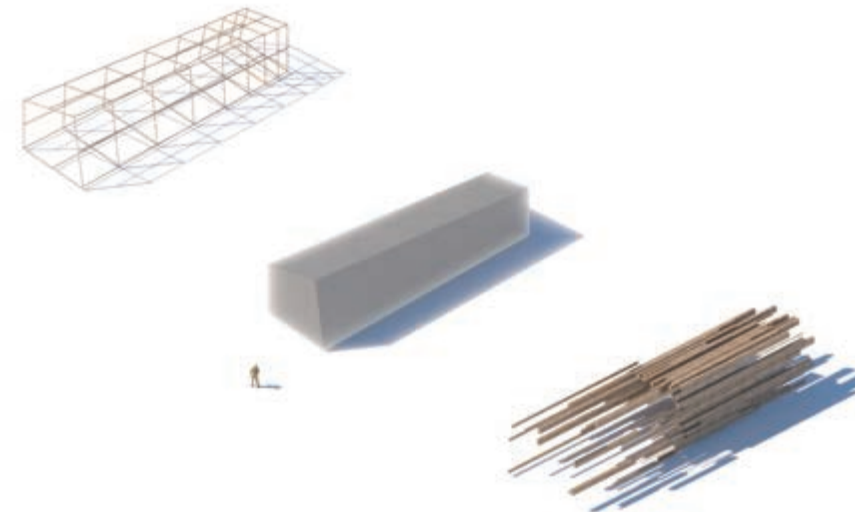
Contemplation - Collage concept



Loading concept - a movable structure



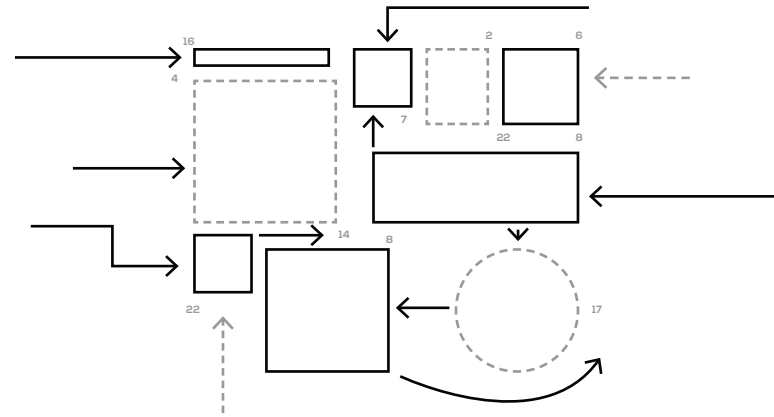
Interior design



Conceptual axonometry







## GENERATIVE DESIGN -THE ARCHITECT AUTOMATION ODYSSEY

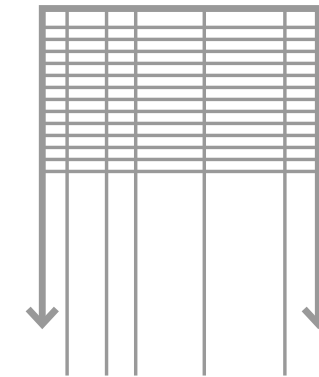
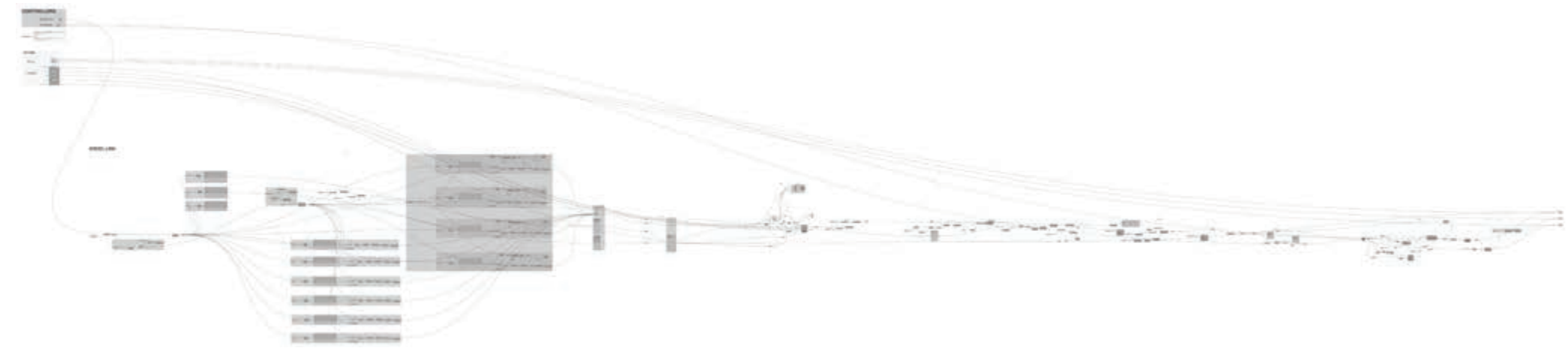
During the last 6 months I had the opportunity to explore generative design by coding a software able to create architectural plans automatically.

The Generative Design is an iterative design process that involves a designer & a program. The program will generate a number of outputs that meet constraints. The designer will refine the search space by changing the values (intervals, constraints & variables).

Above all it's a method of rapid exploration of design possibilities. From a given architectural program, possibility to leave an infinity of possibilities, always right.

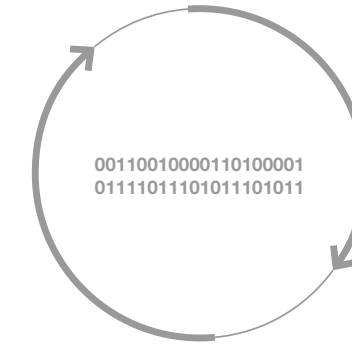


a collaboration with *SUPERCONTEXT*  
(architectural firm in Sydney)  
2018



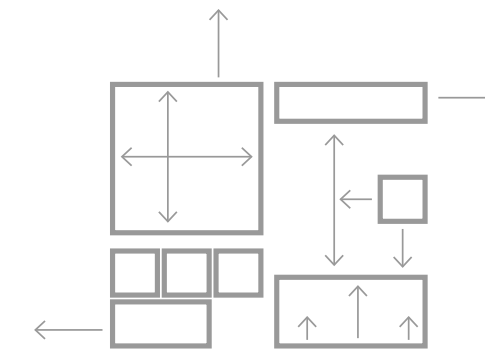
1.

The user enters the architectural program data in a Microsoft Excel table.



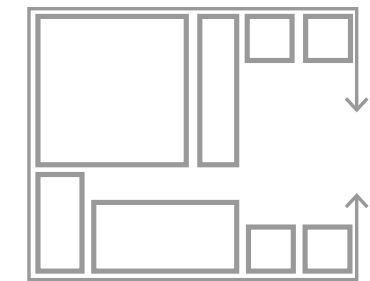
2.

The software (Rhino + Grasshopper definition) generates the solutions.



3.

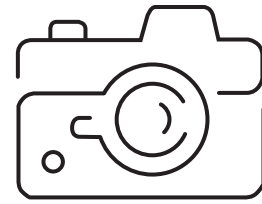
Adjustment according to the constraints



4.

Exporting 2D plans.





## GET TO KNOW ME : PHOTOGRAPHY & TRAVELS

I'm deeply into photography, another way to note that art & technology aren't that far, just like architecture. I know it's not really original these days, but travels made me.

Here's a selection of some photographs : shot with Nikon D90, 50 mm & 16-70mm lens.



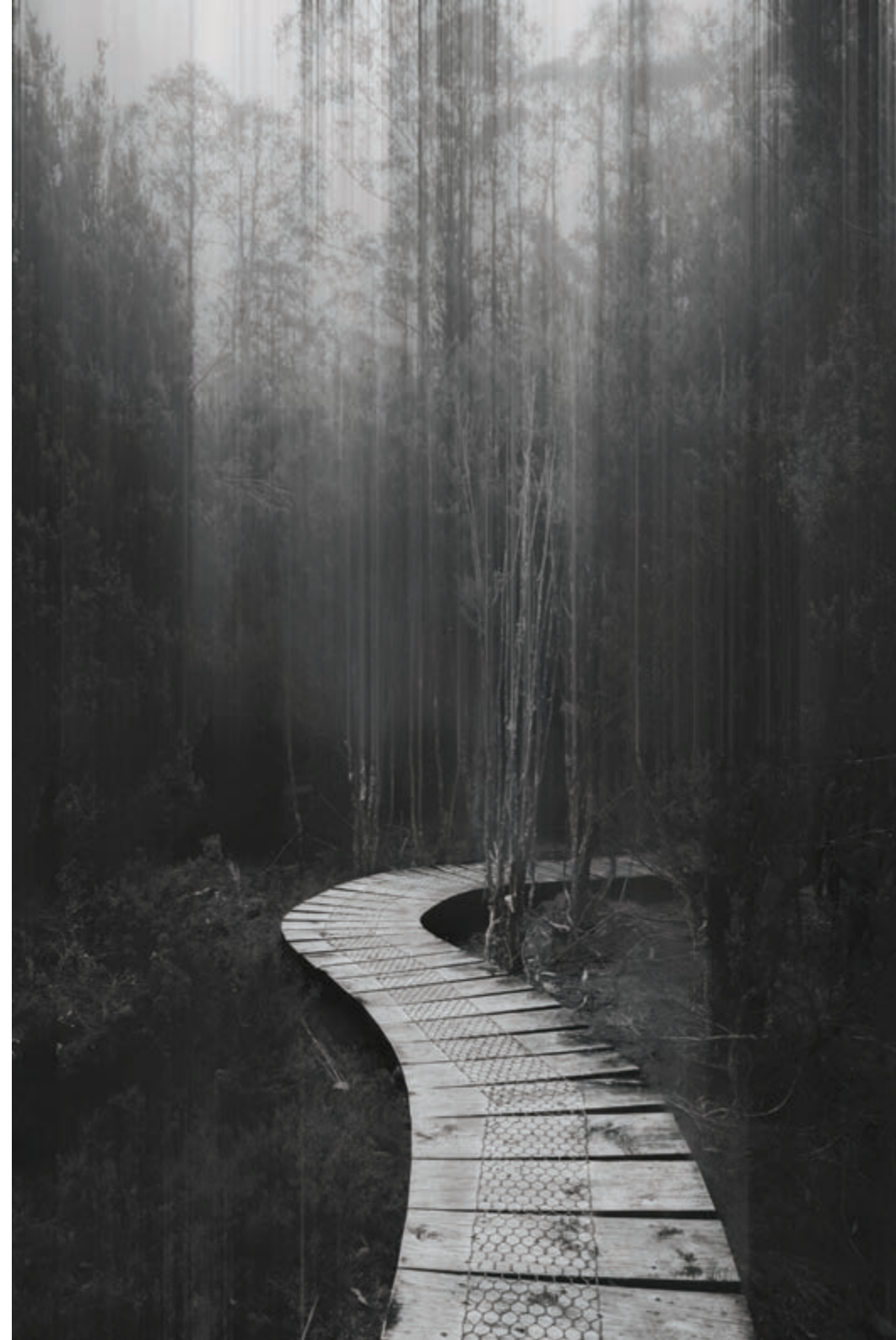
*1st prize at « Best architectural  
photoshooting - Saint-Luc Institutes »  
competition, june 2011*



*Academic Work  
2013-present*

















THANK YOU FOR YOUR TIME !

*for more works, have a look on my website :*  
———— *www.clementloyer.com* ————