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WIEN

Multifunctional Artschool_Masterarbeit

ausgeführt zum Zwecke der Erlangung des akademischen Grades eines Diplom-Ingenieurs / Diplom-Ingenieurin unter der Leitung

Manfred Berthold Prof Arch DI Dr

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eingereicht an der Technischen Universität Wien Fakultät für Architektur und Raumplanung

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Theme

The idea for project was born from desire to provide more space for young artists and designers in Belgrade. In this particulary moment, there is not enough ateliers and exibition space for students of Academy of applied Arts and Academy of fine Arts and a possibility for them to be able to grow as professionals. The goal was to create a unic artistic space that could be flexible for different type of use. In order to accomplish a freeform building and the highiest point of flexibility, the location for this madder is chosen to be in the green area by the river but yet near enough to the existing university buildings...Through a short reaserch of creative process, multifunction, flexibility, organic form, light and view, the idea for the project was futher developed. Giving that art is very free and undefined term but yet it is considered to be an organic living thing, the inspiration for the building appearence inside and outside were water and caves, so the whole object could be considered as being in the spirit of nature. The spaces created inside the building are free form flexible and adapted for different use such as drawing, painting, computerwork, resting, but also for teaching and exibition.

Reaserch

Location _ 1 - 2 Creativity & Space _ 4 - 6 Flexibility & Multifunction _ 8 - 10 Structure elements _ 12 - 14 Organic form _ 16 - 18 Light & View _ 20 - 22

Project

Inspiration _ 24 - 26 Concept _ 28 - 30 Floorplans _ 32 - 52 Communication _ 54 - 56 Construction _ 58 - 66 3D Presentation _ 68 - 77 Sources_ 78 - 79 MULTIFUNCTIONAI ARTSCHOOL

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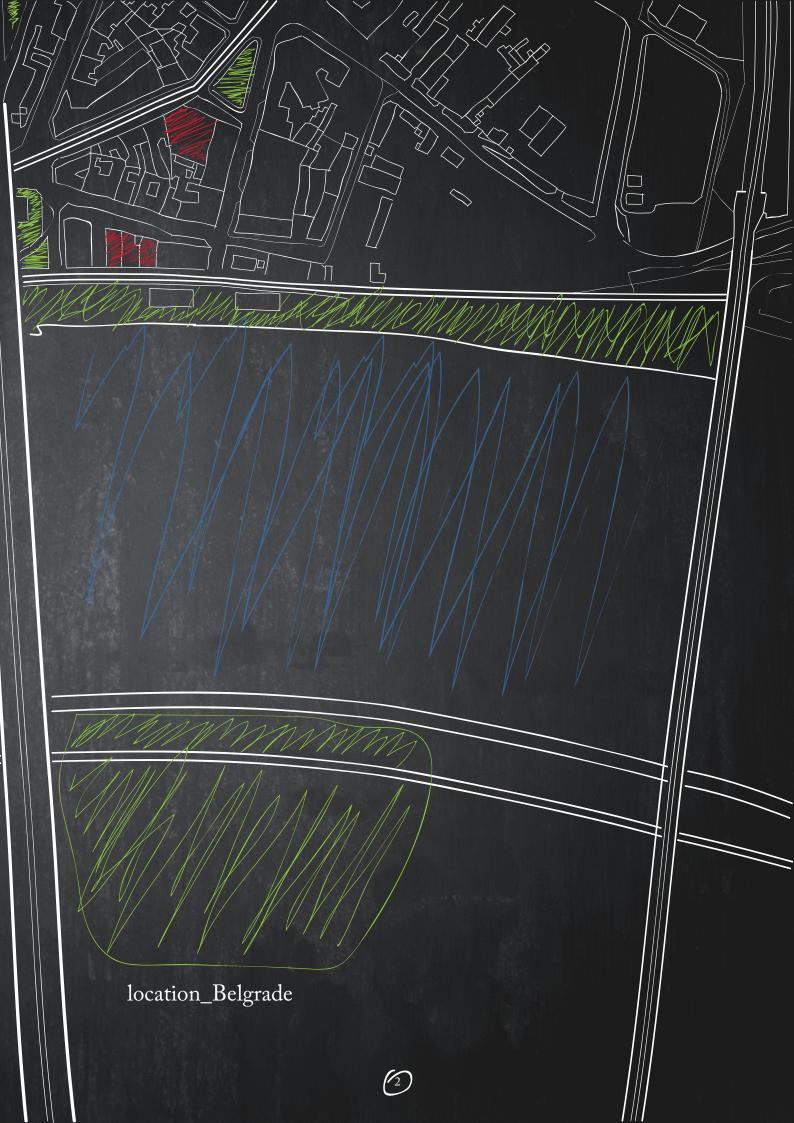
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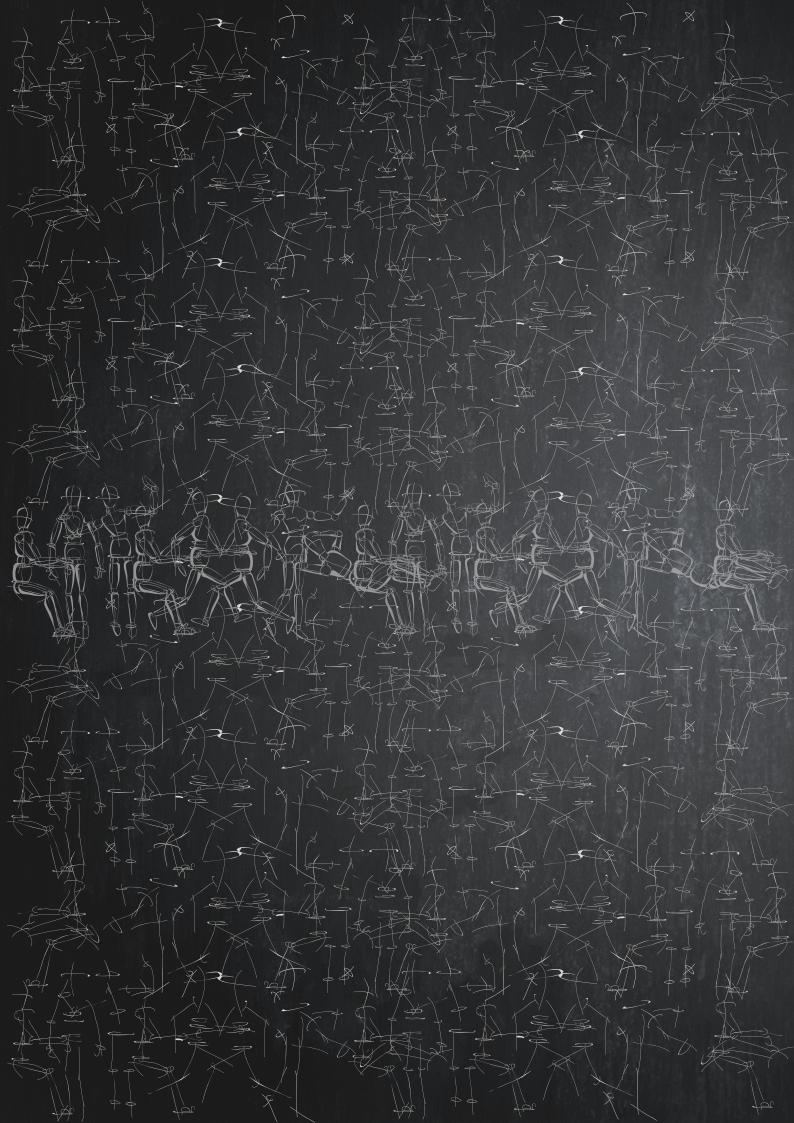
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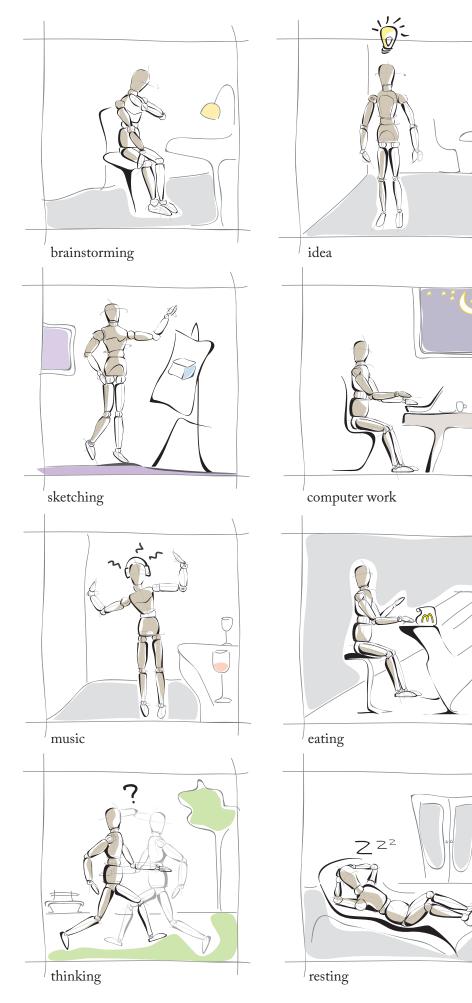




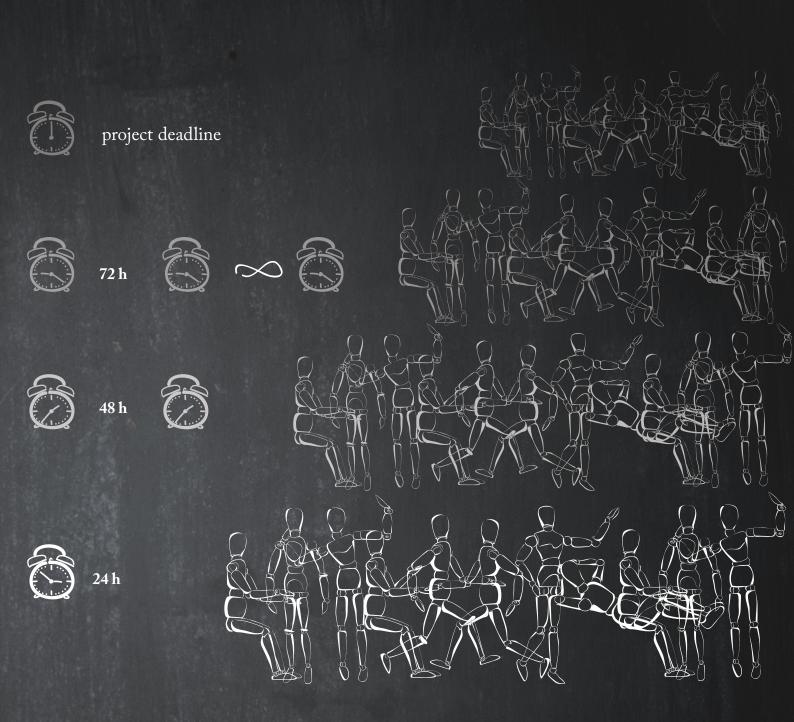


CREATIVITY & SPACE

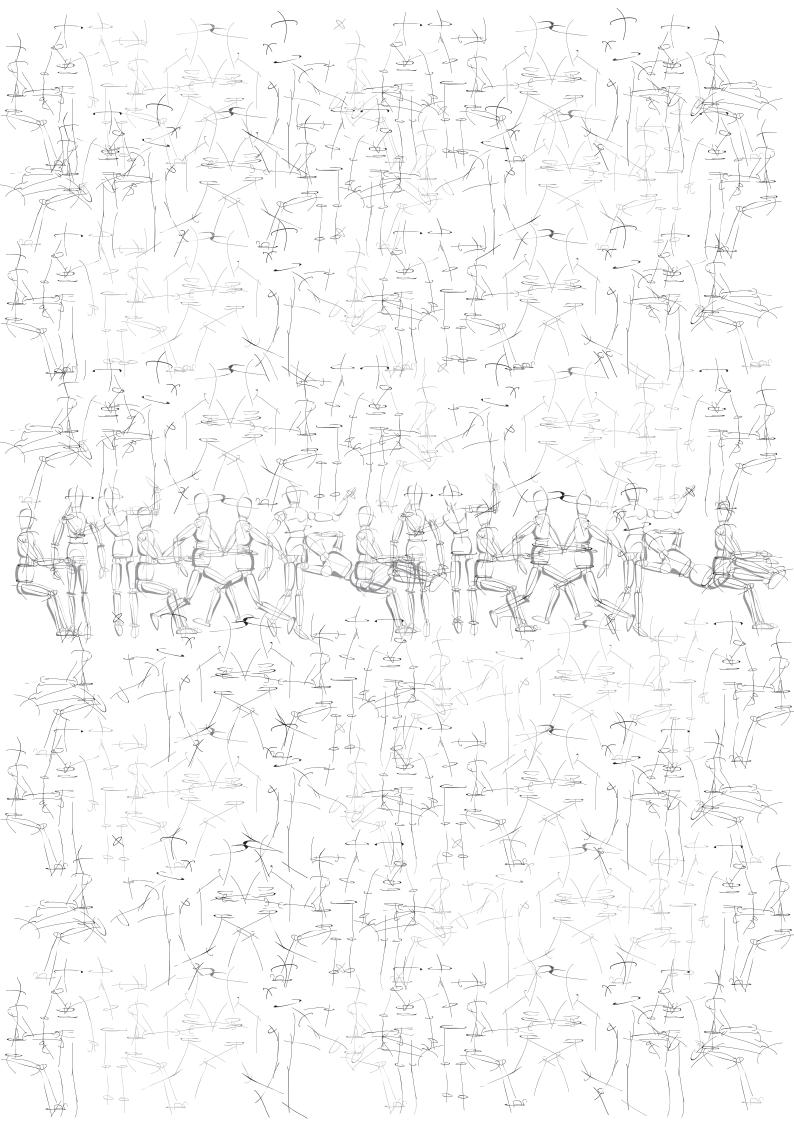
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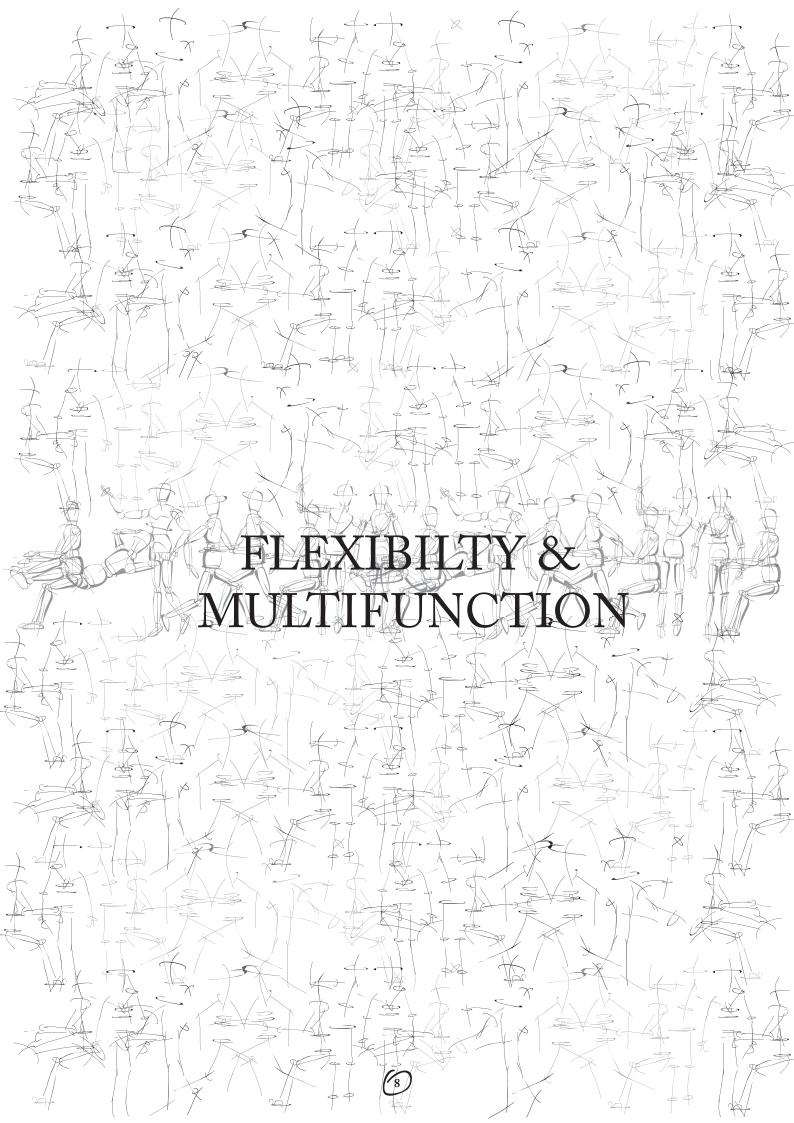


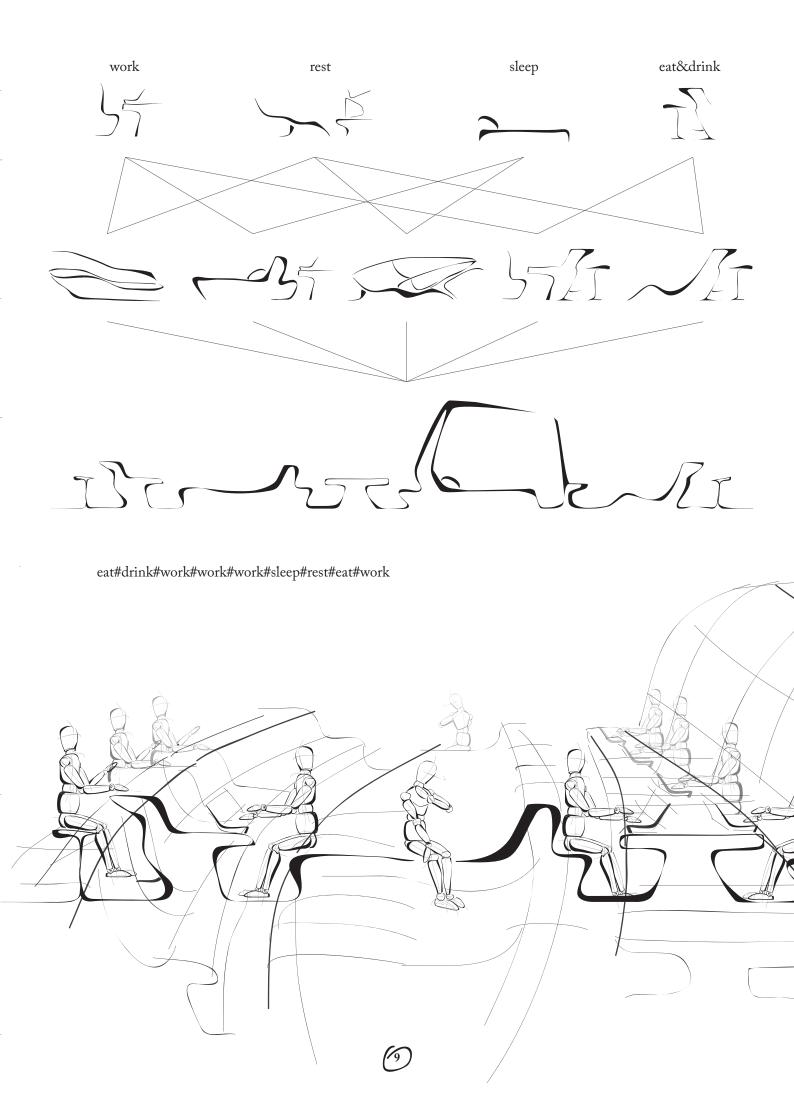
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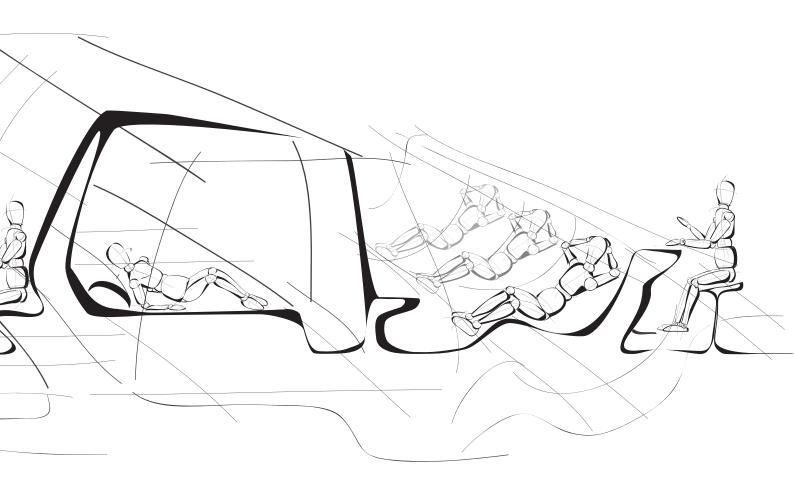
While creating a project or an art piece, a person passes through a diffferent phases of work. Importancy of embrasing all the steps of creative process at the very beginning leads to the better develoment and quality of the project. In the pictures is presented a part of that process, with a focal point on a most often body poses that person attends to make. Those body poses could be the first step towards creating a comfortable space. Dividing space into rooms or maybe not should be inspired by the situation itself. In the case of creative process could be a solution to create a space which is able to provide an oportunity to do all in the same room, with no restrictions or separation what so ever, in order to let the user to be more free to focus on the work oder than his basic needs.

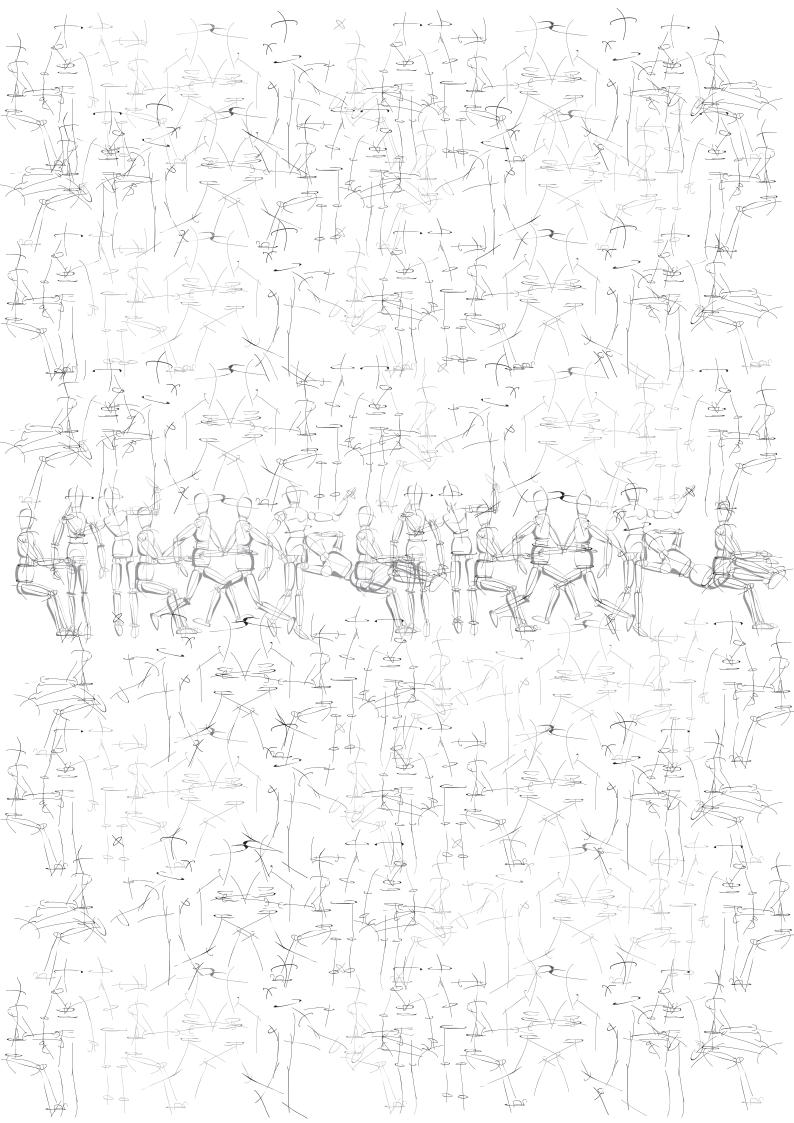


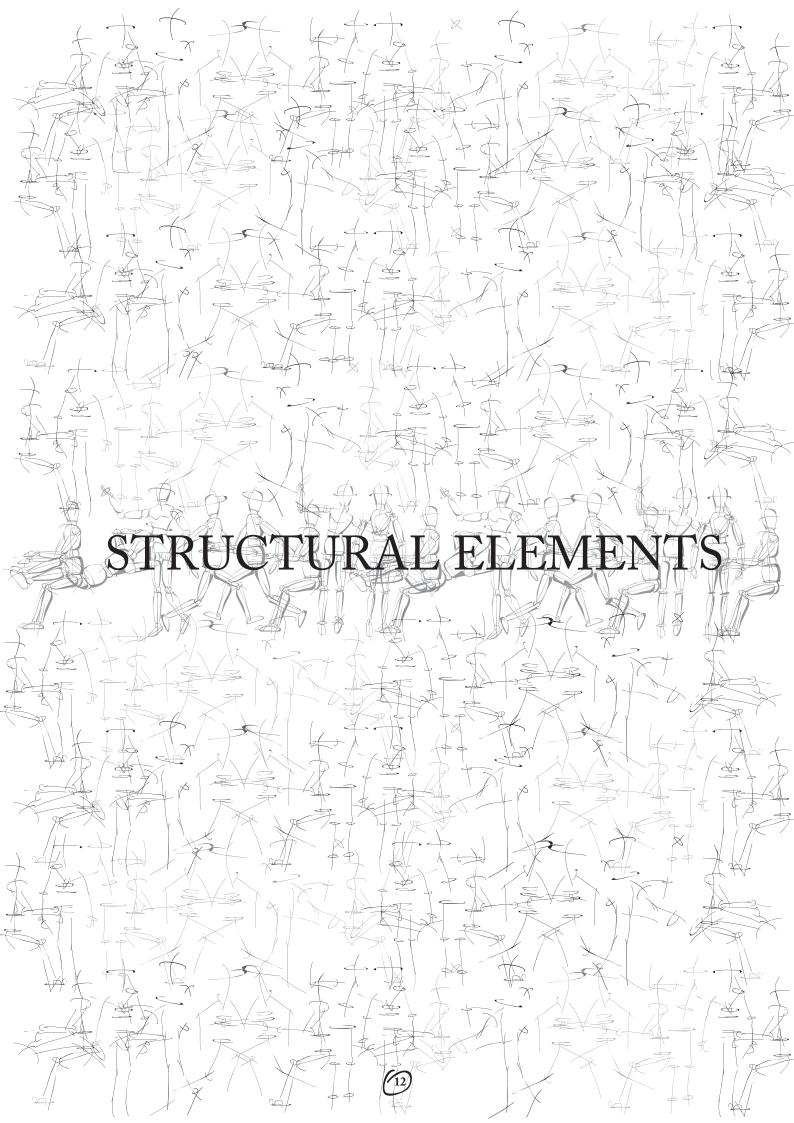


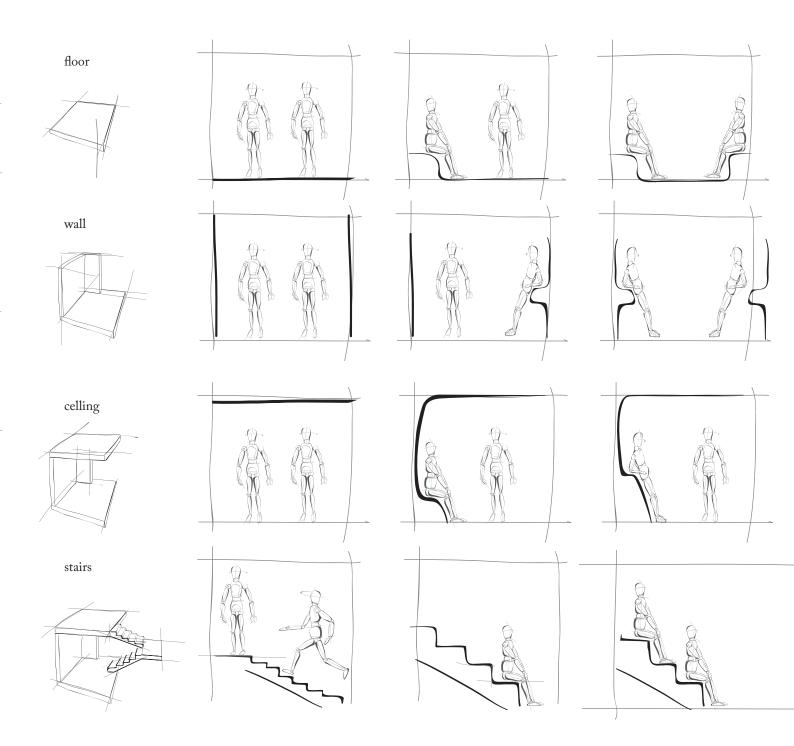


Continuosly with the story about creative process and how to shape a space required to make the work more comfortable and easier, follows an atempt of mixing two or more spaces with a different use and blend them into one room only. A shematic presentation of furniture elements which are most often used during longhour work was one way to find out more about usage of the space. Furniture is a group of elements that is commonly brought into the empty room previously owned by user. So, in that case, those elelments are acctually responsible of making a room cosy and useful. But it could be also otherwise. When the room itself would have everything necessary for any action or situation already implemented , then this room could take a leading role in the use. Blending all the furniture elements into one unic unit, it is created a new space with everything to offer for users activities. In that way, the room would be never empty at the beginnig and any other furniture elements would be enough comortable to support it's users due to often changing of body positions while working.



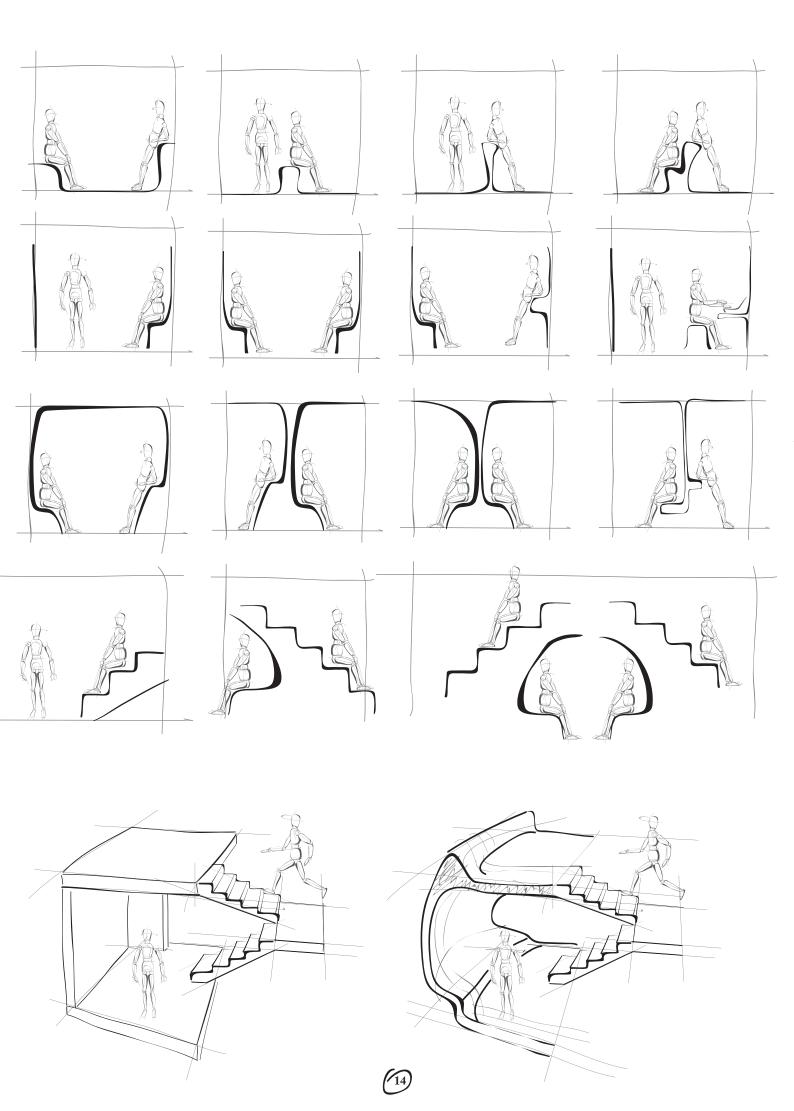


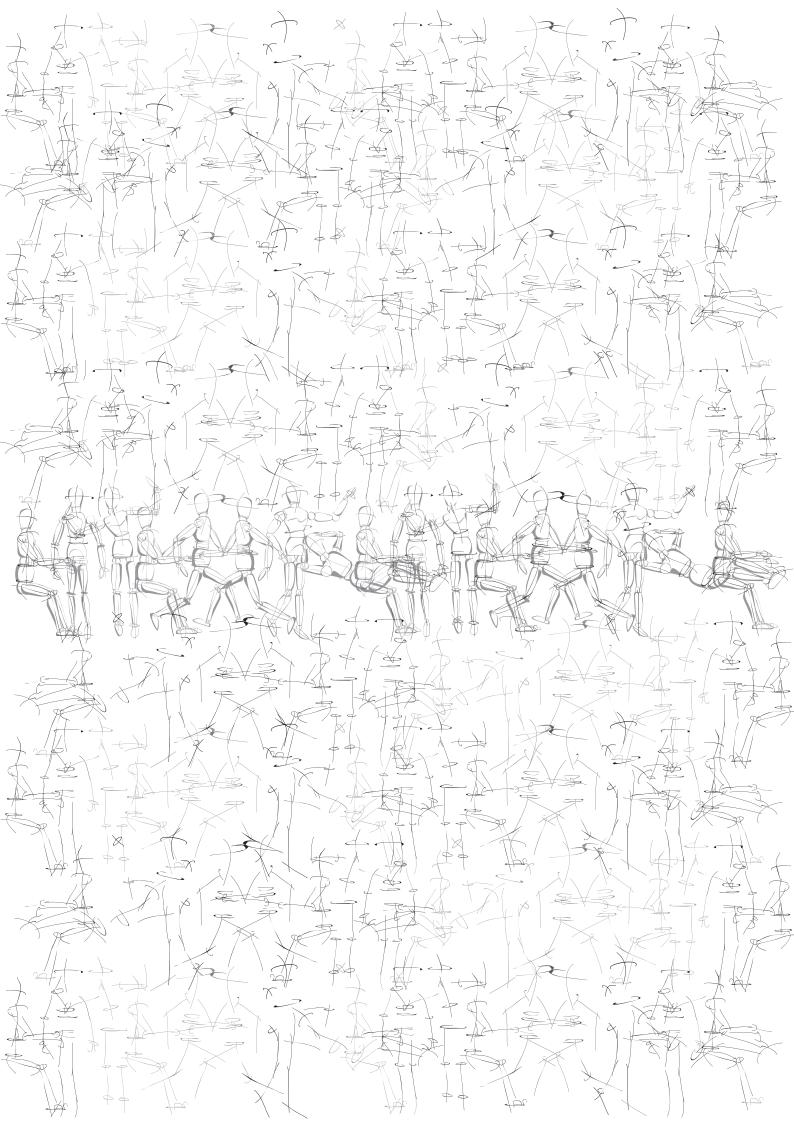


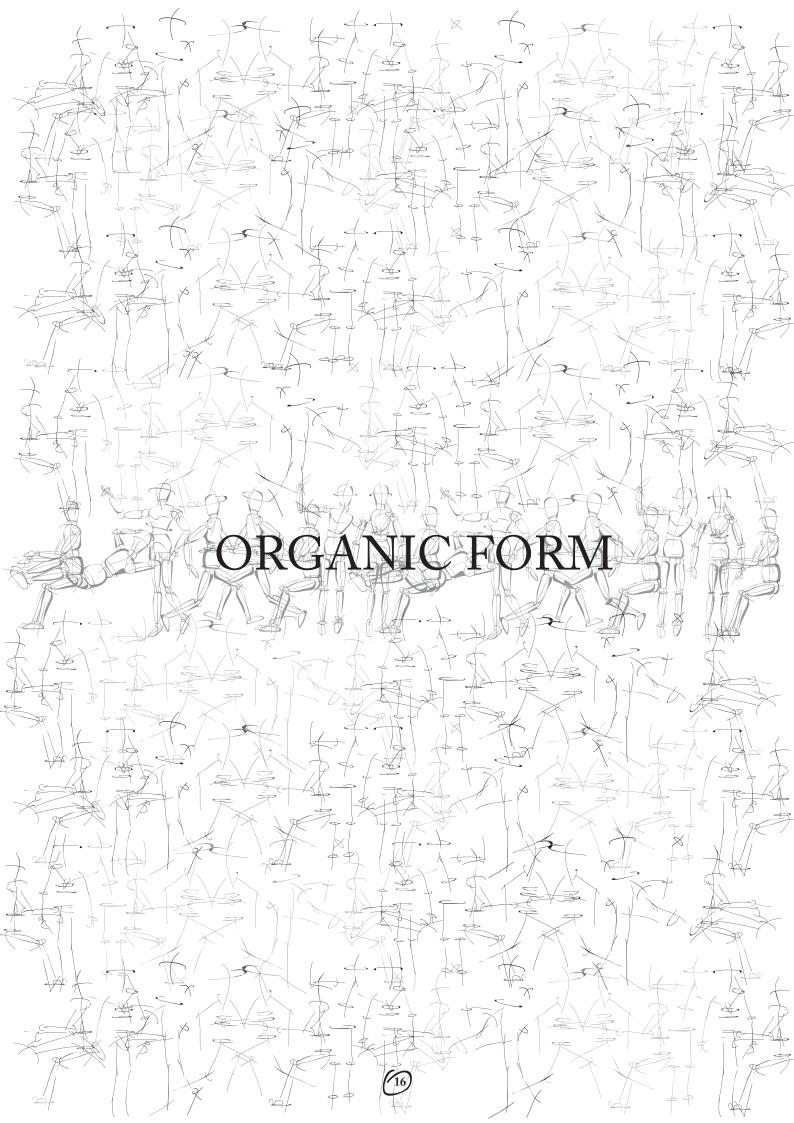


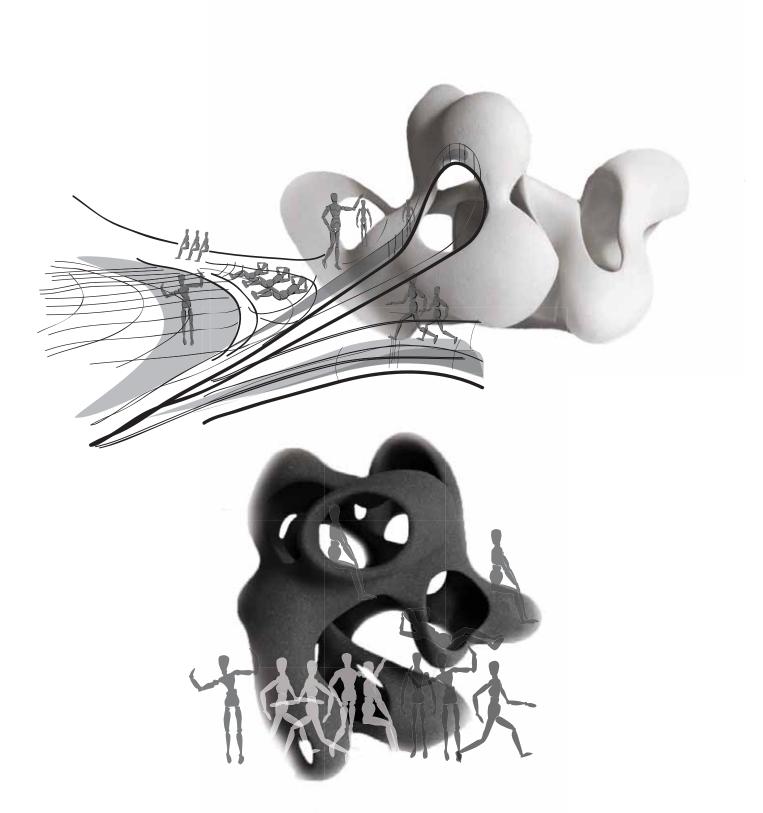
The drawings represent a study about transfering basic structural elements into curved forms. The goal was to create organic enviorment with basic stucture, giving the units such as wall, floor, ceeling and stairs the oportunity for more usage in space. Involving various typ of situations (sitting, waiting, talking - socializing) with functionality of space, shapes the spatial enviorment according to it's function. The more could be structure used as a base for needed function, the bigger are the possibilities for space to reach the highest quality for it's users.

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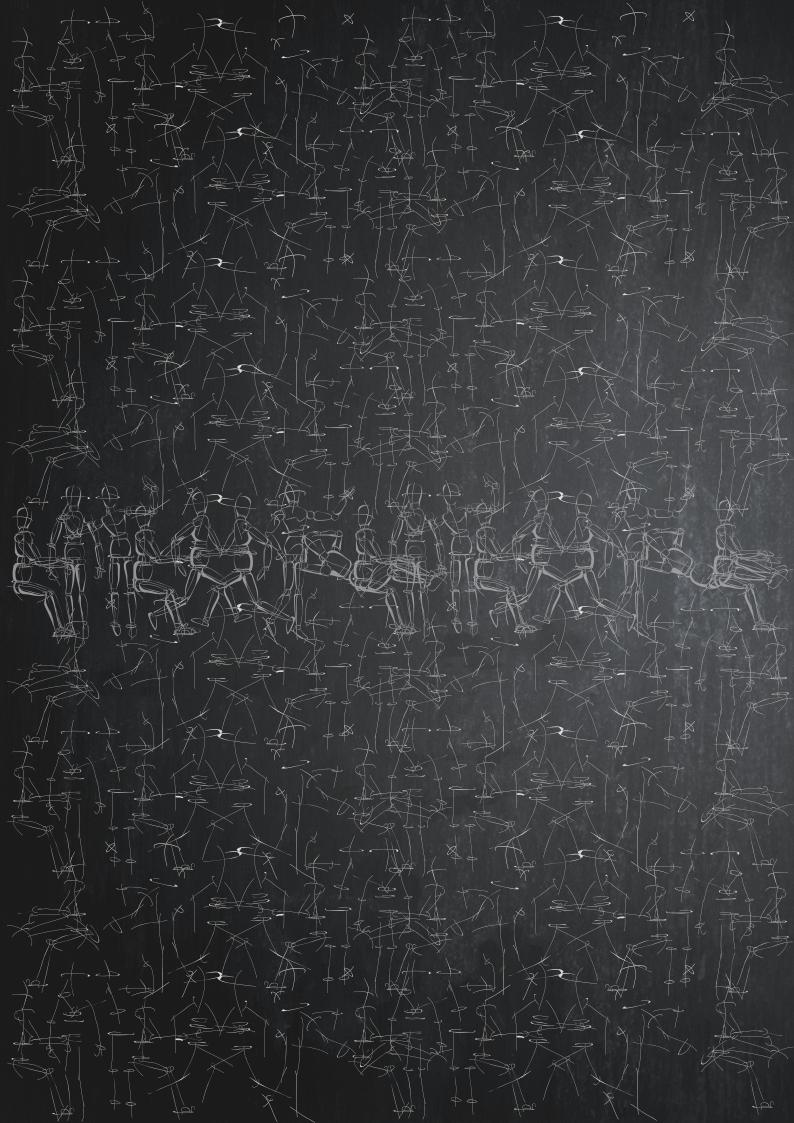
Organic foms in architecture imitate natural human inhabitat. The imperfection of that kind of forms is neccesary, but also gives much to the unicnes. When speaking about freeform space, that suppose to be an artistic place, then organic forms have so much to offer. Comparing form and function, that means that a place where people create unic artworks, should be also unic and imperfect like an art piece. Otherwise, there could exist the possibility that artist could not create in a perfect enviorment.. Also the organic formed space could reach a much higher level of flexibility required.

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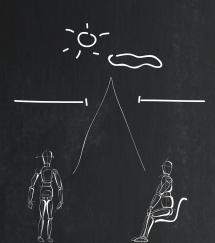
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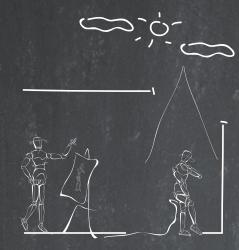


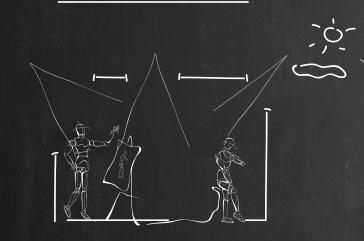
LIGHT & VIEW

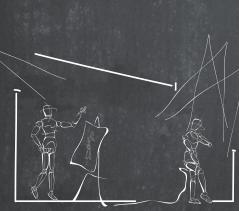


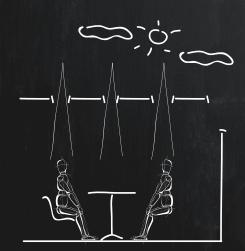
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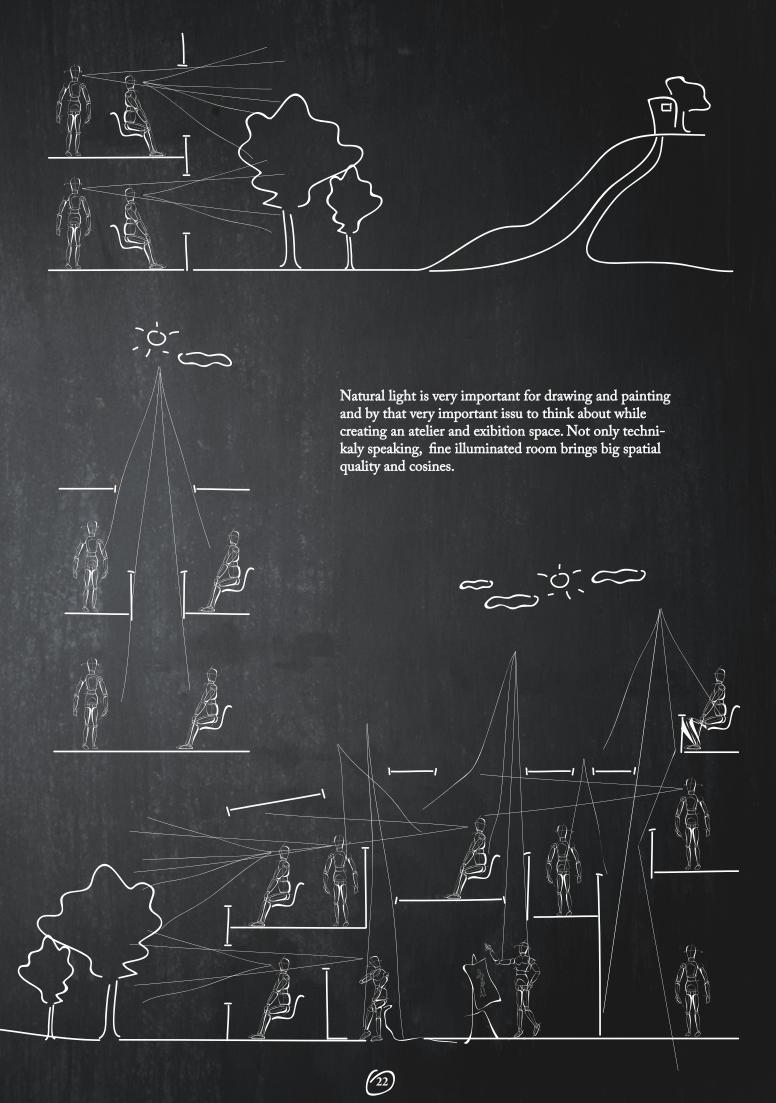


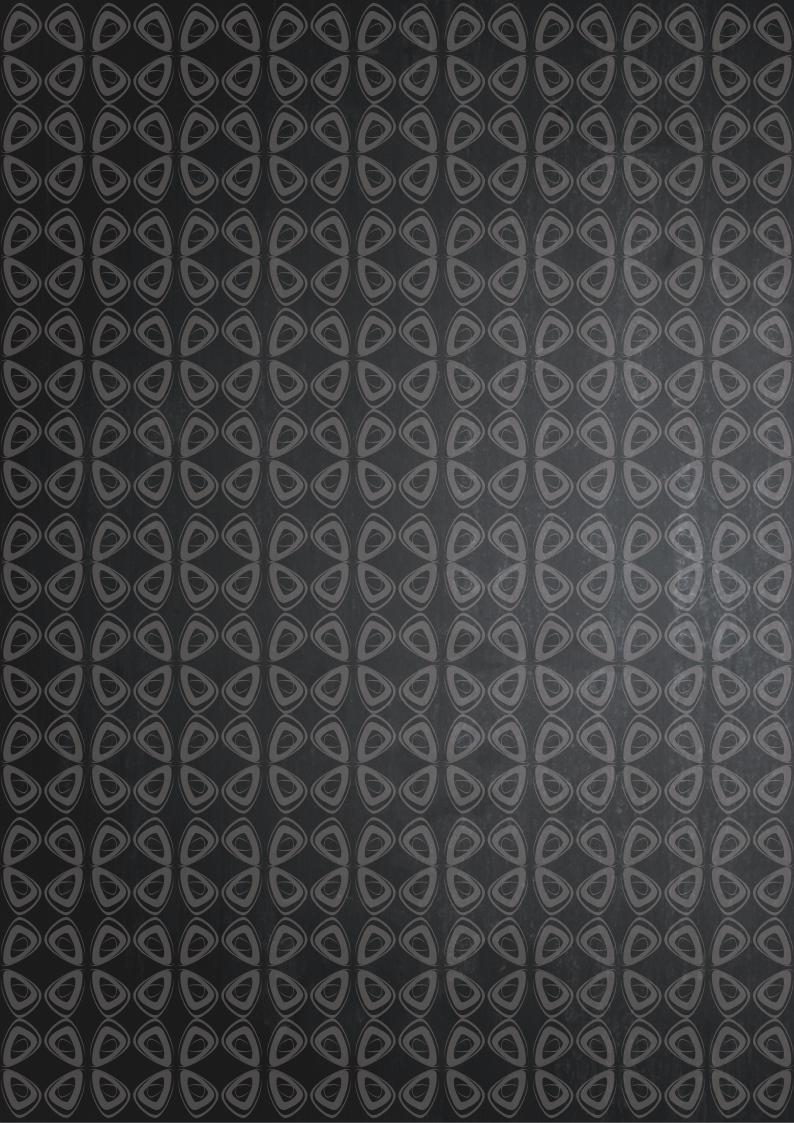












INSPIRATION

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WATER

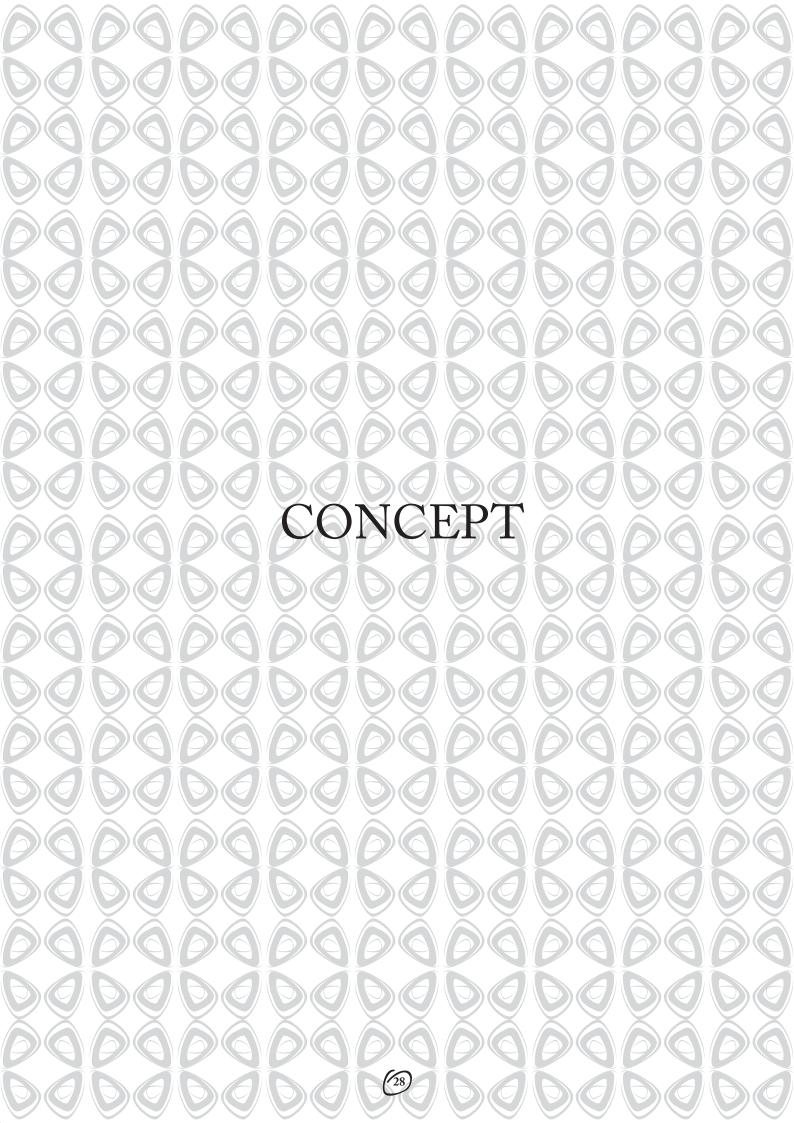
Since the location is placed by the river, it presented a certain challenge to attempt to implement water into the space in any way, and impress it's calmnes and freshnes. Water was the biggest inspiration for the fassade, because connecting more directly the building with it's enviorment, the chances to achieve harmony in colours and shapes are far more better,

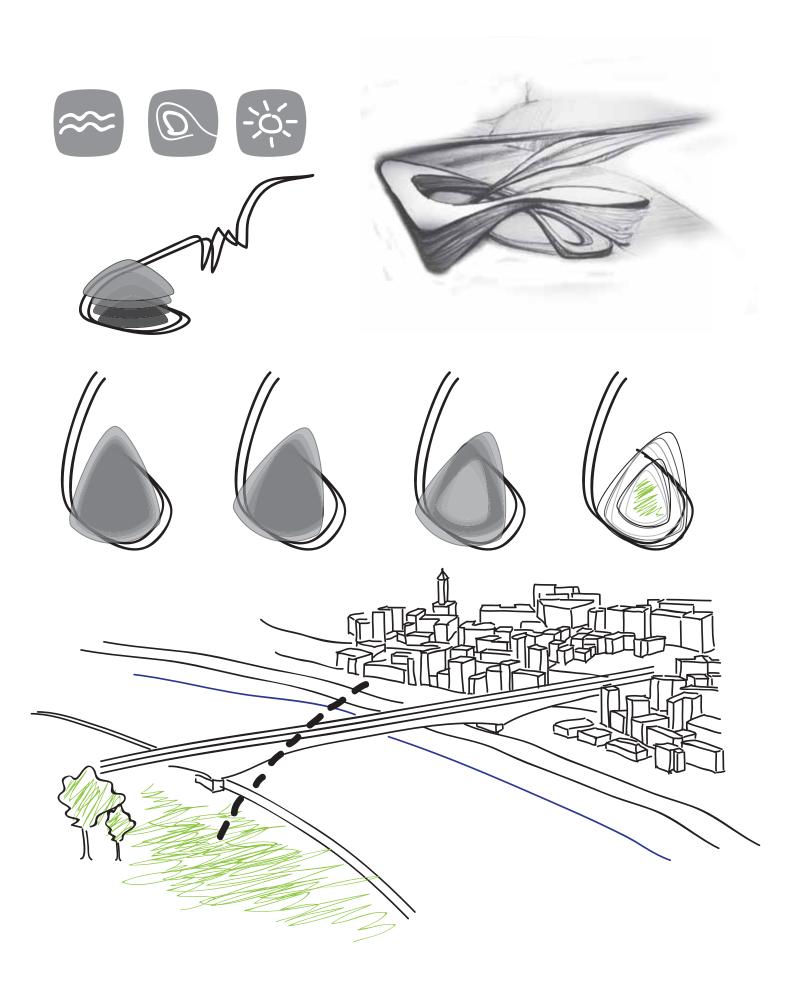
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CAVE

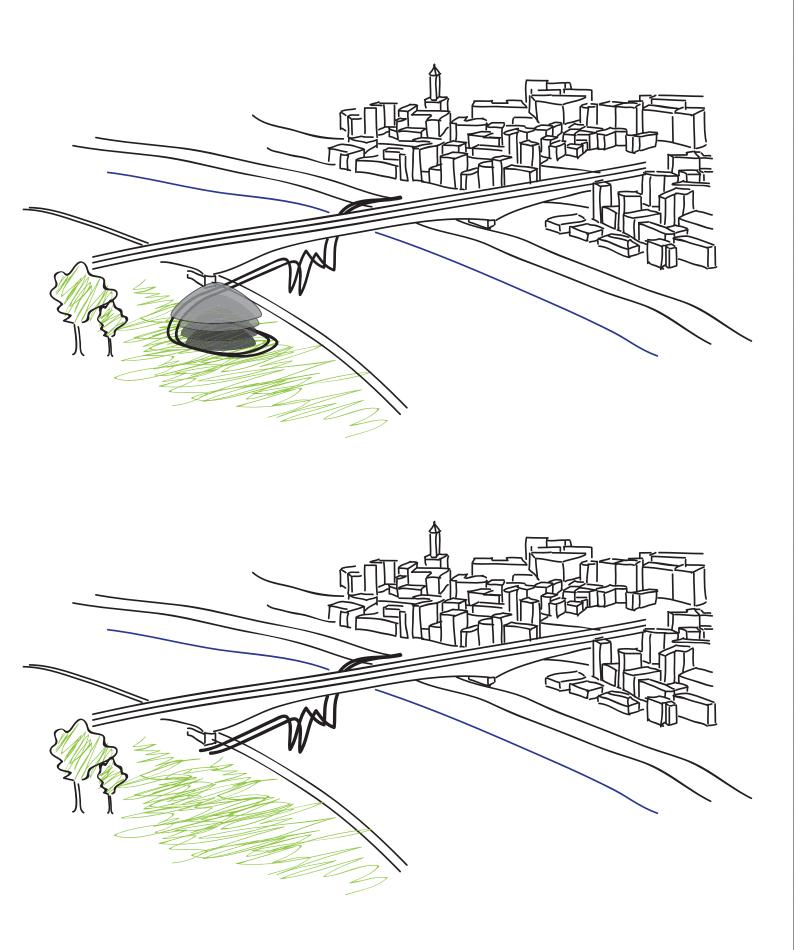
Caves were a big inspiration for interior design. The cracks and holes that are creating the space inside the caves were amazing combination to bring into the project. The idea to create a form hat would be inspired by caves has commed out of the fact that particulary caves were the homes for humans in the past. Their unic form is very interessting to analyse; the walls, which are curved, and the sitt- and lye- places which are all around. So the inside space of a cave is ready for some activity as soon as a person walks into it. There for, in the project was goal to reach that kind of comfort and acessibility.

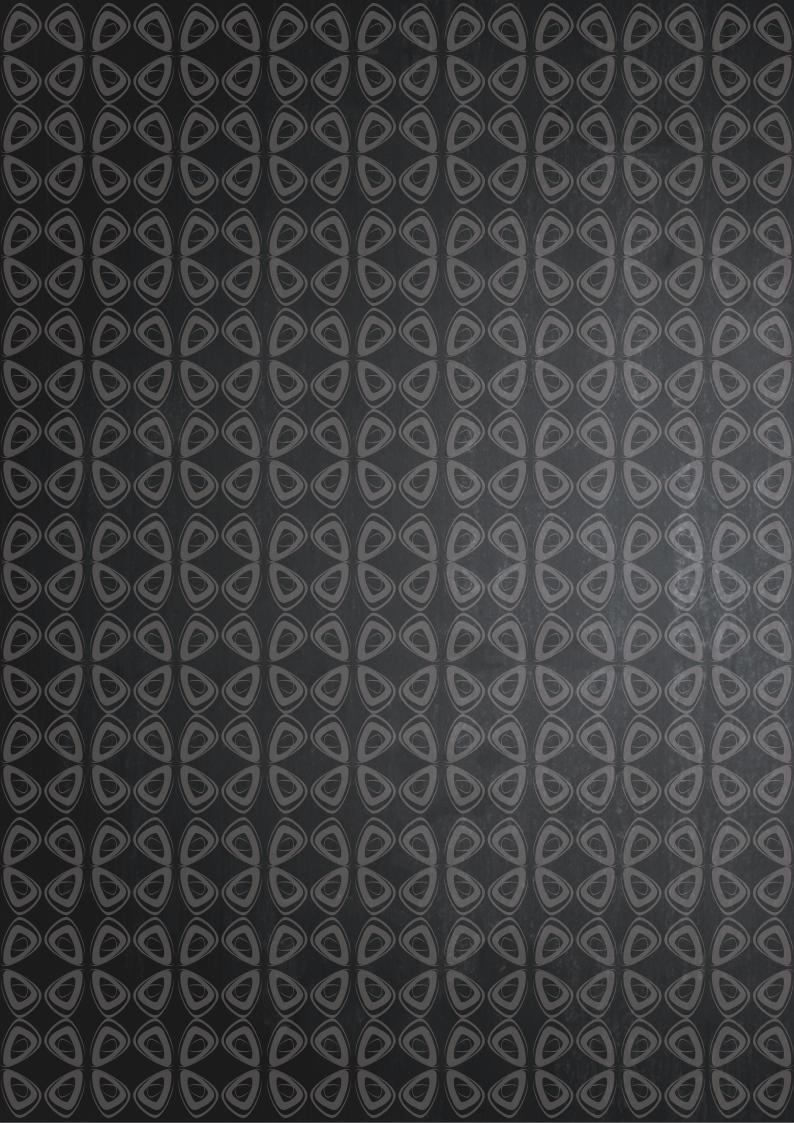
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FLOORPLANS

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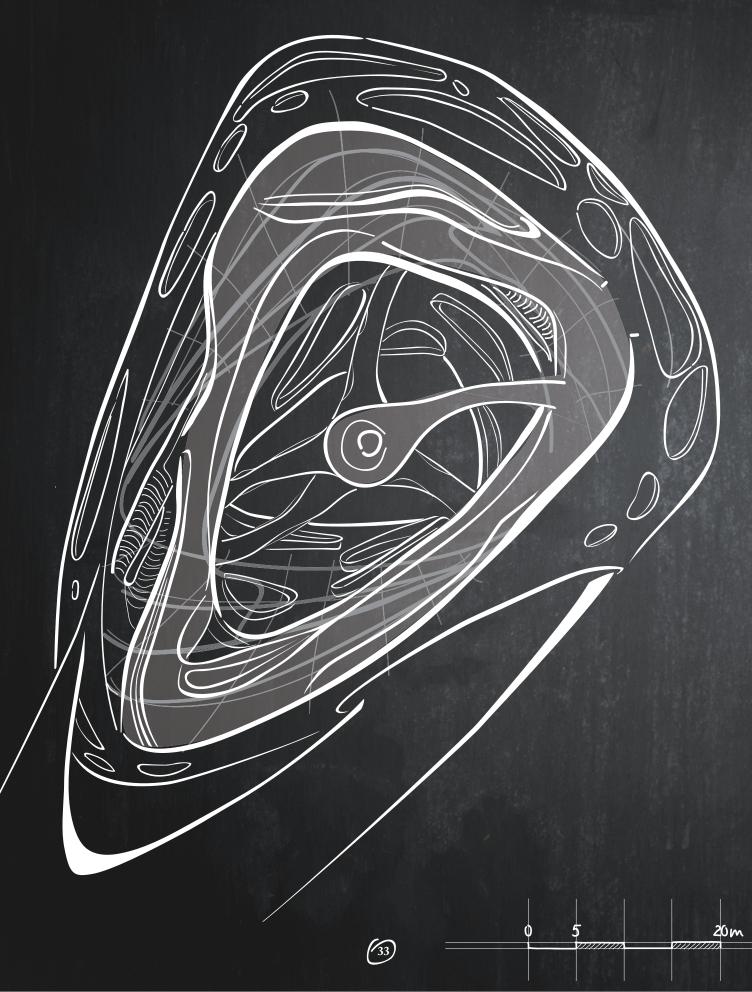
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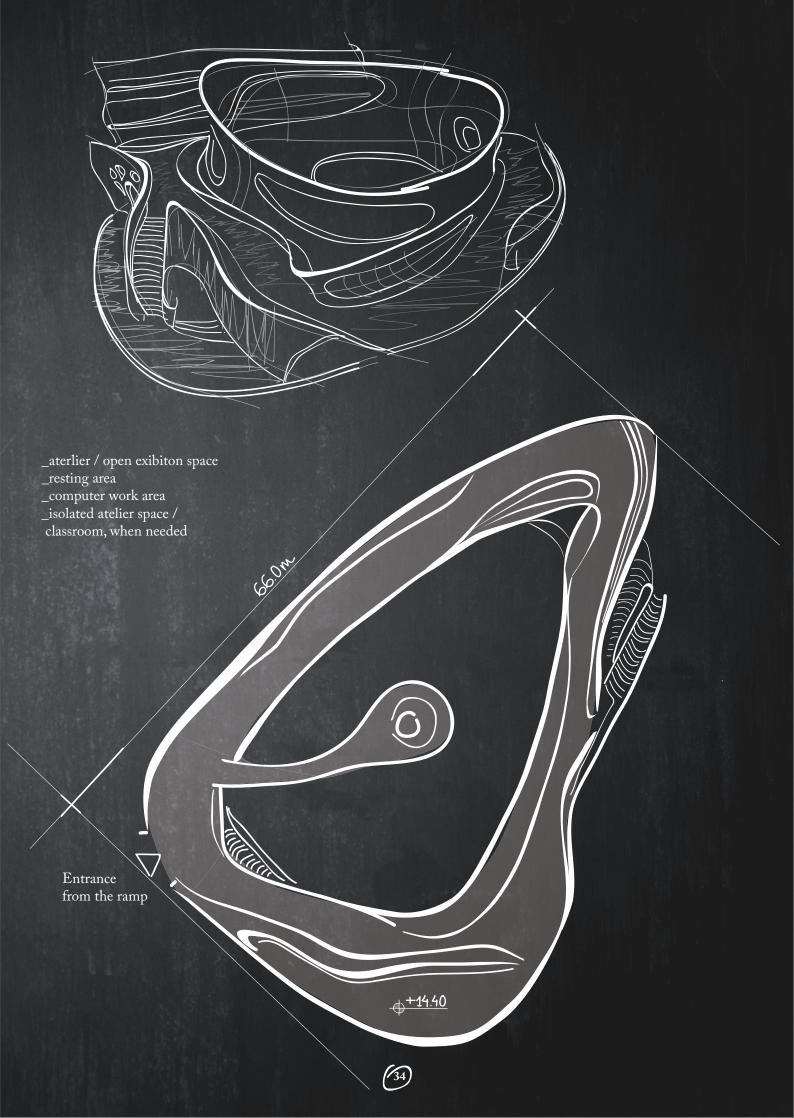
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4. floor

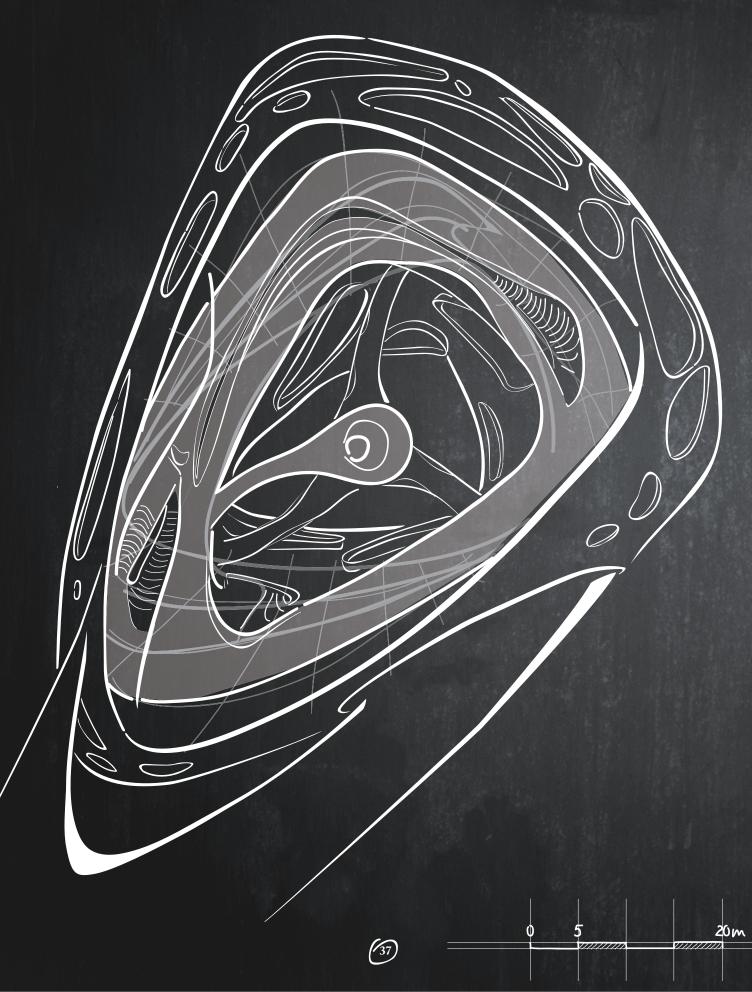


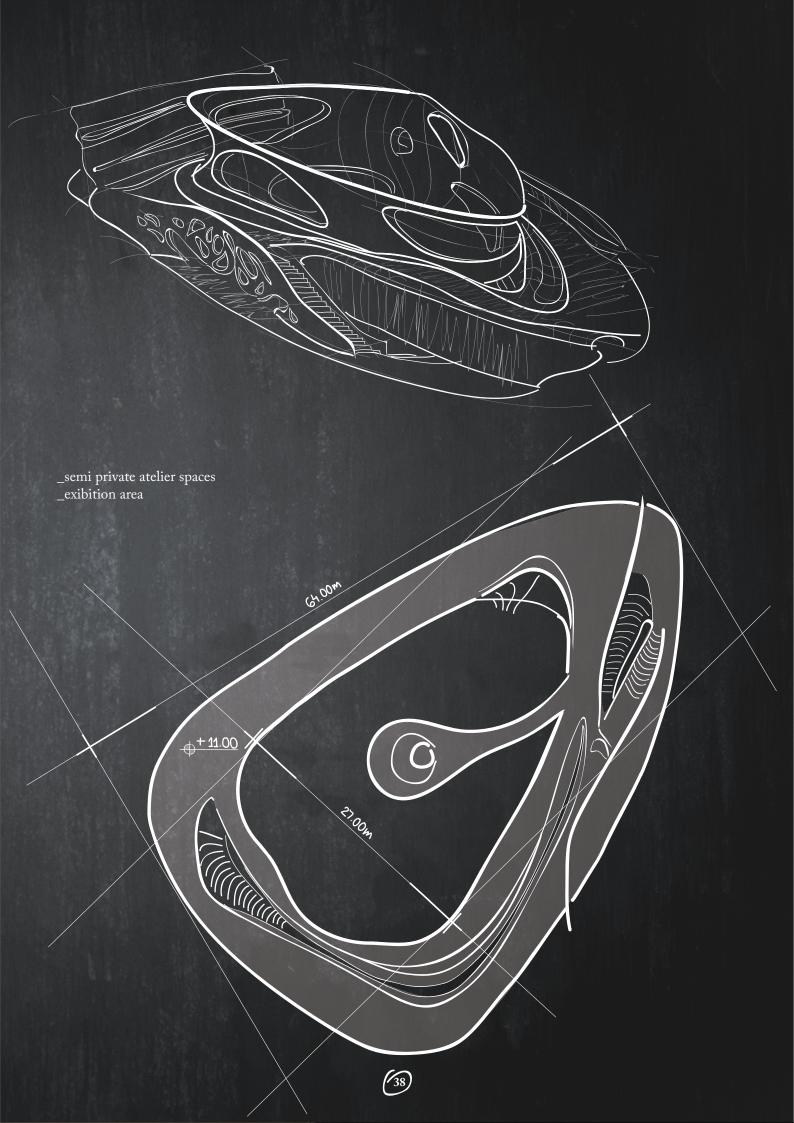




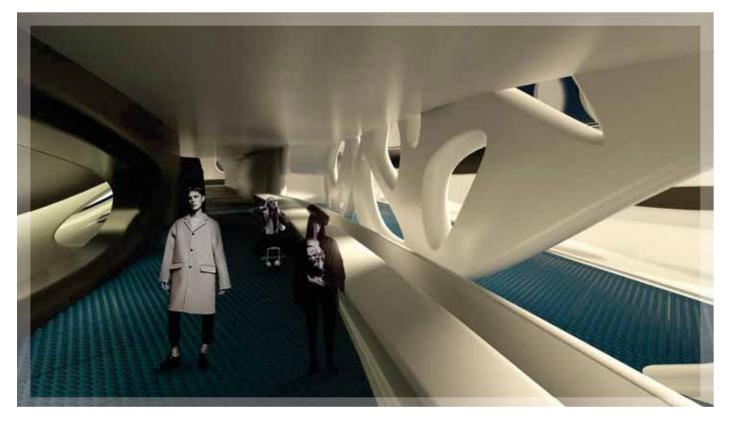


3.floor



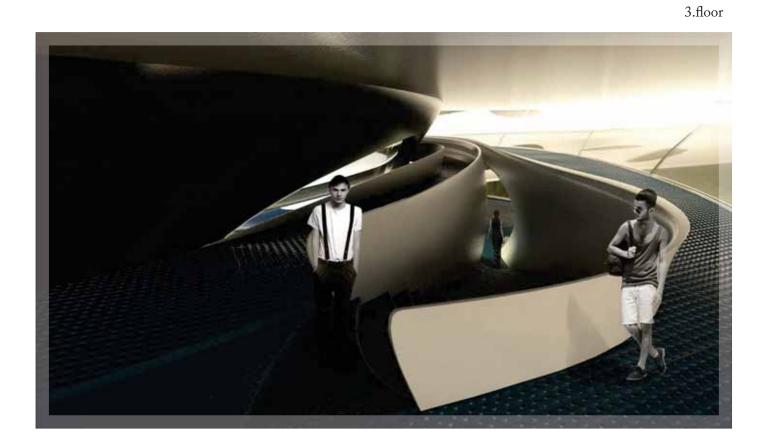


3.floor





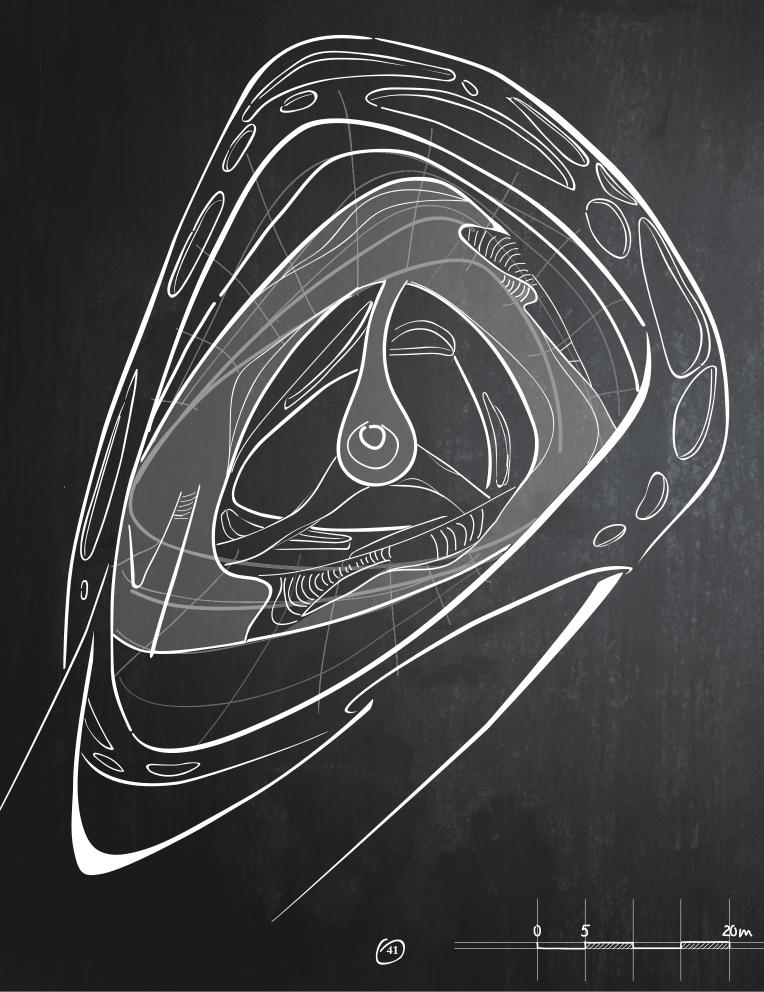
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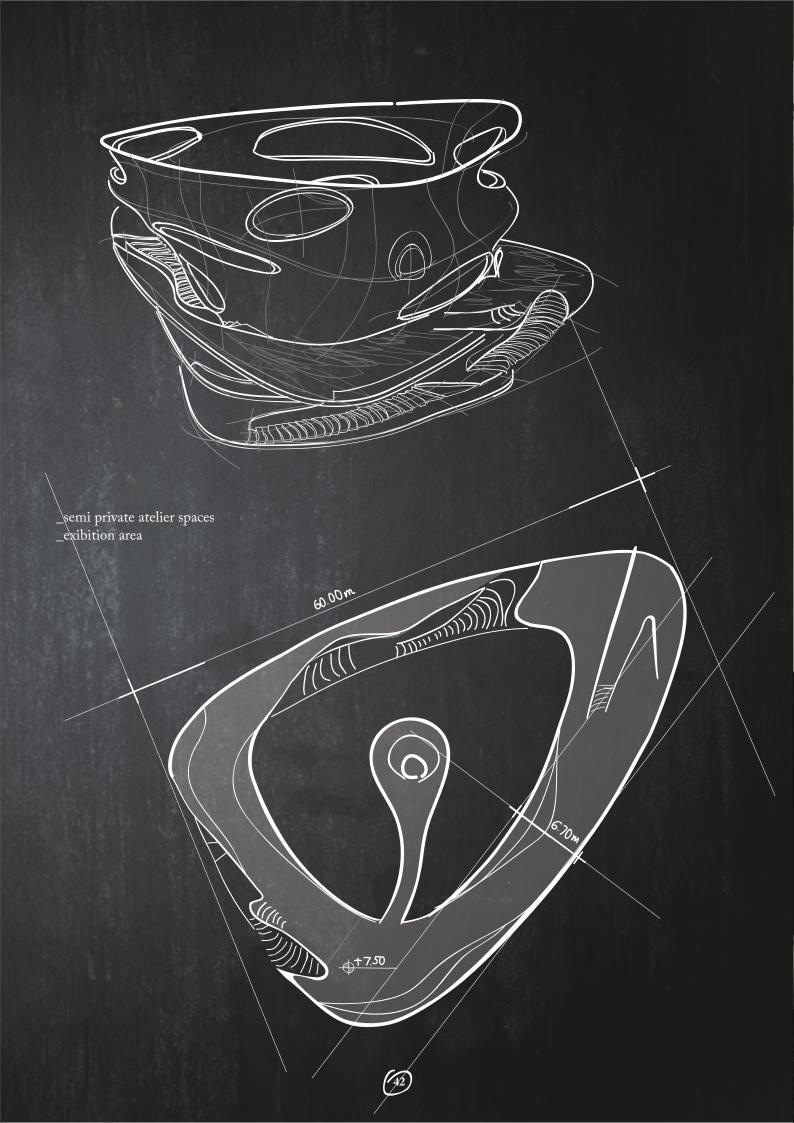




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2.floor

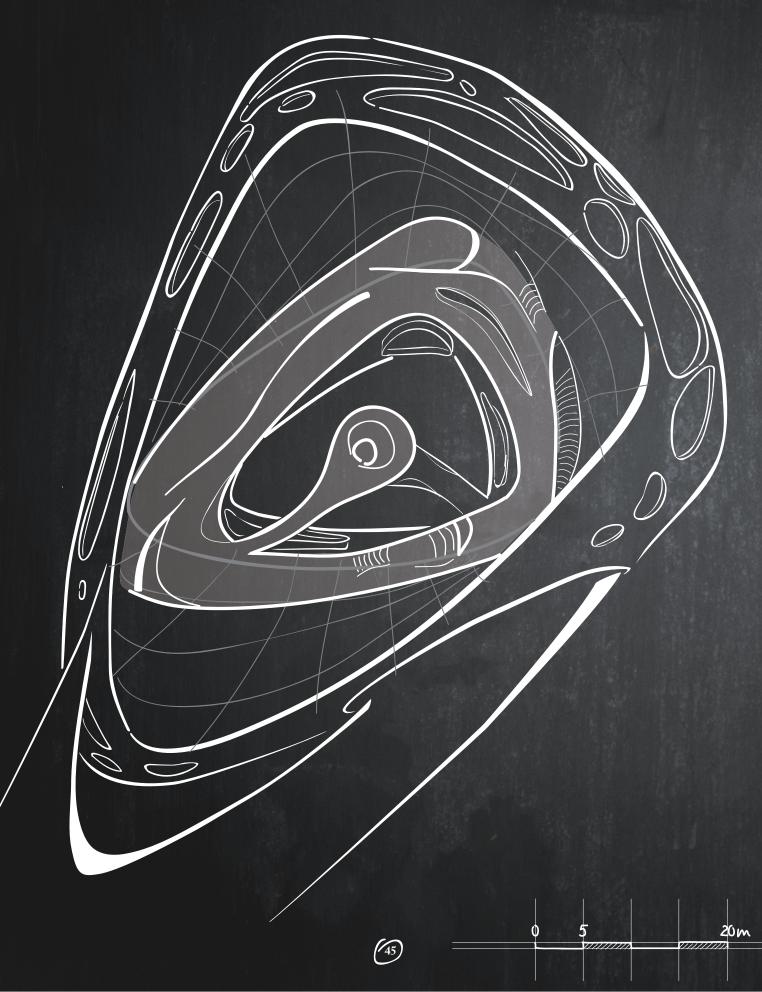








1.floor



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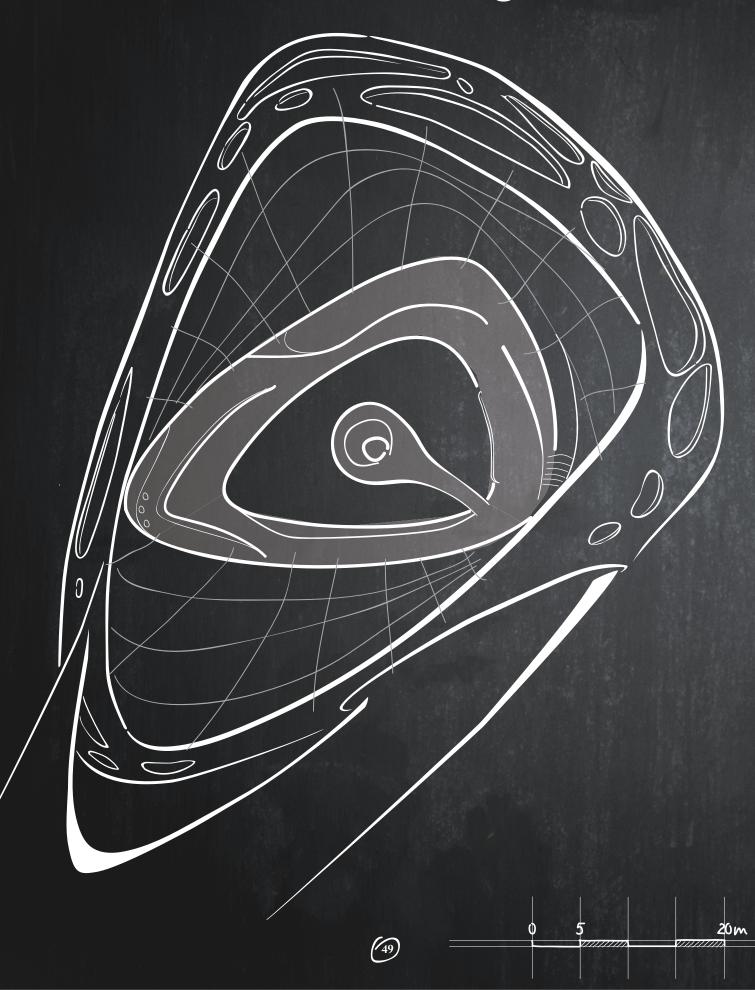
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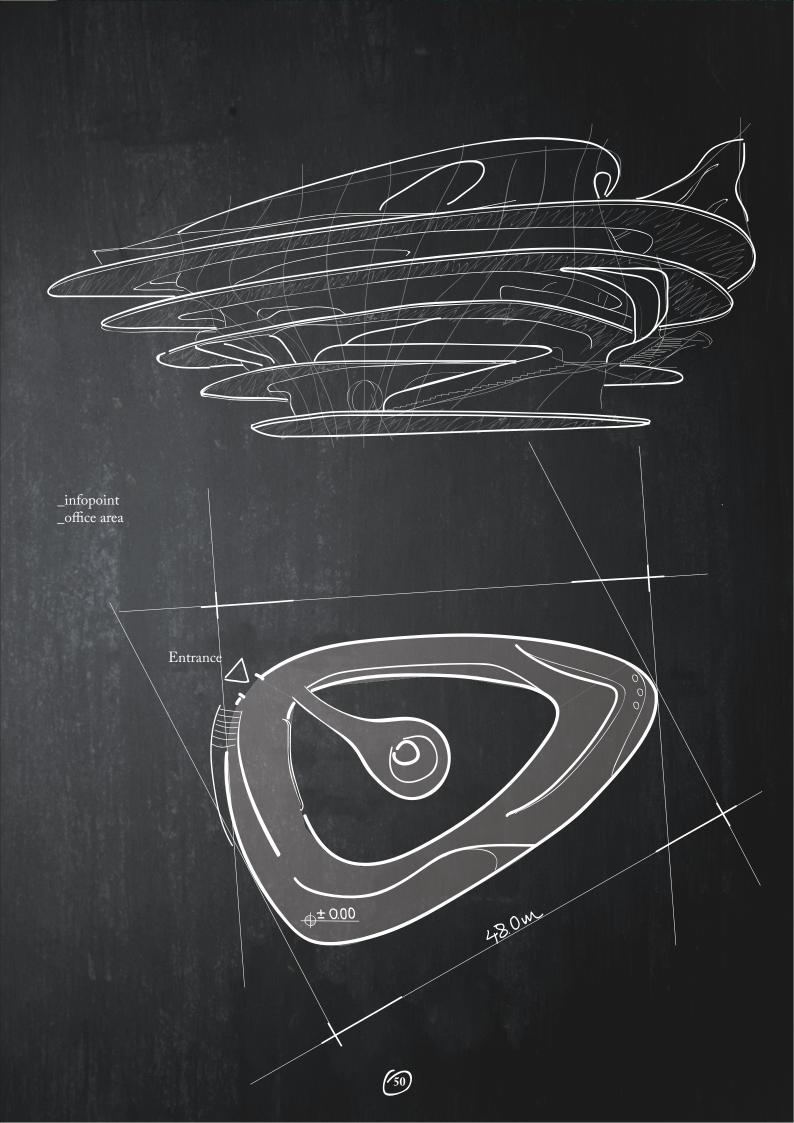
51.00m





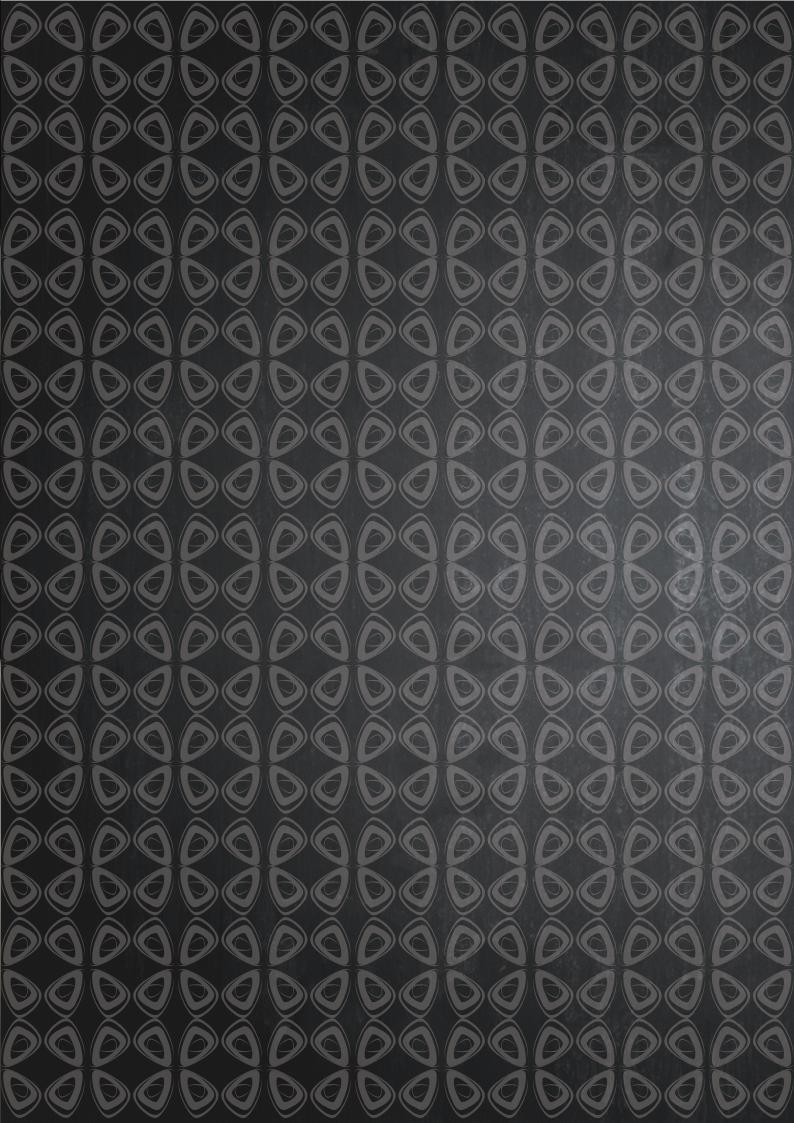
groundfloor











COMMUNICATION

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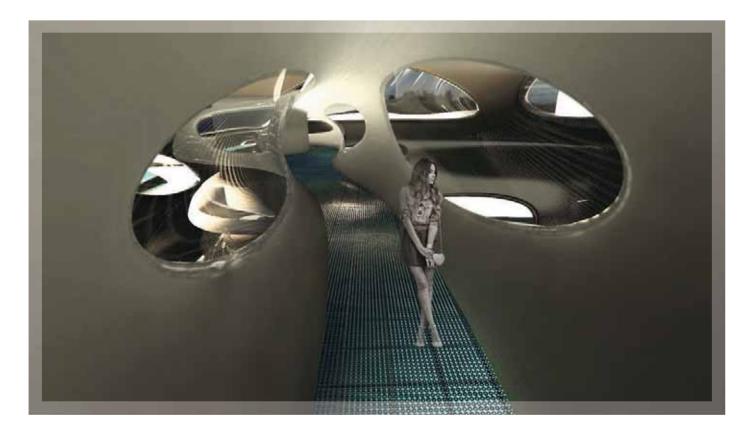
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hallway between elevator and floor

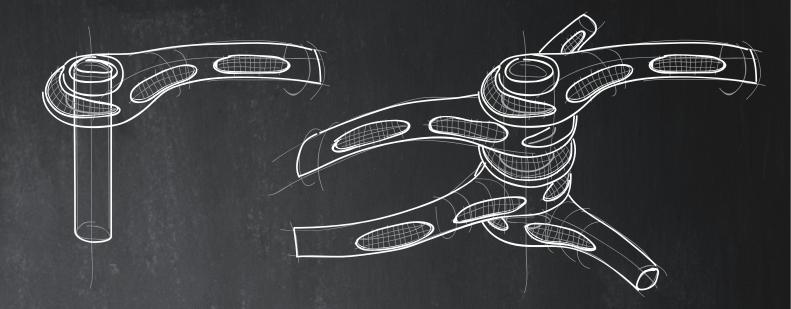




55

view from ramp

elevator with restrooms



(56)

In order not to break up the flow and mixing of different spaces and corners, which are created in the building, the main vertical communication (beside the stairs) - concrete core with an elevatoris positioned outside of the building. Around the core are placed 5 units which lead each to the different floor. In every unit would be built in the restrooms. In that way the restroom area would bi excluded from other parts of the space, but yet easy acessible for users.

Outside of the building is created a ramp who's main goal is to connect bridge and the building. The ramp goes around the building starting at the end of the bridge and ending by te ground floor. There is one entrance directly from the ramp to the building on the 4.floor. In that way is enabled for user to decide weather they want to walk by the building or to use the spaces insside of it.

ramp & pedestrian bridge

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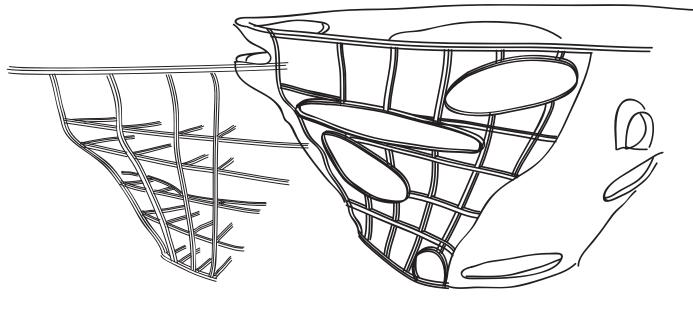
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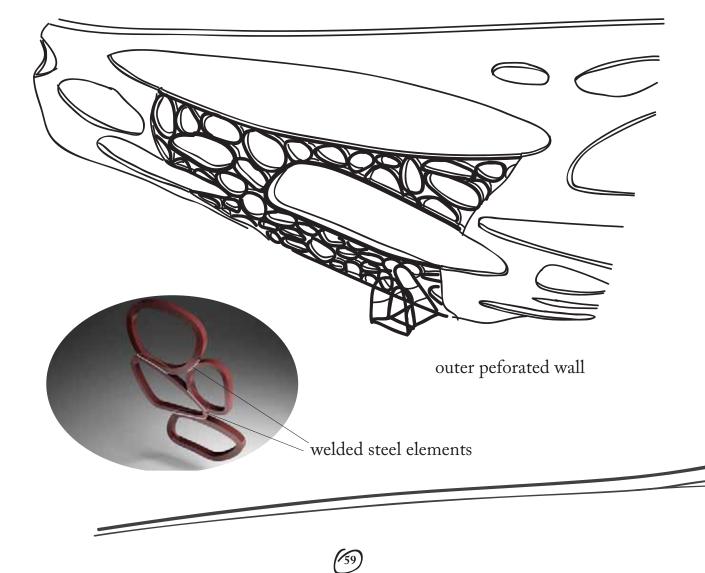
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inner wall

inner wall





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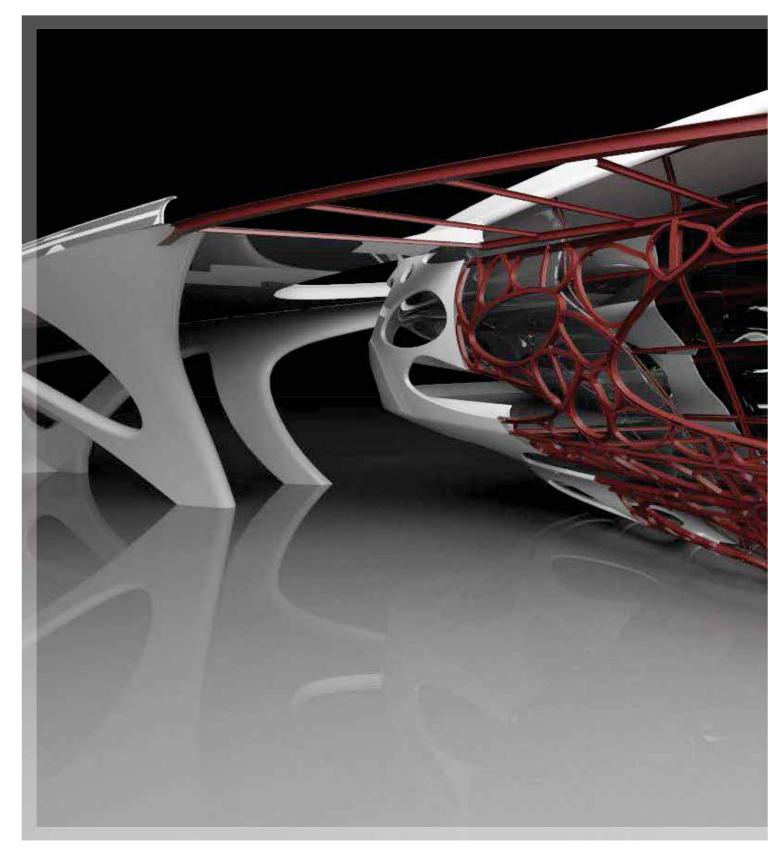
Most parts of the building would be made out of steel construction covered with sprayed concrete, an outer perforated wall and inner wall which would be insulated. Construction of other wall, which also supports the ramp is suppose to be, together with the construction of the inner wall main source of stability.

The concrete core with elevaor would be also surrounded by elements made of steel construction which woud be connected to the inner wall..

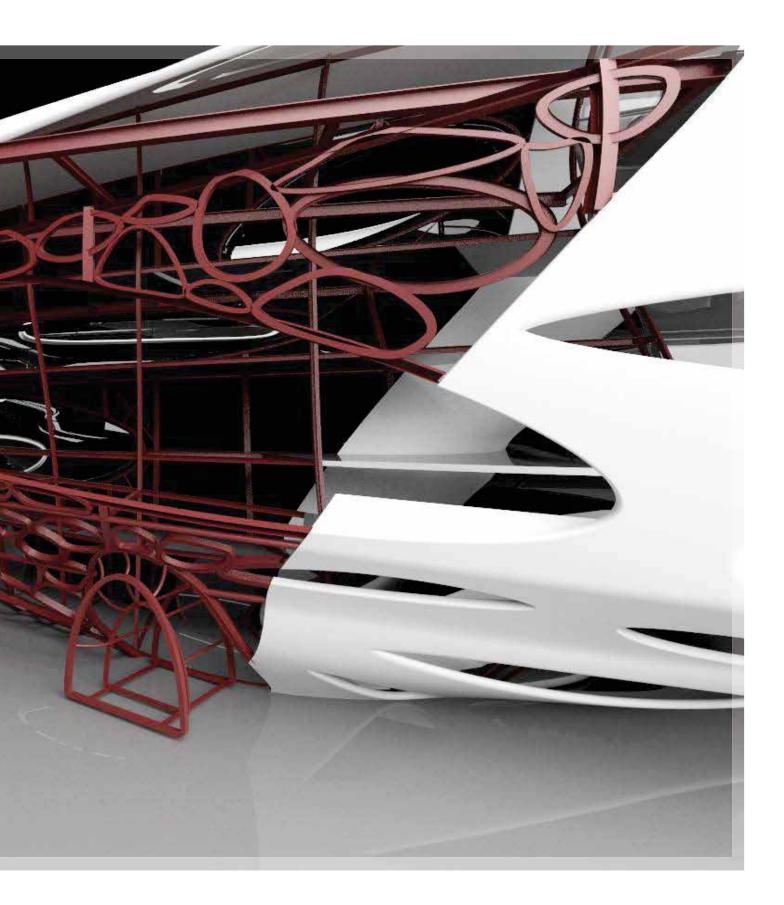
Between outer perforated wall and inner wall would be placed glass fasade supported also by steel construction elements.

60

steel construction

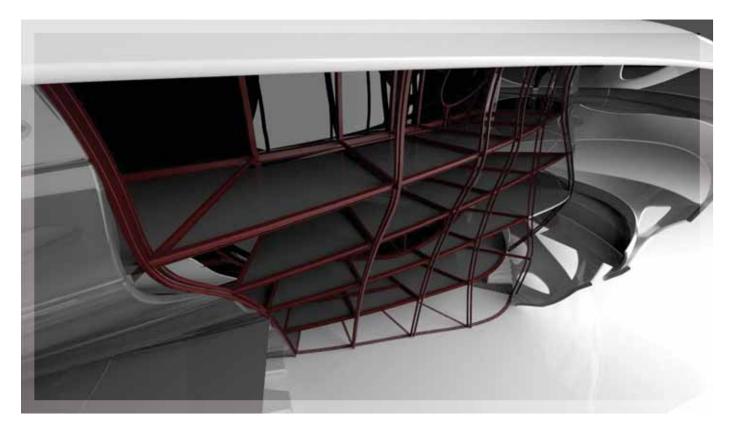






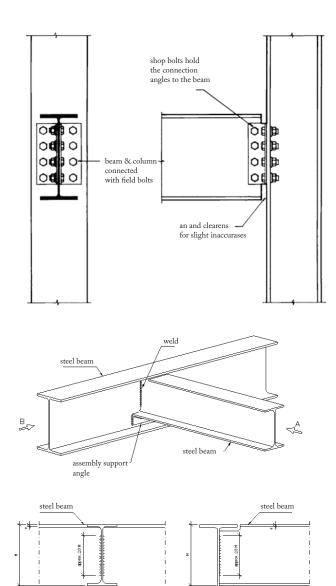
inner wall construction connected with ramp construction





63

inner wall construction



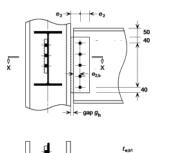
assembly support

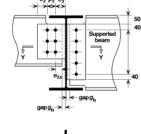
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angle

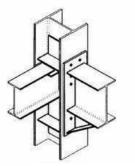
steel beam J

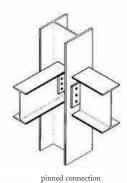
various types of joints of steel construction elements



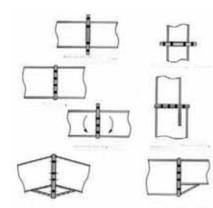




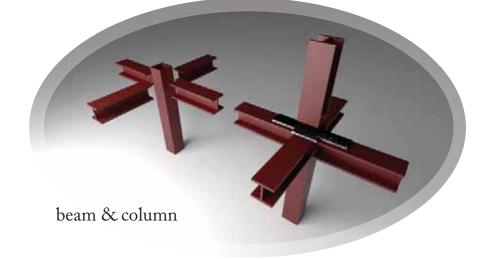




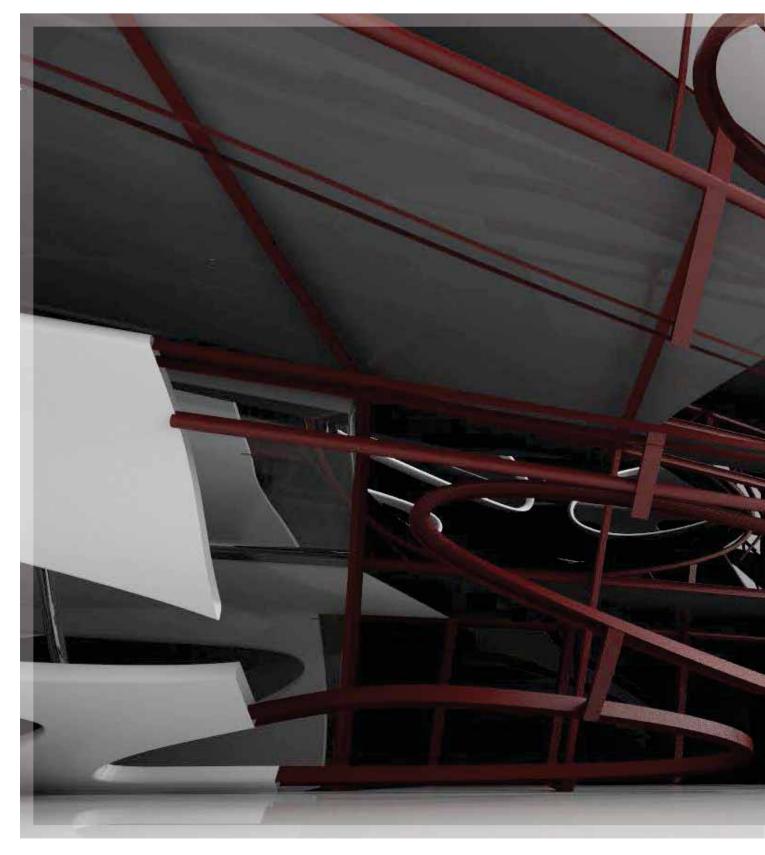
3d rigid



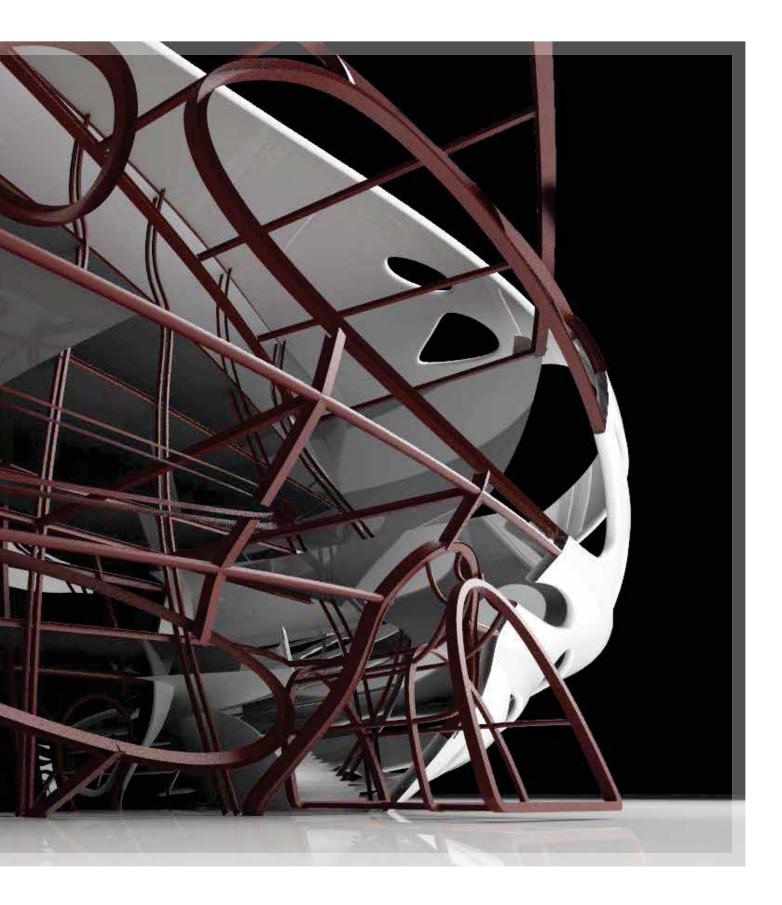
assembly support angle



steel construction



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RENDERINGS

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www.steelconstruction.info

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