

FILIPP FERDINAND

Hi, I'm Filipp Ferdinand. I was born in Moscow, Russia. Raised in a scientific background family my life was always open to exploration and creativity. Starting my career in exploration and trading of materials and commodities, I learned how never say no to an idea and thrive the intellectual curiosity capturing feelings and ideas through multiple mediums.

As a Spatial Experience Designer, I tend to explore the new dimensions of architecture through design. Finding inspiration from a variety of fields from classical music to film, photography and industrial design, I synthesize, explore and blend different aspects of those fields through different mediums in my works. I create story, create the atmosphere around it and develop prototypes of the models in the end. I tend to provide a different angle of vision, creating spaces that capture a new feeling. Visualizing the entire process with innovative and AI tools I transmit my idea to reality.

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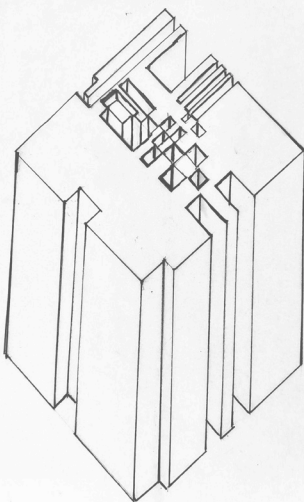
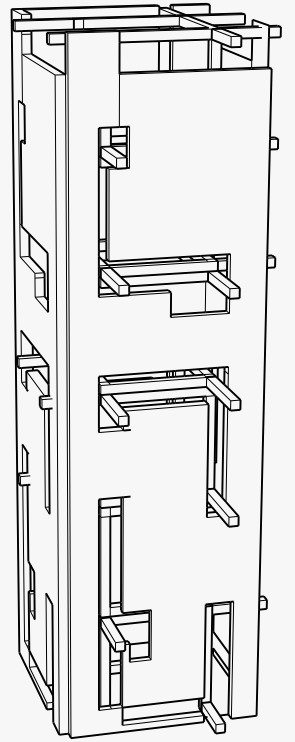
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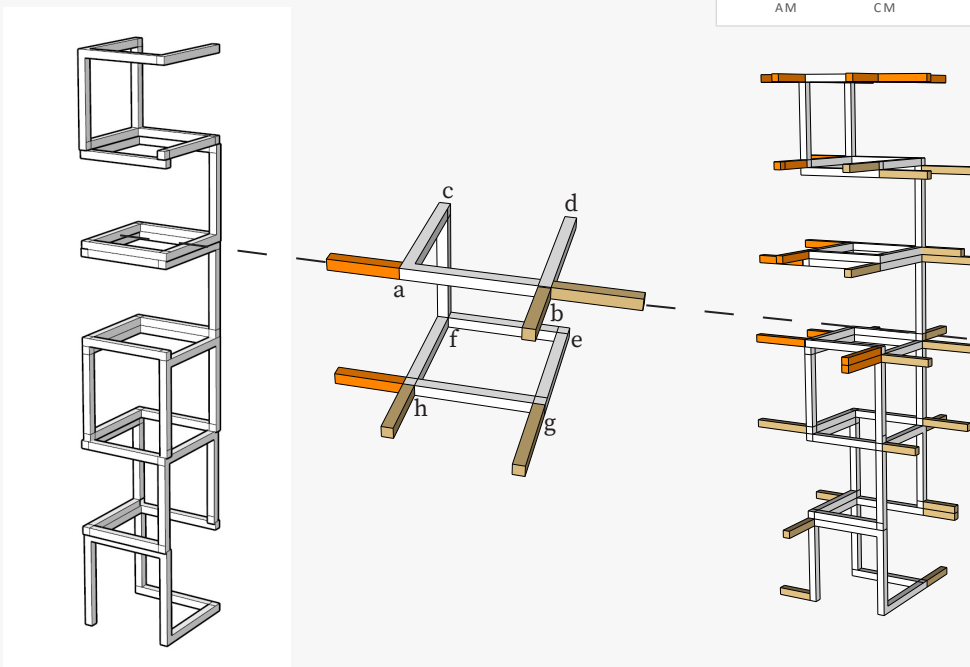
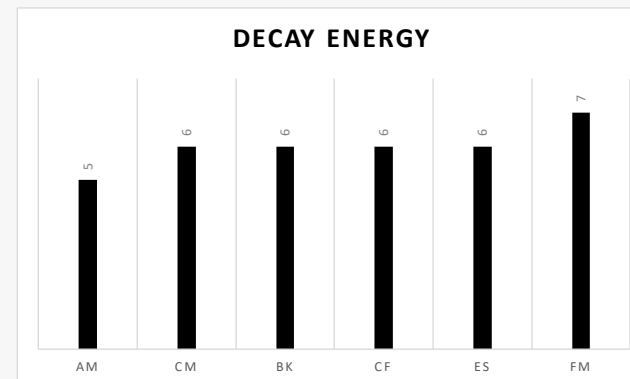
EXTENTIONS

Developing a Rule based system to extend elements outward. These will eventually penetrate an outer shell

Ordering system of the extensions was based on elements properties : Valency, Decay energy, Type of rays emitted (alpha or beta or both)

Special metrics have been worked out to grade the properties to tie them to the parameters critical to choose for allocation of extensions to the vertices (a-g) of cubes (different lengths: 1, 1.25, 1.75, 2)

	Am	Cm	Bk	Cf	Es	Fm
Oxidation state	3 4 5 6 7	2 3 4	2 3 4 5	2 3 4 5	2 3	5 6 7
"Half life of elements / num. oxidation "	3	15	78	1	15 8	12 3
Type of rays	a	a	a b	a b	a b	a
Lengths in inches	1.25 1.5	1.25 1.5	1.75 2	1.75 2	1.75 2	1.25 1.5
Direction	forward	side	forwWard	side	side	forward
Valency	2	3 4	2 3	2 3 4	2 3	2 3
Decay energy	5	6	6	6	6	7



ALLOCATION

Eventually, each side of the cubes vertex was linked to the oxidation state of the certain element.

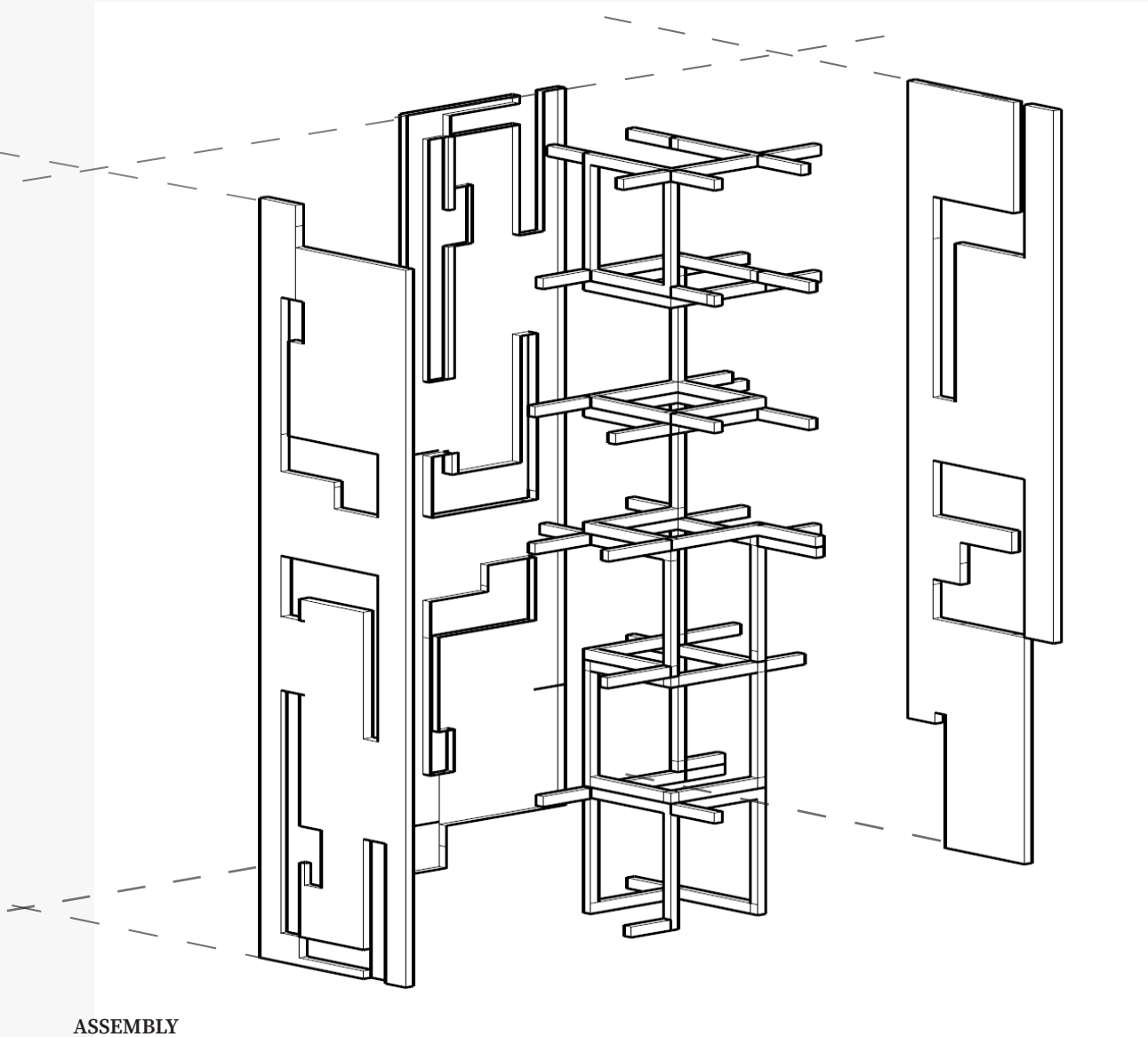
And after the first iteration of placing the extensions on the cube edges it was visibly and physically clear that additional data is needed. So I also brought in the half-life of elements as a parameter correlated. As half-life of the elements itself was exceedingly higher than the number of vertexes of cube, this number was divided by the available oxidation states number (of each isotope) and only the integer values not extending 8 were taken. (also the ones that did not repeat the previous oxidation state numbers)

RULES

1. Rotate incomplete cube along x-axis when nucleus weight grows
2. Assign top 4 oxidation states to top vertices and top 4 half life levels to bottom vertices
3. Determine the lengths of extensions on each vertex by the type of energy emitted
4. Determine the direction of each extension by the valency
5. Attach the extensions clockwise to the cube corners based on the combination of metrics

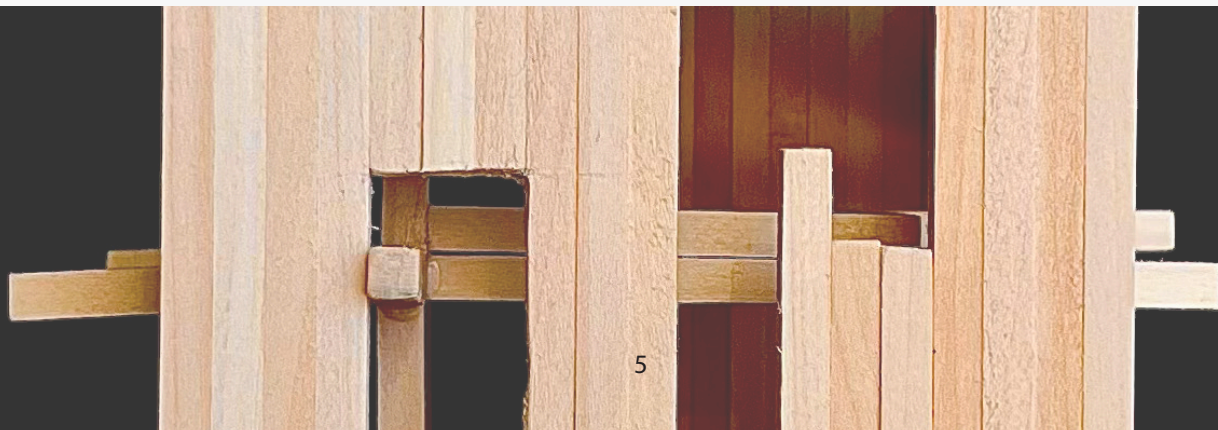
Continuing using the ordering systems principle when designing the Shell.

Ordering system used for the shell were paths and connections created by interaction of transuranium elements with high temperature and pressure. (The pattern justifies the cuts in the shell and shows the general similarity of the elements reactions).

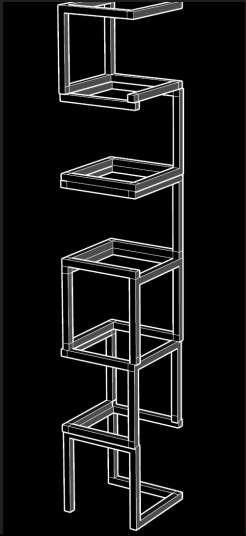


ASSEMBLY

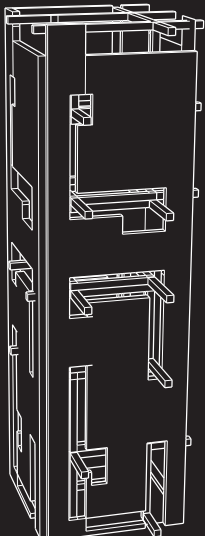
The shell was developed using four sides. Each side represents main elements properties (valency, emission type, decay energy, half-life isotopes periods). The openings represent the oxidation state. The opening size is determined by the change in the key parameters while interacting with oxygen.



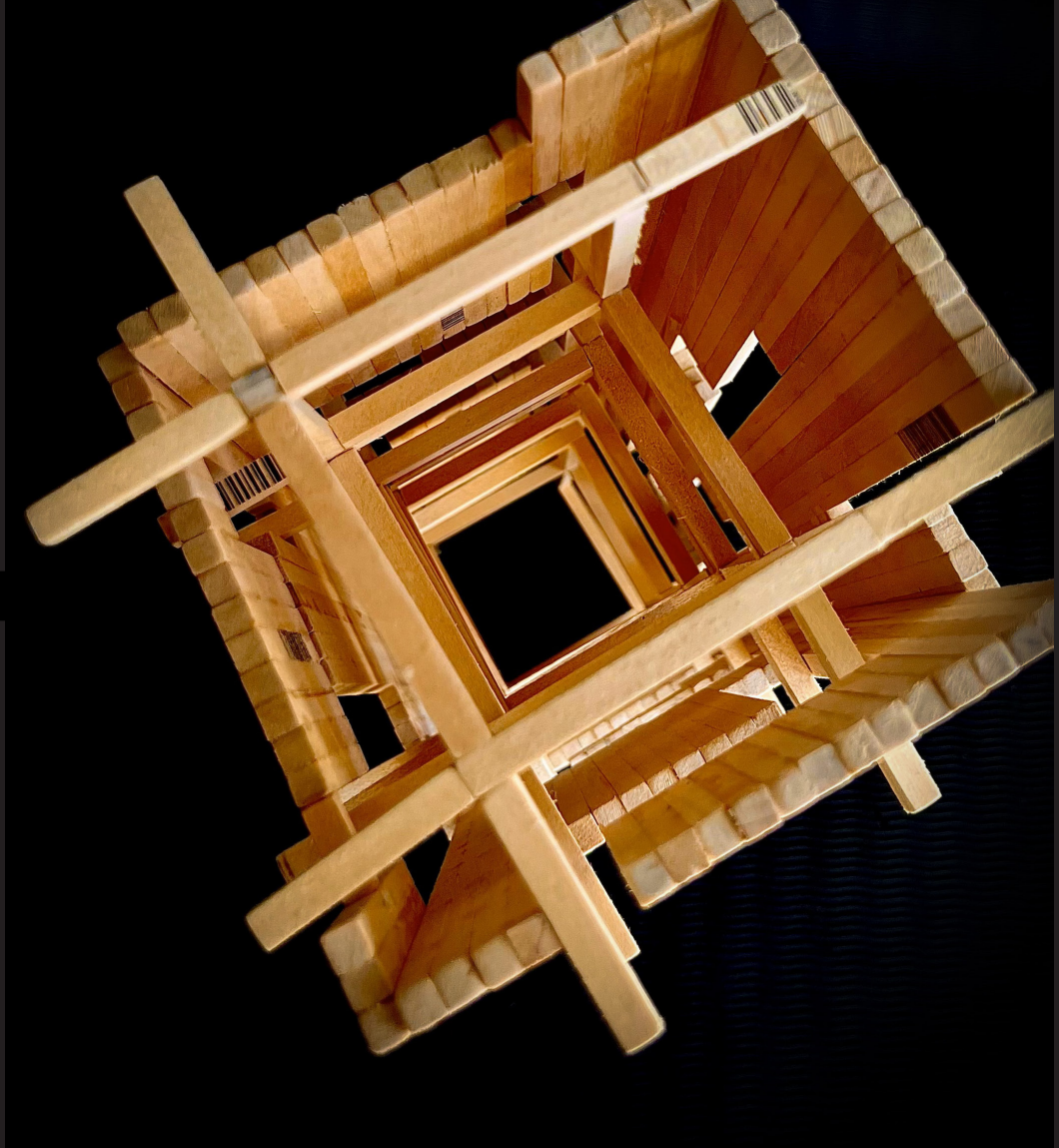
sdsd Basswood model 1/4" sticks



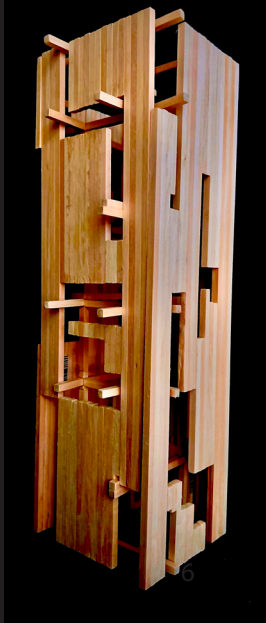
sdsd Axonometric view



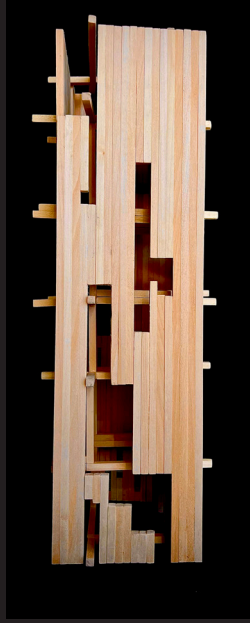
sdsd South Elevation



sdsd SE Elevation



sdsd Front

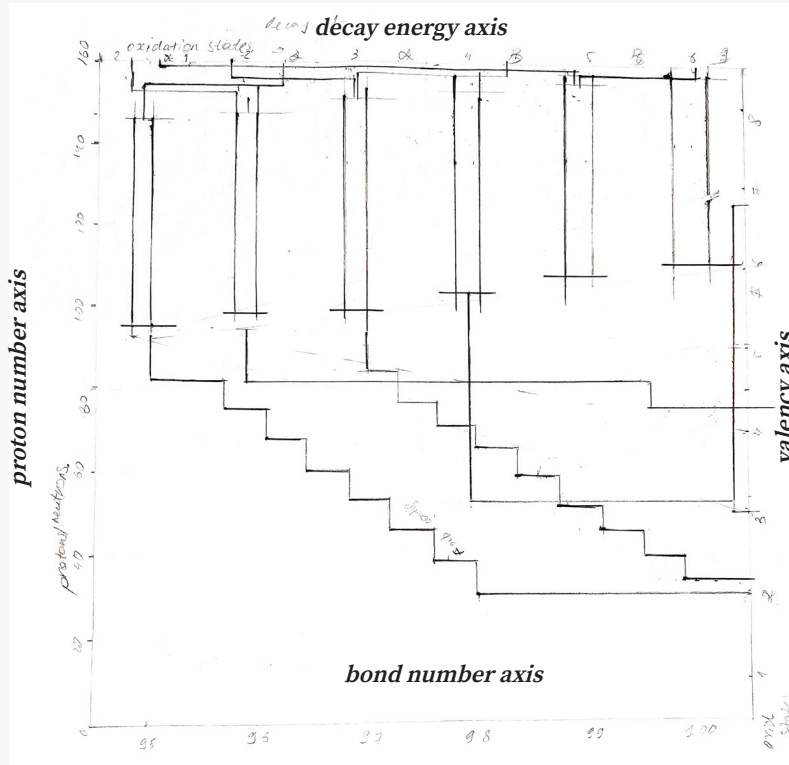


Axonometric cubes

PROJECT AIM

Increase the proficiency for organization of information in different modes and media

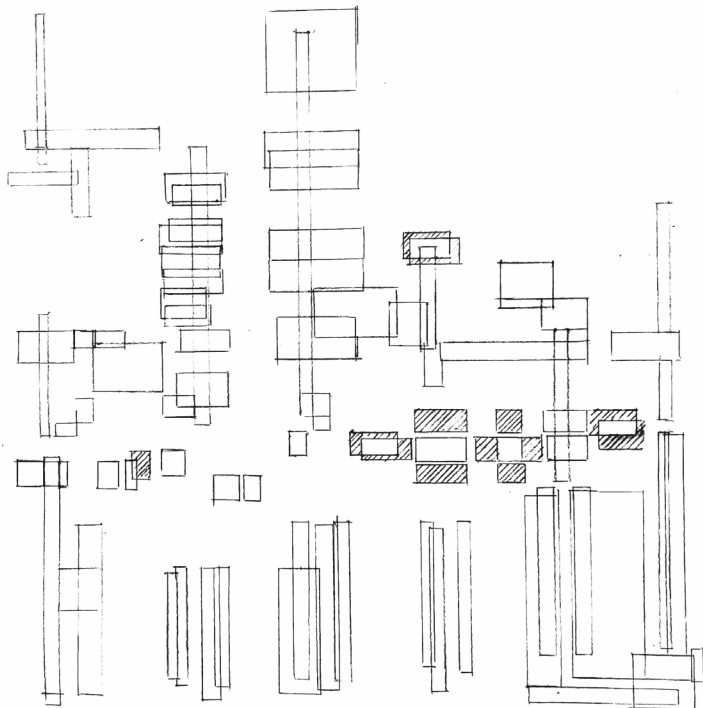
STARTING WITH constructing an 8*8 inch square and mapping several aspects of data on the plot. Using the same periodical table of elements data as for a tower project, placing the elements parameters like oxidation state, nucleus weight, protons weight, bonding and creating a field condition out of them.



ITERATIONS

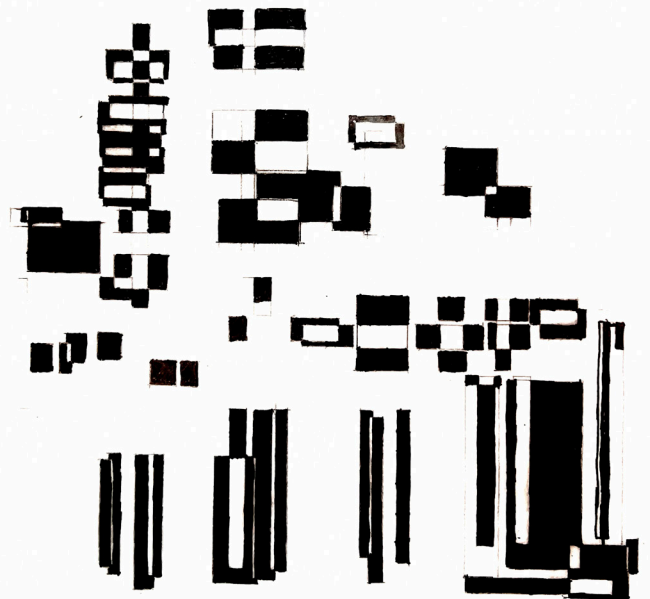
Using different line weights, outlines, hatching and drawing techniques to emphasize important relationships in the data, intersections, major vs. minor events



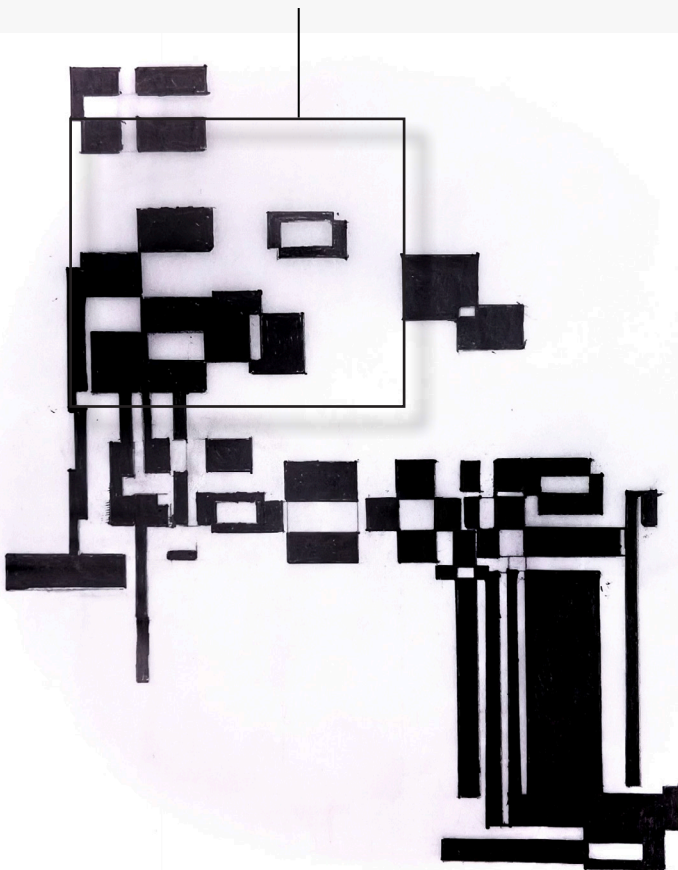


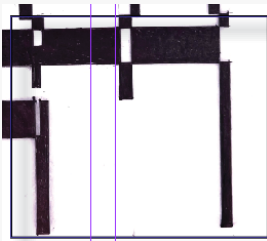
Increasing the complexity of the grid, finding out more points of interactions between elements and marking these areas with various line weights

Transferring the details of the upper drawing (each line and figure is identified with certain relation between the elements and its multiple properties as: bonding, valency, decay, period, etc.) to form a black and white rectilinear shaped figure ground

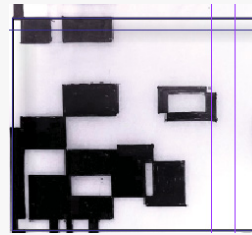


3"x3" section of the drawings were used as a base for 3D transformation. The two 3"x3" sections were then transformed and pulled in three dimensions, interacting with each other to create the axonometric cube.

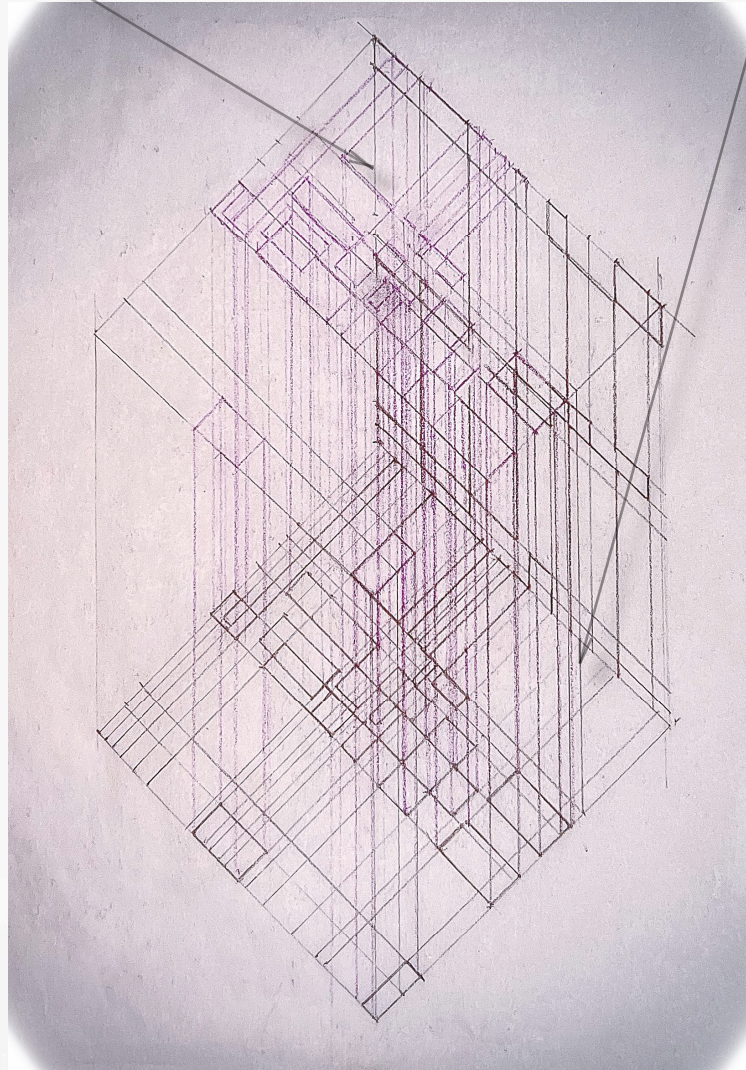




Back edge fragment



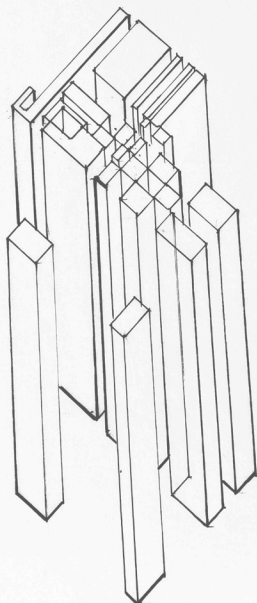
Bottom edge fragment



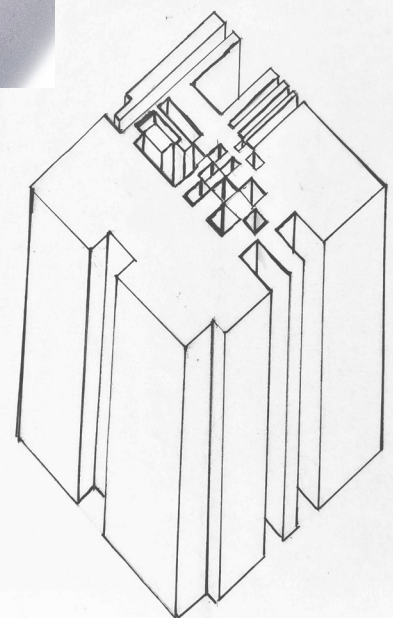
PROJECTION

Transferring 2 fragments of the figure grounds on the 2 edges of the 3 inch cube. (bottom and back). Projecting each fragment pattern to the opposite edge of the cube using black and purple colors. Finding the interaction

Addition



Subtraction



EXTRUSION

Making 2 separate projections of the figure ground interactions: positive and negative sides.

MUSICAL NOTES PROJECT

PROJECT AID

Find and utilize a way of seeing and organizing thing that involves the non-visual aspect of design. Project involves the explorations of data analysis, form language development, spatial quality, computer 3D modeling, and physical modeling

STARTING WITH

Selecting a piece of sheet music that will become the basis of the project

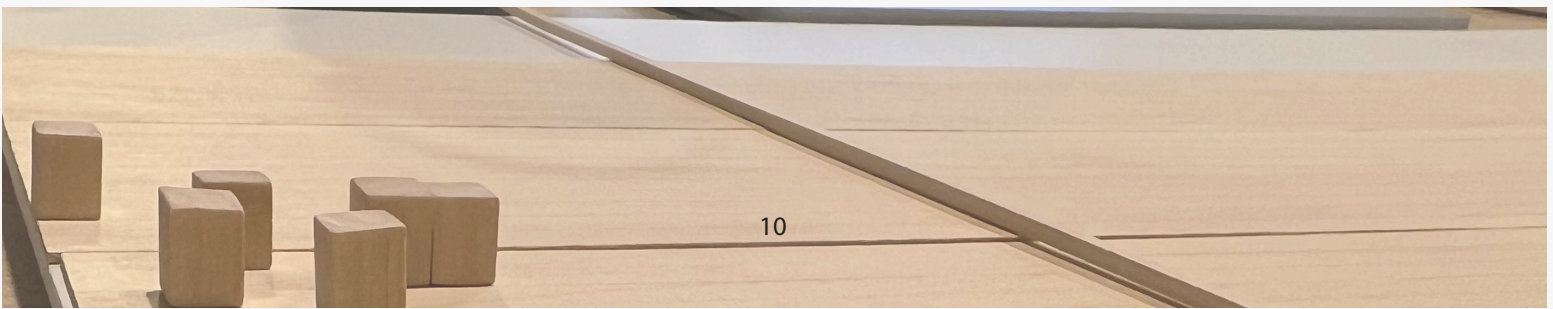
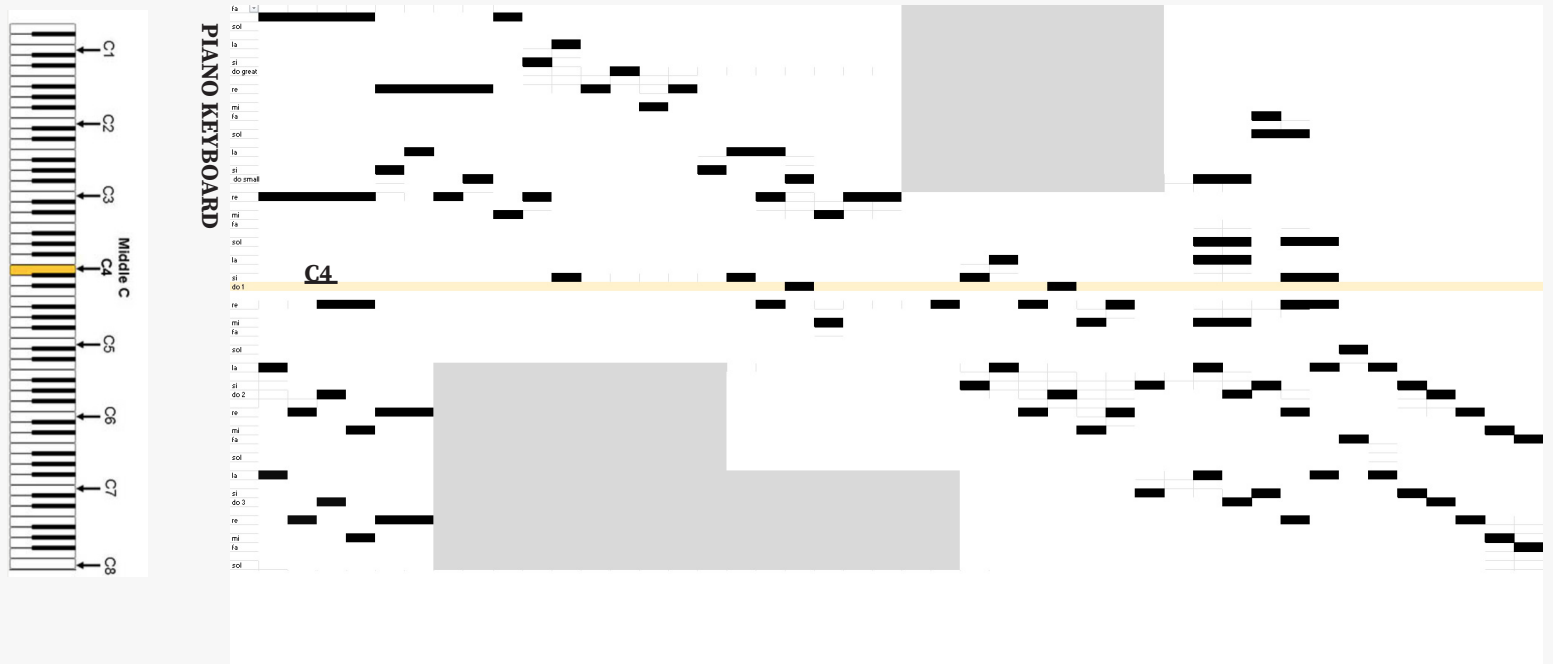


Sheet Music

I have chosen one of my favorite pieces of music - third part of Jewels ballet called "Diamonds" Music by P. Tchaikovsky

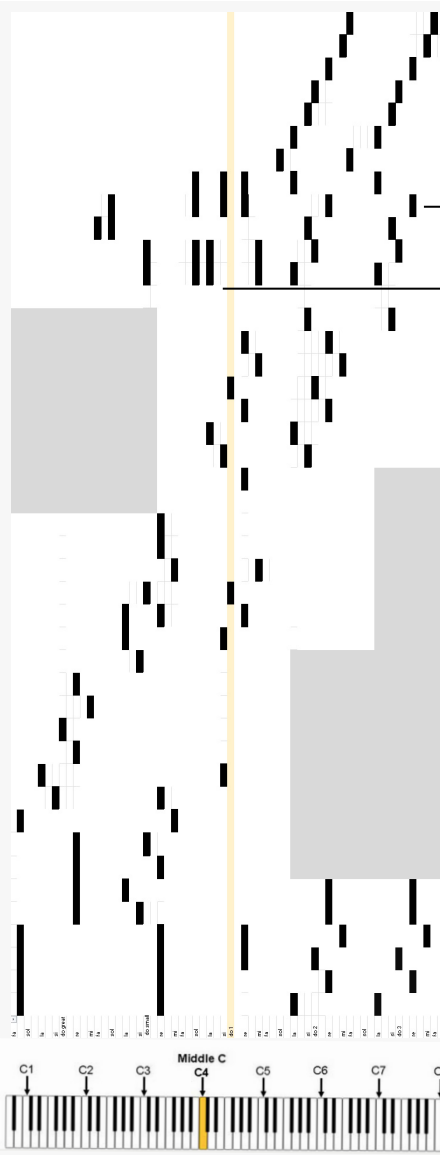
CONVERSION

"Translating" the sheet music into a "digital" format by arranging the piano keyboard vertically, placing each note in separate cell (sharps and flats included)



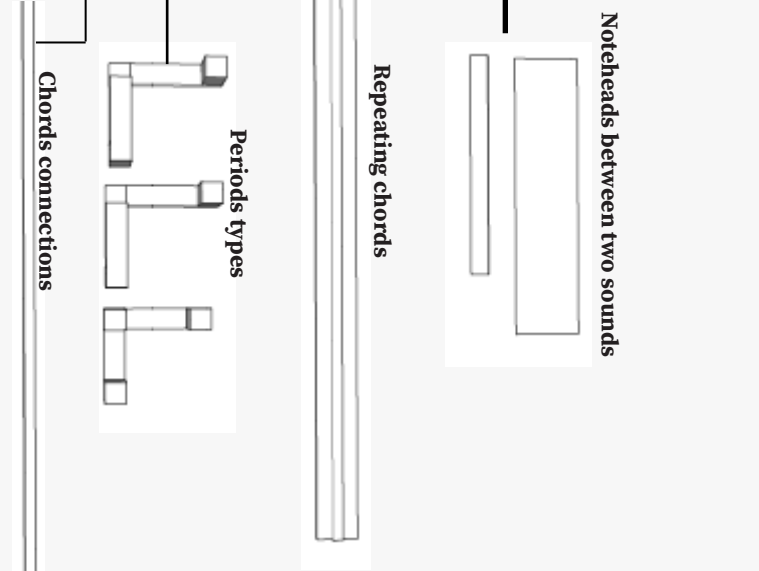
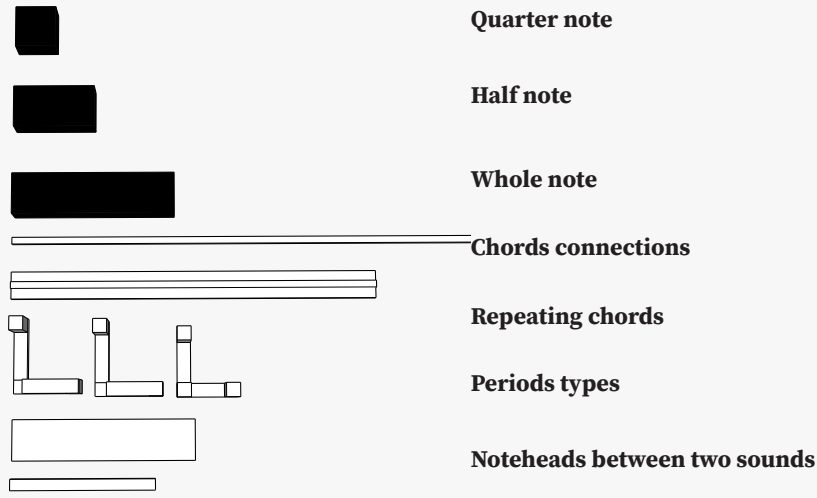
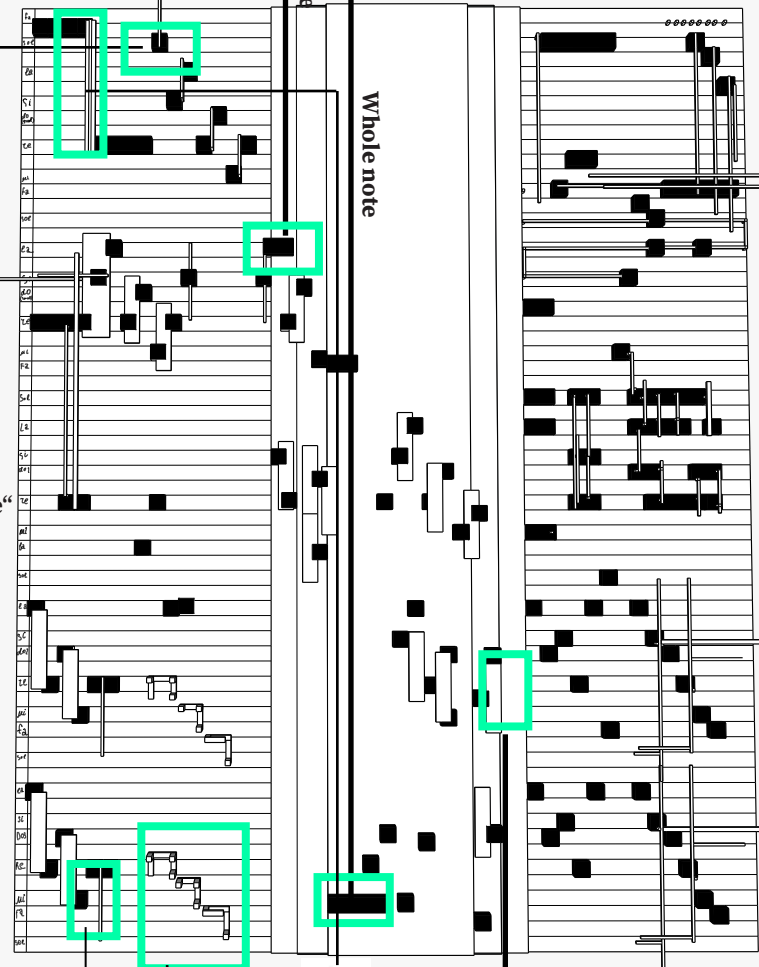
COMPUTER MODEL

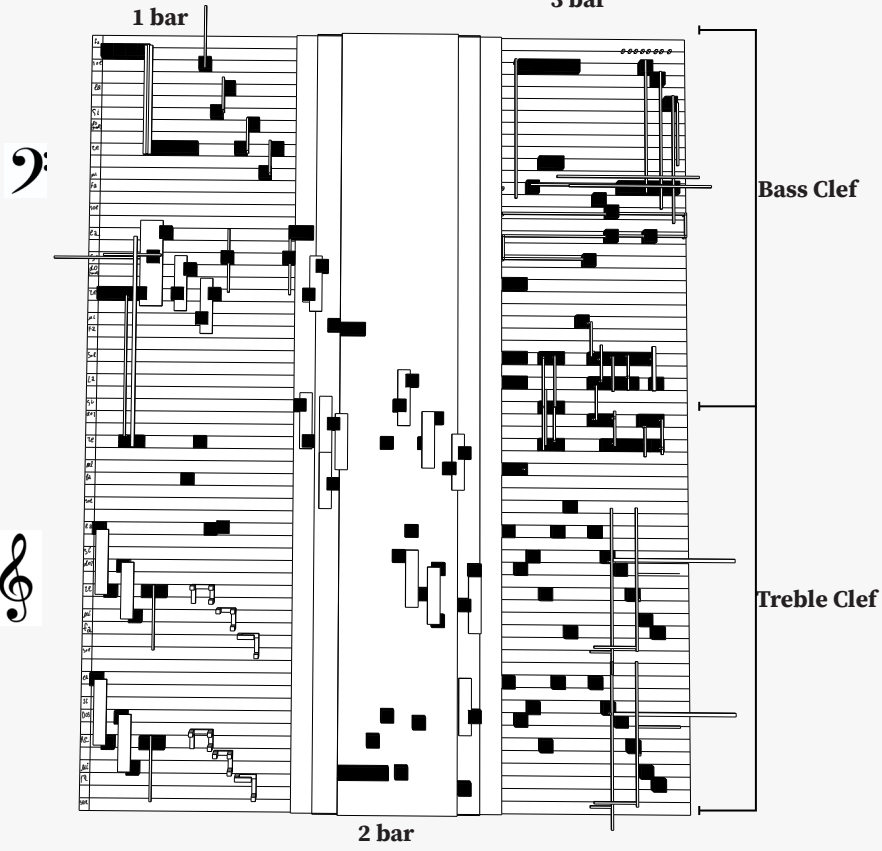
Class/Project
Generating a three dimensional interpretation of the previous flat model.



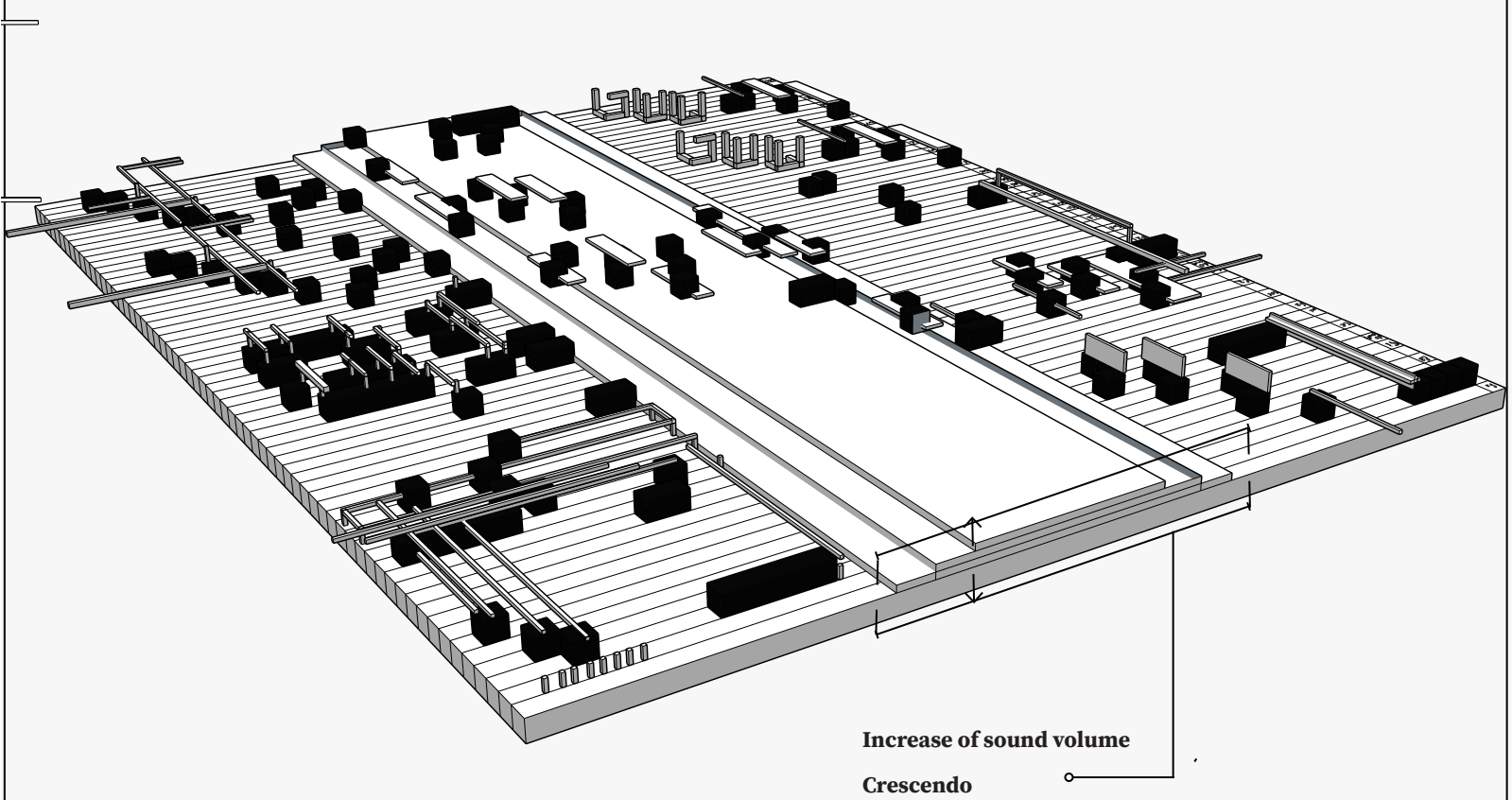
FORM LANGUAGE

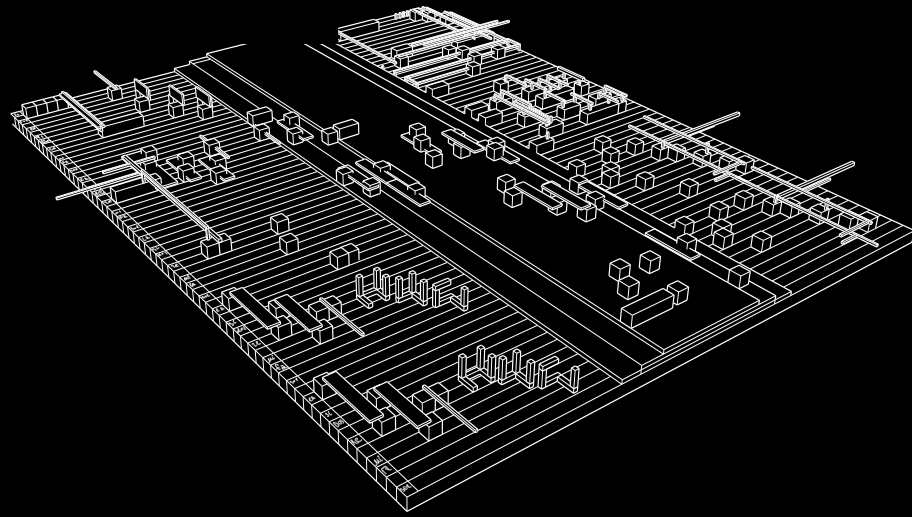
using the special "language" while making the model, where each element corresponds to a different music sign, intonation, size, etc. Example below:





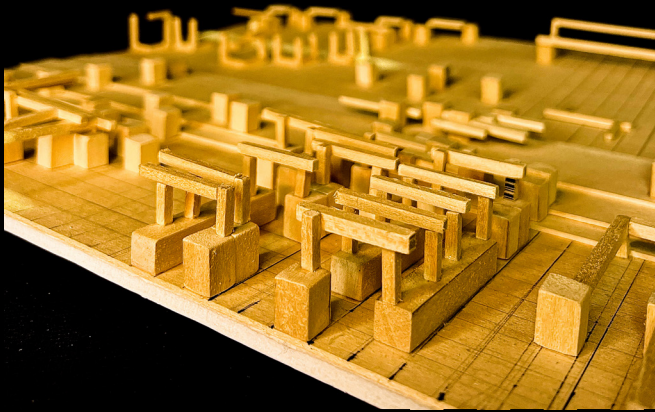
AXONOMETRIC VIEW



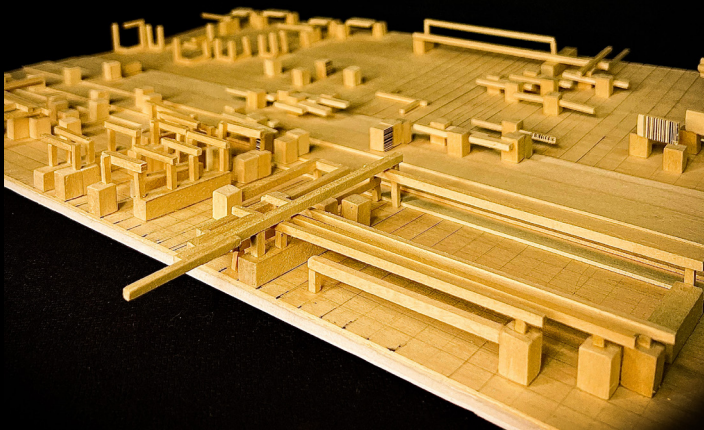
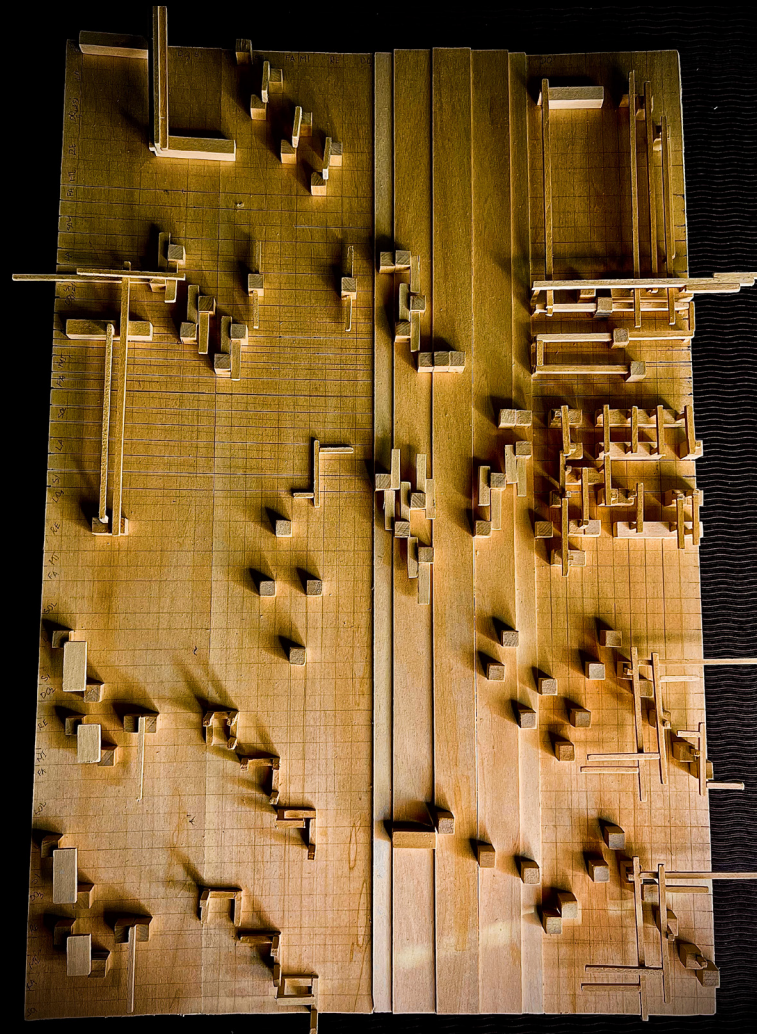


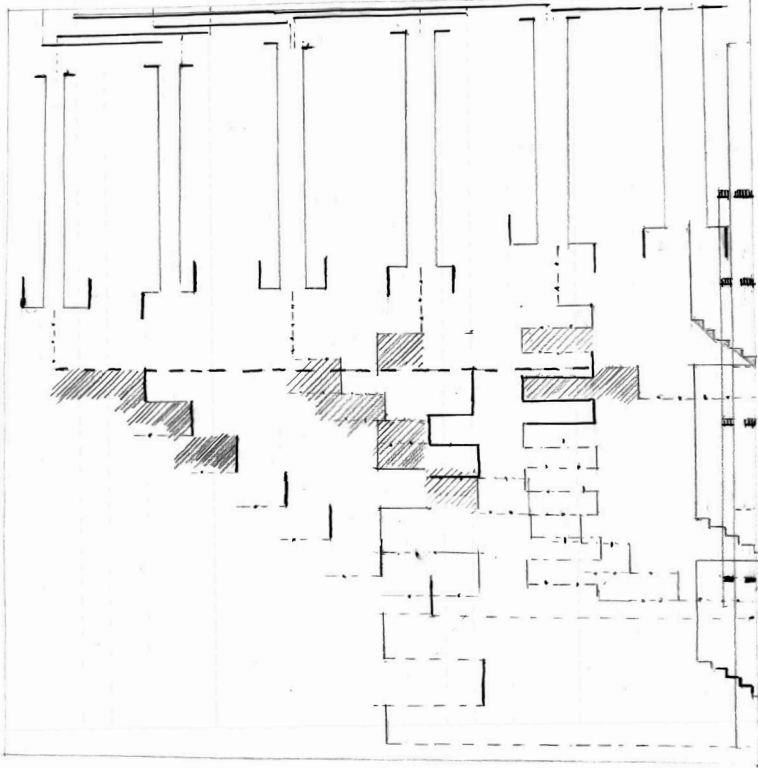
sdsd Perspective view

sdsd Aerial View



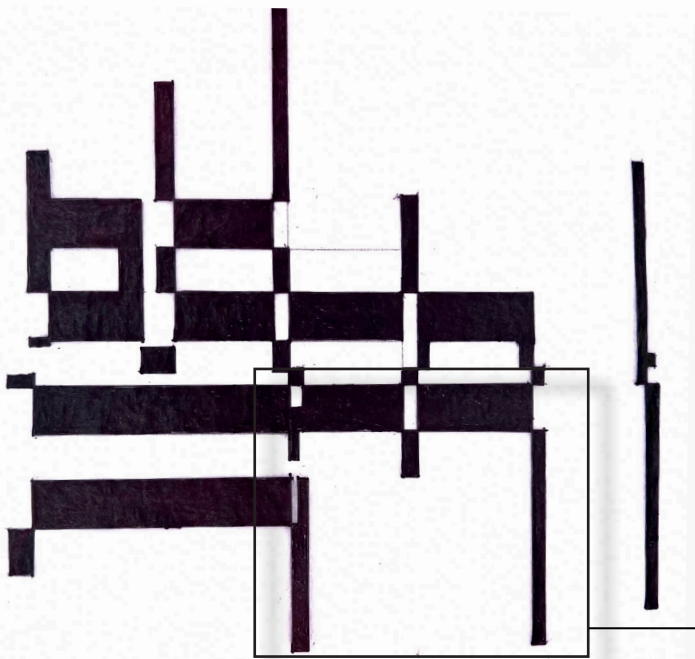
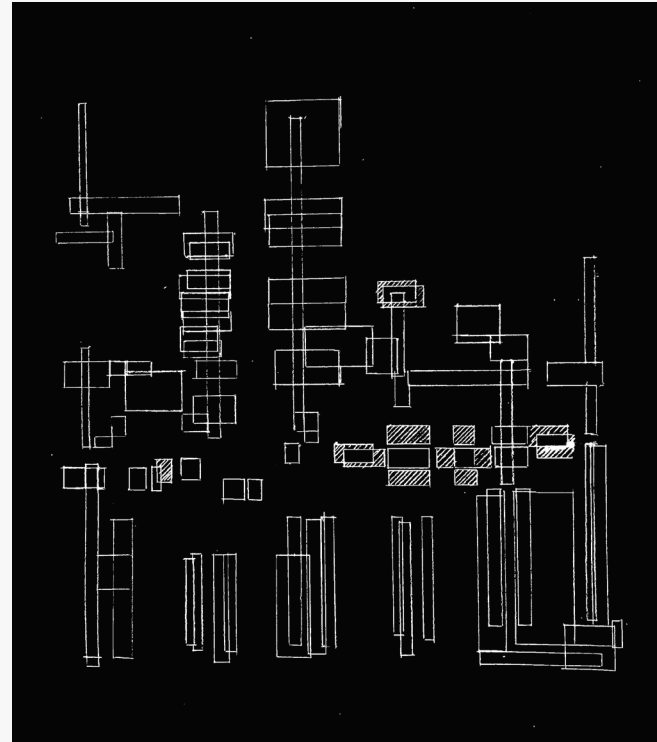
sdsd SE Elevation





ITERATIONS

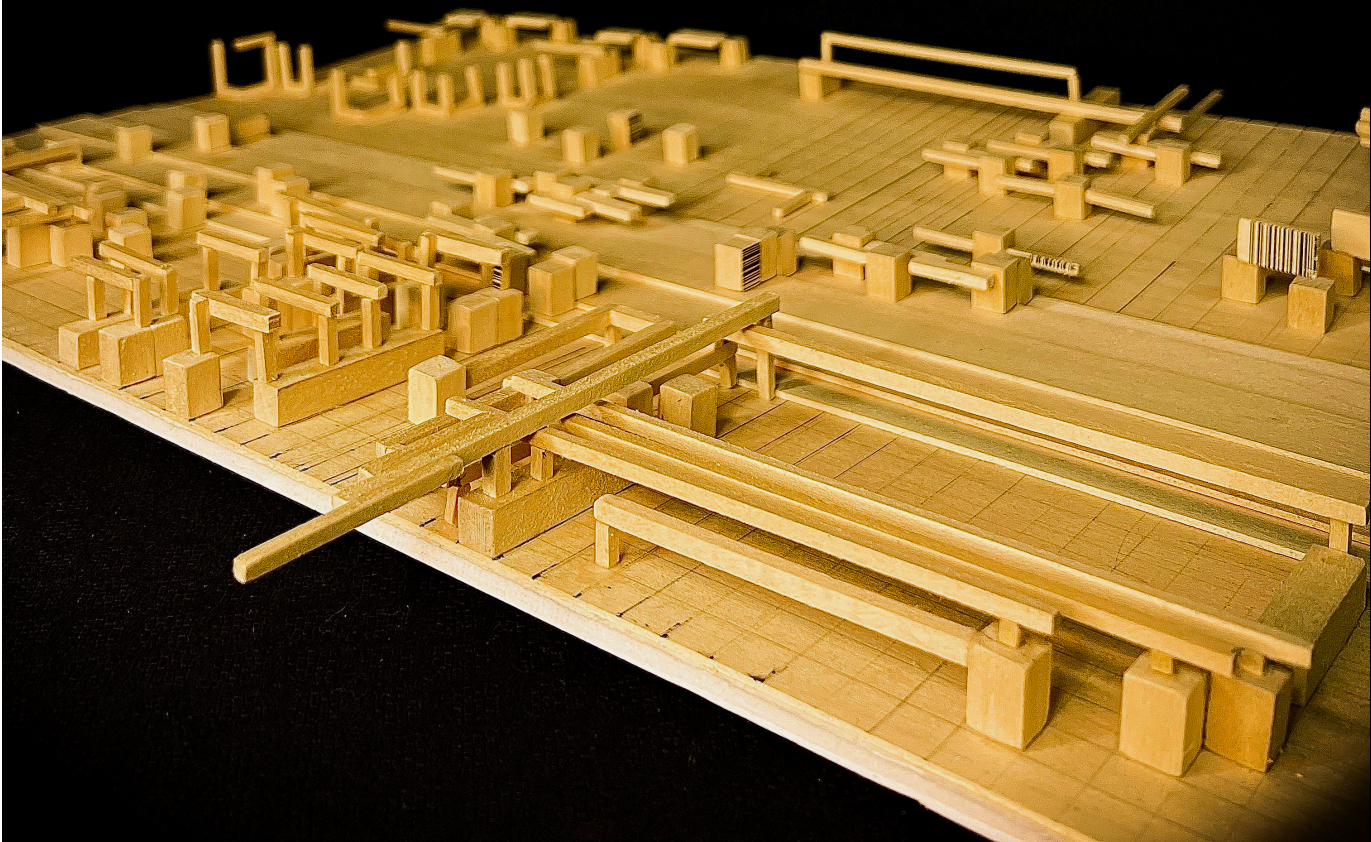
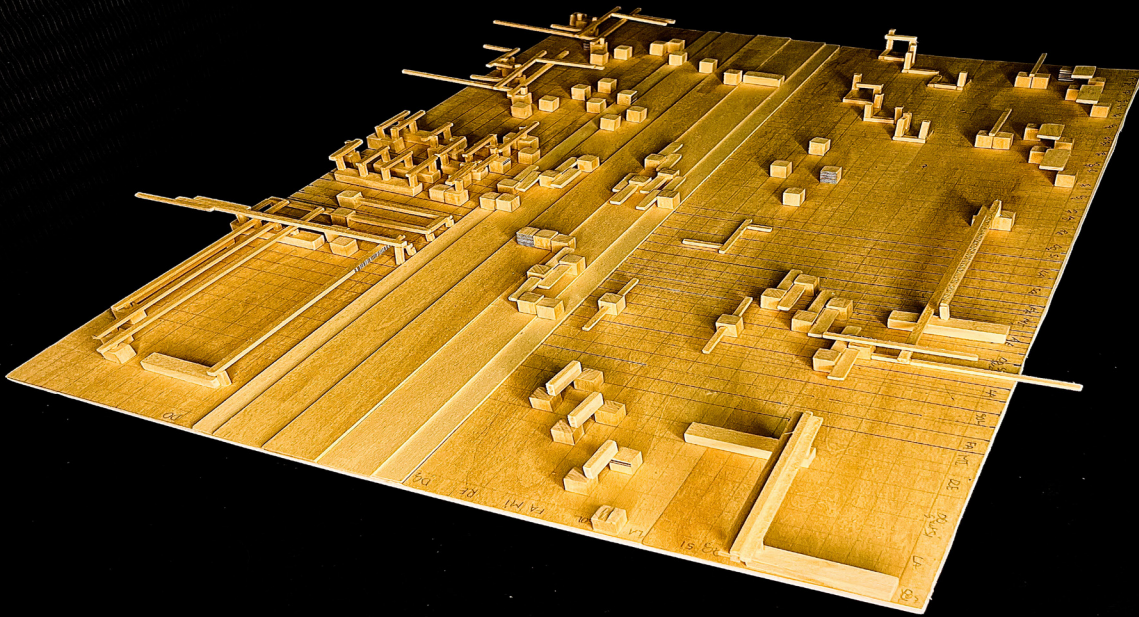
Projecting the data points, creating non-regular orthogonal grid. This grid will form the skeleton and basis of the further figure ground and will be foundation for further objects interplay



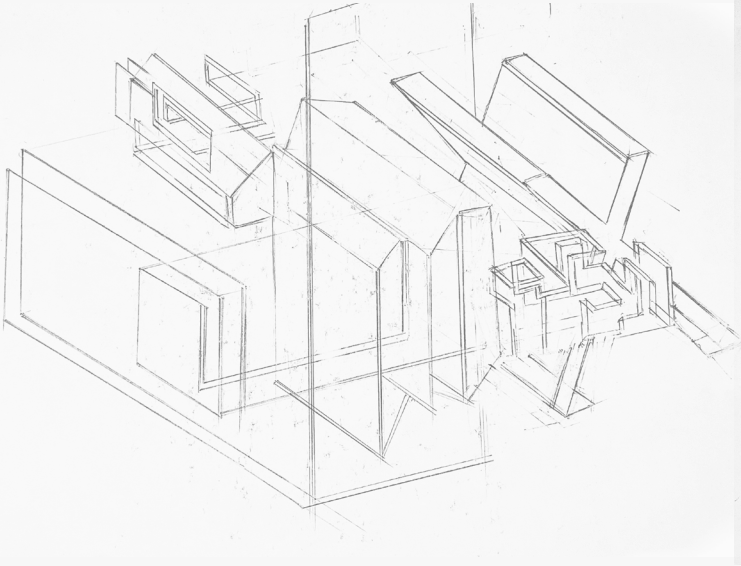
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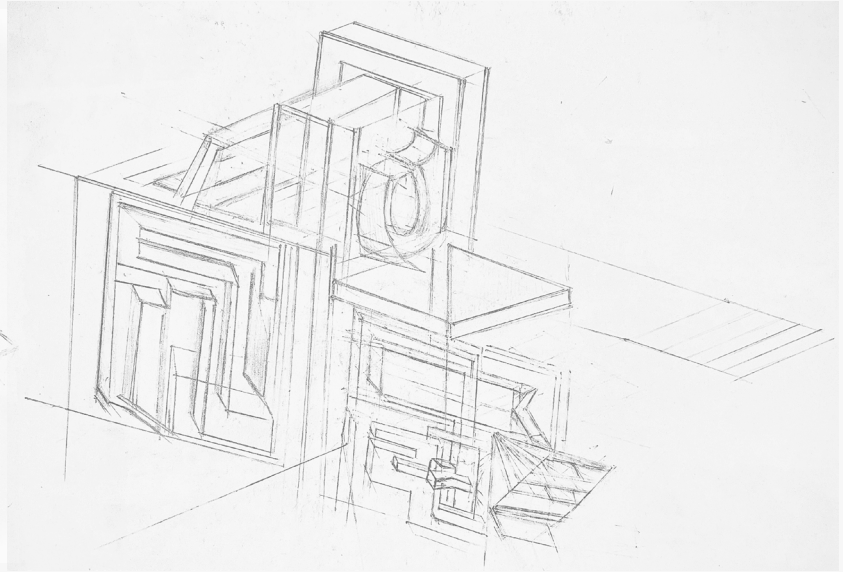
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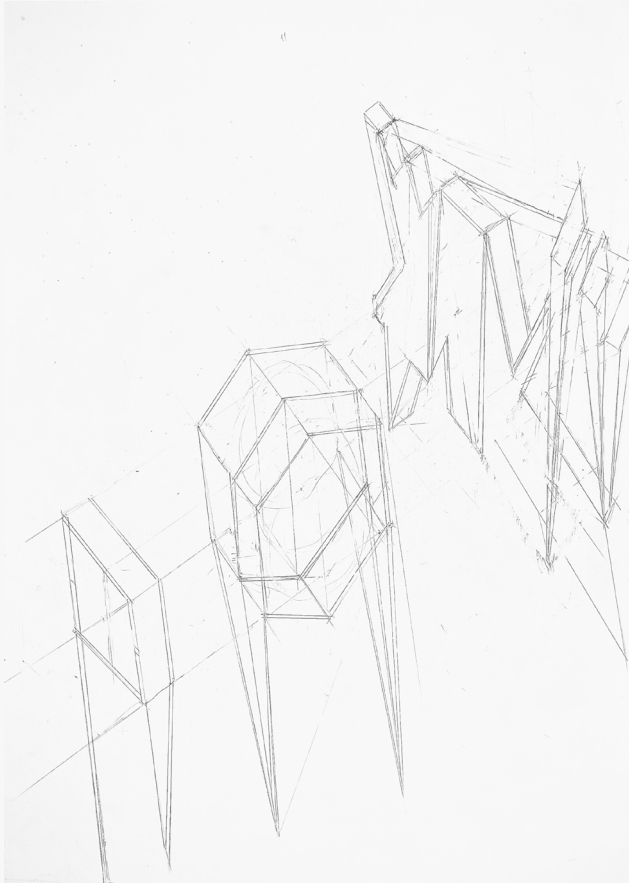
Abstract conceptual drawing 2020



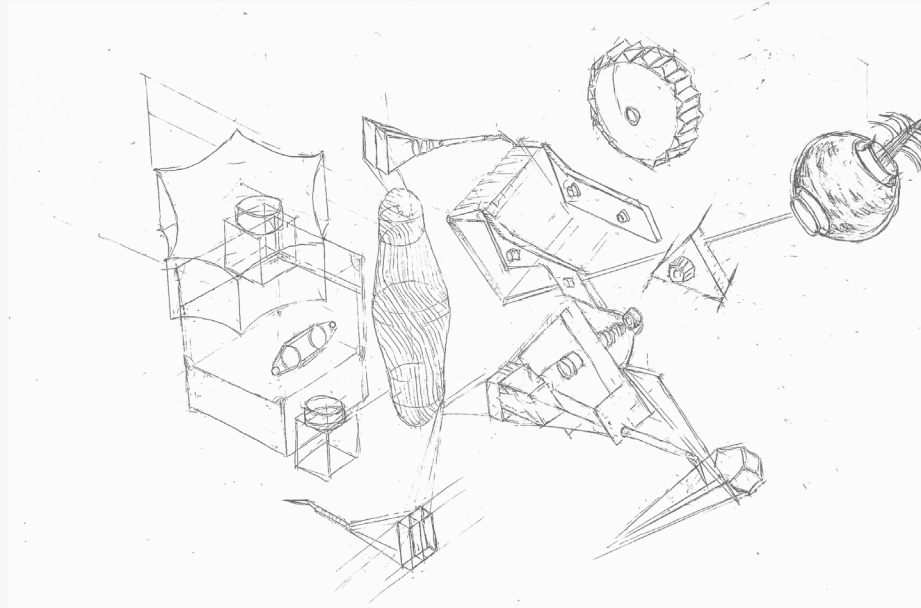
Abstract conceptual drawing 2020



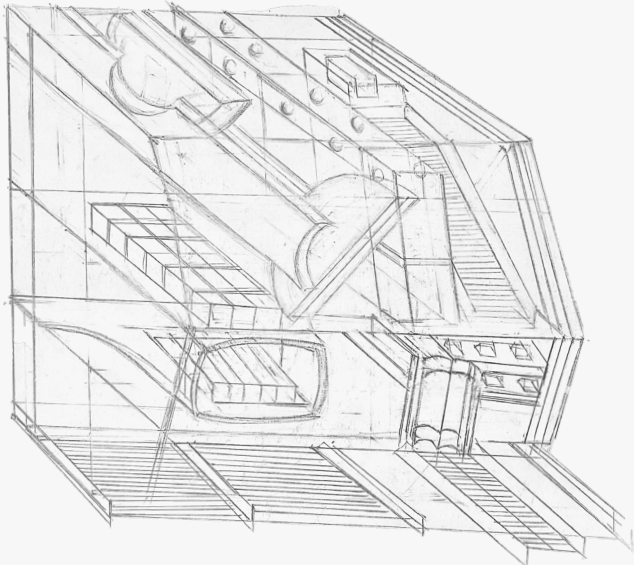
Abstract conceptual drawing 2019



Gears and elements conceptual drawing 2020



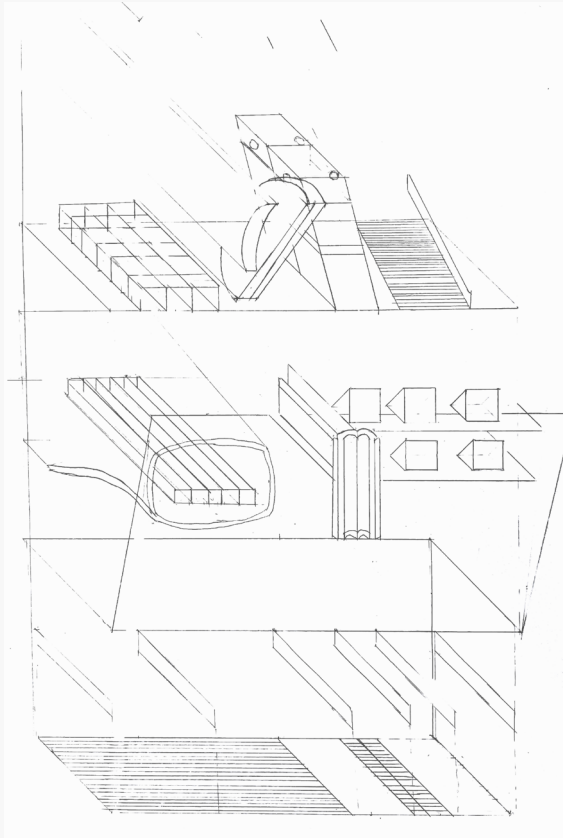
Office building Concept



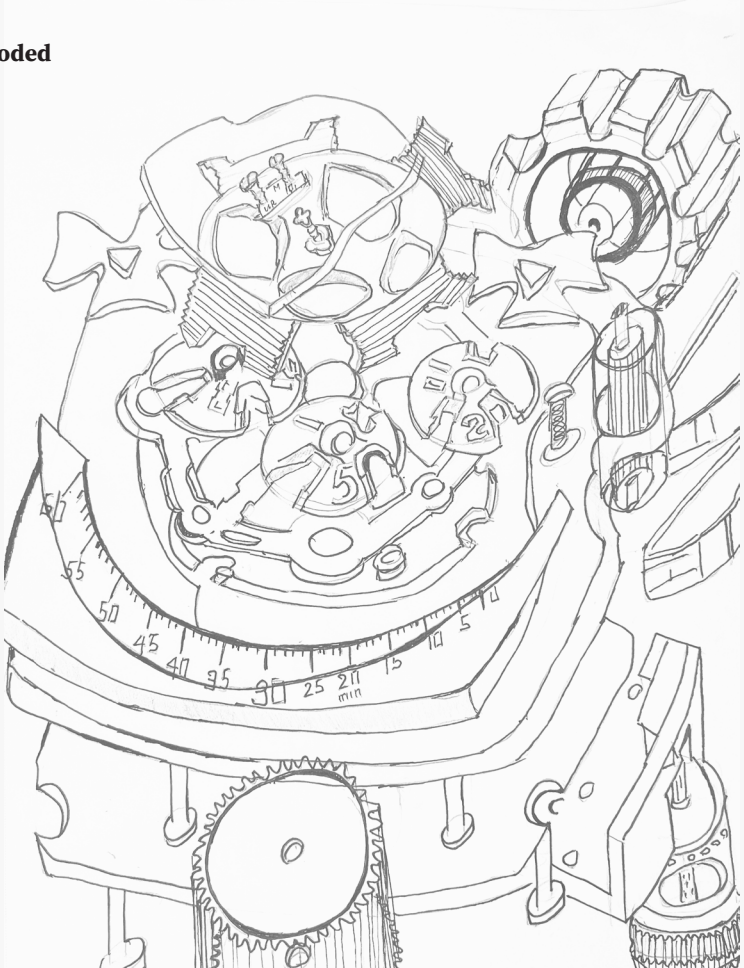
Class/Project



Office building Concept



Mechanical watches Concept exploded



Morphogenesis and urbanization origins

Each city can be compared to a live creature or a human being which constantly changes and evolves responding to the internal and external factors, no two cities can be supposed as identical or similar like it is impossible to find the two identical people.

To understand the peculiarities and details of urbanization processes and occurrence of any architectural trend, it is inevitable to make a research of such factors as: economics and material aspect which would ideally be an evidence and will track through the history to the builders intentions. The aim of the essay is to analyze the core factors at the root of the formations of the urban structure of the deeply capitalist-nature country and deeply communist-nature regime countries (United States and Soviet Union (Russian Federation)), studying the projects associated with pros and cons of the evolution of urban development, making comparison and drawing conclusion.

In the process of estimation and evaluation of the capabilities of the area or potential city several factors such as market potential, demographic, income layout are taken in consideration. But obviously everything could not be precalculated and there were lots of other factors leading to certain urban programs and configurations. I

Location factor is also a prominent characteristic that is determining the future urbanization concept, which itself can be determined by situational factors such as for example the city of Bath that was literally a place for water procedures for the Roman empire citizens. So was its planning and structure responding to the function which afterwards with changed as already a UK town as the architecture concept changed as well.

Los Angeles, originally built atop of the Millingstone settlements, became a model for municipalities. Later, after the Spanish influence and “rancho system”, the territory was split into numerous villages which transformed into the new emerging industrial powerhouse region with the funding and management of the the region by a new class of ruling dynasties as Geety, Hearst, Huntington, etc. With the mobilization of enormous volume of new materials and workers, millions of people were housed in their own houses on the widely spread territory. These people got their

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HT 2100: Introduction to Contemporary Architecture Southern California Institute of Architecture, Erik Ghenoii. Fall 2024

This course introduces and contextualizes key concepts in 20th-century and contemporary architecture to provide a foundation for the study of both the discipline and practice of architecture. Integrating fundamental concepts related to architectural form and composition, lectures will focus on pivotal themes within the discipline. The course will devote significant attention to specific relationships between the organization, configuration, and articulation of buildings and the historical, conceptual, and cultural arguments with which they are associated. The course will also emphasize the use of historical precedents by architects and the cultural and social implications of design decisions.

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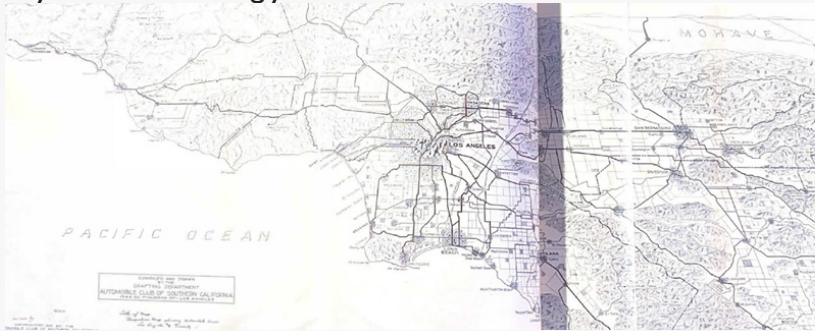
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own means of transportation which granted Los Angeles the leadership by the individual person mobility and lead to construction of the vast road infrastructure and shaped the city fabric accordingly.



Old map of Los Angeles area (citation)
Overdrive : L.A. constructs the future, 1940-1990

So, on one hand we have European cities where people were living for centuries, and which were built for a convenient walkable movement. You can easily travel there by bicycle or walk everywhere. On the other hand, there is Los Angeles, which was added to the US territory only in the mid of 19th century. At the end of the century only Downtown was well urbanized. We can track it in the older Los Angeles maps where we can find mostly hills, mountains and abandoned territories around. Active urbanization and diverse city development just started at the time when Ford launched the conveying system and was done by the classical single-storied America scenario. Mass building was at its rise and some developers were leading 30 projects at a time. Industrial trend for mass production was largely replicated to the construction and architecture. The notion of the standardized line was where no customizations, alterations and replacements were available was widespread. Universal solutions in architecture were one of the adopted concepts of those times. 2

And that would be fine if in these houses were living usual American families: father white-collar worker, mother housewife and kids that attend the local school. But due to segregation policy

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of the beginning of the 20th century in US, some areas were populated by white people and other by black like Watts for example. Same kind of segregation policy existed in Europe as well but single-storied urban layout organization and Great Depression only exacerbated the problem. Los Angeles became a Californian Chicago. Lots of slums appeared everywhere, real poverty and ridiculous richness mixed. 2

In lots of cities around the world such deprived areas are in suburbs. In Los Angeles case, bad neighborhoods were in the city central areas. All that led to settling in the heart of the city vast poverty communities. Urbanization and segregation drawbacks shut down the poverty trap. That made the Los Angeles city downtown center the ideal place for crime and poverty and it came there. Eventually it led to the necessity of managing the homeless and allocating them to the special residences.





The new Star Apartments for the Skid Row Housing Trust transformed an existing one-story commercial building in downtown Los Angeles into a mixed-used complex with 102 apartments for formerly homeless individuals. The LEED for Homes Platinum development, located at 6th Street and Maple Avenue along the border of Skid Row, sets a new model for urbanism and increased density by adding new community spaces and residential levels above.

Projects like Star Apartments or Inner-City Arts emerged. Developers and city management attracted famous architect Buro Michael Maltzan, chose to make the project a show case and highlight the relevance of such an initiative. A good example when political regime and economical reality shaped the design of the city urban fabric is Soviet Union communal apartments organization style where commitment to functionalism overlooked the comfort and well-being of people and people centered design receding to the bare functionality is the The Chekist Town in Yekaterinburg, Russia.

Built in 1929-36 it was called a model socialist complex; its photo was printed on Soviet and foreign postcards and stamps. In my opinion the phenomenon itself is echoing the US social projects just here the upper social class life organization took place. Local KGB bosses' aim was to unite and control the heads of the regional nomenclature under one roof.

The symbol of the Ural region capital became an example of a revolutionary approach to architecture, adopting the design concept from the industrial movement, Russian idea of mass production and conveyor.



The architecture of the town also had its own peculiarities: the design of the model socialist complex was approached in a revolutionary way. They built not houses here, but “machines for living,” as the French architect Le Corbusier called them. Even in the documents, the town was listed not as a residential complex, but as a housing complex. There were unfortunately no kitchens in the “buildings of the new way of life” — the community center building housed a canteen and a buffet where you could order food to go. Every morning, a convoy brought a column of NKVD (KGB) employees, and in the evening, they took them back from work.

01- IGA FUNDAMENTAL ARCHITECTURE STUDIO

Course Description

The M.Arch I curriculum begins with two years of a shared curriculum called “core”. The core offers students a common platform a shared language and value system—that unifies the class into one coherent whole. It builds in the student body a kind of “class consciousness” through a deep appreciation for contemporary technologies and the public conversations on architecture. One of the primary goals of the introductory studio is to develop technical rigor and fine craft in working with contemporary architectural tools.

New Moca Museum Building

The tectonics of paper as a primary consideration for

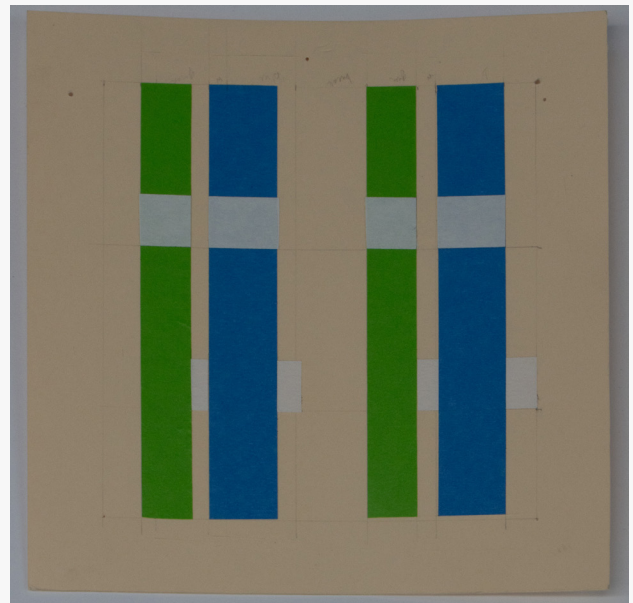
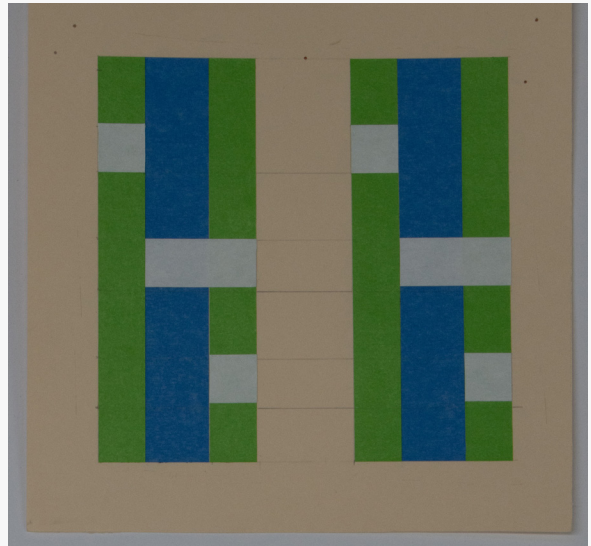
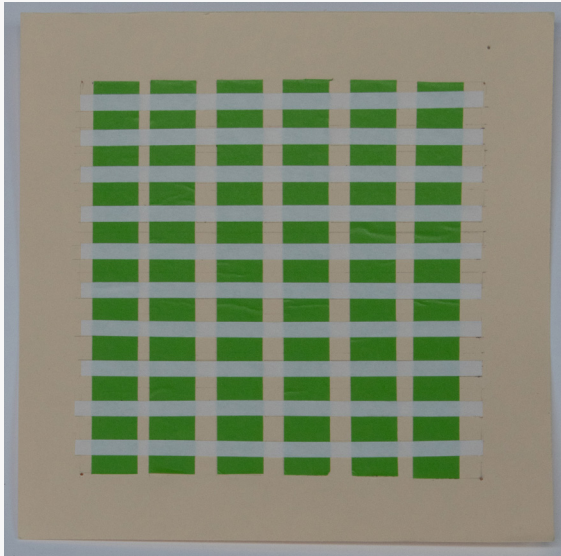
craft paper
paper carrying ink
crumpled paper
s-crate structures
thickened surfaces

Studio IGA: David Eskenazi, Matthew Au.

PROJECT I: TAPE UP

And when I hold the ruler against the table, do I always measure the table, might I not sometimes be checking the ruler?

Ludwig Wittgenstein



6"x6" grid made of tape, centered on an 8"x8" piece of manila paper.

GRID IT: "Pleated Grid"

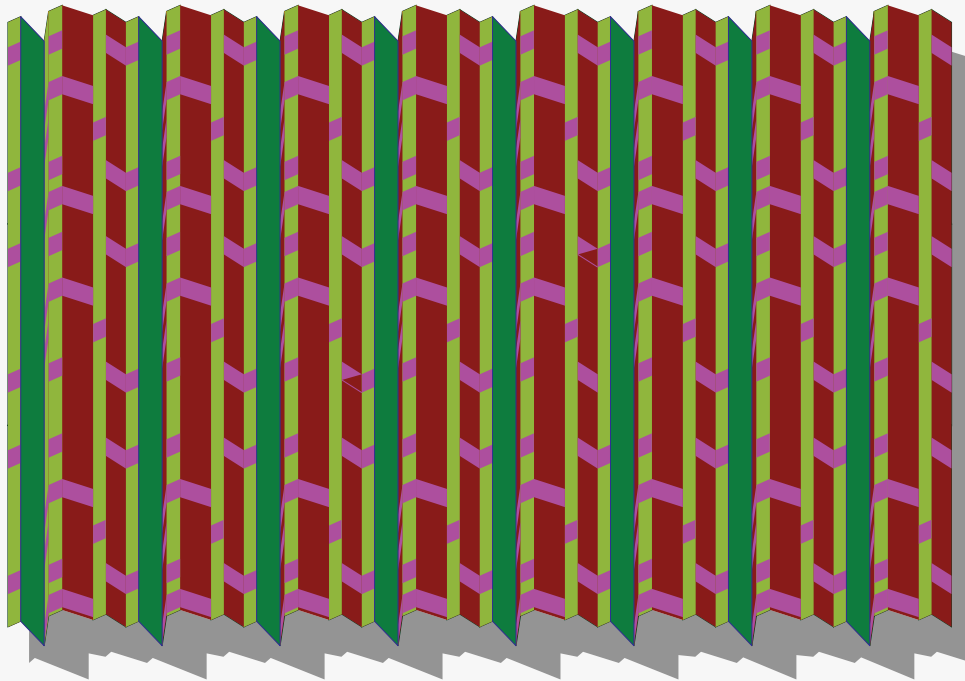
First of 6" x 6" Grid drawing, centered in 8" x 8" piece of white paper

Created in Rhino and edited in Illustrator is a digital version of the physical models of the grids made in exercise 2, iteration

1, copied along the x-axis 2 times.

Tape Size: vertically located 0.5-inches wide green tape strips and vertically located 0.8-inches wide blue tape strips, black swatches spread along both tapes .

Cutting sequence: repetition of the grid based on the music sheet notation. Swatches represent the pauses signs.



Making Live Render print of the grid and taking photo of it.



PROJECT 2: POSTURE IT

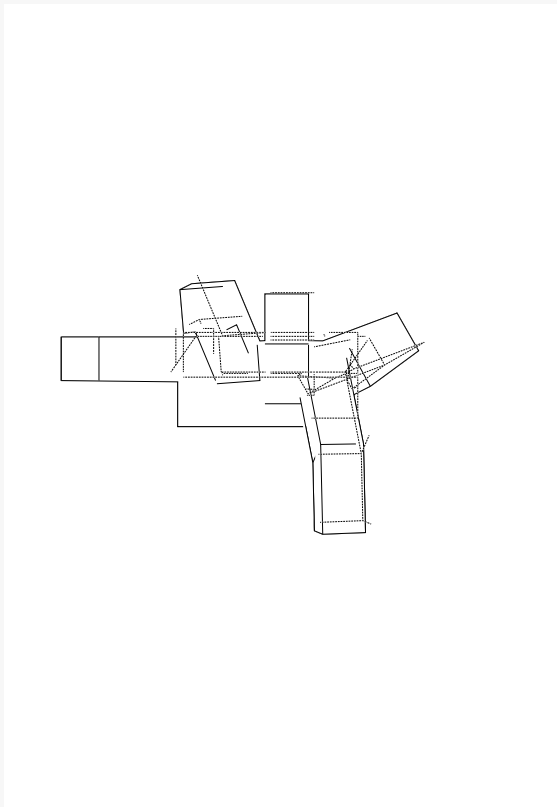
STUDIES OF THE HANDS POSTURES



Photographing the hands against a blank background. Choosing a repeating action or gesture and finding relationship of the flat palm, the fingers and thumb, and wrist.

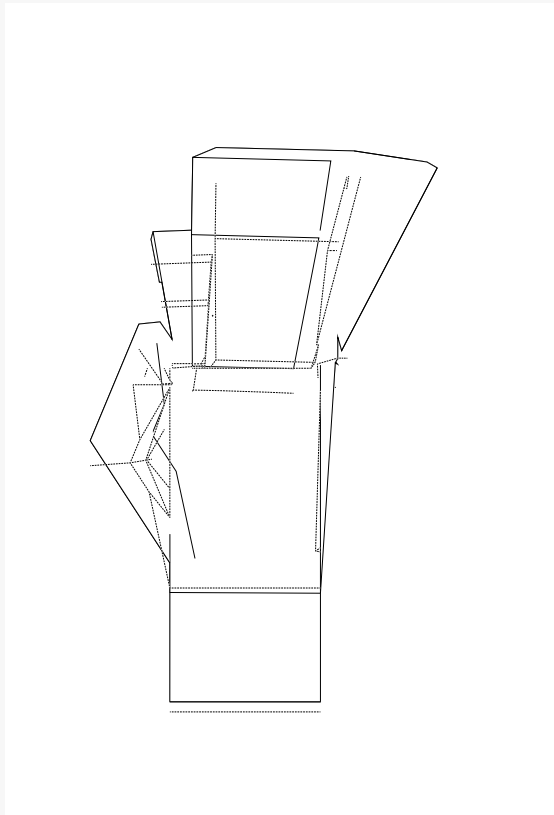
Making the digital version of the hand postures of **Digital Hands**

25



Front View

Using Rhino, constructing rectangular shapes to describe the thumb, palm, four fingers, and end of the arm. Making 2D views captures of various views. Differentiating and marking the lineweights on the drawing using Adobe Illustrator.

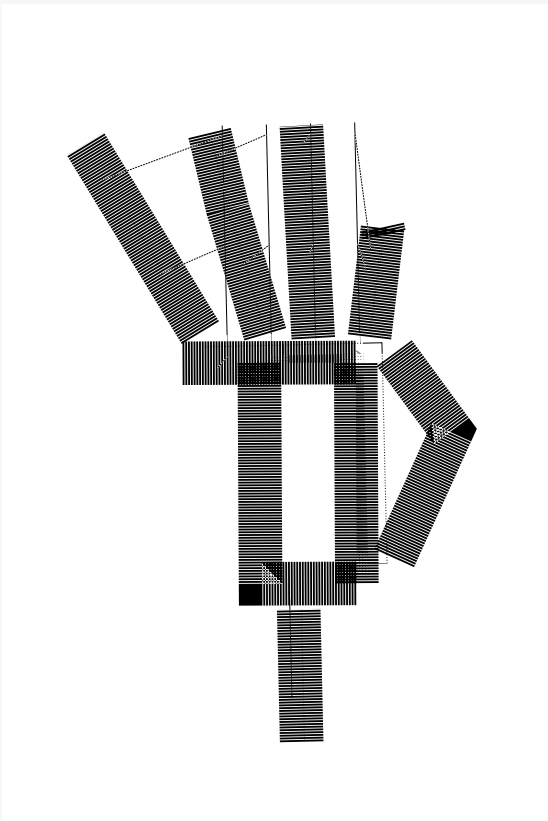


Aerial View, Mitten

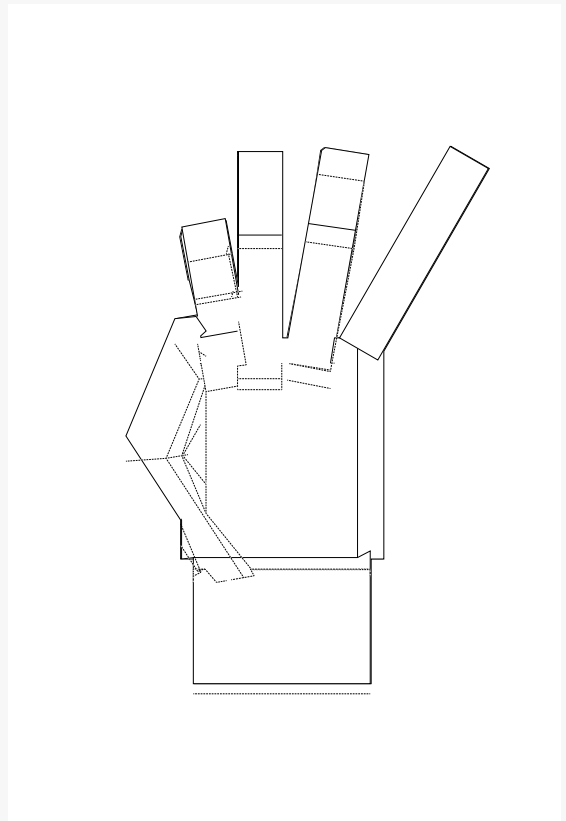
13x 19" drawings, on paper.

Using Rhino, constructing rectangular shapes to describe the thumb, palm, four fingers, and end of the arm and making a mitten on the fingers by merging two fingers. Making 2D views captures of various views. Differentiating and marking the lineweights on the drawing using Adobe Illustrator. .inches-wide green tape strips vertically located.

Aerial View, Fingers

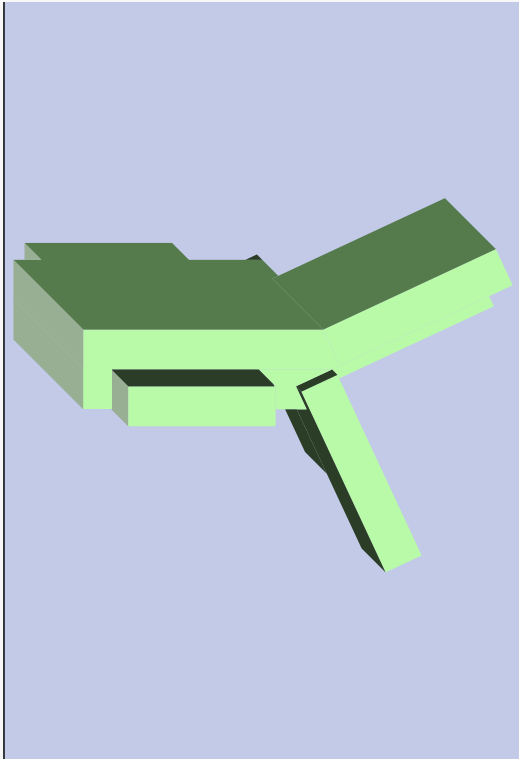


Aerial View, Fingers and Palm



PROJECT 3: MAKE IT THTE SAME, MAKE IT DIFFERENT

Based on the hand postures making a list of attributes that are present in the forms. Starting with the number of boxes, touch, orientation, color, etc expressing them in a two hands gesture. Considering various joint types, from a simple solid joint or open corner to miters and compound miters. In some joint types, one box has a hierarchy.



Open Corner Miter

“Digital Posture”

13”x 19” drawings, on paper.

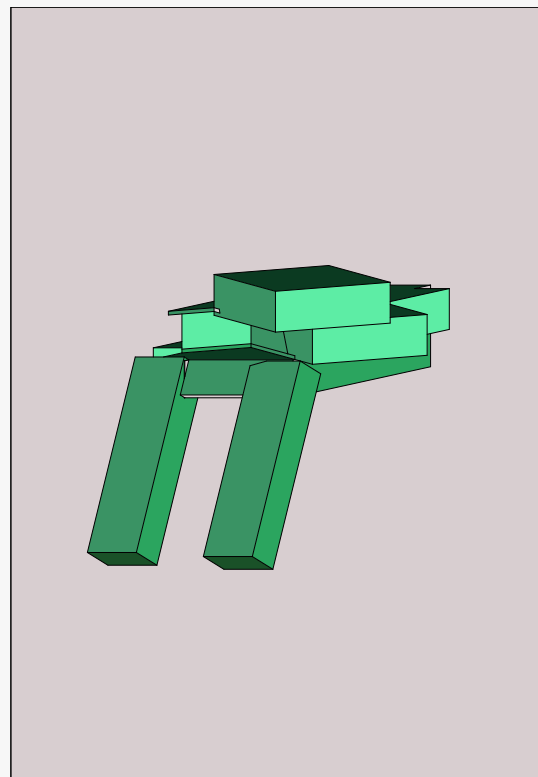
Using Rhino and previous iterations of the hand drawings in Rhino, constructing the second shape mirroring the first hand initial geometry but changing the posture based on the photograph. Merging the two hands together Making the elevations drawings and editing them in Adobe Illustrator using the color by number principle.

Version 1, Color Set I: Green (Hands), Purple (Background).

Open Corner Tilted 45

13x 19” drawings, on paper.

Using Rhino and previous iteration, making compound miter and rotating the upper parts of the hands to the left. Miter

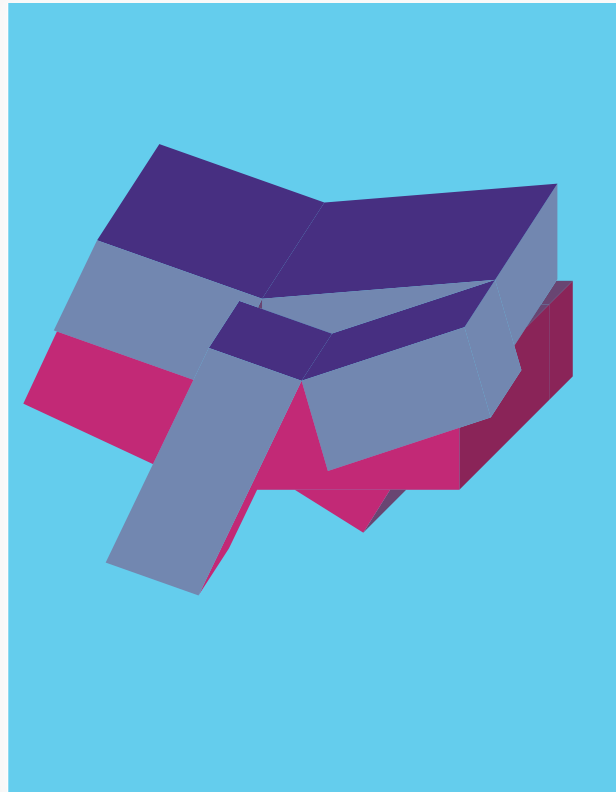


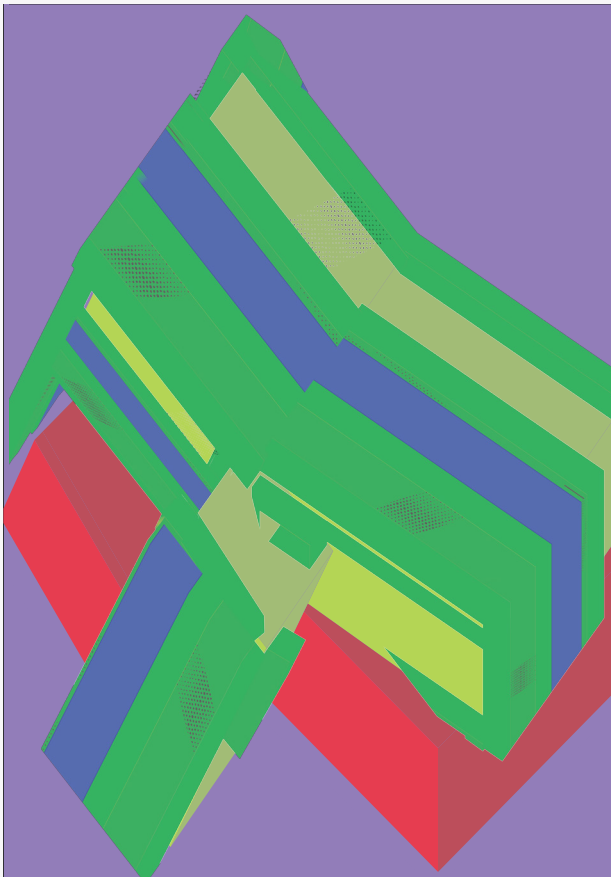


Reshaping both boxes, combining in one structure

13x 19" drawings, on paper.
Using Rhino and previous iterations of the hand drawings in Rhino, constructing the second shape mirroring the first hand initial geometry but changing the posture based on the photograph. Merging the two hands together Making regular open corner cut and rotating of the upper part down on a right view. Making the elevations drawings and editing

13x 19" drawings, on paper.using color by number method





Digital hands in grid coat

13x 19" drawings, on paper.

Using Rhino and previous iterations of the hand drawings in Rhino, constructing the second shape mirroring the first hand initial geometry but changing the posture based on the photograph. Merging the two hands together Making regular open corner cut and rotating of the upper part down on a right view.

Wrapping the model in the initially made.

Making the elevations drawings and editing them in Adobe Illustrator using the color by number principle.

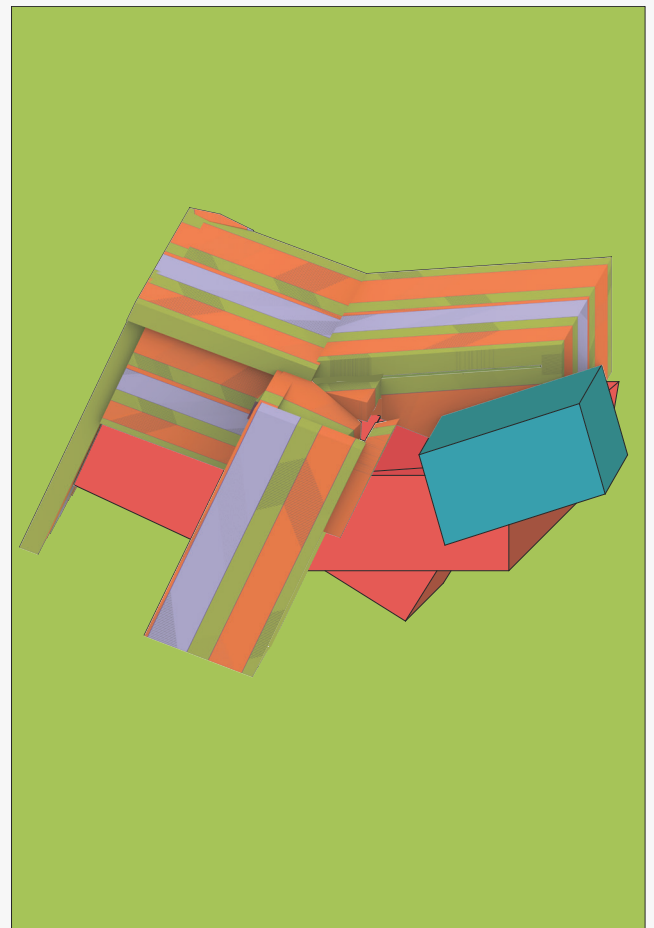
13x 19" drawings, on paper.

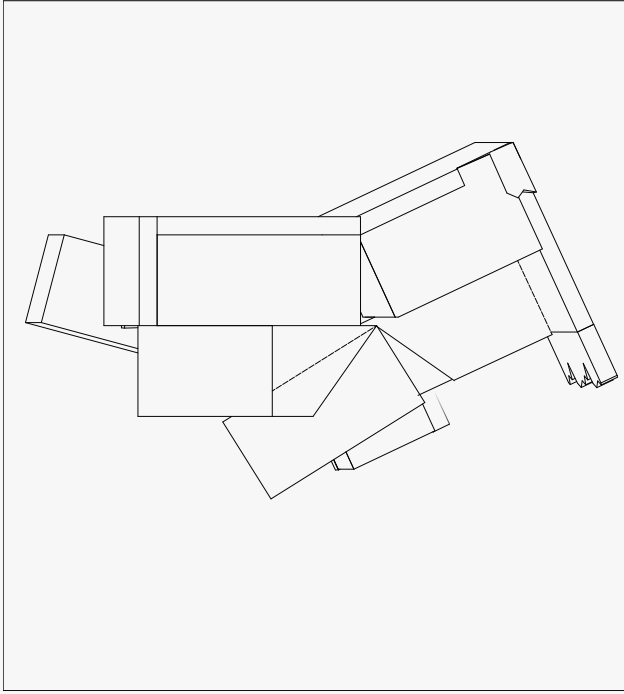
Using Rhino and previous iterations of the hand drawings in Rhino, constructing the second shape mirroring the first hand initial geometry but changing the posture based on the photograph. Merging the two hands together

.Wrapping the model in the second grid coat.

Making the elevations drawings and editing them in Adobe Illustratoe

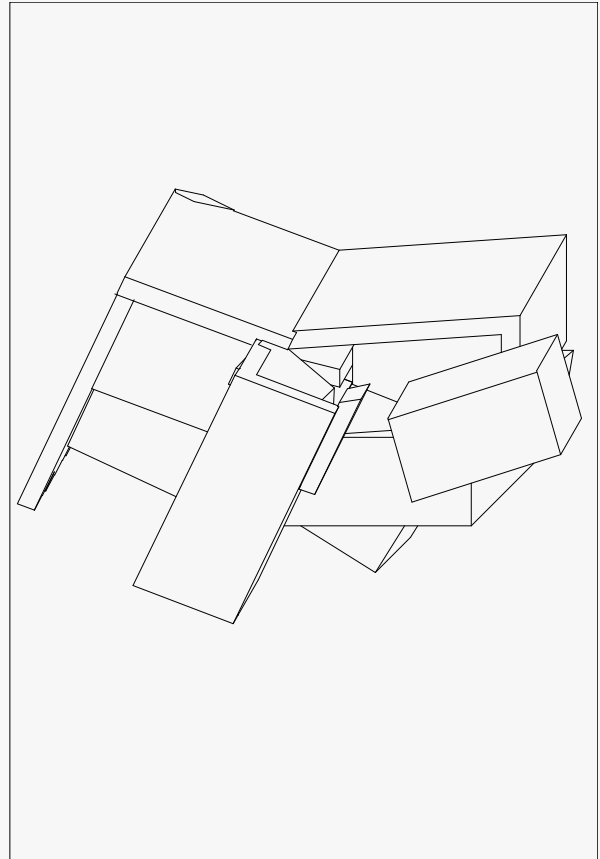
using the color by number principle. Making rotation of the upper part of the hand. Overlaying the grid to the two hand model.





13x 19" drawings, on paper.
Using Rhino and previous iterations of the hand drawings in Rhino making the construction line drawing to describe the two hand forms interplay. Making 2D views captures of various views. Differentiating and marking the lineweights on the drawing using Adobe Illustrator.

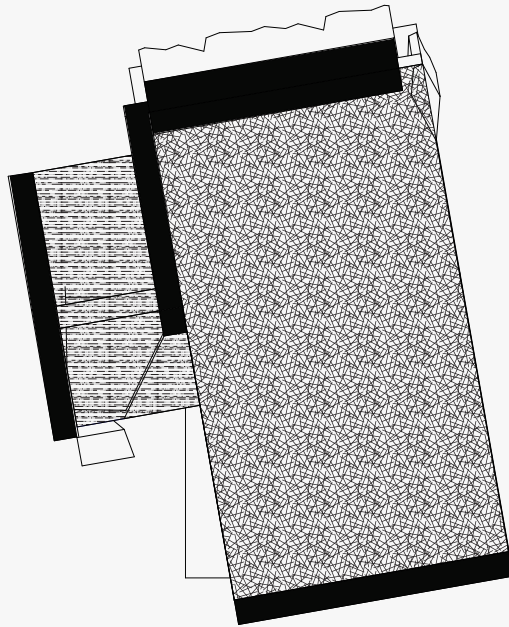
13x 19" drawings, on paper.
Using Rhino and previous iterations of the hand drawings in Rhino making the construction line drawing to describe the two hand forms interplay. Making 2D views captures of various views. Differentiating and marking the lineweights on the drawing using Adobe Illustrator.



Digital Hands Diagram

13x 19" drawings, on paper.

Using Rhino and previous iterations of the hand drawings making the diagram-hatched drawing to describe the two hand forms interplay. Differentiating and marking the lineweights on the drawing using Adobe Illustrator. Using the swatches to boeder the space inside the drawing method. Plan view.

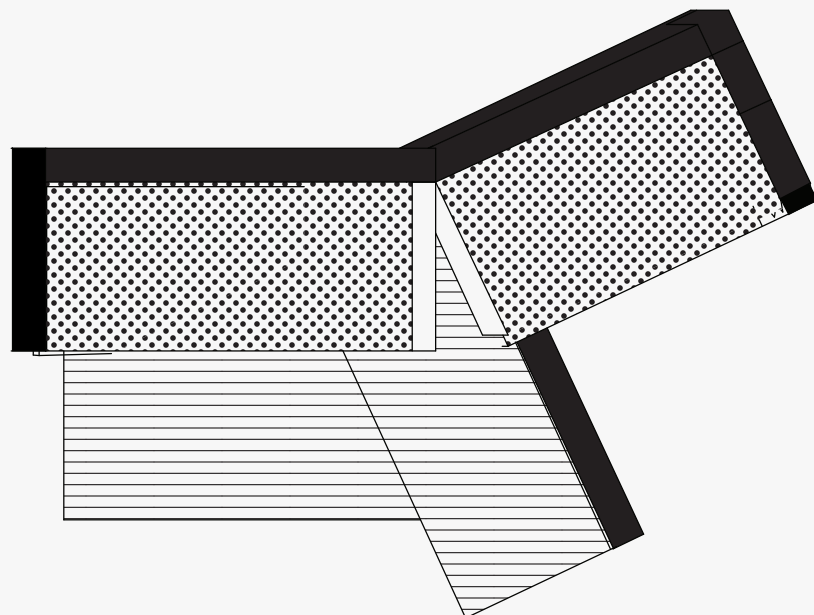


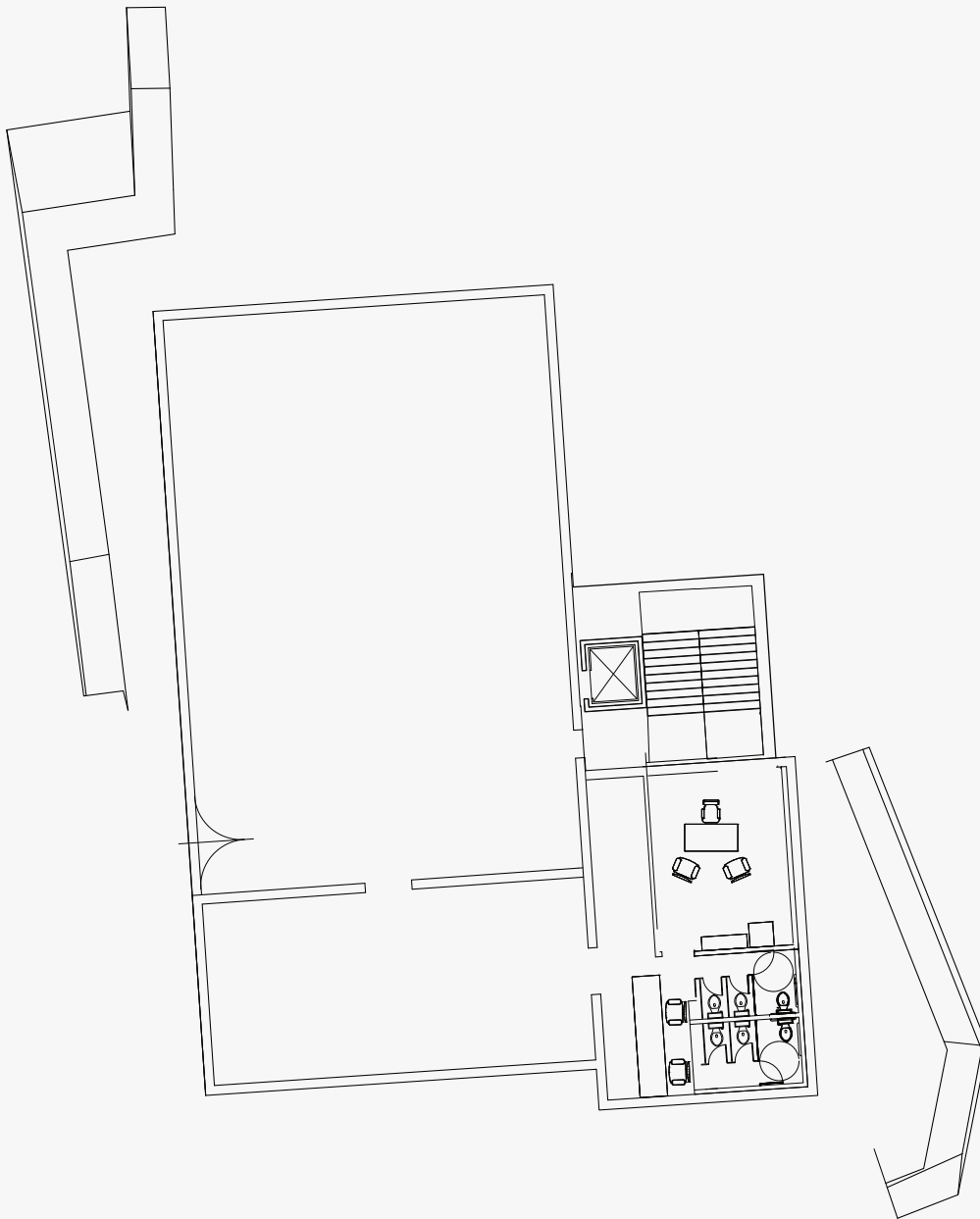
31

Digital Hands Diagram

13x 19" drawings, on paper.

Using Rhino and previous iterations of the hand drawings making the diagram-hatched drawing to describe the two hand forms interplay. Differentiating and marking the lineweights on the drawing using Adobe Illustrator. Using the swatches to boeder the space inside the drawing method. Section view.



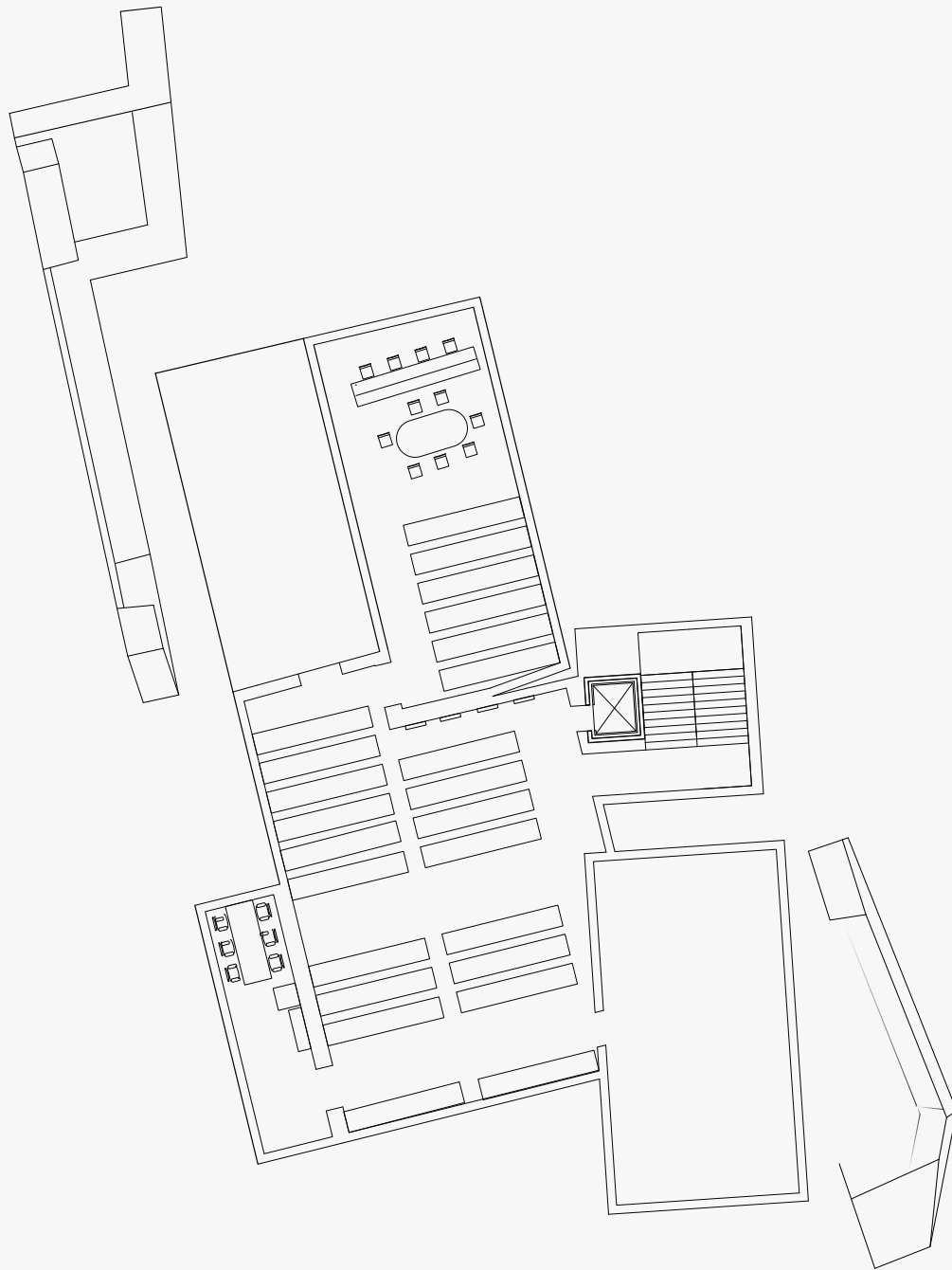


Ground Floor Plan

13x 19" drawings, on paper.

Using Rhino and previous iterations of the hand drawings diagrams making the future building Ground Floor plan. Adding essential elements like stairs, rooms, furniture and posche.

Plan view.



Second Floor Plan

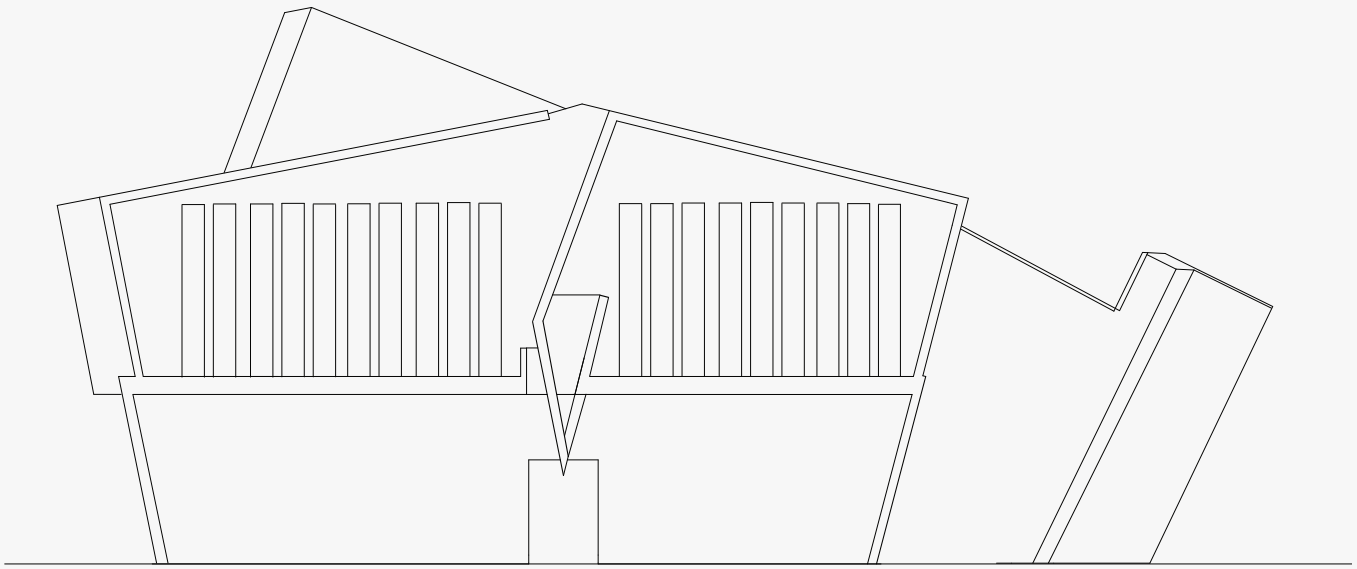
13x 19" drawings, on paper.

Using Rhino and previous iterations of the hand drawings diagrams making the future building Ground Floor plan. Adding essential elements like stairs, rooms, furniture and posche. Plan view.

Left Section

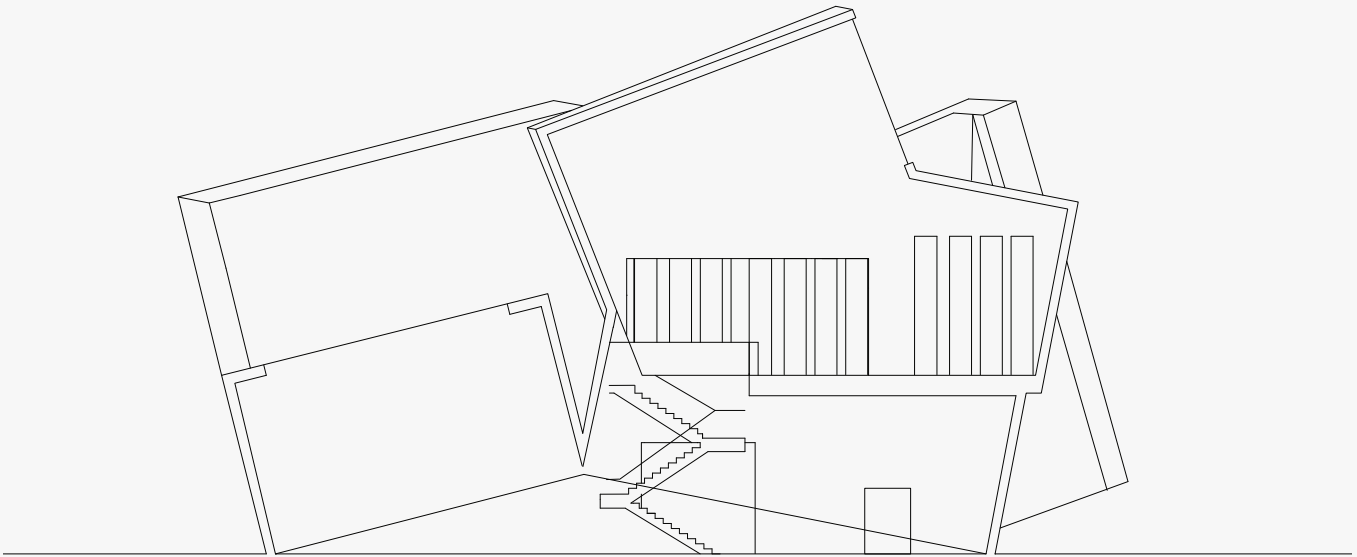
13x 19" drawings, on paper.
Using Rhino and previous iterations of the hand drawings
diagrams making the future building Left Section plan. Adding
essential elements like stairs, walls storage systems and
posche. Section view.

34



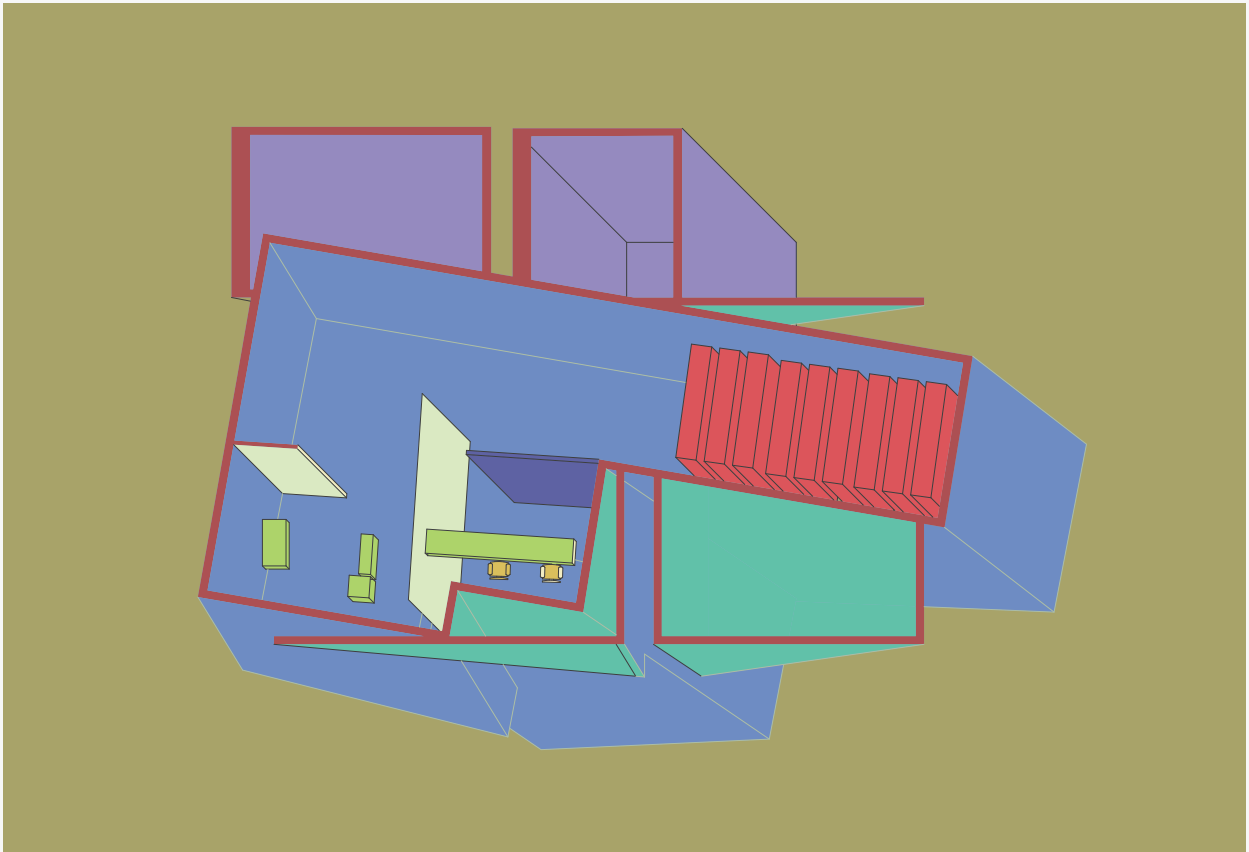
Right Section

13x 19" drawings, on paper.
Using Rhino and previous iterations of the hand drawings
diagrams making the future building Right Section plan. Adding
essential elements like stairs, walls storage systems and
posche. Section view.



Worms Eye

13x 19" drawings, on paper.
Using Rhino and previous iterations of the hand drawings making the future building Worms Eye View drawing with interior of the building. Coloring using the color by number principle. Oblique view.

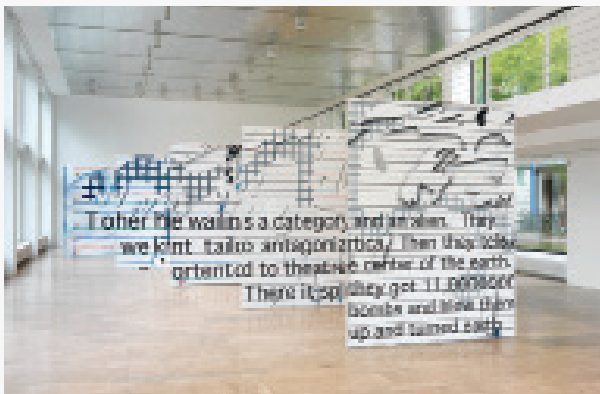
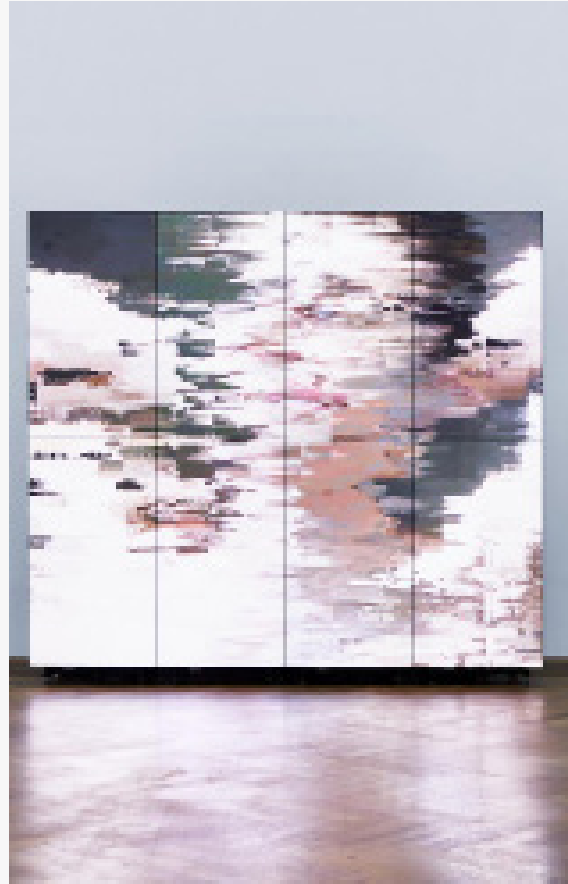


PROJECT 4: ADDING ARTPIECE IN THE BUILDING



SHAHRYAR NASHAT

In a view of space modification the artist is very unusual as he mixes the color and light, modifying and playing in the space with colors and rhyme. He engages in the study of the body types of and tries to mix our visual culture and a issues that work solemnly through the process of interplay of colors, forms flexibility and lights.



LAURA OWENS

In the several artists works I would like to underline the idea of "retrofitting" the classical painting techniques and projecting them into digital realm. The series of paintings which are aimed to view from afar in order to read them properly, I would like to note her ability to orient in the space and engage the spectator into both seeing the art and being able to explore it in detail while walking around the exposition.



Small Art Pieces

13x 19" drawings, on paper.

Using Rhino making tiny copies of the art pieces for the future paper model.



Attributes List

Filling in the attributes list for monitoring the evolution of the project stages.

Parameter	Midterm	Final
Size	around the same	around the same
Form	more boxy	more angled
Material	paper	foam core
Color	red and green	different pattern
Openings	no openings	skylight
Plan	no plan	2 floors plan
Poche	no as no plan	poche
Grid	no grid	grid



Rhino Render print of the building on site



Making Live Render print of the building with the grid on site

Paper Model of the building RightView

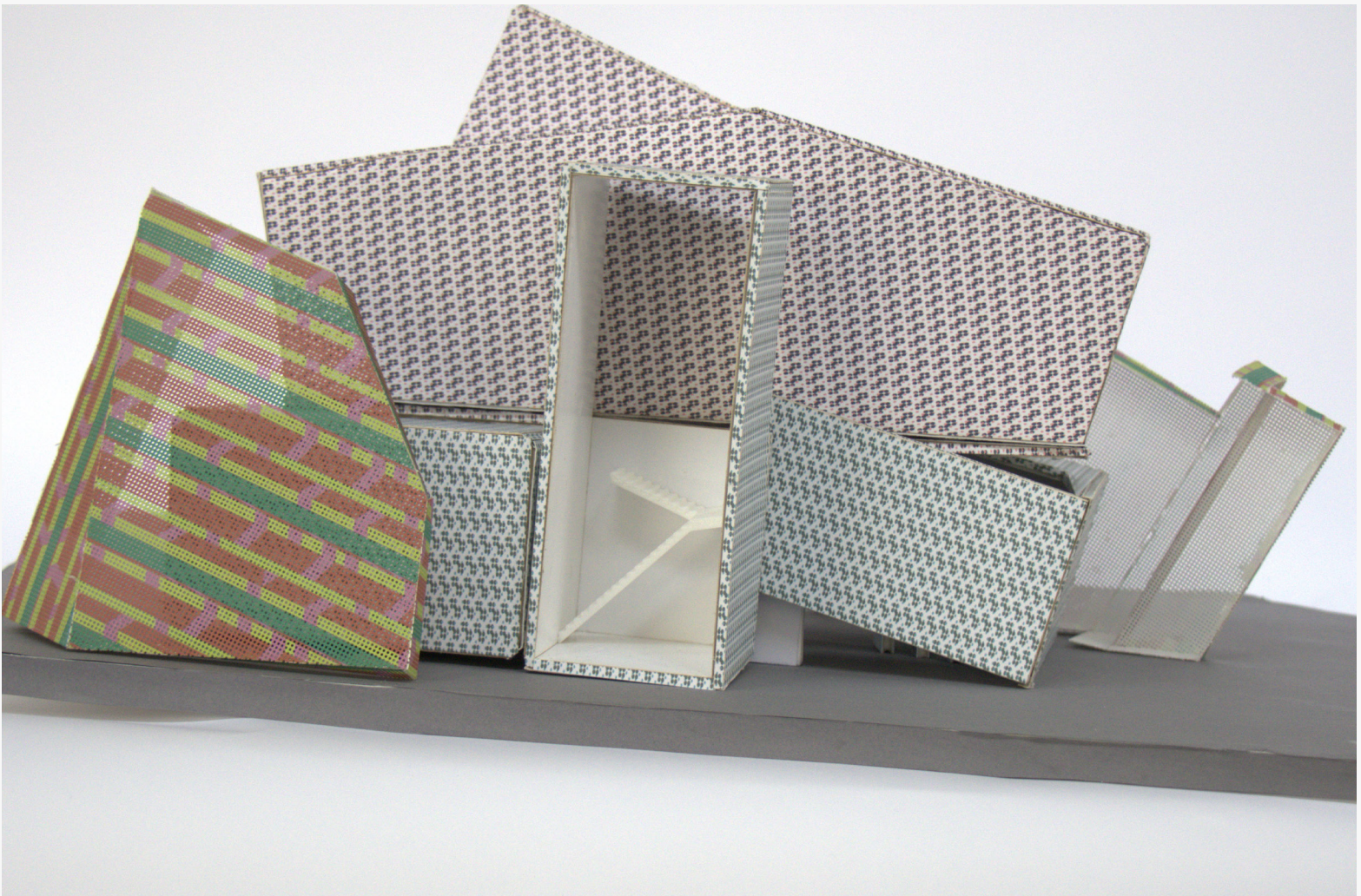


40

The Moca extension building contains the open space artist gallery on the Ground Floor and Art Storage area located on the Second Floor connected by staircases and elevators.

Varieties of textures are implemented on the model to represent swatched paper texture of blue and red colors. Initially the model was laser cut from foam core material and glued with precisely cricket cut paper chunks on the top, The perforated paper was printed with the pleated grid pattern, folded and glued accordingly.

Paper Model of the building Left View

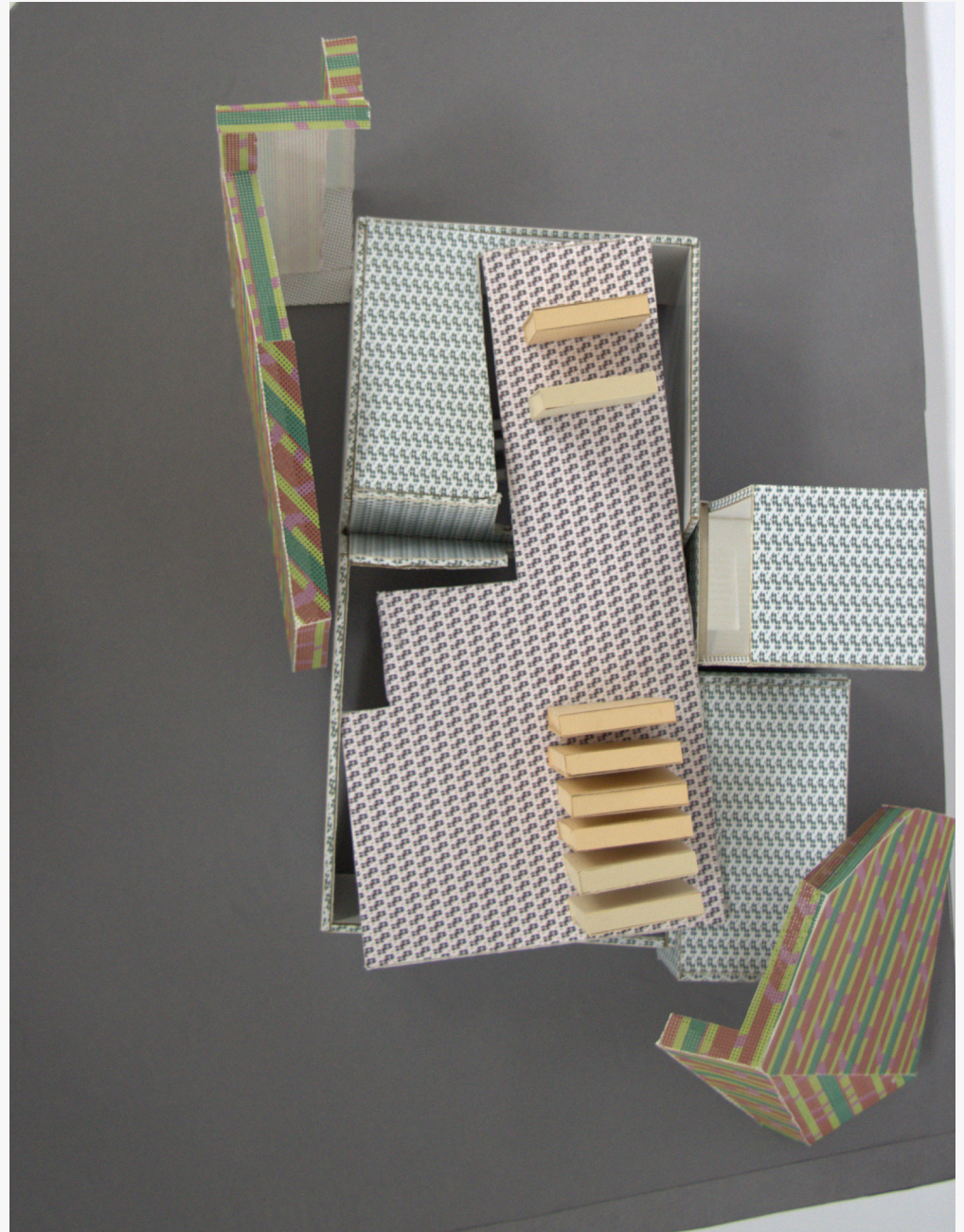


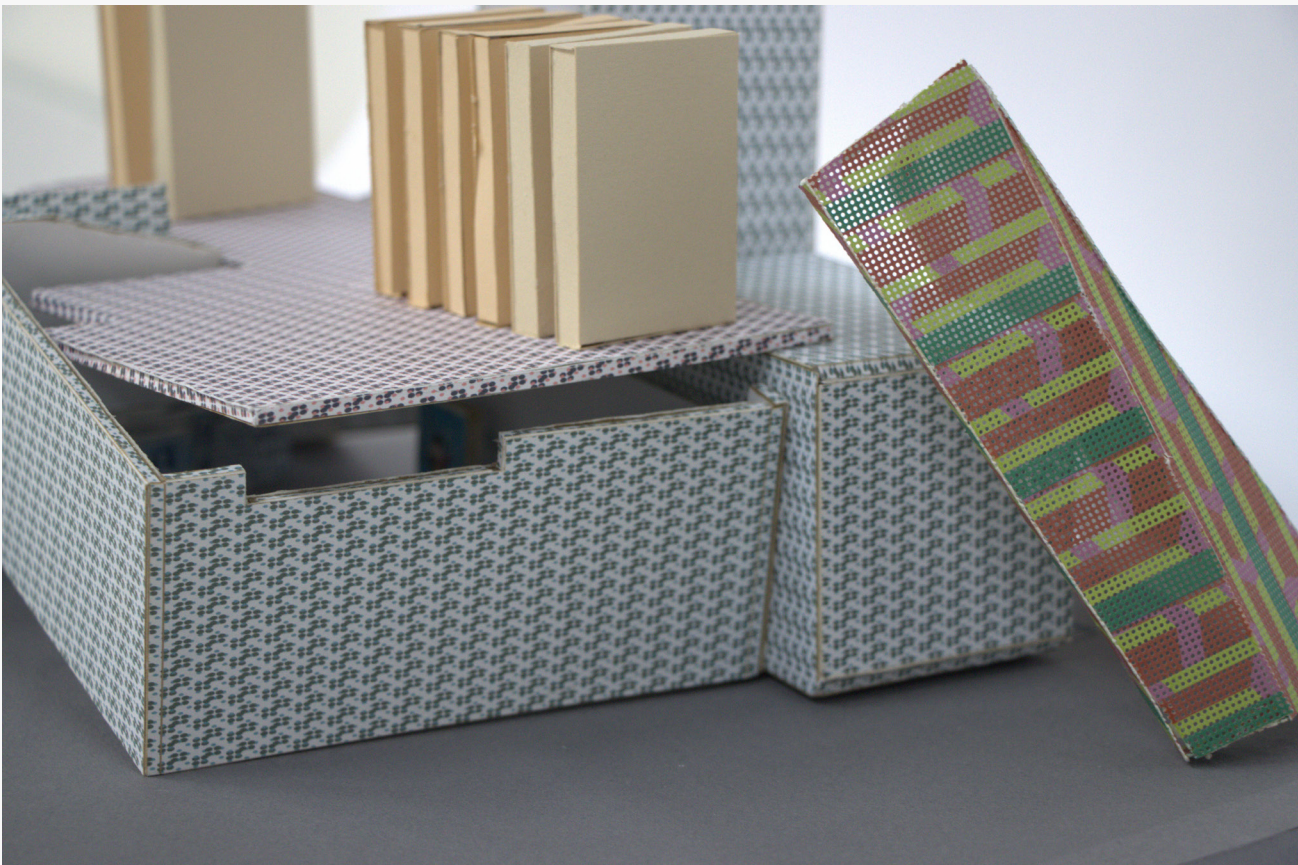
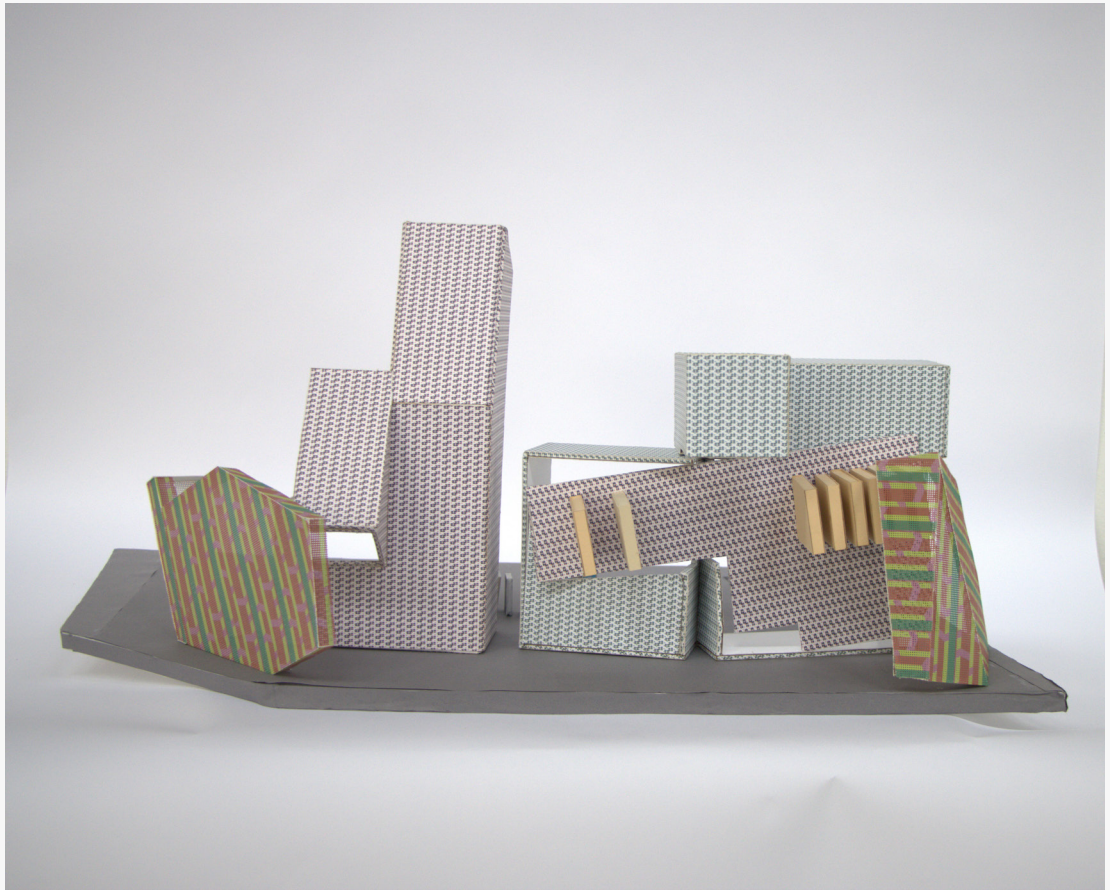
Paper Model of the building Plan View

Plans and sections of the Moca Building extension reveal the programmatic organization of the building.

The first floor (invisible) shows open plan gallery, reception spaces and offices and a staircase interconnecting the floors.

The second floor (shown on picture) shows an art storage area with manila paper crafted boxes as art storage drawers.





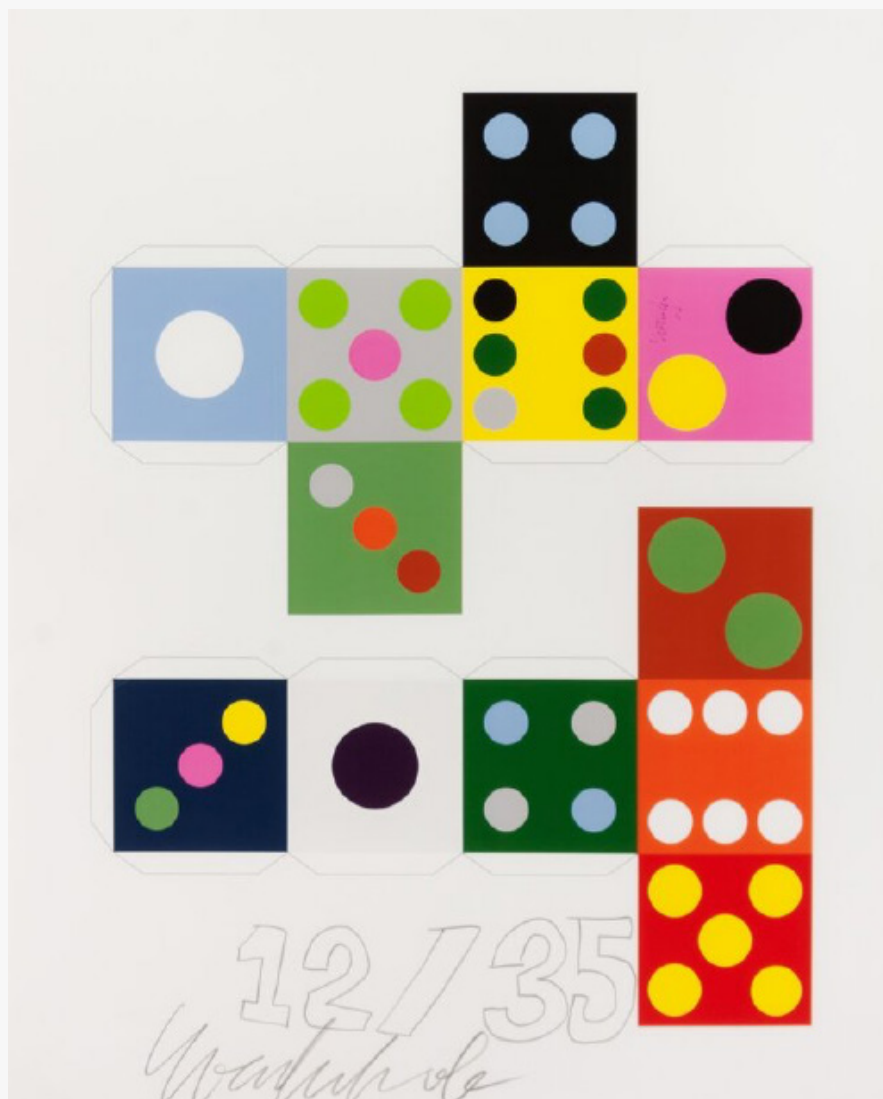
VISUAL STUDIES I

DICE, NUMBERS, FONTS

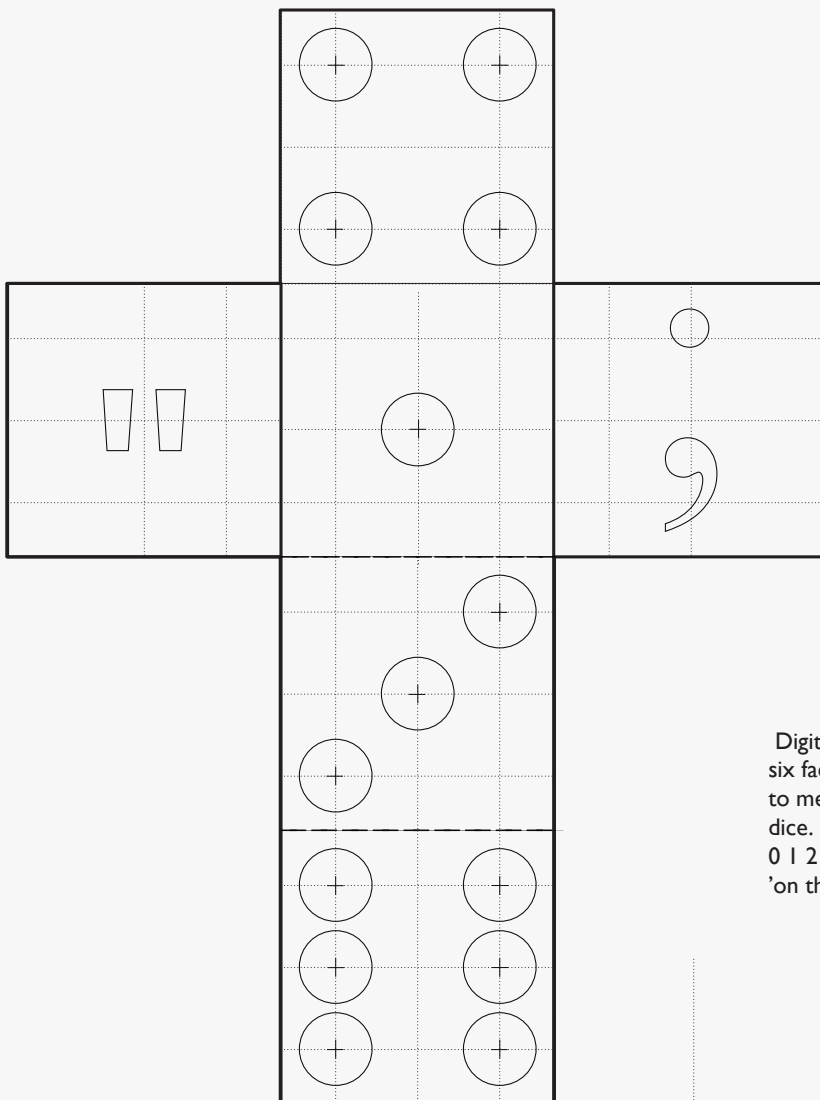
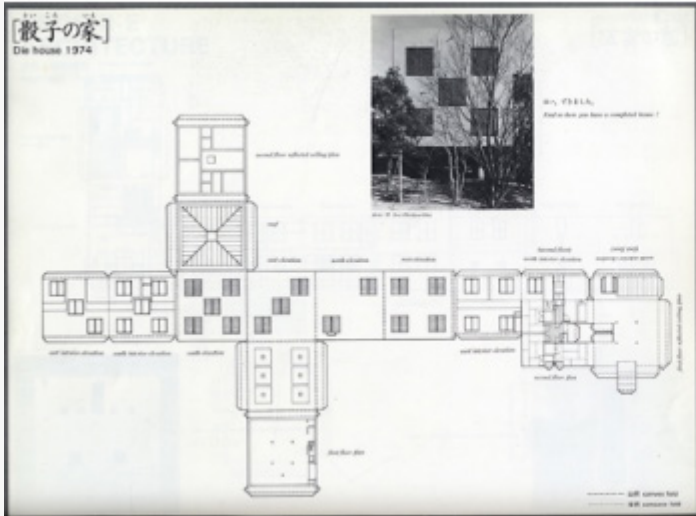
Visual Studies I is the first of three core VS seminars in the M.Arch I program. As an introduction to representation, it is structured as both a technical course and a general survey. The seminar introduces students to the conventions, tools, and procedures of architectural drawing and modeling within a broader context of ideas, debates, and formats of representation in the discipline of architecture. Tutorials and assignments will focus narrowly on the interrelated roles of geometry, instrumentalization, and representation, while lectures and readings will broadly examine various modes of description and media.

The course will be closely coordinated with the studio curriculum to facilitate the representation of design ideas and to begin the development of a personal portfolio of work.

Visual Studies I: Anna Neimark, Caroline Hayes.

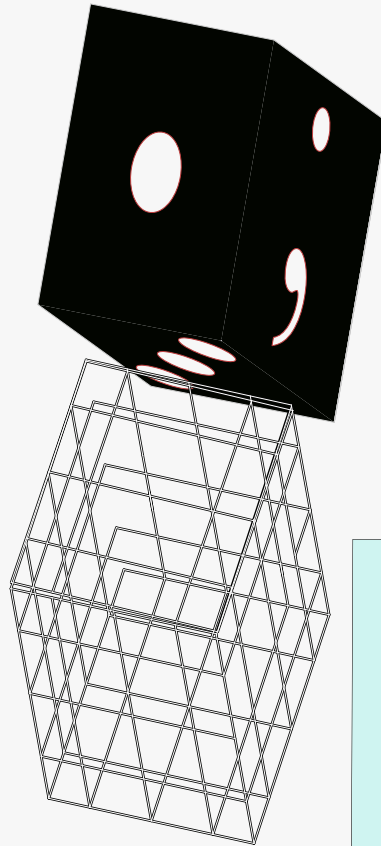
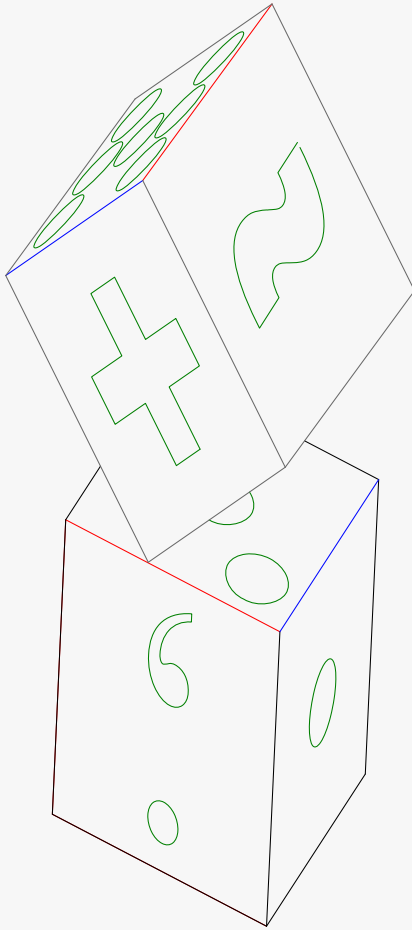


0-1 DICE EXERCISE



Digitally modeling a 3.5" cube, then unfolding its six faces in Top view. Developing a grid that helps to measure the center points of each dot on the dice. Allocating the symbols like: 0 | 2 3 4 5 6 7 8 9 ~ ! ? & () [] { } " , ; : - - + = ` ^ ' on the unrolled surfaces.

0-2 DICE STACK



46

Working In Blender leaning the dice in an environment that simulates the force of gravity. In addition to our own die, including one or more dice from friends. This stack involves rotation – in plan or in section, or likely both and showing the grid structural elements.

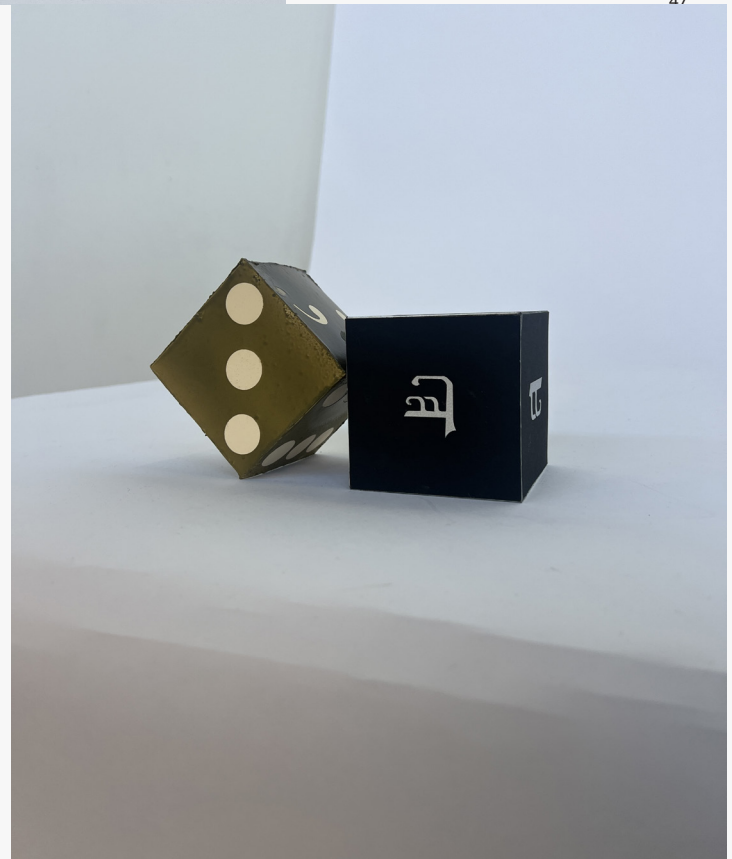




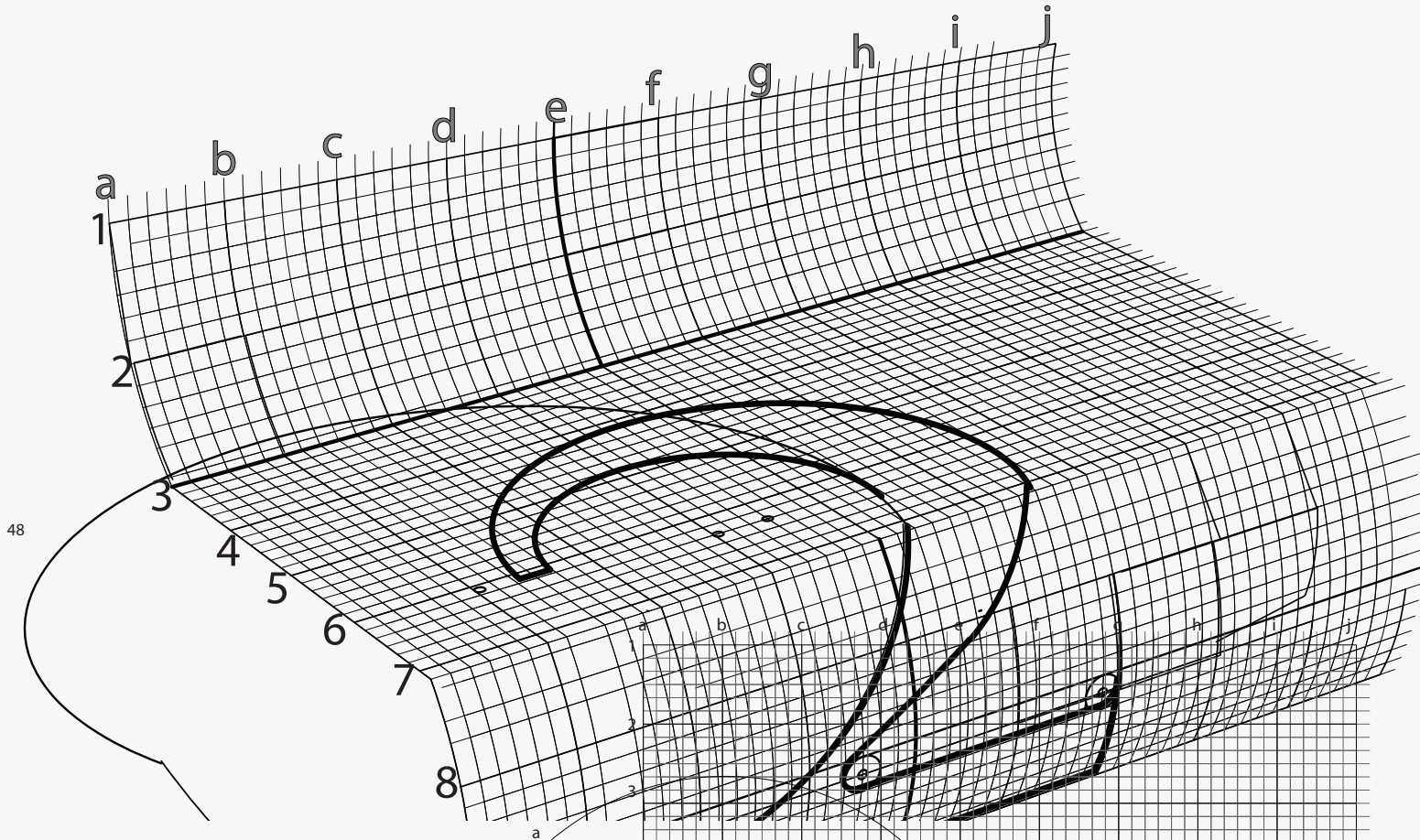
47

Making the final dices from manila paper first by cutting them on a Cricut cutter and painting them with spray paint of different colors. Placing the own dice leaning on the neighbour one.

Making further iterations of number 2 variations and extrusions pinned on top of the grid. Making a final print of 2 numbers in a contrapposto to each other using vellum material and special myler technique. Painting the final drawing with a spray paint from the back.

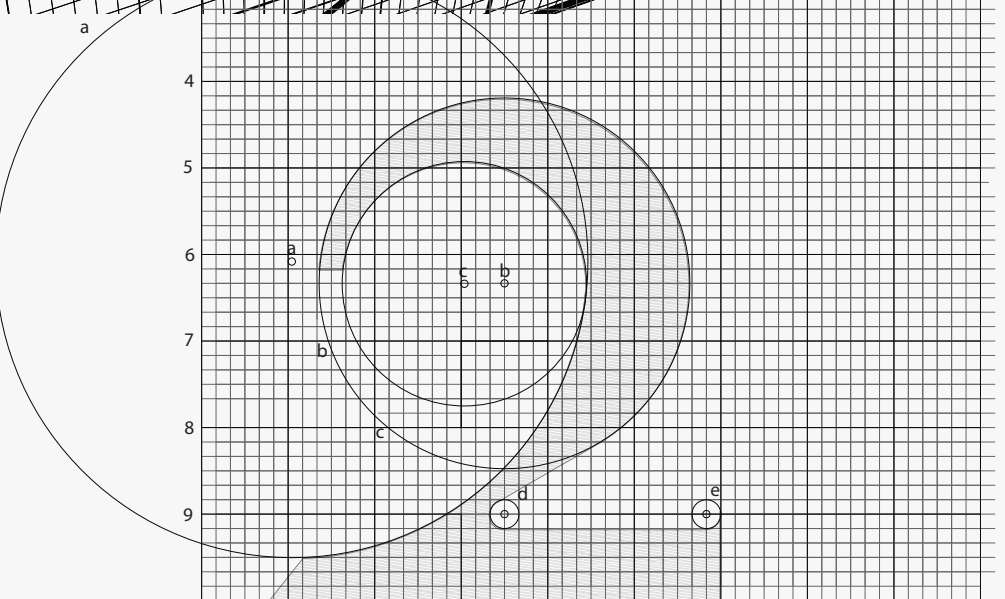


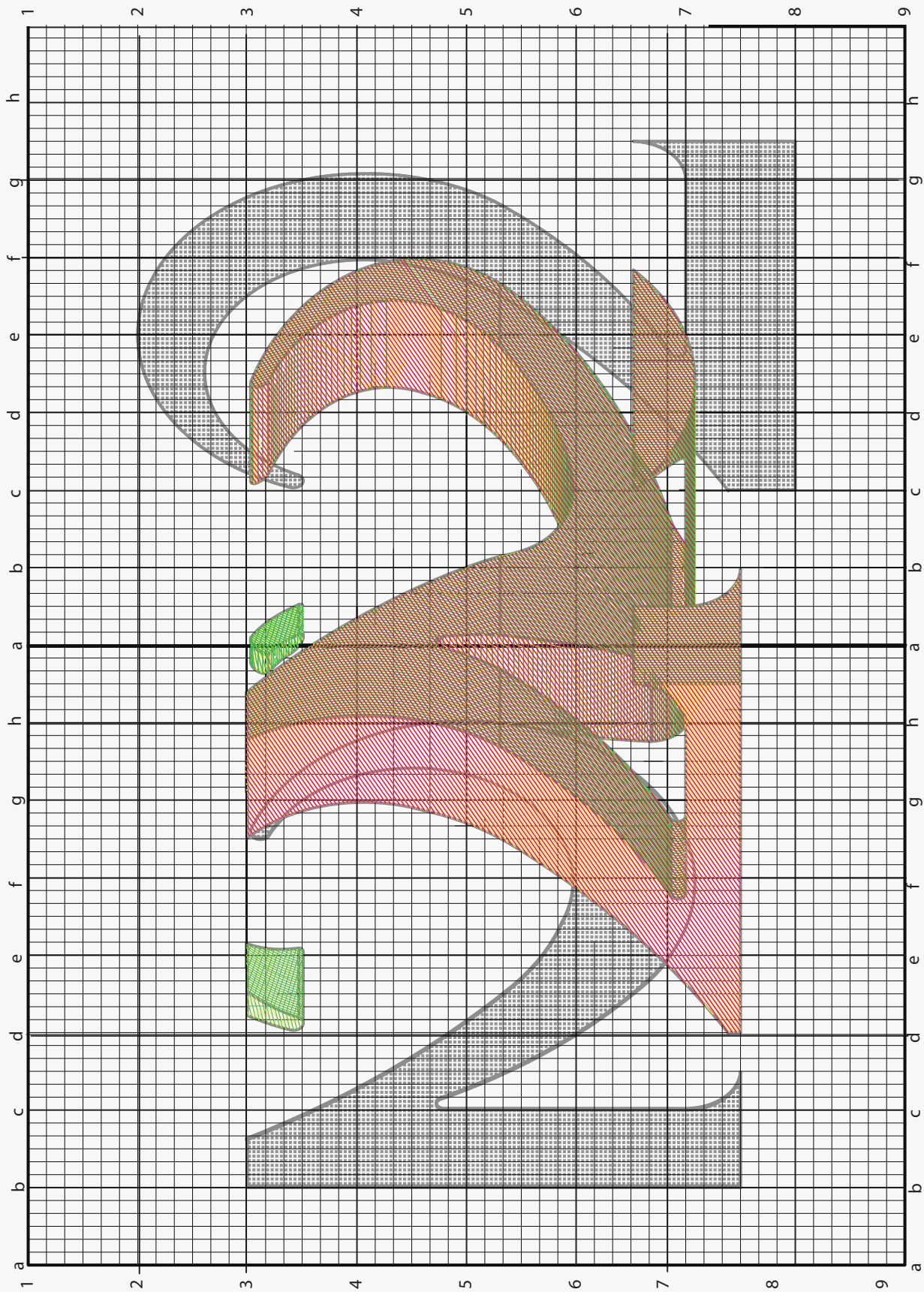
0-3 NUMBERS FIGURE EXERCISE



48

Constructing the figure or mark accurately articulating its controlling geometry of joined arcs and segments. Interpret the low-resolution print from the supplement sheet by looking at the high resolution Romain du Roi alphabet. Finding clues about serifs, arc radii and general dimensions by studying a letter that has a similar geometric form as your number. Including notation to represent geometric centers (lower case italic letters) and regulating grids (lower case letters and numbers as in a chess board). Working in Rhino with layers; using clearly differentiated line weights and line types for depicting the hierarchy of regulating lines, points, grids, arcs, and hatches. Arraying the hatch in relation to the grid beyond – as a subdivision of the grid such that it aligns with the background.





Making further iterations of number 2 variations and extrusions pinned on top of the grid. Making a final print of 2 numbers in a contrapposto to each other using vellum material and special myler technique. Painting the final drawing with a spray paint from the back.

h 1 2 3 4 5 6 7 8 9

g

f

e

d

c

b

a

i

50

h

g

f

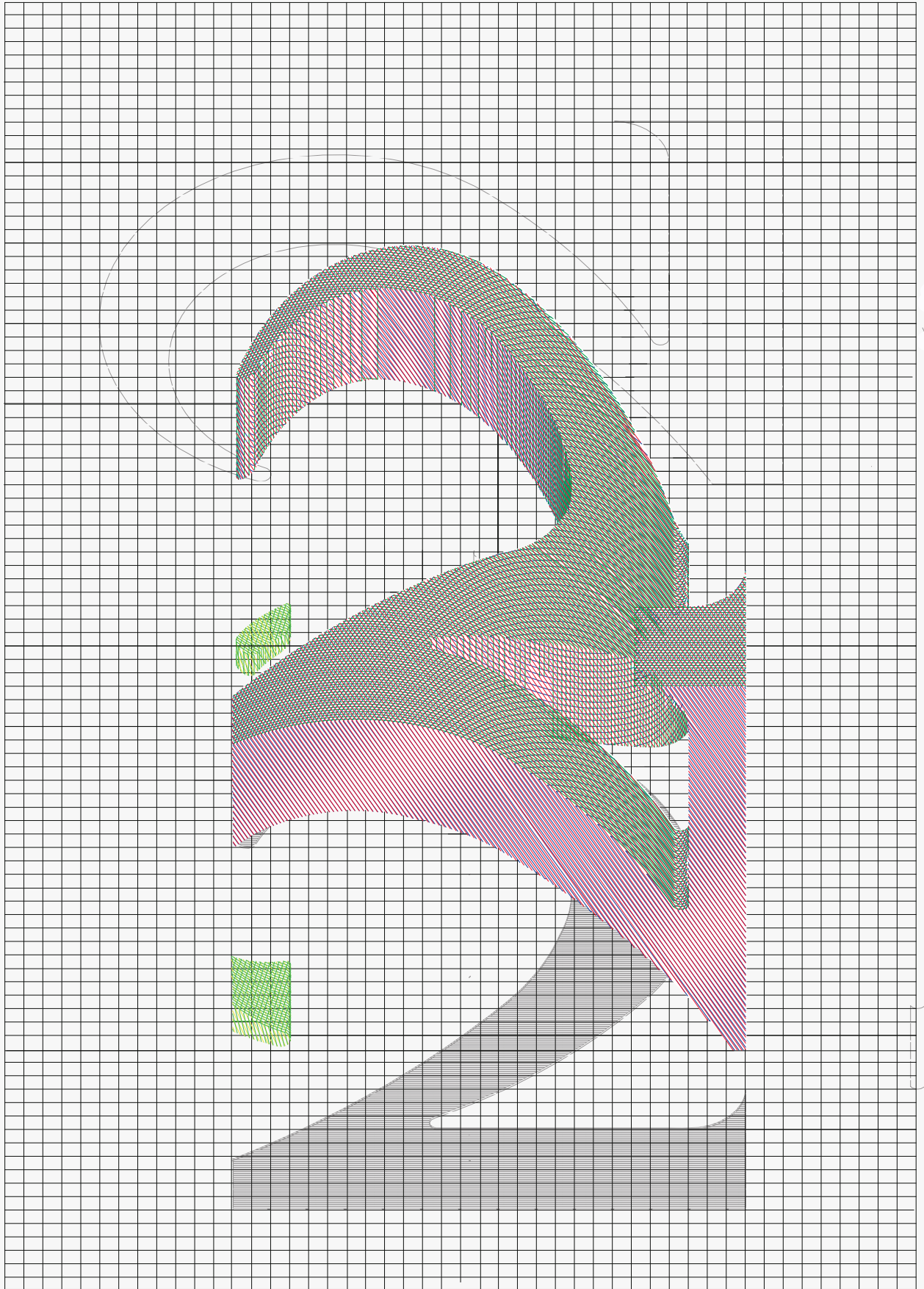
e

d

c

b

a

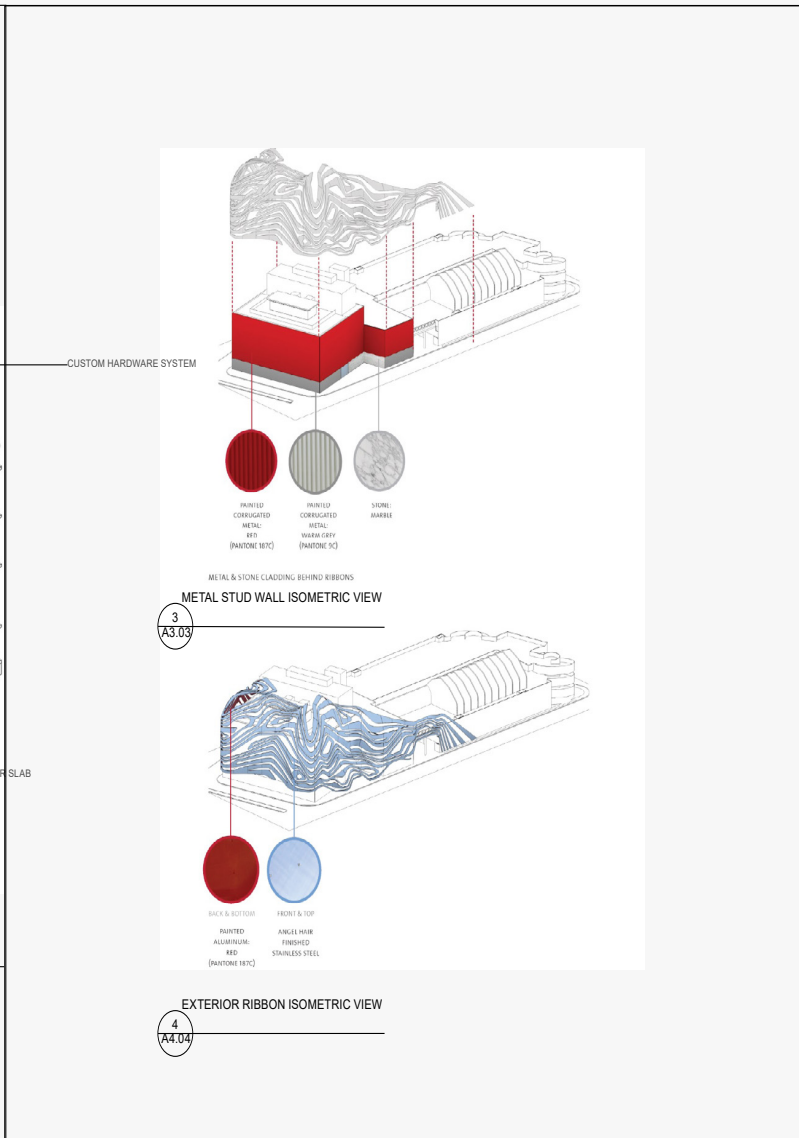
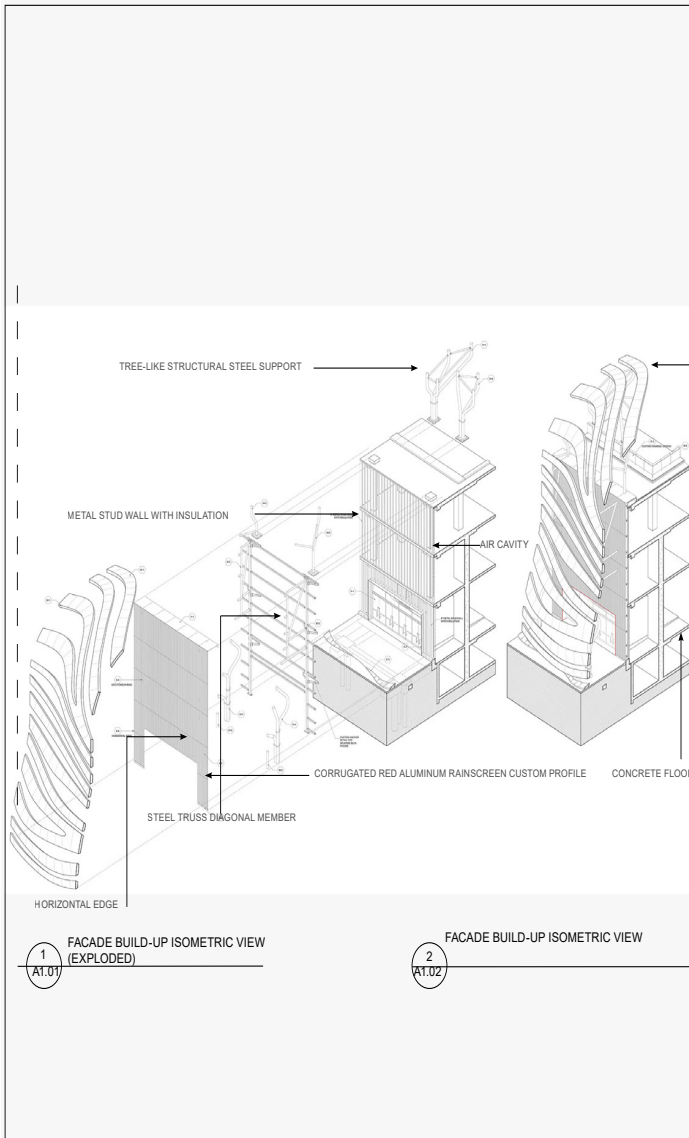




Making further iterations of number 2 variations and extrusions pinned on top of the grid. Making a final print of 2 numbers in a contrapposto to each other using vellum material and special myler technique. Painting the final drawing with a spray paint from the back.

MATERIALS AND TECTONICS EXP 0125

Peterson Automotive Museum facade composition



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ISSUE DATE:

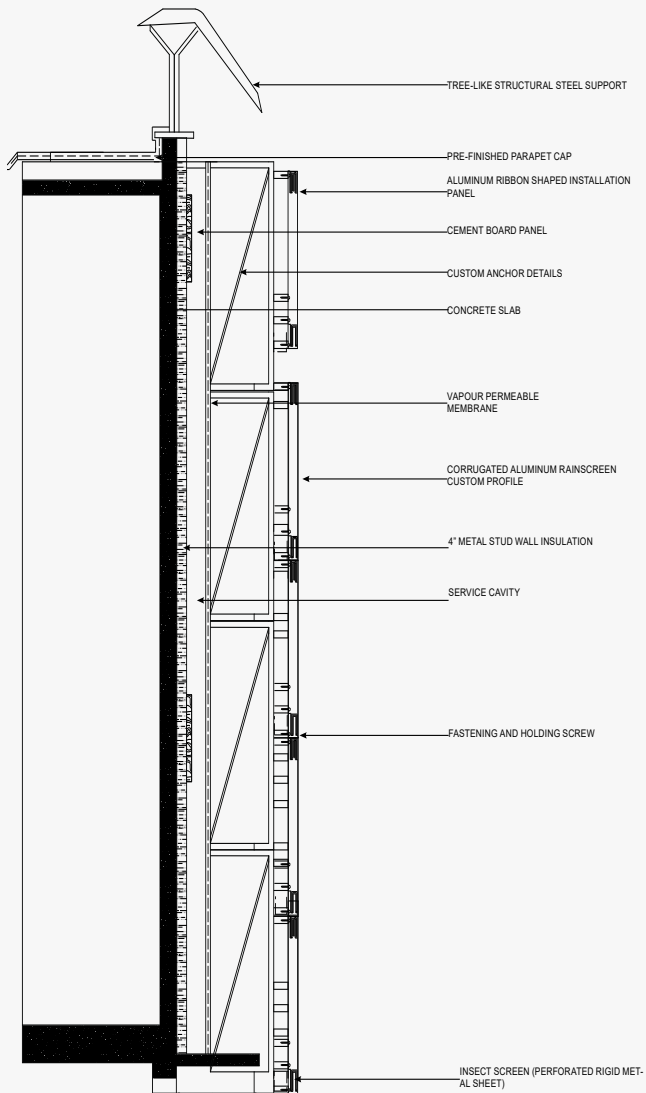
REV	DATE	COMMENT

TITLE	FACADE ISOMETRIC VIEWS
PROJECT	PETERSEN AUTOMOTIVE MUSEUM LOS ANGELES HISTORIC CORE
CLIENT	SOPHIE PENNETIER

JOB NUMBER: 00000001

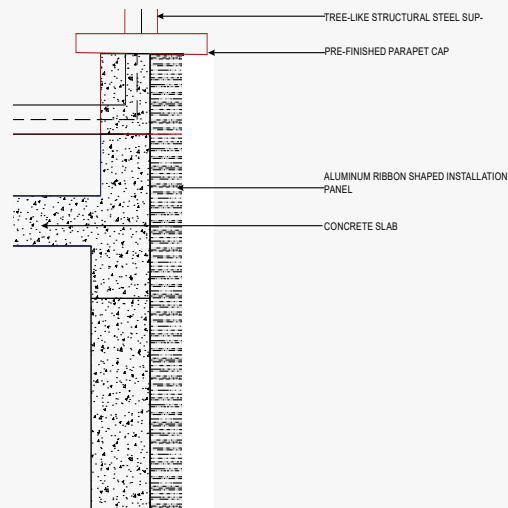
A1.01

Peterson Automotive Museum facade composition



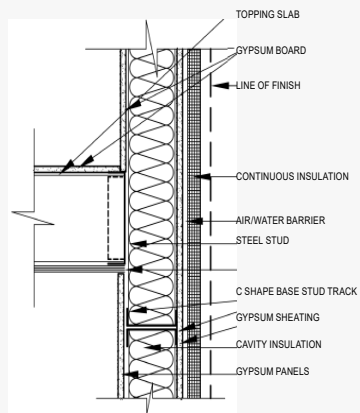
1 TYPICAL BUILDING SECTION

1
A1.02



2 PARAPET DETAILS

2
A1.02



3 METAL STUD WALL DETAIL

3
A1.02

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TE	COMMENT

53

FACADES DETAILS	
PROJECT PETERSEN AUTOMOTIVE MUSEUM LOS ANGELES HISTORIC CORE	
CLIENT SOPHIE PENNETIER	

JOB NUMBER: 00000001

A1.01

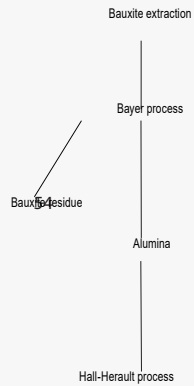
Aluminum Supply Chain research

Aluminium Supply Chain

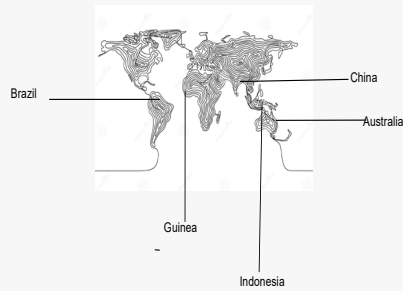
Extraction

Aluminium production starts with bauxite extraction

Aluminum comes from bauxite ore, which is made into alumina by refining Bayer process in alumina refineries and then smelted into aluminum.



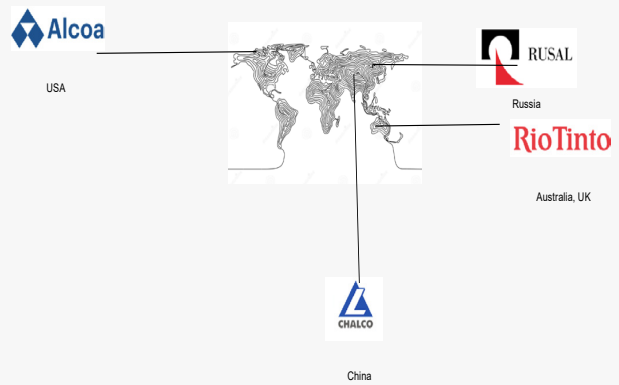
Major bauxite miners by country



Aluminium casting

Ingots

Major ingots producing companies



Ingots Types and Applications



50-pound ingots

This type of aluminum ingot is made of aluminum alloys, which is used in the automotive industry as well as in manufacturing cast parts.



1000-pound ingots

The purity of this type of ingot is 99.85%, so it is very pure. 1000 1,000 ingots are used to make alloys, parts, and sanitary ware.



Aluminum Slabs

Slab ingots, which are usually produced in sizes of 300 * 1060 and 270 * 1060 square millimeters, are used to produce various types of coils, belts, sheets, and the like.



T-bar ingots

T-bar ingots are made of pure Electrical Conductor grade alloy and are used in the manufacture of home appliances, cables, and the like. T-bar is generally used to produce electrical conductors.



Billet Ingots

This ingot is mostly used in the extrusion industry and can be produced in different diameters that meet international AA standards



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FACADE ISOMETRIC VIEWS
 PETERSEN AUTOMOTIVE MUSEUM
 LOS ANGELES HISTORIC CORE

TITLE
 PROJECT

JOB NUMBER: 00000001

A1.01

HT 2101 01 – HISTORY OF ARCHITECTURE AND URBANISM I THE PRECEDENT OF HISTORY – THE HISTORY OF PRECEDENTS

Course Description

This course analyzes architectural expressions globally as a field-bound practice rooted in precedents – in the act of designing anew based on previous architectural specimens. The course sequence is in fact twofold; on the one hand, it seeks to introduce students to the history of architecture of ancient civilizations (prehistory to 1500s), using architectural objects and landscapes as markers of socio-cultural phenomena and habits across specific time periods and geographies; every ancient civilization we study, we will reflect on how it derives from the overlapping of different past traditions. On the other hand, it traces the ways in which contemporary modern architecture levies past typologies, aesthetics and formal gestures to express innovative endeavors. This course thus maps out ancient architectural practices

Quotation

Architect quote: “A simple and intuitive idea: when you are in the cinema, you are transported elsewhere, you fly away as if in a soap bubble. There are three physical dimensions of reality: width, length, height. And then there is a fourth dimension: motion. The transition between the existing building, now a museum, and the new hall is a transition from shadow to light, of rather a sequence of alternating light and shadow. Just like in the cinema. There is, however, an essential difference. In the cinema you stand still, and the film moves; in architecture, the opposite is true: the building stands still and you move. And when you move, you go from the dazzling brightness of Wilshire Blvd to the dimness of the ground floor, then to the terrace, which is bright again, and then to the darkness of the auditorium.” Renzo Piano

Keyword: Motion

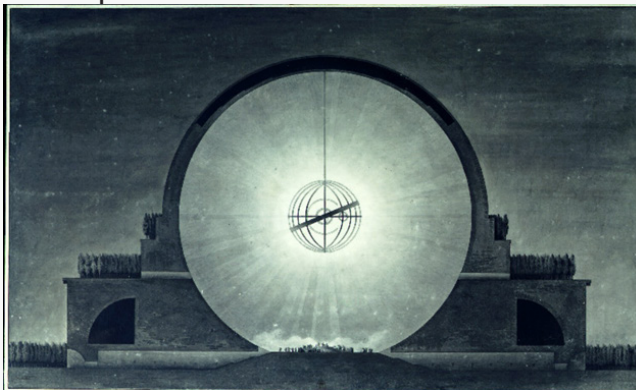
The core idea highlighted in the quotation and keyword is the experience, experience architecture and experience design. In the project, Renzo Piano embodies the emotions which the spectator feels in the process of visiting the cinema, architect is projecting designing the peculiar attributes of the user-centered design for the new Academy of Motion Picture building. Comparing the theatre design to a soap bubble or a zeppelin levitating the spectator up and transferring to the “other” space of a movie or to a magic lantern projecting and playing with light, speed and motion creating the 25th frame to lure the audience, the architect engages in the idea of playfulness and experience orientation of the architectural object. Rooting the design on the historical precedents of the shape, plans, elevations, typology etc, Renzo Piano creates a completely new building which organically fits in the Los Angeles urban fabric and Golden Mile neighborhood rhyme and urban fabric.

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1) Fondazione Renzo Piano “Academy Museum of Motion Pictures, Los Angeles” 2023, pp 182-183.

PrecedentsWSpatial experience

Cenotaph for Sir Isaac Newton



One of the most striking examples of the special experience architecture is Cenotaph for Sir Isaac Newton.

The building is a paper architecture. Basically a Newton tomb, it was a tall sphere, encompassed by two large barriers circled by hundreds of cypress trees. The massive, spherical shape of the building inspired by Boullée’s own study called “theory of bodies” where he claims that the most beautiful and perfect natural body is the sphere which. and creating the transition from lighted Wilshire Blv to the dark theatre space.

Although the project has never been erected, it is a great representation of a special experience architecture. Centered around the Newton grave, the space inside creates powerful emotional feedback by the observer which corresponds to the intention of the architect. The design of the memorial was intended to create the effect of day and night, sun and moon interchange, the movement of the celestial bodies on the ceiling embodying the sky. The night effect would have occurred when the sarcophagus is illuminated by the sunlight coming through the holes in the vaulting, giving the illusion of stars in the night sky. The day effect would have been provided via an armillary sphere hanging in the center that gives off a mysterious glow. The same effect is tried to be achieved by Renzo Piano in the design of the Academy Theatre while installing the diverse lightening and creating the transition from lighted Wilshire Blv to the dark theatre space.



The Motion Inside, Experience.

Just by looking at the Academy building we can notice that idea of the movement itself which can be clearly reflected in various aspects. The spherical top façade of the building resembles the Cenotaph. But instead of the closed surface, the Academy Museum has a glazed façade with an open terrace in the middle which provides the viewer a chance to spot the inner motion – circulation in the building, the impression of the movement of the building created by structural elements. At the night time when the dome is lit with the projector lights and reflections of different colors, this kaleidoscope movement engage the spectator both inside and outside the object.

Colosseum, Rome

The typology

The typology of the Academy Museum is a theatre. Tracing back to the antient time, it can be associated with a Roman amphitheater as a type and Colosseum as an antient embodiment of this typology.

An amphitheater has always been an open-air venue where spectators were audience was usually entertained by watching gladiator fights, sports competitions or stage performances. (even the translation of the word amphitheater is a “place for viewing.”).

The fact that antient amphitheaters were used to hold the large capacities of the viewers also can be matched to the Academy Museum. It was tailored to be a larger than usual venue for a movie theatre as well as Colosseum is used to be a larger version of the amphitheater accommodating approximately 50,000 to 80,000 spectators.

As well as Colosseum typologically is characterized by the mix of orders, Academy museum could also be also be added to the example of the mixed type architectural style which together with an adjoining building of the old Academy Museum forms eclectic combination of diverse architectural canons.

Colosseums particularly in the Roman Empire were the places where viewers of different ages and social groups were gathering to watch the gladiator fights and other performances. The idea of motion and observation is embedded in this typology from the beginning of their existence. The show itself presented a competitive occasion where gladiators, animals and some actors were moving around the arena, fighting, running, making physically intensive moves. At the same time the crowd was observing the actors as well as circulating around the Colosseum tribunes and observing the other spectators. Public which was seating on the higher rows was also able to observe the city view form their viewing position, the circulation of people, merchants, animals and other habitats around the streets of antient cities as well as urban fabric of the city.

In that sense the Academy Museum also gives the visitors plenty of possibilities to observe inside and outside the venue. Obviously inside the building we can observe the motion of the pictures on the screen of the movies, people circulating around the hall, theatres, bridge connecting the museum of Motion

Picture with the adjacent building. Also, on the top of the building there is an observation desk under the sphere canopy of the building roof. From that point the spectator can view a 360-degree panorama of Los Angeles, engage in the city rhythm by tracing the motion of the cars, people and other objects around the Miracle Mile area as well as being incorporated into the inner motion of the terrace and communication with the other visitors.



Circle Stones and Initiation Well



Experiential Architecture

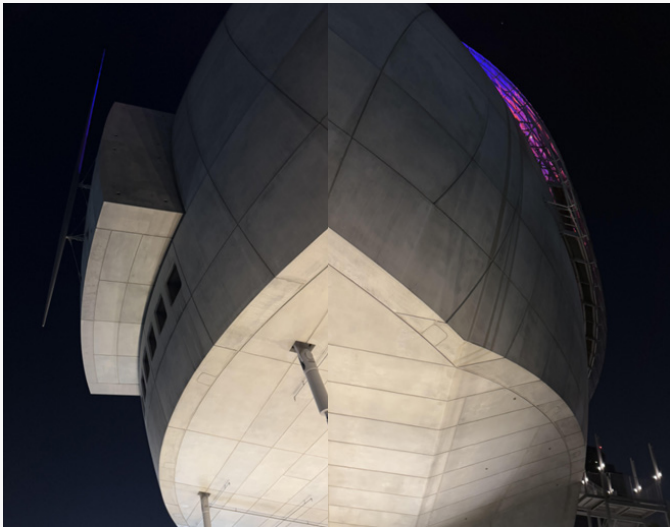
One more precedent of ancient architecture which could be cited is Circle Stones often found in Northwestern Europe area especially in the British Isles and Brittany as well as Initiation Wall perhaps, one of the most famous attractions in all of Sintra, Portugal. Designed in a mysterious manner lacking clear purpose, is a real origin of admiration. If we look at the well from the bottom to the top, it seems like the circular path is infinite and strives in the sky higher and higher,

Although many theories have been advanced to explain their use, most scientists tend to relate these structures to providing a setting for ceremonies or rituals, but there is still no consensus among archaeologists regarding their intended function. The enigmatic presence of these structures, mysteries of prehistoric cultures tend to lure a huge number of tourists all around the world as well as scholars tempting to study the objects.

The circle stones represent monumental objects in and open space. Once you imagine yourself inside the circle looking around, this overwhelming experience from the ancient architecture object organically instilled in the landscape, transfers you to the eternity and the times our ancient predecessors were alive. Similarly experiential approach of Renzo Piano Geffen Theatre design leaves no one apathetic and provokes the individual desire to perceive, explore and dive into the magical world of Cinematography. Ancient Stones particularly in Northwestern Europe have always been a tool for the humanity to track the history of our predecessors, their potential habits and lifestyles. Rocks were adopted and used in constructions of different kinds of buildings for centuries of years. Among the most famous saved artefacts are Stonehenge, the Easter Island Heads. Both structures are still being the mystery for the archaeologists, as gigantic, 96 tones rocks were transported by workers without and modern technology as well as many other uncertainties are being discussed.

Those ancient structures approached by the viewer radically augment the perception of time passing by creating the “time machine” motion feeling. Onlookers are being teleported through the space-time finding himself among the prehistoric times and feeling the transience of the life being in general in regards as opposed to the still existing traces of the human labor.

While the bystander is observing The Academy Museum building from the point of worm's eye or at the same point as we look at the initiation well from the bottom to the top, the shape of the UFO and feeling of the floating object drifts the viewer in time to the magical world of cinematography. The thoughts about the cinema art being the “time machine” and illusion at the same time are provoked. And finally, the observer gets back to the reality of the object within the city context and adjacent territory to derive his experiential awareness.



Shape
Futuro House, Finland



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Being the product of the post-war Finland architecture, the period when technology breakthrough was most dignified aspect of the human life, Futuro House shape resembles the spaceship and the flying saucer at the same time. Designed by Suuronen as a ski cabin, as a unite easy to be moved, stored and transported, its configuration at all aspects thrives the notion of passage and movement, universal transportability and ability to self-replicate.

United States period of the streamline architecture, transition to curvilinear shapes and deriving its ideas from the industrial design, can be also a good example of the motion conception in architecture.

At first glance at the Geffen Theatre building, when approaching it from the street across the road, the viewer would notice the peculiarities of its shape.

The building is literally floating over the ground, and its silhouette somehow resembles Ex terrestrial entity. Some would see a space ship or a zeppelin launching into the sky while others would imagine an alien escaping the bad guys via bicycle and levitating to fly over the moon. The integrity of this shapes is configured by the dialogue of the inside structural details' shapes such as screen enclosure, floating terrace floor, main roof structure, projector room, "airstream skin" and the designer decisions how to embody them in one composition.



Architecture details
Staircases of Bradbury building, Los Angeles

In the process of research of the details of the building it caught my eye that the front staircase adjoining the Geffen Theatre building has a similar look to the staircase structure of the Bradbury building in downtown Los Angeles. The steel-framed staircase of the Bradbury building has four piles mounting high to the ceiling and shaping the structure in rectilinear manner itself. The Geffen Theatre building staircases look the same and they also have four extensions on each side pointing up.

The aesthetic quality of the Bradbury Building is largely derived from the superb environment of an inner court flooded with light due to the huge glass roof on the top. The staircase though is made from black iron and usually remains in shadow which is also a similarity to the Geffen Theatre building principle of differentiating the light and shadow. The Bradbury building is frequently used as a set for motion picture and television films and remains one of the prominent tourist attractions of Los Angeles.

The Motion of Shadows

We can also observe the movement of light and shadows and the interplay of the structural details, parts of the building. The Geffen Theatre building adjoining staircases interplay with the sunlight casting shadows on the building itself, producing the oblique reflections. This can also be seen in the example of the Bradbury building staircases. Exactly in one of the famous scenes of the Blade Runner movie (1982), we can see the communication of the light and shadow which creates the impression of the continuous motion and transition between the existing building, now a museum and the new theatre, the sequence of alternating light and shadow.



References

* (1) Fondazione Renzo Piano "Academy Museum of Motion Pictures, Los Angeles" Fondazione Renzo Piano, 2023, pp 182-183.

IGB FUNDAMENTAL ARCHITECTURE STUDIO 2

DS 1101: Course Description

The main project of this semester is developing a design for a mixed-use building located in the West Los Angeles.

As this is an ongoing municipal project, the studio was in touch with such offices as Koning Eizenberg who laid out a 900-unit masterplan for the West LA Commons and John Friedman Alice Kimm Architects (JFAK) who composed plans for the West LA Civic Center Office Building throughout the semester.

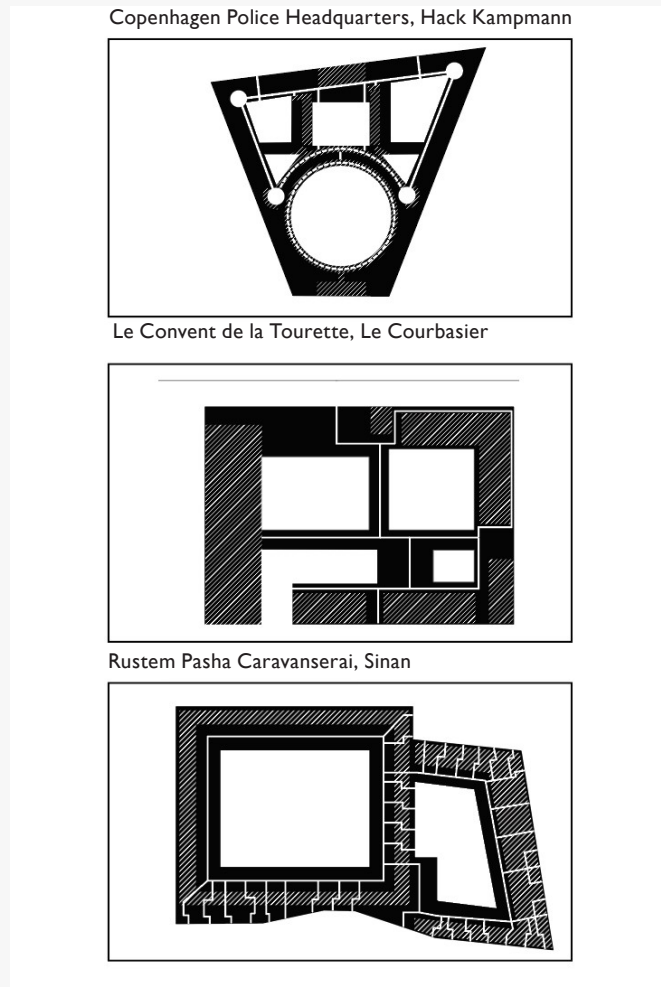
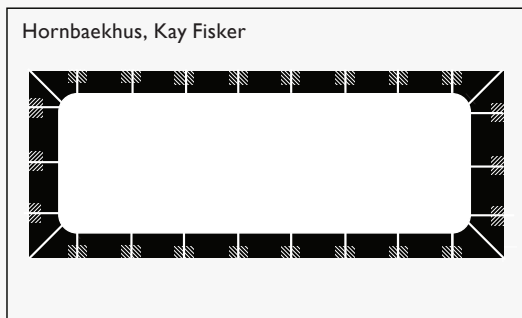
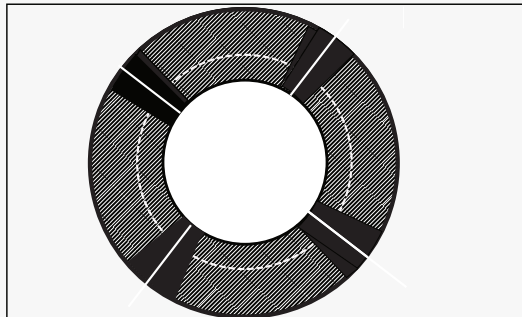
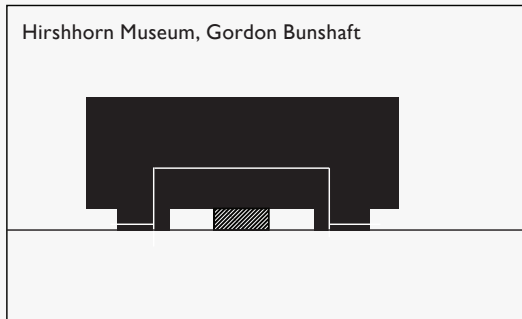
Due to the current disinvestment trends among townships, many offices are being no longer beautiful and engaging the citizen participation, not engendering the sense of pride in the citizenry, more often exhibiting the purely functional planning neglecting the landscaping and lacking the cultural programming. West Los Angeles Municipal Building is the sort of site that could easily fall into the background of the city, obfuscating access and participation. To articulate anew an architecture that represents an engaged citizenry, the purpose of the project is to update the offices and propose a courtyard block that offers a series of public programs at its center. The courtyard is providing both open air relief to the occupants and a public plaza for the Civic Center campus. That is why during studio main focus was on researching the various courtyard buildings as a typology precedents. The assignments of the course were organized into four broad subjects that correlate to a range of conditions inherent in the design and conceptual framing of the studio project: building and ground, site and context, program and circulation, material and environment.

West LA Civic Center Building

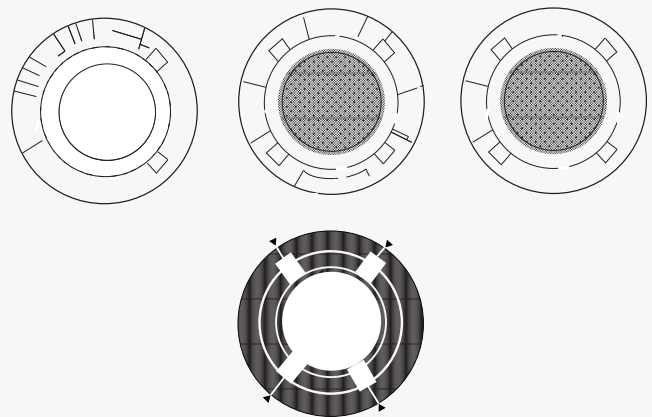
craft paper
paper carrying ink
hydrocal casting
pvc foam

Studio IGB: Andrew Zago, Anna Neimark.

BUILDING AND GROUND: COURTYARDS GAME OF SET



Hirshhorn Museum, Gordon Bunshaft



Diagramming the variations of these buildings in plan and examine their similarities and differences. A separate collection of contemporary buildings will be studied through their topology, in particular, their unconventional relationship to the ground. Together, these studies of typology and topology will inform the mass and interior of the studio building project and its relationship to the courtyard and ground while finding similarities and differences.

DIAGRAM STANDARD
 BLACK SOLID:
 WHITE LINE(1.5 PT): CIRCULATION
 DASH LINE :1.5 PT THICKNESS, 4PT
 DASH AND 1.5PT GAP: CIRCUMABULATION
 WHLITE SOLID: COURTYARD
 DIAGONAL HATCH: NECESSARY DETAIL

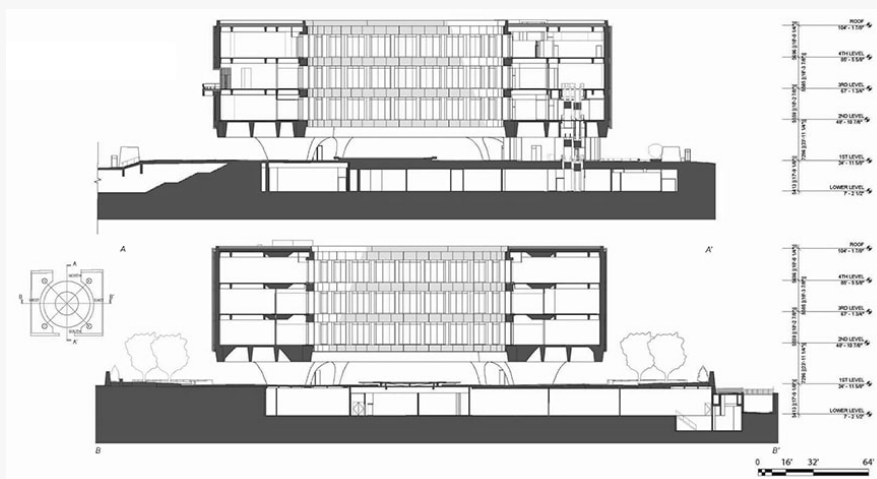
PRECEDENT: HIRSHHORN MUSEUM BUILDING



Hirshhorn Museum, side view



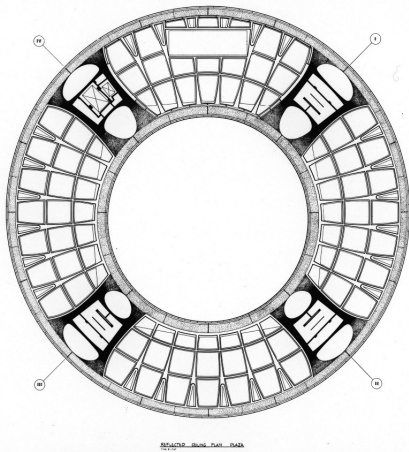
Hirshhorn Museum, courtyard view. Elevated over the ground on columns the courtyard provides an absolute throughput inside.



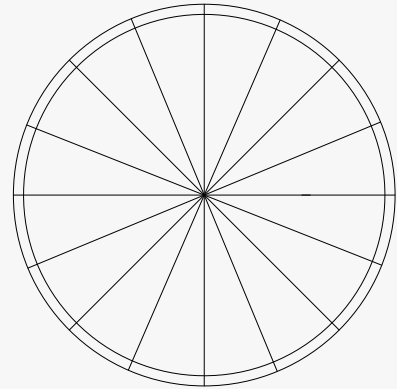
Hirshhorn Museum, section

Hirshhorn Museum

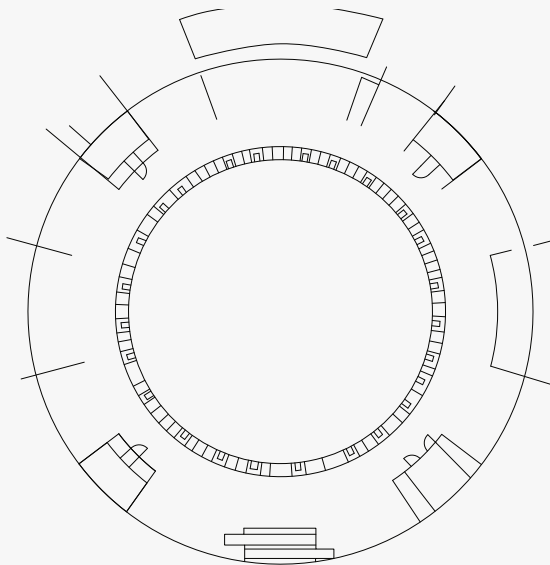
Concrete moulding elements



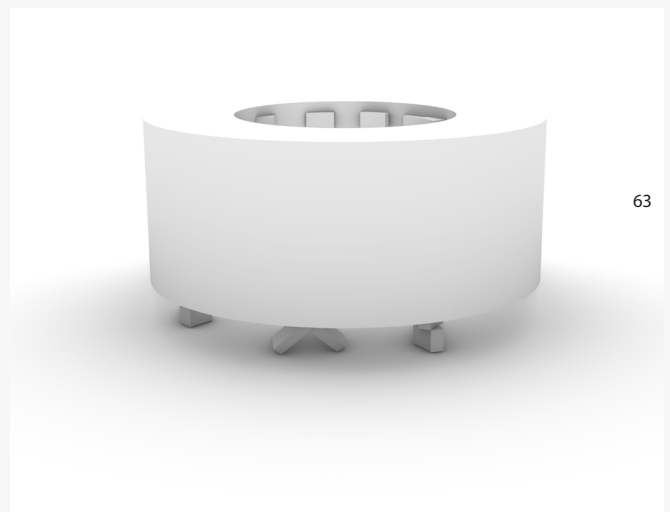
Polar diagram



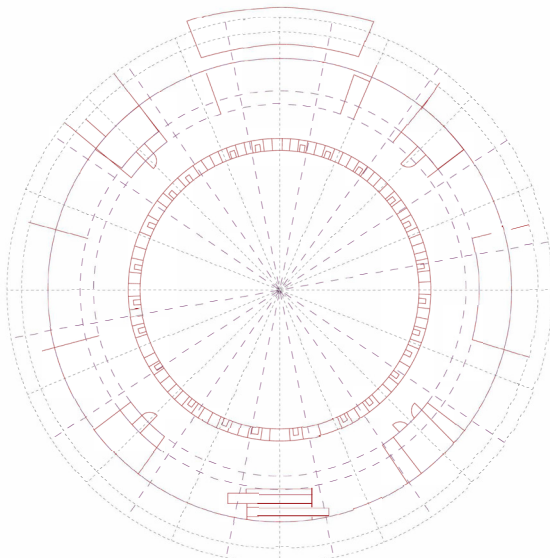
Polar diagram with elements



Hirshhorn Museum render



Extended polar diagram with grid



Hirshhorn Museum analysis starts with drawing the polar diagram as it is an absolute circular building with an absolute symmetry. Essentially the circulation is mostly locked into a circle with offsets up and down to elevators.

SITE AND CONTEXT: CHUTES AND LADDERS

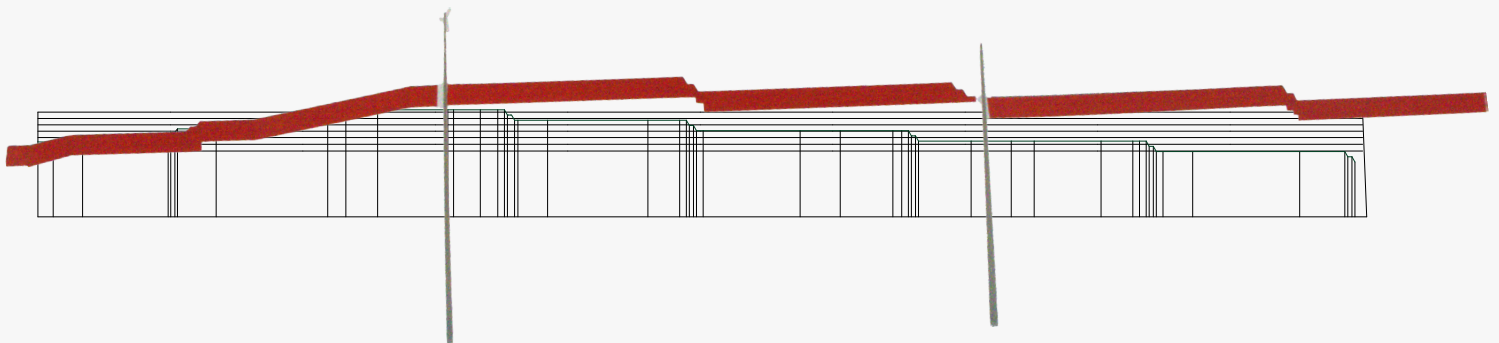
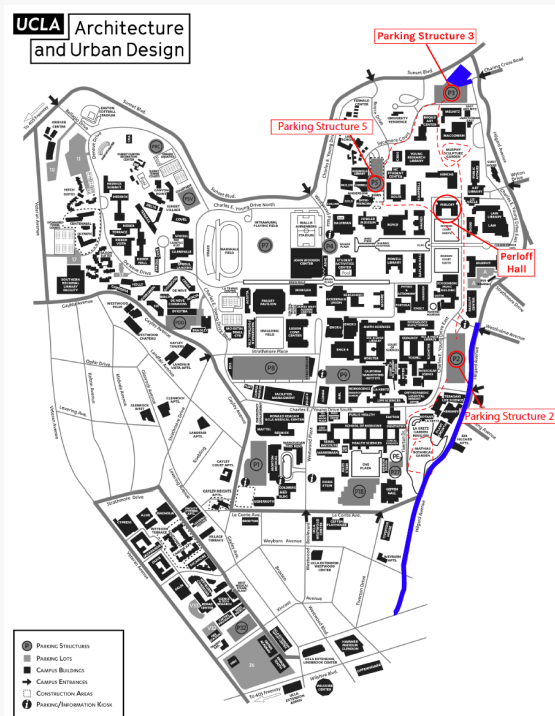
Based on the principles of the game originated sometime in the 13th century studio was making a field trip to the UCLA parking structures. As the game suggests: players compete to get to the top by throwing the dice. But shortcuts get in the way, with chutes sliding the players down and ladders rising them toward their destination. As an architectural plan, the board game is uniquely beautiful. It suggests a plan that can simultaneously be read as a section, with circulatory figures of the ramp and the stair producing a series of circuits through the otherwise flat grid. The floor plan of a parking structure was associated with the gridded field of the boardgame.



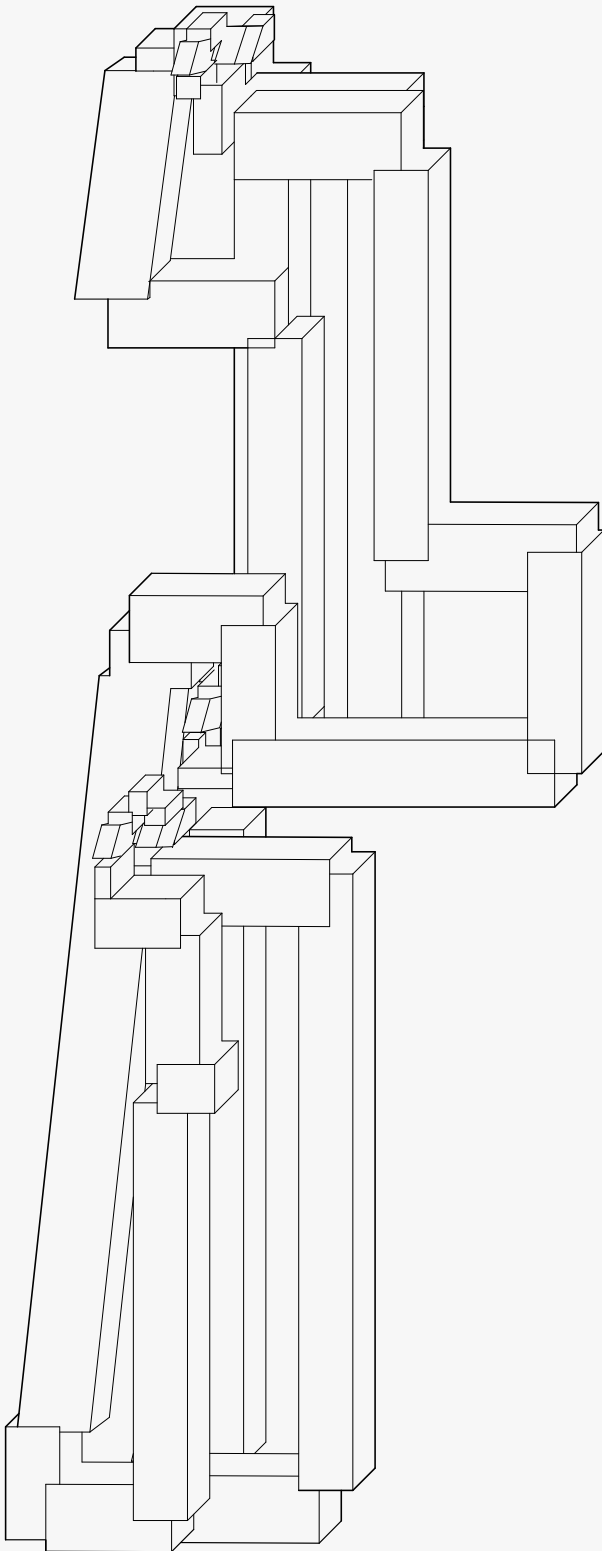
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UCLA Anderson School Of Business parking structure photo and map

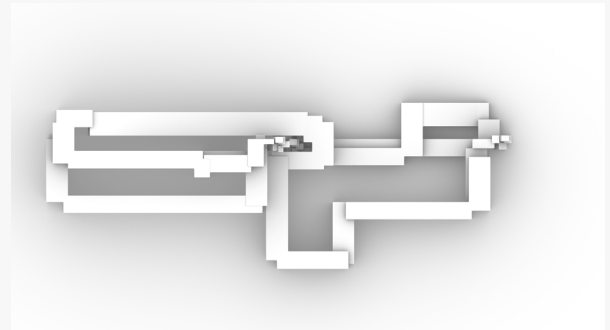
Considering that the structural columns produce the gridded parcels, that car ramps can be read as circulatory snakes, and pedestrian stairs, bridges, and elevators can offer vertical shortcuts between floors. The goal was to map a circuit through a parking structure that confuses that normal pathway of a car into a sectional loop initially drawing the loop path with a giant chalk.



Using one roll of tape, a knife, and a ruler, mark out the path with tape segments. Indicating individual pieces of tape to mark each segment of the unrolled circulation line with ramps and stairs.



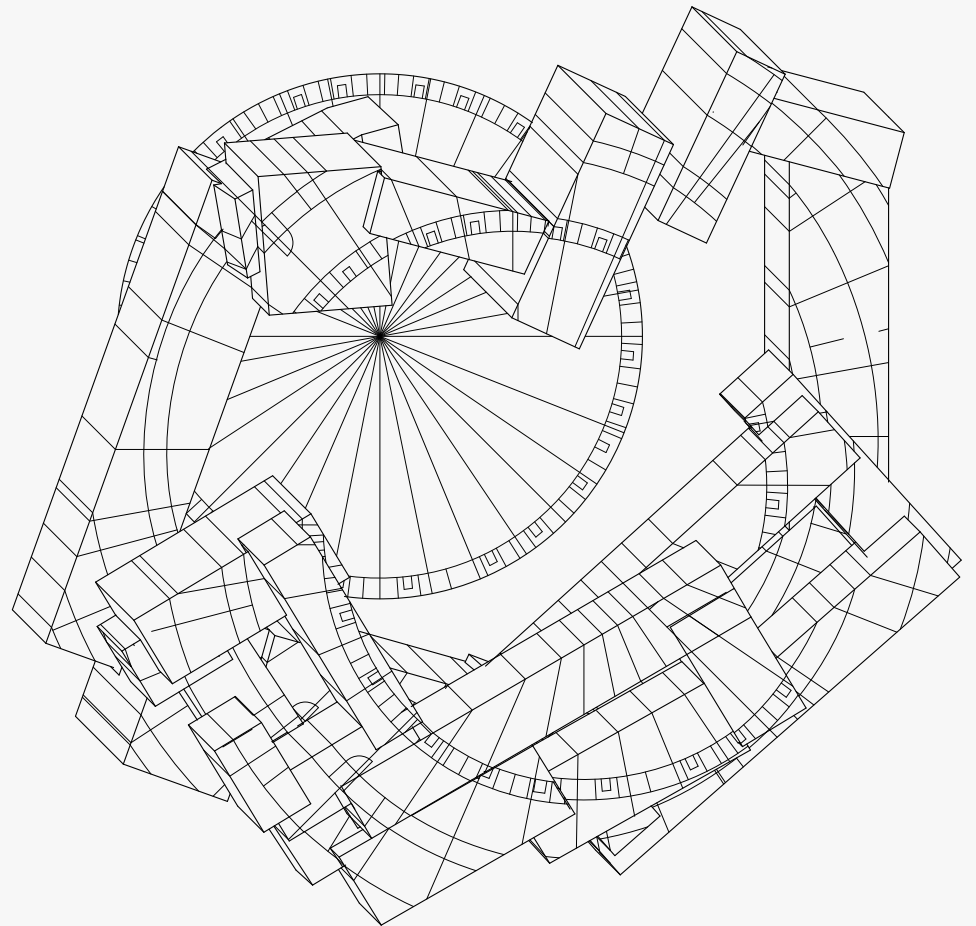
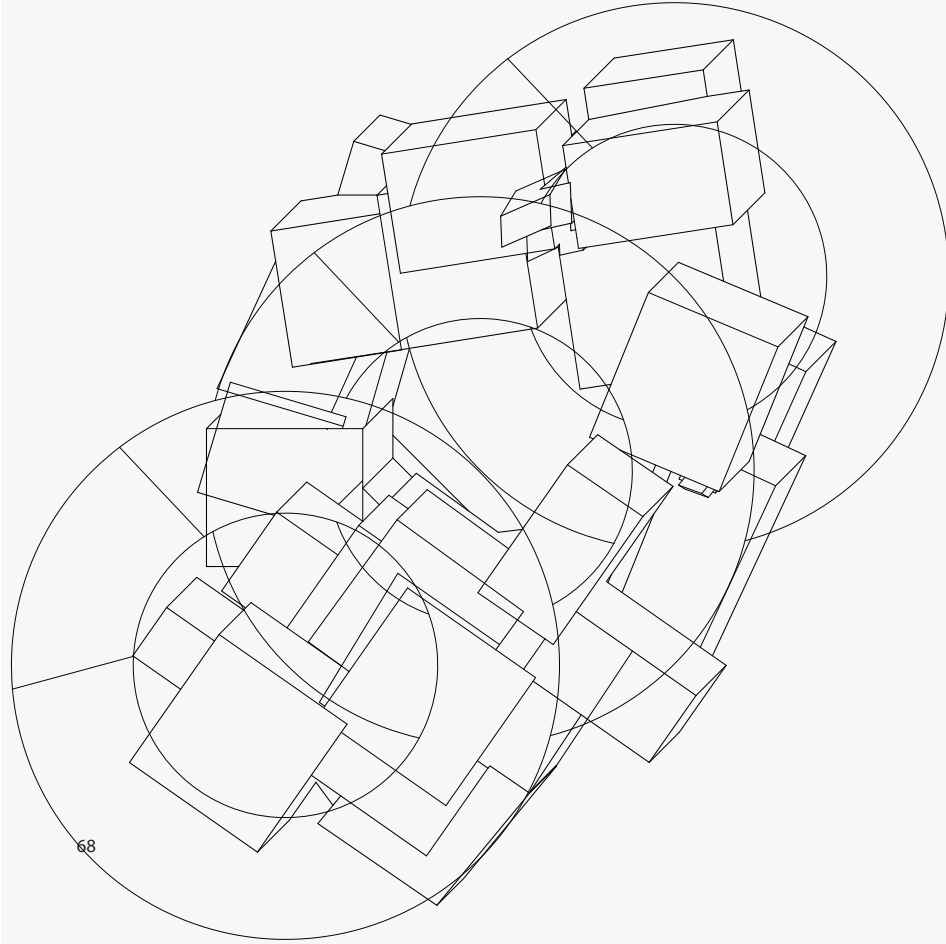
Parking structure circulation loop line broken into pieces with ramps and stairs render.

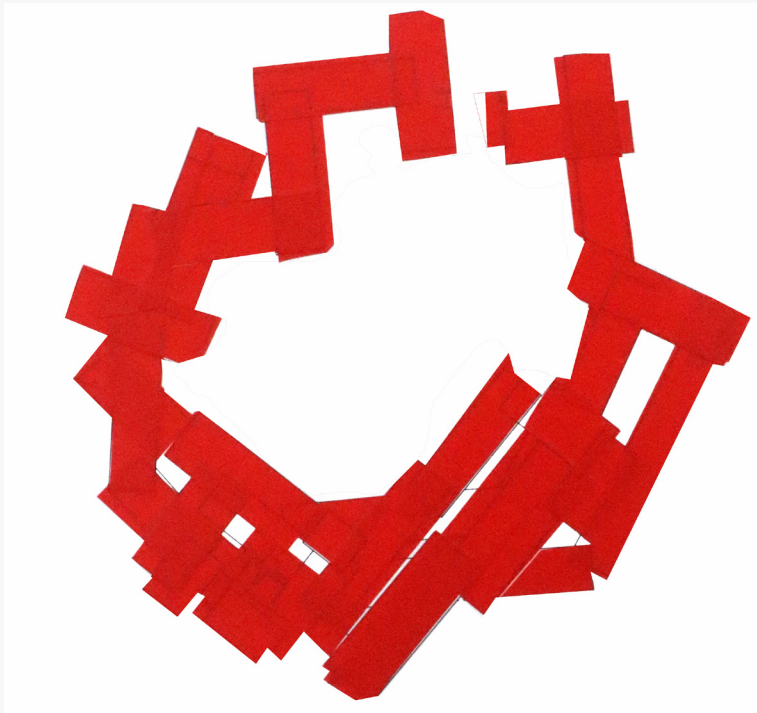


3-D modeling the tape segments as a 3-dimensional line (before it was unrolled or sheared for presentation). Keeping the proportions of the tape identical; a 1-inch-wide tape may translate to an estimated 30-foot tall rectangle. Projecting this rectangle to make a 3d box where 1-inch tape translates to a 30-foot-tall rectangle, it will be projected 60 feet in depth. Repeating the projection for every tape segment producing a series of flat overlapping boxes.

THE BUNDT CAKE

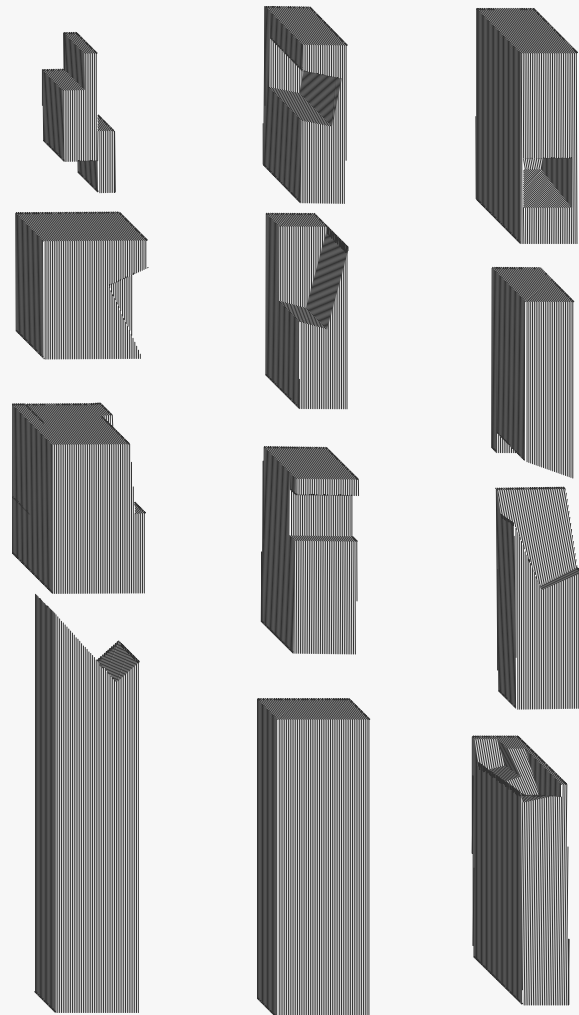
Inscribing the segmented parking circulation blocks into the analyzed building breaking the blocks where needed.



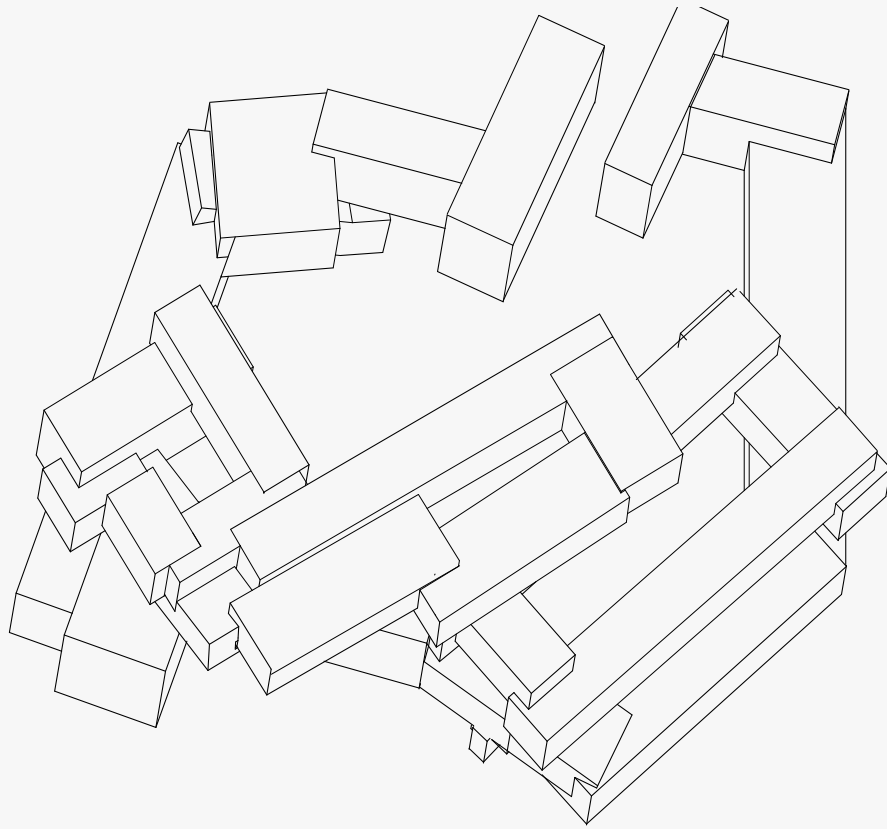


Making a tape drawing of the achieved Bundt Cake form.

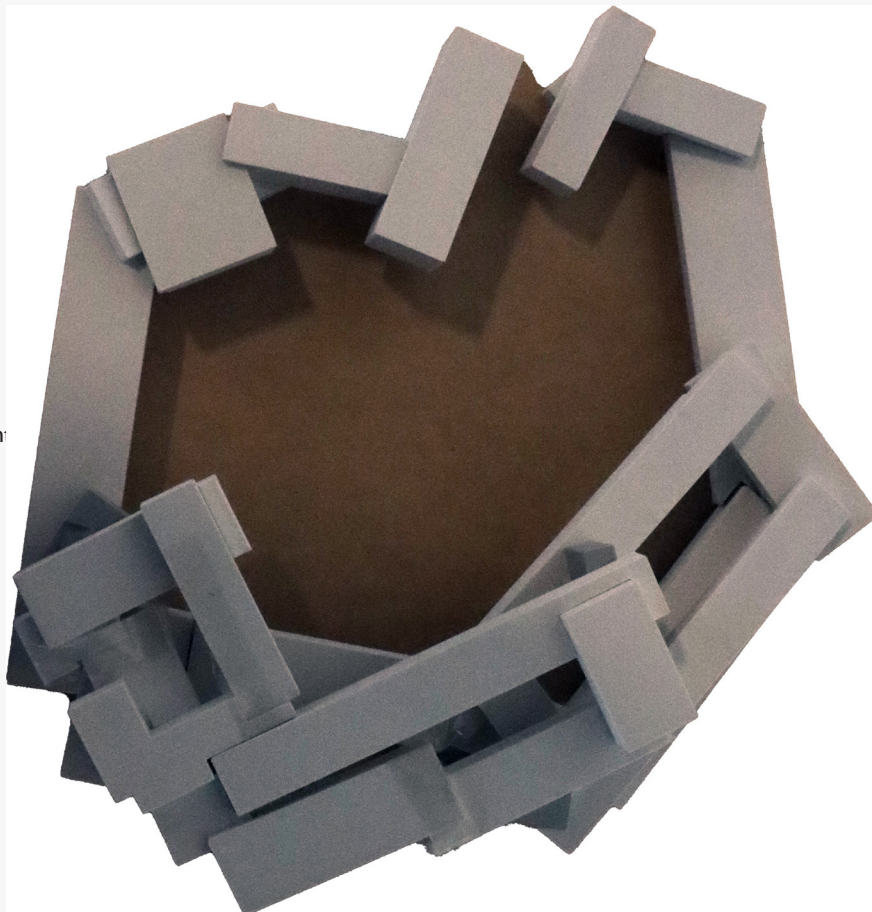
Working out the blocks joinery and design



Making the Digital 3-D massing model

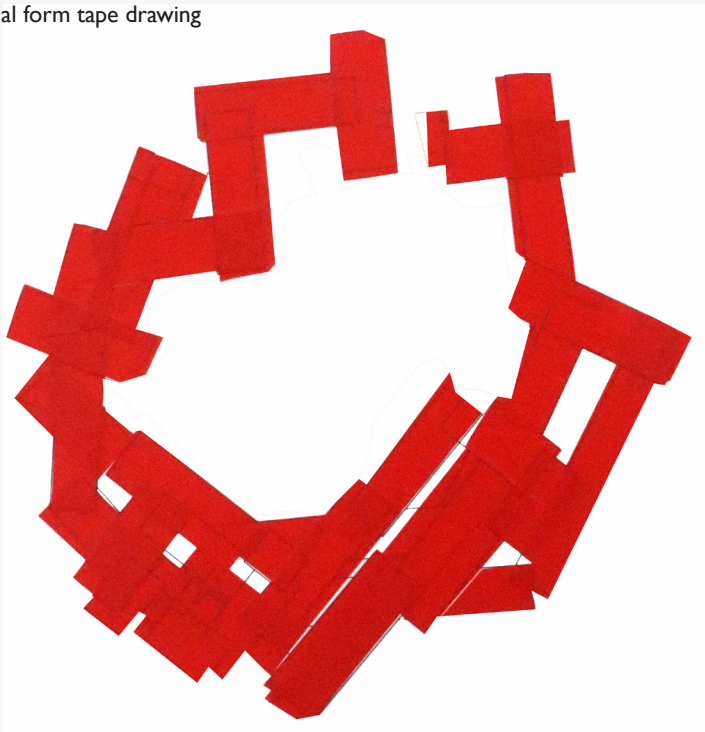


Making Initial Massing Model Using 3D Print

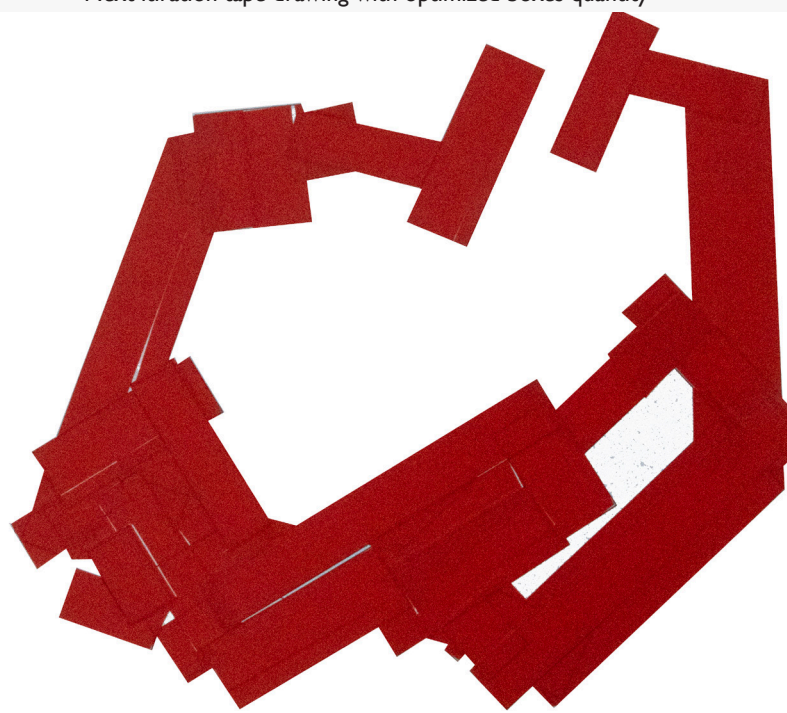


FINAL FORM ACCOMPLISHMENT

Initial form tape drawing



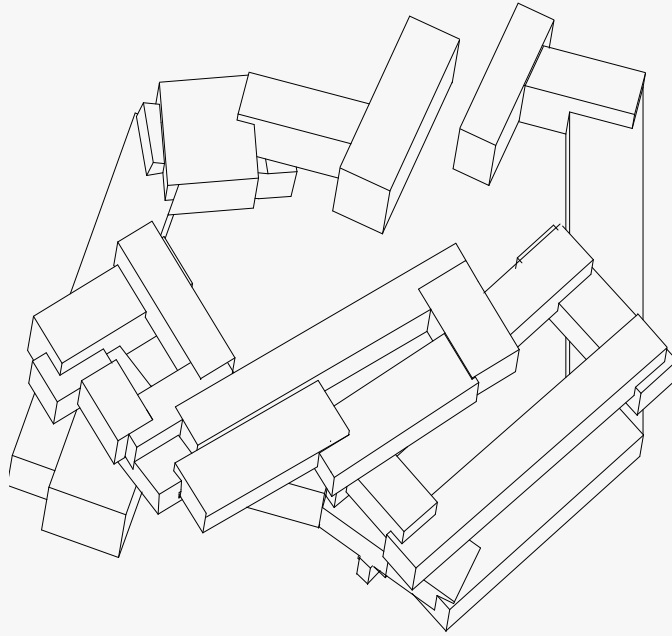
Next iteration tape drawing with optimized boxes quantity



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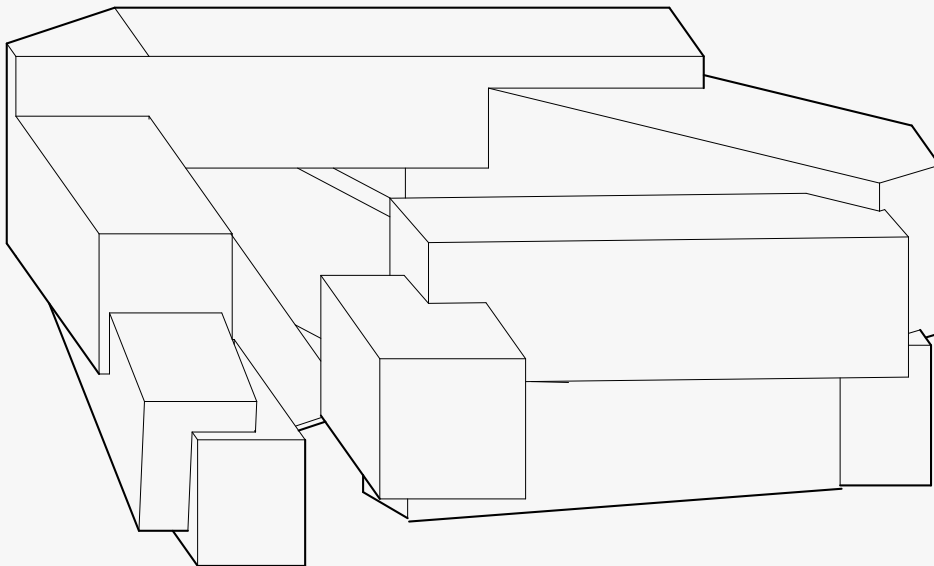
Using the laser cutter to cut the polystyrene foam pieces to form the shape of final building



Initial Digital 3-D massing model

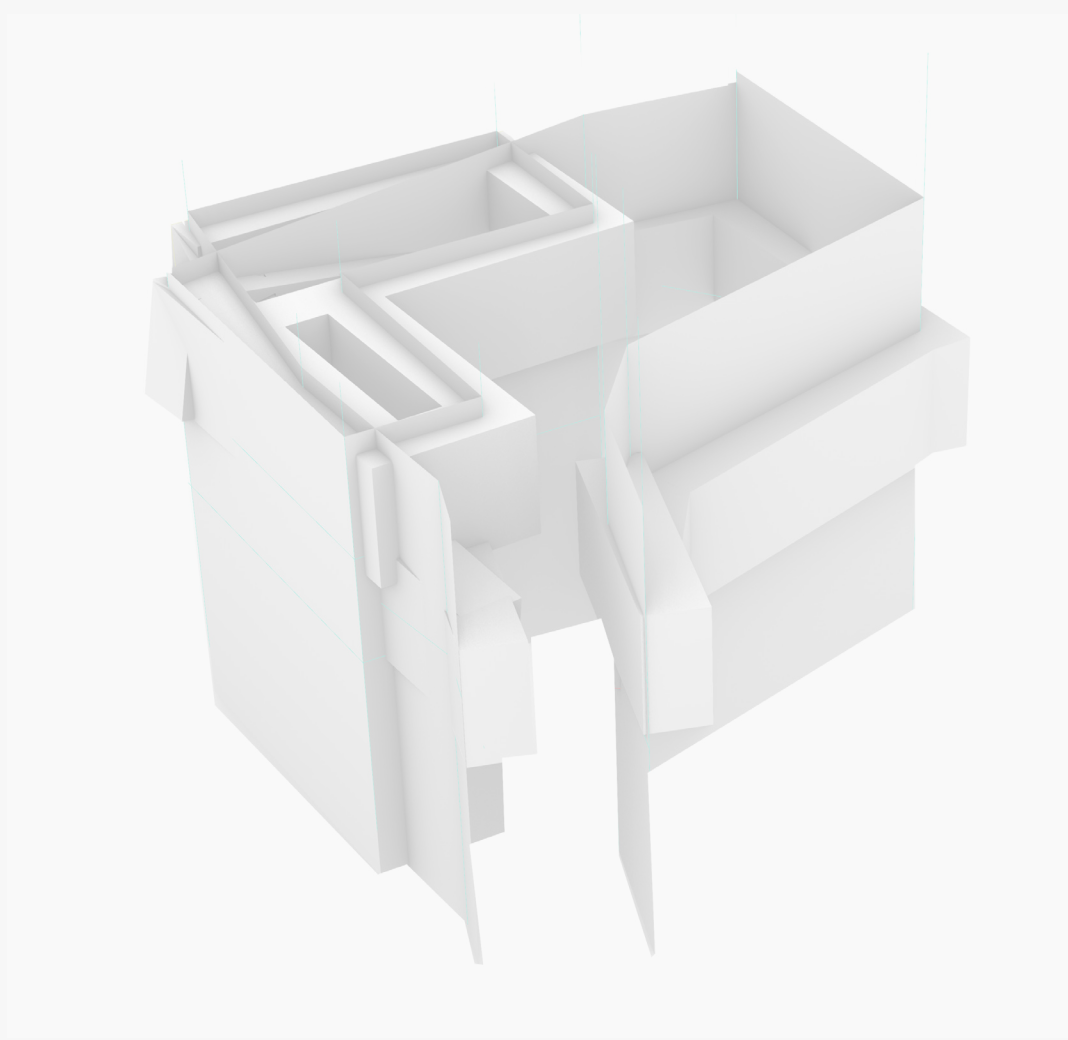
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Final Digital 3-D massing model



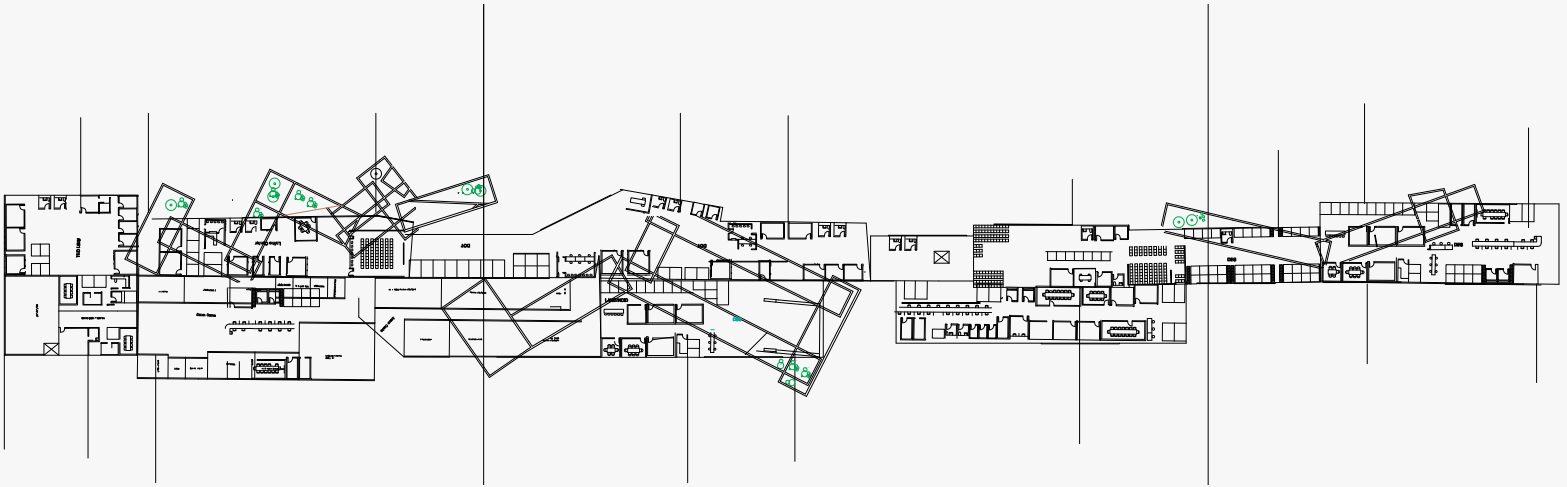
Dividing the structure on the segments and drawing the circulation line through it.

Making Section through the circulatory route to understand the building dynamics and make a full section unroll.

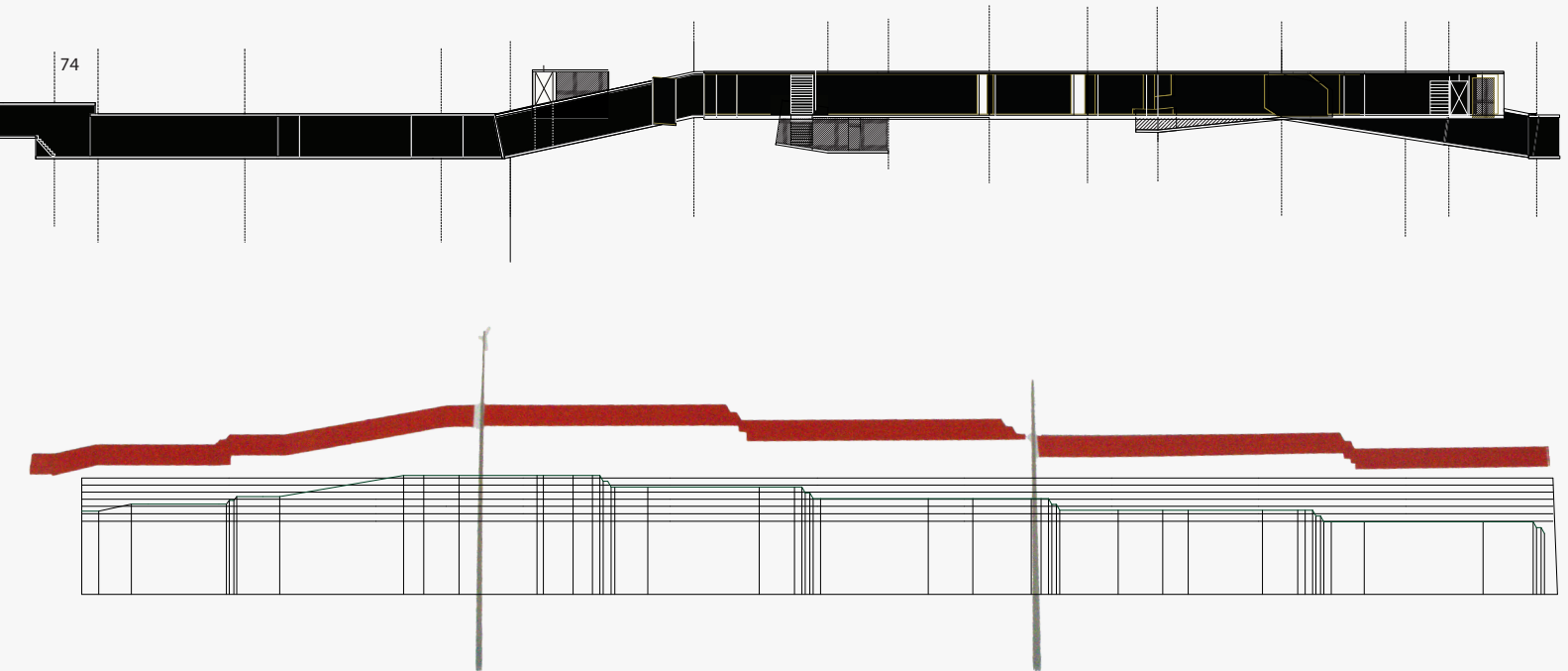


SECTION UNROLL

Unrolled Plan showing the building program through the circulatory route



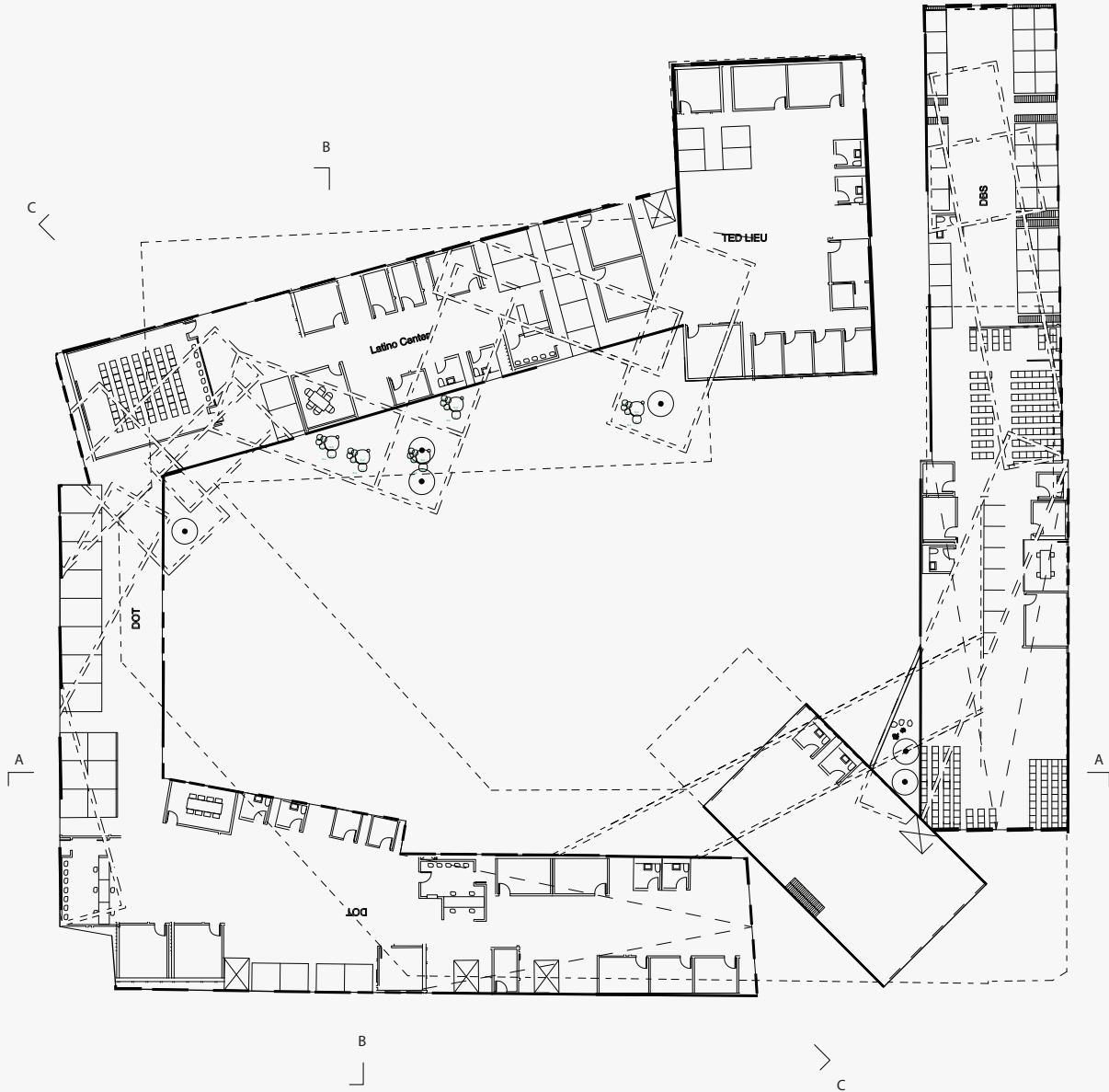
Unrolled Building Section showing the circulatory route throughout the building



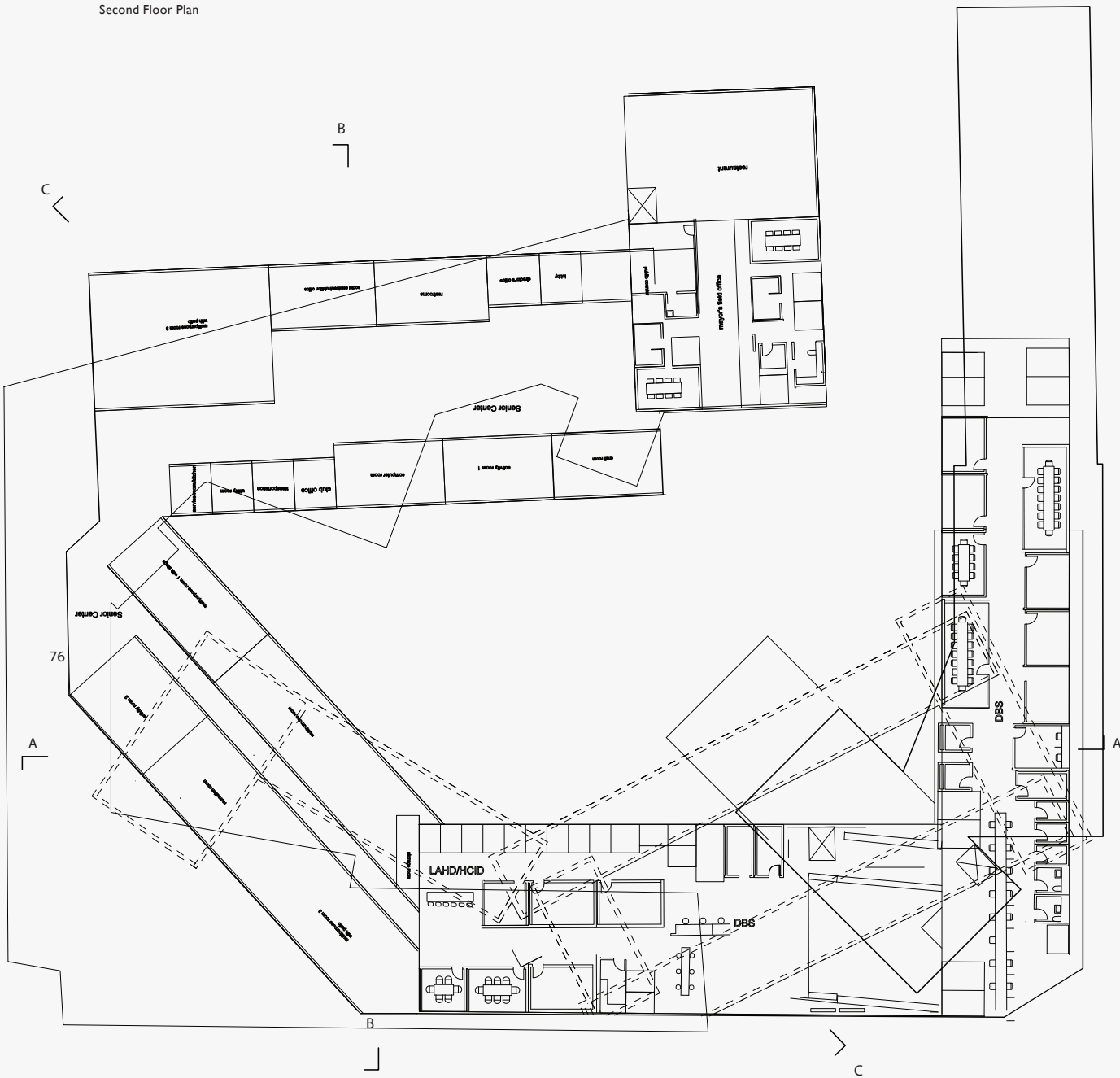
Red tape showing the segments of the paths through the building with ramps and hallways

SOME PLANS

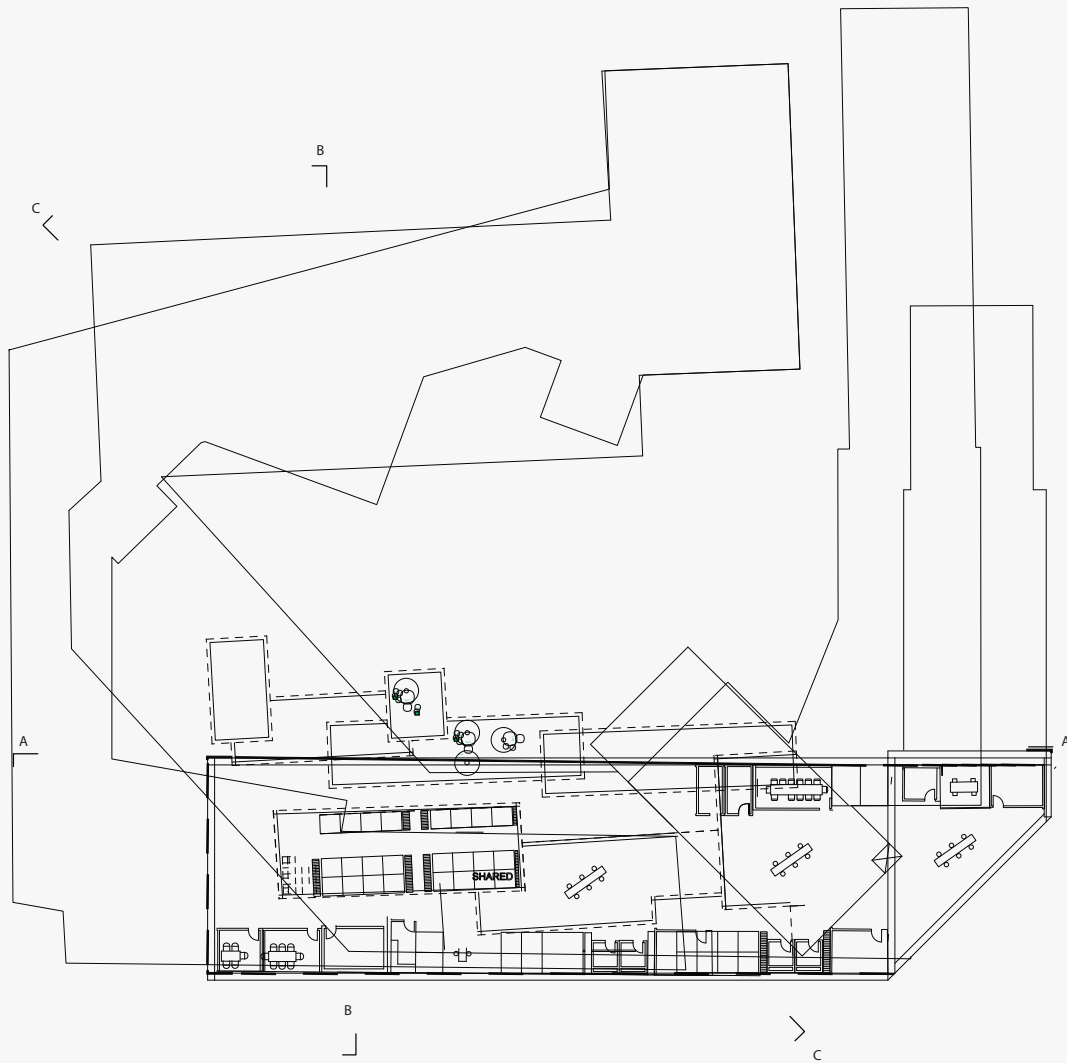
Ground Floor Plan



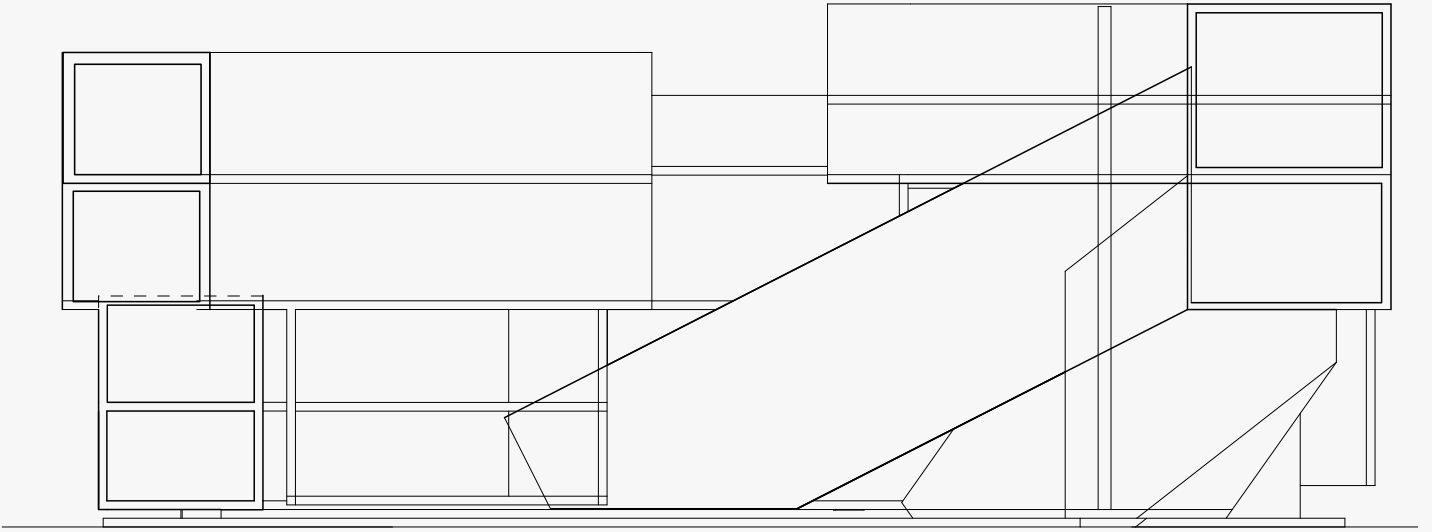
Second Floor Plan



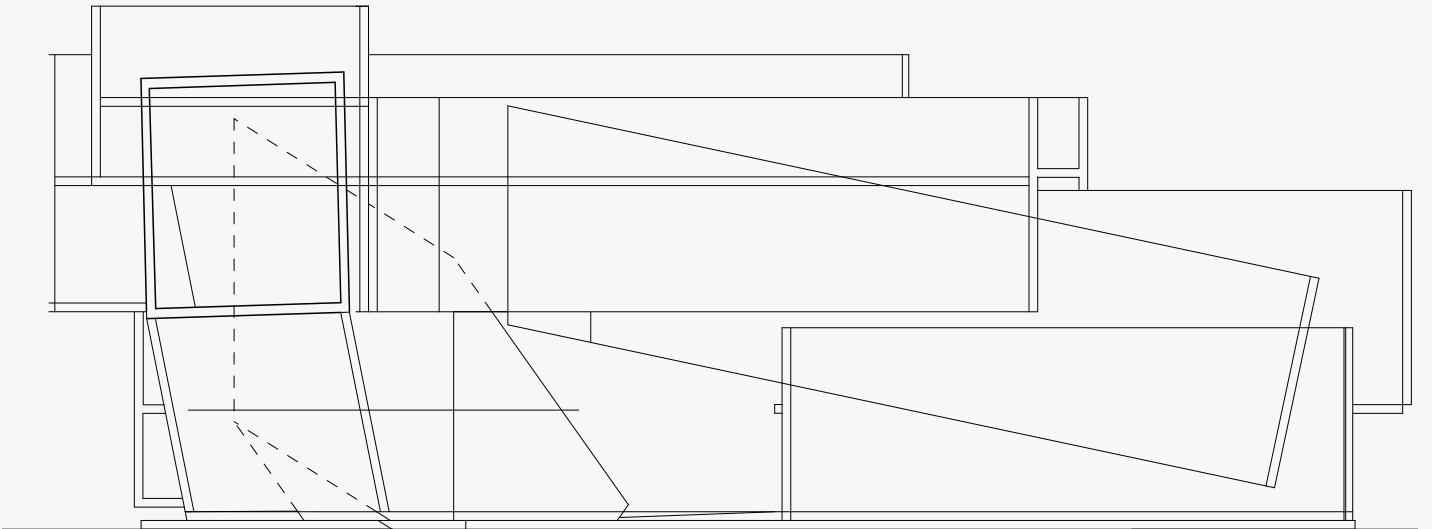
Third Floor Plan



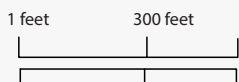
SECTIONS

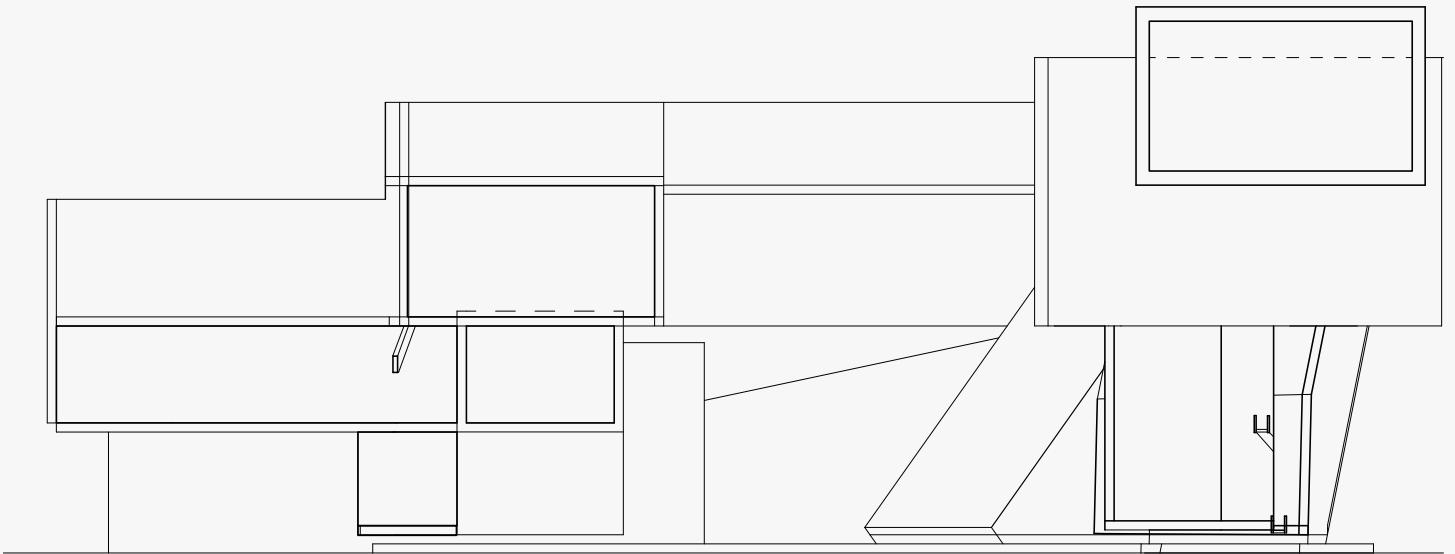
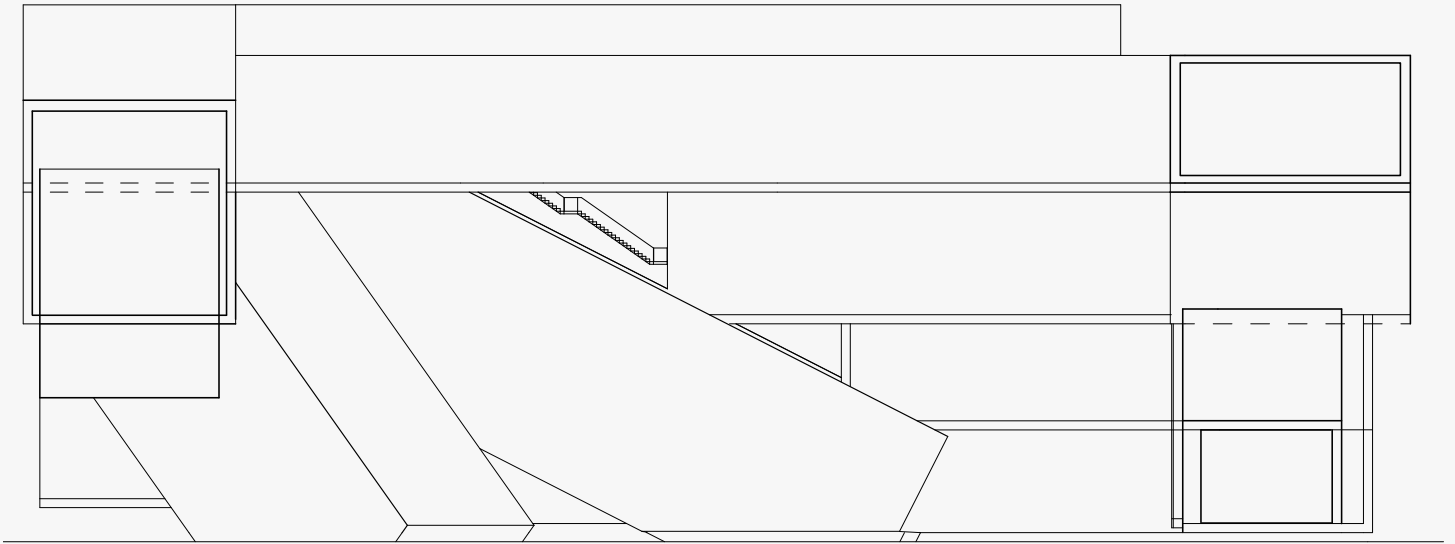


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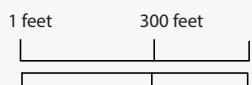


Sections through the courtyard



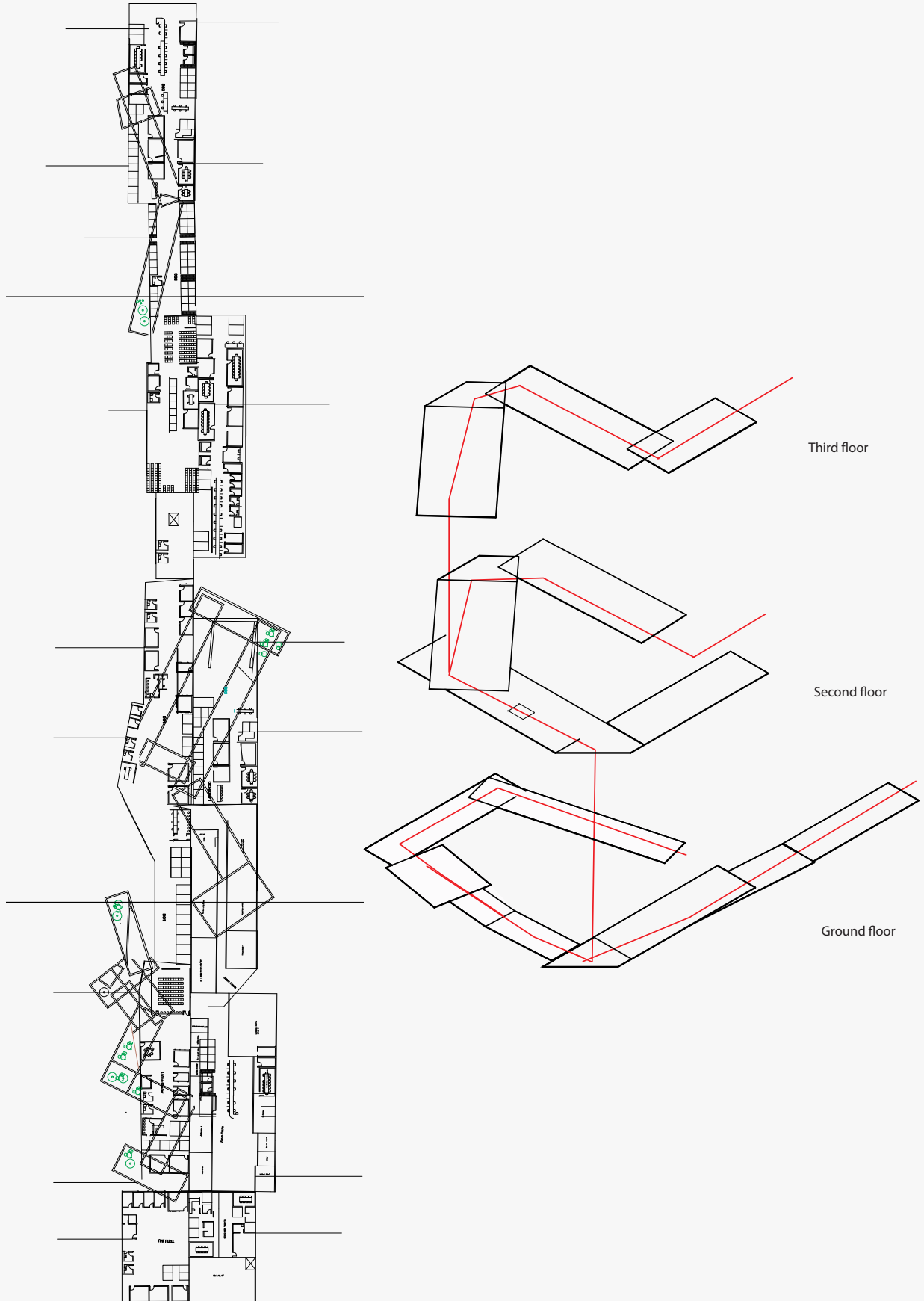


Sections through the ramps



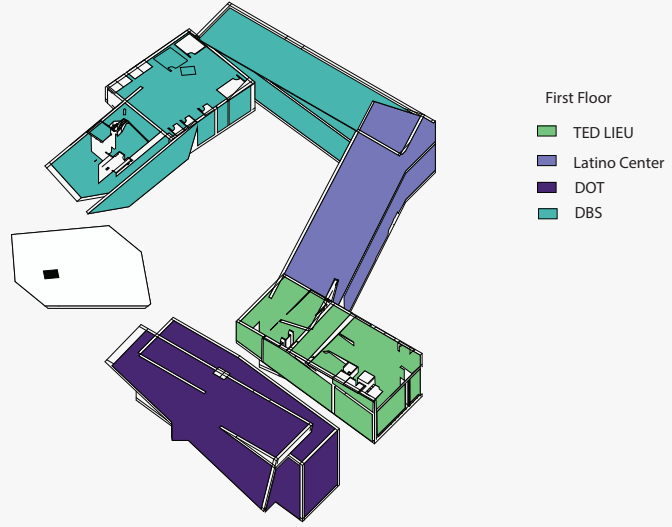
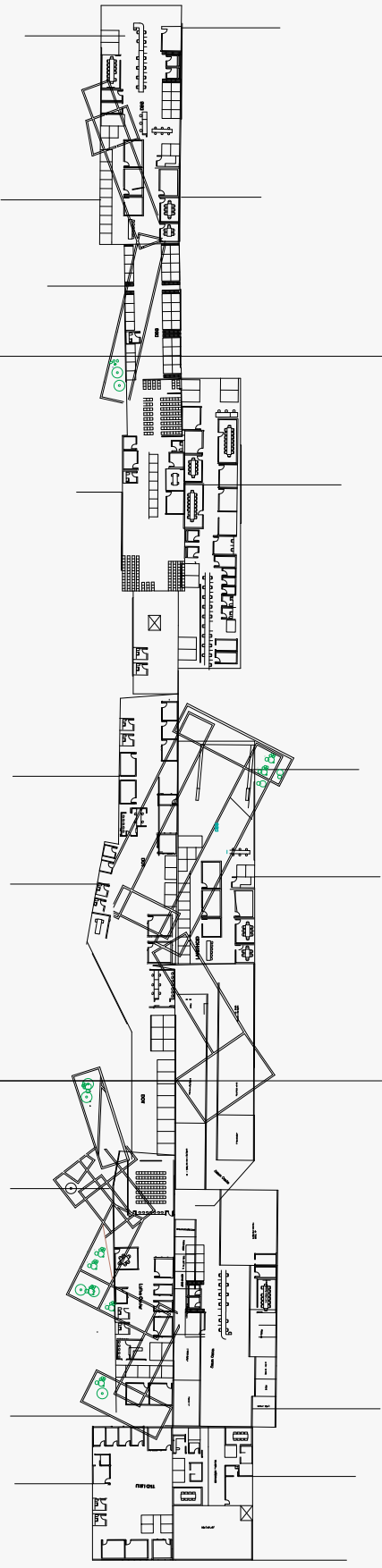
CIRCULATION DIAGRAM

Unrolled Plan showing the building program through the circulatory route

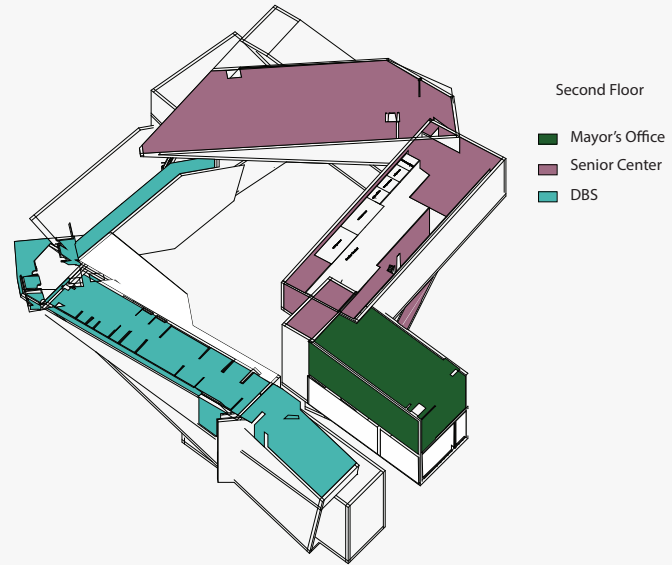


PROGRAM DIAGRAM

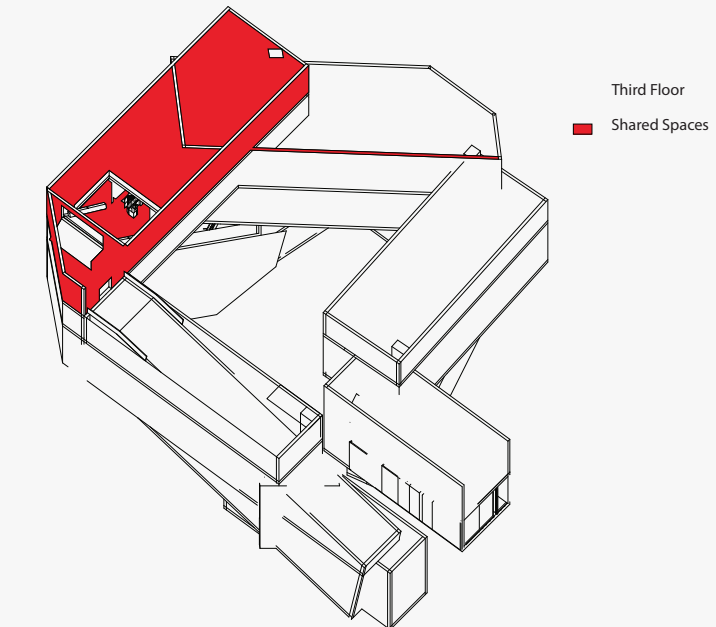
Unrolled Plan showing the building program through the circulatory route



- First Floor
- TED LIEU
 - Latino Center
 - DOT
 - DBS



- Second Floor
- Mayor's Office
 - Senior Center
 - DBS



- Third Floor
- Shared Spaces



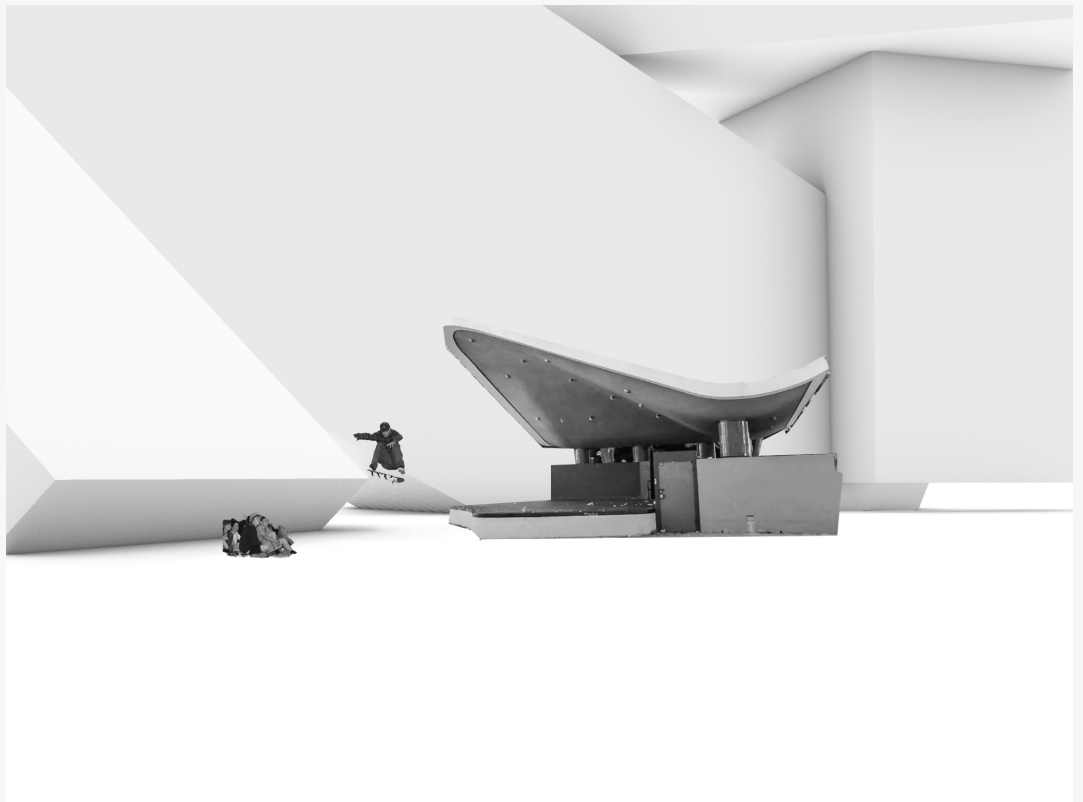
Sawtelle Area

A new 60,000sf building will take the place on the site of the existing West LA Civic Center. In addition to the offices, operated under different governmental sectors—city, county, federal—the civic center will absorb and consolidate public programs, including a local senior center that offers multi-purpose programming and the Sawtelle nursery outpost, connecting the site to the neighborhood's long standing Japanese American community.

These diverse programs will all be housed in one building yet will require independent organizations and conditions of access and circulation. At the center of this building will be a shared open courtyard providing both open air relief to the occupants and a public plaza for the Civic Center campus.

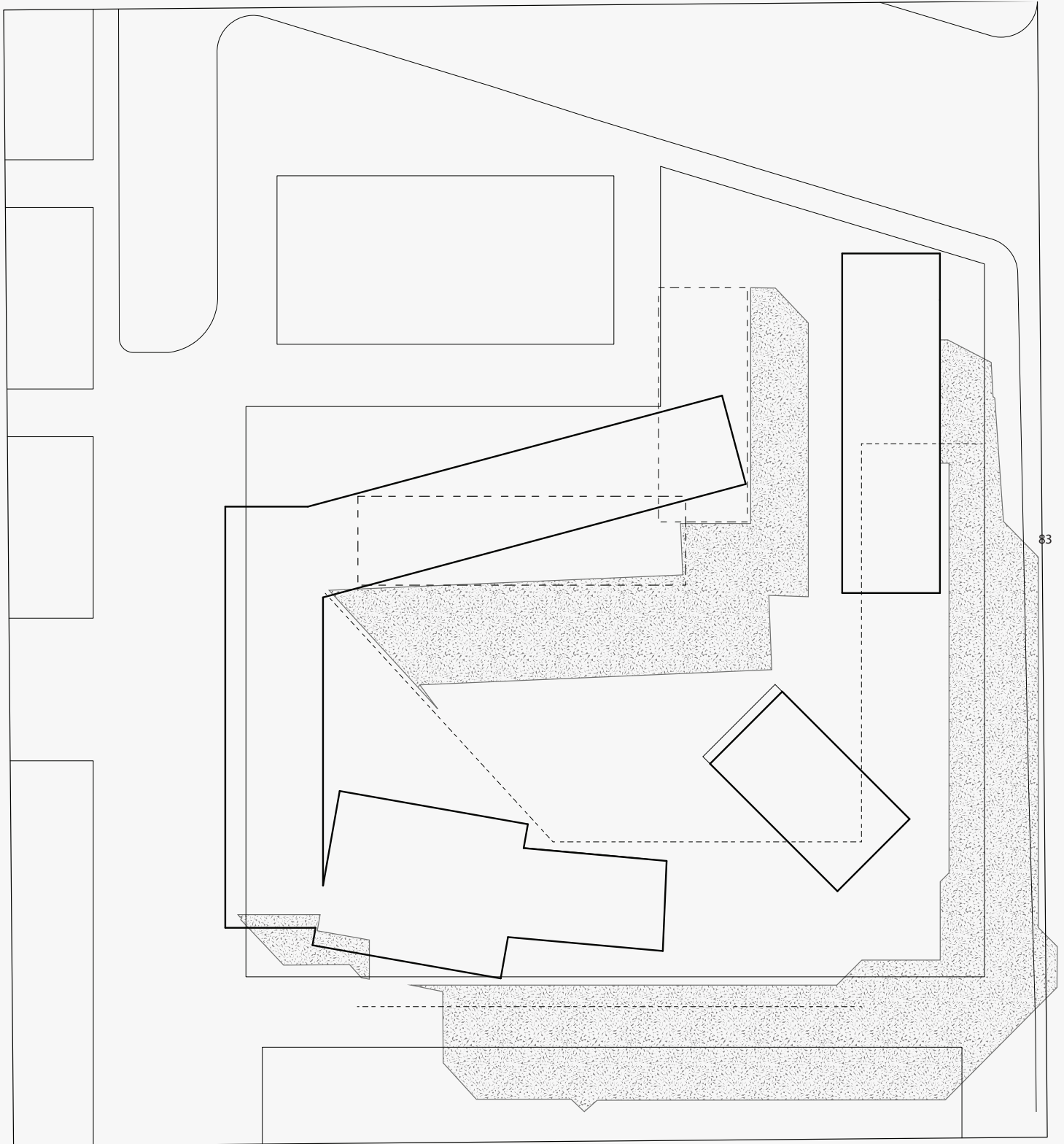
Currently, the civic plaza offers diverse functions as it services multiple communities. Daily, the historic plaza comes to life with skaters who gather from all around the city to skate the internationally renowned course.

Weekly, the West LA Farmers Market takes over the open space to offer local organic produce from surrounding farms. Annually, the Oaxaca Tejate Festival and other cultural events stage musical performances and large gatherings around the bandshell. Students will consider how their new building continues to promote and engage these communities, offering spaces for gathering, parade, and performance.



THE SITE DIAGRAMS

Site and Plan with Shadows

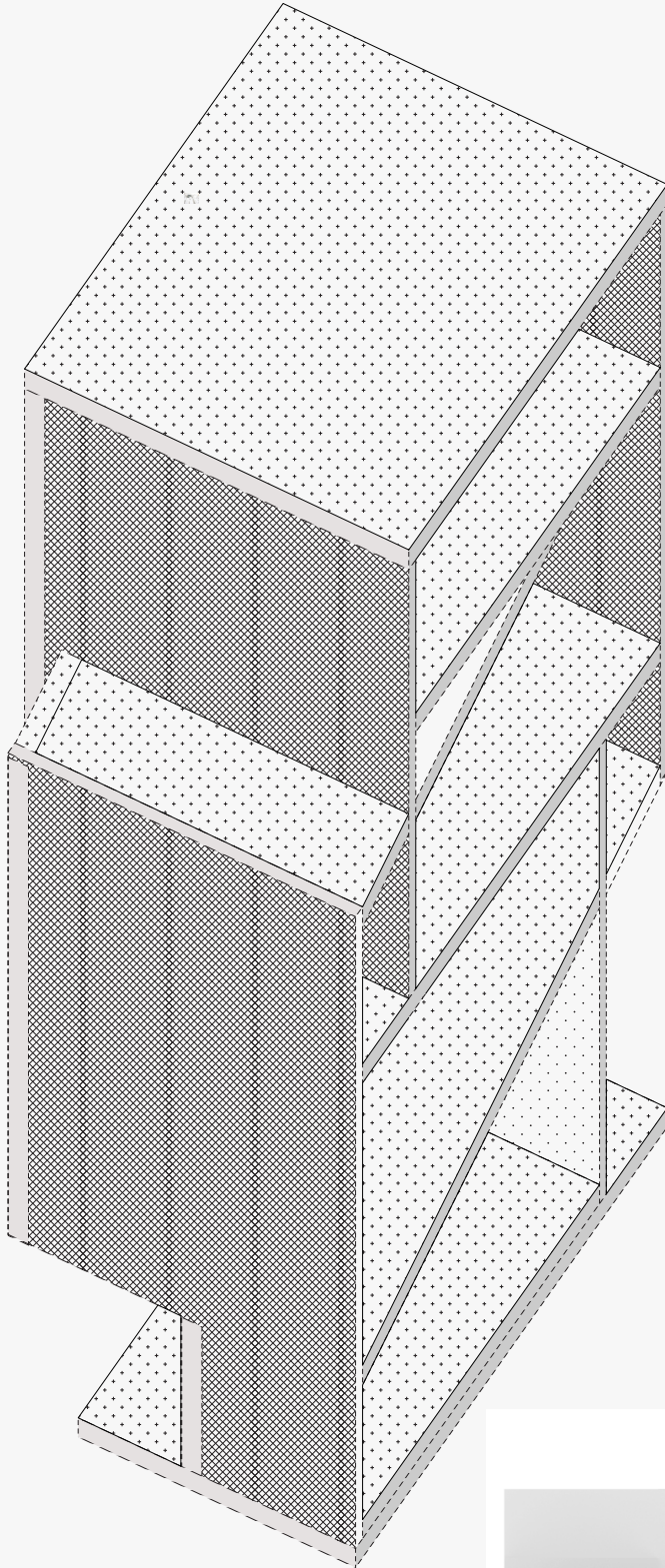


Building Form on Site

84



BUILDING CHUNK DIAGRAM



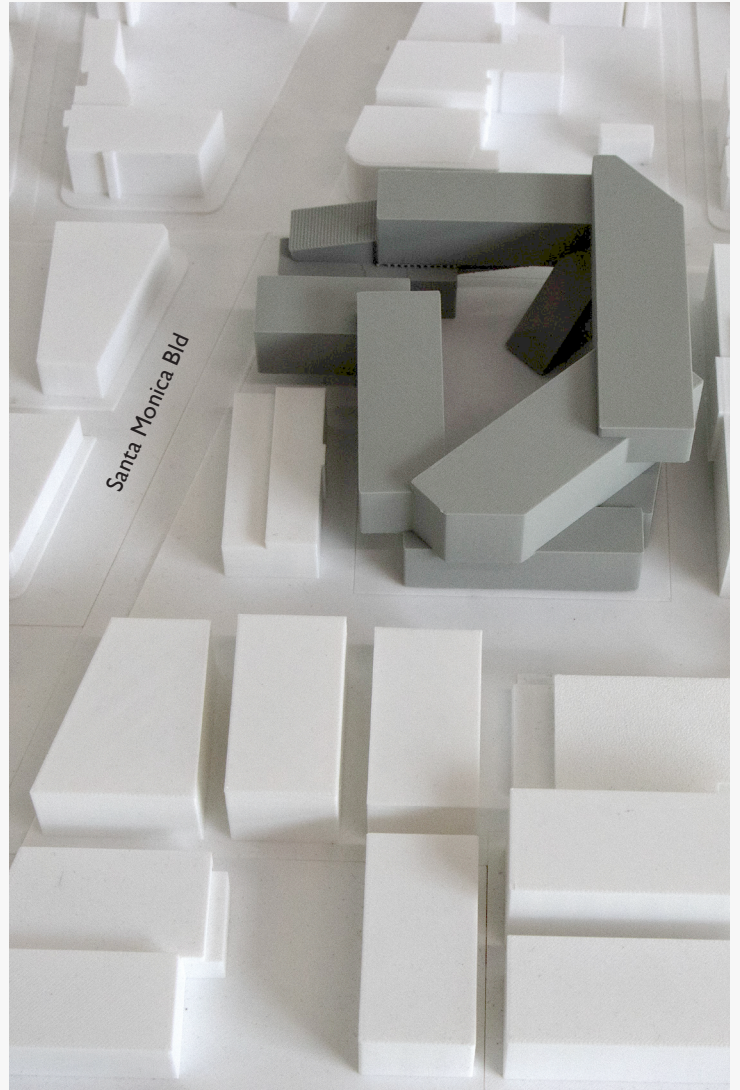
Making The oblique drawing of the building Chunk Model.

Choosing the intersection of 3 boxes with sloped surfaces for a representative chunk model



THE SMALLER SCALE MODEL

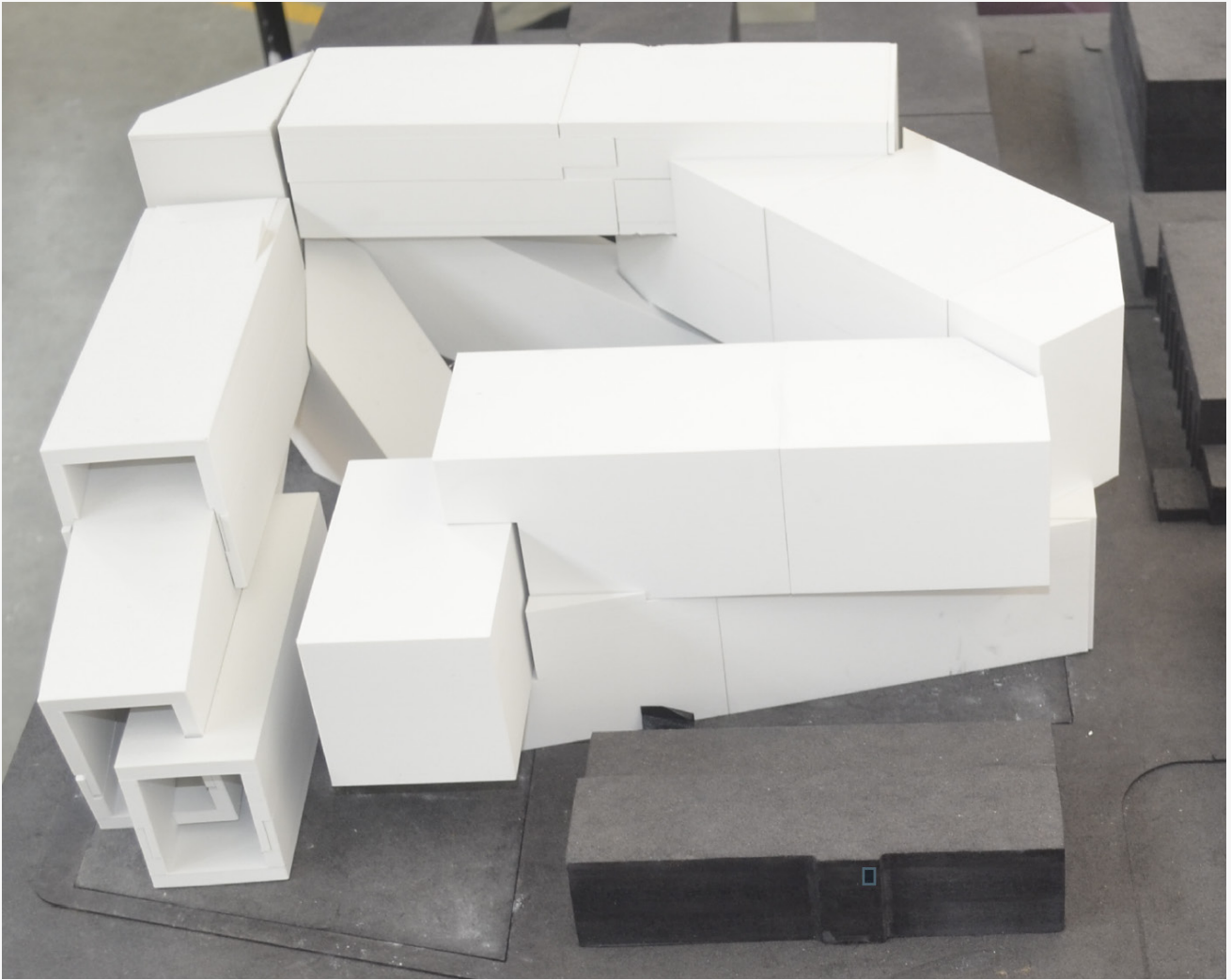
86



1:800 scale building model on site

THE MODEL

Perspective view

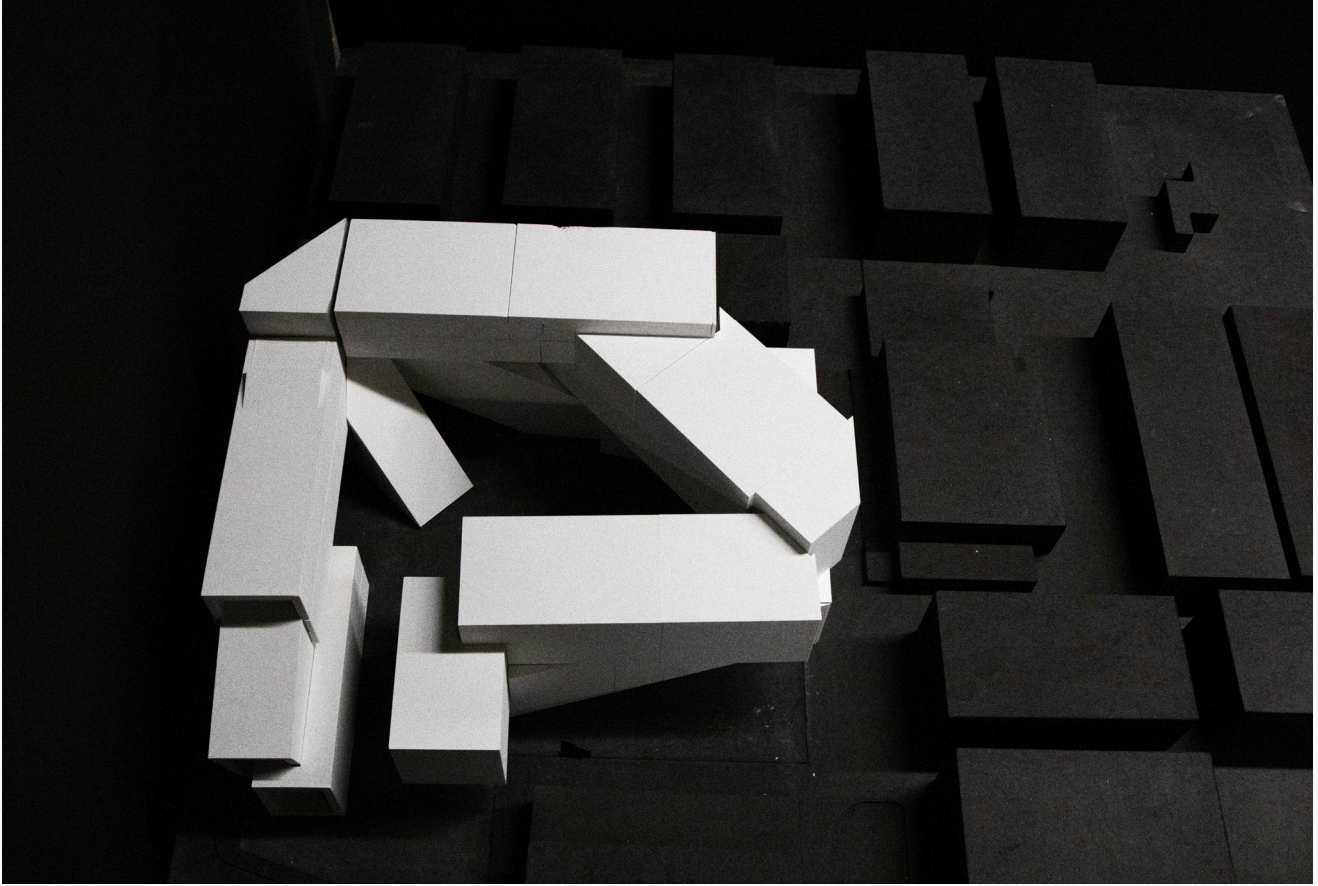


87

Front view

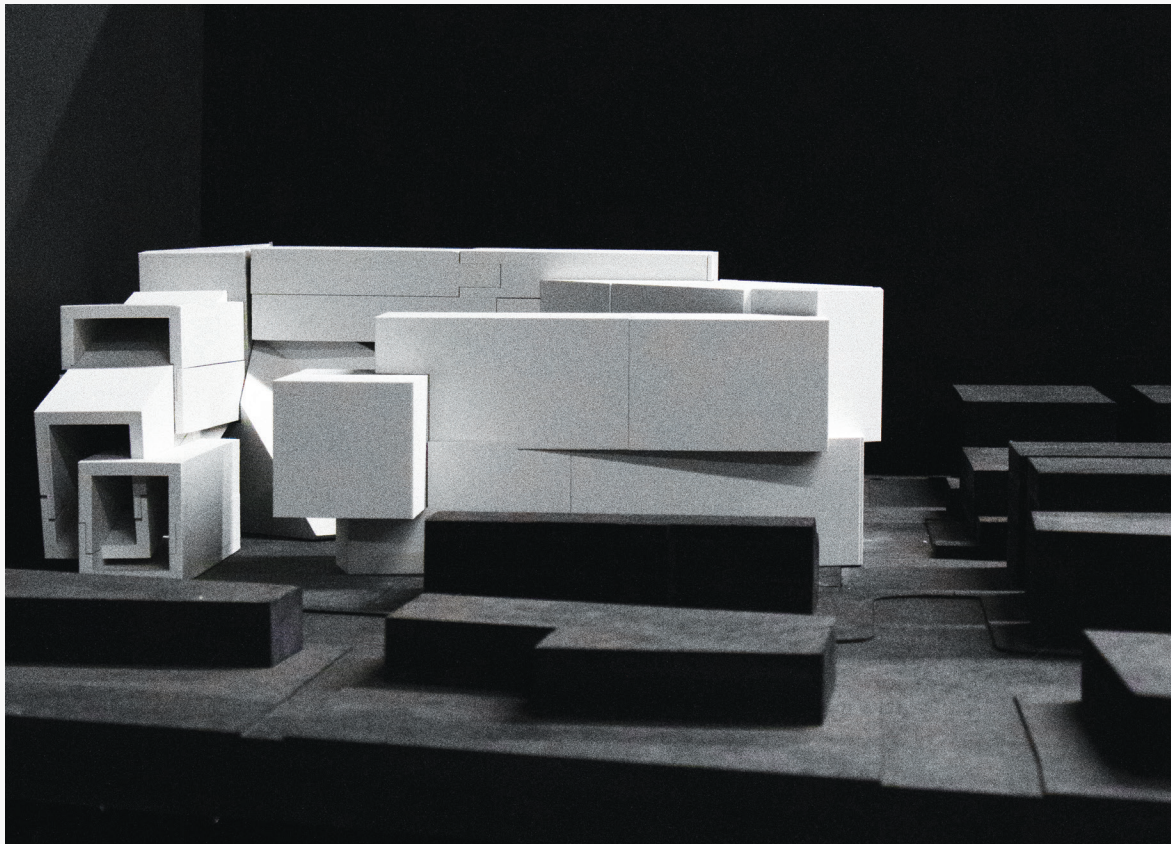


Aerial view



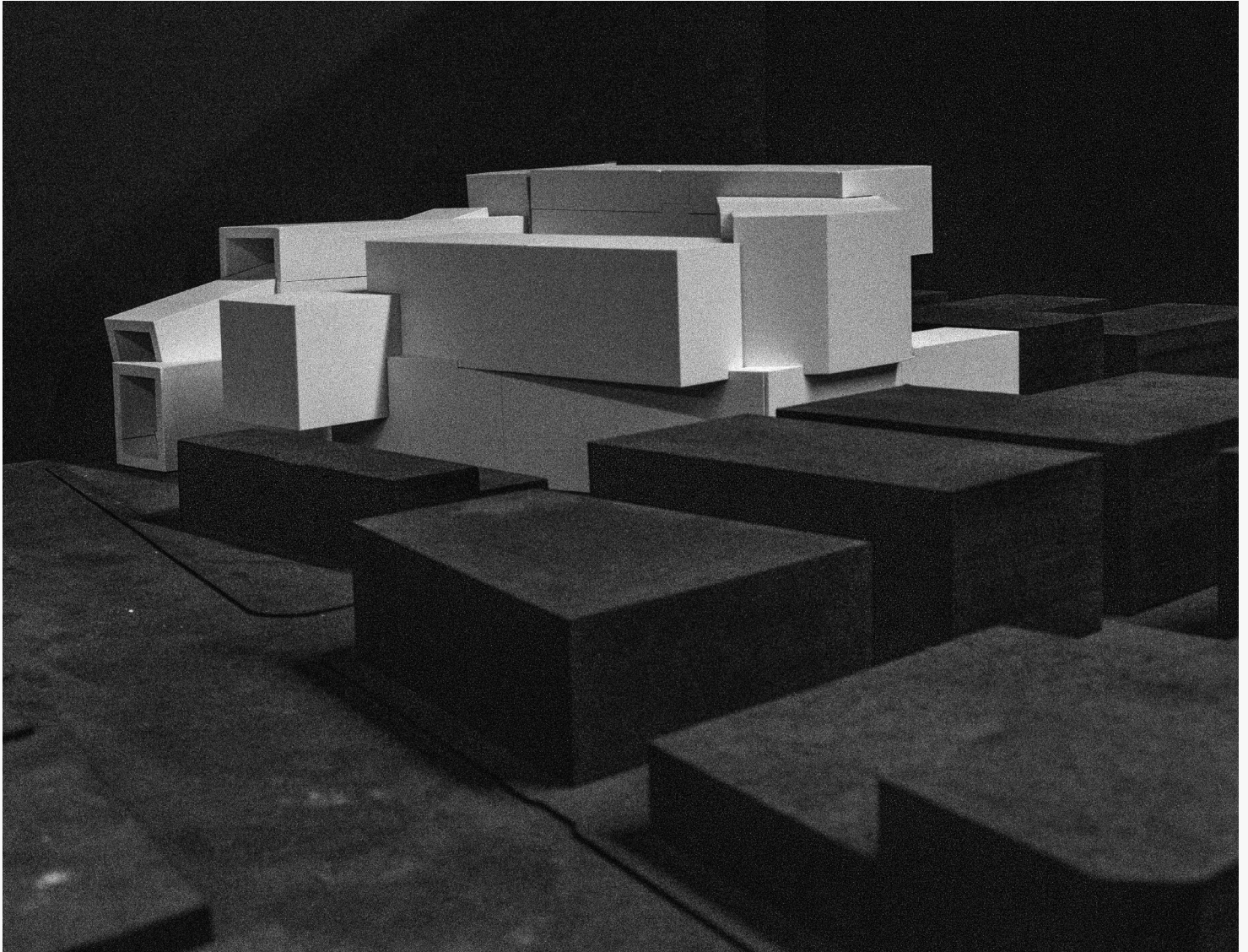
88

Front view



1:200 scale building model on site

SE elevation view

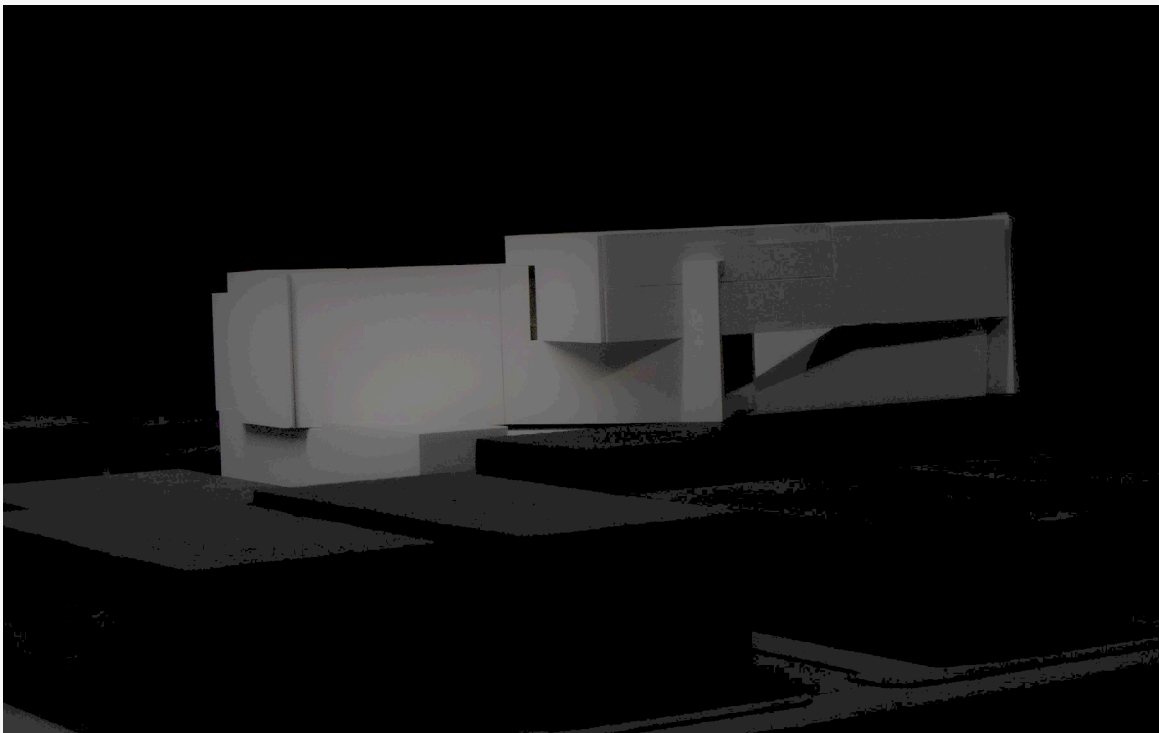


Side view



90

Back view



1:200 scale building model on site

VISUAL STUDIES II

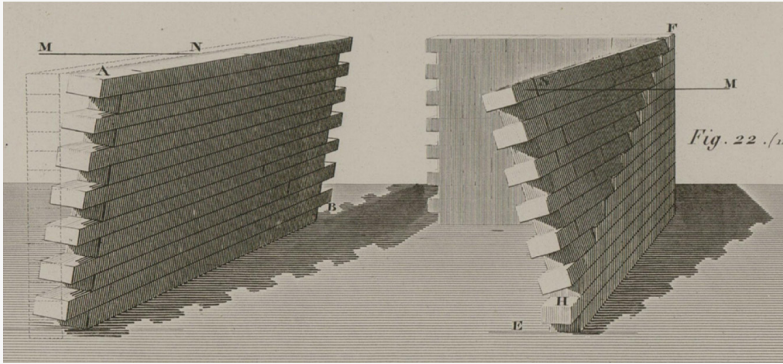
VS 410I: Course Description

Visual Studies II forms the continuation of VS I, expanding on developing representational tools and material production.

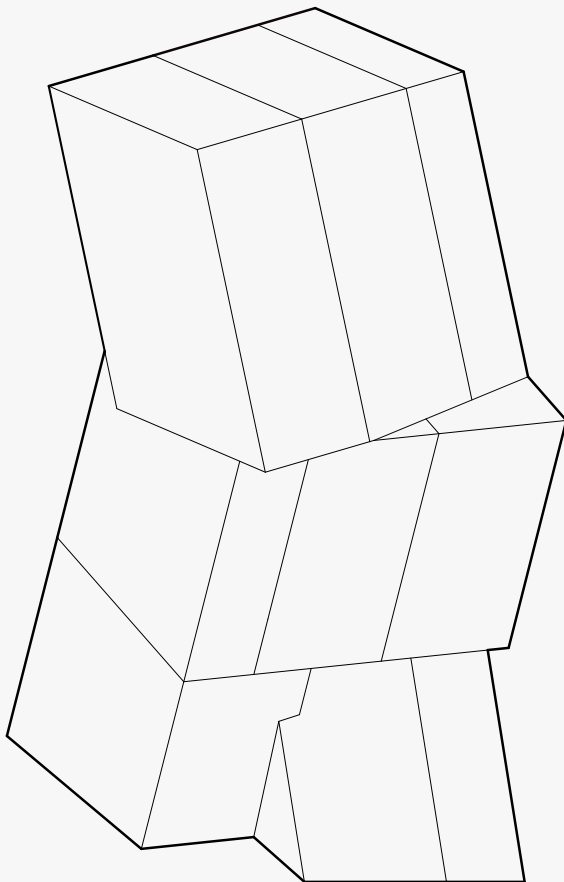
This course continues the close exchange between digital and material techniques established in the first-semester Visual Studies course. It expands on the use of representational tools to explore formal legibility and geometric precision through techniques of projection, notation, and scripting. The course adds to standard architectural toolsets developed in the first semester - line drawing and rendering - material techniques including mold making and plaster casting. The assignments and lectures of the course focus on the "brick" or polyhedron in these exercises as both an abstract device and material artifact.

Visual Studies II: Andrew Zago, Matthew Au.

0-1 STACKING BLOCKS EXERCISE



92



Modeling a stone block 44 cm wide x 80 cm high x 40 cm deep and a half block 22 cm wide x 80 cm high x 40 cm deep and repeating these units to form a wall in a running bond three blocks wide x 3 blocks high x 1 block deep.

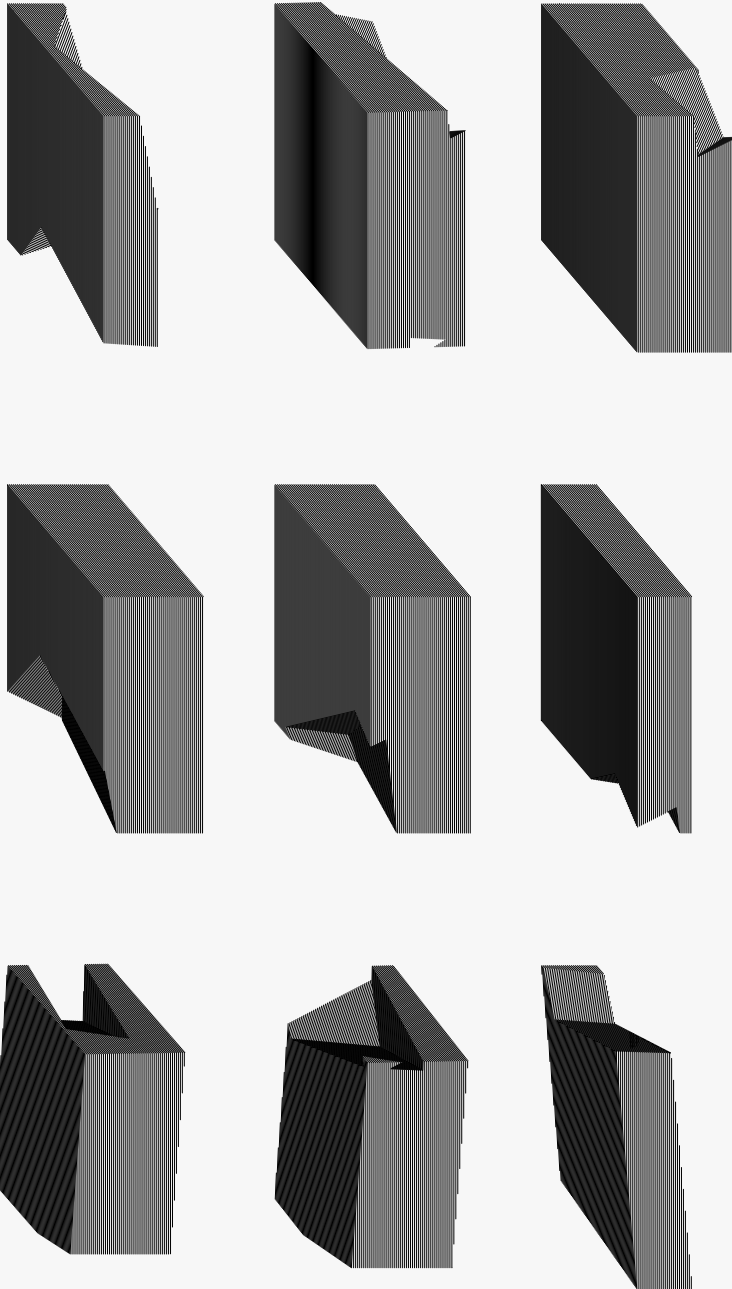
Creating the folding line on the front surface to run from the left edge of the wall to the right edge of the wall.

Rotating the following blocks along with the top half of the plane:

- Those blocks whose front face lies wholly within the top half of the plane
- Those blocks whose front face lies more than 50% within the top half of the plane.

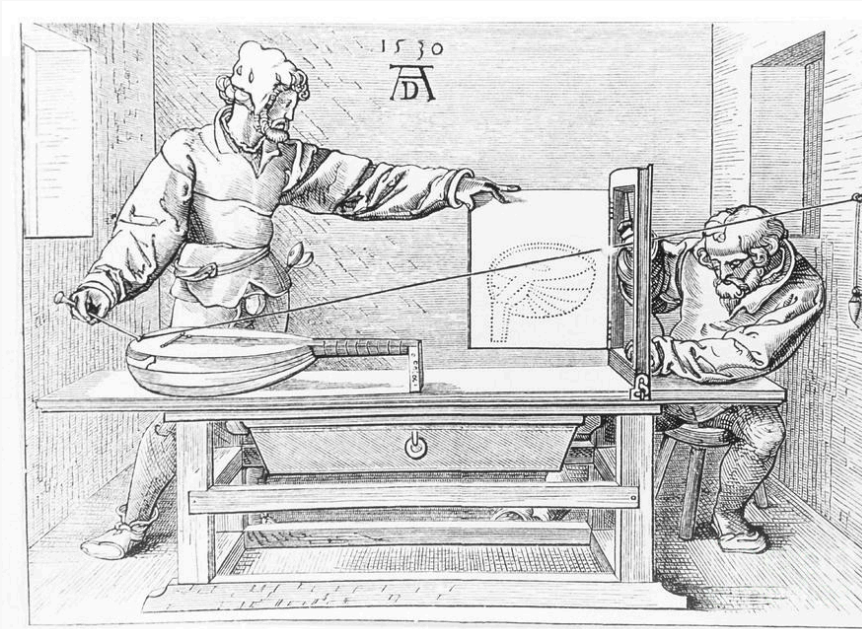
Making the Brick Wall drawing

CONTOURED BLOCKS



Breaking down the Brick Wall into individual pieces. Arraying the blocks in a vertical grid. Using cage edit function shearing the entire arrangement into two elevation oblique. Aligning them symmetrically in the in the rows and making an oblique projection. Contouring the blocks using line weight and making an individual pieces drawing.

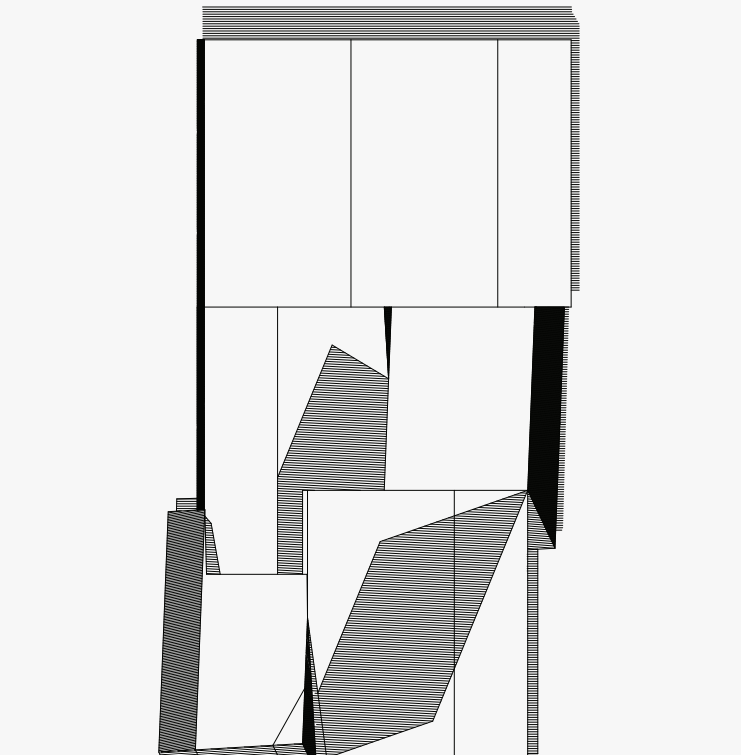
SHADOWS PROJECTION



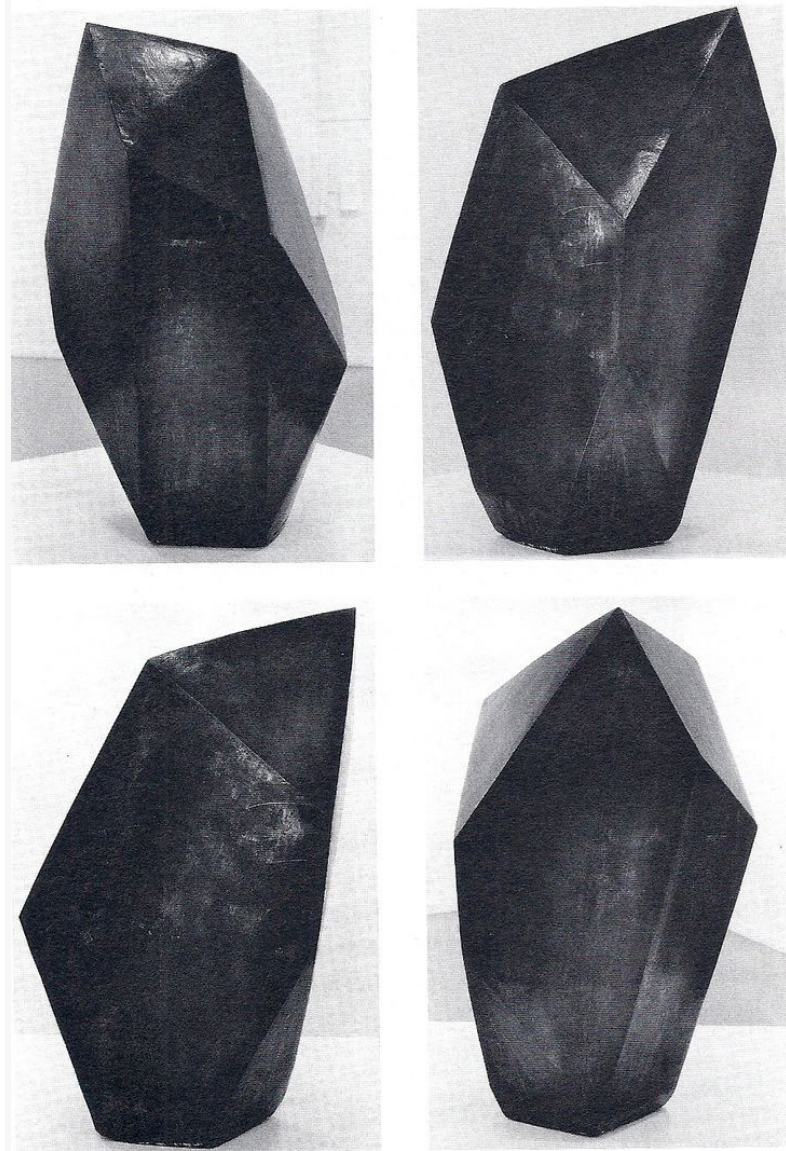
Albrecht Durer. Historical engraving of Albrecht Durer, at left (1471-1528), German artist, measuring the perspective of a musical instrument.

Using the projections 3D tools modeling the shadows for each block.
Casting the shadows on the surface and intersecting them with other surfaces.
Contouring the shadows.

Making the Brick Wall Shadows drawing



0-2 POLYHEDRON EXERCISE



Alberto Giacometti Cube
example of Twelve-sided polyhedron

Using the projections 3D tools modeling
the shadows for each block.
Casting the shadows on the surface and
intersecting them with other surfaces.
Contouring the shadows.

Making the Brick Wal Shadows drawing

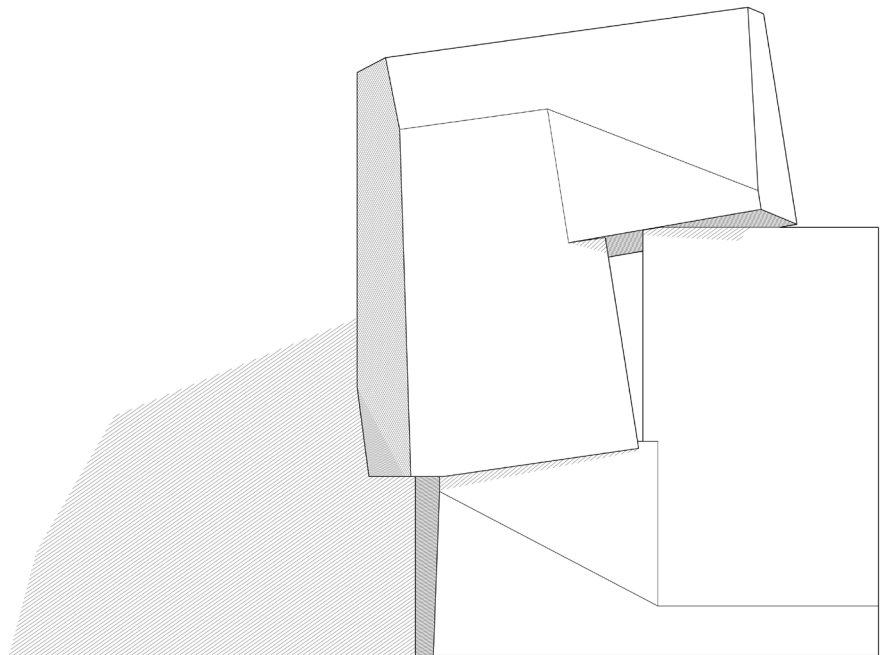


Jacques-Henri Lartigue
Grand Prix of the A.C.F. - a Delage, 1912

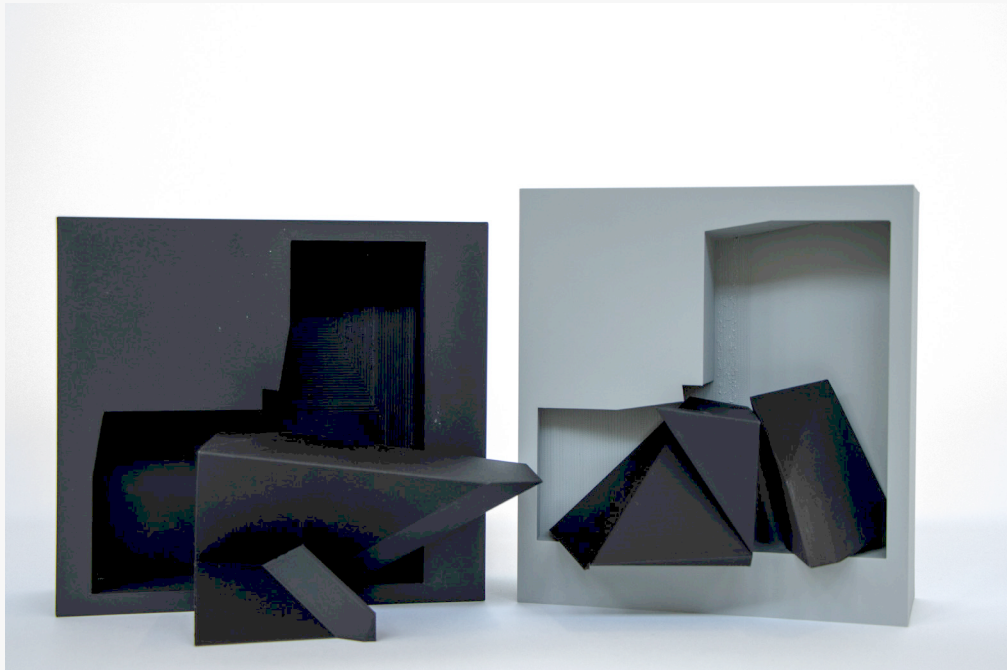
96

Using the projections 3D tools modeling complex Grasshopper script making the programmed shape for the Polyhedron. Casting the shadows on the surface and intersecting them with other surfaces using the perspective studies knowledge. Contouring the shadows.

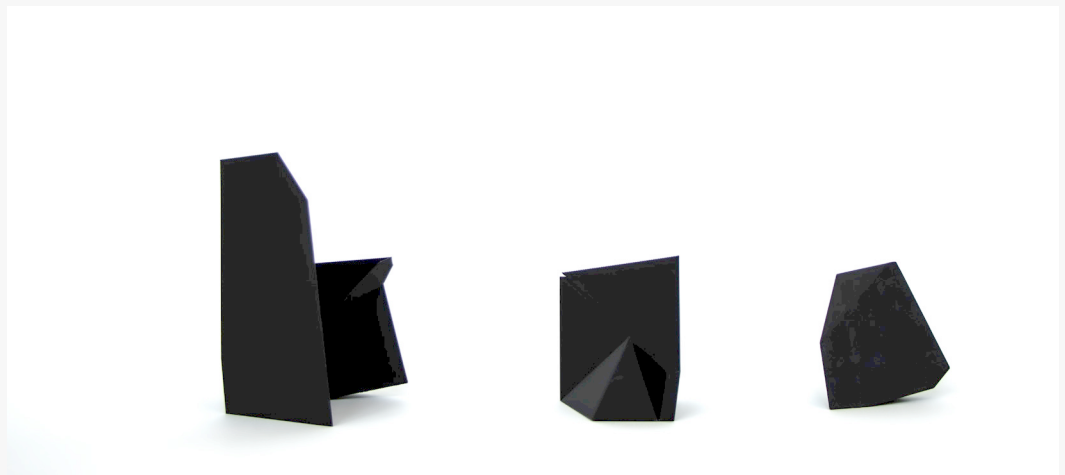
Making the Polyhedron line drawing



CASTING PROCESS



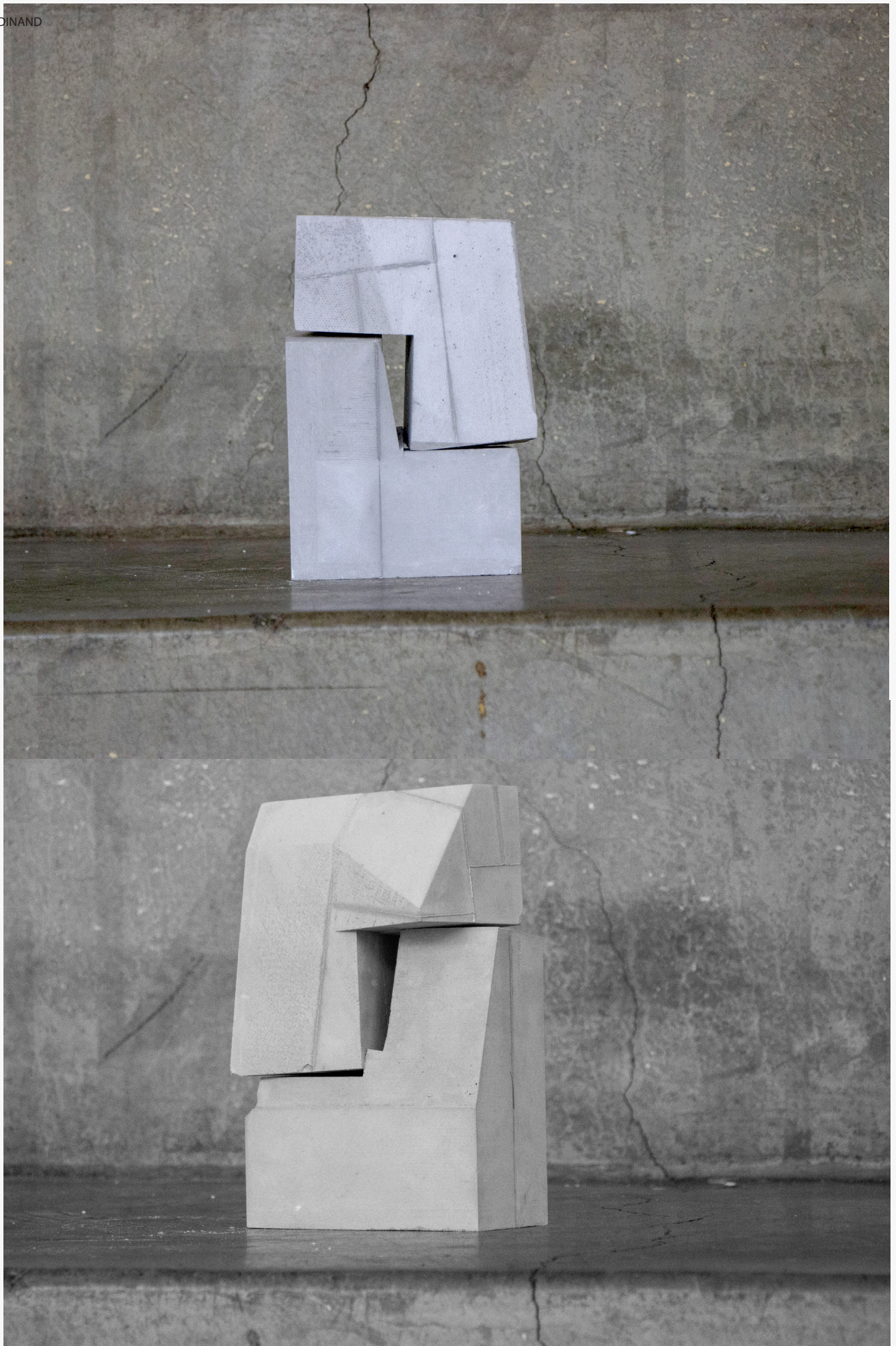
Molds for polyhedron and shadows casting



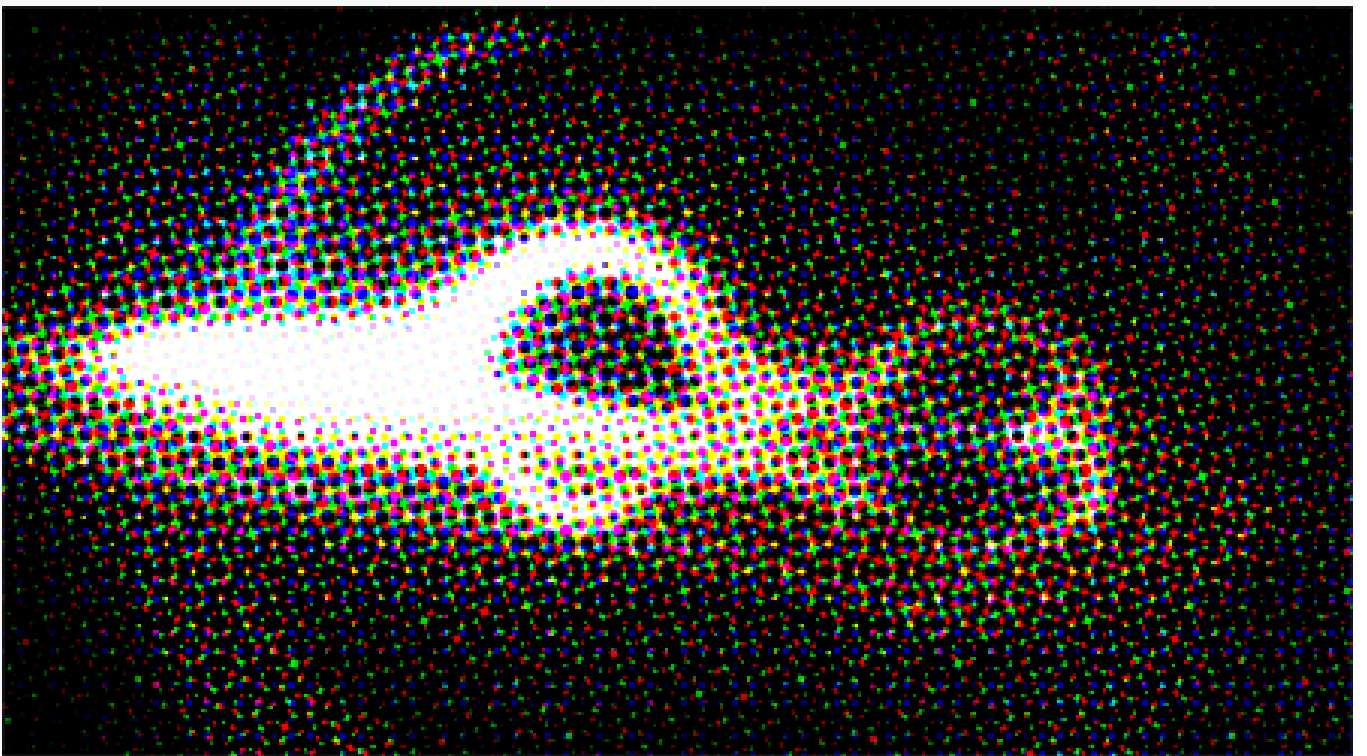
Using the projections 3D modeling making molds for casting the Polyhedron. 3D Printing the shadows and sticking them into molds as a negative form for production the final model.

Casting the Polyhedron using hydrocal

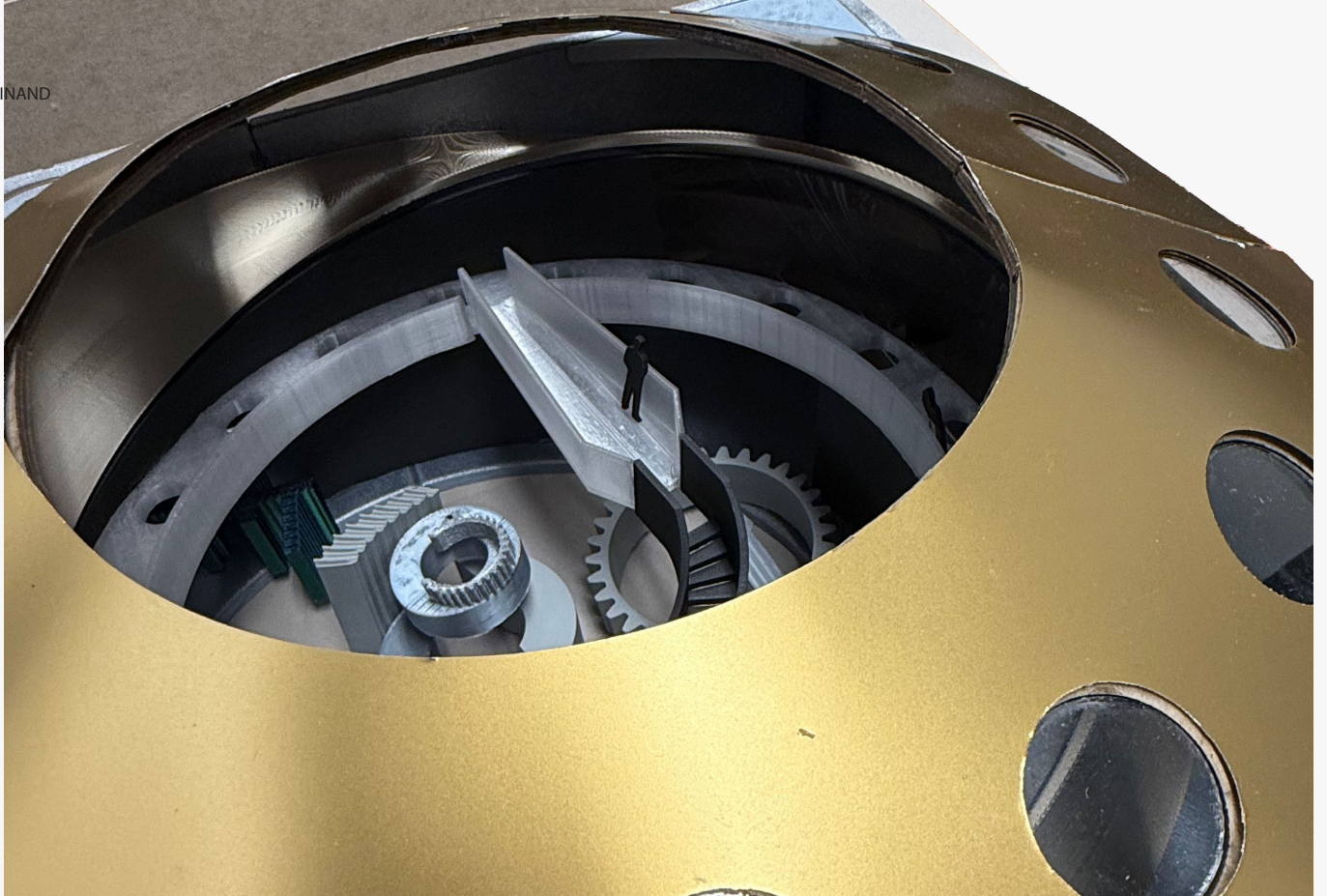
Making the Photos of Molds and Polyheron



VANGUARD WATCH CULTURE CENTER



FILIPP FERDINAND



100



THE WATCH CULTURE CENTER

ENGAGE THE TIME

VANGUART WATCH CULTURE CENTER



WELCOME TO THE TIME DRIFT

When the atmosphere of innovations and exclusivity of mechanics as well as the materiality builds the narrative around the space aesthetics.

101

VANGUART Watch Culture Center is a unique space for people to explore the tradition of the Swiss watchmaking, try to assemble the watches, discover the hidden secrets of high end horology and perceive the time differently

BRAND

- *Founded in 2017 by a group of watch industry professional designers and engineers*
- *Swiss Manufacturer develops and creates highly complicated watches that introduce new technical and experiential ways to engage with time*



TARGET AUDIENCE

SEGMENT

High-net-worth collectors of independent /niche high-end watches

Connoisseurs/ horology enthusiasts

Affluent individuals seeking status via rarity/exclusivity

AGE, GENDER, GEOGRAPHY

35-60 years old

Skews male

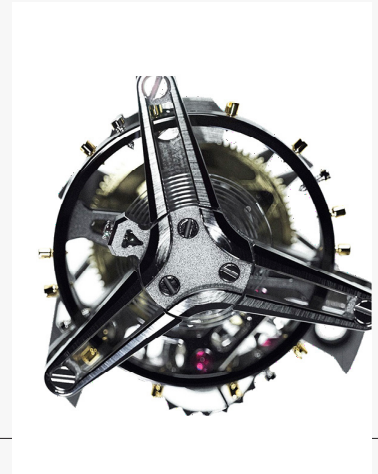
Ultra High Net Worth Individuals

USA (NY, Miami, LA), Middle East(Dubai, Saudi Arabia, Qatar), Europe (UK, France),Asia (Hong Kong, Singapore)

DESIGN STATEMENT

Spending time with like minded individuals at Vanguard flagship store would elevate the user experience from the watches and watchmaking process to the different dimension, expand the knowledge about the craftsmanship and make an adventurous journey into the watchmaking world.

My aim is to create a space where you can embrace the spirit of high end niche craftsmanship and product designing and feeling, engage inside the watch.
104
Welcome to Vanguard Flagship Store and Culture Center!



BRAND ESSENCE

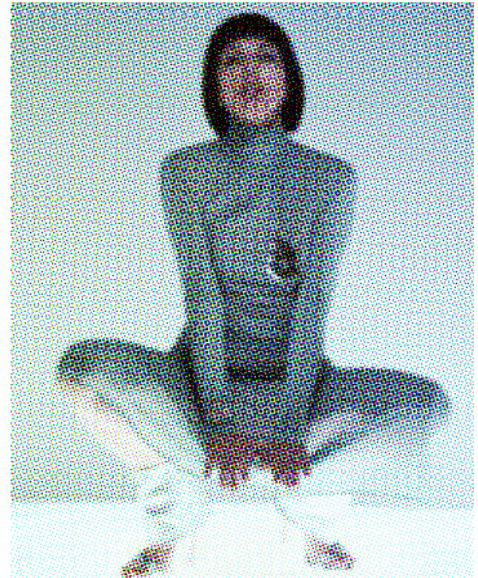
- Radical design language
- Serious mechanical credibility
- Art and engineering fusion



BRAND IMAGE

- Neo-High-Horology Innovation
- Independent & Limited
- Narrative of the Future Meeting Tradition

106



BRAND DNA

- Precious metals
- Architectural shapes
- Bold color line



BRAND PROMISE

- Immersive time reading
- Uncompromised mechanical innovation

108

- Architecture on the Wrist
-

CUSTOMERS TAKE AWAY

I WANT PEOPLE TO FEEL ENTHUSIASTIC AND INTELLECTUALLY CURIOUS

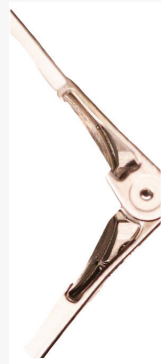
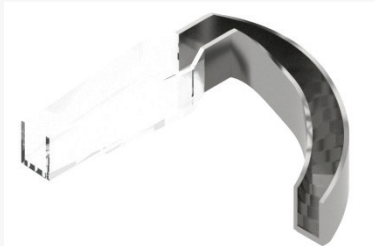
by exploring the watchmaking process, engaging in interactive installations , observing the interior details



DESIGN CHOICES

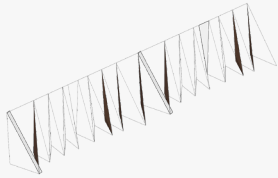


design inspired by the watches hull



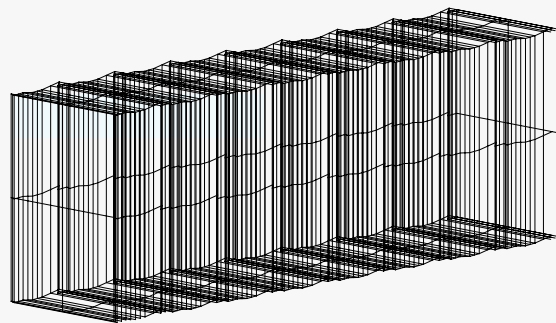
design inspired by the watches hand shape shape

DESIGN CHOICES



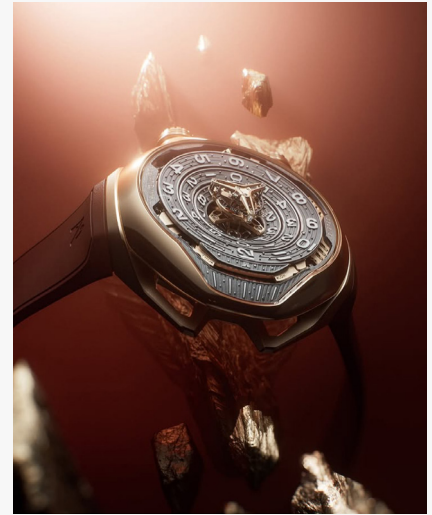
111

the geometry of the logo inspired the inside interior items and facade

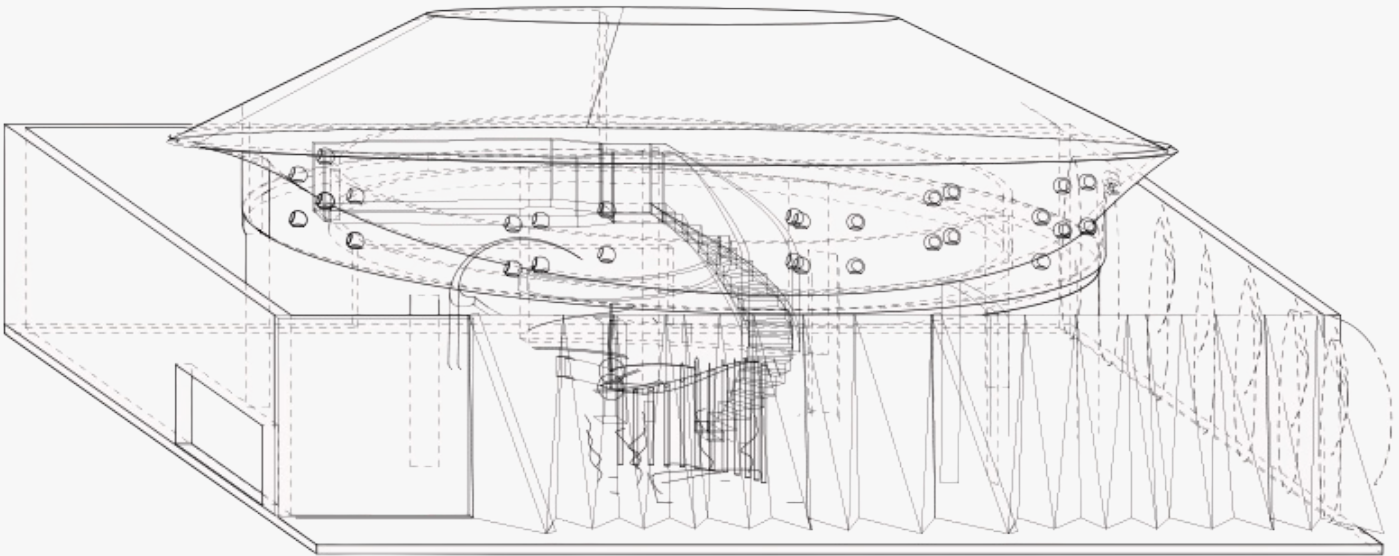


DESIGN CHOICES

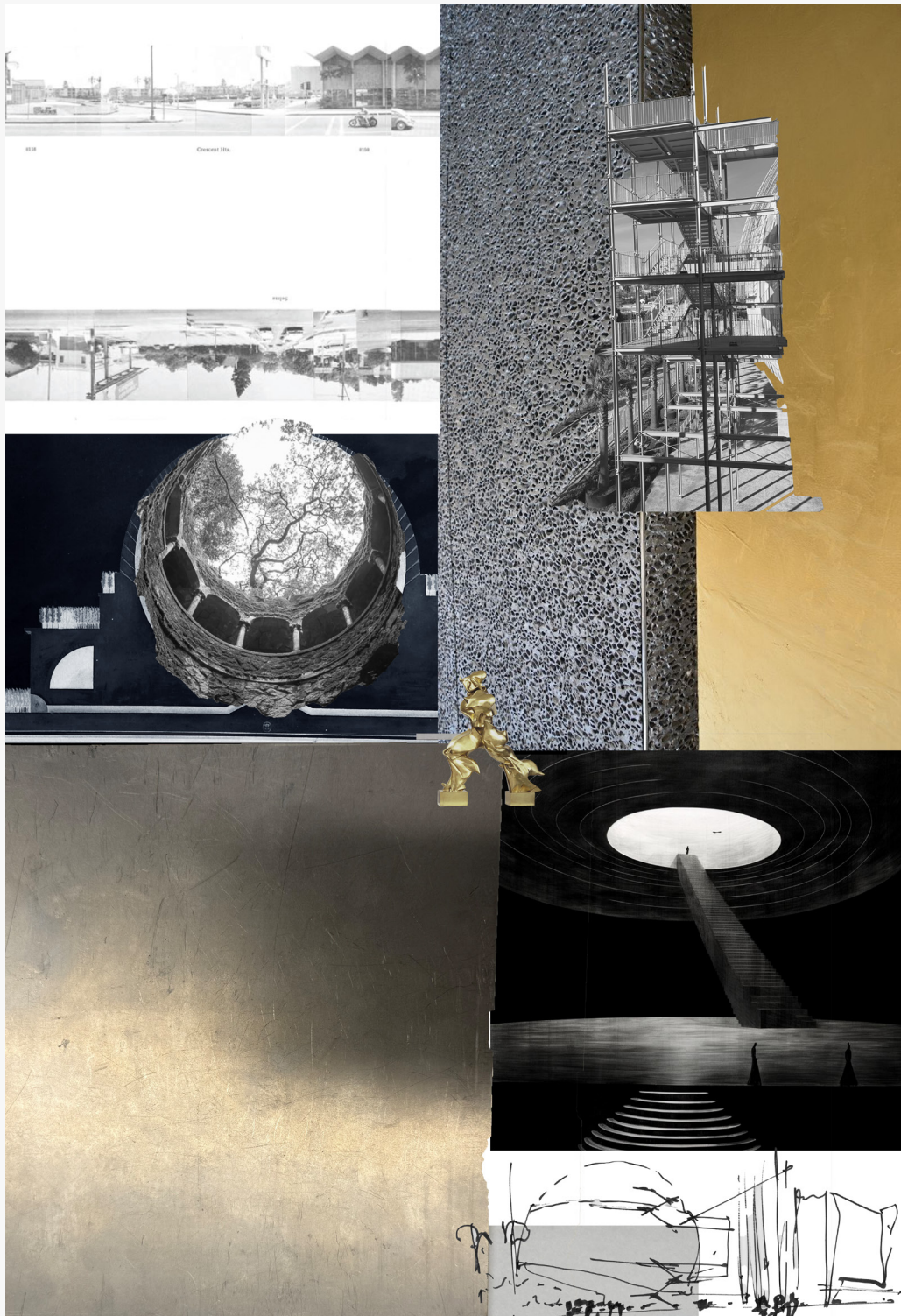
shape of the building inspired watches body



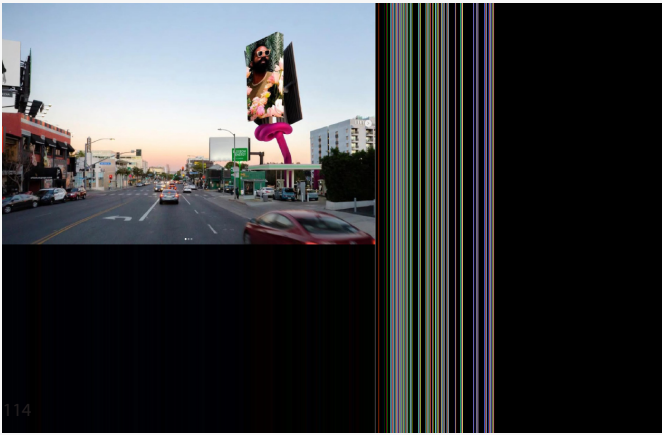
112



COLLAGE



CITE AND CONTEXT



8710 SUNSET BLV



Second most expansive location for interactive ads panel and billboards per square feet



Lots of locations with various food selections



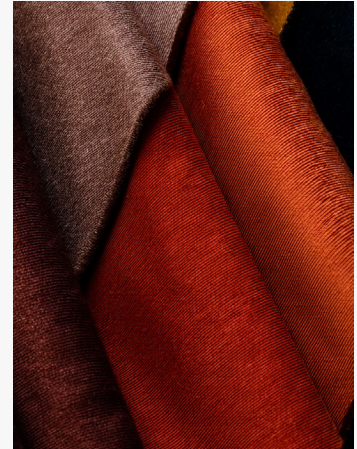
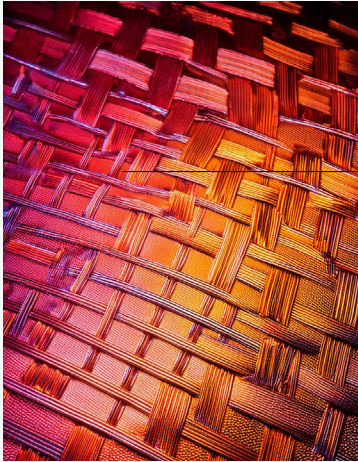
CITE AND CONTEXT

8710 SUNSET BLV



Store facade view

MATERIAL STRATEGY



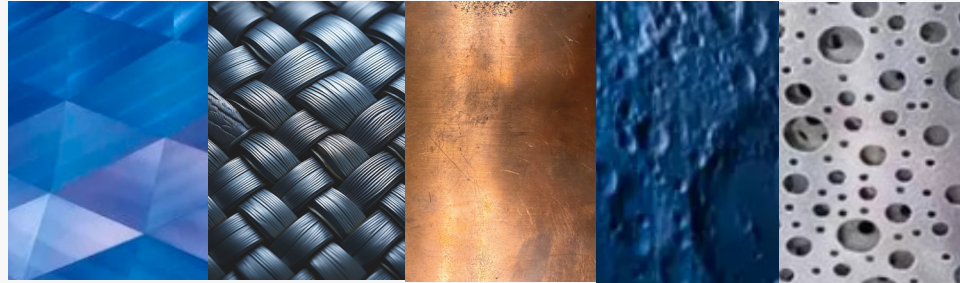
INNOVATIVE

————— GROUNDED —————

————— DETAILED

MATERIAL STRATEGY

INNOVATIVE



Heated Colored Steel

Woven Metal

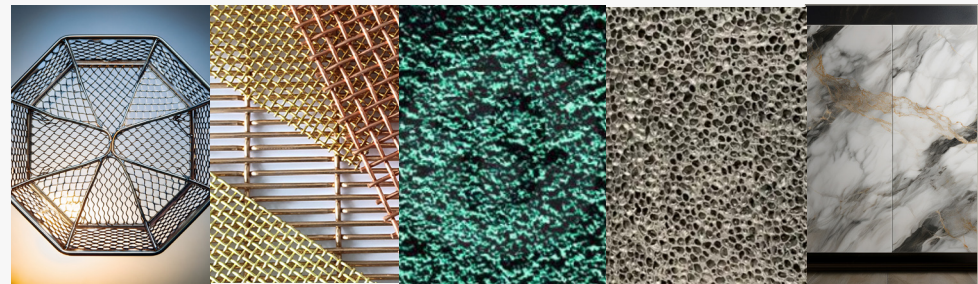
Brass Panel

Aluminum Panel

Perforated Metal

GROUNDING

118



Linked Metal structure

Metal Mesh

Colored Cement

Foam Concrete

Marble panel

DETAILED



Wood Panels

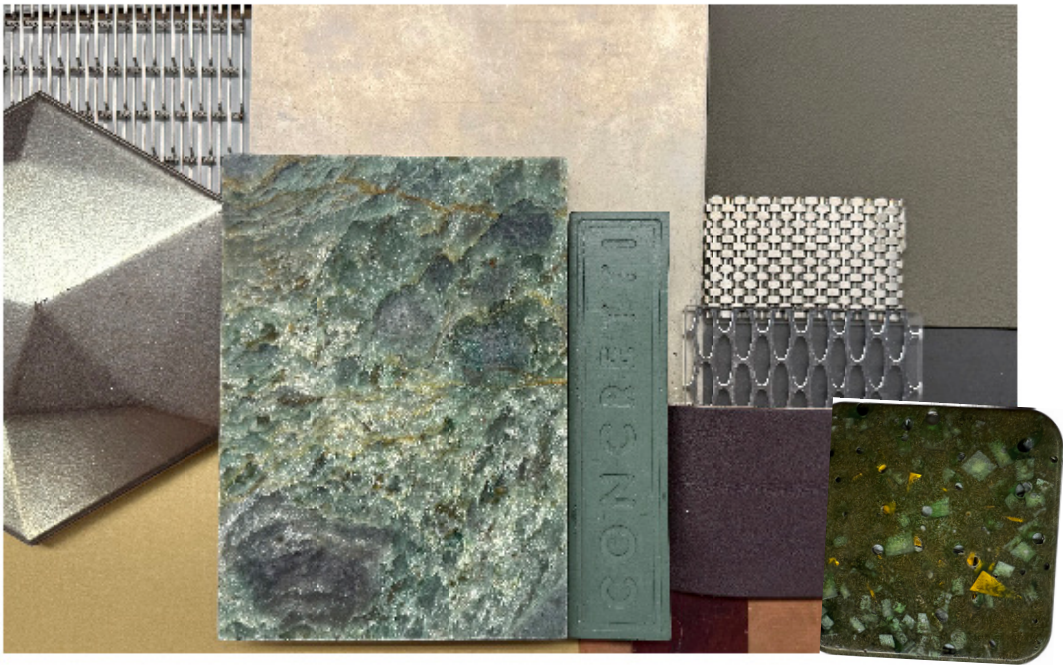
Colored Suede

Crafted Velvet

Birch Veneer

Quartzite Panel

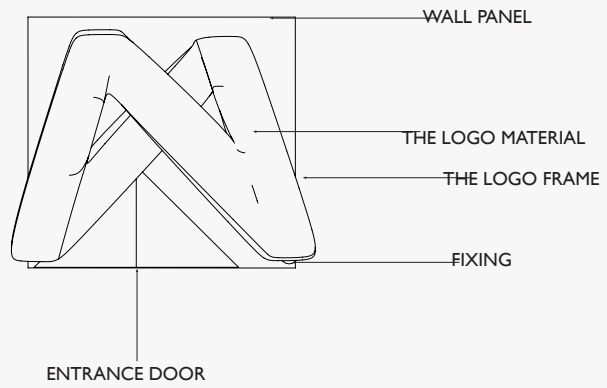
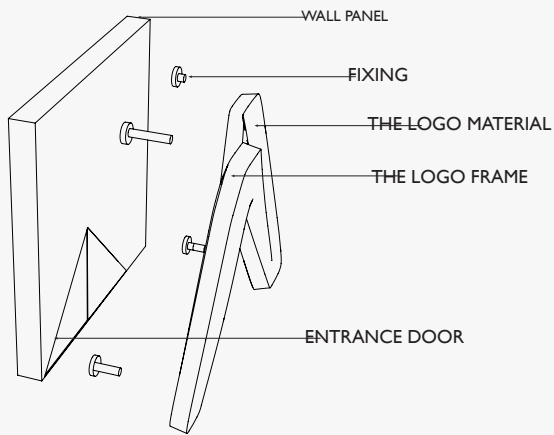
MATERIAL BOARD



MATERIAL EXPLORATION



120



ArtCenter	2015
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TE COMMENT

STRUCTURE

PROJECT

CLIENT

STRUCTURE

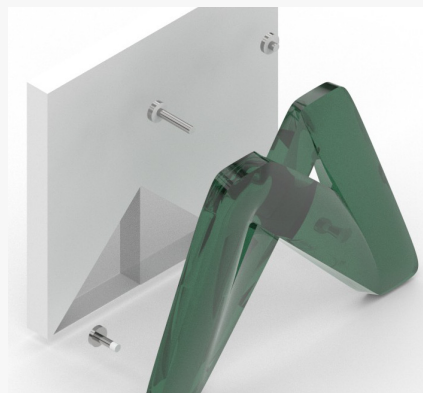
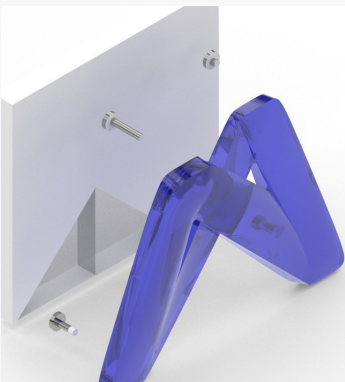
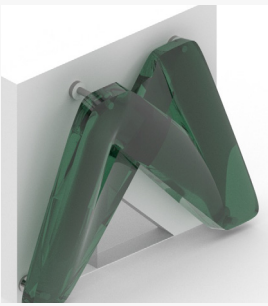
PROJECT

CLIENT

JOB NUMBER: 0000001

A1.01

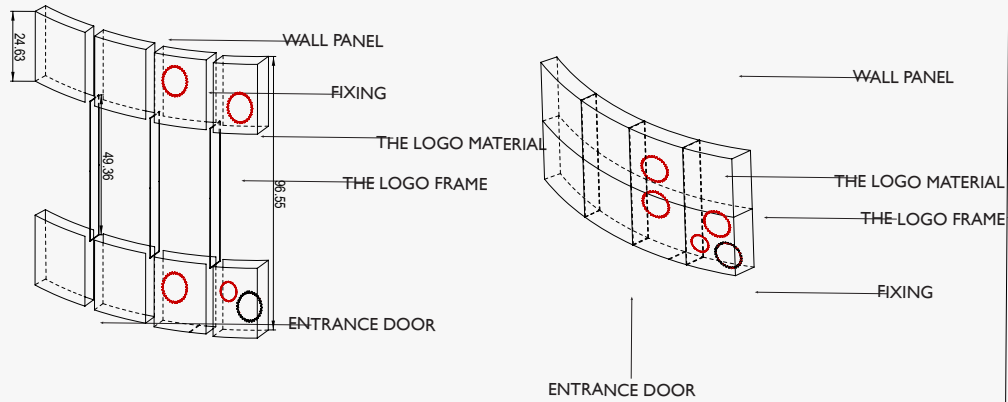
MATERIAL EXPLORATION RENDER



VANGUART WATCH CULTURE CENTER

MATERIAL EXPLORATION

122



ArtCenter
2025

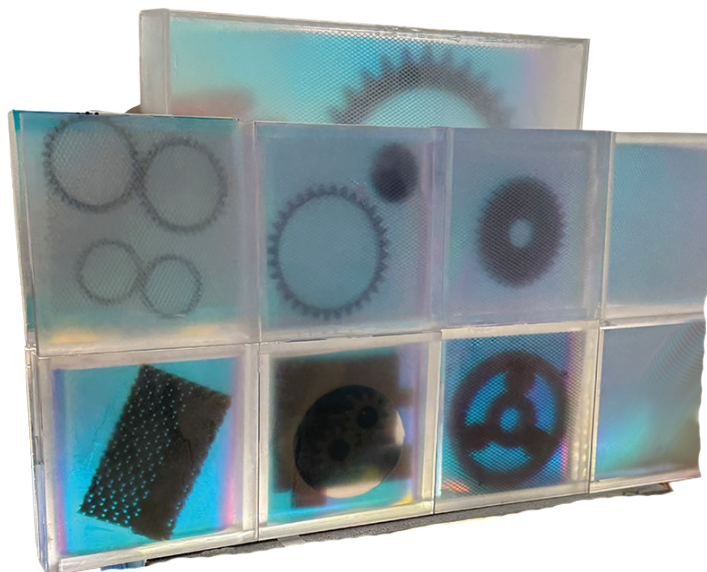
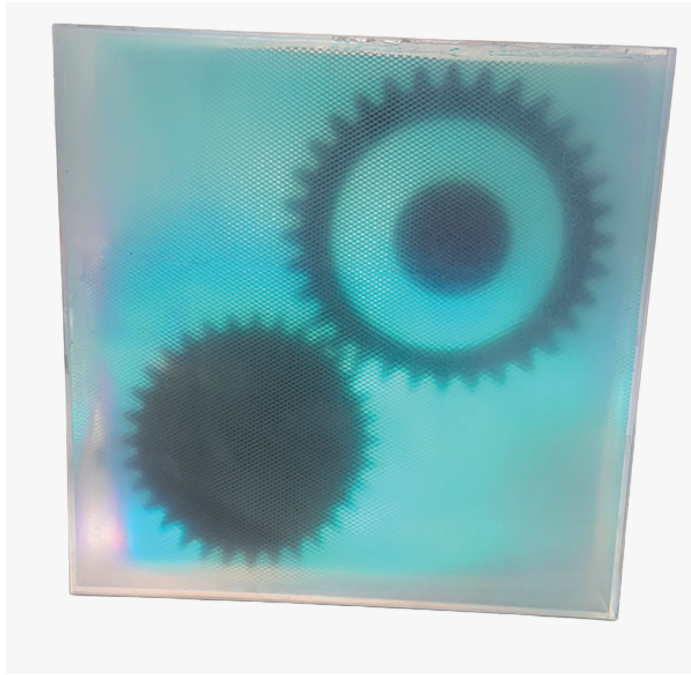
TE COMMENT

STRUCTURE VANGUART LOGO FIXING
PROJECT VANGUART
CLIENT VANGUART

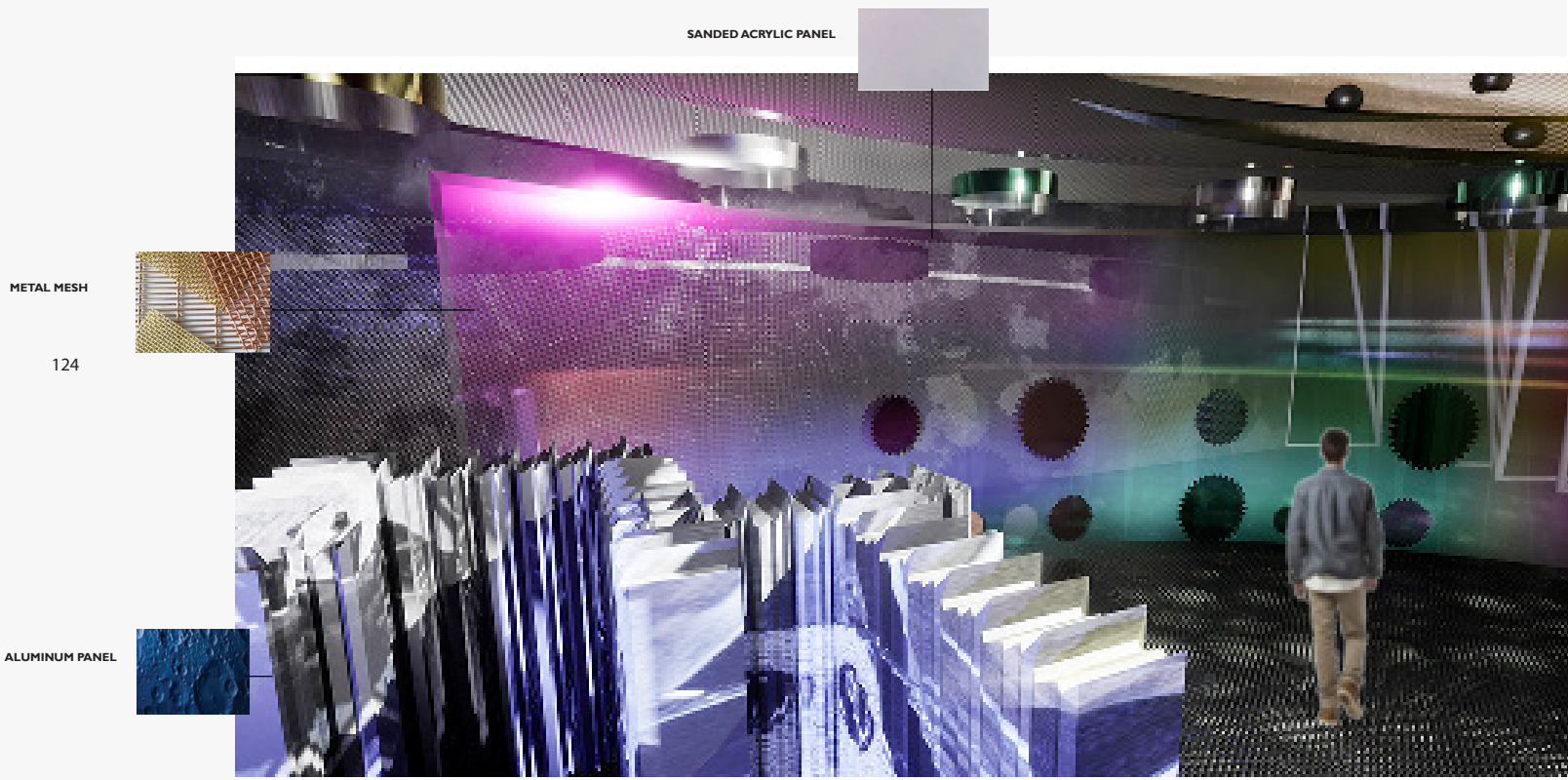
JOB NUMBER: 0000001

A1.01

MATERIAL EXPLORATION MODEL

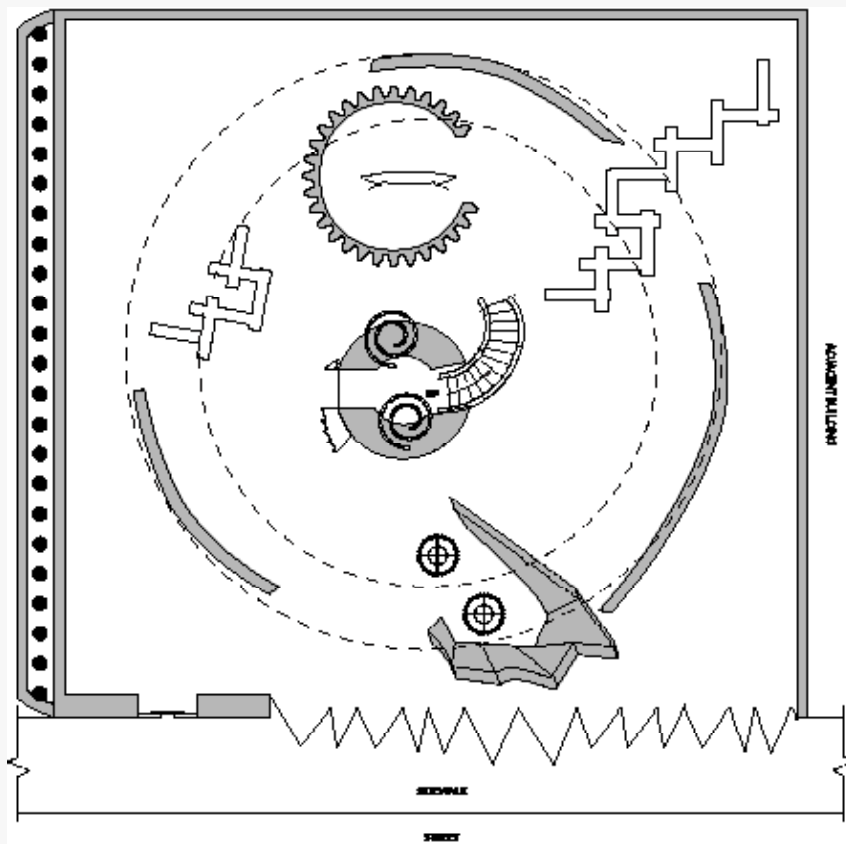


RENDERING MATERIAL EXPLORATION

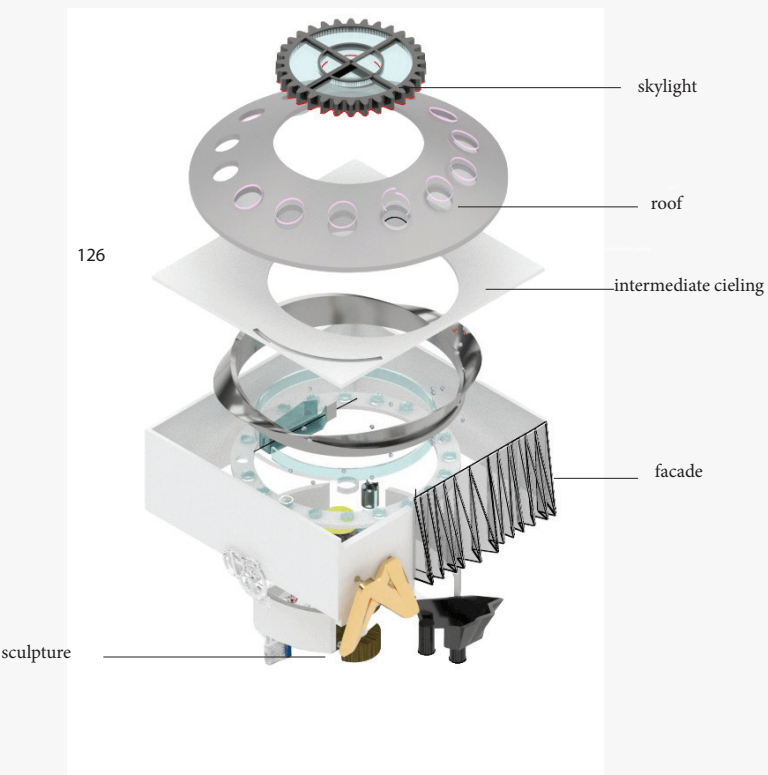


VANGUART WATCH CULTURE CENTER

PLAN



AXONOMETRIC EXPLOSION



RENDERS

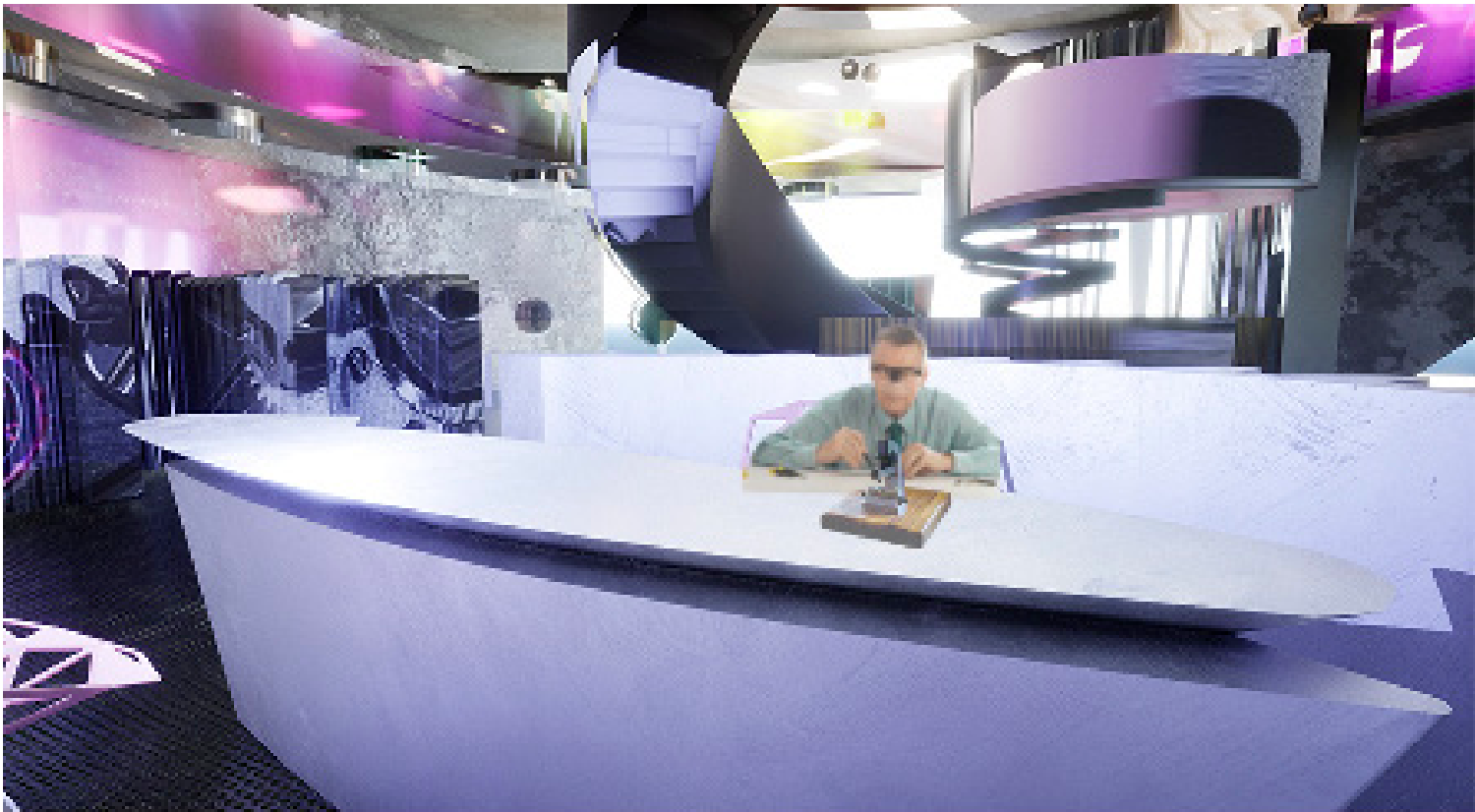


127

Facade

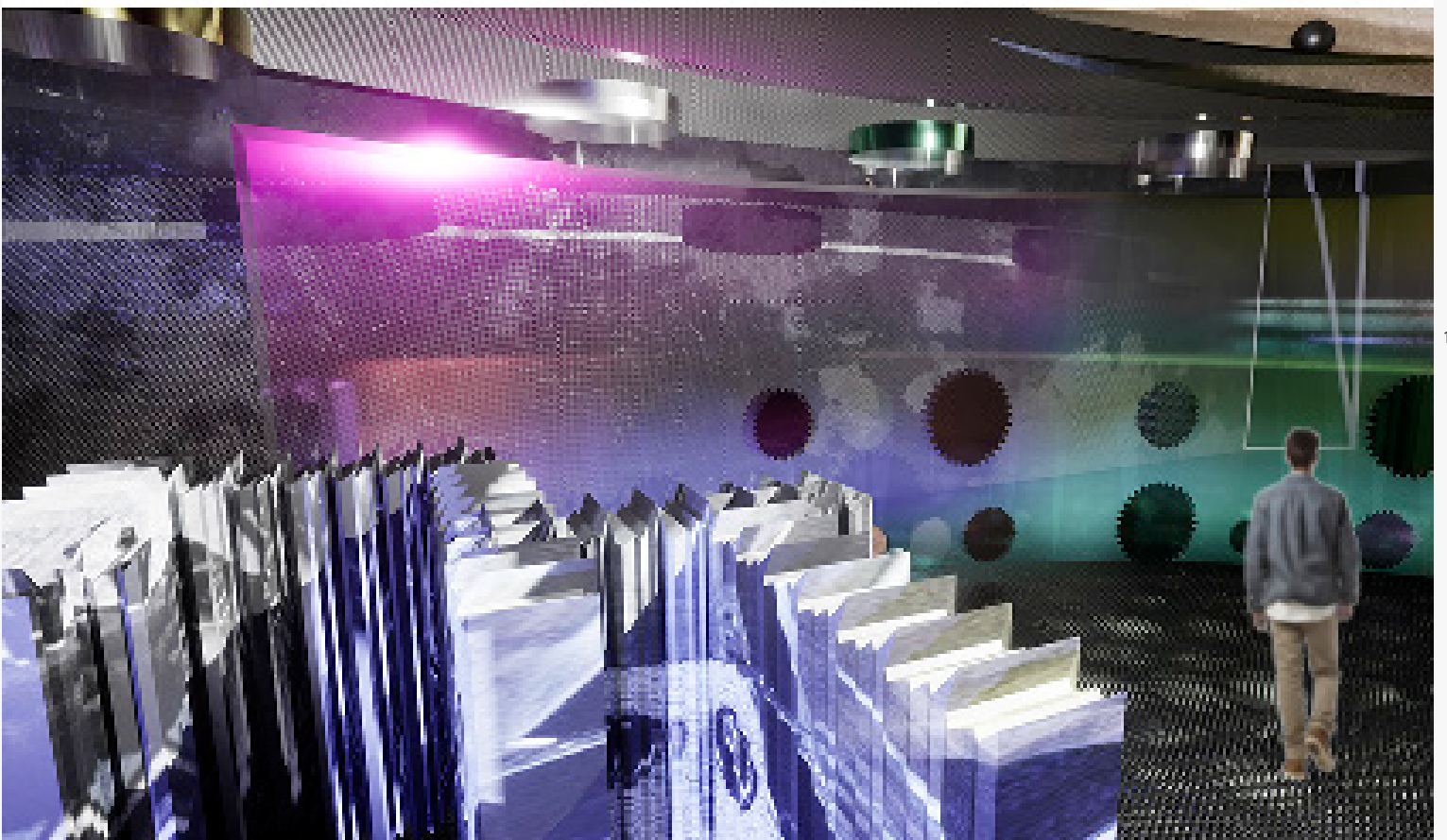
RENDERS

130



Workshop experience

RENDERS

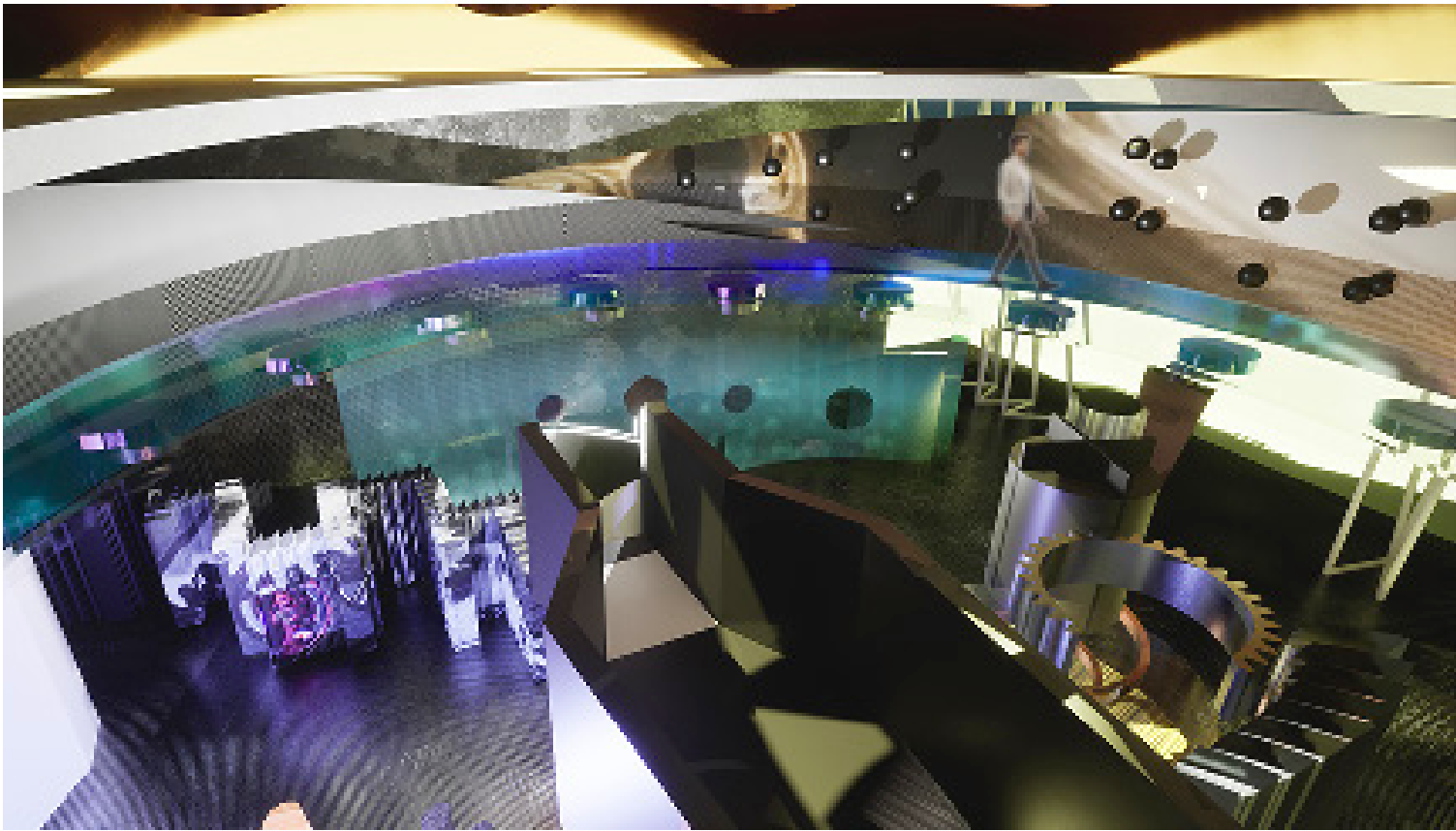


131

Installations and wall ground floor

RENDERS

132



View from Second Floor

RENDERS

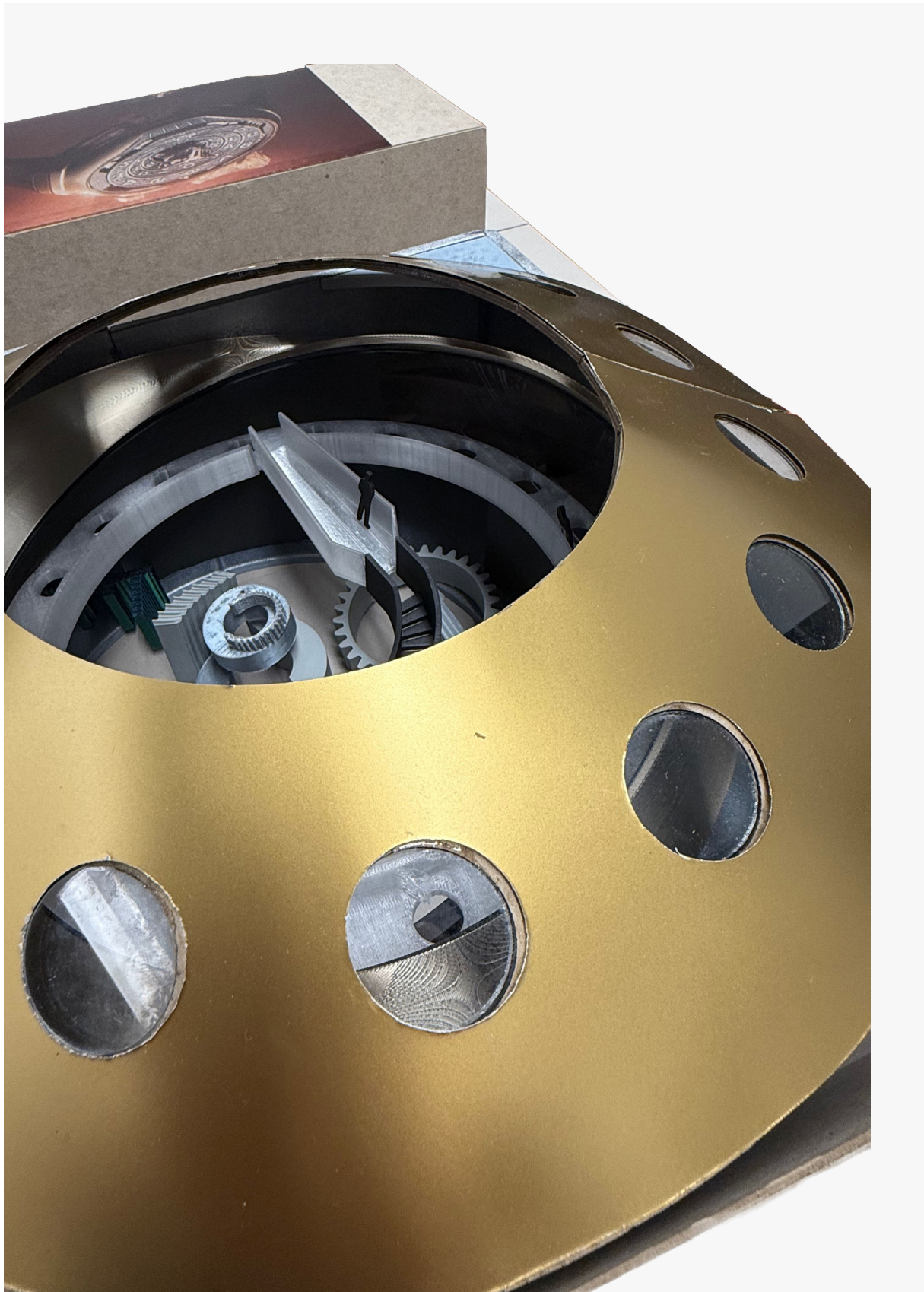


133

Interactive panels Second Floor

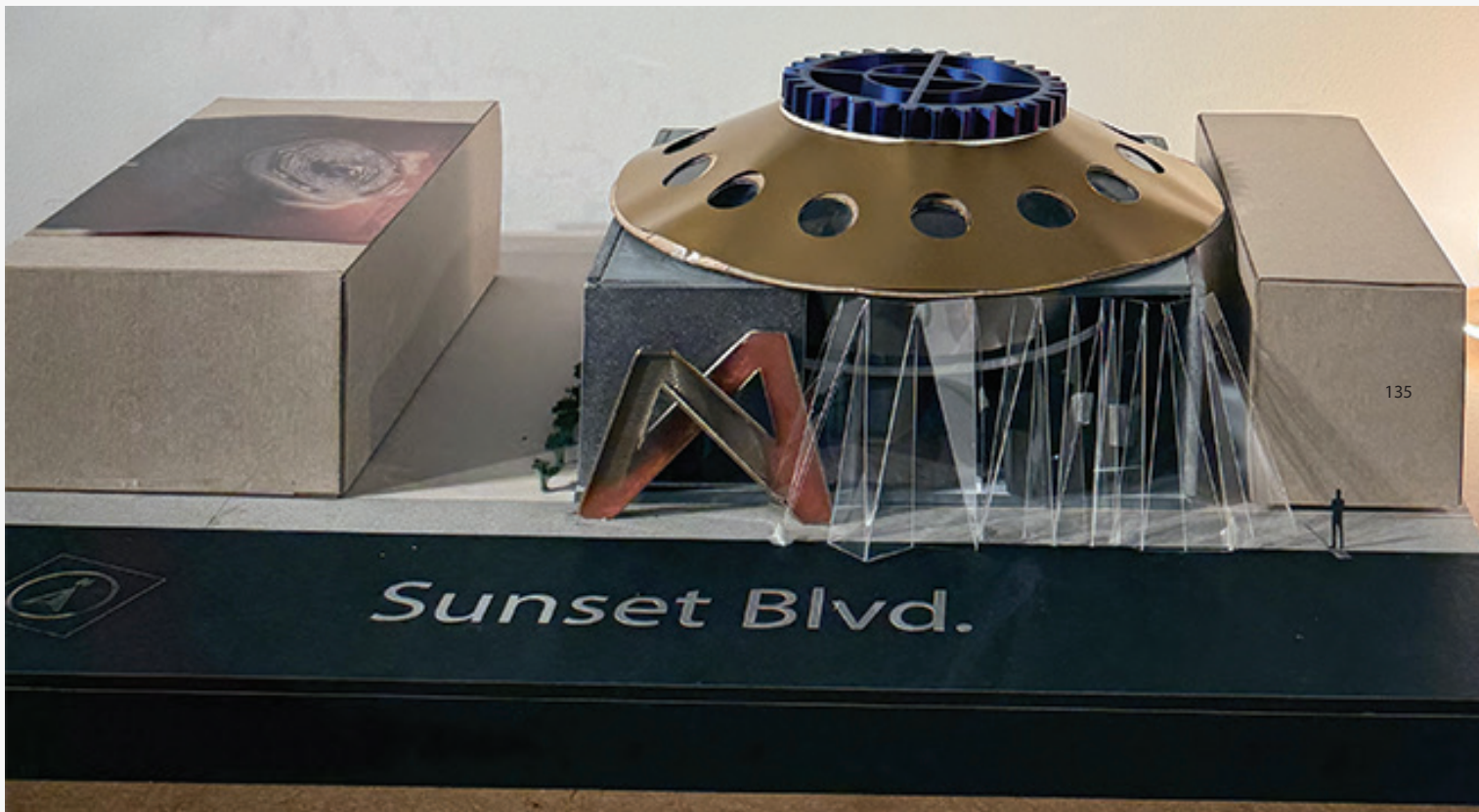
MODEL DETAILS

134



PERSPECTIVEVIEW

MODEL DETAILS



FILIPP FERDINAND

VANGUART WATCH CULTURE CENTER



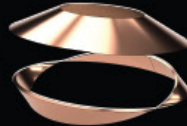
WELCOME TO THE TIME DRIFT

When the atmosphere of innovations and exclusivity of mechanics as well as the materiality builds the narrative around the space aesthetics.

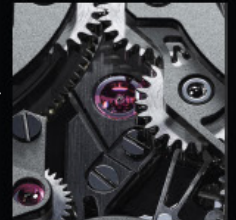
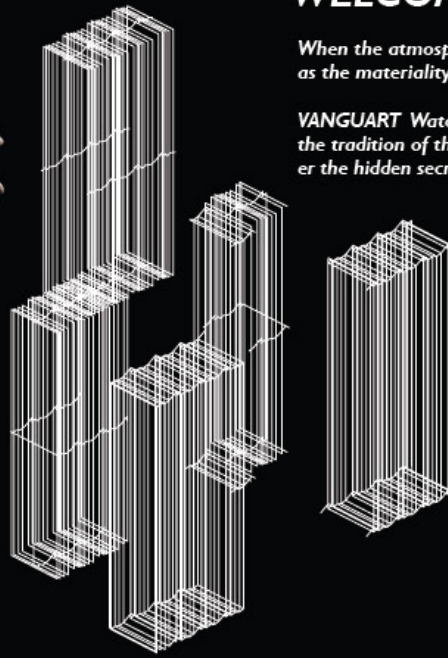
VANGUART Watch Culture Center is a unique space for people to explore the tradition of the Swiss watchmaking, try to assemble the watches, discover the hidden secrets of high end horology and perceive the time differently



design inspired by the watches hull shape



staircase bridge inspired by the watches hands



gears inspired installations

first floor eye level view

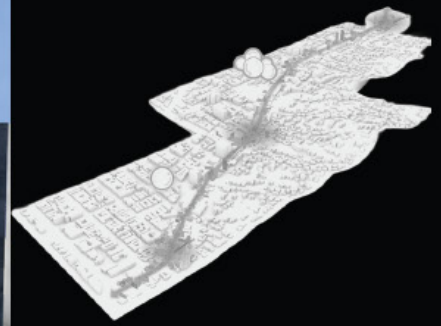
first floor plan



© 2018 VANGUART

SITE CONTEXT

FILIPP FERDINAND

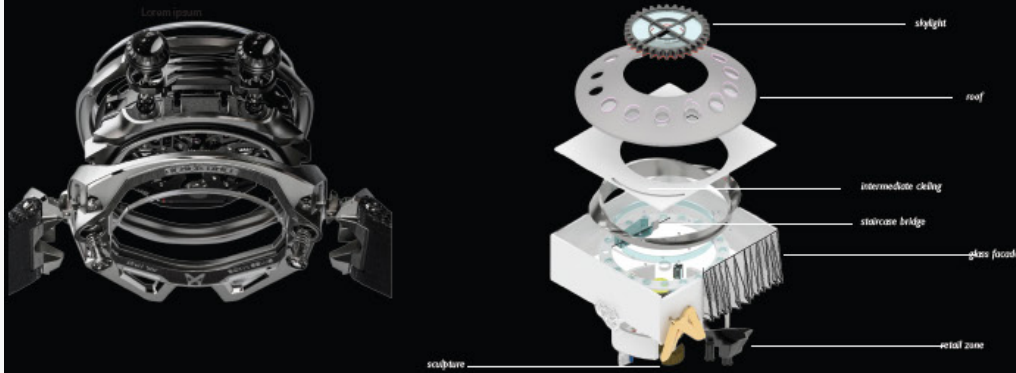


Located on the Sunset Strip, quintessential area of Los Angeles



swiss engineered high end watches showroom turned into a watch Temple

watches exploded view vs cultural center exploded



COLOR STRATEGY



UNIQUE WORKSHOP

take a part in a specialized horology masterclass from the artisan Swiss watchmakers and you will perceive the time differently

craftsman workshop area

