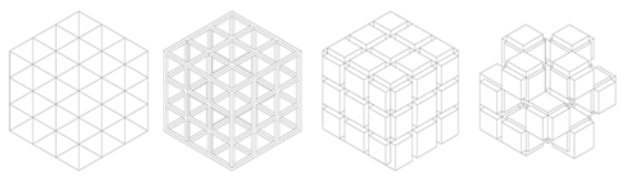


parameters

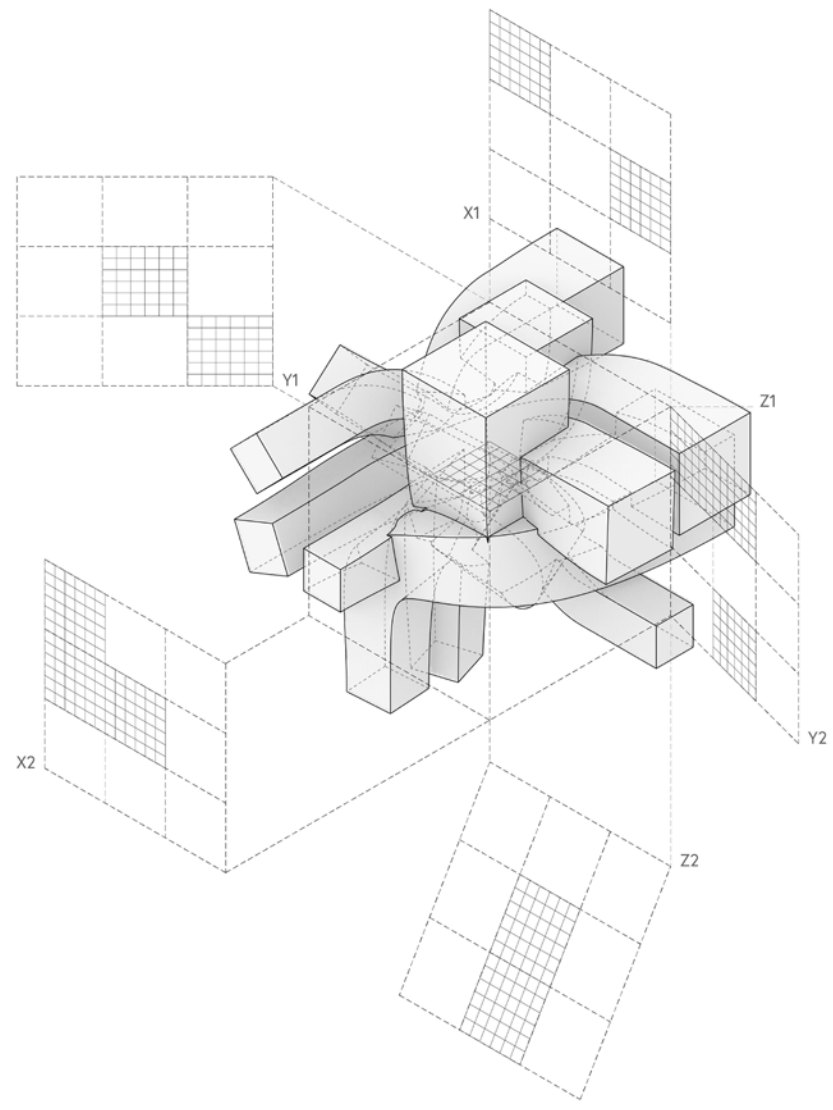


9 square subdivision frame frame inversion "phenomena" derivative

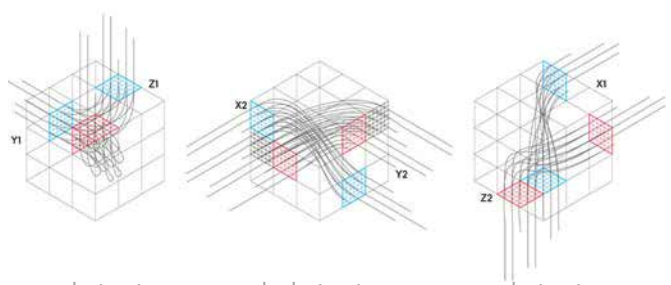
01

ARCH - 6039
Advanced Studio I
Michael Gamble

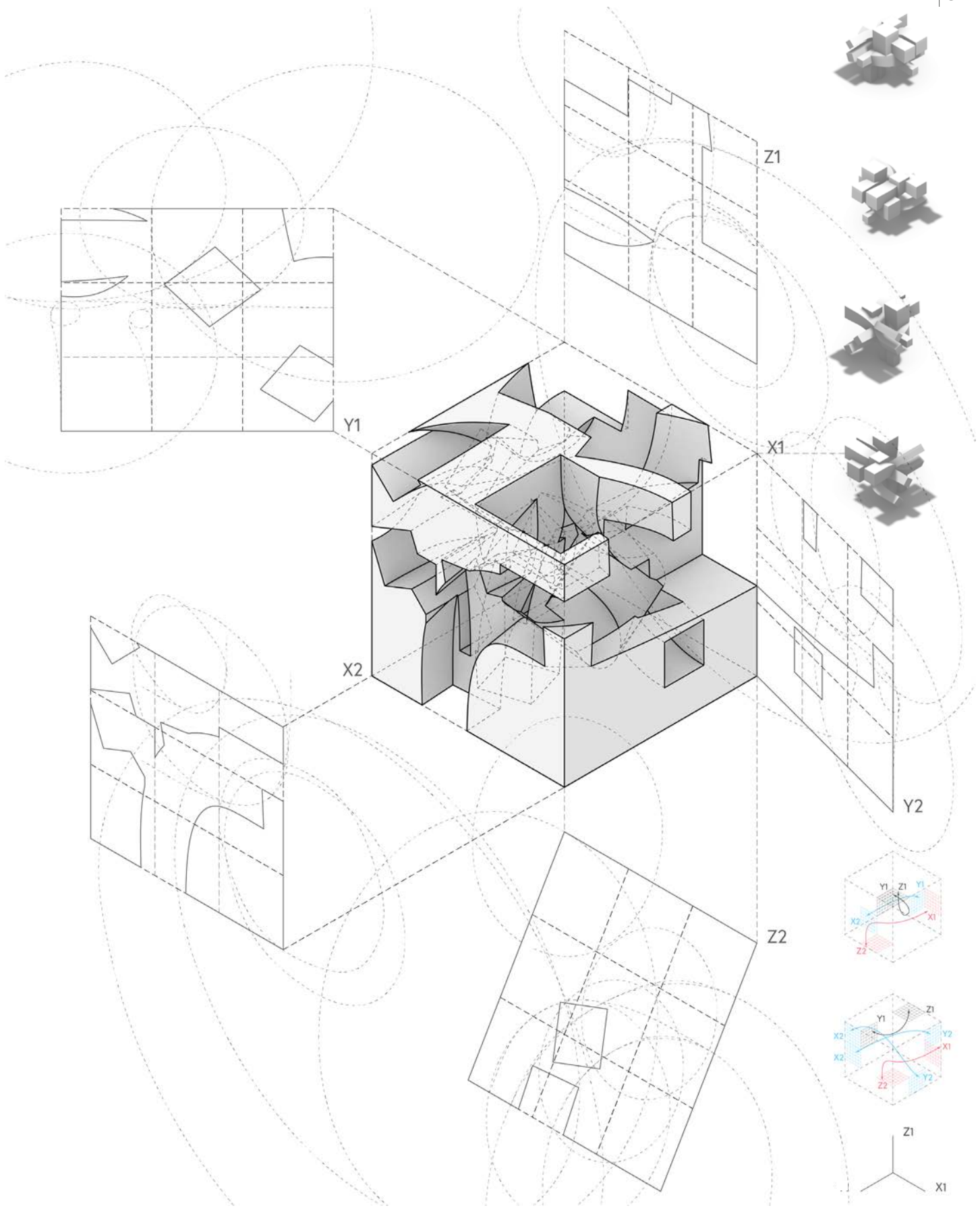
Planar Blending



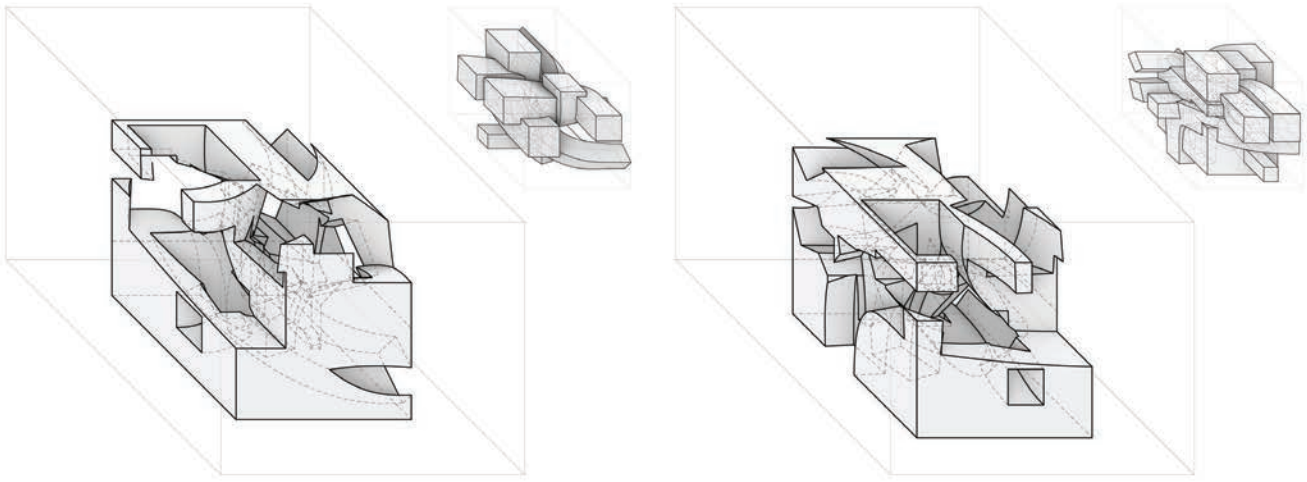
derivatives



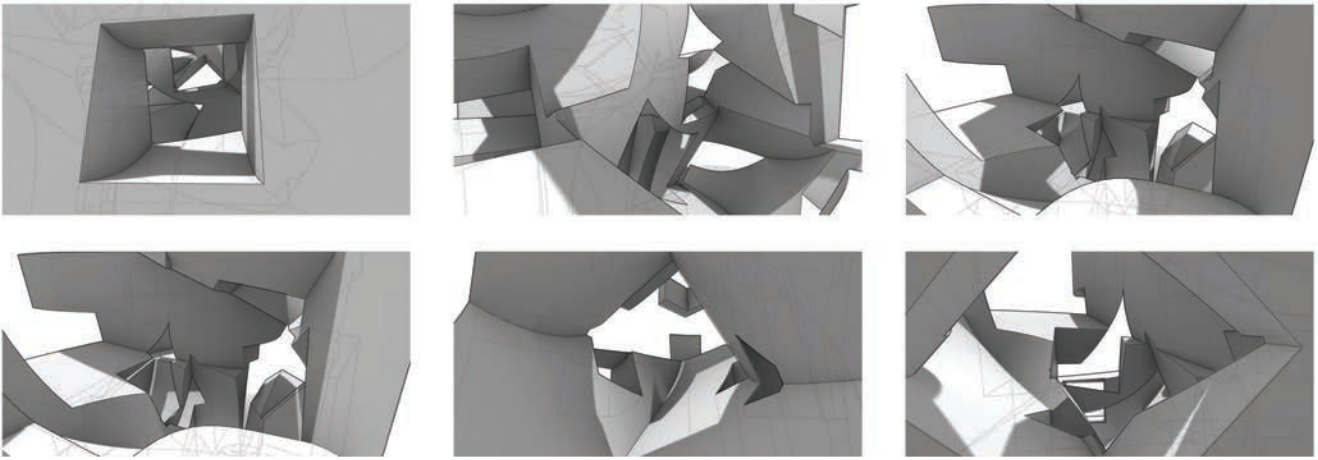
c-derivative: $c' = z1 - y1$ b-derivative: $b' = x2 - y2$ a-derivative: $a' = z2 - x1$



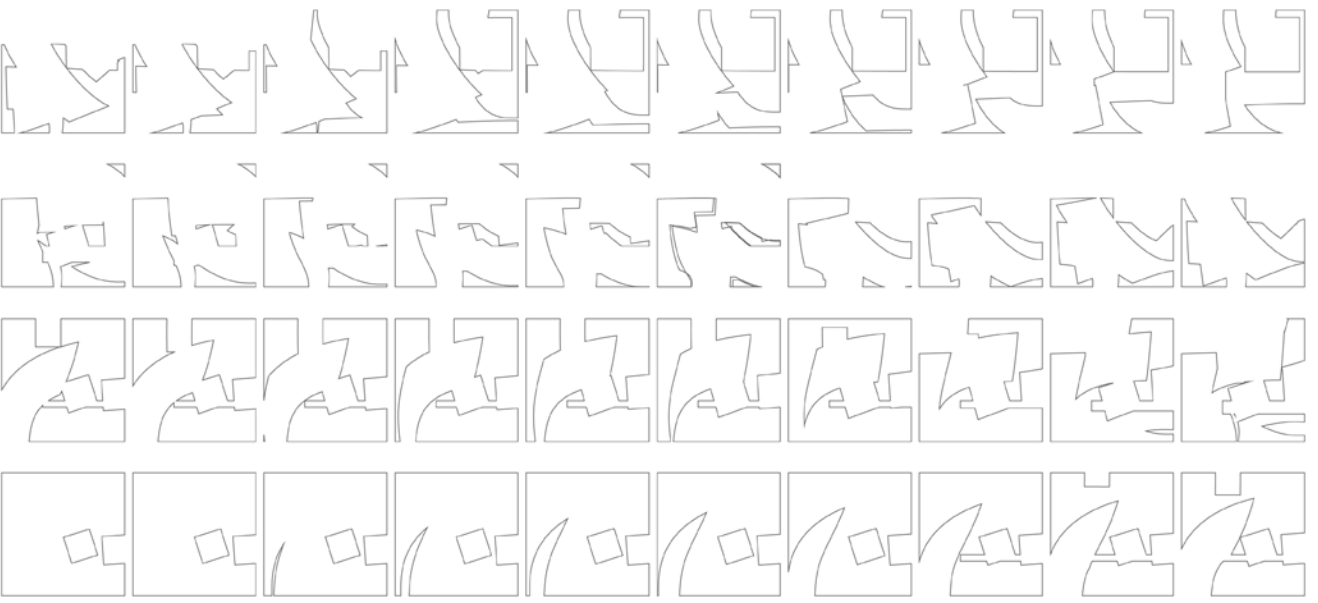
elevation obliques



para-phenomena

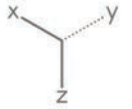
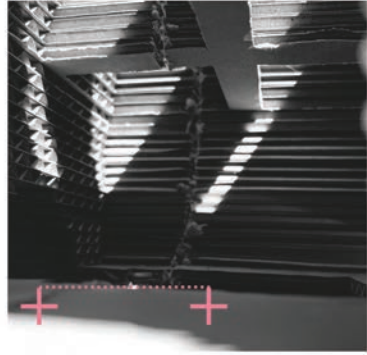
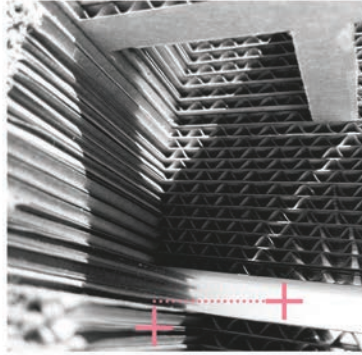
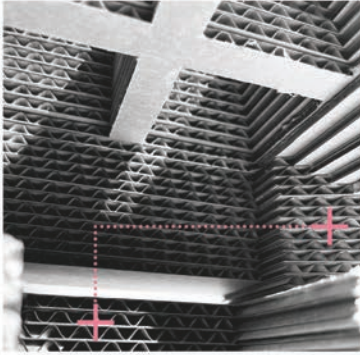


plan contours

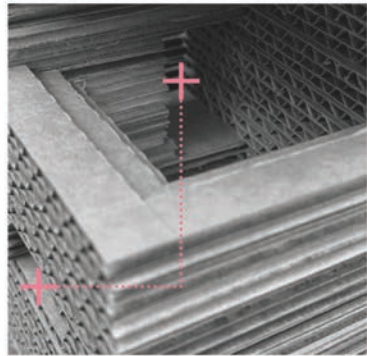
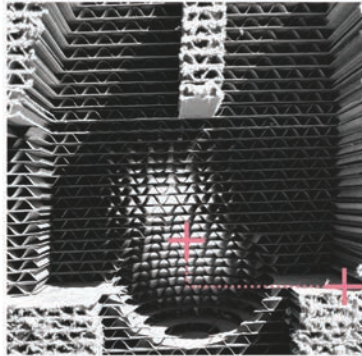
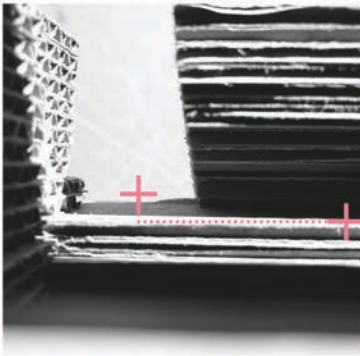


phenomena

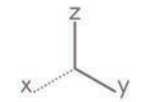
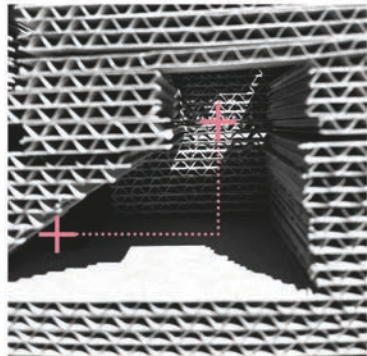
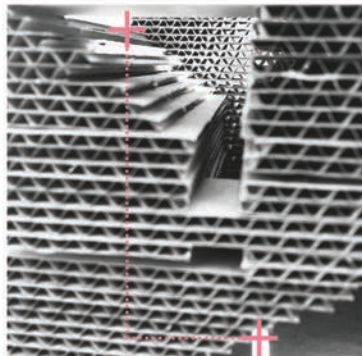
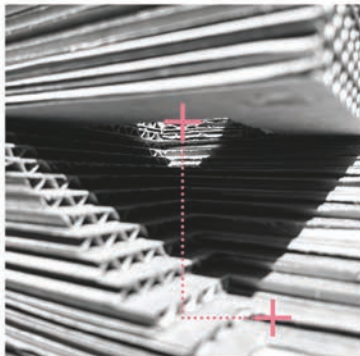
a = z--x



b = x--y



c = z--y



Chapter 1

The trajectory of this studio can ultimately be broken down into two chapters.

The first part consists of deriving a collection of mechanical time-telling components. These artifacts were then integrated into a curiosity cabinet. This curiosity cabinet consists of a collection space at 34' x 21' and garden space at 55' x 21'. Ultimately, this exercise led to an exploration of wall, floor, and ceiling systems.



ARCH - 6030
Advanced Studio I
Michael Gamble

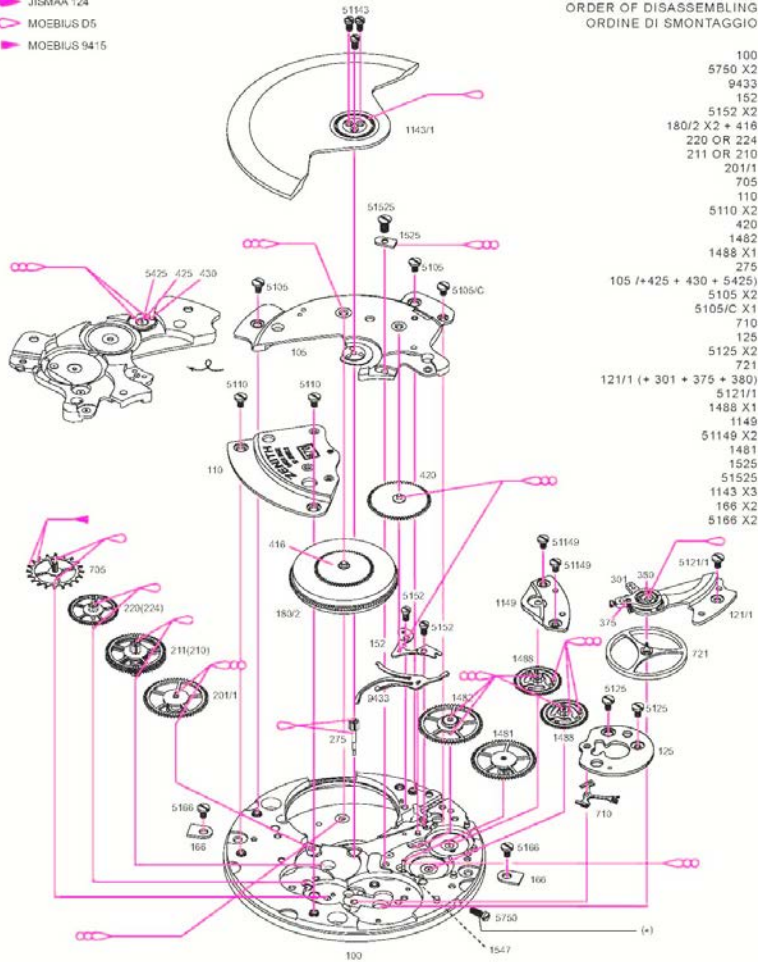
Mechanical Romanticism

Artifacts:
sundials
water clock
timeball
noon cannon
church bells
clock tower
hourglass
oil lamp clock
congreve clock
lantern clock
the tides
big ben
sphinx
old faithful geyser
jantar mantar jaipur
shore temple

670/680

ELITE

-  MOEBIUS 90/10
-  JISMAA 124
-  MOEBIUS D5
-  MOEBIUS 94/15

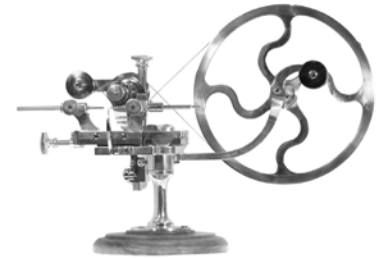
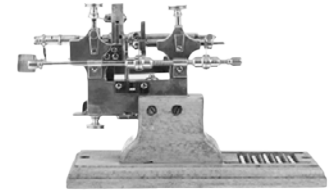
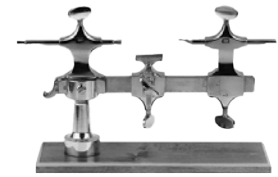


ORDRE DE DEMONTAGE
DEMONTAGE - REIHENFOLGE
ORDER OF DISASSEMBLING
ORDINE DI SMONTAGGIO

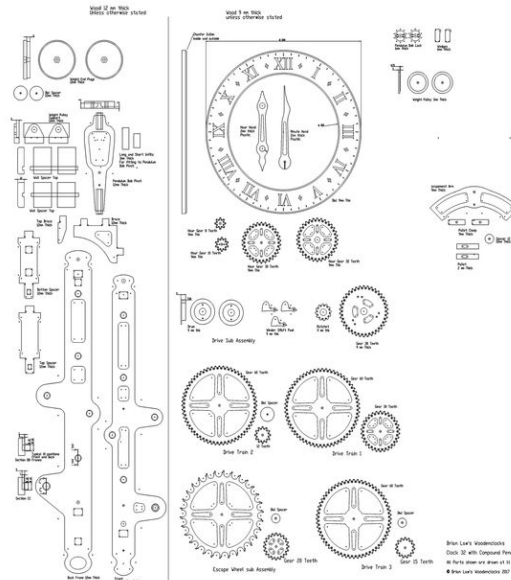
- 100
- 5750 X2
- 9433
- 152
- 5152 X2
- 180/2 X2 + 416
- 220 OR 224
- 211 OR 210
- 201/1
- 705
- 110
- 5110 X2
- 420
- 1482
- 1488 X1
- 275
- 105 (+425 + 430 + 5425)
- 5105 X2
- 5105/C X1
- 710
- 125
- 5125 X2
- 721
- 121/1 (+ 301 + 375 + 380)
- 5121/1
- 1488 X1
- 1149
- 51149 X2
- 1481
- 1525
- 51525
- 1143 X3
- 166 X2
- 5166 X2

(*) Frein fillet / Lock thread / Gewindesicherung / Frenorete

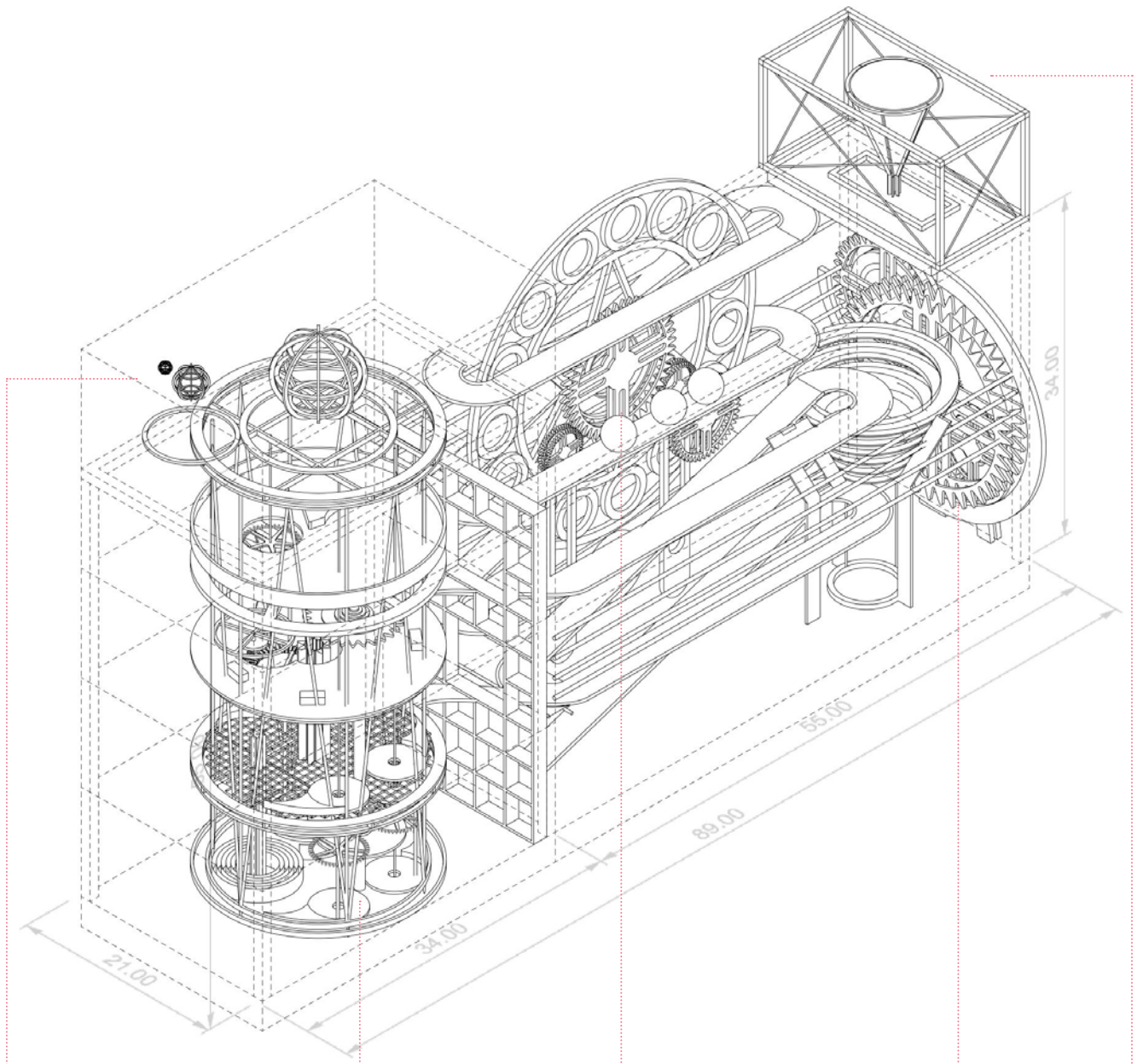
All intellectual property right such as trade marks, service marks, trade names, technical drawings, design and copyrights are reserved. Nothing contained in this document may be reproduced without written permission.



collection of mechanisms

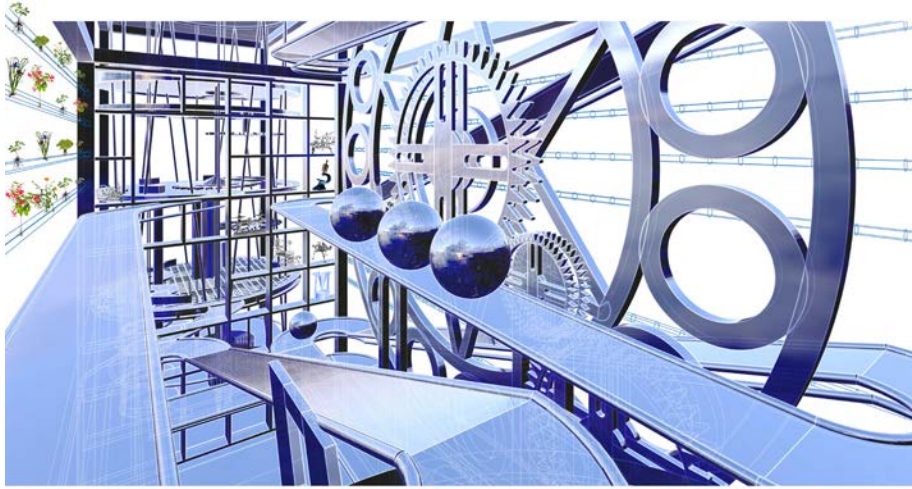


Swiss Leica Watchmaking
Since 1920 with Original Tradition
in Schaffhausen since 1920 in Schaffhausen
© Swiss Leica Watchmaking 2017

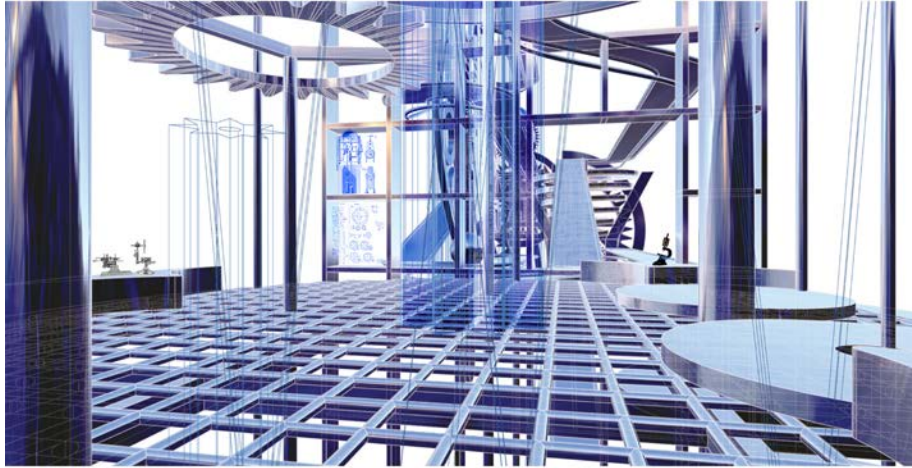


Artifact Collection:

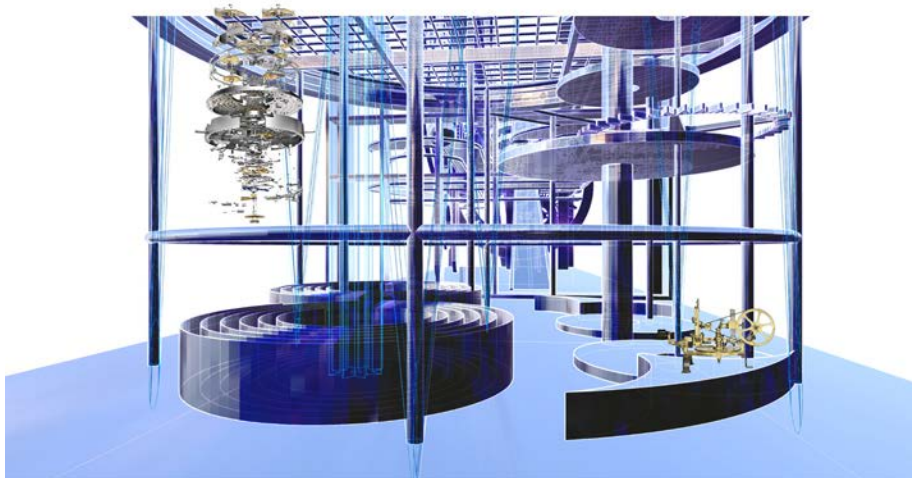
- mechanical watch
- tellurion
- water clock
- timeball
- clock tower
- congrue clock



Garden



Manufacturing center



Collection spaces



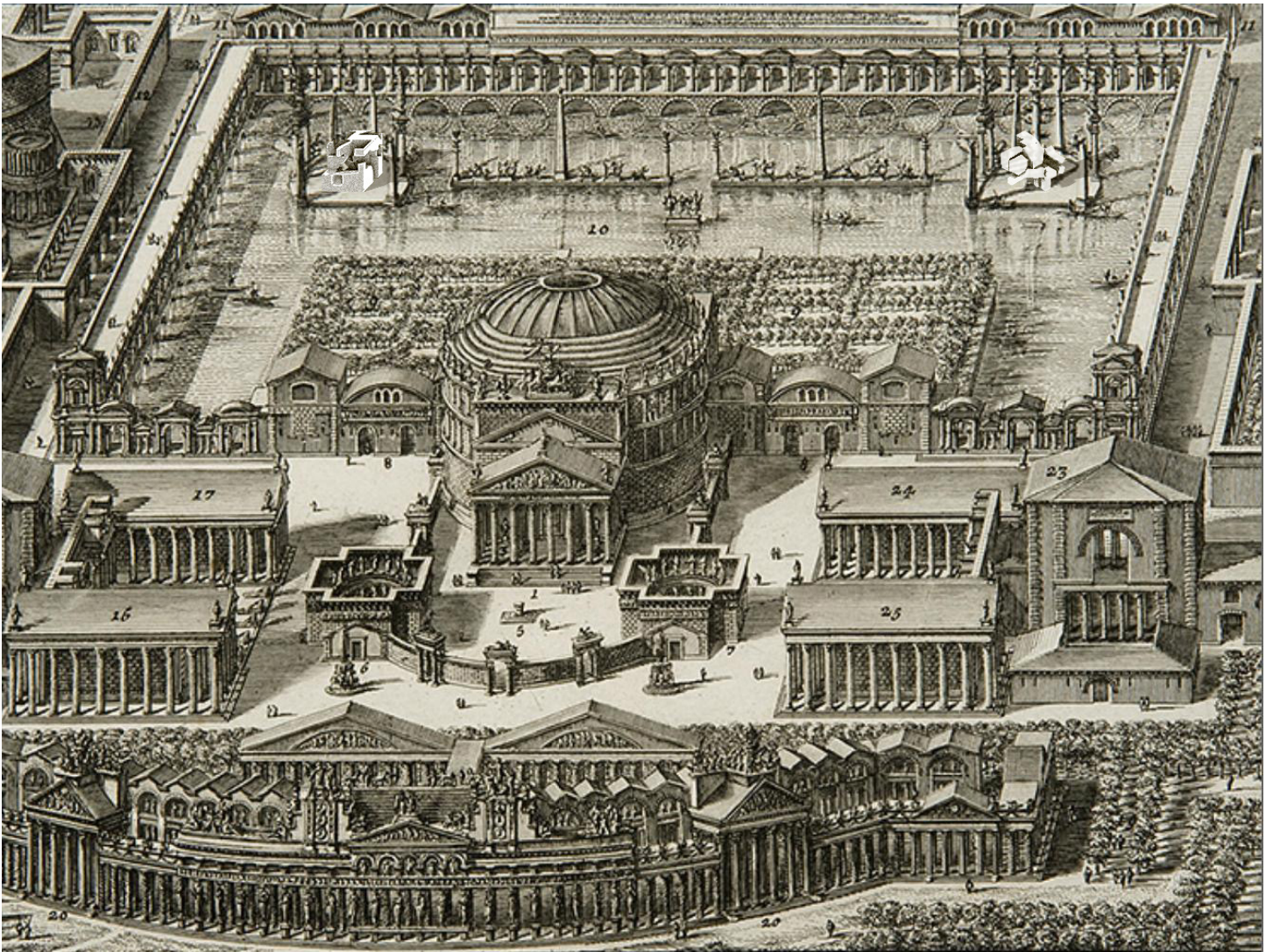


Chapter 2

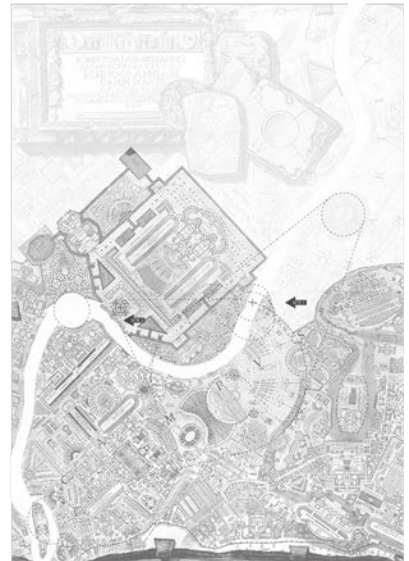
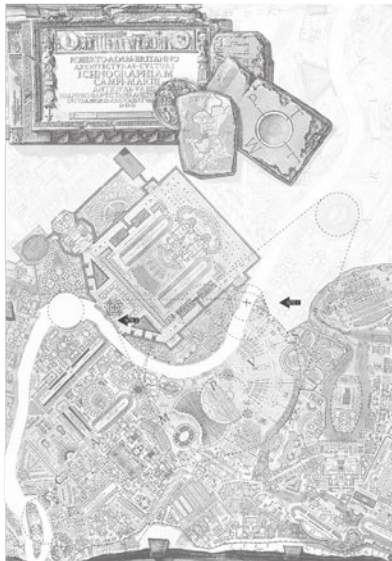
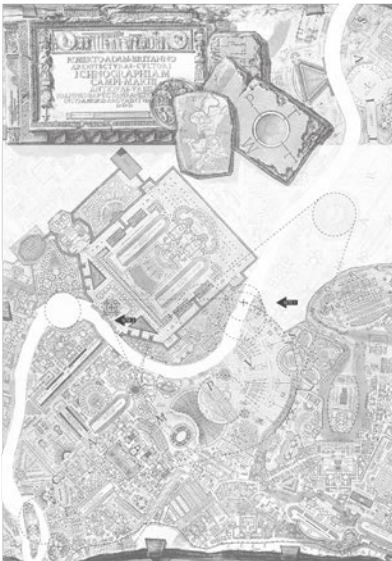
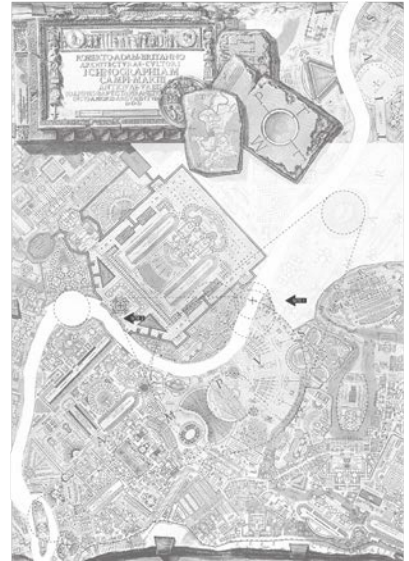
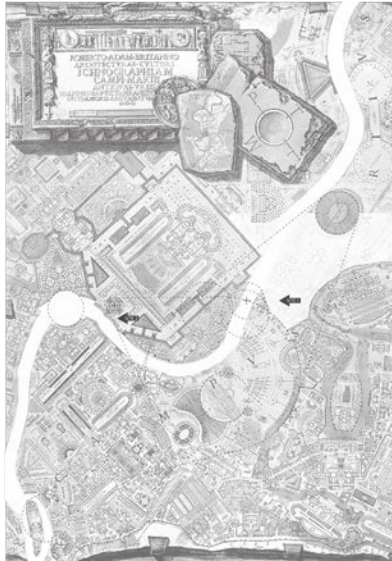
The general objective of this proposal is to design an archive for collection through the imaginary reconstruction of ancient Rome. This results in a theoretical emergence of "the hanging city," or as Piranesi phrased it, "Cittá Pensile." This hanging city is derived in a cyclical process in which architecture is imagined as a set of narratives informed through contemplative drawings, models, hybrid drawing-models [drodels or drawdles], and texts.

"When Egypt hosted the COP27 climate change talks last month, there was intense debate, raising pressure on politicians to step up action to tackle the climate crisis. But when the so-called COP15 biodiversity talks started last week in freezing Montreal, there was near silence on the global stage."

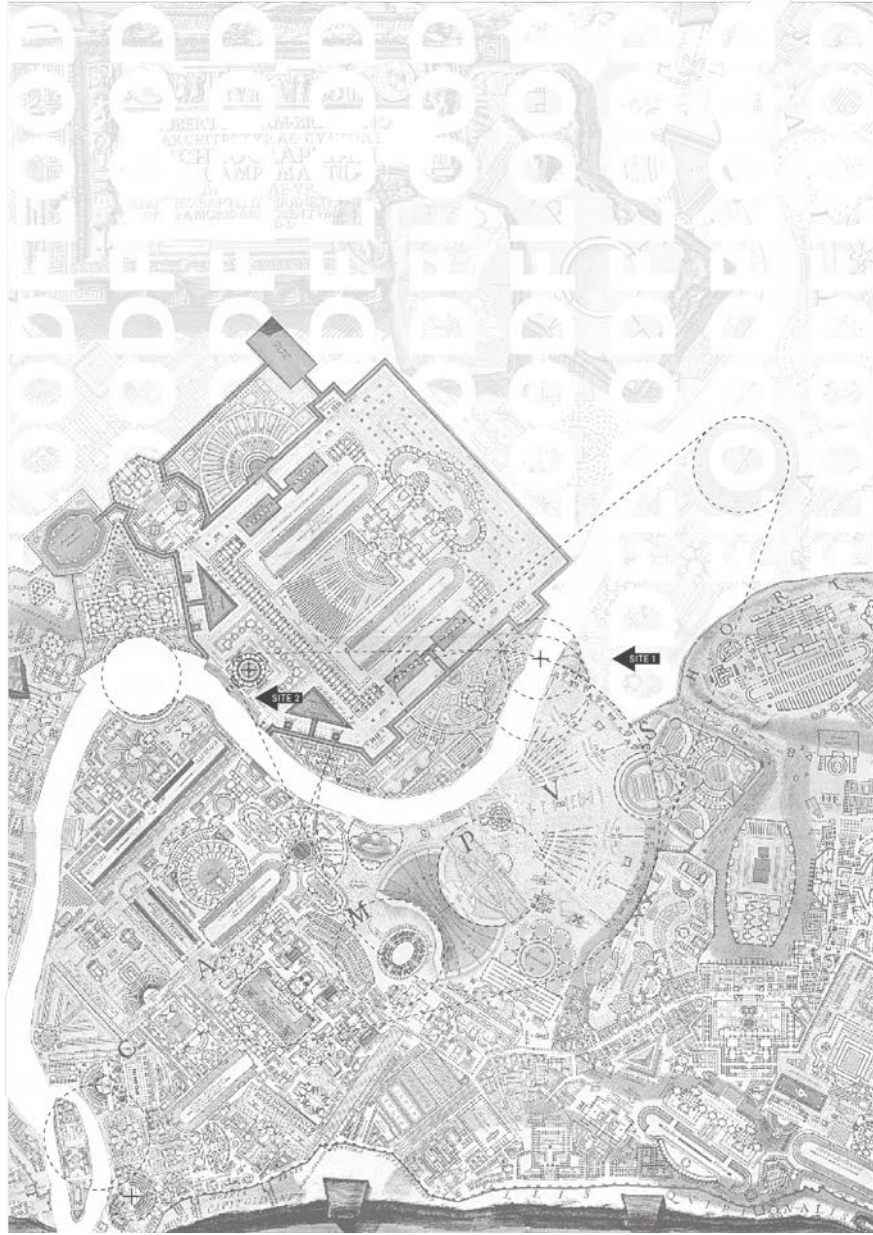
10, 000 years later, and Rome is gradually flooding. Artificially Intelligent [AI] machines have been programmed to build a hydroelectric dam to save the population. The following images illustrate the construction of the hydroelectric dam to power the machines intended to save humanity. Programmatically, the hydroelectric dam contains a museum of the machine collection, a manufacturing center for their self-generation. Castel Sant'Angelo has been repurposed as a blast furnace for the material needed to continue the manufacturing of the Artificially intelligent machines.

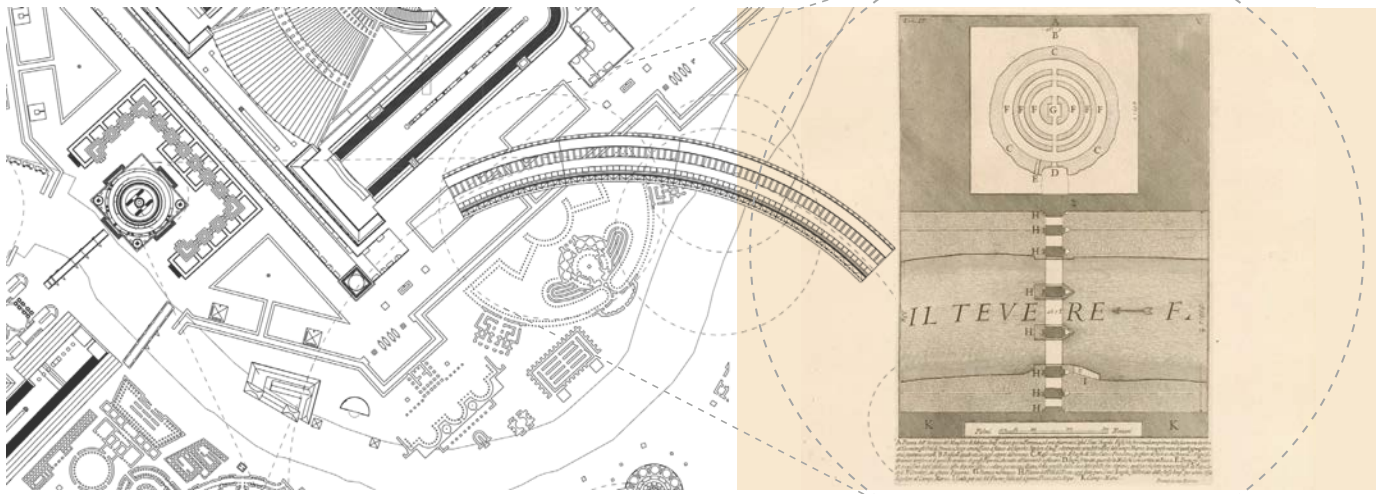


Inhabiting the drawing of Piranesi with Planar Blending Exercise



Gradual flooding of Campo Marzio

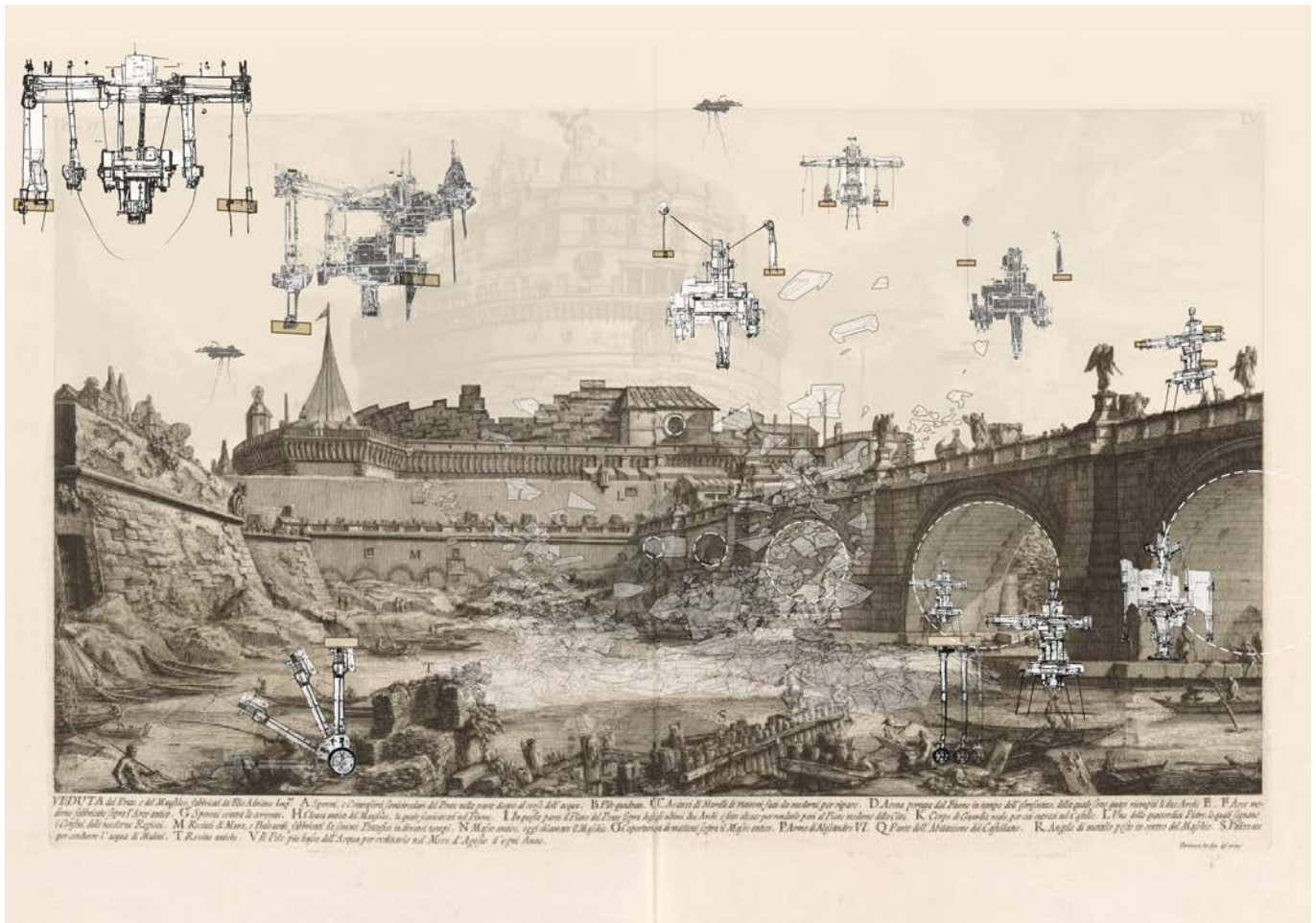
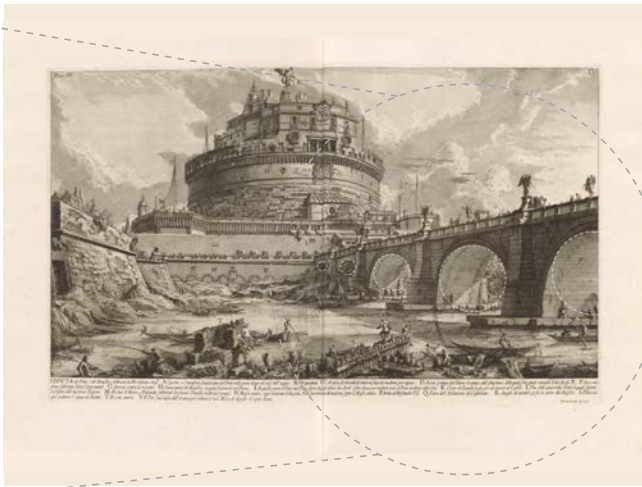




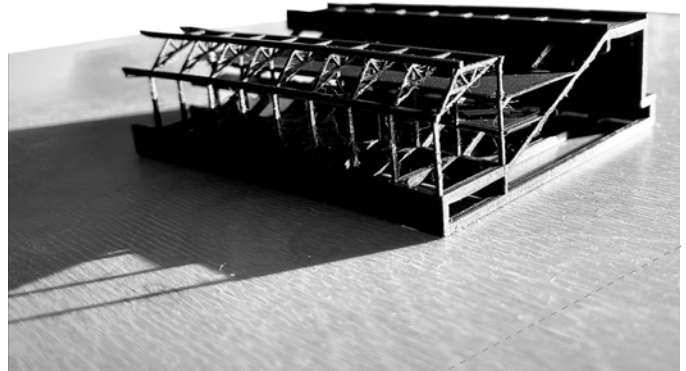
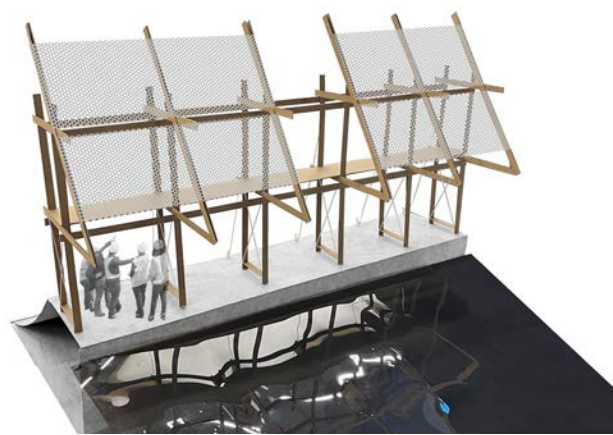
Site plan along Tiber River



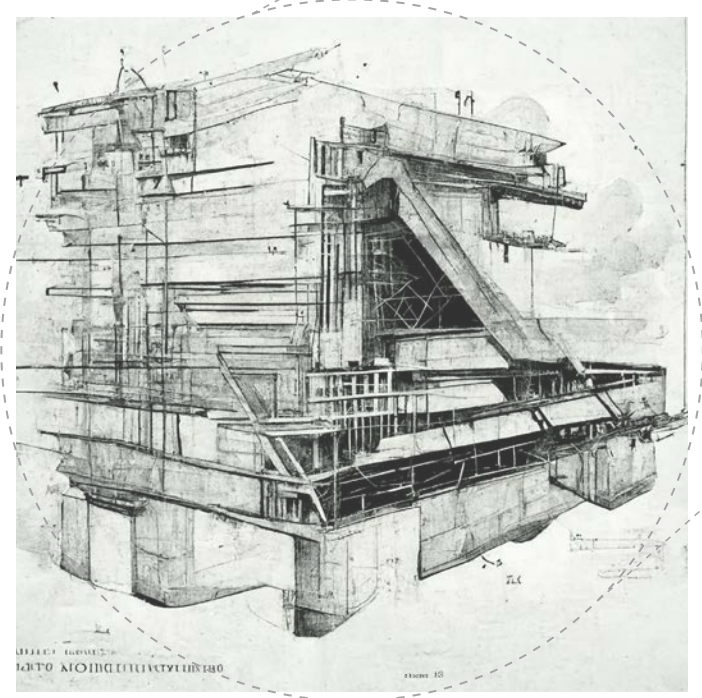
Demolition phase



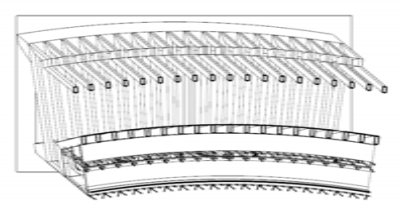
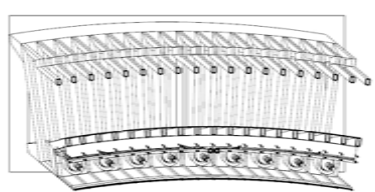
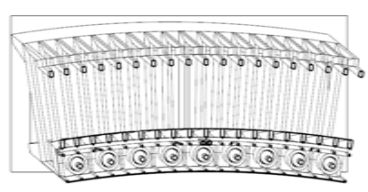
Construction assembly techniques of AI

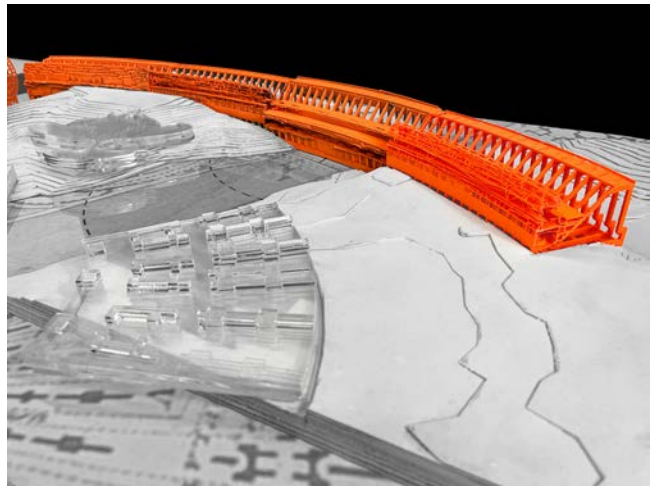
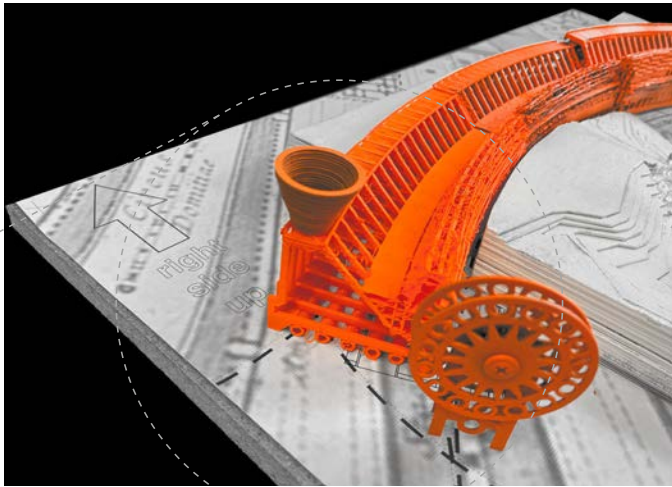


Physical model wall studies

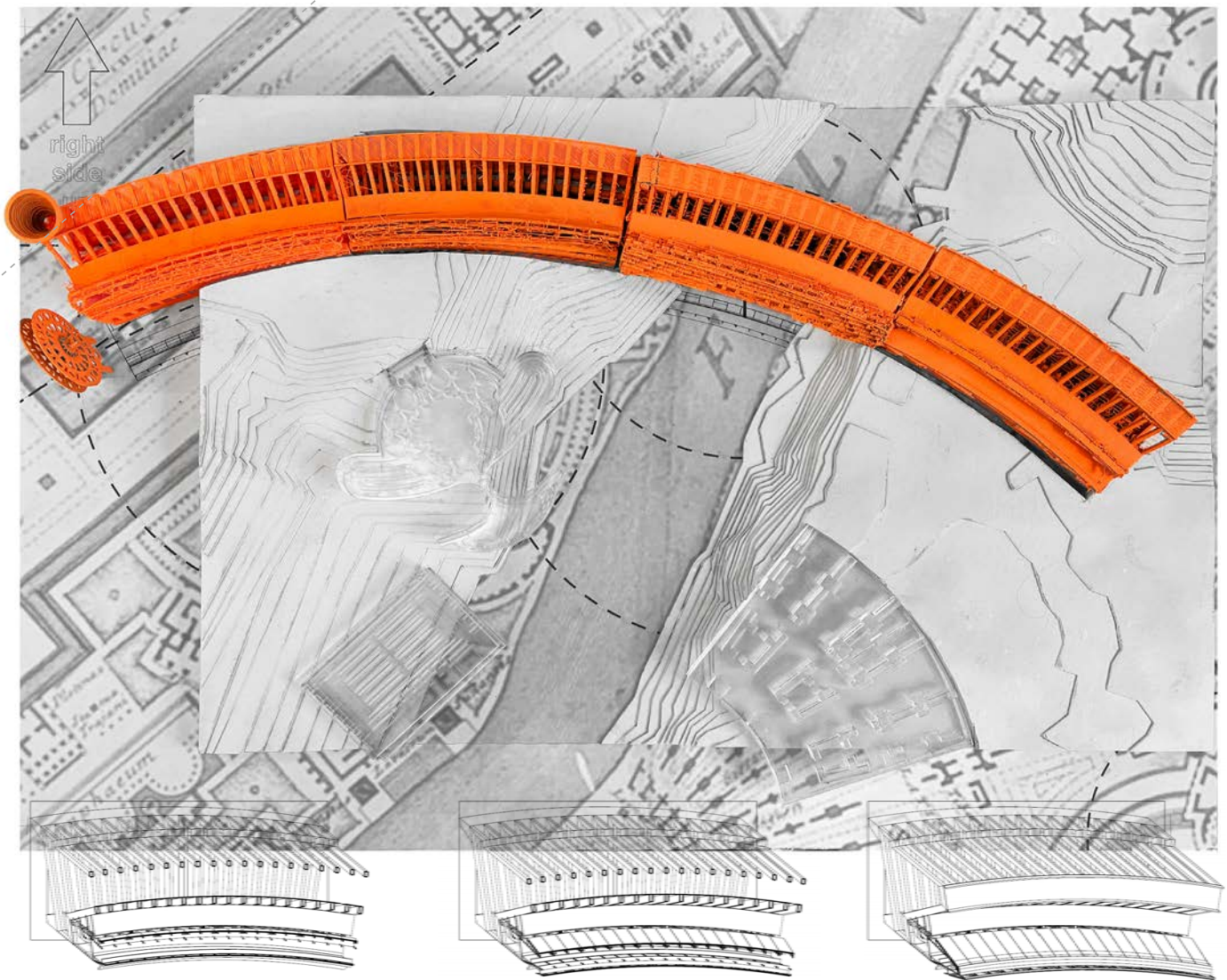


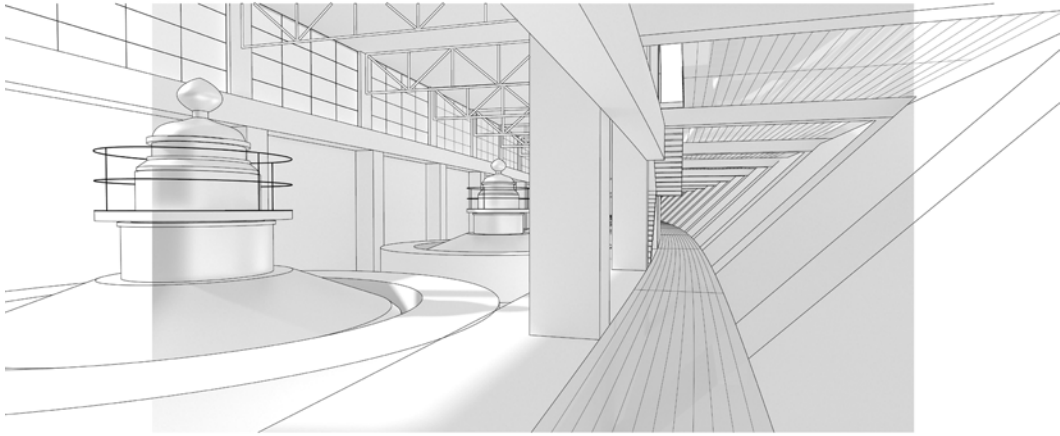
Hydroelectric dam and drodel massing model



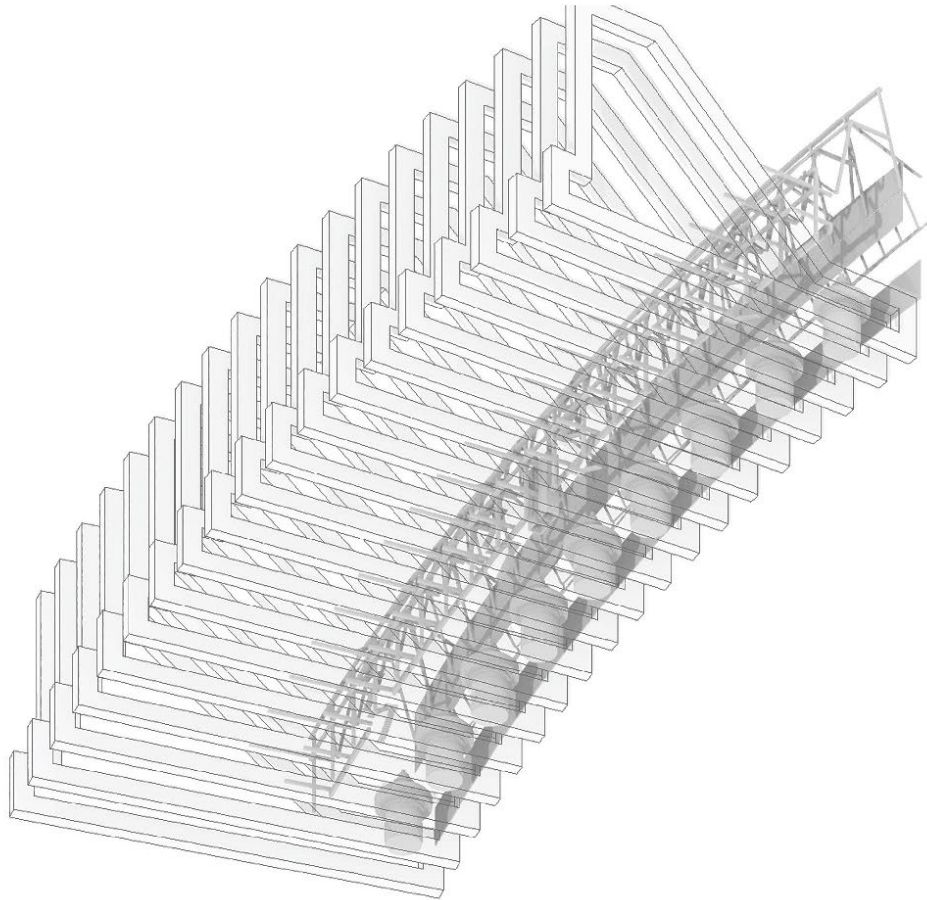


Piranesi massing re-imagined as storage utility space

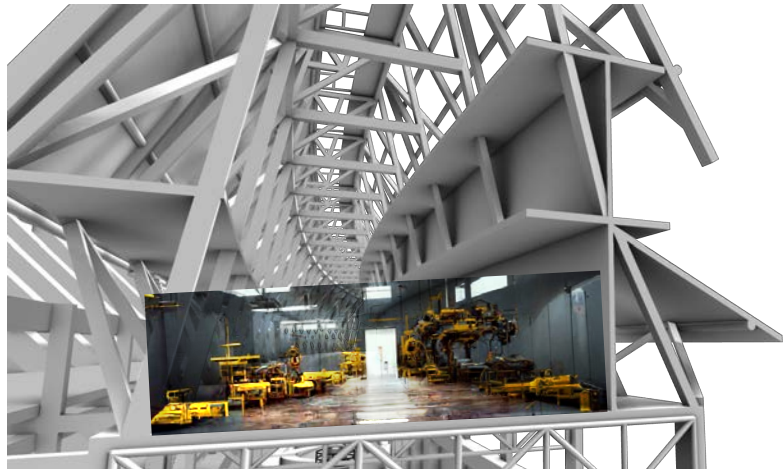
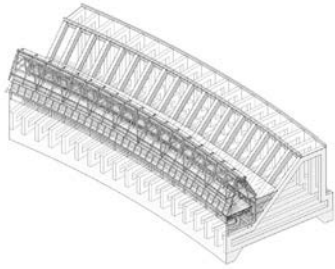




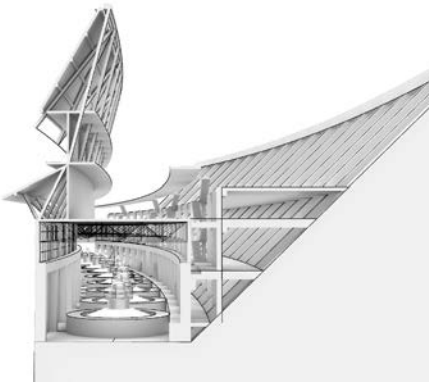
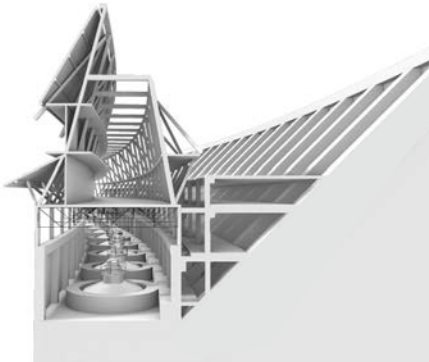
Interior perspective of generator space



Worms-eye view of turbines for electricity generation



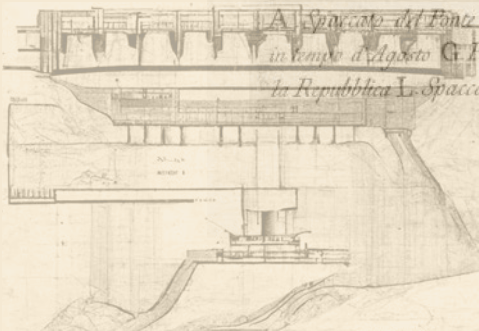
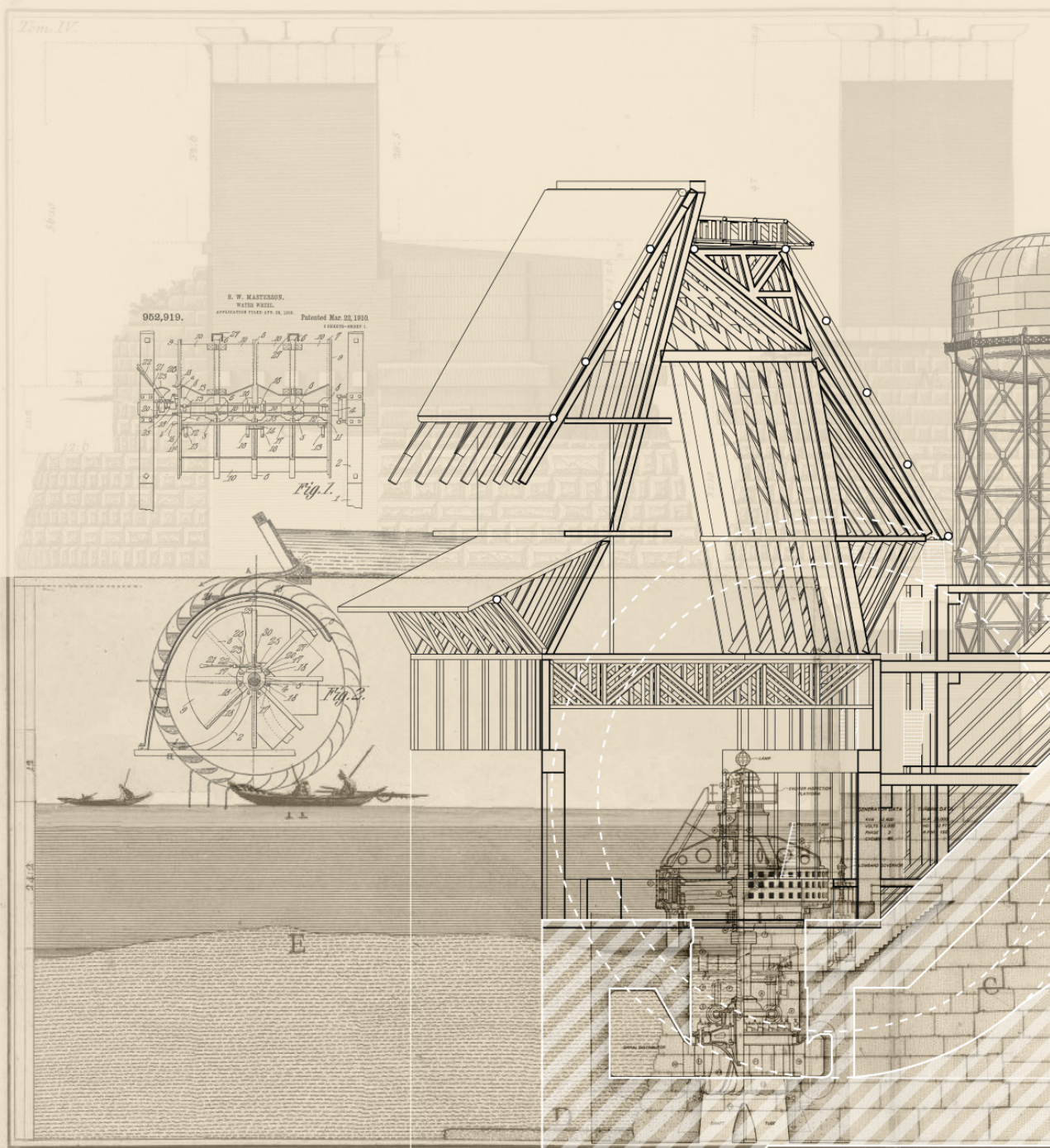
Maker space of AI machinery



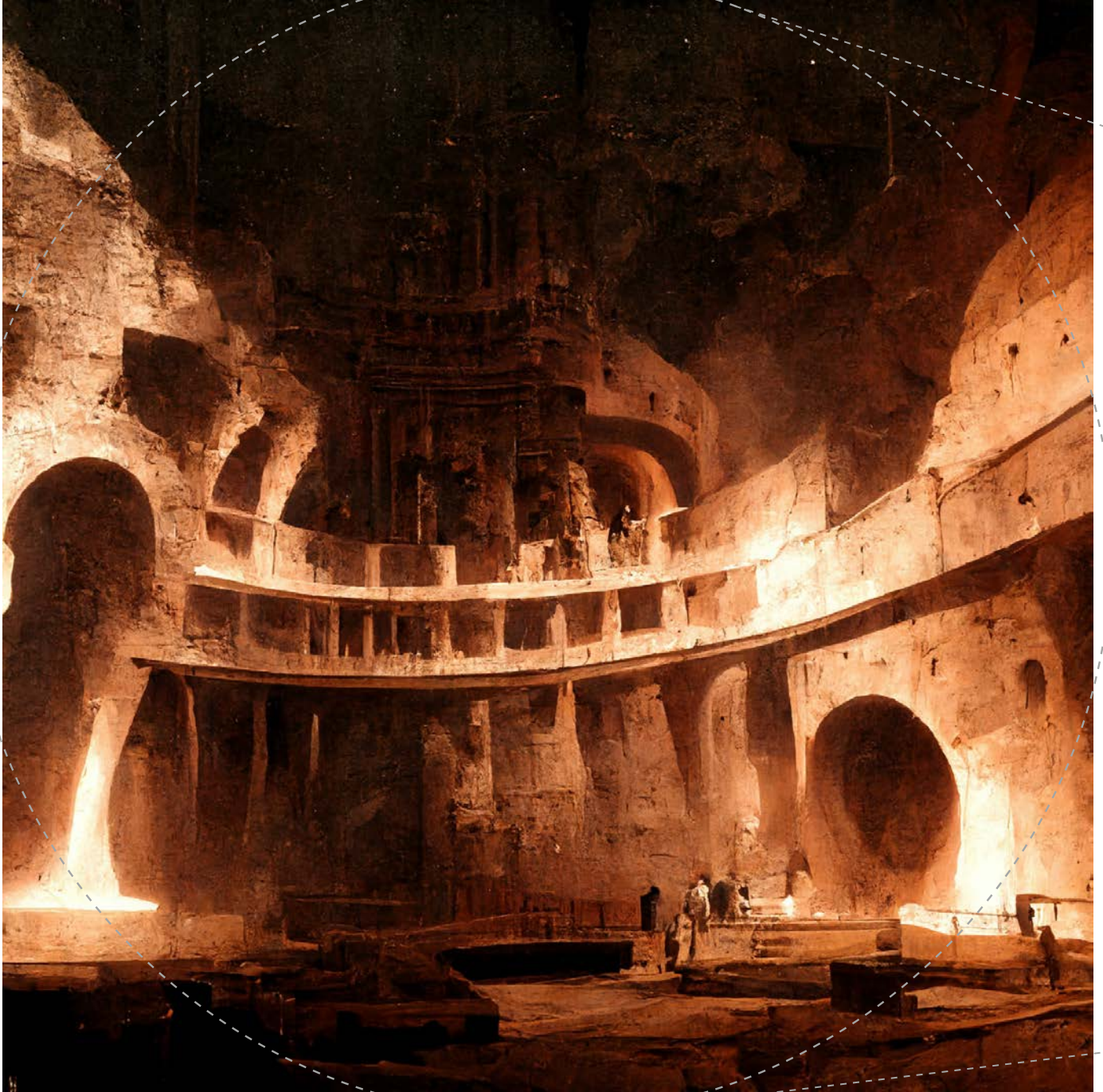
Gradual construction



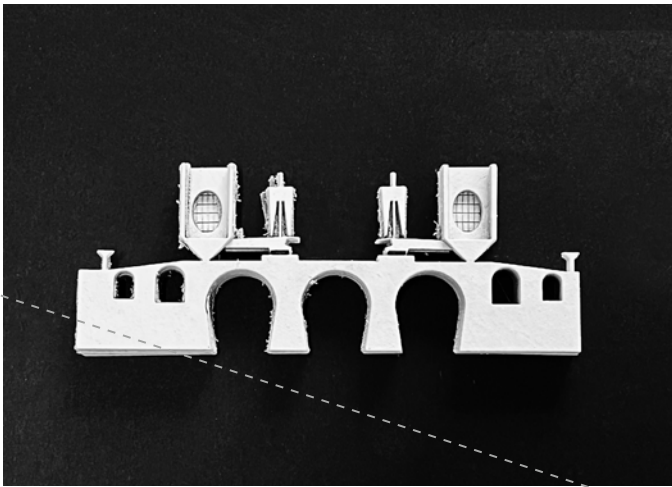
Interior view of collection archive



A) Spaccato del Ponte Fabricio oggi detto Quattro Capi B. Sperone aggiunto da Consoli sino alla linea C. D. Lastrico, che ricuopre i f...
 in tempo d'Agosto G. Pelo in tempo d'Inverno H. Pelo d'Acqua in tempo dell'Anno 1750. I. Spaccato d'uno degli Archi superiori coi pro...
 la Repubblica L. Spaccato del Ponte verso i ripari fatti da Consoli M. Ripari de Consoli uniti alle ripe N. Ripe fabbricate nello stesso tempo



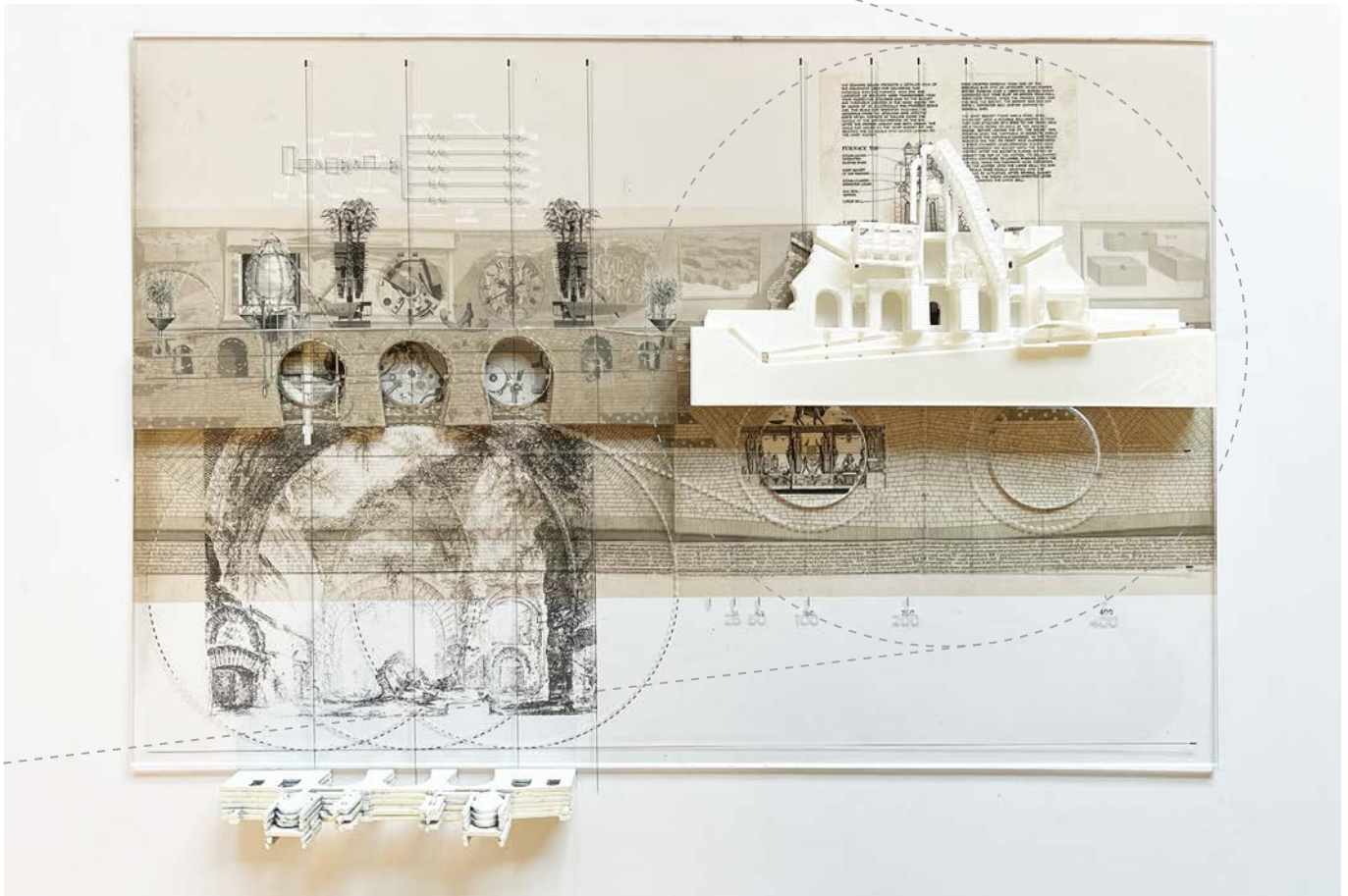
Interior perspective of blast furnace



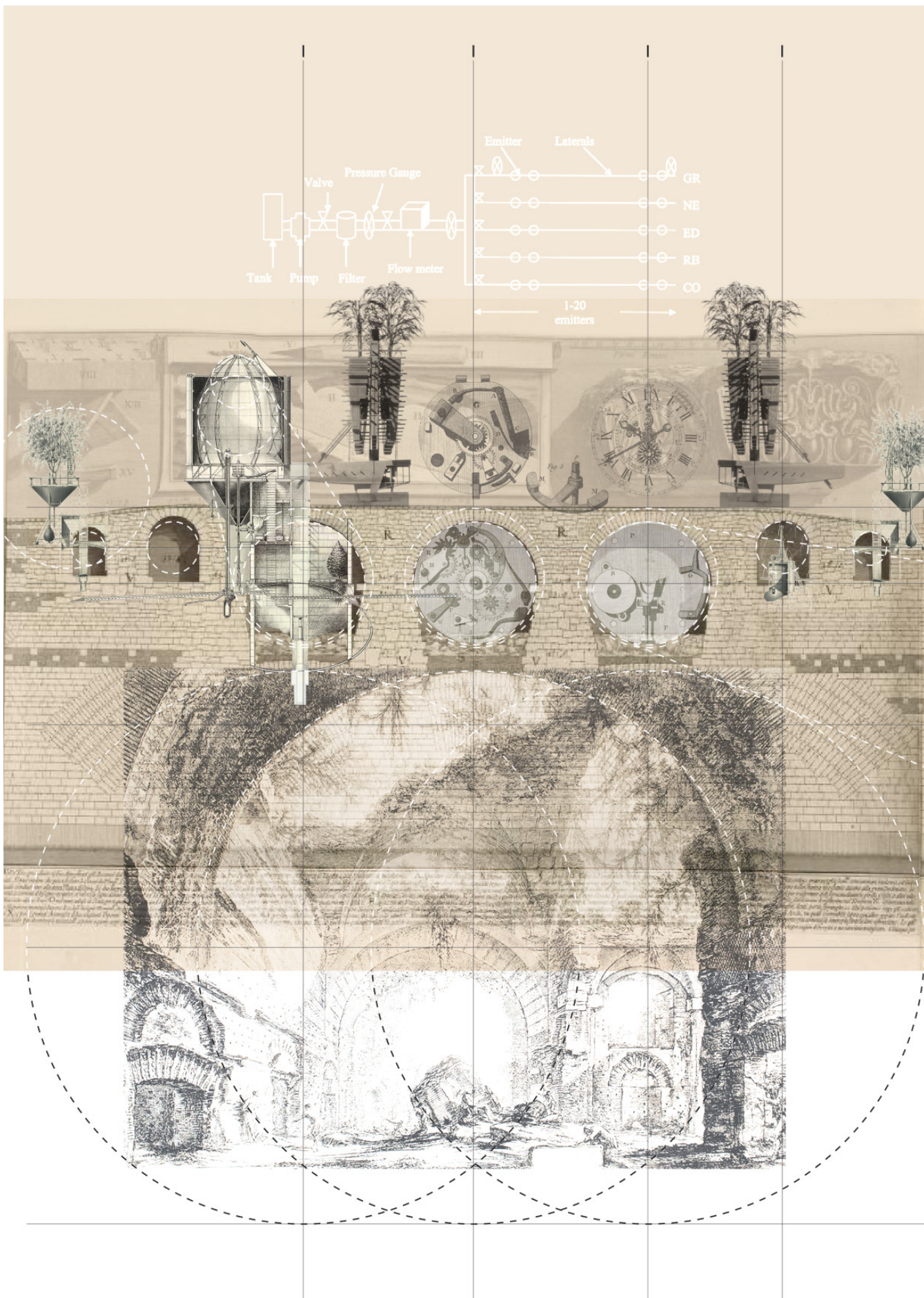
Drodel nugget 1



Drodel nugget 2



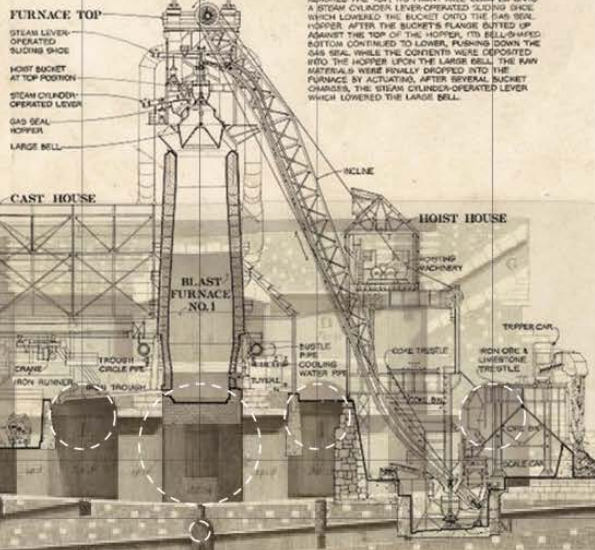
Hybrid drawing model or drodel



THE DRAWING BELOW PRESENTS A DETAILED VIEW OF THE EQUIPMENT USED FOR DELIVERING RAW MATERIALS INTO THE FURNACE. IRON ORE AND LIMESTONE OR DOLOMITE WERE TRANSFERRED FROM THEIR RESPECTIVE STOCKING BINS TO THE BUCKET AND TURNABLE LOCATED IN THE HOIST BUCKET PIT BY MEANS OF AN ELECTRICALLY RUN-POWERED SCALE CAR. THE SCALE CAR OPERATOR RELEASED THE MATERIALS FROM THE STOCKING BINS INTO THE CAR'S WHEEL HOPPERS BY PULLING DOWN THE HANDLE AT THE BOTTOM-OPENING OF THE BIN. AFTER THE PROPER AMOUNT HAD BEEN DRAWN, THE SCALE CAR MOVED TO THE HOIST BUCKET PIT AND DROPPED THE MATERIALS INTO CHUTES LEADING TO THE HOIST BUCKET.

COKE DROPPED DIRECTLY FROM ONE OF THE STOCKING BINS INTO AN ATTACHED WHEEL HOPPER BEFORE PASSING OVER A VIBRATING SIEVE WHICH SEPARATED OUT COKE DUST OR BRUISES FROM FULL-SIZED COKE PIECES. WHILE THE USABLE COKE WAS FED INTO THE BUCKET, THE BRUISES WERE LED OUT OVER A CONVEYOR BELT SYSTEM LEADING TO REMOVAL BINS.

THE HOIST BUCKET ITSELF WAS A STEEL SHELL WHICH SAT UPON A MOVABLE BELL-SHAPED BOTTOM THAT WAS ATTACHED BY A STEEL TO THE FRONT AXLE OF A TRUCK BODIES ON RAILS UP THE INCLINED SLOPE. BEFORE LEAVING THE PIT, THE BUCKET WAS ACTUATED UPON THE TURNABLE IN ORDER TO EVENLY DISTRIBUTE THE MATERIALS CHARGED. AS THE TRUCK REACHED THE TOP, ITS FRONT AXLE CLAMPED ONTO A STEEL CYLINDER, LEVER-OPERATED SLIDING SHOE WHICH LOWERED THE BUCKET ONTO THE LARGEST HOPPER. AFTER THE BUCKET'S FLANGE CLIPPED OFF AGAINST THE TOP OF THE HOPPER, ITS BELL-SHAPED BOTTOM CONTINUED TO LOWER, PUSHING DOWN THE GAS SEAL WHILE THE CONTENTS WERE DEPOSITED INTO THE HOPPER UPON THE LARGER BELL. THE RAW MATERIALS WERE FINALLY DROPPED INTO THE FURNACE BY ACTUATING, AFTER SEVERAL BUCKET CHARGES, THE STEAM CYLINDER-OPERATED LEVER WHICH LOWERED THE LARGE BELL.



FURNACE TOP
STEAM LEVER-OPERATED SLIDING SHOE
HOIST BUCKET AT TOP POSITION
STEAM CYLINDER-OPERATED LEVER
GAS SEAL HOOPER
LARGE BELL

CAST HOUSE

HOIST HOUSE

BLAST FURNACE NO. 1

IRON ORE & LIMESTONE TRISTLE

COKE TRISTLE

SCALE CAR

BUCKET

WAGON TRUCK



[Small, illegible text at the bottom of the page, likely a caption or technical notes.]

ISM

ABOLISM

ONALISM

DECONSTRUCTIVISM

STRUCTURALISM

POST-MODERNISM

NEO-FUTURISM

Complexity and Contradiction
Venturi: 1966

Introduction to 5 Architects
Rowe: 1972

Critical Regionalism
Frampton: 1983

Space, Culture & Urban Design
Peponis: 1989

Diagram Architecture
Ito: 1996

Persistent Breakage
Evans: 1995

Public Space
Crawford: 1999

Architecture of the City
Rossi: 1966

Team 10 Primer
Smithson: 1968

Arch Dans
Leboudoir Tafuri: 1974

Language of Post-Modern Arch.
Jenks: 1977

Architecture of Reality
Benedikt: 1987

Post-Modern Architecture
McLeod: 1989

Why Critical Regionalism
Tzonis and Lefaivre: 1990

Evolution of Designs
Steadman: 1979

Typology
Colquhoun: 1969

Neo-Classicism
Rowe: 1973

Meaning in Western Arch.
Norburg and Shultz: 1974

Arch. & the Conflict of Representation
Vesley: 1985

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of the City
Rossi: 1966

Team 10 Primer
Smithson: 1968

Language of Post-Modern Arch.
Jenks: 1977

Evolution of Designs
Steadman: 1979

Critical Regionalism
Frampton: 1983

Post-Modern Architecture
McLeod: 1989

Why Critical Regionalism
Tzonis and Lefaivre: 1990

Architecture of Reality
Benedikt: 1987

Complexity and Contradiction
Venturi: 1966

Introduction to 5 Architects
Rowe: 1972

Typology
Colquhoun: 1969

Neo-Classicism
Rowe: 1973

Meaning in Western Arch.
Norburg and Shultz: 1974

Arch. & the Conflict of Representation
Vesley: 1985

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Arch Dans
Leboudoir Tafuri: 1974

Diagram Architecture
Ito: 1996

Persistent Breakage
Evans: 1995

Light Construction
Riley: 1995

Diagram Architecture
Ito: 1996

Persistent Breakage
Evans: 1995

Diagram Architecture
Ito: 1996

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987

Architecture of Reality
Benedikt: 1987