

Above and Below

*Jacob Steinberg / 6082572
P5 / 18.06.2025 I 14:45 / Room Q*

*TU Delft / 2024/25
Explore Lab Graduation Studio / 39*

Tutored by Roel van de Pas, Laura Cipriani and Georgios Karvelas



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Präsentation Rosenturm von Herzog & de Meuron: Nachhaltiges Hochhaus mit Luft nach oben

VON ARCHITEKTUR BASEL AM 24. MÄRZ 2023

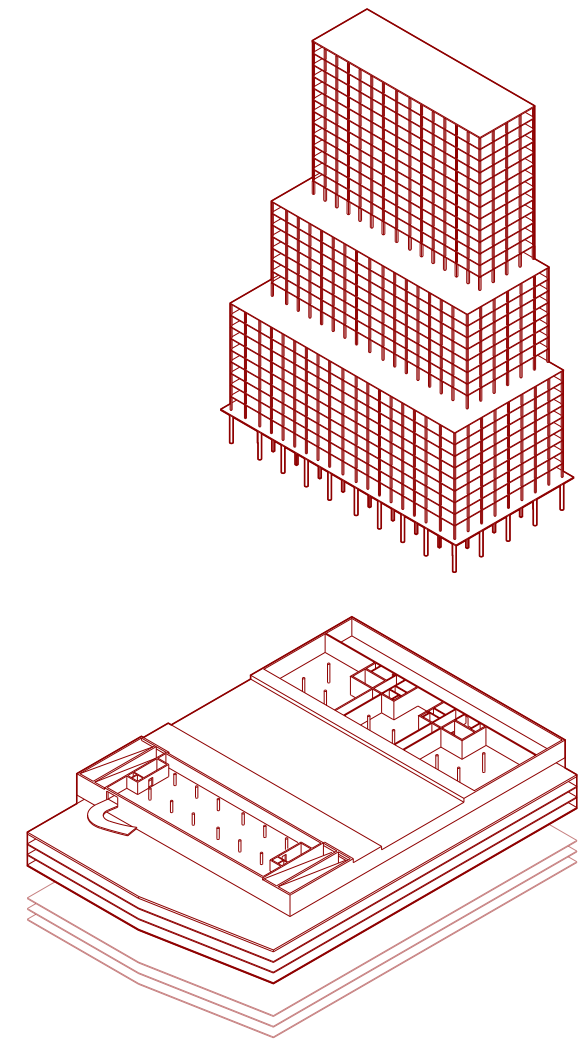
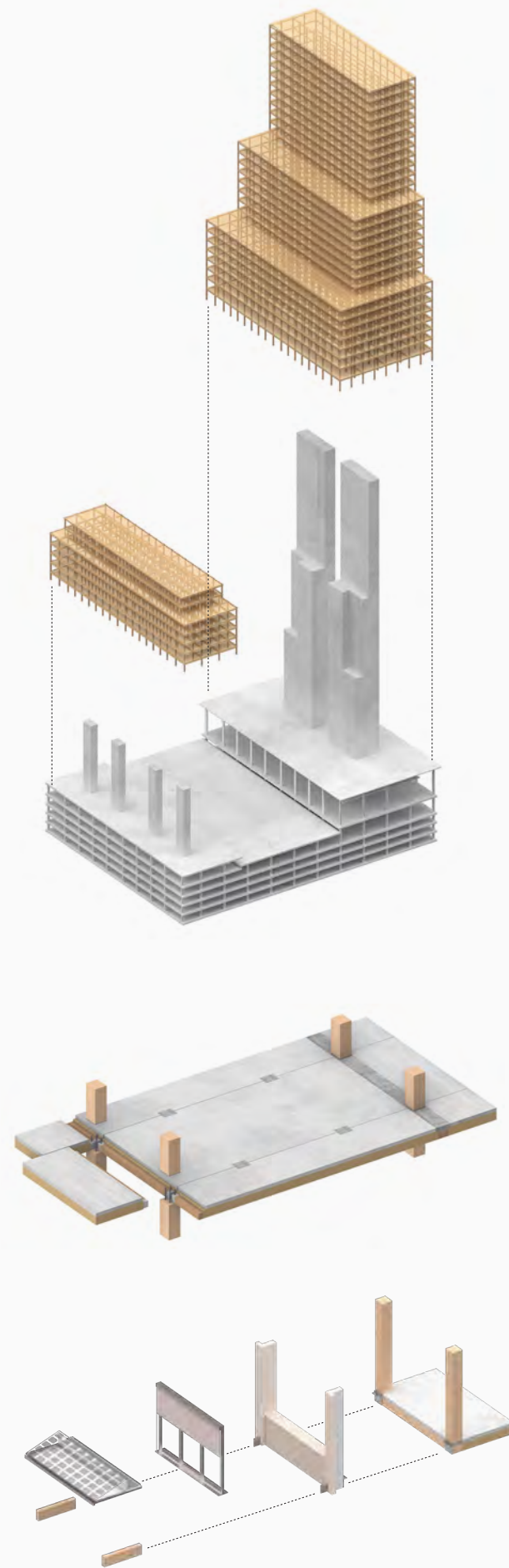
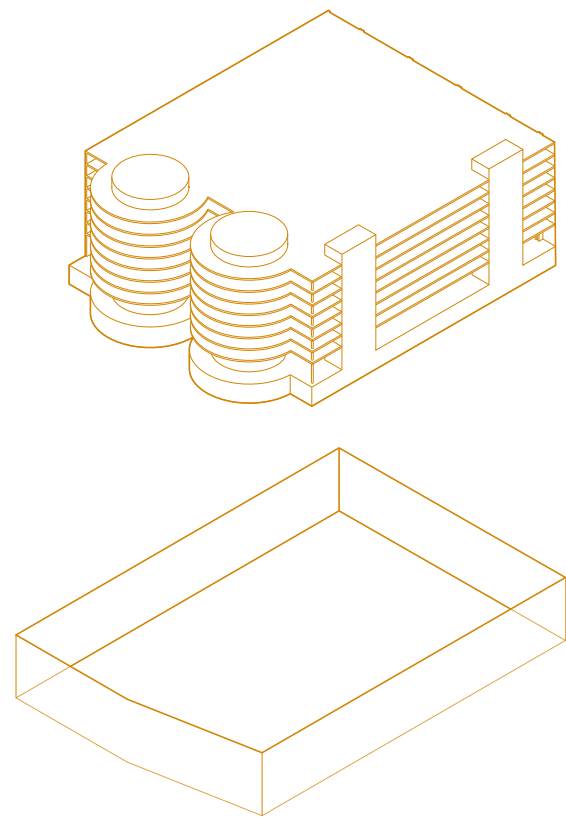
AKTUELLES

«Als Rollkofferquartier bezeichnen es manche», bemerkte Kantonsbaumeister Beat Aeberhard bei der Präsentation des neuen Rosenturms. Tatsächlich nutzt die Quartierbevölkerung die öffentlichen Räume rund um die Messe nur bedingt. Das soll sich künftig ändern. Das siegreiche Projekt von Herzog & de Meuron sieht eine Erweiterung der Rosentalanlage

source: architekturbasel.ch



source: Herzog & De Meuron



source: Herzog & De Meuron



Forrest Management
arte.de

Extraction Landscapes

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Forrest Management
arte.de



Cement Factory
depositphotos.com

Extraction Landscapes



Forrest Management
arte.de



Construction Debris
Antakya, Turkey



Cement Factory
depositphotos.com

Extraction Landscapes



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Construction Debris
Antakya, Turkey



Cement Factory
depositphotos.com



Coal Mine
Kiruna, Sweden

Extraction Landscapes

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Forrest Management
arte.de



Construction Debris
Antakya, Turkey



Marble Quarry
Tito Mouraz



Cement Factory
depositphotos.com



Iron Mine
Kiruna, Sweden



Forrest



Cement Factory
depositphotos.com



Photo: Marie-Luise Schlesinger



Favignana, Sicily

Iron Mine
Kiruna, Sweden

Extraction Landscapes



Extraction Landscapes

ABOVE



BELOW



Photo: Marie-Luise Schlesinger

Italy

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Sicily



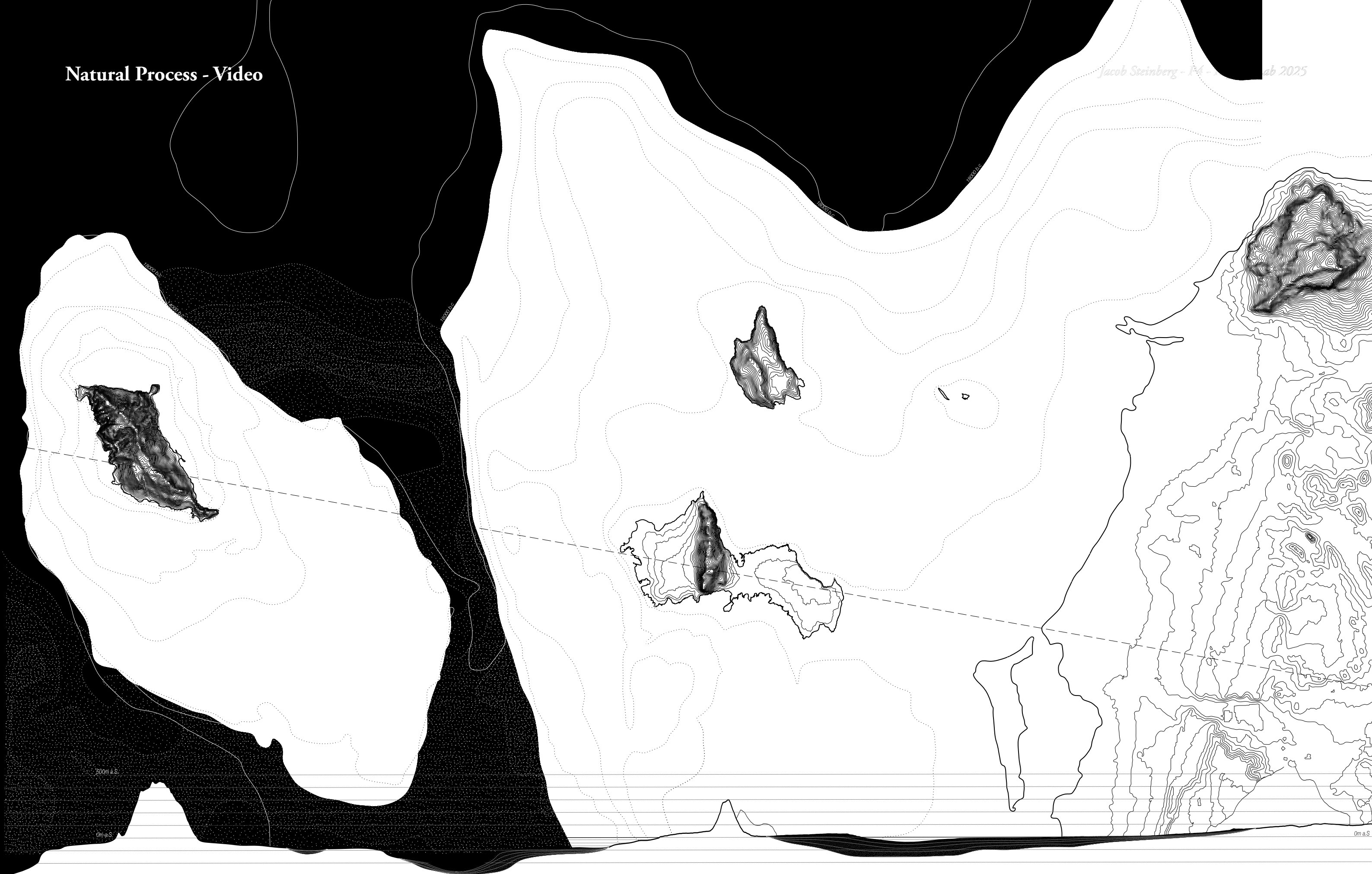
Sicily

More Lab 2025

Egadi Islands





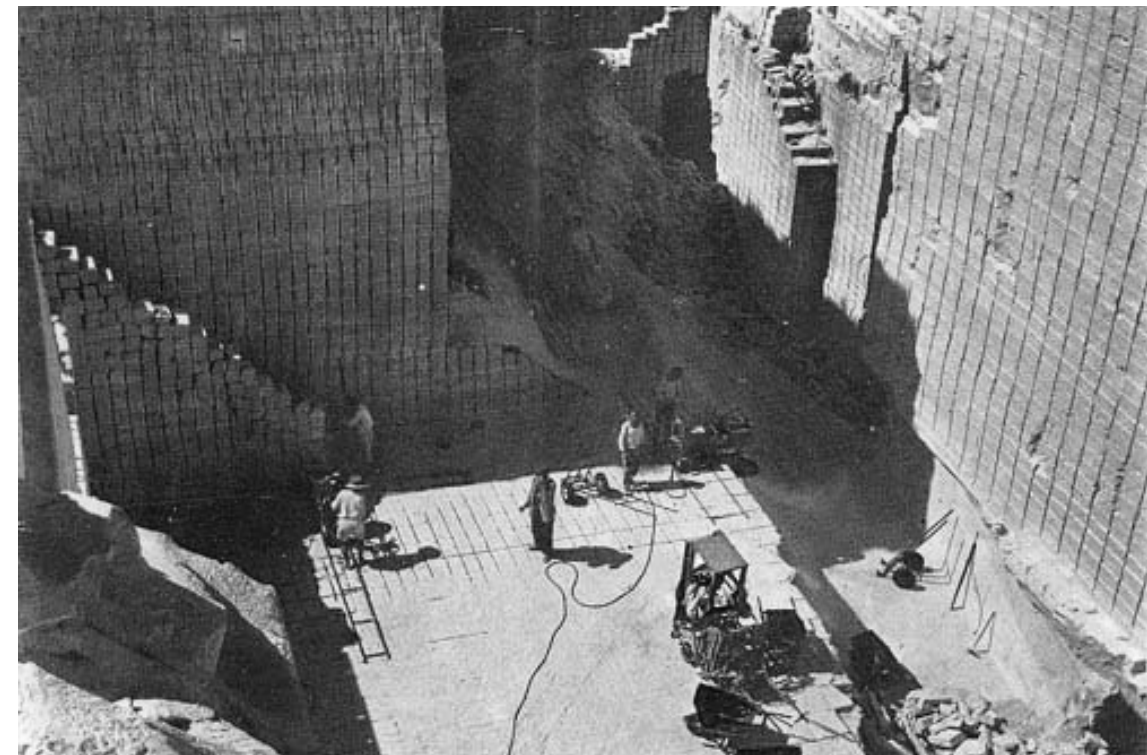


Calcarenite Quarry

Jacob Steinberg - P5 - Explore Lab 2025



*Calcarenite Quarry
19th century
Manual Extraction
Archived Photo - Giardino dell Impossibile*

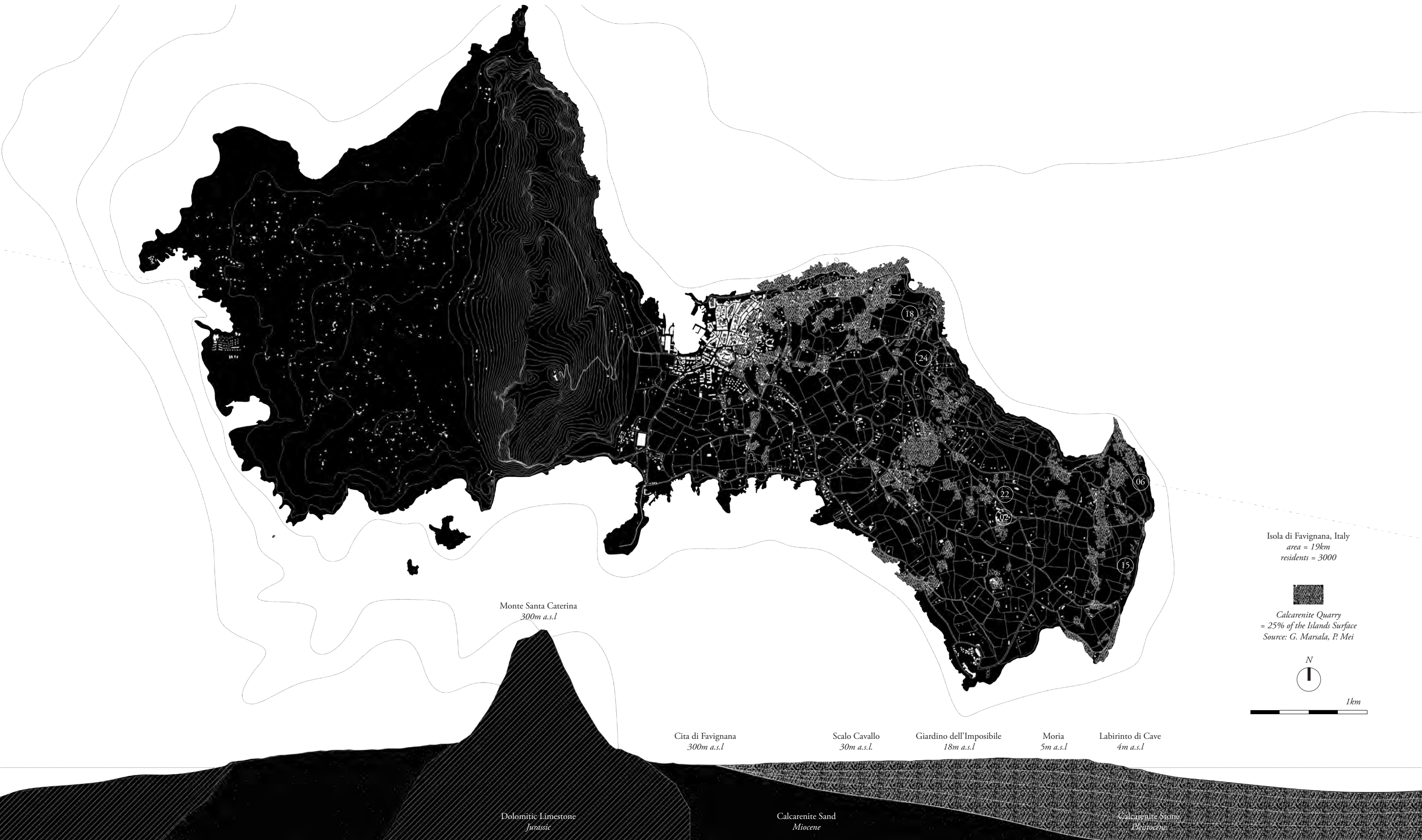


*Calcarenite Quarry
20th century
Industrial Extraction
Archived Photo - Giardino dell Impossibile*

ABOVE

BELOW





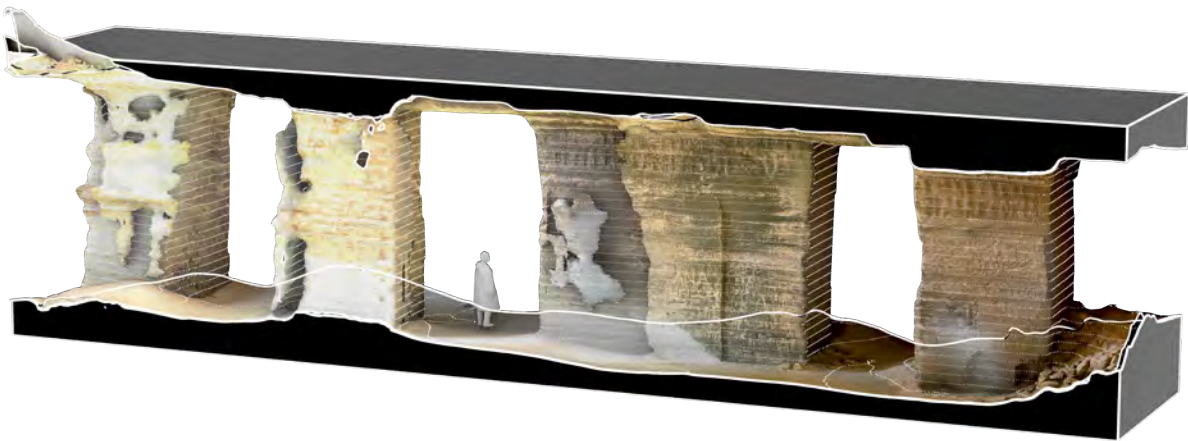
Fieldtrip
November 2024

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Quarry = Ecosystem

Jacob Steinberg - P4 - Explore Lab 2025



Quarry = Ecosystem

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Pine
9-15m, full sun
extreme climates, hardiness zone 7-9
chalkys soils, limestone



Aloe yucca
1.5 - 7 m, full sun
hardiness zone 8-11
sandy/mixed soil



Pampas Grass
2-3m, full sun
hardiness zone 8-10
moist, sandy soils



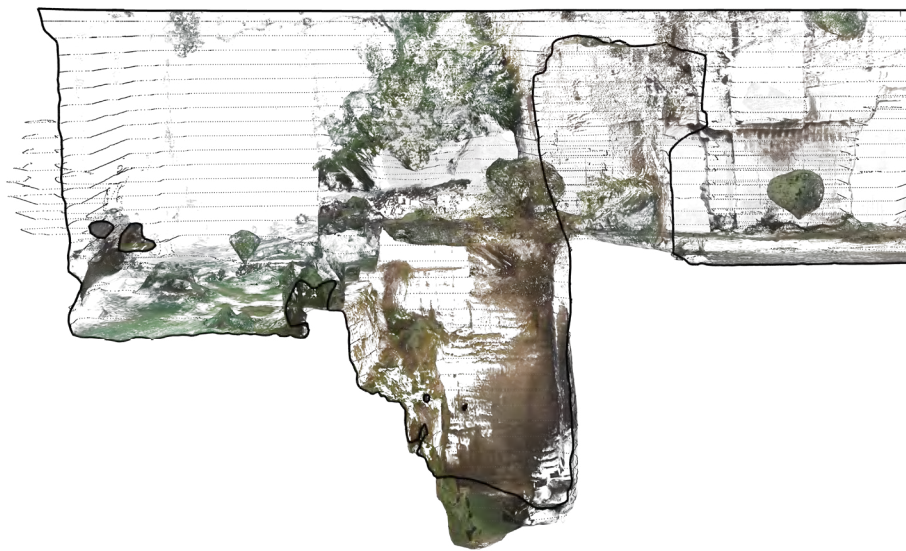
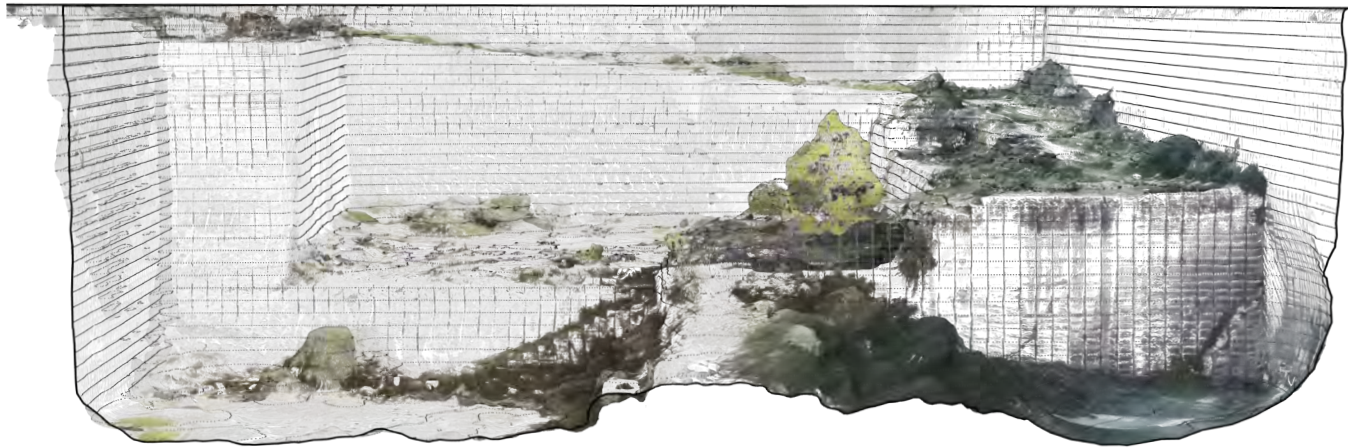
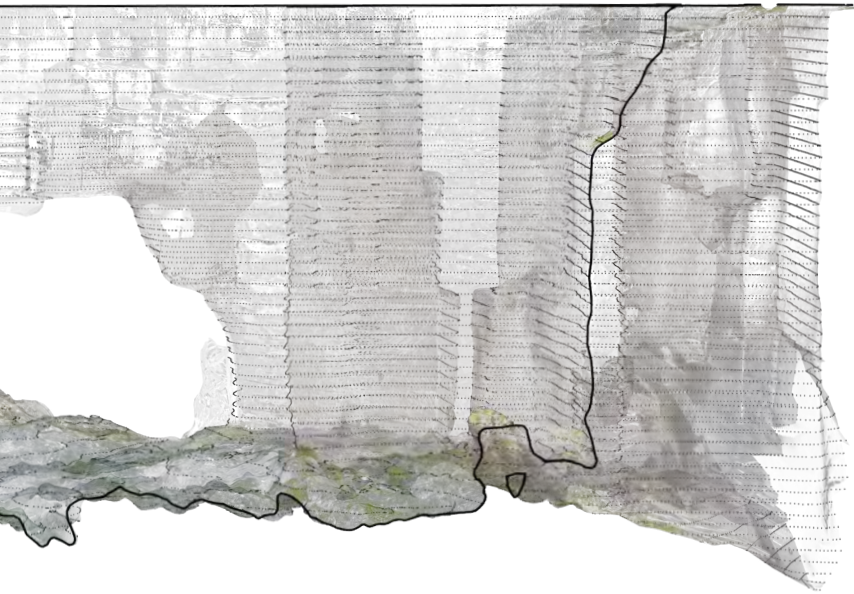
Rock Caper
60 - 90 cm, full sun
hardiness zone 8-10
mixed soil



Bitter Orange
6-9m, full sun
hardiness zone 9-11
mixed soil

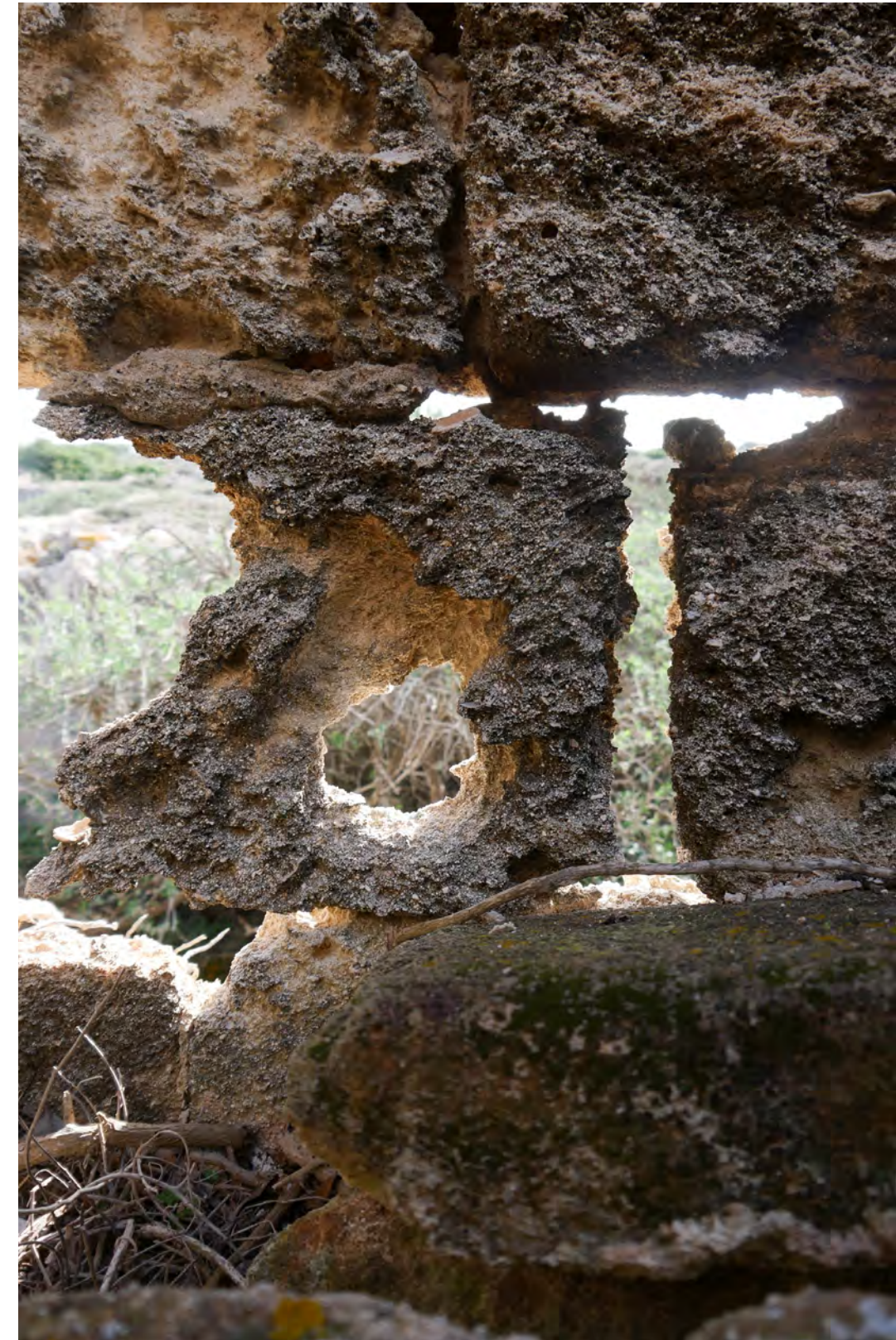


Sago Palm
3-8m, partial sun
hardiness zone 8-12
mixed soil

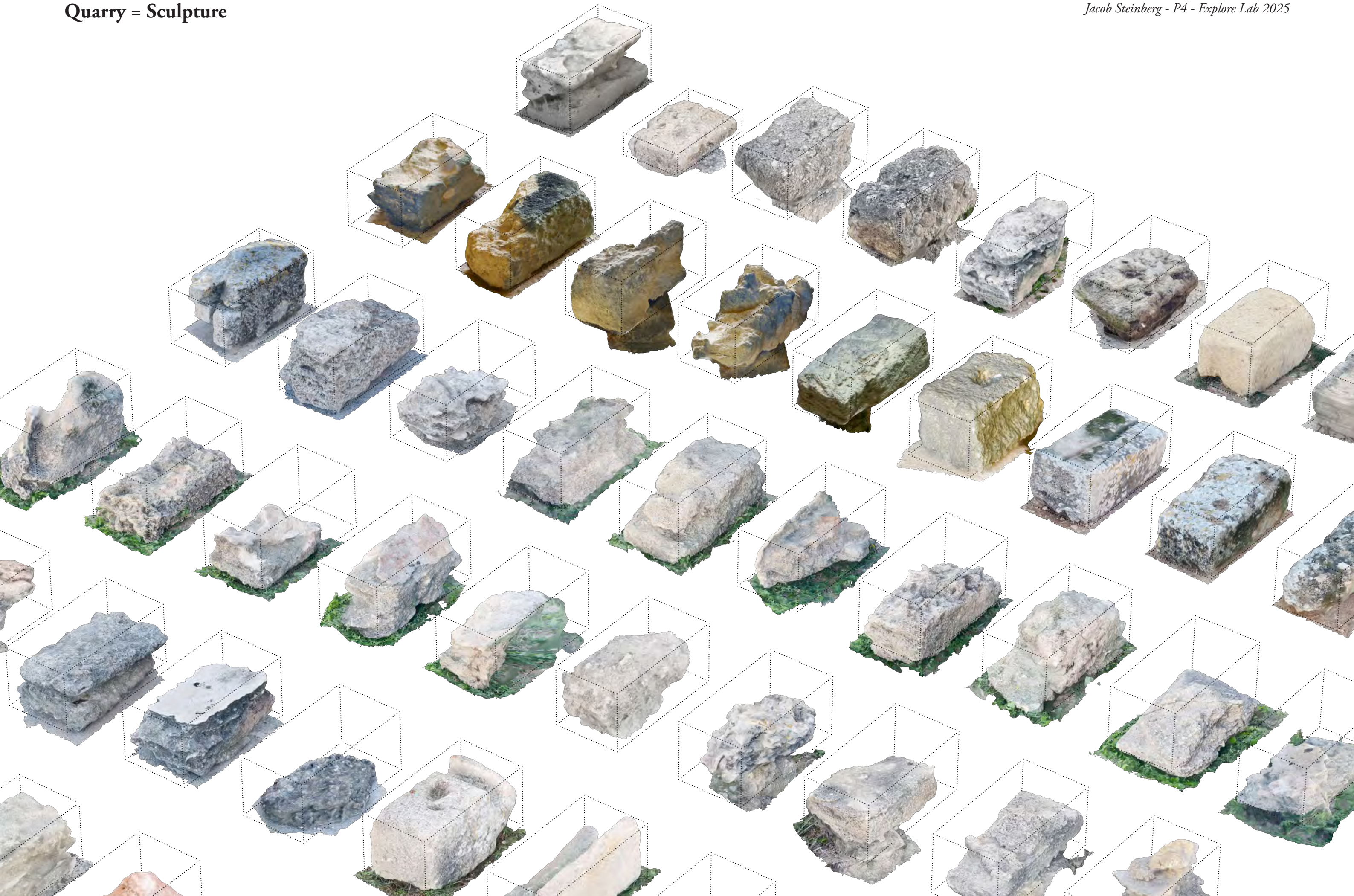


Quarry = Sculpture

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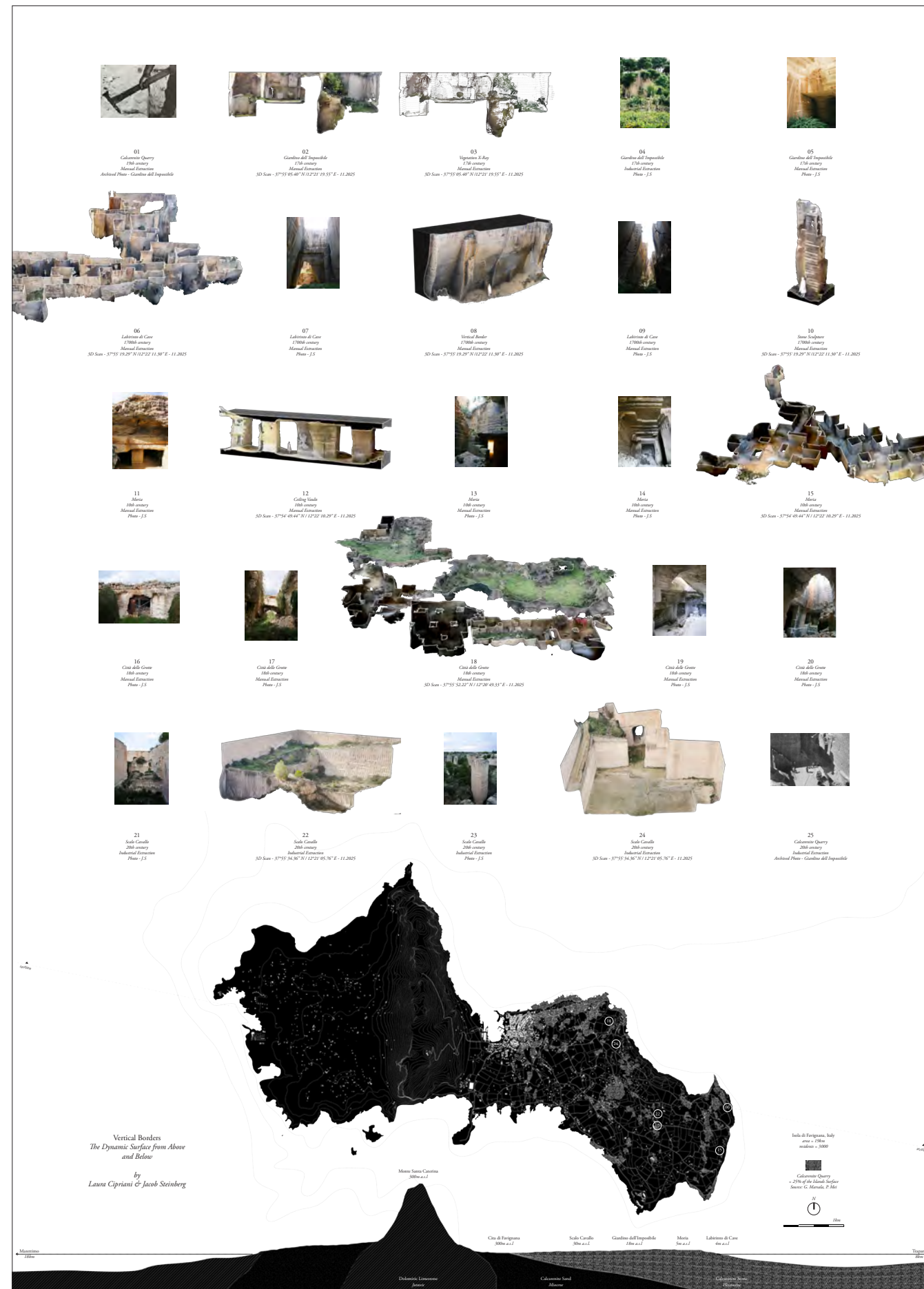


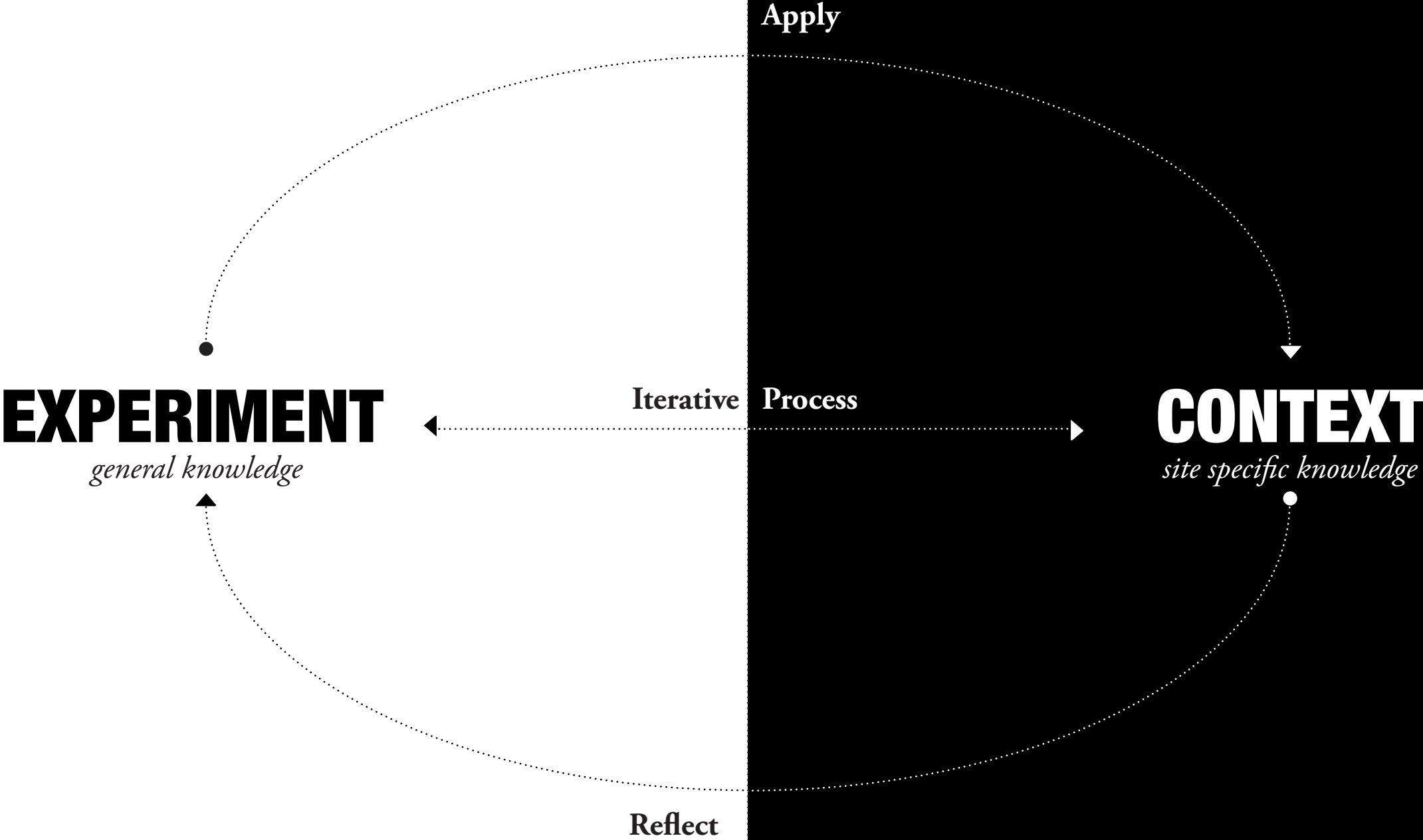
Quarry = Sculpture



Research Outcome

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How do cultural and natural processes shape Favignana's quarries over time?

How can we reimagine Favignana's architecture by timing the interplay of natural and cultural processes?

Duality of Architecture

ABOVE

BELOW

Temporality

deep time

anthropocene

post-anthropocene

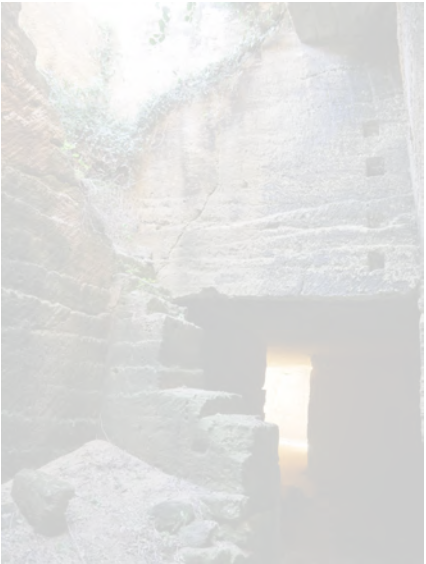
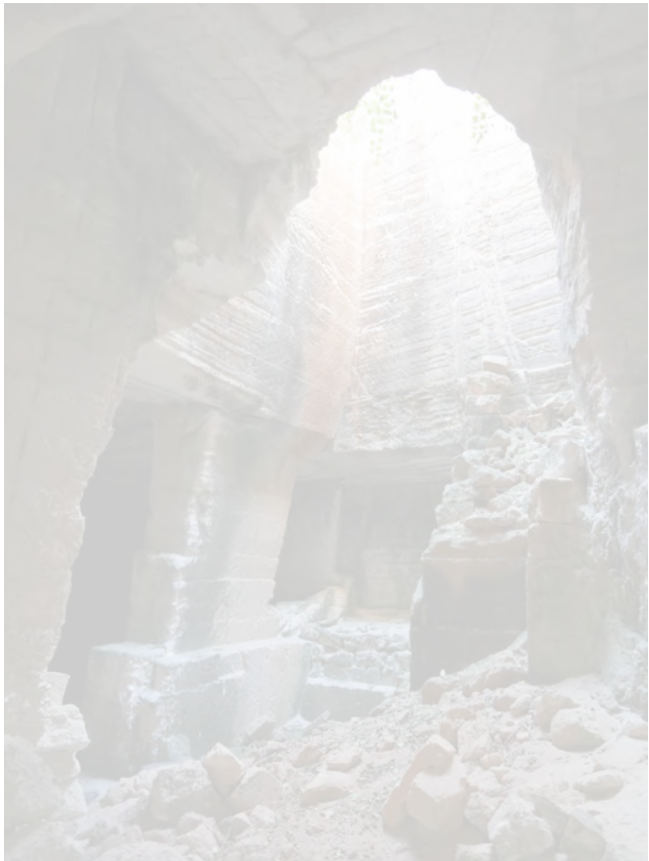
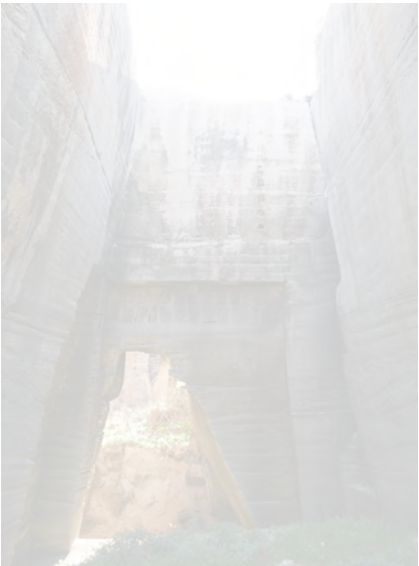
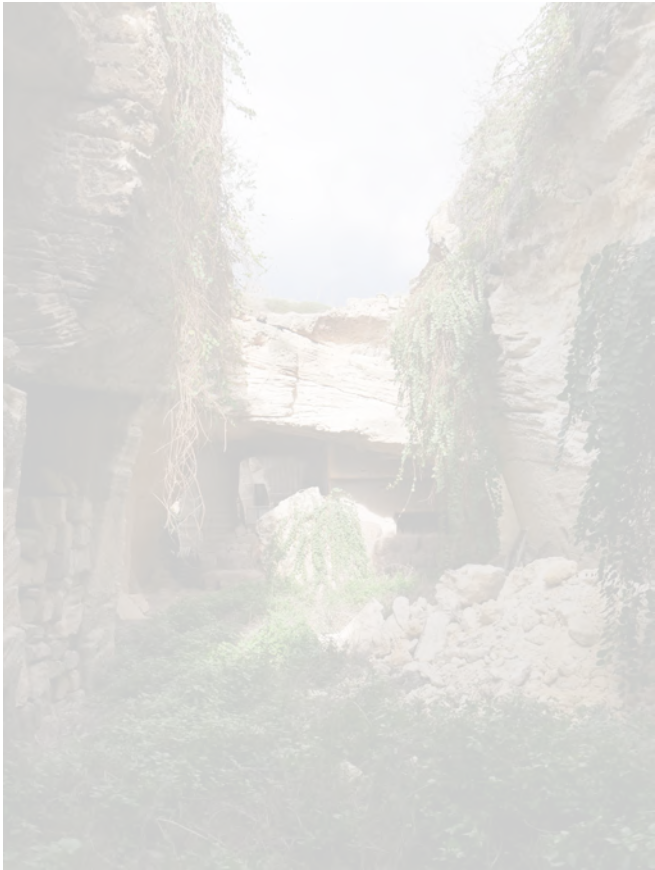
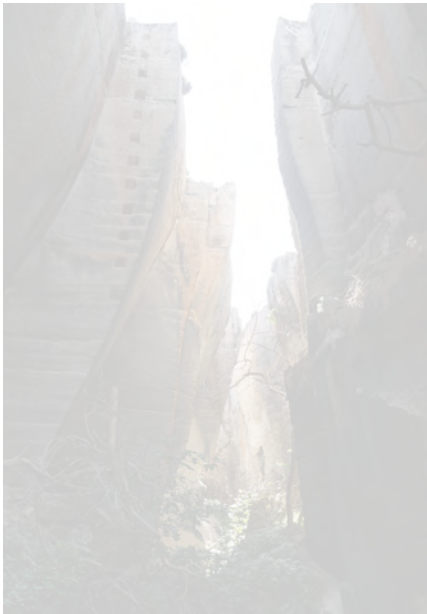
PAST

PRESENT

FUTURE

Architecture = Landscape





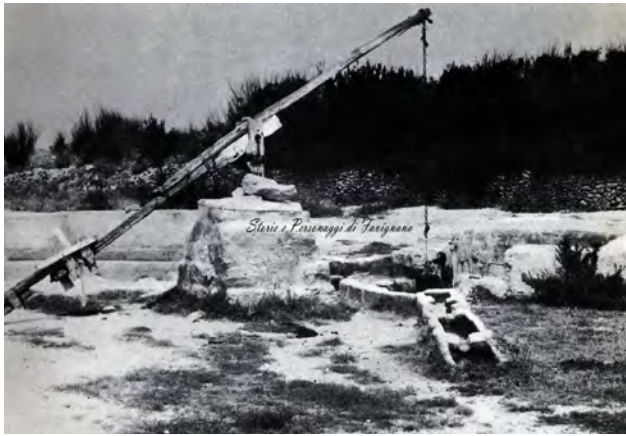
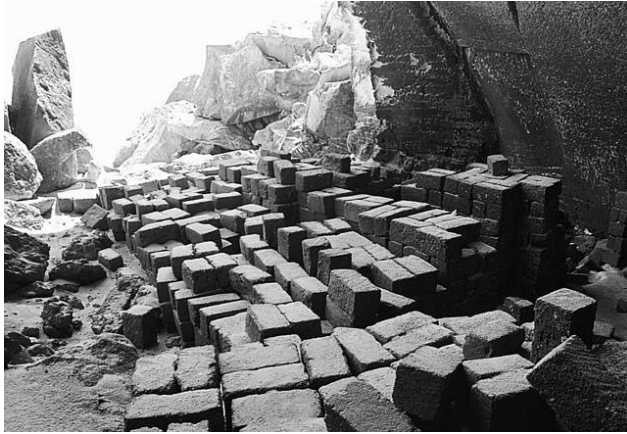


Photo: Alberto Albi, Fillipo Mannino, Giovanni Figliomeni, Giuseppe Incaviglia

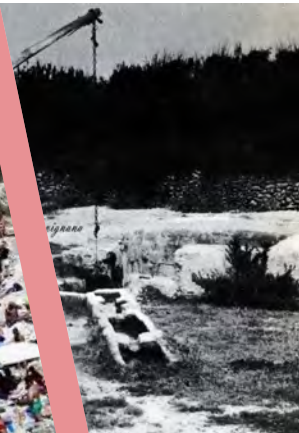
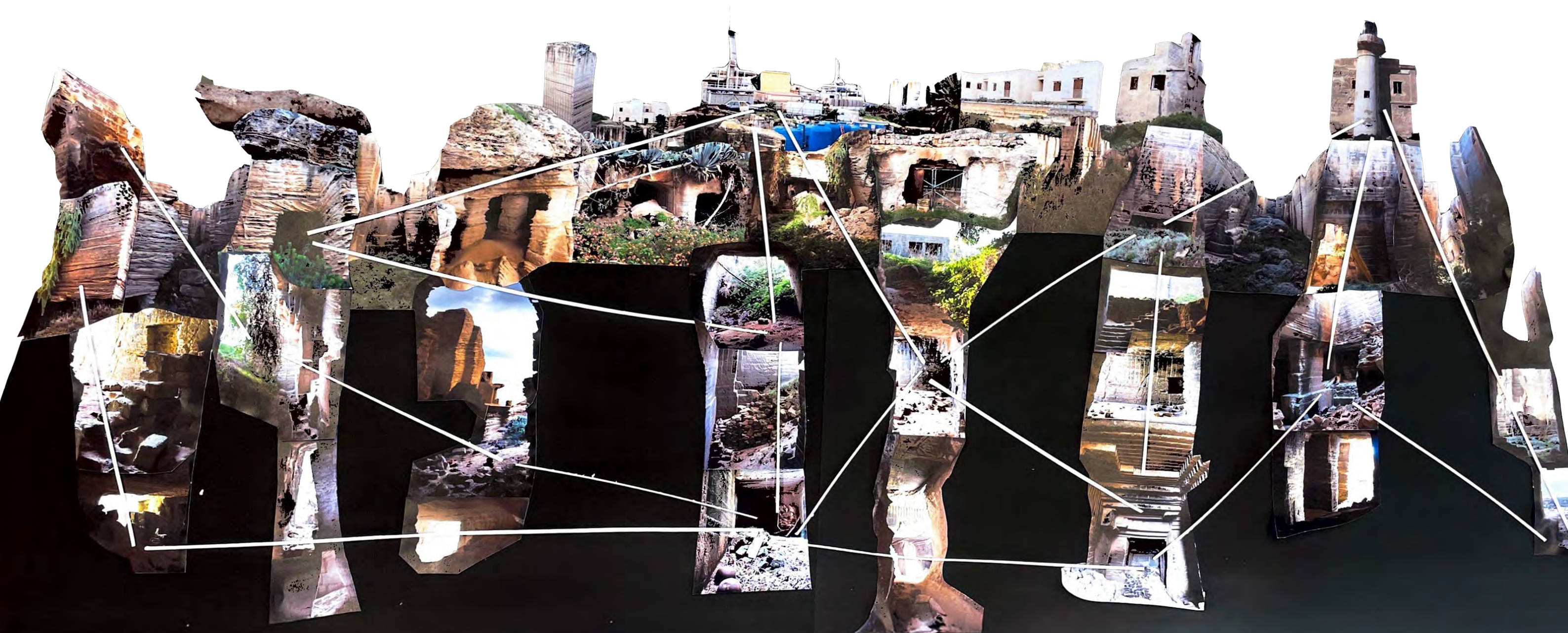


Photo: Alberto Albi, Fillipo Mannino, Giovanni Figliomeni, Giuseppe Incaviglia



Photo: Alberto Albi, Fillipo Mannino, Giovanni Figliomeni, Giuseppe Incaviglia







Light - Shadow



Inside - Outside



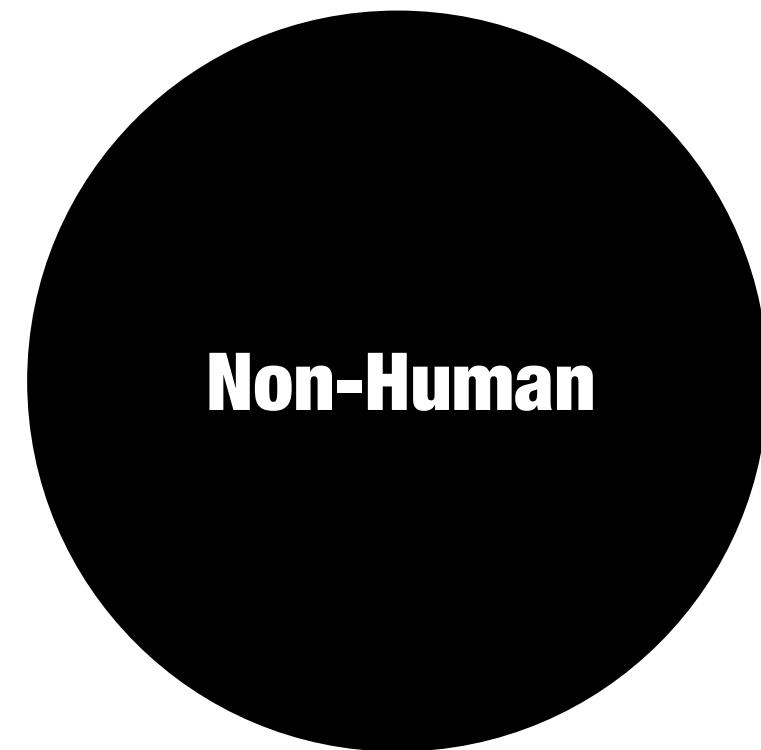
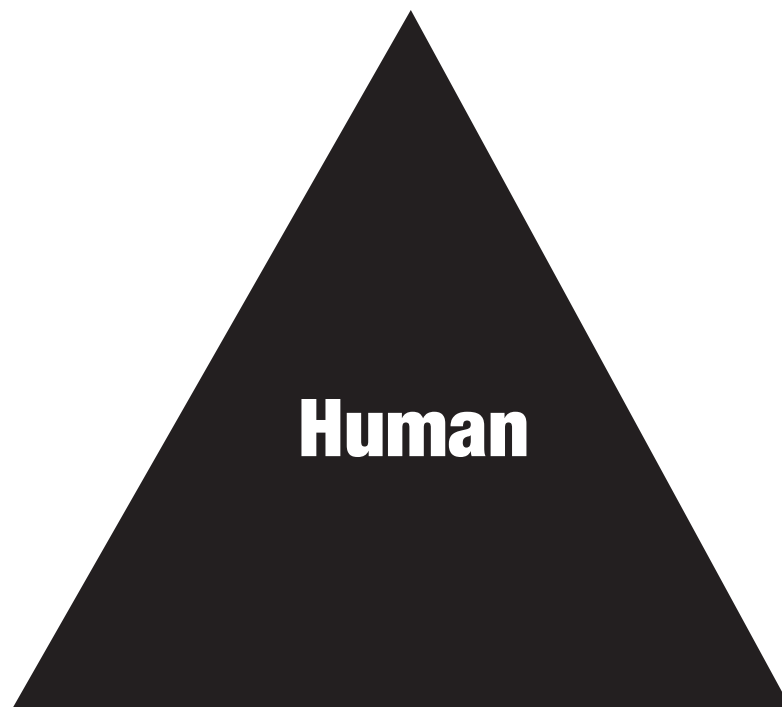
Cold - Warm



Shadow ●▶ Light



Arid ◀▶ Humid



MASS

+



deep time

anthropocene

post-anthropocene



-

VOID

MASS

+



-

VOID

deep time

sedimentation



erosion

anthropocene

post-anthropocene



MASS

+



-

VOID

deep time

erosion

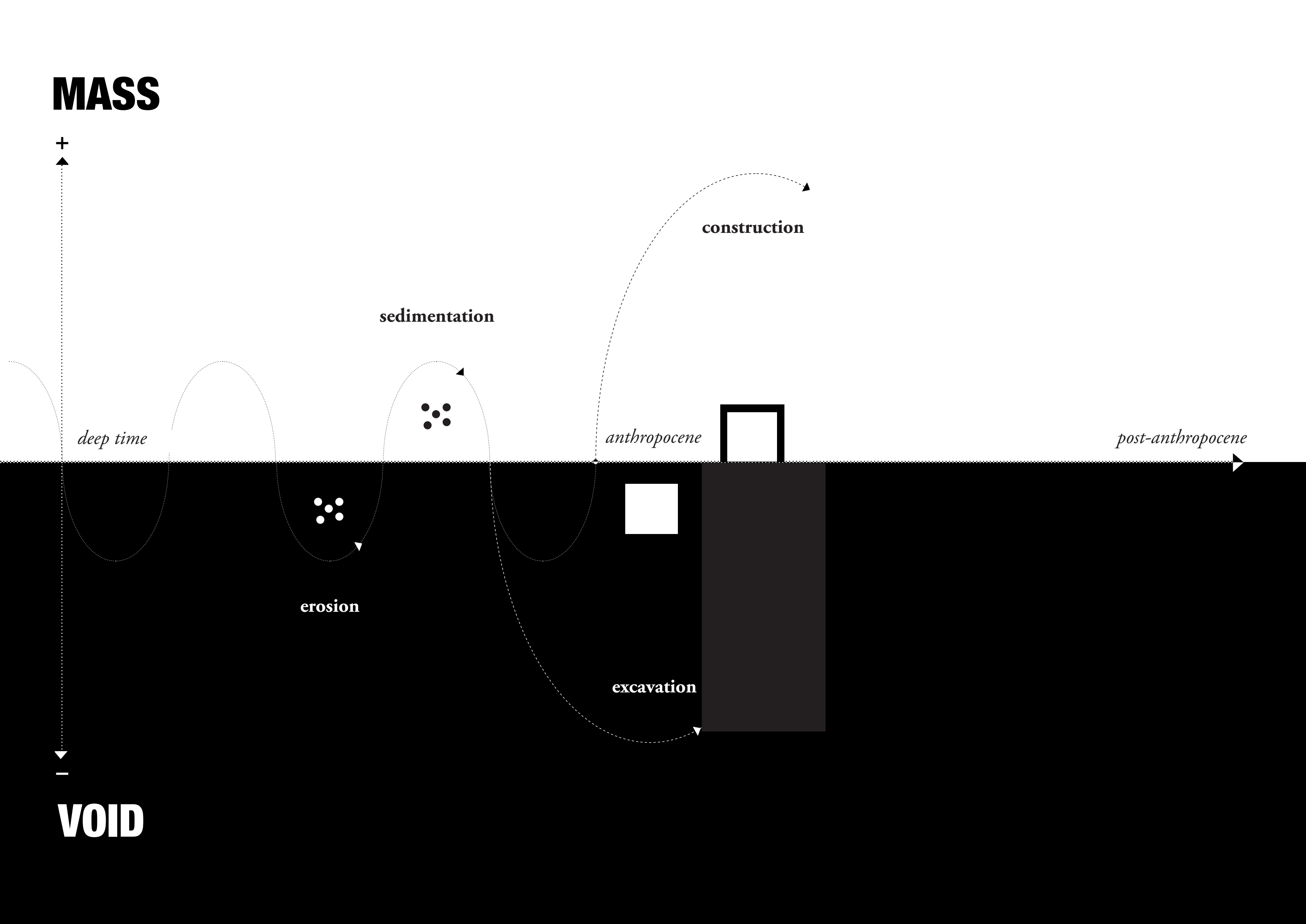
sedimentation

anthropocene

excavation

construction

post-anthropocene



MASS

+



-

VOID

deep time

sedimentation

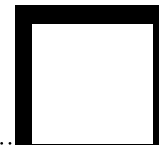


erosion



anthropocene

construction



excavation



construction/sedimentation



excavation/erosion



post-anthropocene







Building with Salt Blocks, Bolivia
Source: atelier.travel



Crystallising a Salt Facade, France
Photo: Luma Atelier





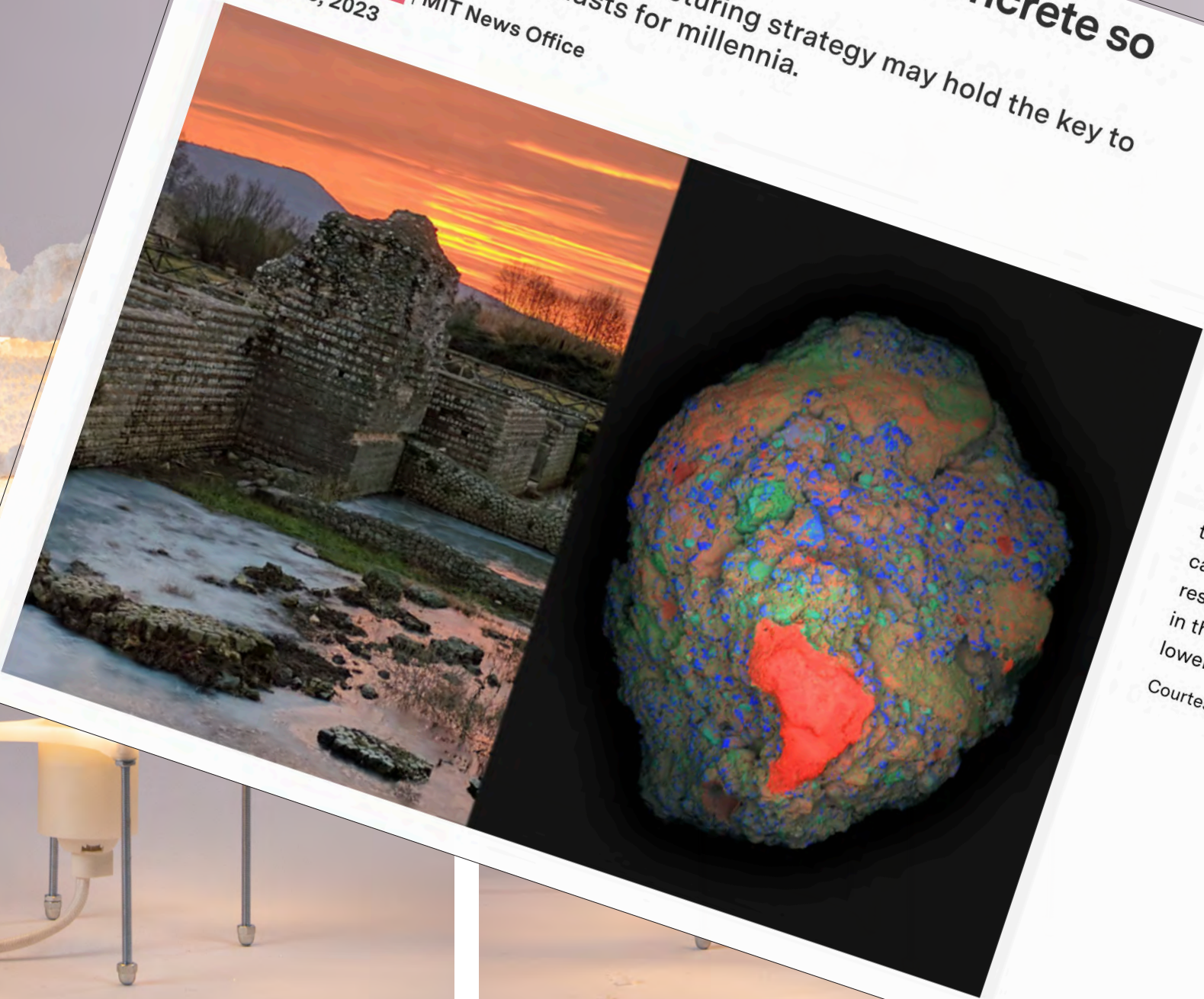




Riddle solved: Why was Roman concrete so durable?

An unexpected ancient manufacturing strategy may hold the key to designing concrete that lasts for millennia.

David L. Chandler | MIT News Office
January 6, 2023



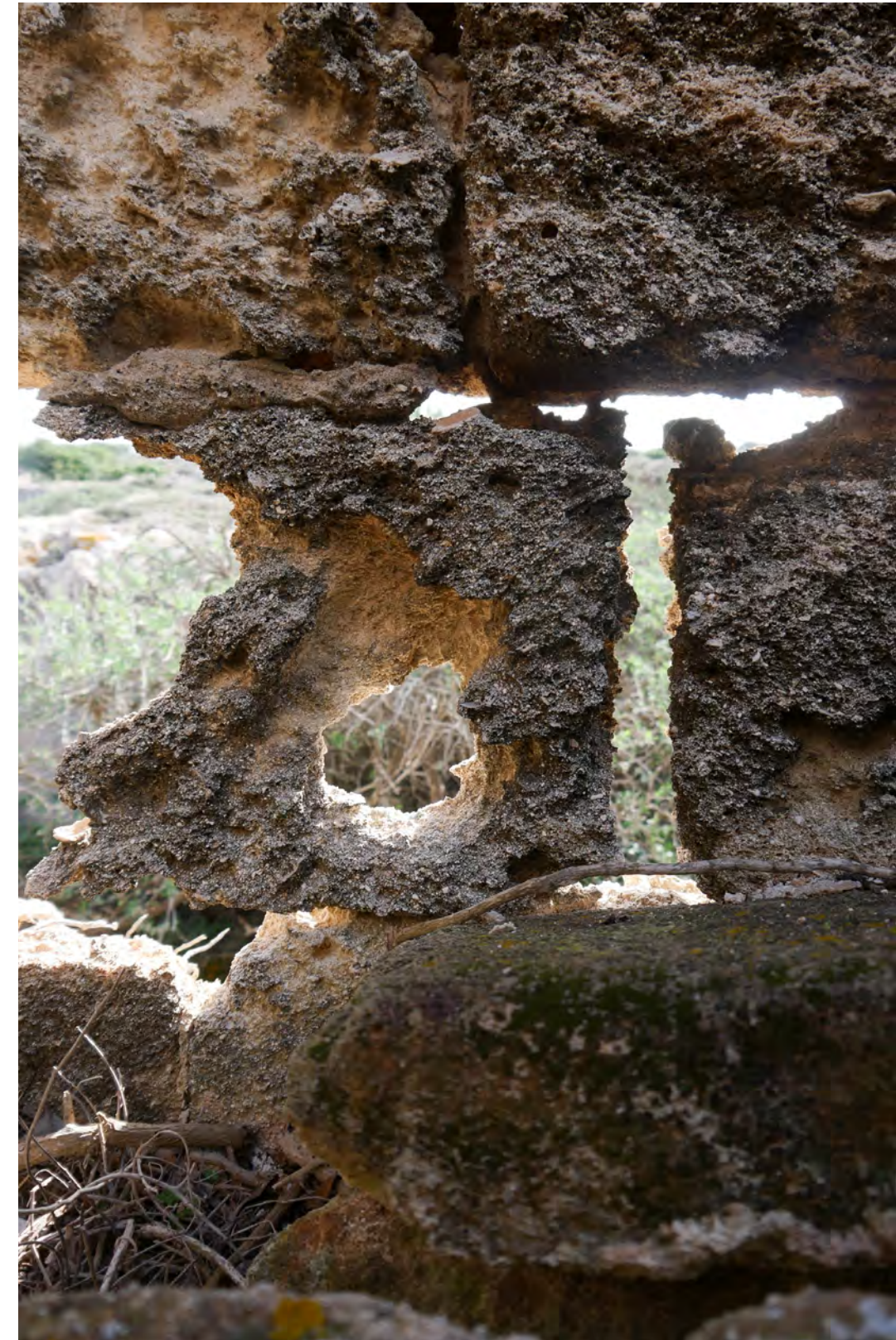
✓ PRESS INQUIRIES

A large-area elemental map (Calcium: red, Silicon: blue, Aluminum: green) of a 2 cm fragment of ancient Roman concrete (right) collected from the archaeological site of Privernum, Italy (left). A calcium-rich lime clast (in red), which is responsible for the unique self-healing properties in this ancient material, is clearly visible in the lower region of the image.
Courtesy of the researchers



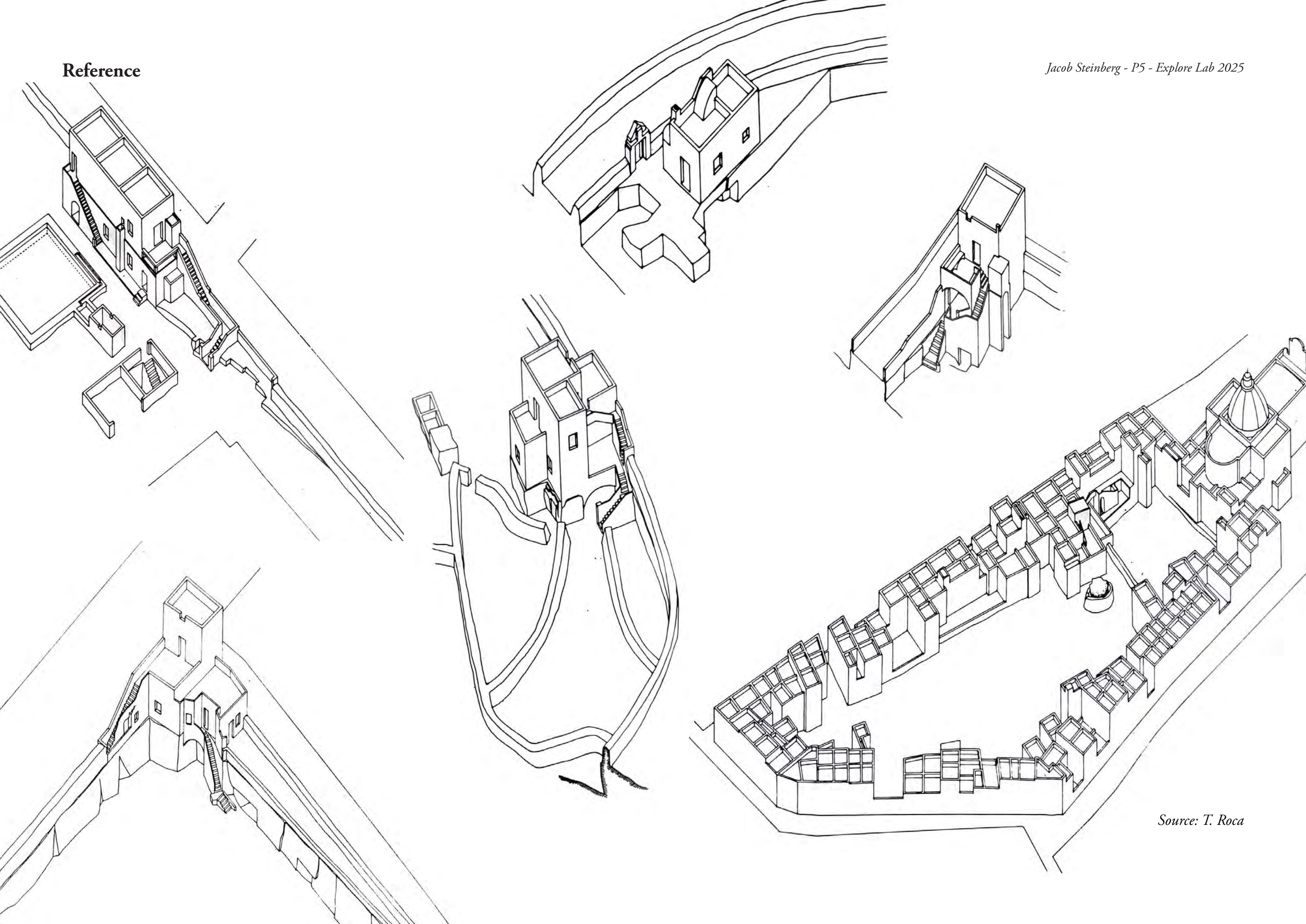
Entropic Decay

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Reference

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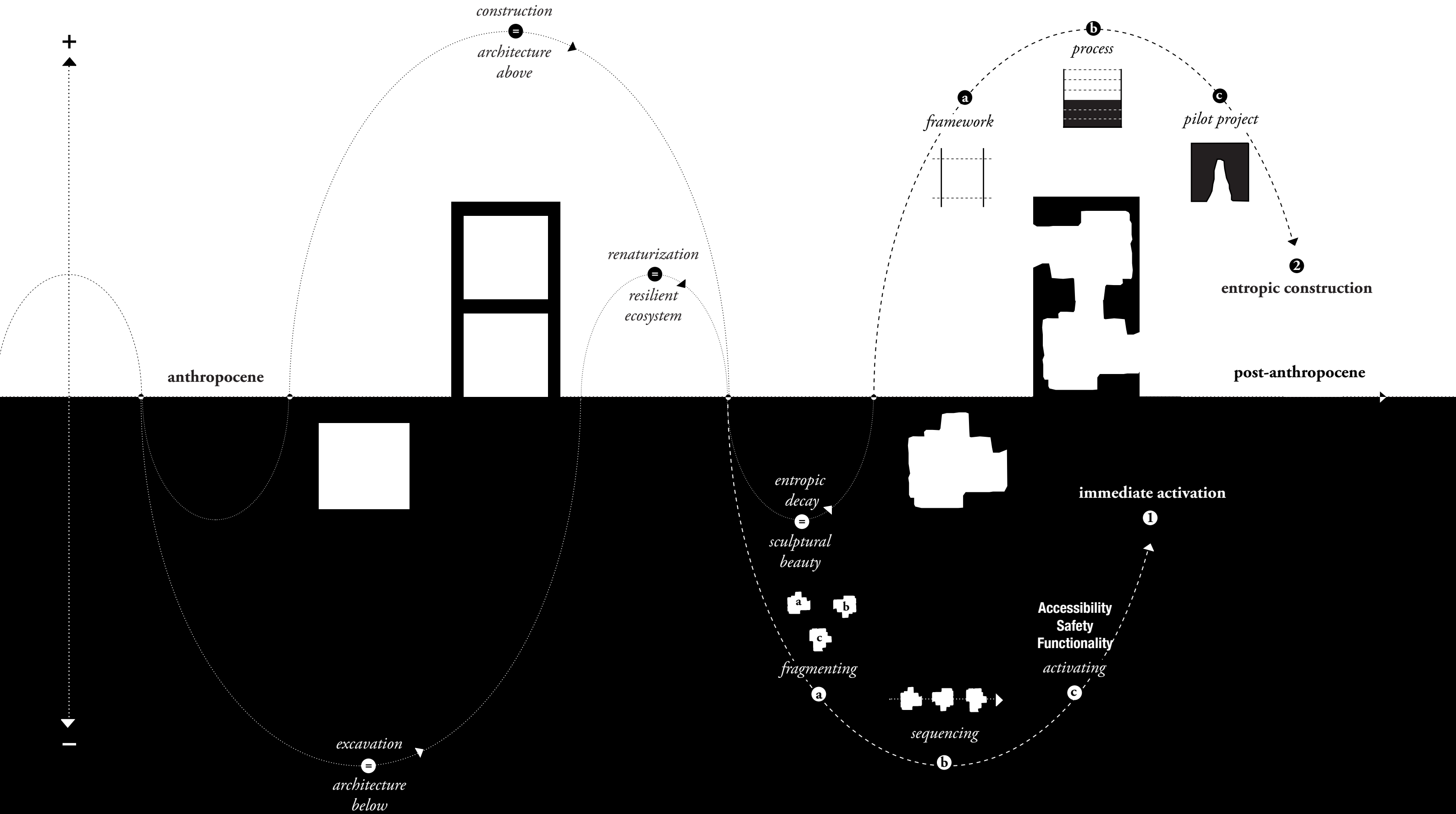
Source: T. Roca



Wood
Framework

Salt
Formwork

Concrete
Structural



+



past

present

future

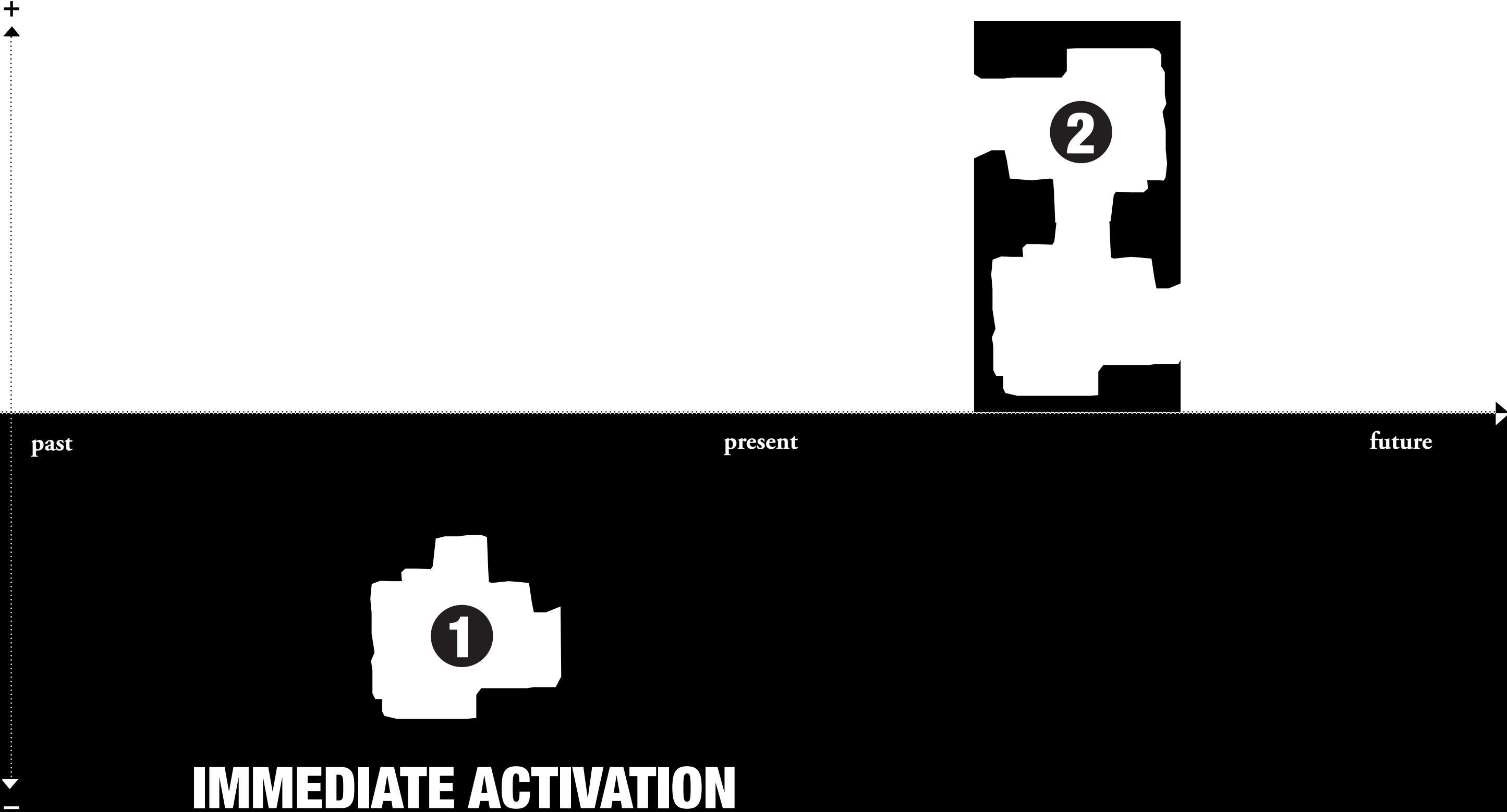


IMMEDIATE ACTIVATION

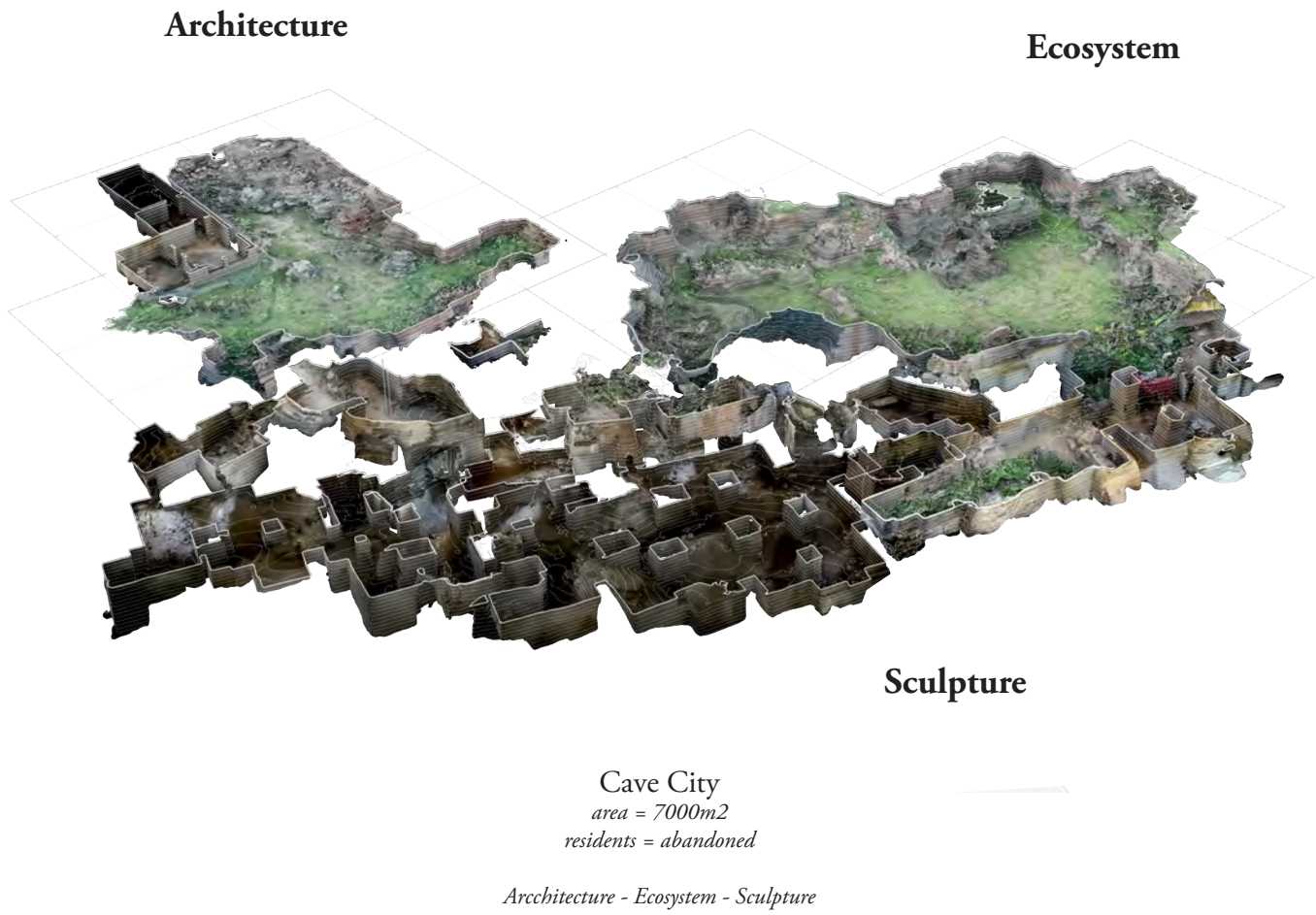


-

ENTROPIC CONSTRUCTION



Location



Landscape





Fragmenting

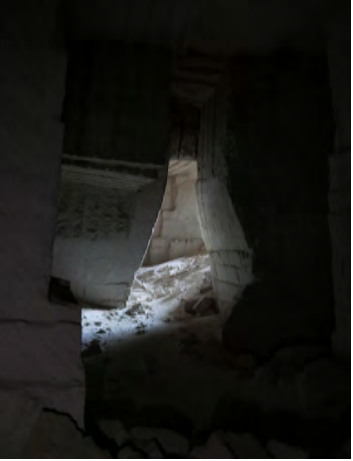
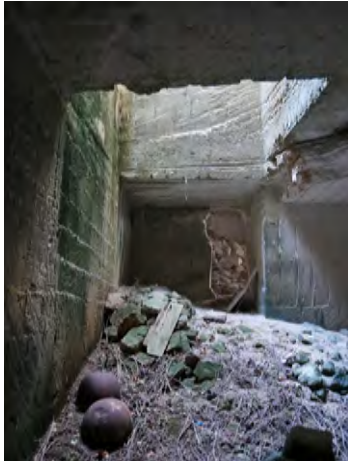
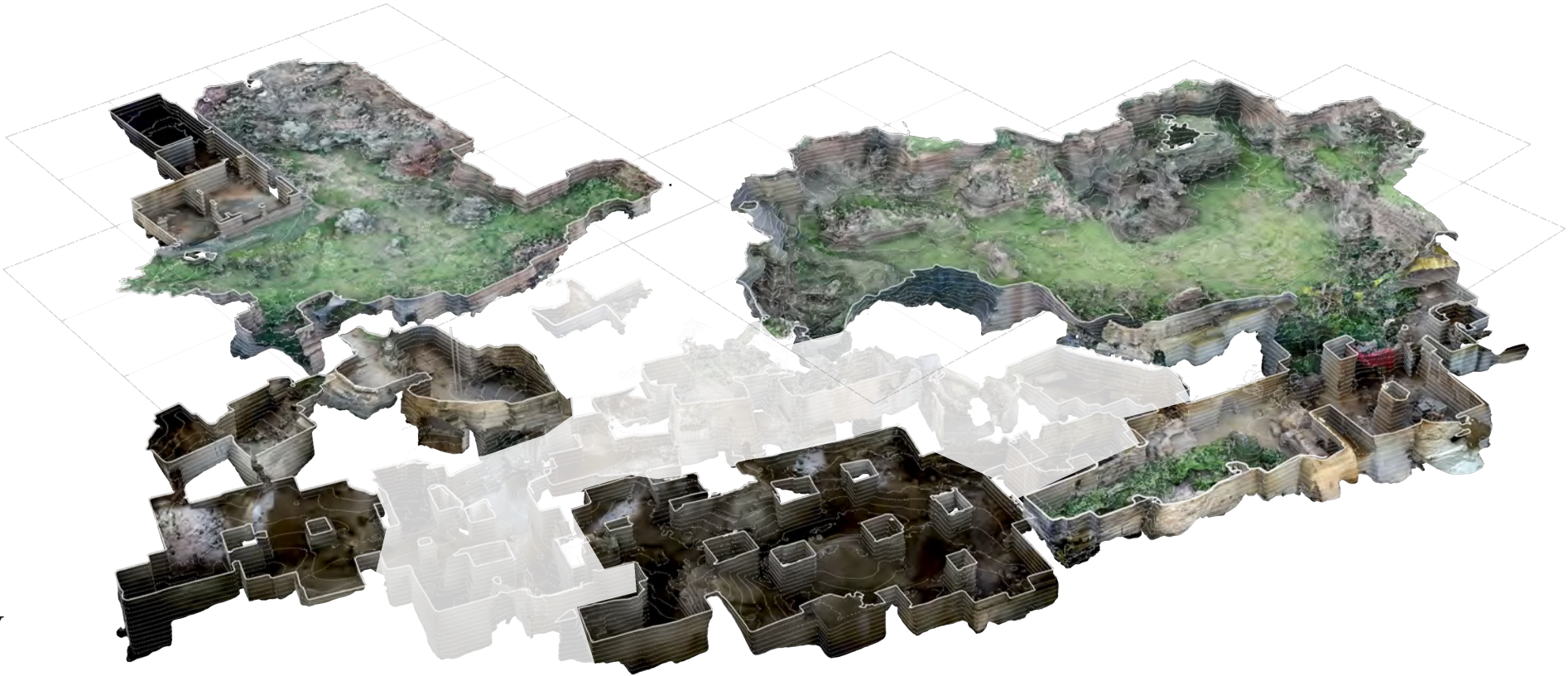


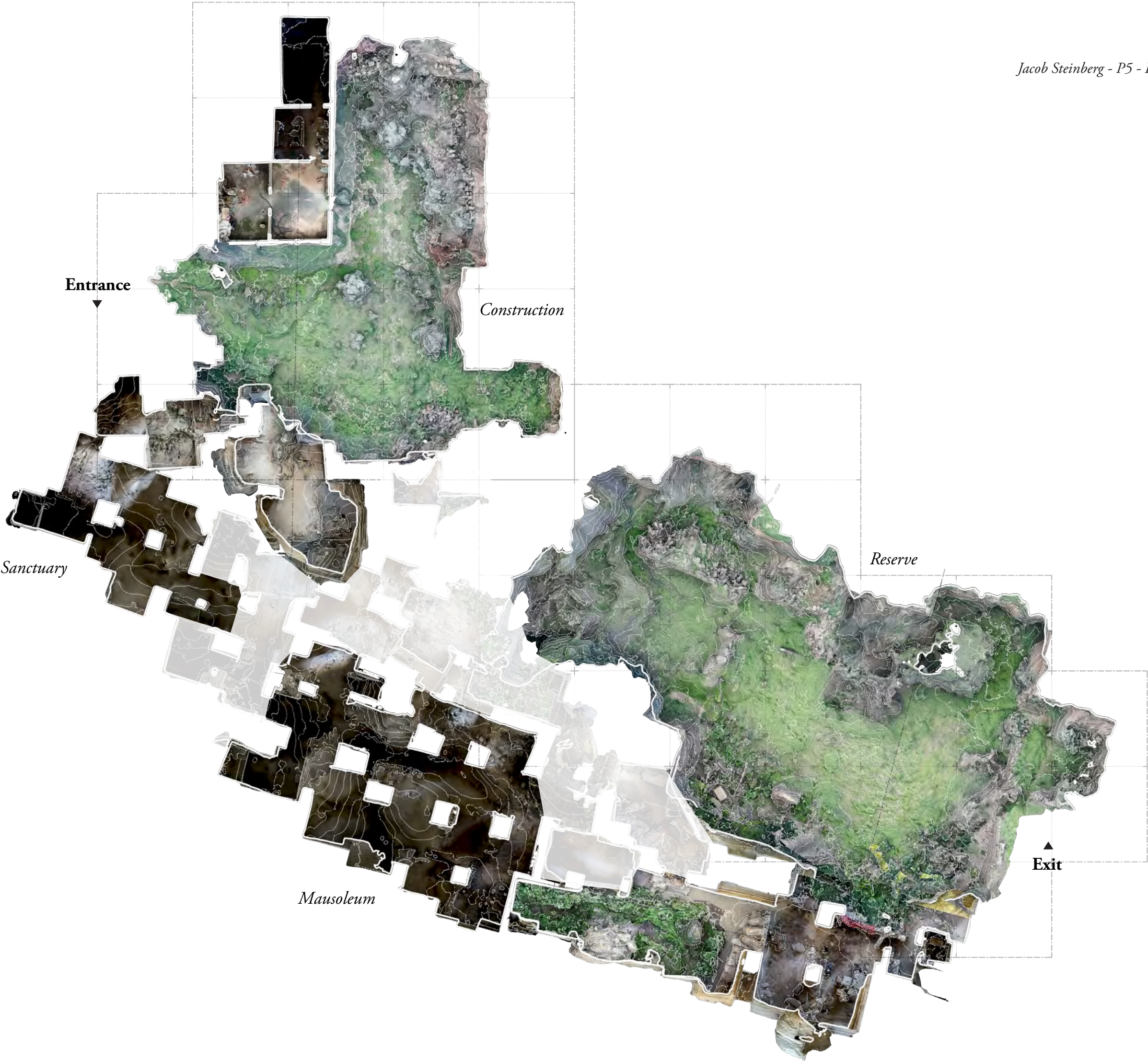
Construction

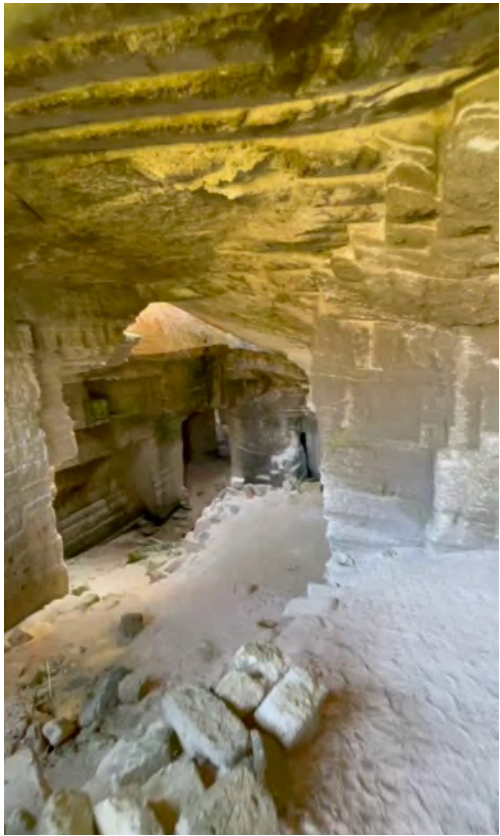
Reserve

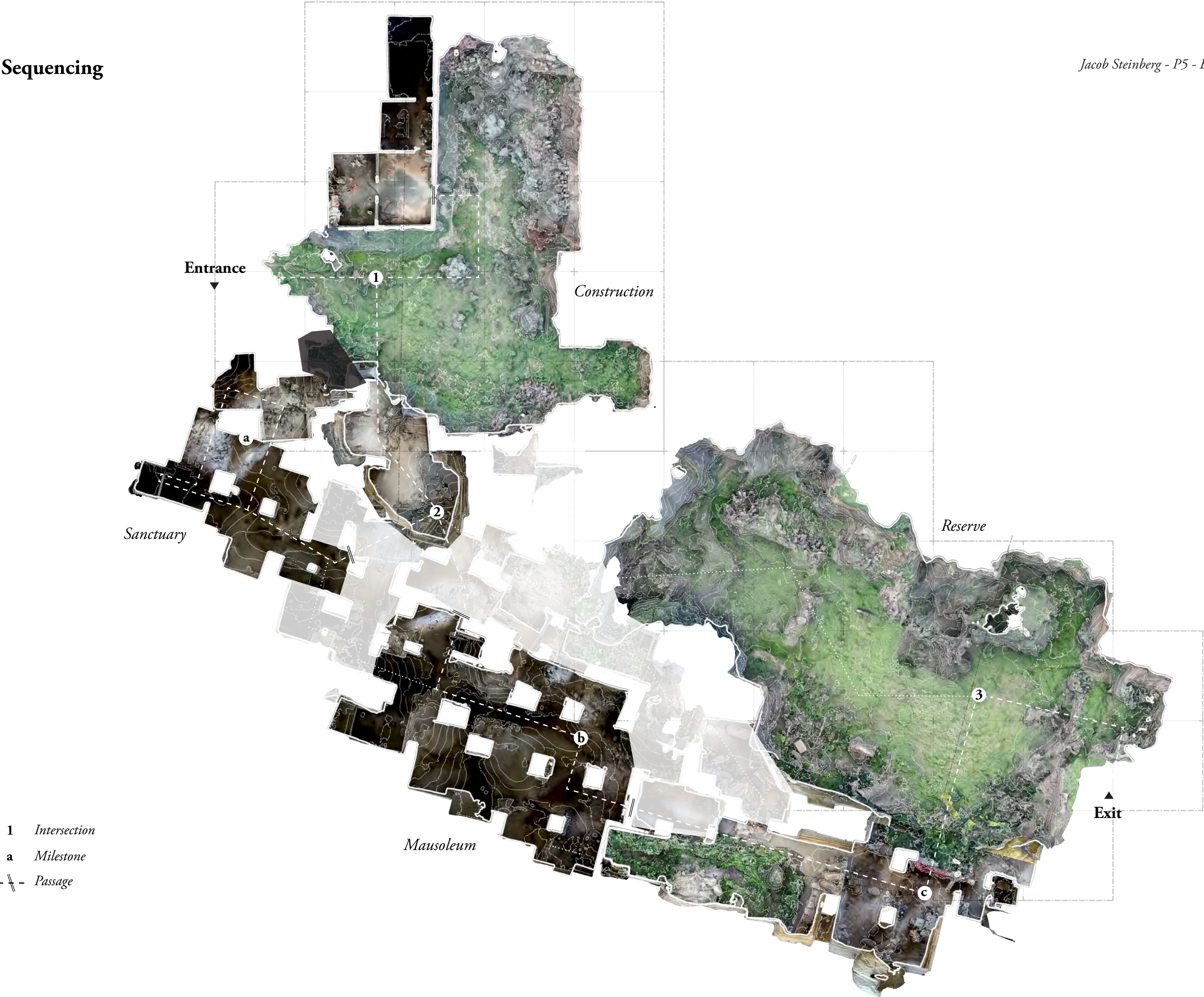
Sanctuary

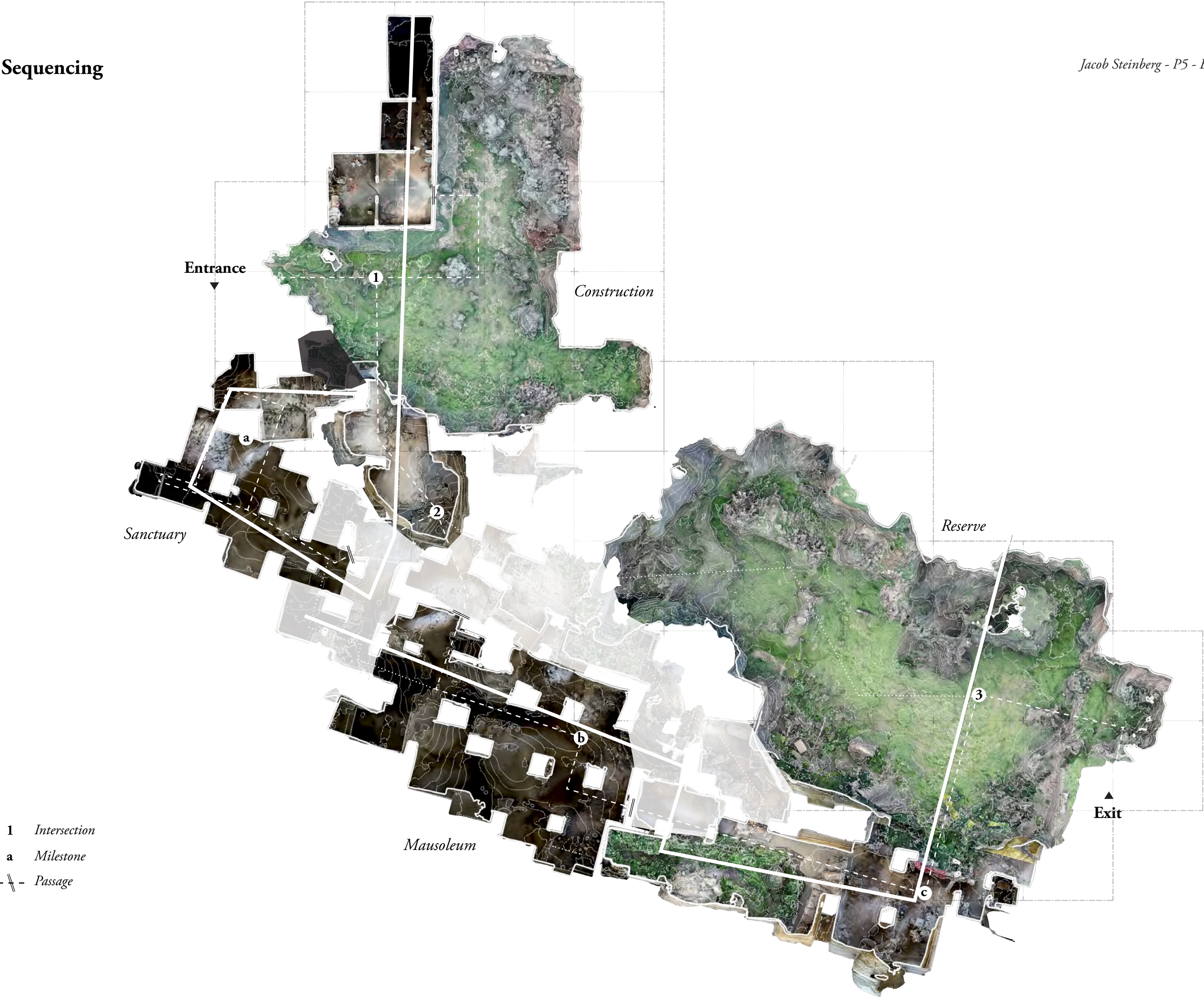
Mausoleum









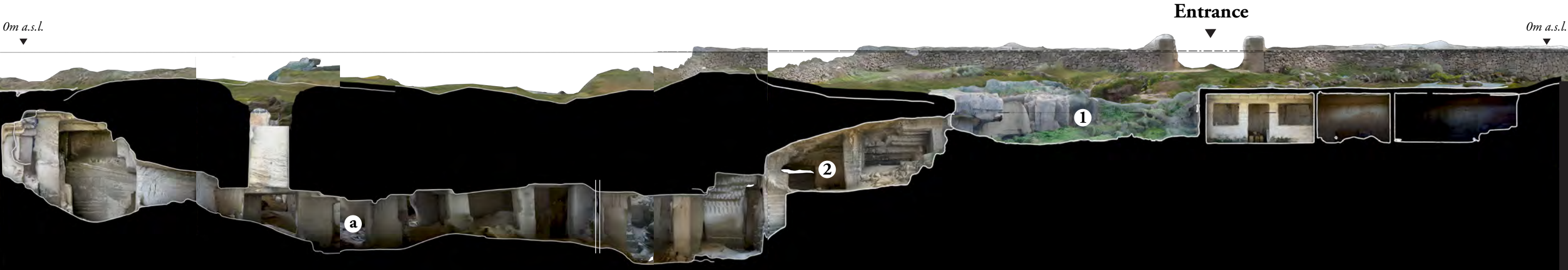


Sequencing

1 Intersection

a Milestone

- // - Passage



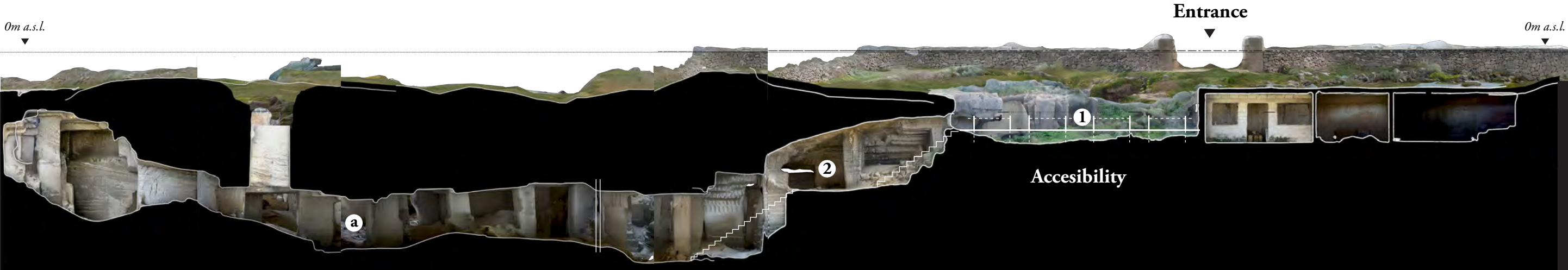
Sanctuary Construction



Reserve Mausoleum

Activating

- 1 Intersection
- a Milestone
- // - Passage



Sanctuary Construction



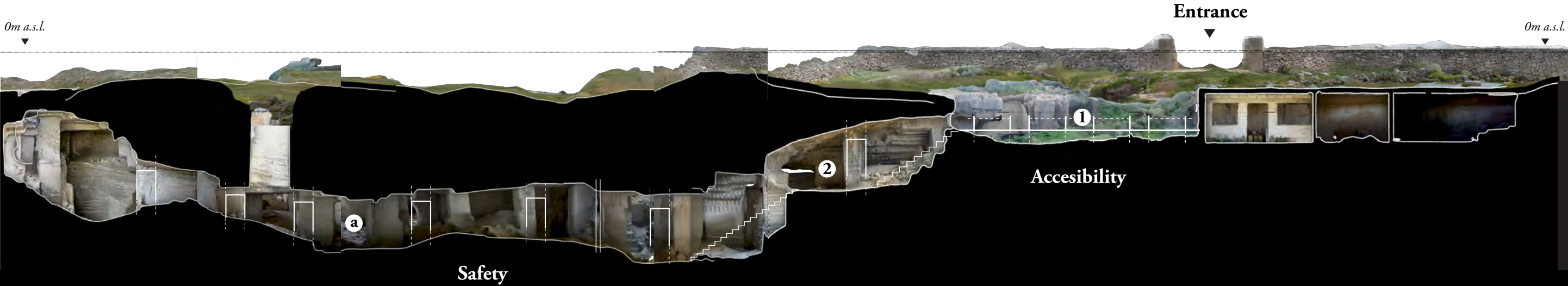
Reserve Mausoleum

Activating

1 Intersection

a Milestone

- // - Passage



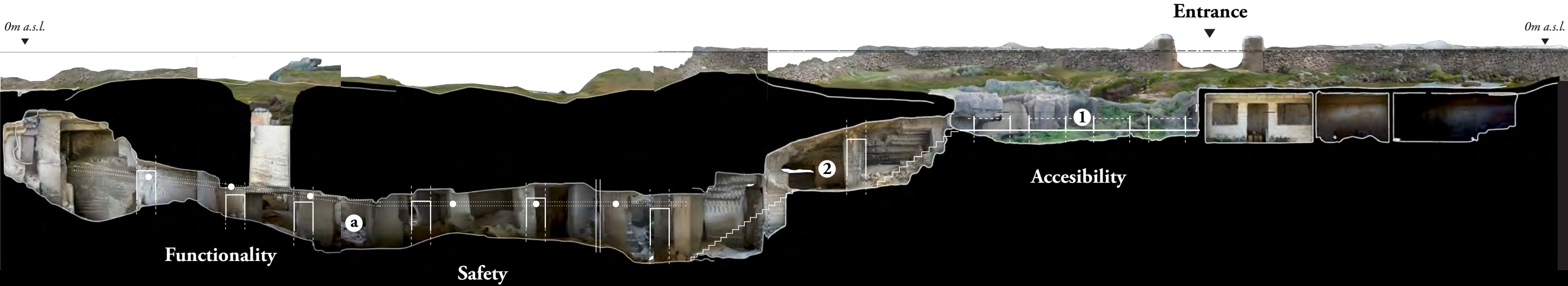
Sanctuary Construction



Reserve Mausoleum

Activating

- 1 Intersection
- a Milestone
- // - Passage



Sanctuary Construction



Reserve Mausoleum



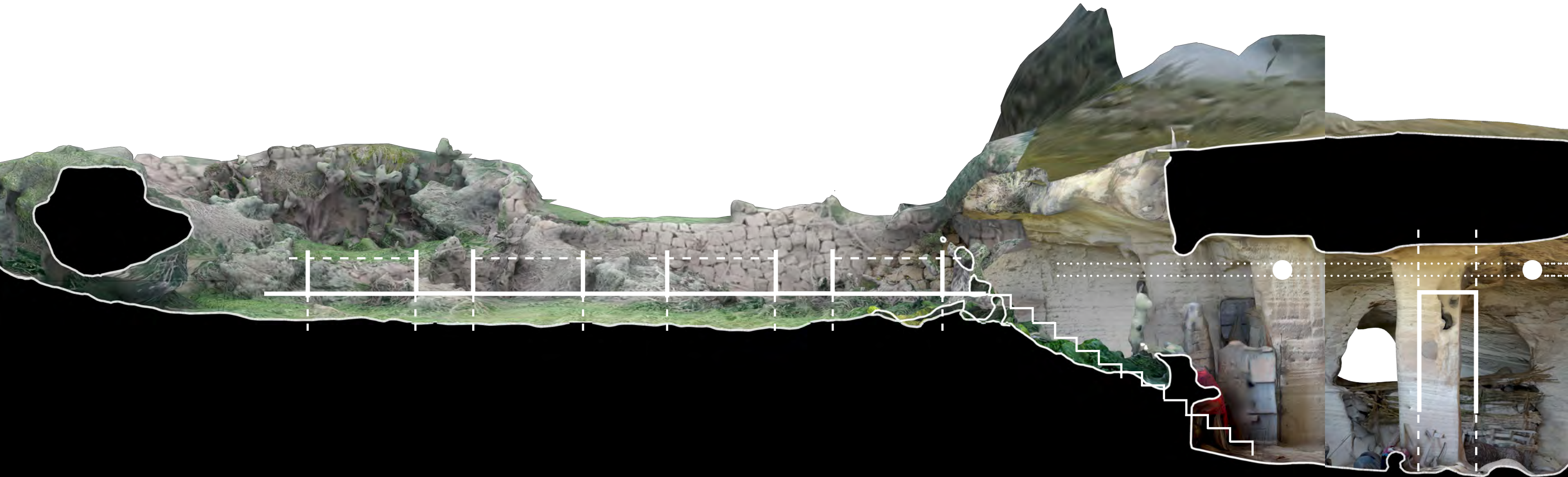
Elevated Pathway



Safety Pillars



Installations

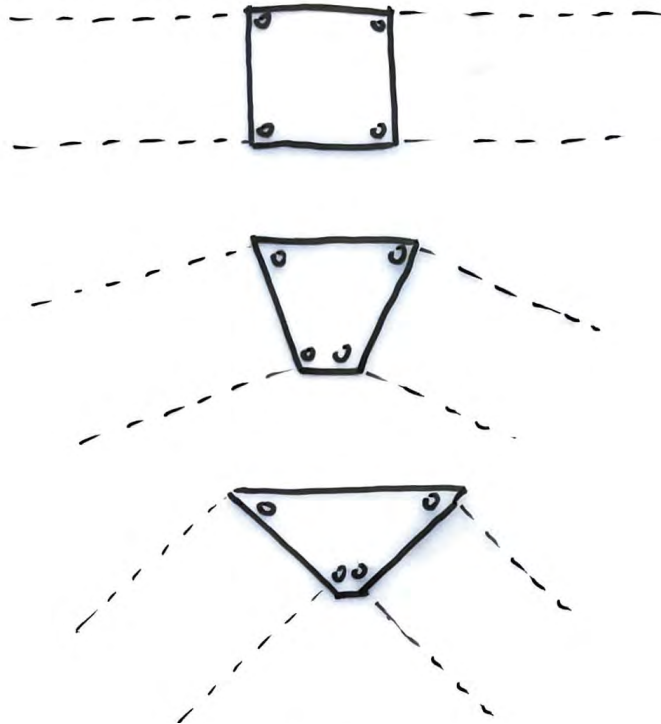


Prototyping

Installation



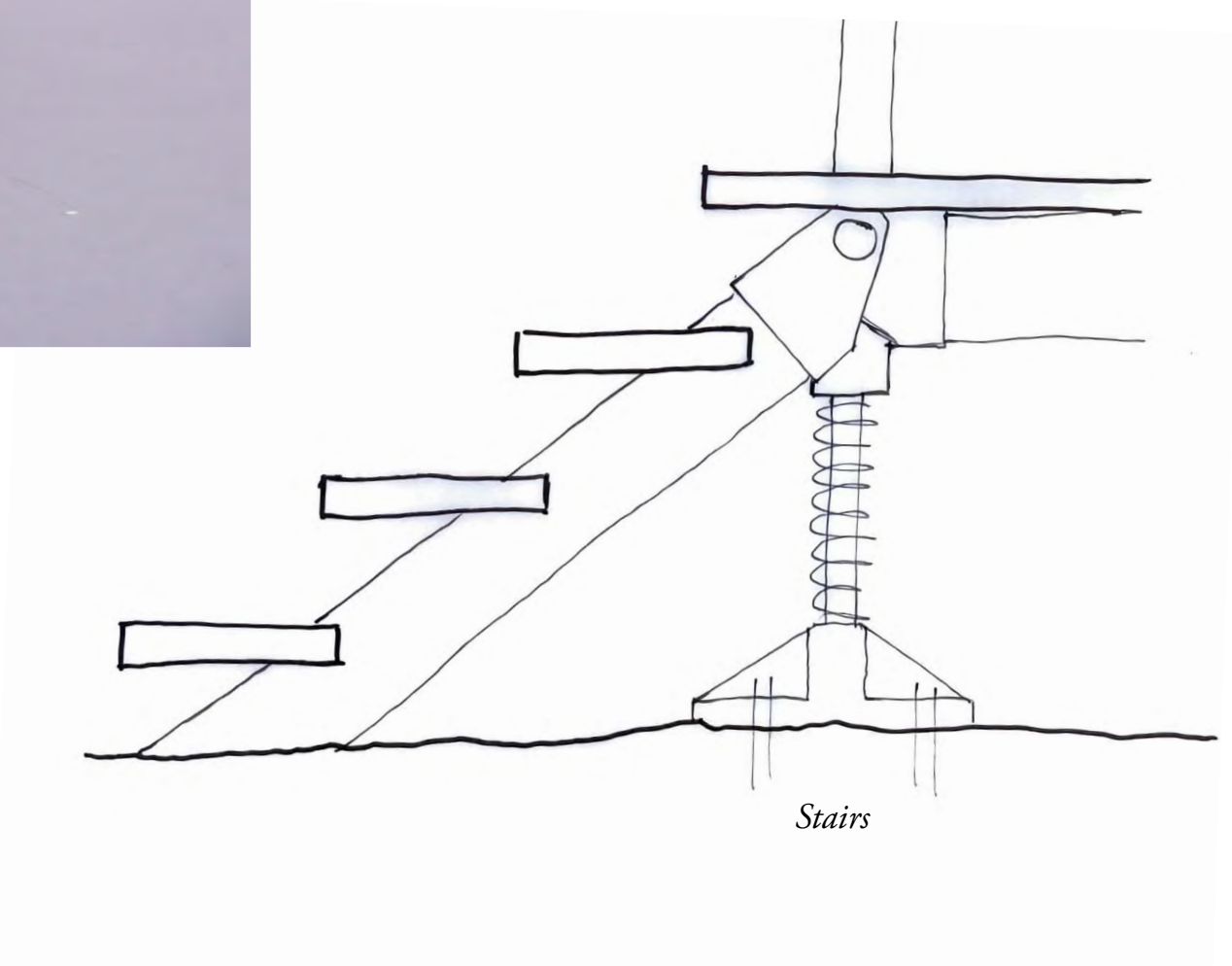
Pillars



Modular System



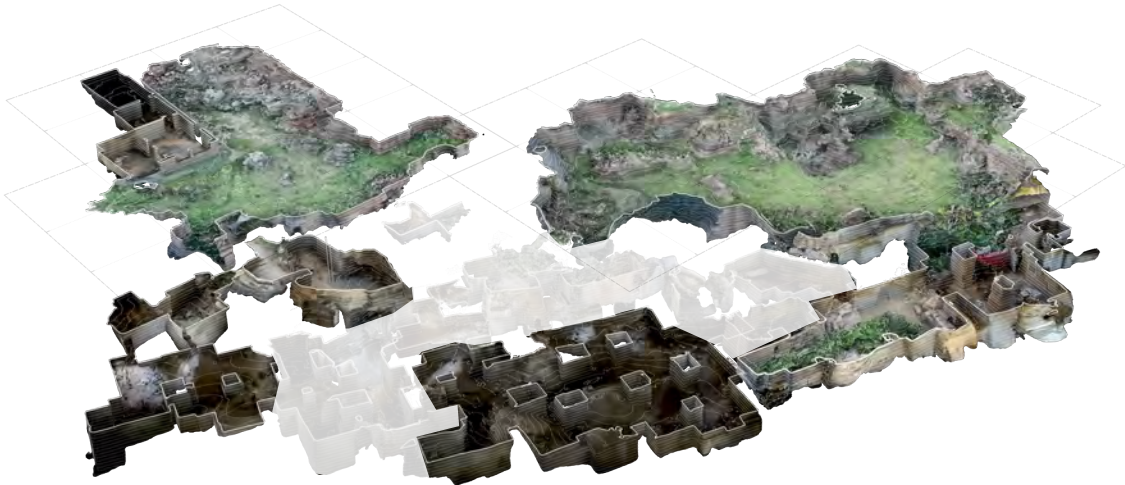
Walkway



Stairs

Excavation





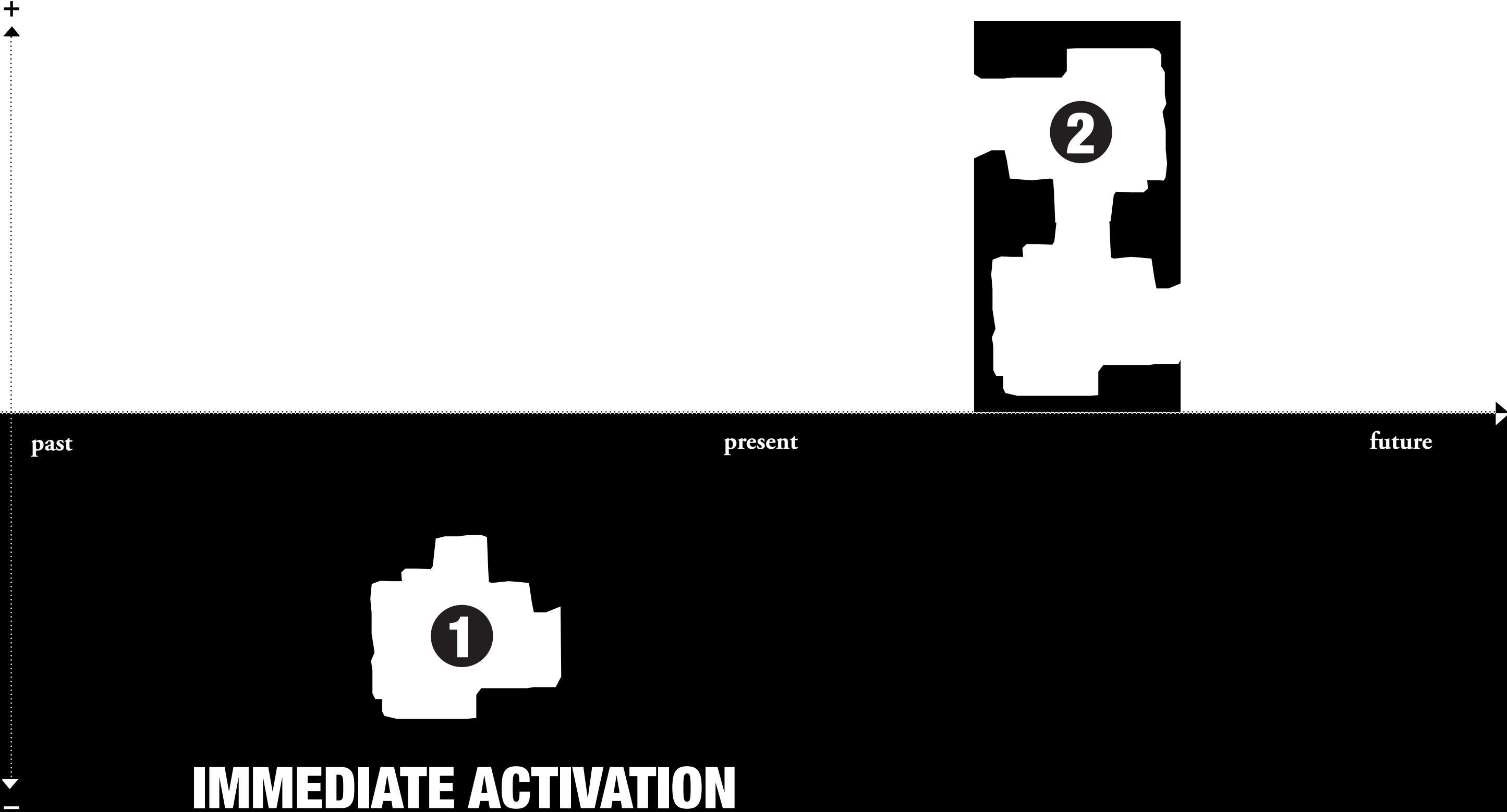
DIGITAL
Analysing

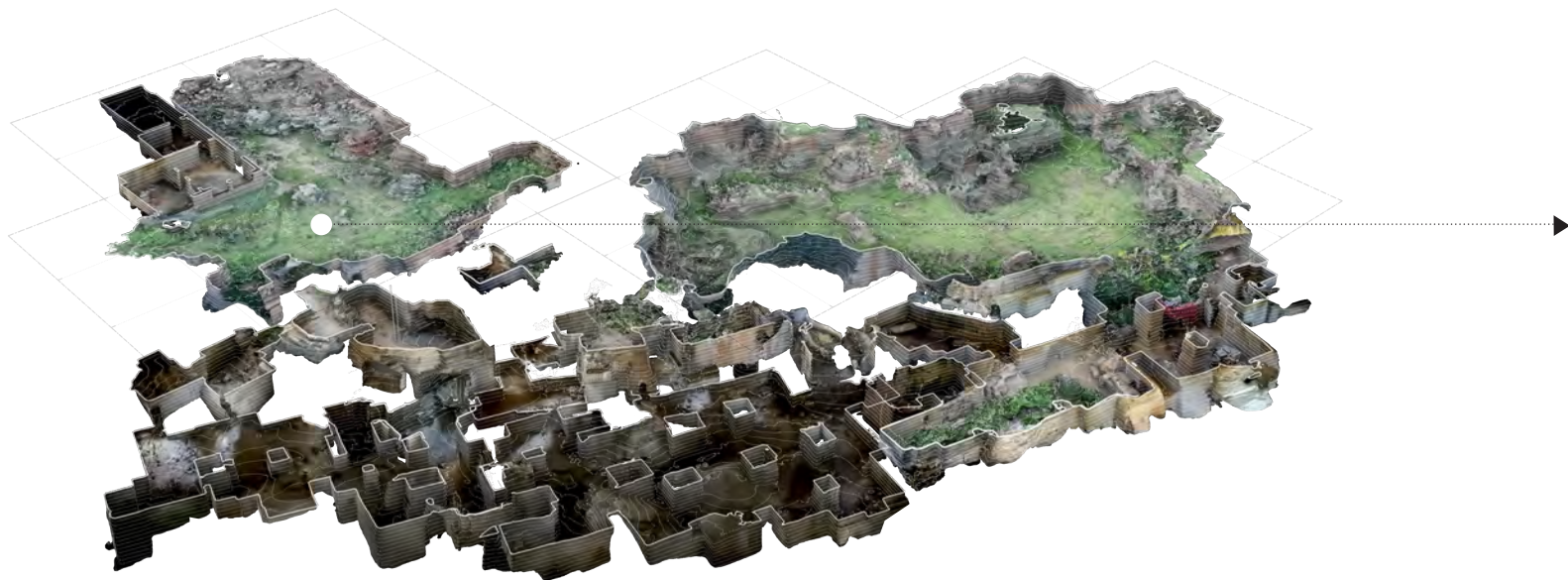
DESIGN
Iterating



PHYSICAL
Experimenting

ENTROPIC CONSTRUCTION





Cave City
area = 7000m2
residents = abandoned

Architecture - Ecosystem - Sculpture



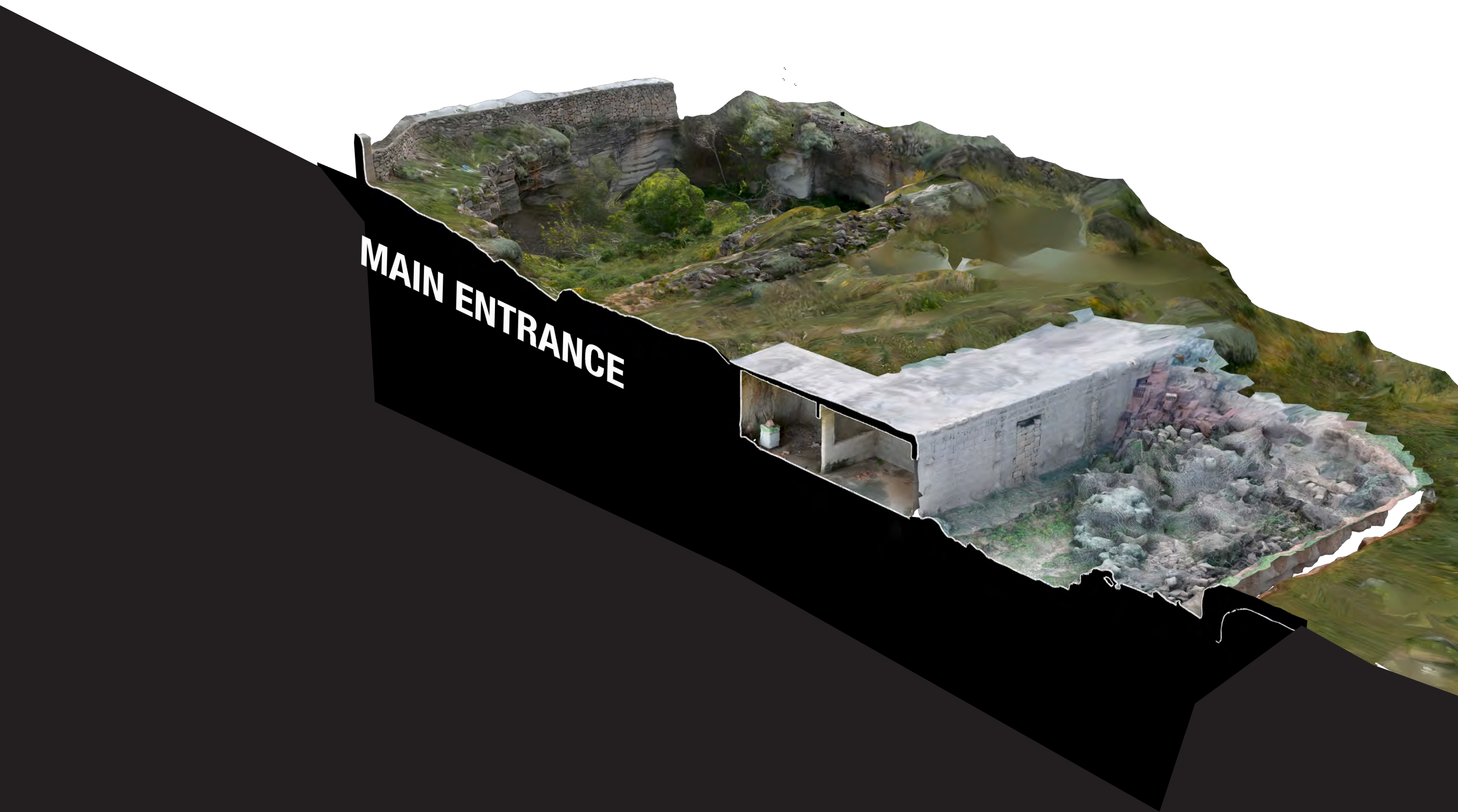
Construction Site
area = 700m2/100m2
residents = abandoned

Existing Building



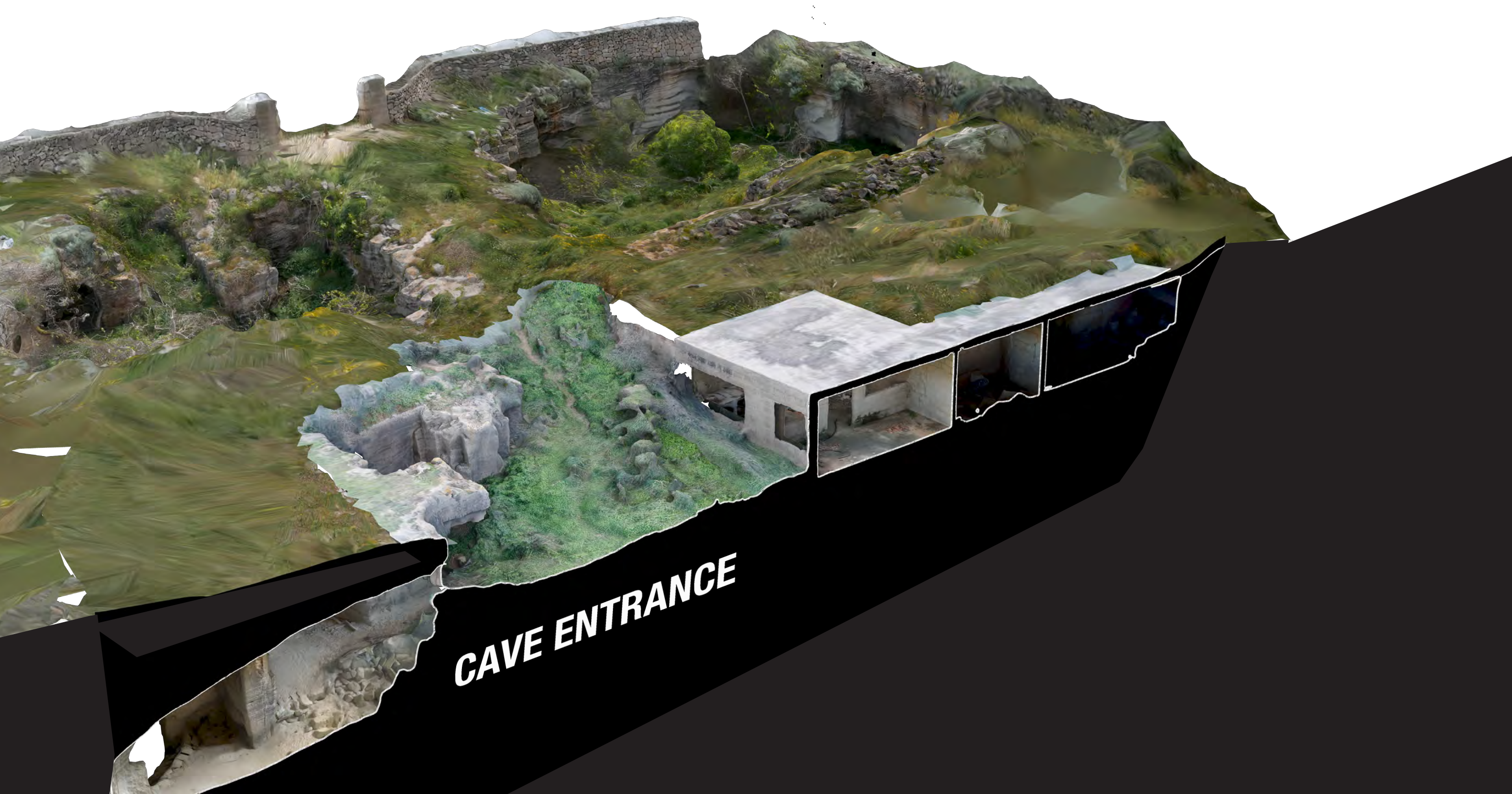


















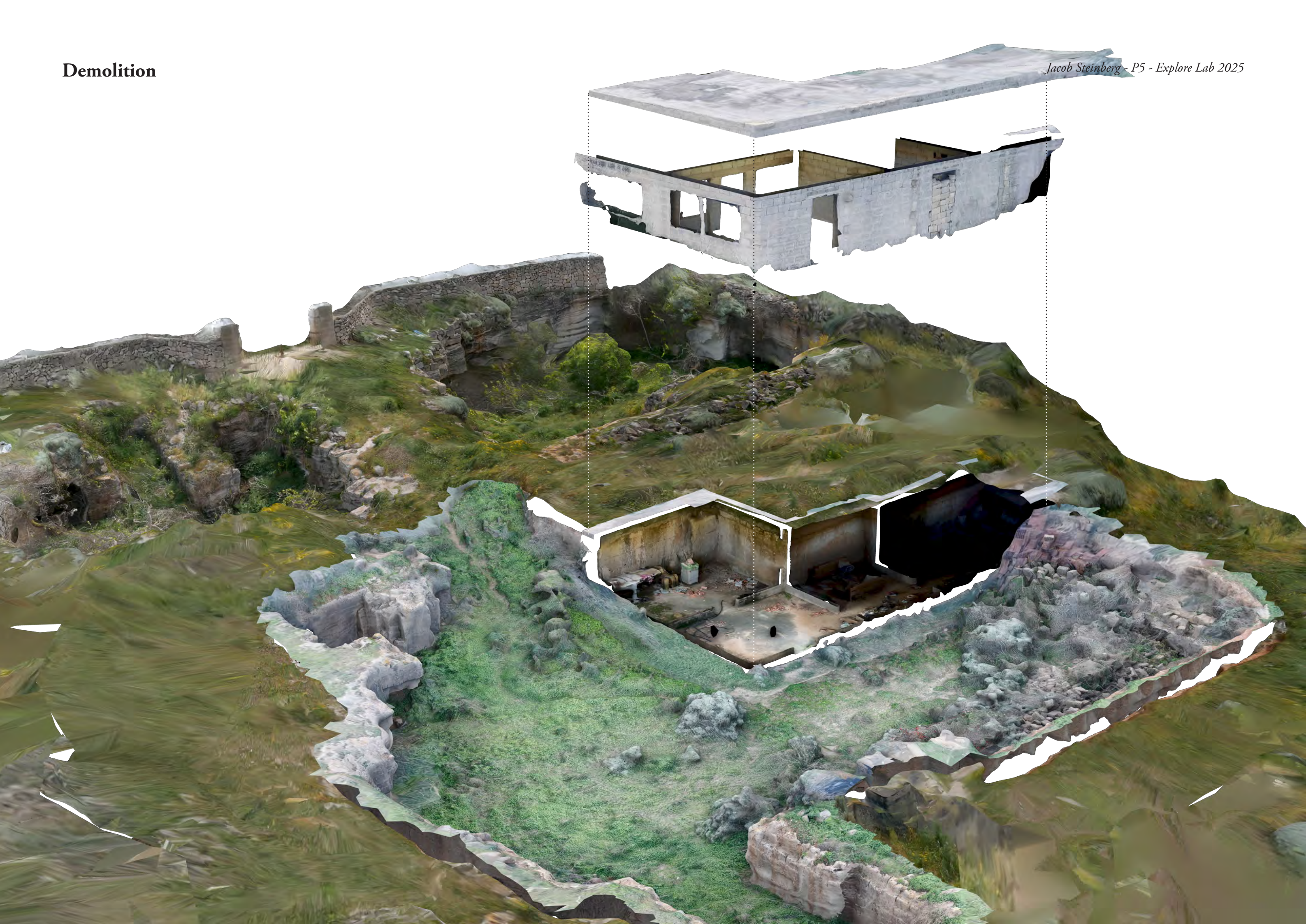




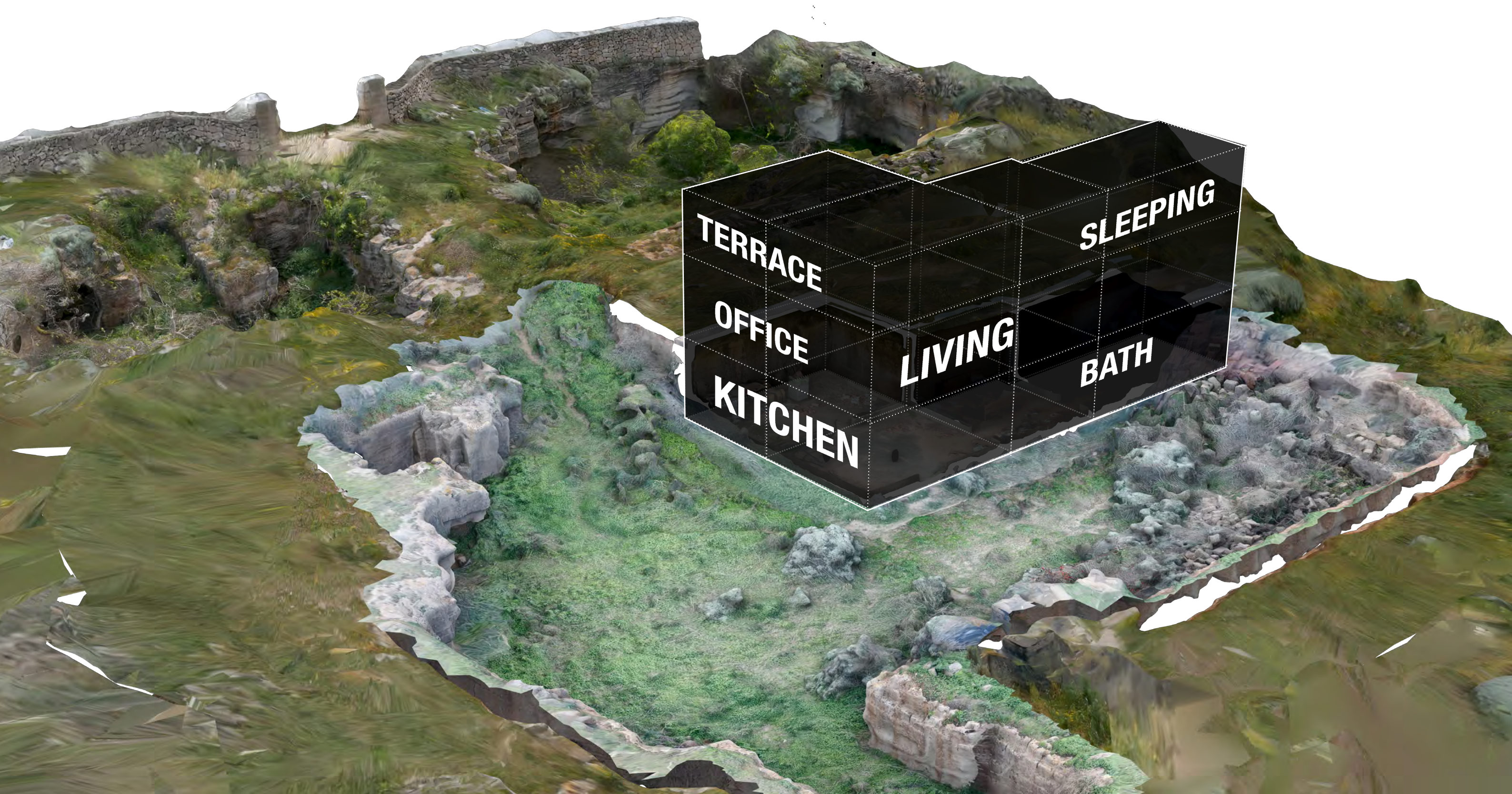


Demolition

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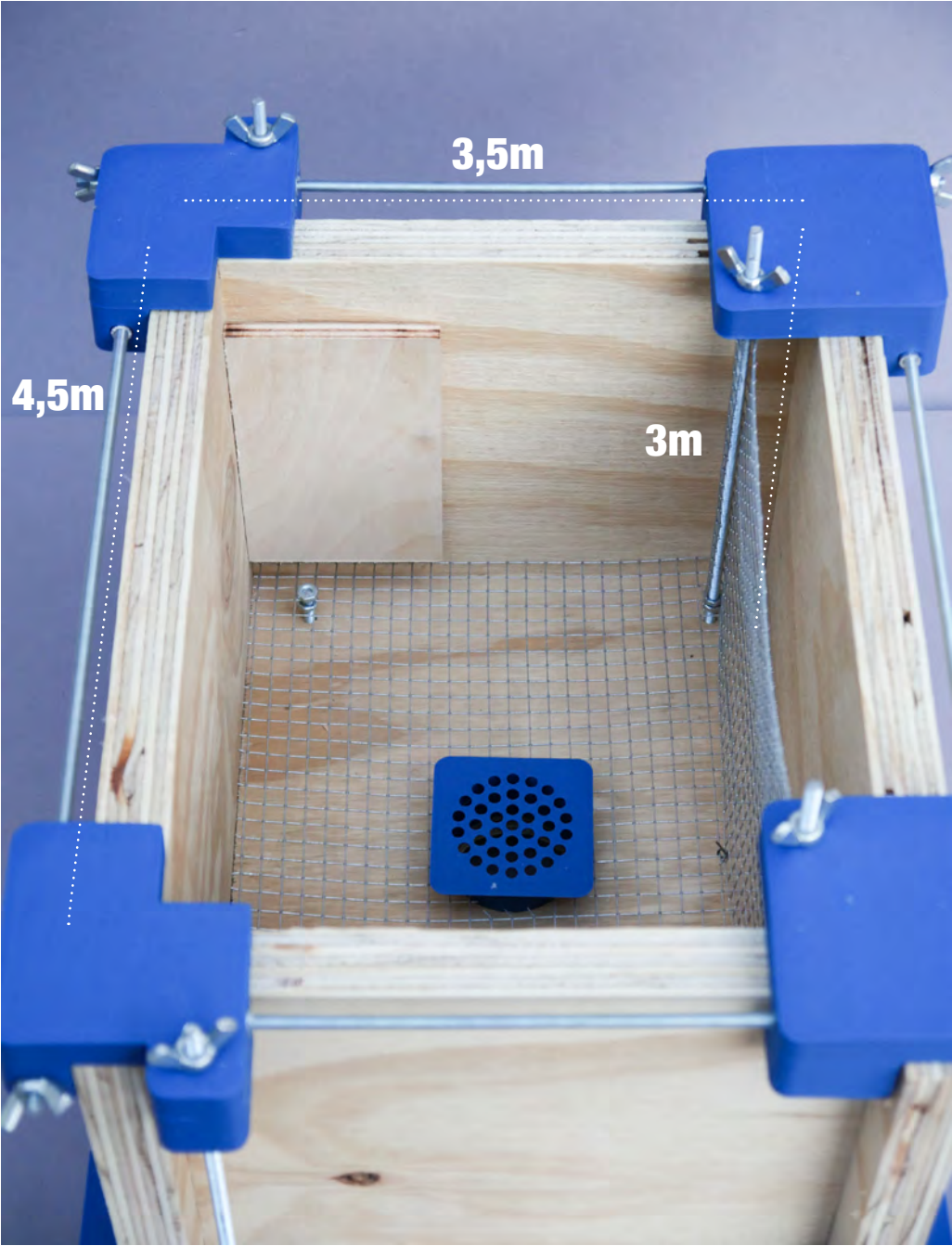
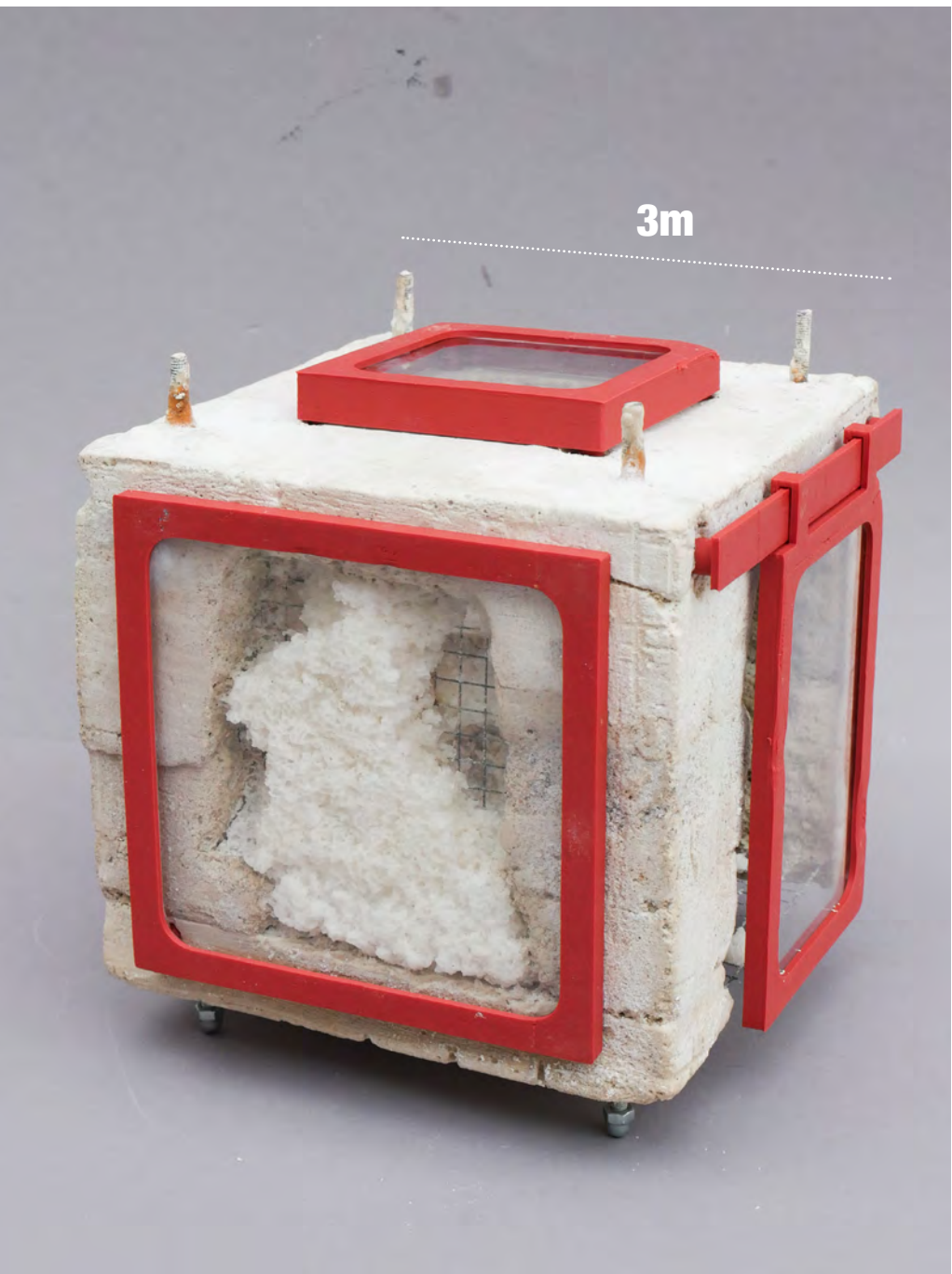


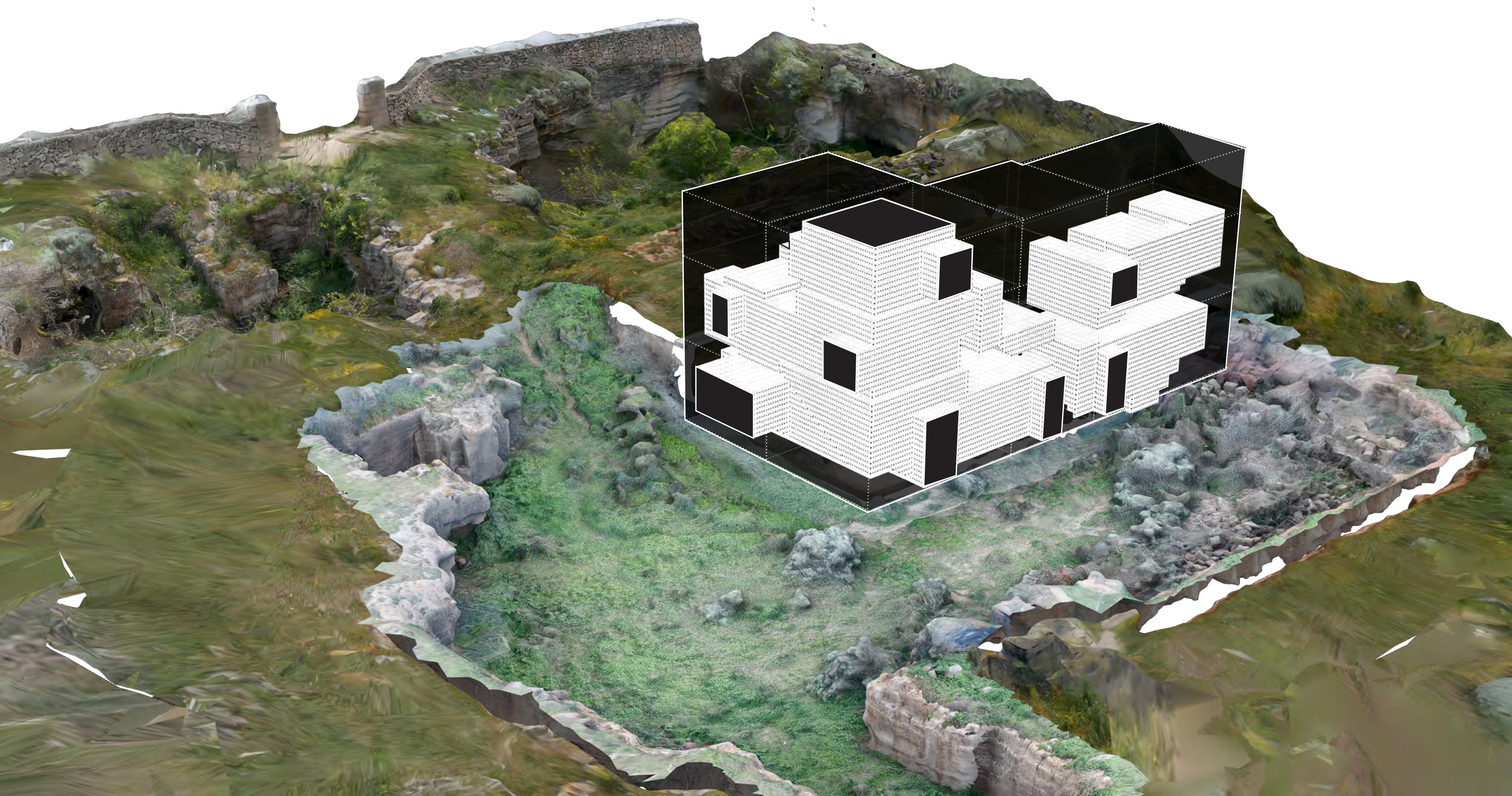
Architecture = Landscape

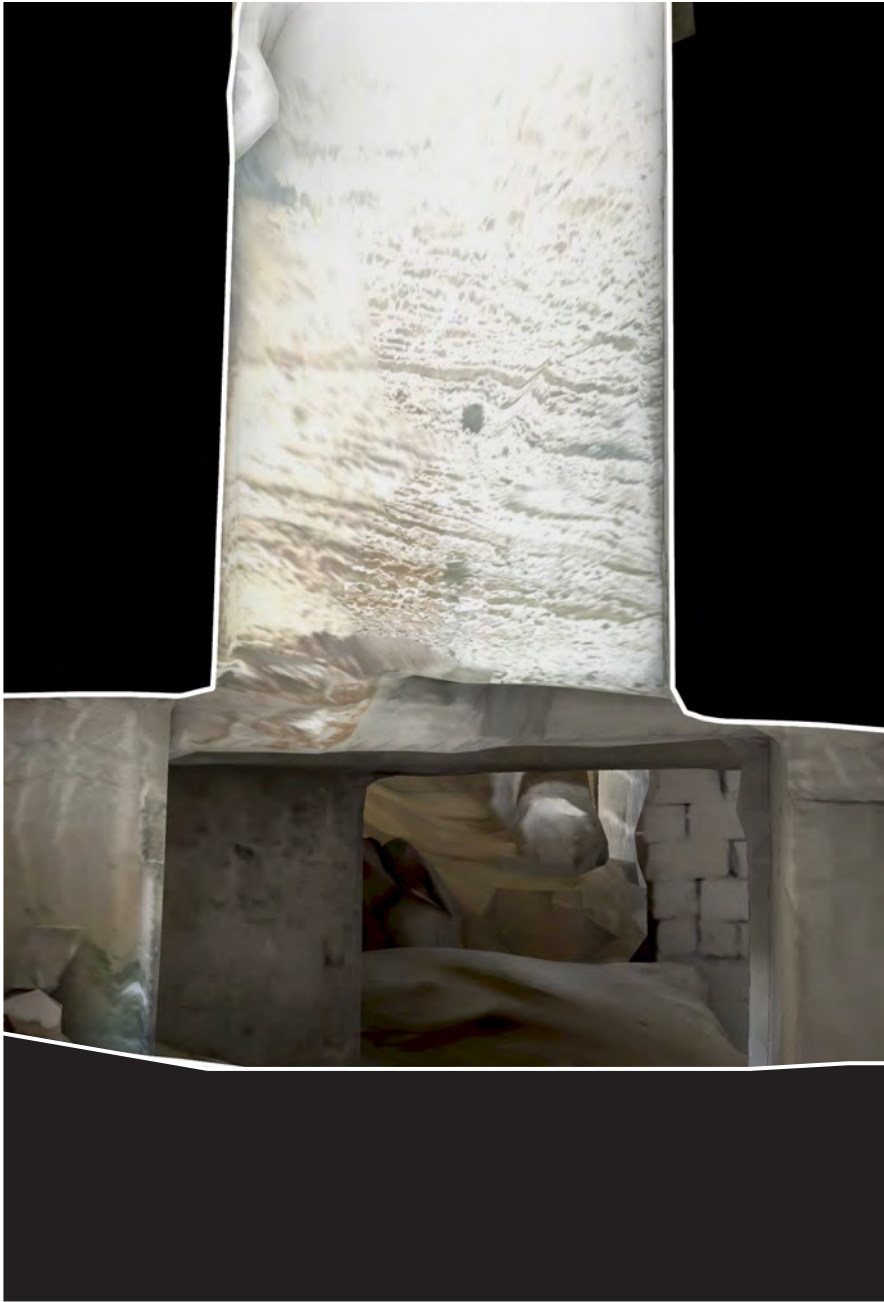


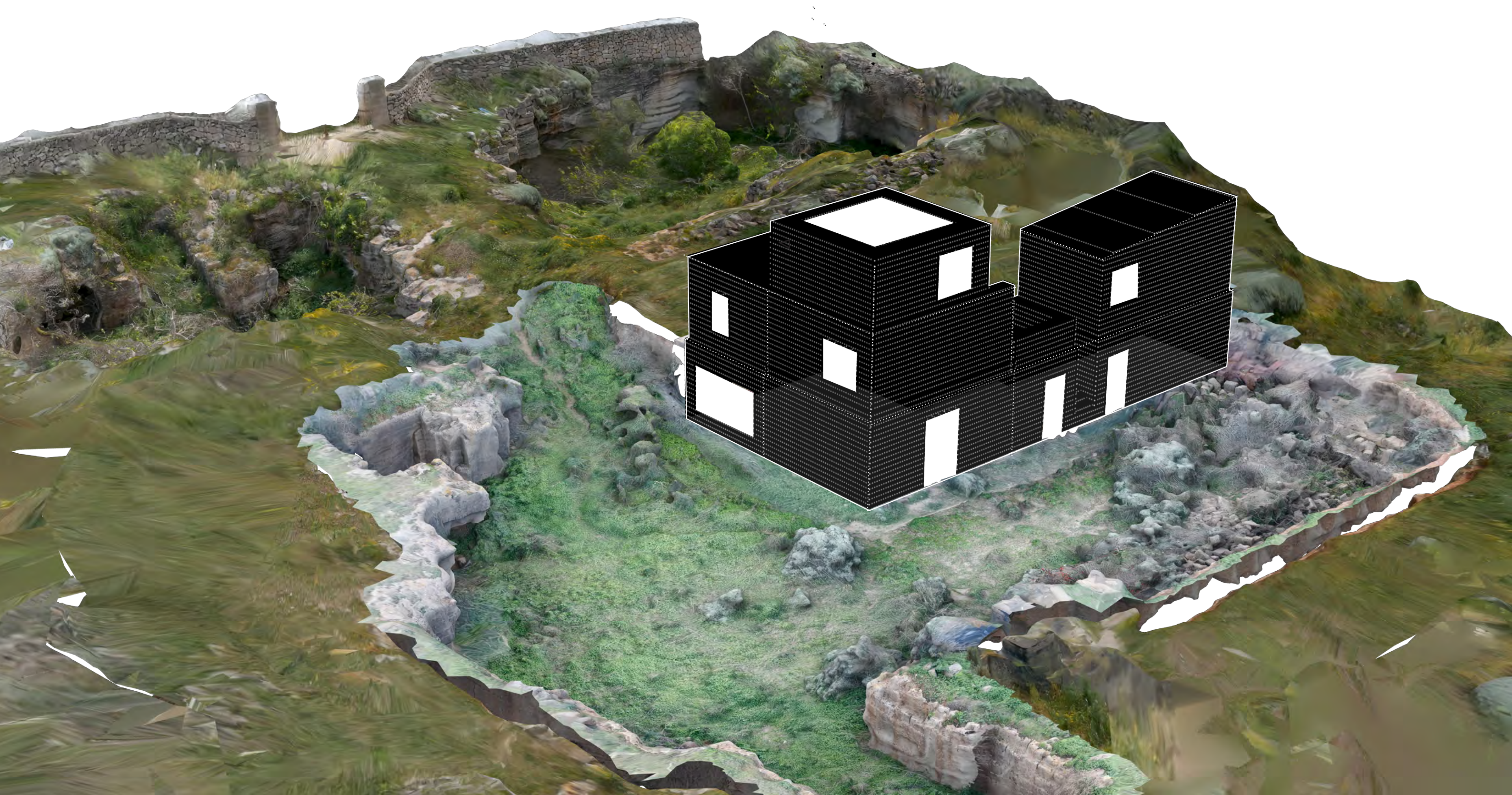
Building Volume



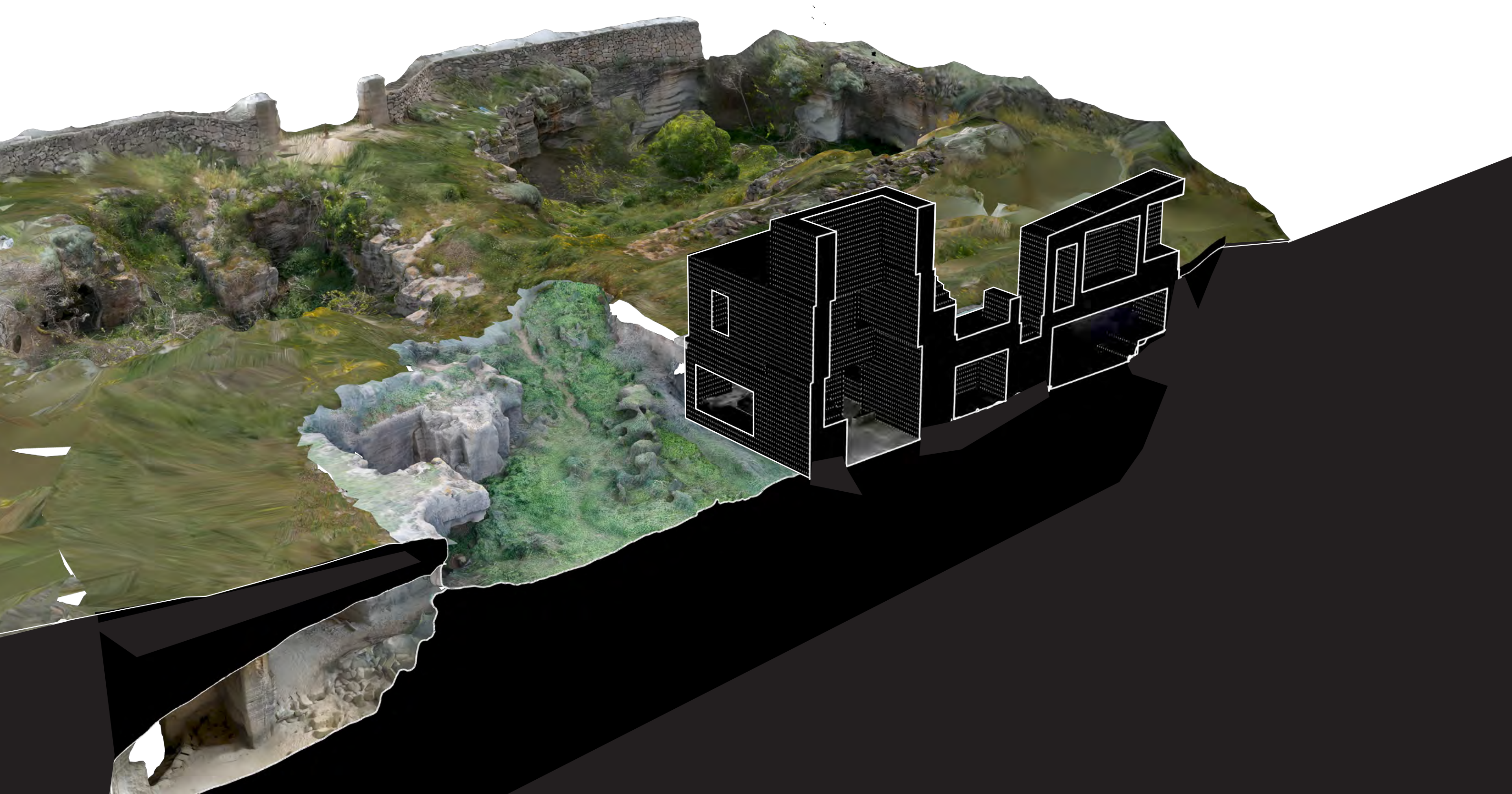


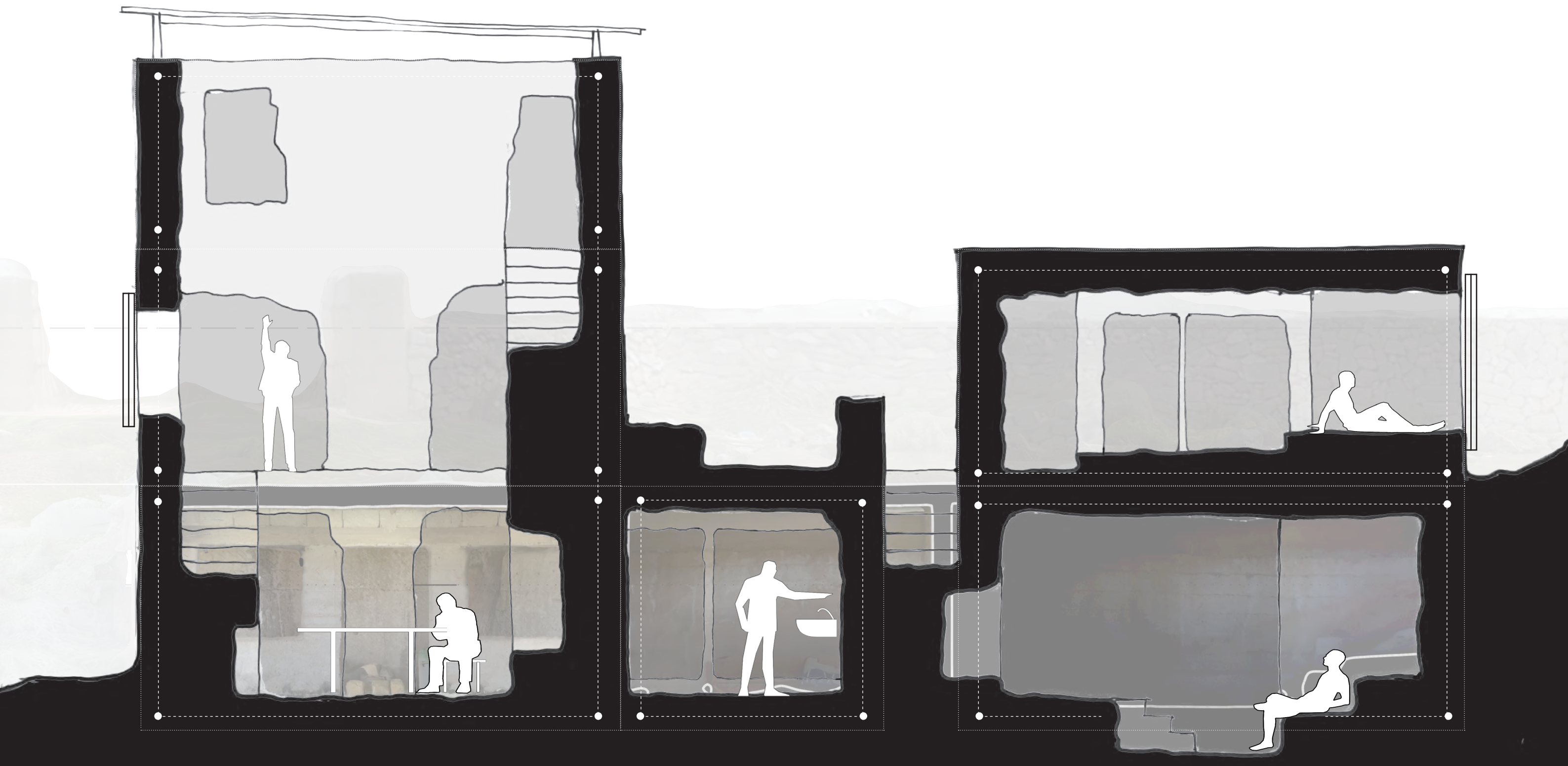










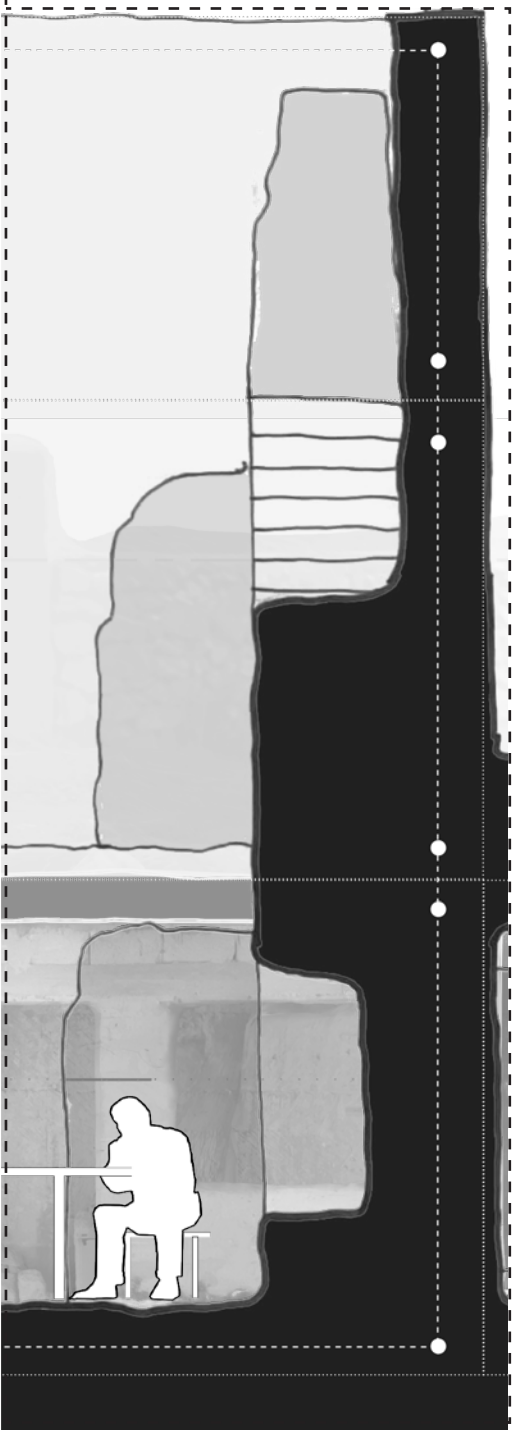


Monolith A

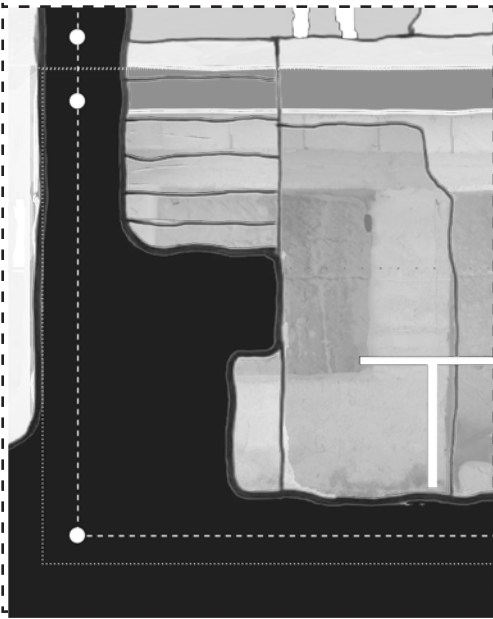
Monolith B

Monolith C

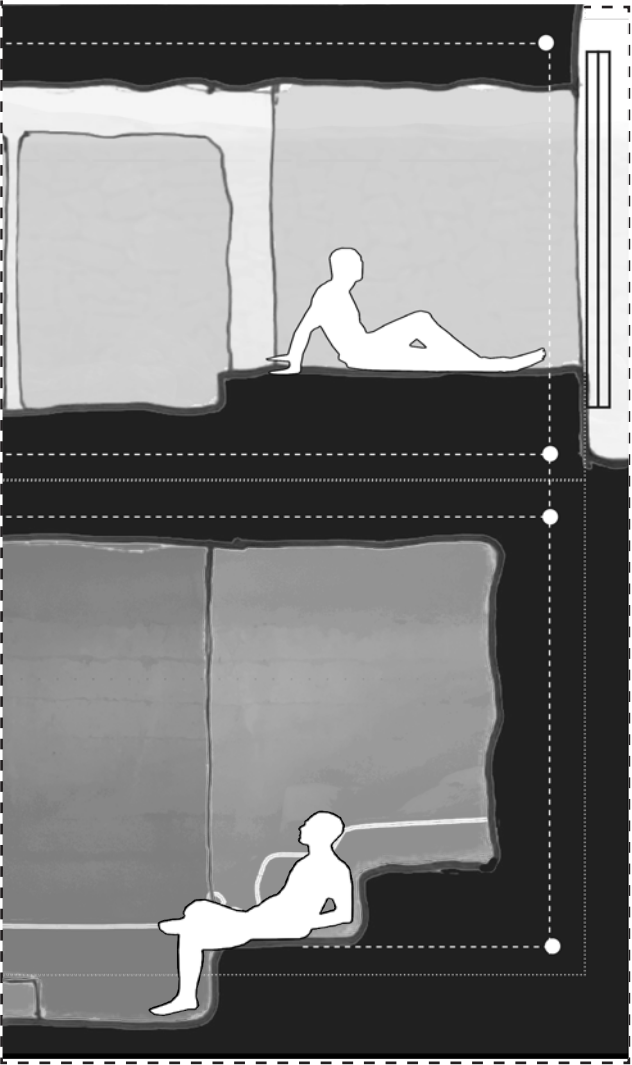
FACADE

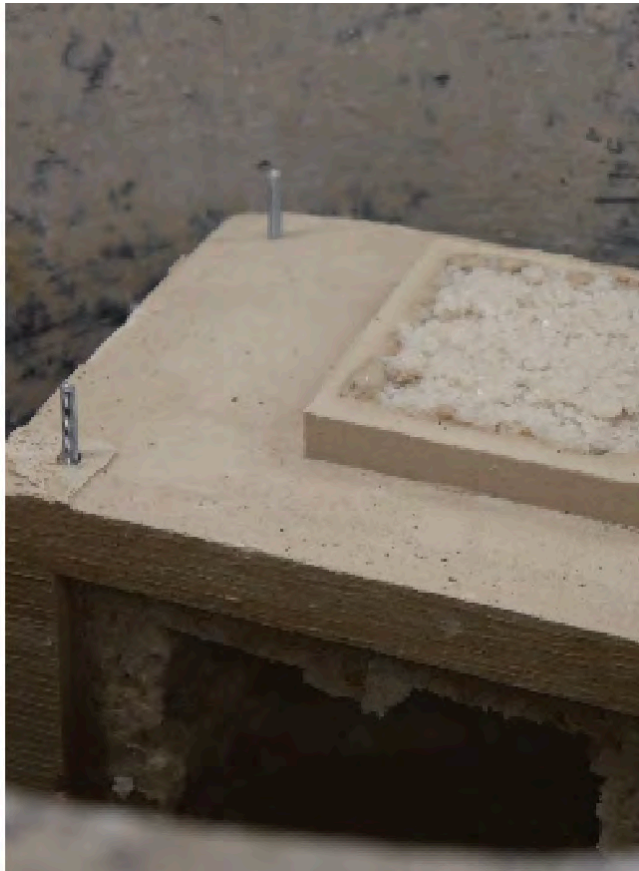


INTERIOR



DETAIL







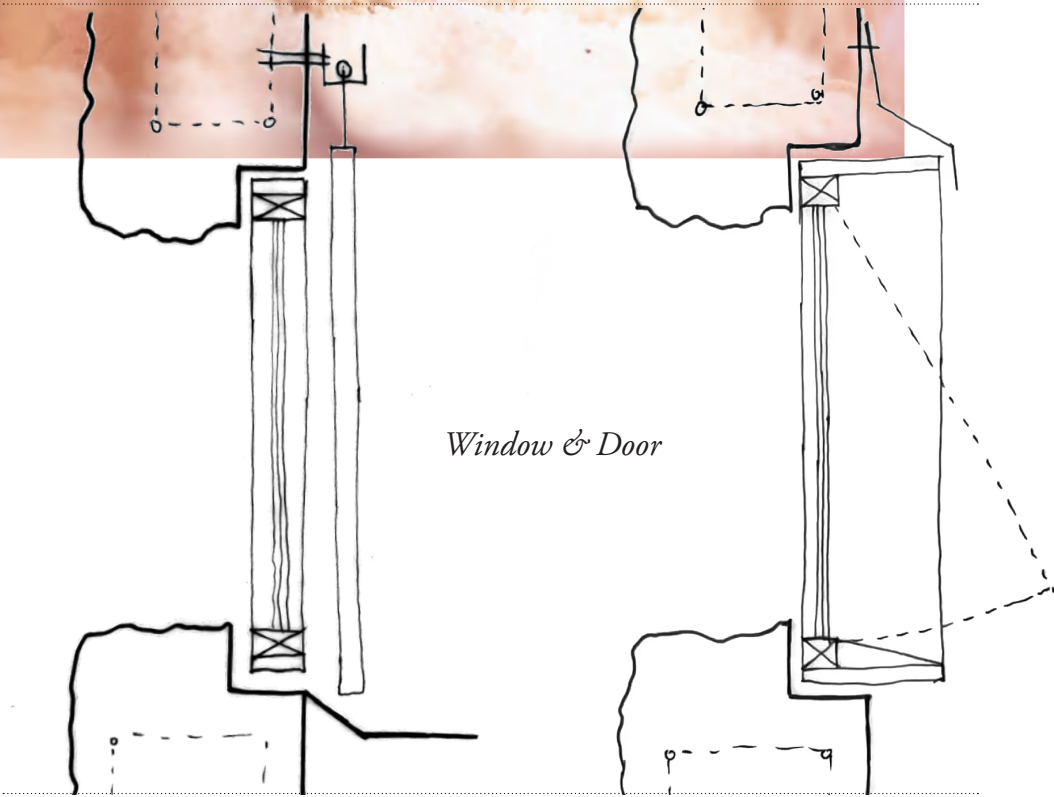
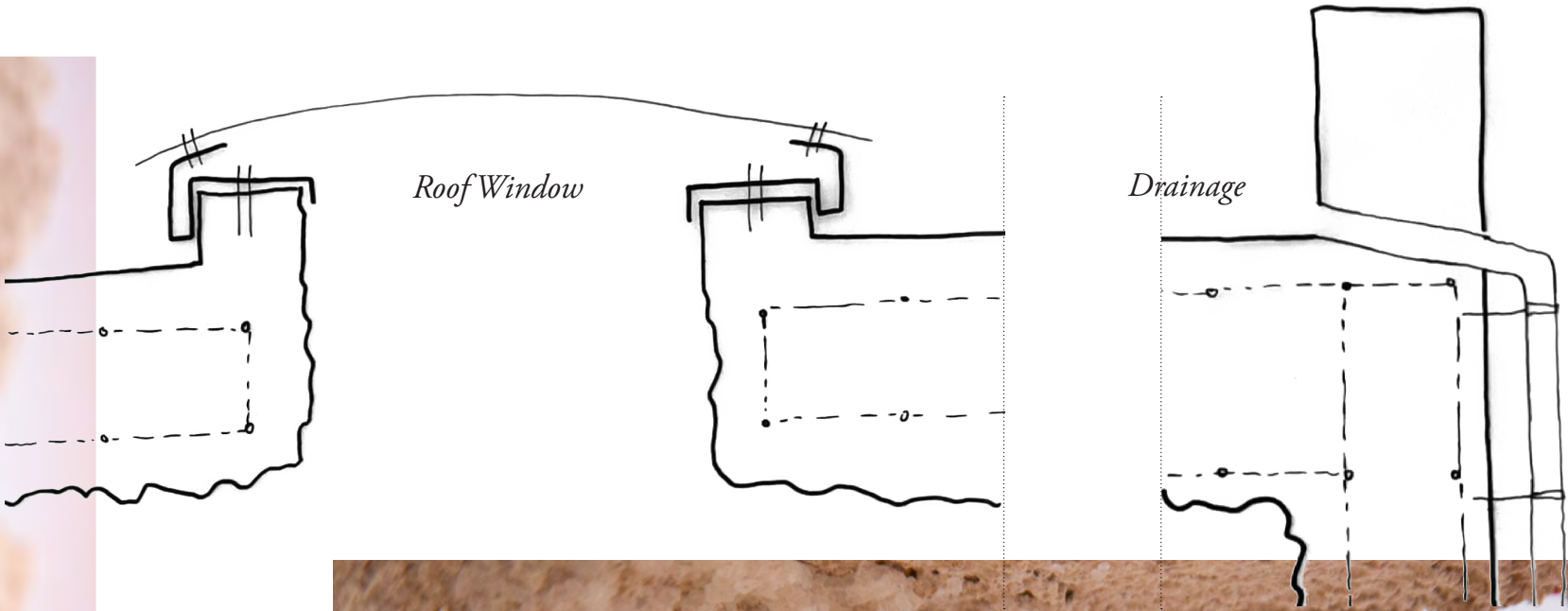






Erosion







Renaturization

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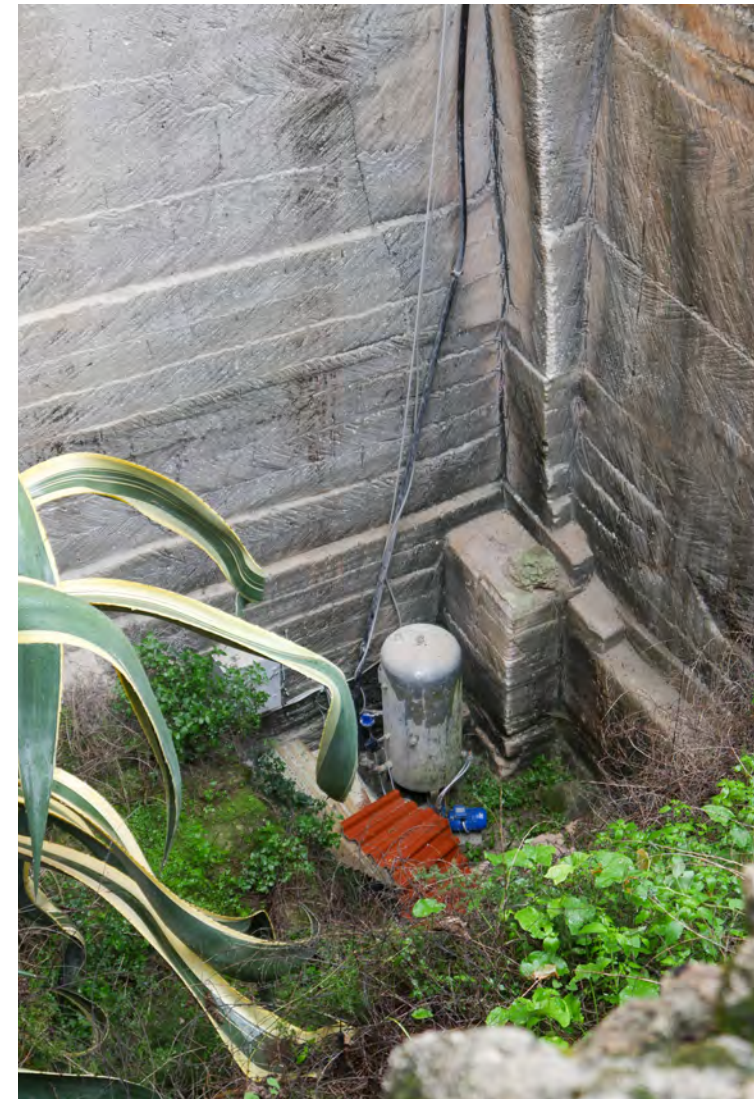
Renaturization

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Renaturization

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Renaturization



Multi Storey

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Formwork

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Interior



Exterior - Video









