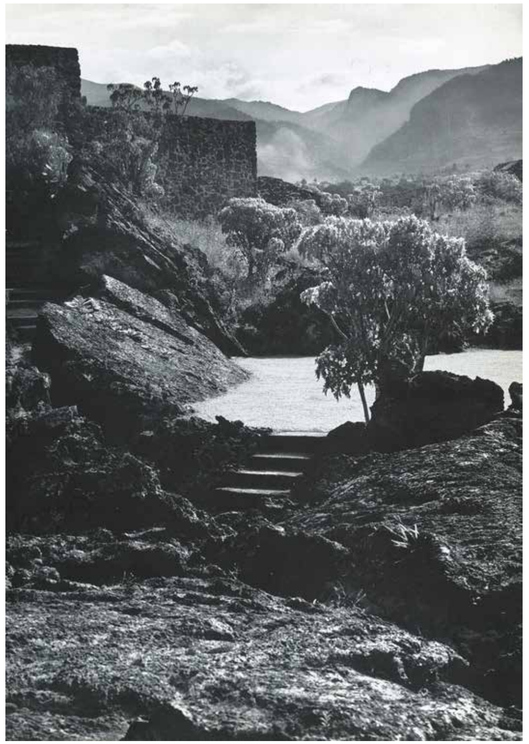
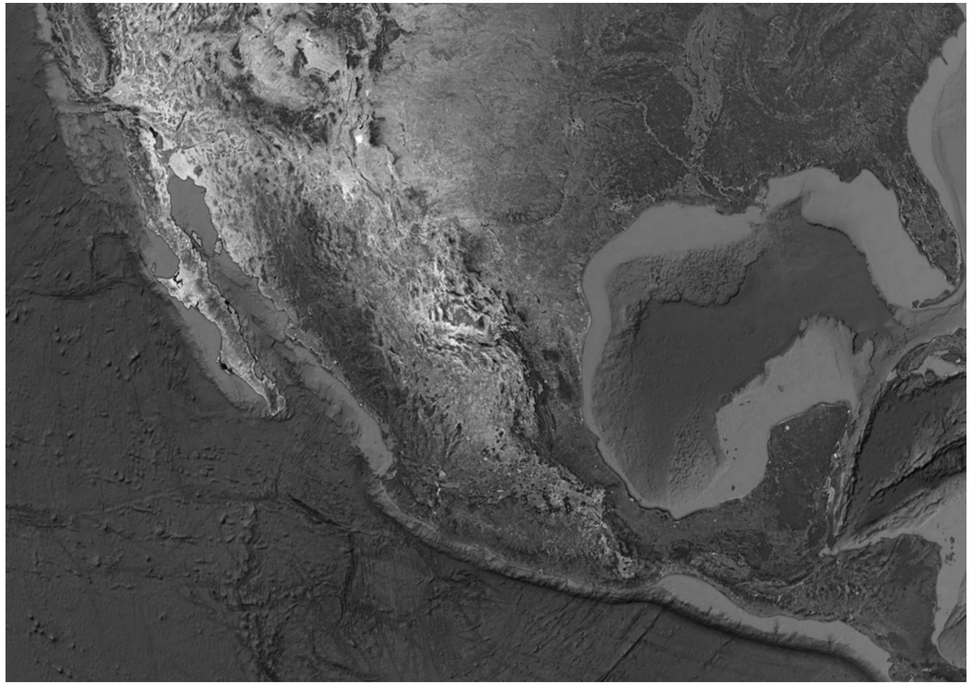


REVEALING THE LOST GARDENS OF EL PEDREGAL

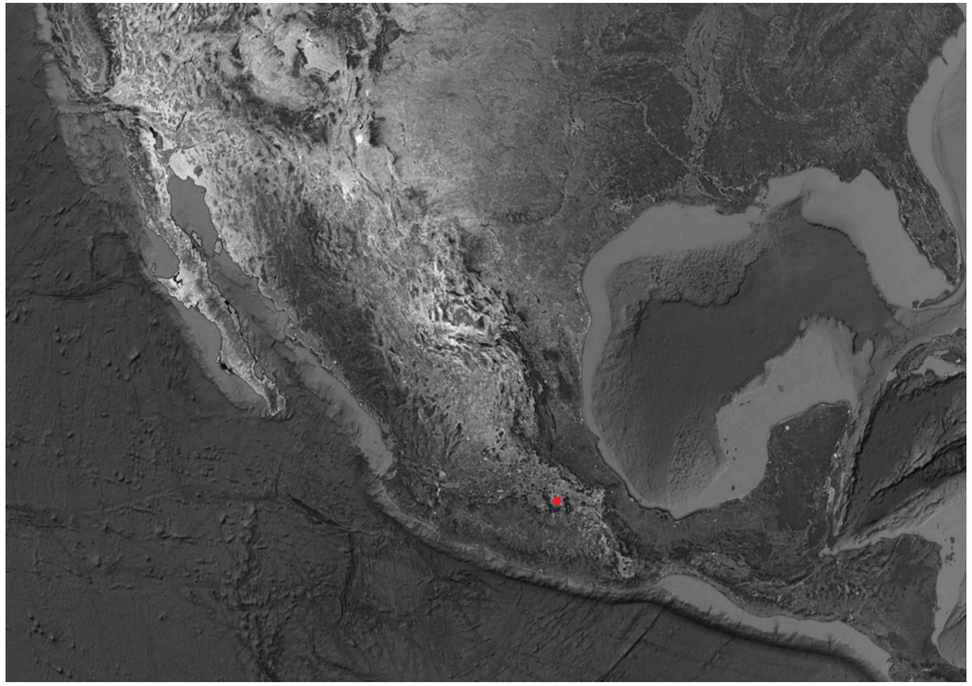
Diploma, Spring Semester 2023

AHO - Oslo School of Architecture and Design

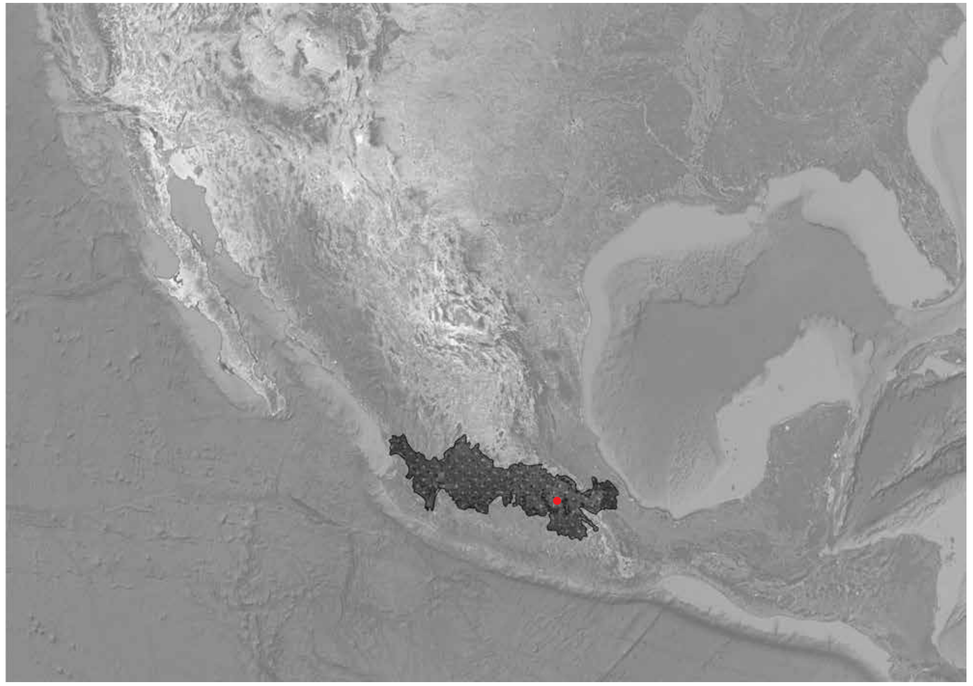
Mexico



Mexico City

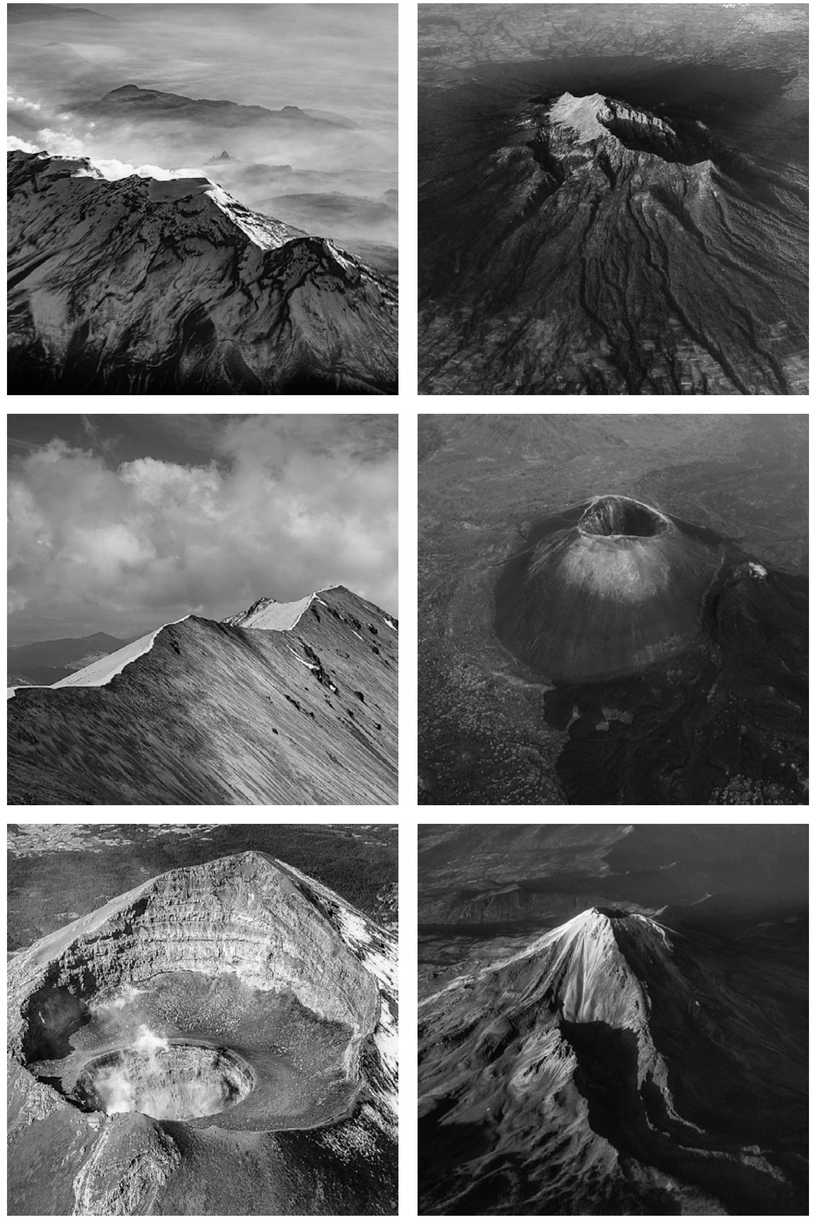


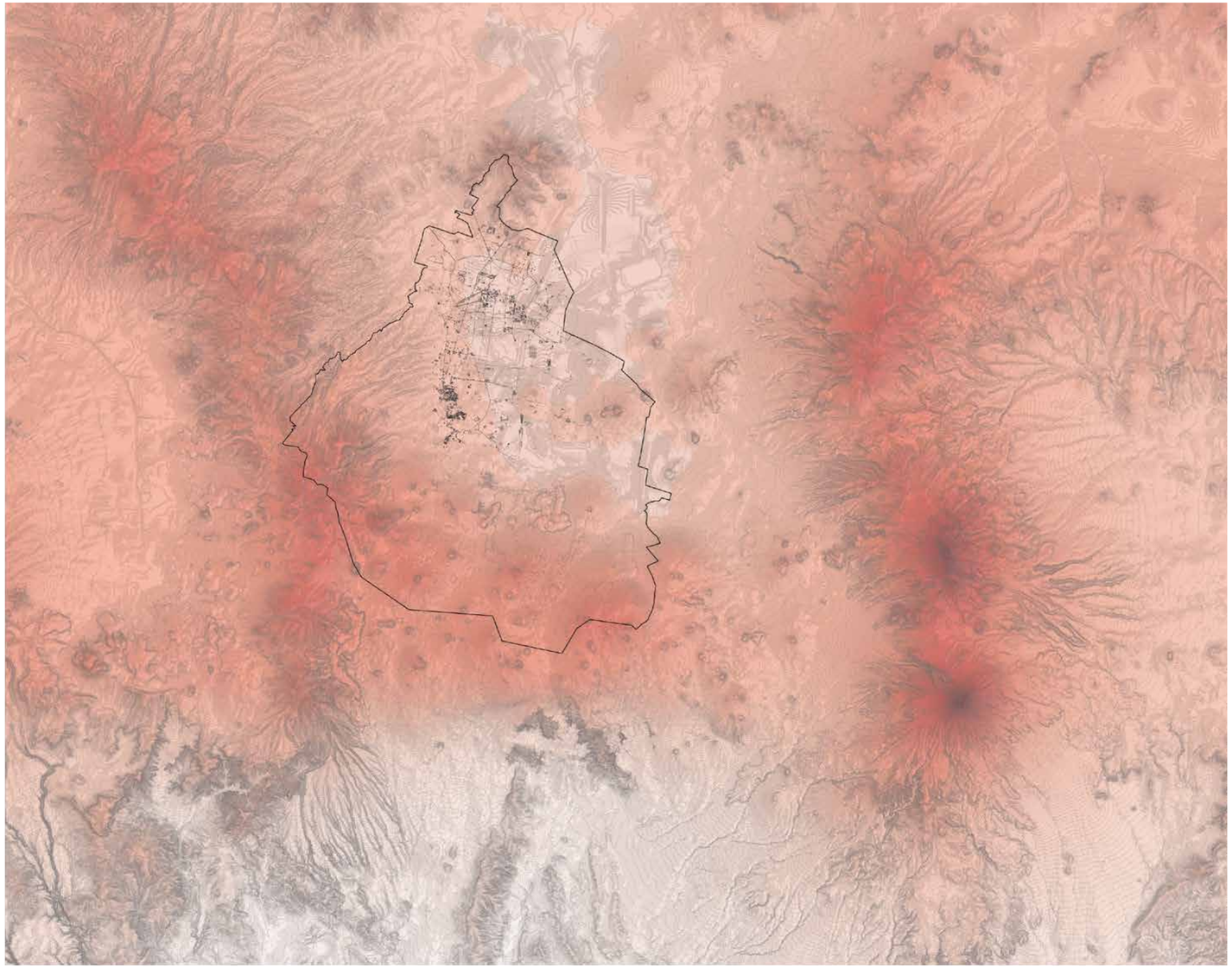
Mexican Transverse Volcanic Belt



Mexico is a country integrated into the so-called "ring of fire" of the Pacific, characterized by a high frequency of volcanic events.
In historical times, countless volcanoes have deposited lava, ashes, and other materials that have subsequently been colonized by communities.
In this project, I will focus on the Xitle volcano and its wonderful Pedregal.

The Valley of Mexico is in constant transformation. Since its founding as Tenochtitlan, the urbanization interacted with the landscape in different ways: from the lake to the mainland and from the valley to the mountain. Like any city, it spread to the shores from the center and it was in the second half of the 20th century that the flow of the urban sprawl met the flow of petrified lava from Xitle to the south of the city.

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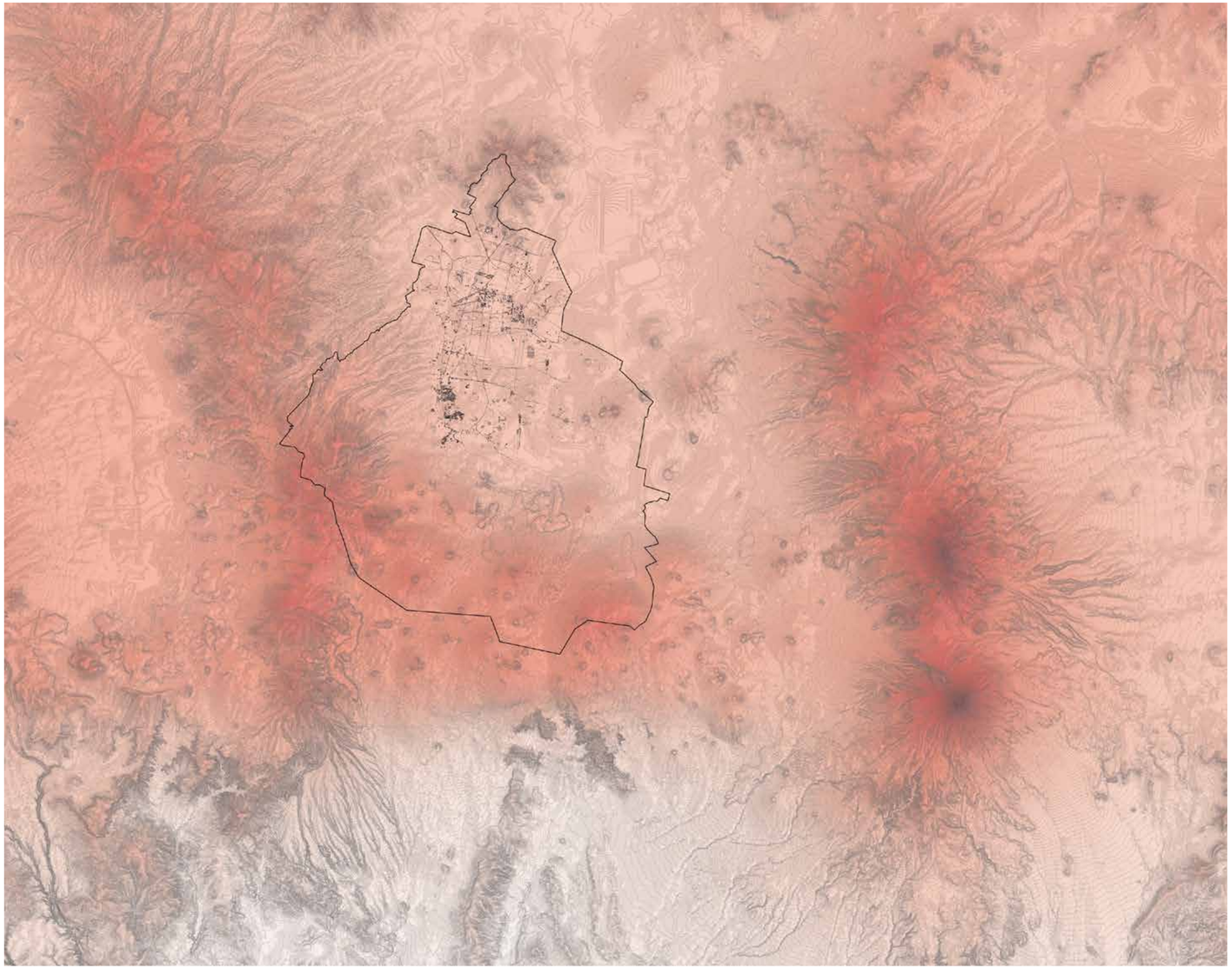
20 km



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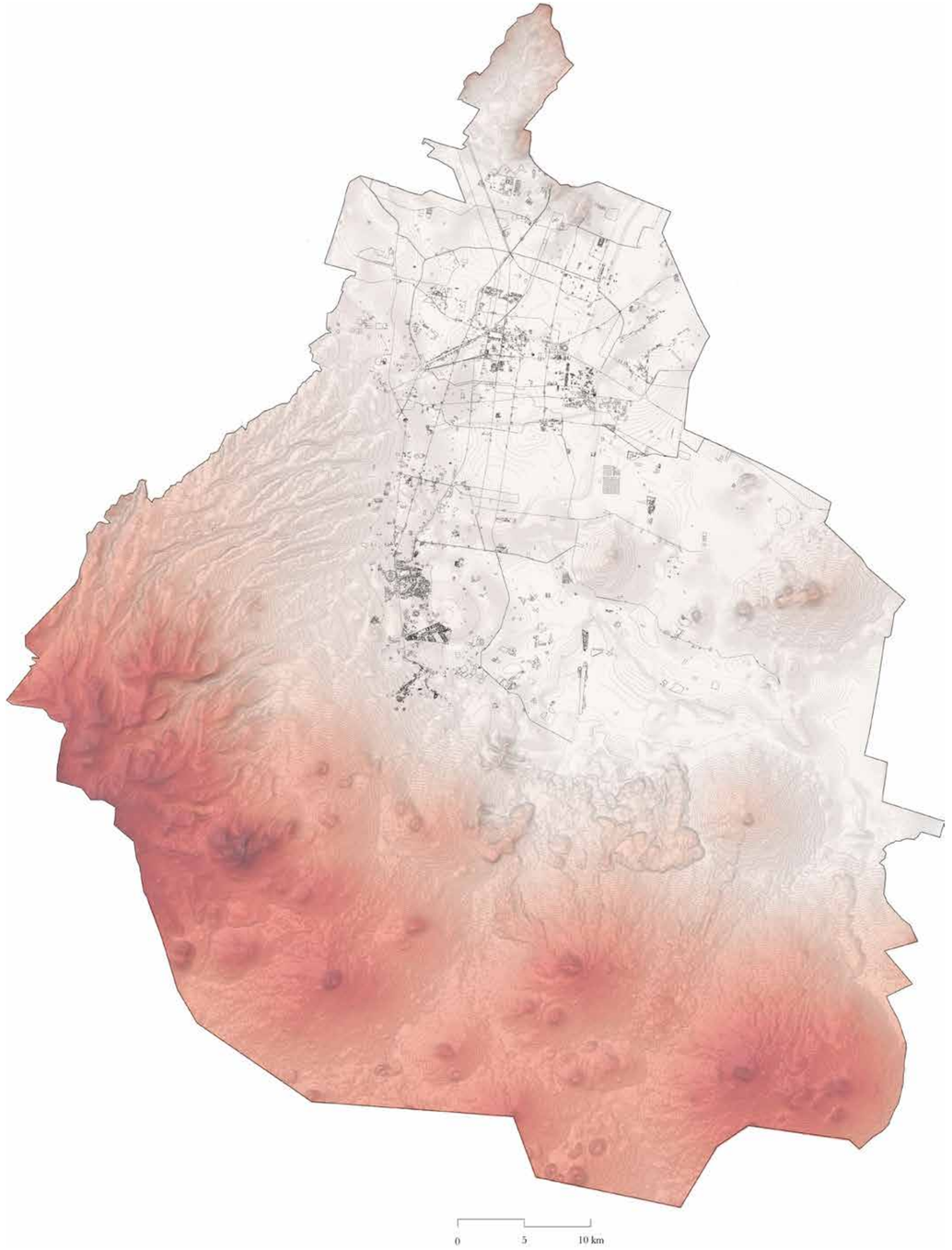
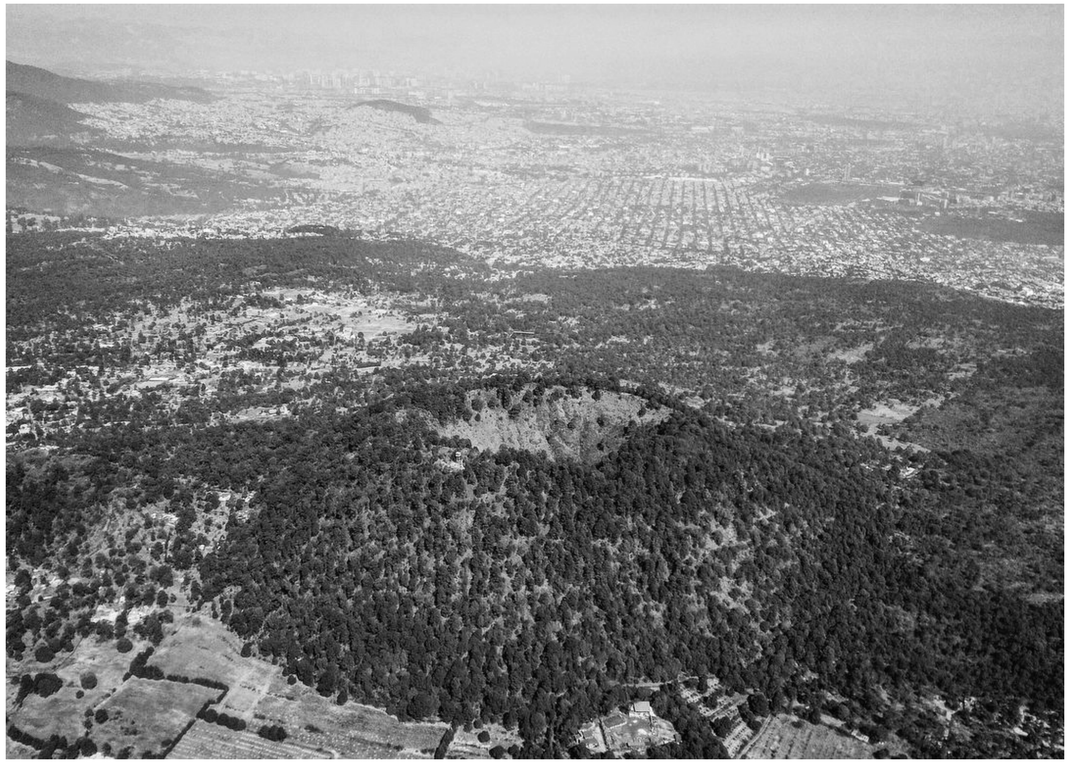
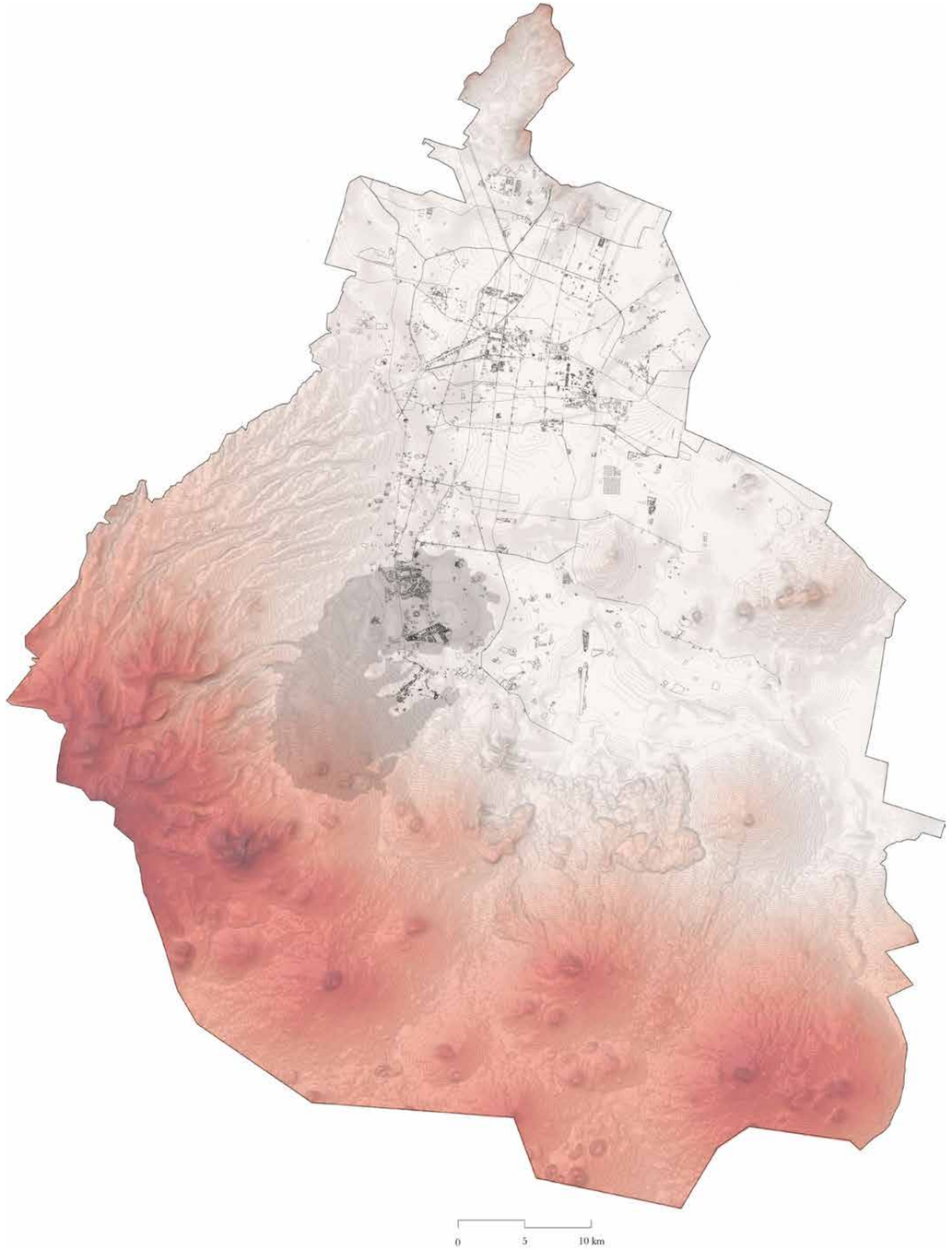

0
5
10 km

Xitle Volcano

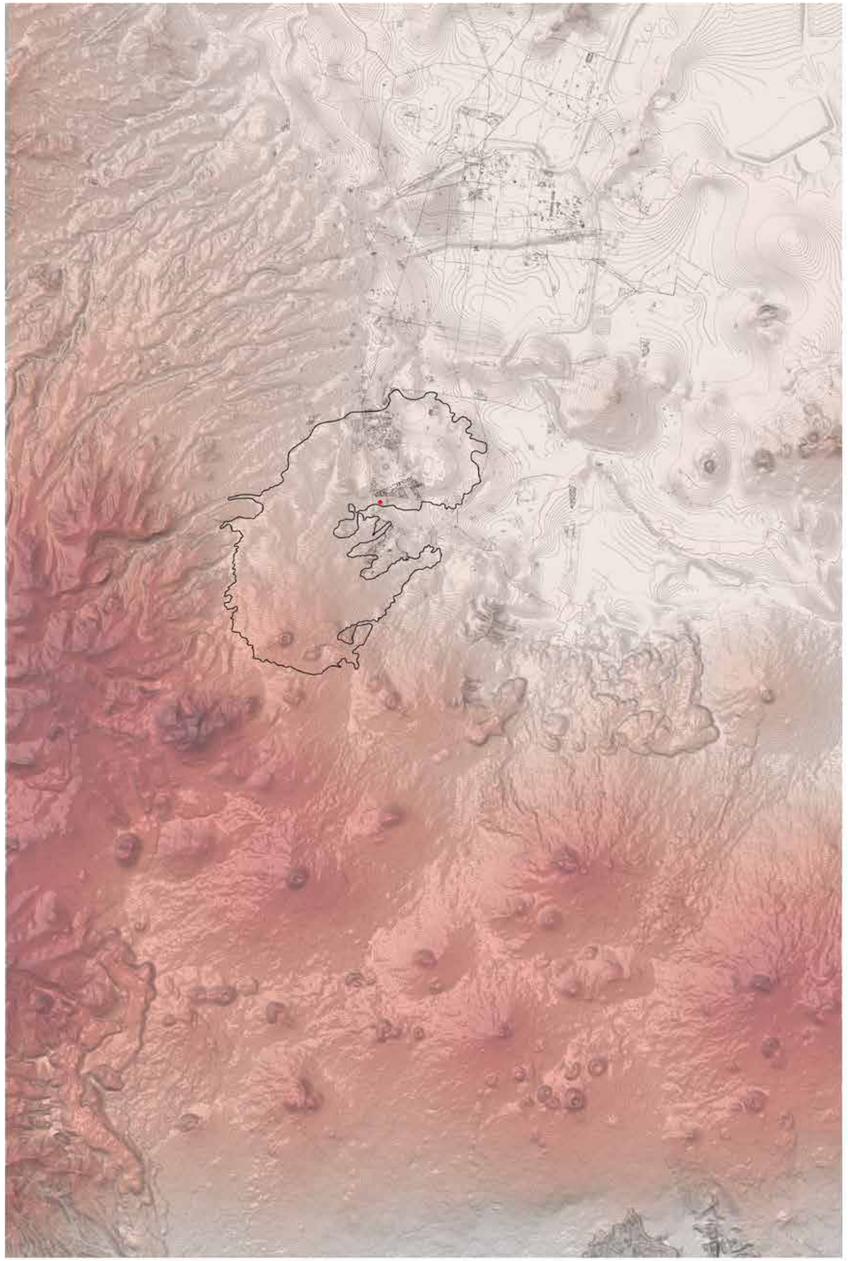


Xitle erupted about 2,500 years ago. The Xitle volcano is part of a mountain range made up of more than 200 small volcanoes that make up the Mexican volcanic belt. New evidence suggests that Xitle's eruption was around 2,000 years ago. Due to the morphology of the Xitle volcanic cone, which has a crater tilted towards the North, it caused the lava flow to be directed mainly toward the North and Northwest. The spill covered a relatively low kidney-shaped area, a total surface of almost 8,000 Ha. (from 2,250 to 2,350 m above sea level).

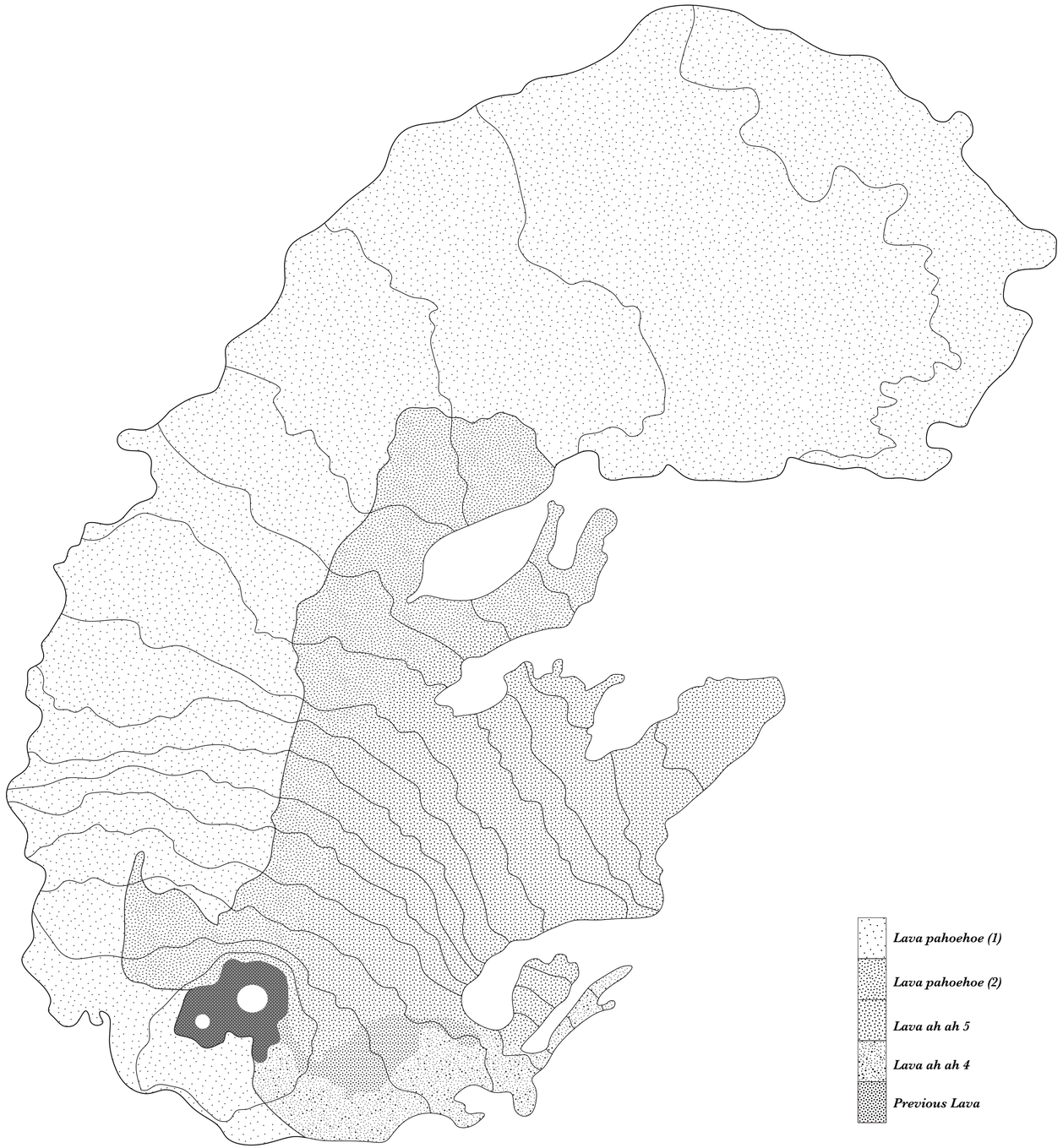

0
5
10 km

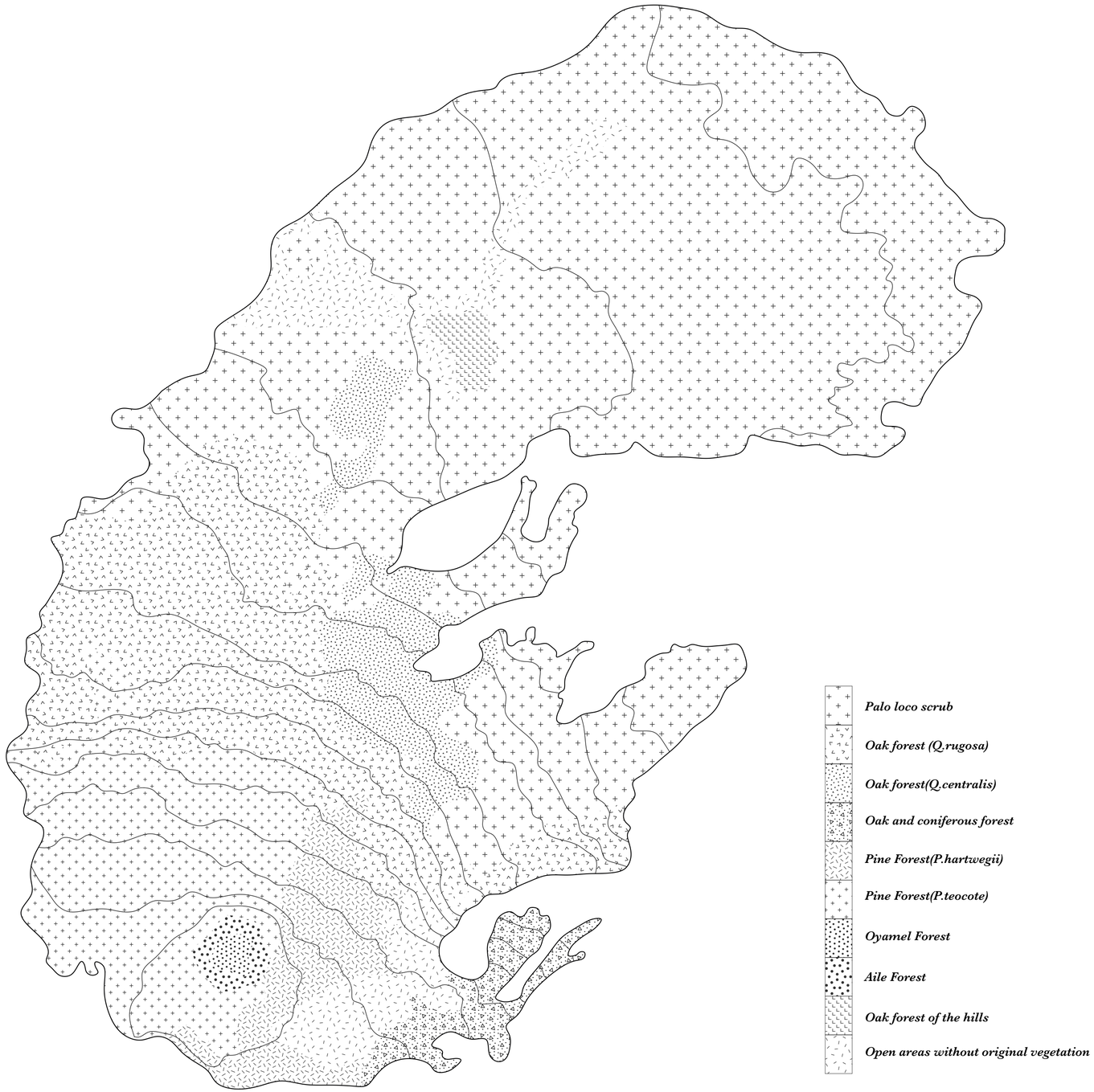
Cuicuilco

When the Xitle volcano erupted (11 years), its lava covered a radius of 80 km2 and, as it cooled, the rock created a new environment for the development of flora and fauna. This is how the Pedregal de San Ángel was born, the most biodiverse place in the Basin of Mexico City.



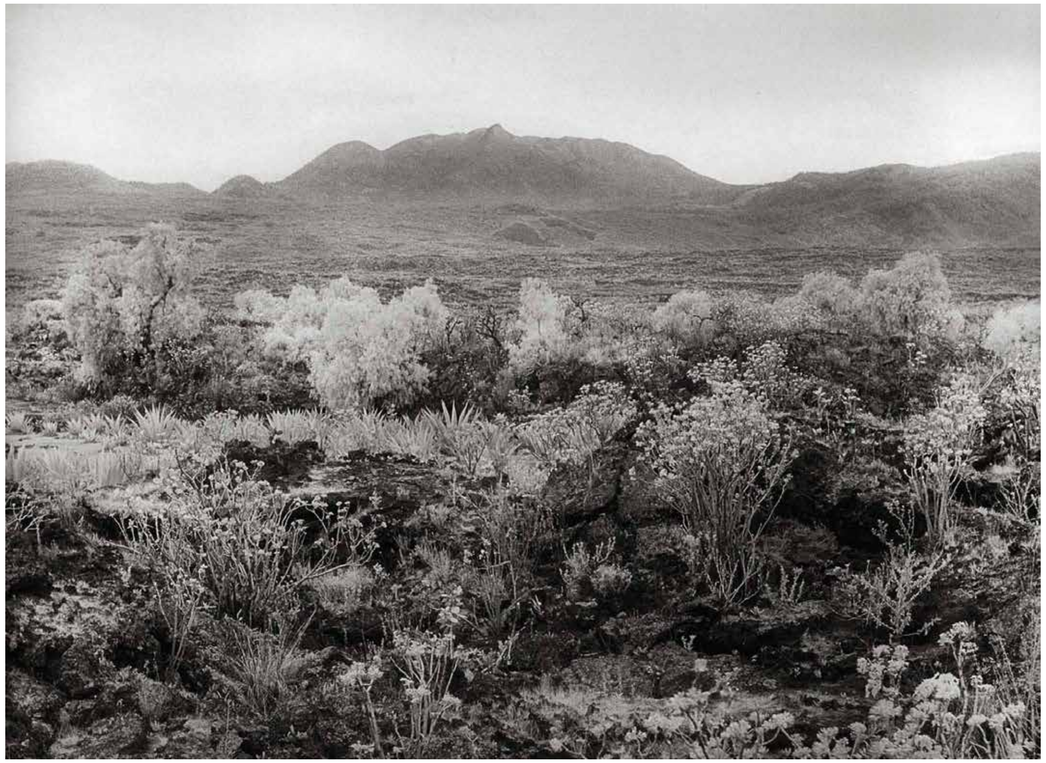
0 2,5 2,5 km


Lava pahoehoe (1)
Lava pahoehoe (2)
Lava ah ah 5
Lava ah ah 4
Previous Lava


Palo loco scrub
Oak forest (Q.rugosa)
Oak forest(Q.centralis)
Oak and coniferous forest
Pine Forest(P.hartwegii)
Pine Forest(P.teocote)
Oyamel Forest
Aile Forest
Oak forest of the hills
Open areas without original vegetation

The Pedregal

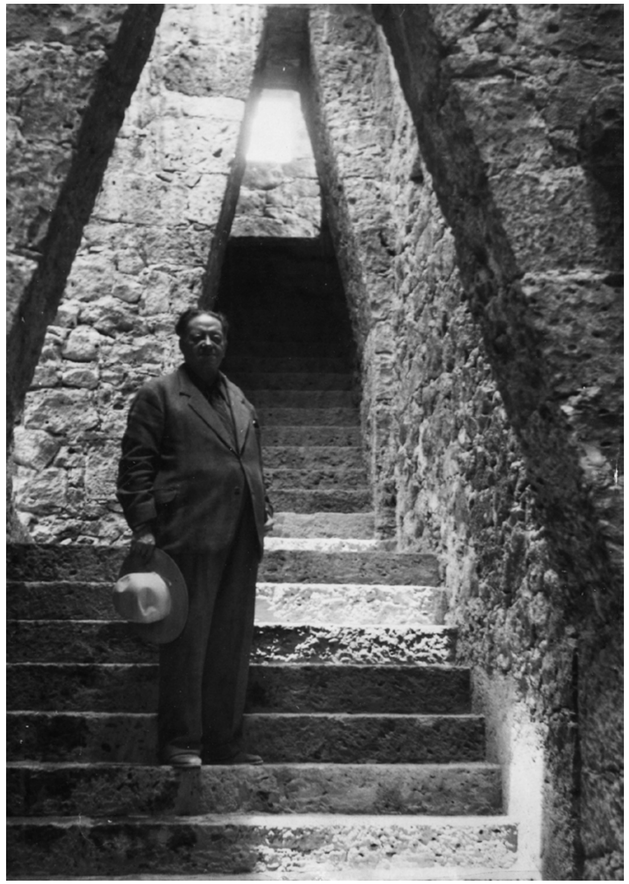
petra = *"stone"* -***al***- *(relationship, place where it abounds)*
Pedregal *"place where stones abound"*



This renewed interest in the pedregal as a landscape, as a place for recreation, foreshadowed its greatest transformation. The imaginary of a mystical and mysterious rocky area that fascinated writers, painters, and residents of Mexico City, fueled the interest in integrating it into the city without ignoring it. We label the architectural and landscape project of Pedregal that began in the 1940s with the label of "modernity". The other city, the old city, ended up beating the ambitious project. More than 60 years later, few windows remain revealing El Pedregal in places we call "reserves." And the memory of him must be fighting against oblivion.

Photo: El Pedregal de San Ángel
Book, Sara Portugal Armanda. "Barragán"

Diego Rivera
The Artist



Written sometime between 1943-1946 Rivera opens an essay by propounding the Pedregal´s advantages over Mexico City:

"The Pedregal as the place of a possible new city has none of the climatic or economic disadvantages, pertaining to the construction of housing, that Mexico City suffers from in its old location." Throughout the essay, Rivera´s thoughts are dominated by a concern for the existing landscape.

Requirements for the organization of El Pedregal writtten by Diego Rivera

1. The country's authorities must establish, in agreement with the owners or companies interested in El Pedregal, a minimum type of extension of lots, which ensures the conservation of the geographical character of the site. One-sixth of the area of the lot should be designated for construction, this being less than 10,000 m2.

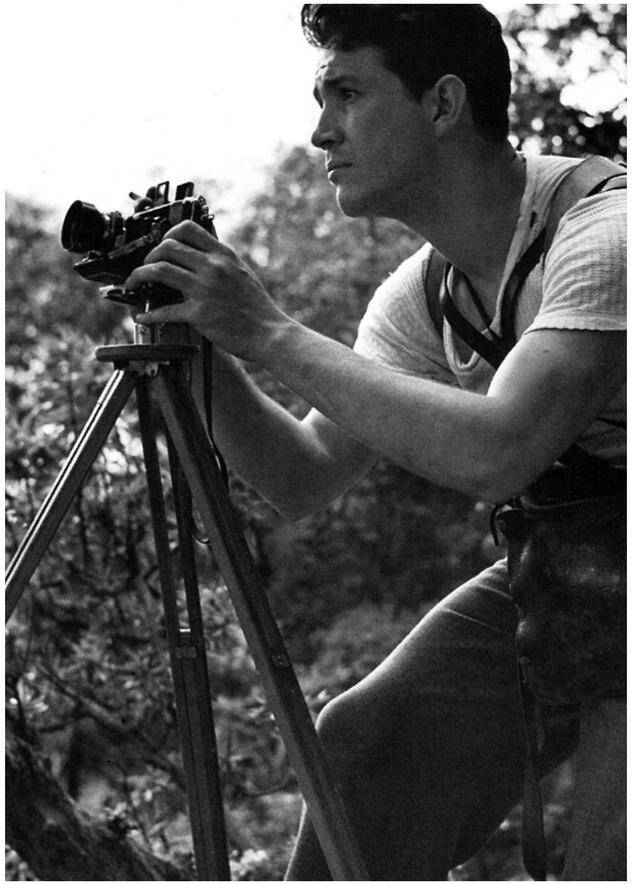
2. Nothing will be achieved if the constructions destroy the natural beauty of the place. To avoid this, it is enough to set a few construction conditions that, of course, would be entire to the benefit of the owners:

It would not be allowed to destroy more than partially one of the three layers of lava that make up the basaltic mantle, limiting their use as quarries to the current exploitation and setting a time limit on surface and volume.
The foregoing does not exclude the national use of concrete, iron, glass, and wood, but the non-construction of tile roofs must be established as an absolutely essential condition, with terrace roofs being preferred and in case of need and for certain parts of the superstructure of the buildings, the traditional thatched roof, but no pop-up roof of solid material.
It would be established by an aesthetic council composed of representatives of the Central Department, the Ministry of Public Education of Mexico, the National University, the National College, and the regularly constituted societies of architects and engineers, in order to establish with wide limits the style that would be allowed. used in construction, and this must be within the tradition of Mexican architecture, opening the field, of course, to materials acquired again by science such as concrete, iron, glass, and others.

Many of the wonderful cacti areas of Mexico are practically inaccessible to the traveler who does not undertake a true expedition. All the species could be brought to El Pedregal, and as a whole, it would constitute by itself a universal attraction. In the horizontal cracks where airborne topsoil, vegetable, and animal organic matter accumulates, they are marvelous receptacles for planting flowering trees and shrubs, being of extraordinary fertility, much greater than anywhere else in the Valley of Mexico. The fact that the rock retains the heat from the sun's rays received during the day makes El Pedregal a true greenhouse, where it is possible to grow orchids and other species of intertropical and even tropical plants. In addition, the fact that the subsoil of El Pedregal is virgin land and is crossed by numerous streams of water from springs that sprout under the rock contributes to the special fertility of the place.

All of the above makes El Pedregal an enormous potential wealth that must be duly exploited since it solves the problems of housing from the point of view of climate and construction costs that Mexico City faces.

Armando Salas Portugal
The Photographer



At the beginning of the 20th century, photography evolved in technique and composition like other arts and became one of the main tools for understanding a work of architecture: both for the analysis of the project and for the dissemination of the work. Likewise, it has been used for the interpretation and analysis of modernity.

Archive Armando Salas Portugal 1940
http://www.beaudouin-architectes.fr/

When we talk about the photography of Luis Barragan's work, it is necessary to emphasize the value that Barragan adds to it, not only as a technique but also as a process. Luis Barragan was able to see the photography of Armando Salas Portugal as an inexhaustible source of possibilities, which built an indissoluble bond between them. For Barragan, photography was not only an instrument of visual communication to promote his own work or to design a corporate image in order to show Los Jardines del Pedregal to the world. For him, the value of photography laid in the potential that its own meaning has - phos (light)-graphs (writing) "writing or drawing with light" - throughout the whole design process. El Pedregal de San Angel is the first work where Luis Barragan, hand in hand with Armando Salas Portugal, introduced the use of photography as a design tool in the creative process.

El Pedregal de San Ángel
Book, Salas Portugal Armando. "Barragán"

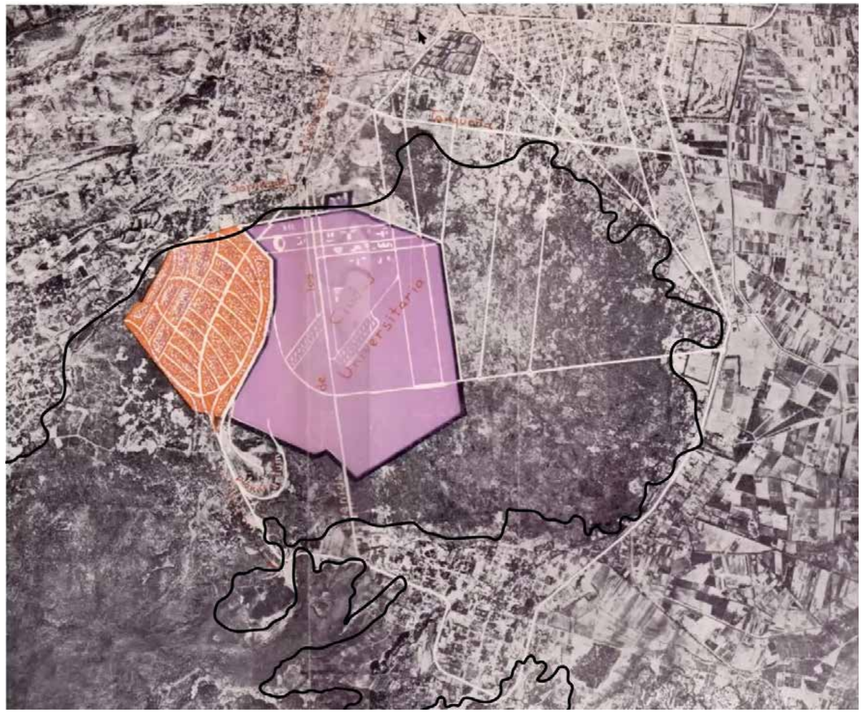
In 1945, he began to change his architectural interest from internal to external and from private to public spaces. with the development of the Jardines del Pedregal, he began to project fountains, squares, and gardens. The few houses that he built, he chose for the interest of the realization of his gardens and patios, beginning with the Mereles house (ca. 1948), the iconic Prieto López house (1948-1950), and the house and garden sample (ca. 1950-1952) in collaboration with Max Cetto.

Luis Barragán 1951
http://www.beaudouin-architectes.fr/

Original Urban Layout
Gardens of El Pedregal

Luis Barragán and a realtor, José Alberto Bustamante, both acquired 865 acres of El Pedregal very inexpensively. The streets of the subdivision were so laid out that they followed the natural contours of the lava formations within its crevices. The contrasts were violent, but all parts maintained their separate integrities.

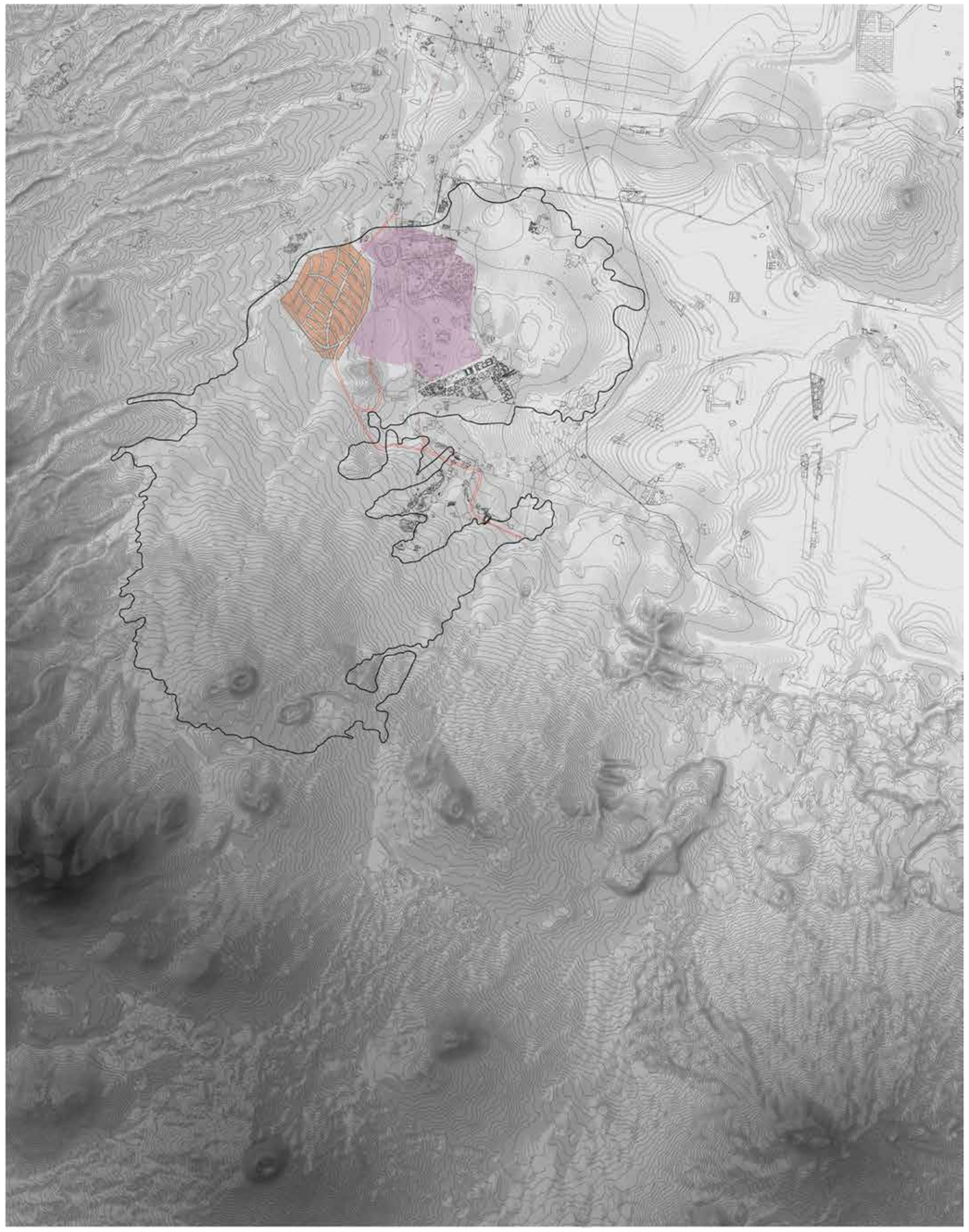
Jardines de El Pedregal 1955
http://www.beaudouin-architectes.fr/



A New Modern City Envisioned on a Volcanic Field

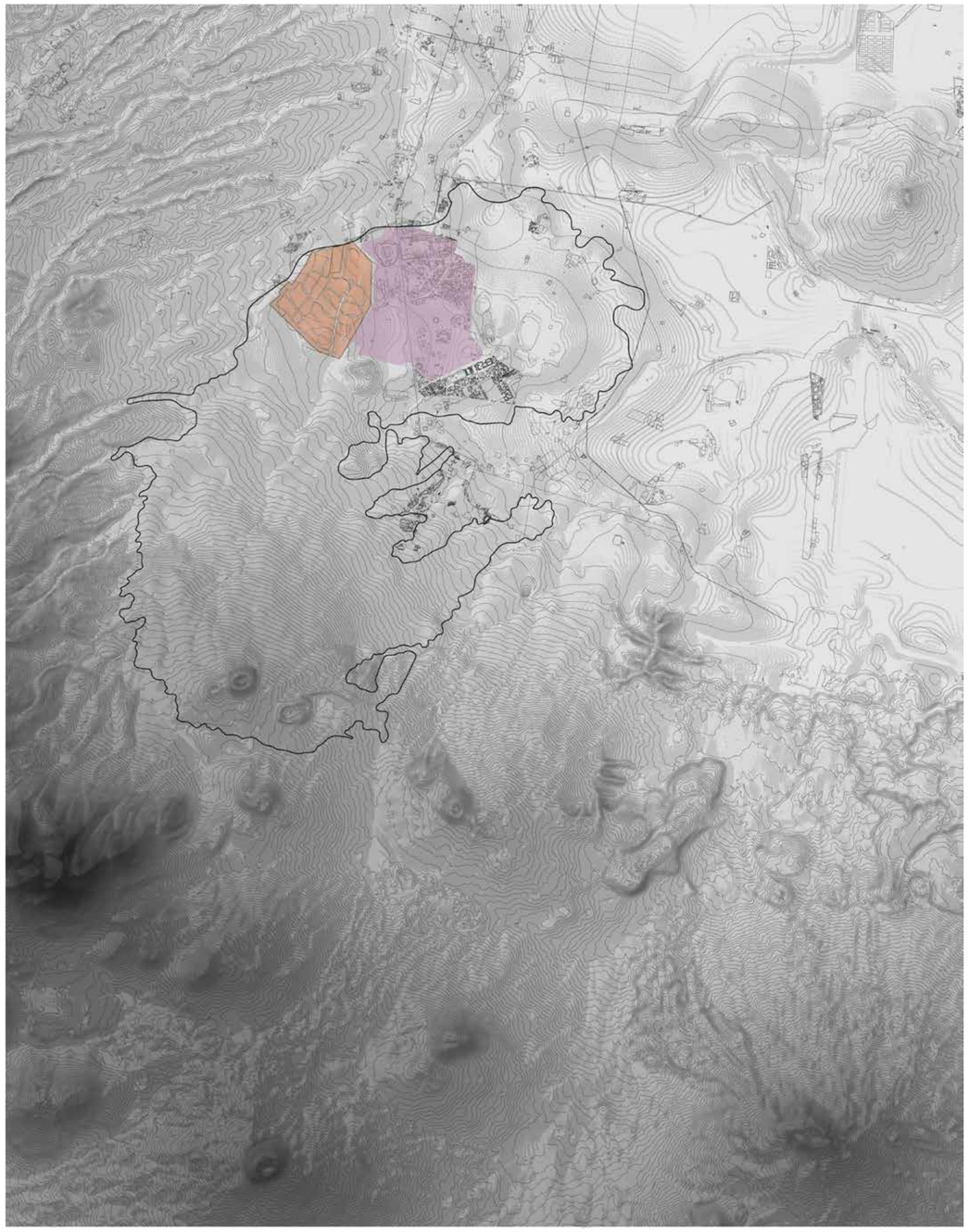
The minimum lot size allowed was about one acre; the house could not occupy more than 10 percent of the lot, and the rest was to remain free space. The lava was to be protected, and the natural vegetation was preserved. Any new planting was required to follow the contours, and any new construction had to be subordinated to the rock.

Jardines de El Pedregal
http://www.beaudouin-architectes.fr/

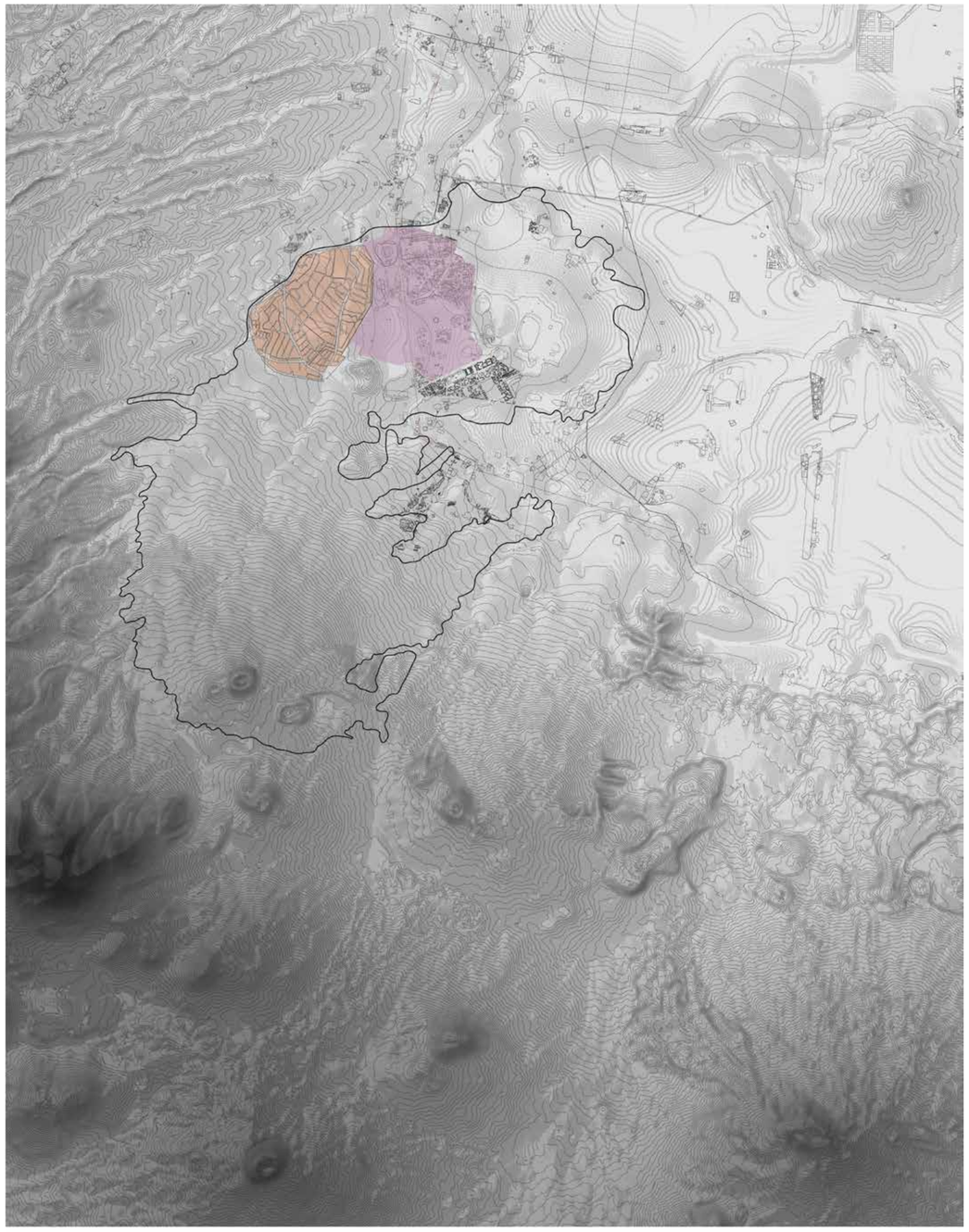


0 0.5 1.0 5.0

1944

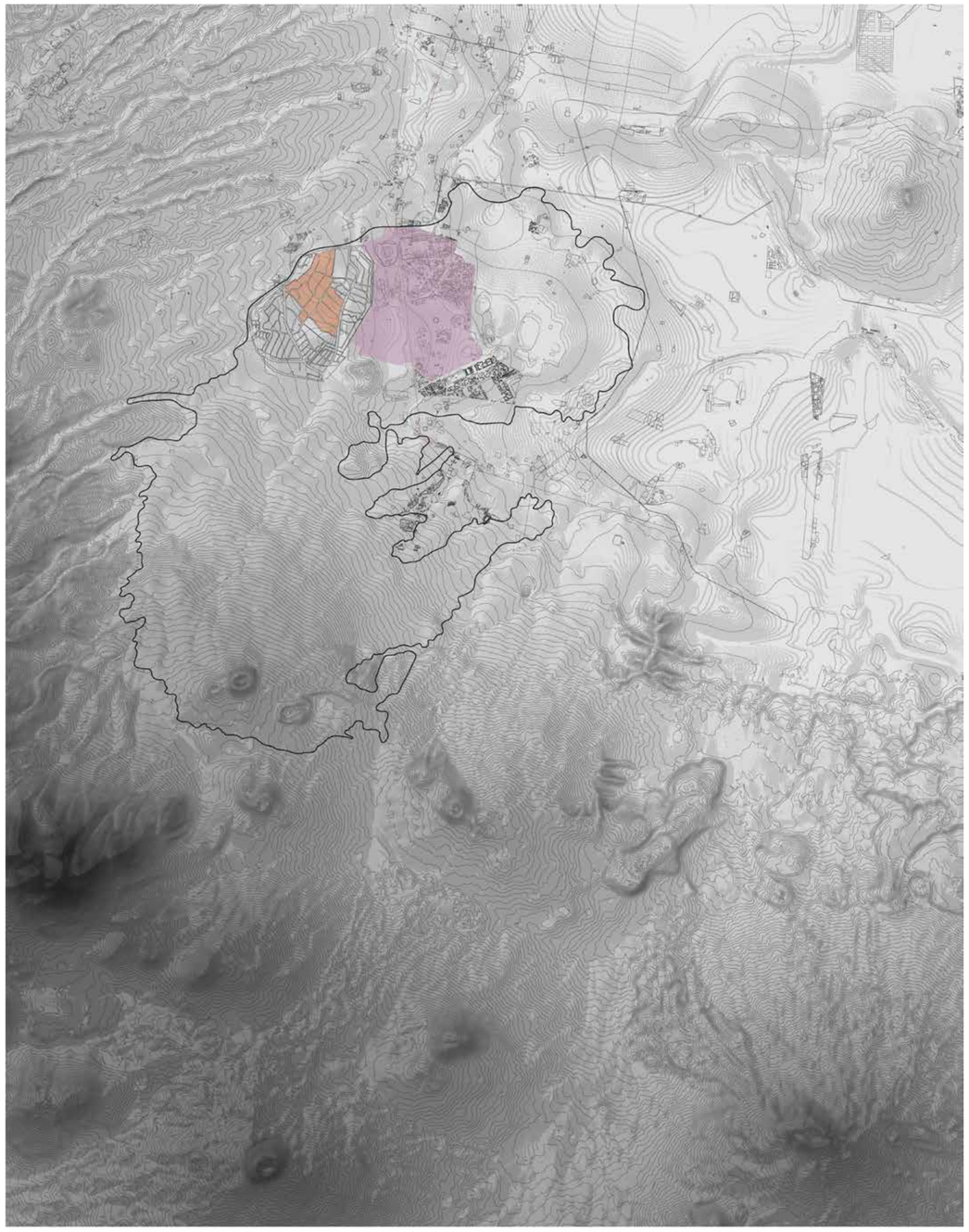


1945

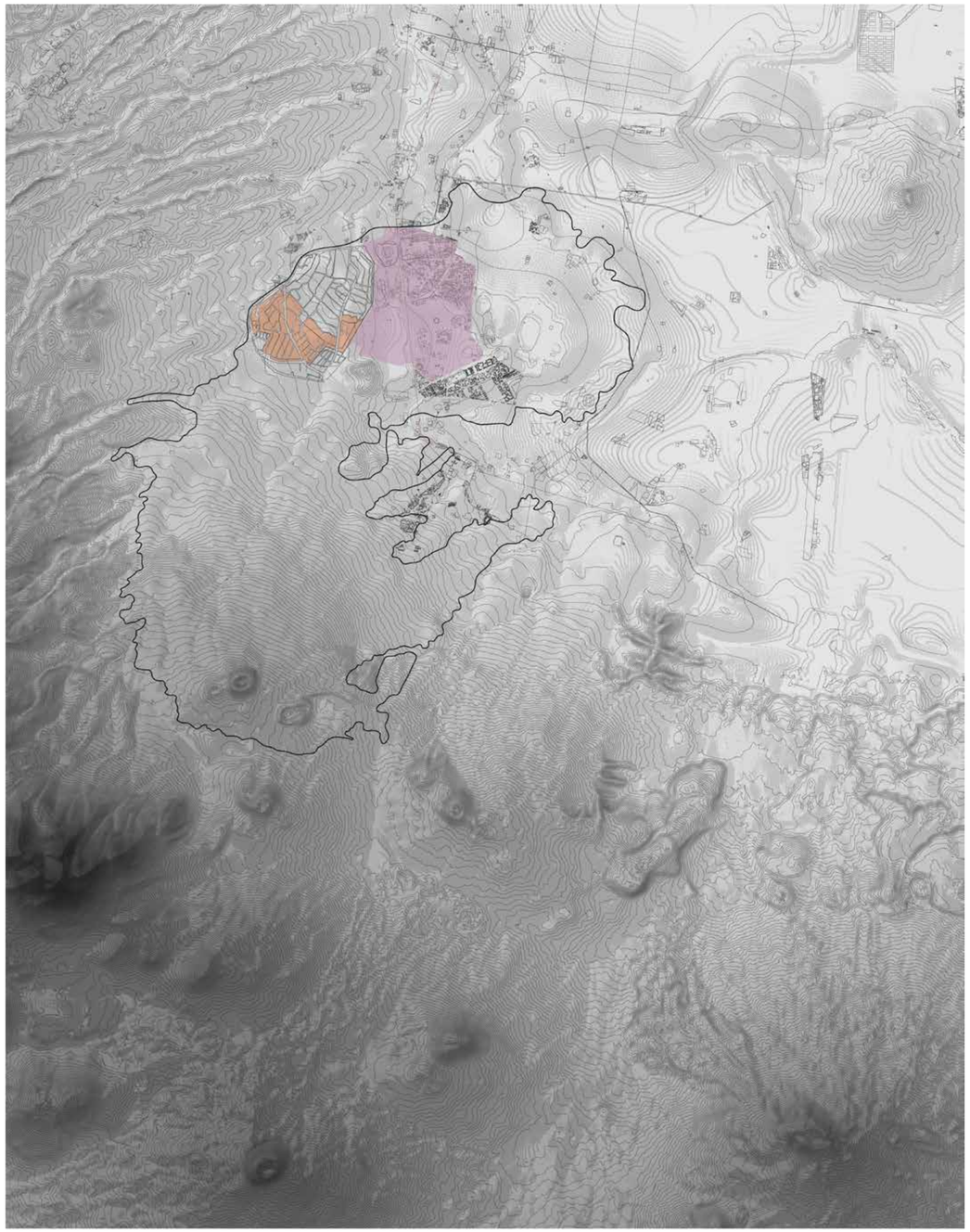


0 0.5 1.0 3.0

1950

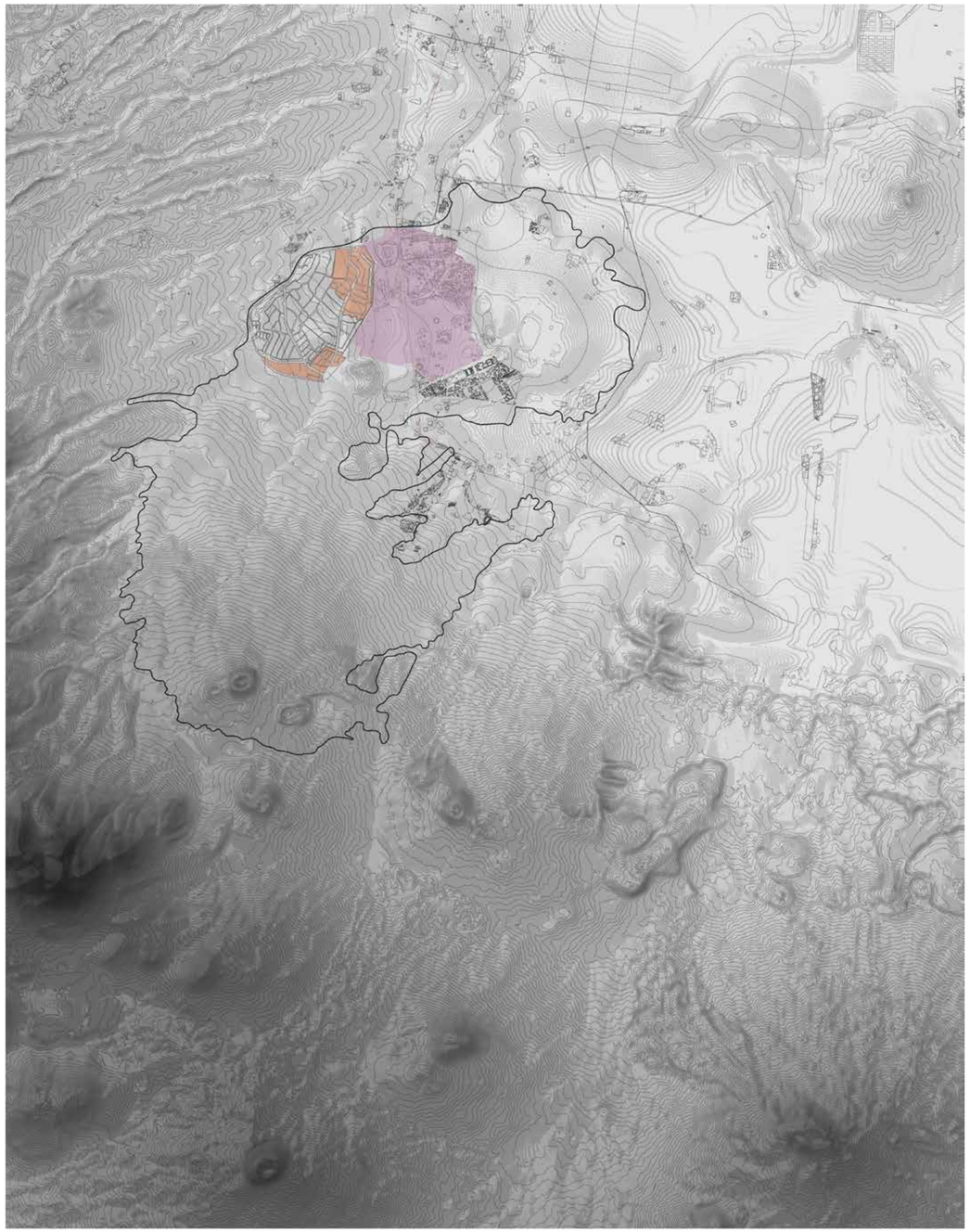


1950 1st stage

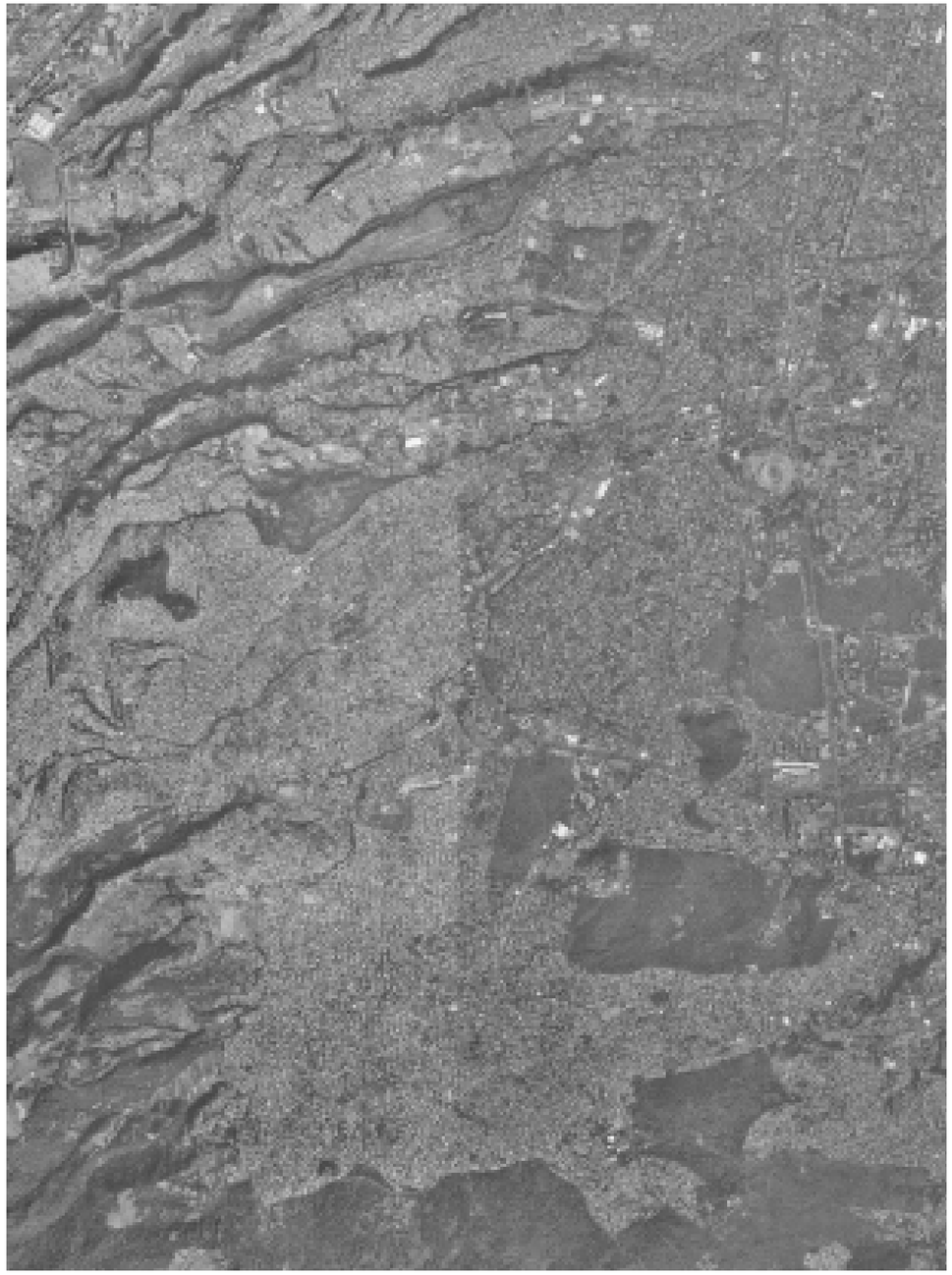


0 0.5 1.0 3.0

1954 2nd stage



1958 3rdst stage

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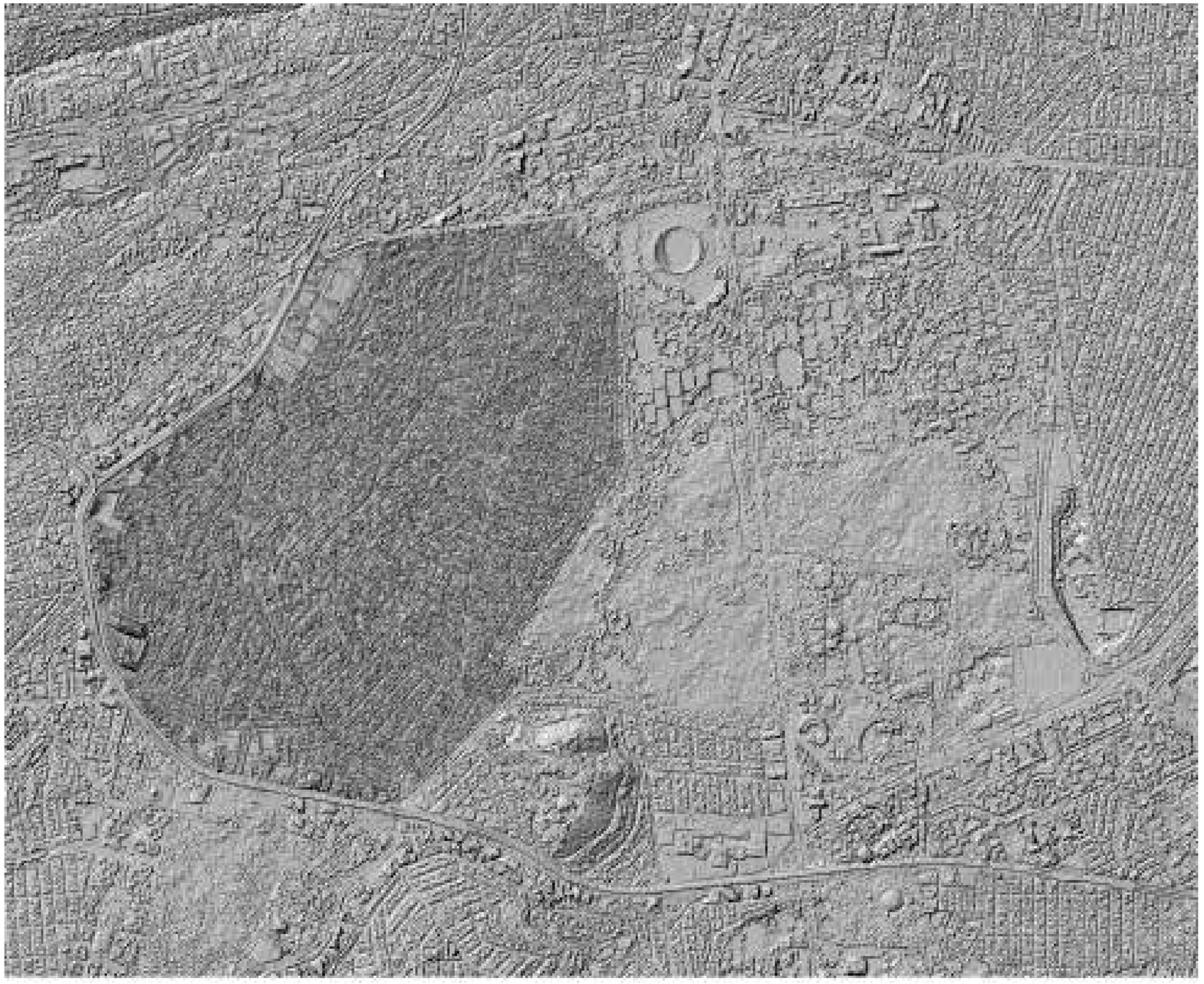
1
2 km


0
750
1500m

a.El cabrío
b.Fountain Square
c.Max Cetto House
d.Sample House
e.Sample Gardens
f.Prieto López House
g.Public Gardens
h.Traffic ring and Service entrance
i.Cigar Square
j.Commercial Center
k.Catholic Church

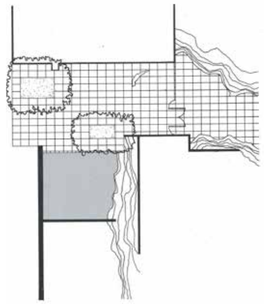
An overlap between the current situation of The Gardens of El Pedregal and the original urban layout with the minimum lot size allowed.

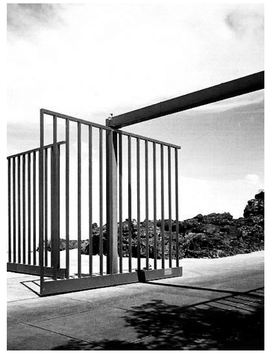


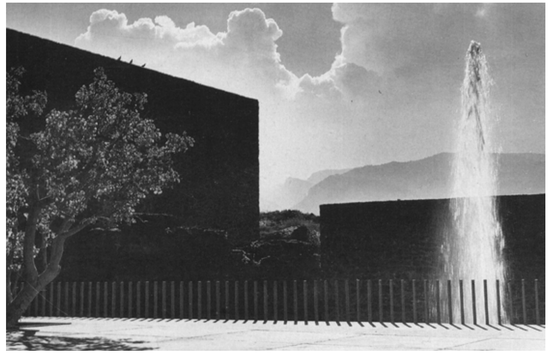

Barragán's plan was to create a residential area, respectful of both the existing lava formations and the extraordinary natural vegetation. Rather than houses, Barragán had in mind perhaps a vision closer to the ancient Persian concept of living quarters: he conceived of the garden as the soul of the house, the place, where guests are received. He perceived rooms as simple retreats meant just for sleeping, storage of belongings, and shelter from hostile weather.

Gardens of El Cabrío 1943-1944
Book, Salas Portugal Armando. "Barragán"

Fountain Square
Main entrance square


Entrance Plaza Plan





To define entrances to the subdivision, Barragán opened the walls here and there with fences of tall iron pickets painted phosphorescent reds and greens, and built decorative fountains and plazas. The main entrance to the subdivision.

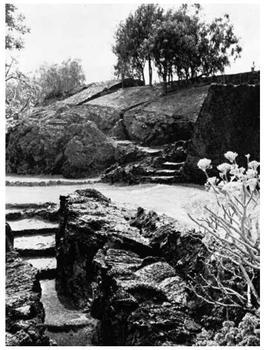
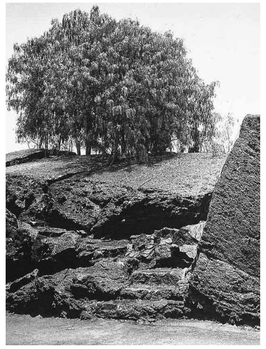
Fountain Square 1947-1948
Book, Martínez Riggen Antonio, "Luis Barragán", Mexico's Modern Master,


c
0
100
400
500

Sample House
Demolished

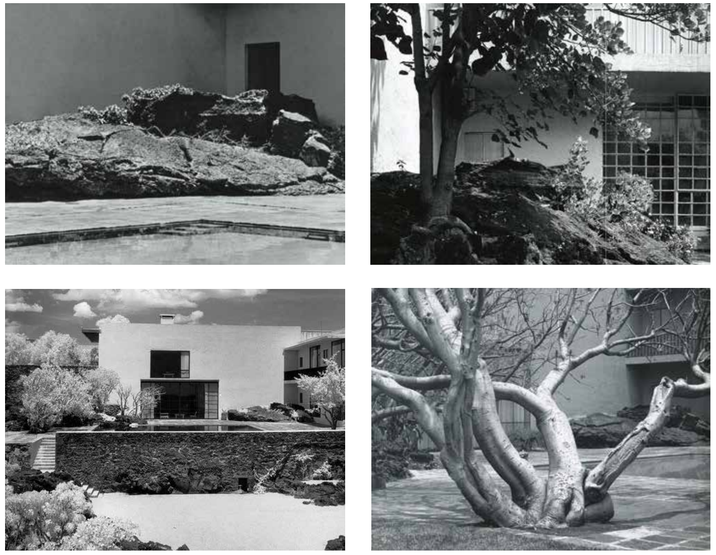
Barragan designed the Model Gardens for public inspection and planned them as models for the development of private space. The sample houses were intended for publicity and sales purposes and were built in 1950 according to the project by Max Cetto in collaboration with Luis Barragan.

Sample House 1949-1950
Book, Amasz Emilio, "The Architecture of Luis Barragán.

The sample gardens were created by bringing in topsoil and using the native Pedregal cacti, wildflowers, graceful pepper trees, and gnarled Palo bobo (crazy tree). Steps and pathways were carved into the rocks; water pools and stone walls were disposed of in such a seemingly effortless manner that the gardens seemed to have been born together with the sea of lava.

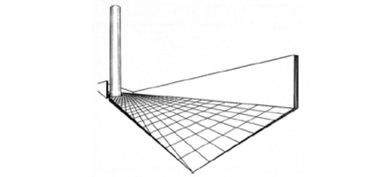
Sample Gardens 1947-1948
Book, Salas Portugal Armando. "Barragán"

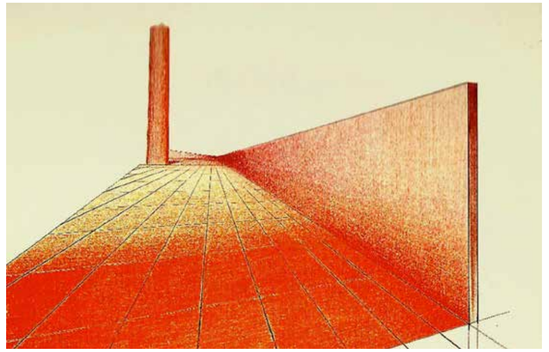


All houses were to be contemporary in design the colonial style was expressly forbidden. The houses were to be surrounded by high lava rock walls. In this manner, Barragán paid his respects to the traditional Mexican home, which emphasized living on patios, behind walls. As each plot was to become a room open to the sky, an immense lattice defined by high lava walls was to emerge, following the contours and varying subtly in color and contrasts. The surrounding somber mountains and the rising wilderness, juxtaposed with geometry's logic, lent to these creations the aura of inexorability which classical myths once possessed.

Prieto López House 1948-1951
Book, Amasz Emilio, "The Architecture of Luis Barragán.

Public Gardens 1945
http://www.beaudouin-architectes.fr/





Cigar Square 1947-1948
http://www.beaudouin-architectes.fr/

Luis Barragán made the inhabitants of the houses out of the stones, venerating the natural substrate where his imagination founded new spaces.

Can we adapt the city into entities with nature?

Can we transfer the vocabulary of the Landscape House to intervene in an entire landscape?

Can we design cities as gardens?

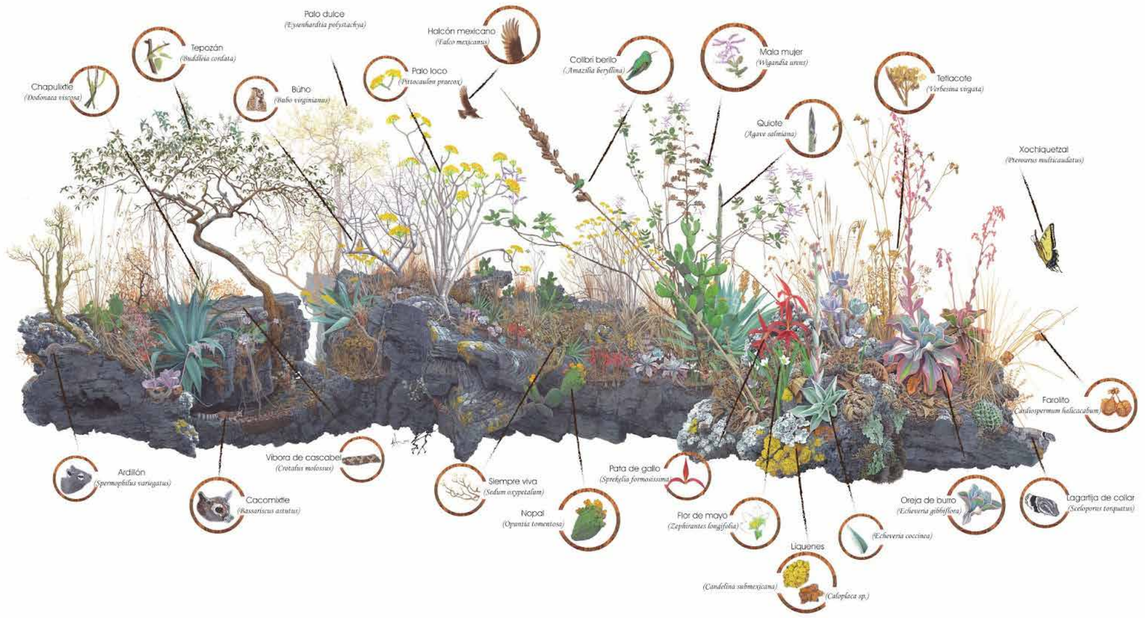
Geopedregal
UNAM - CU

There is a one-dimensional, uncontrolled, excessive development problem that conquers geo-landscapes and even covers the bases of volcanoes, it is the denial of the basic conditions in the south of the Valley of Mexico.

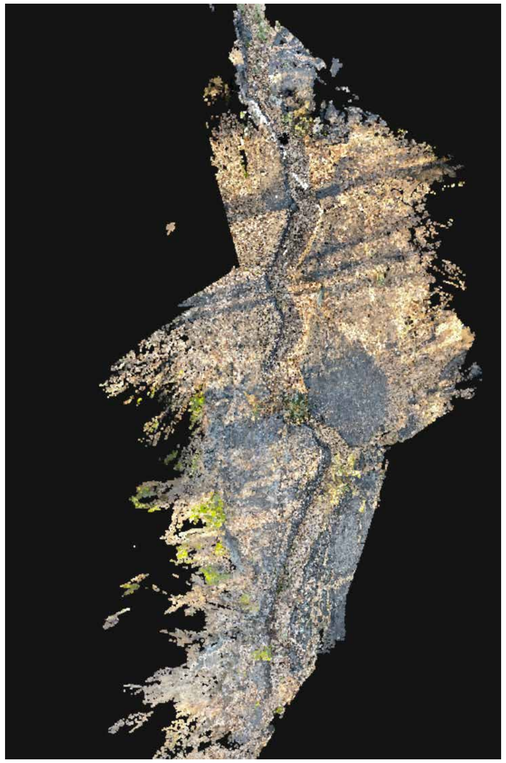
Make ouline of unam in line color pink

A geopedregal is a remnant of the original pedregal that has three structures with which its geoform can be identified. This space is the first geosite in the national university from which an educational proposal for a network of university geotrails is born.

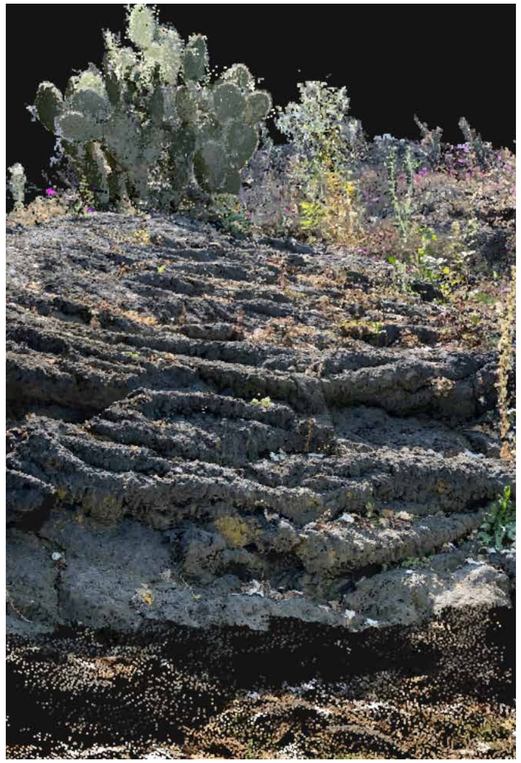
Landscape of the ecological reserve of pedregal de San Ángel
UNAM - CU
Dry season (november - may)



Geoform
cracked lava



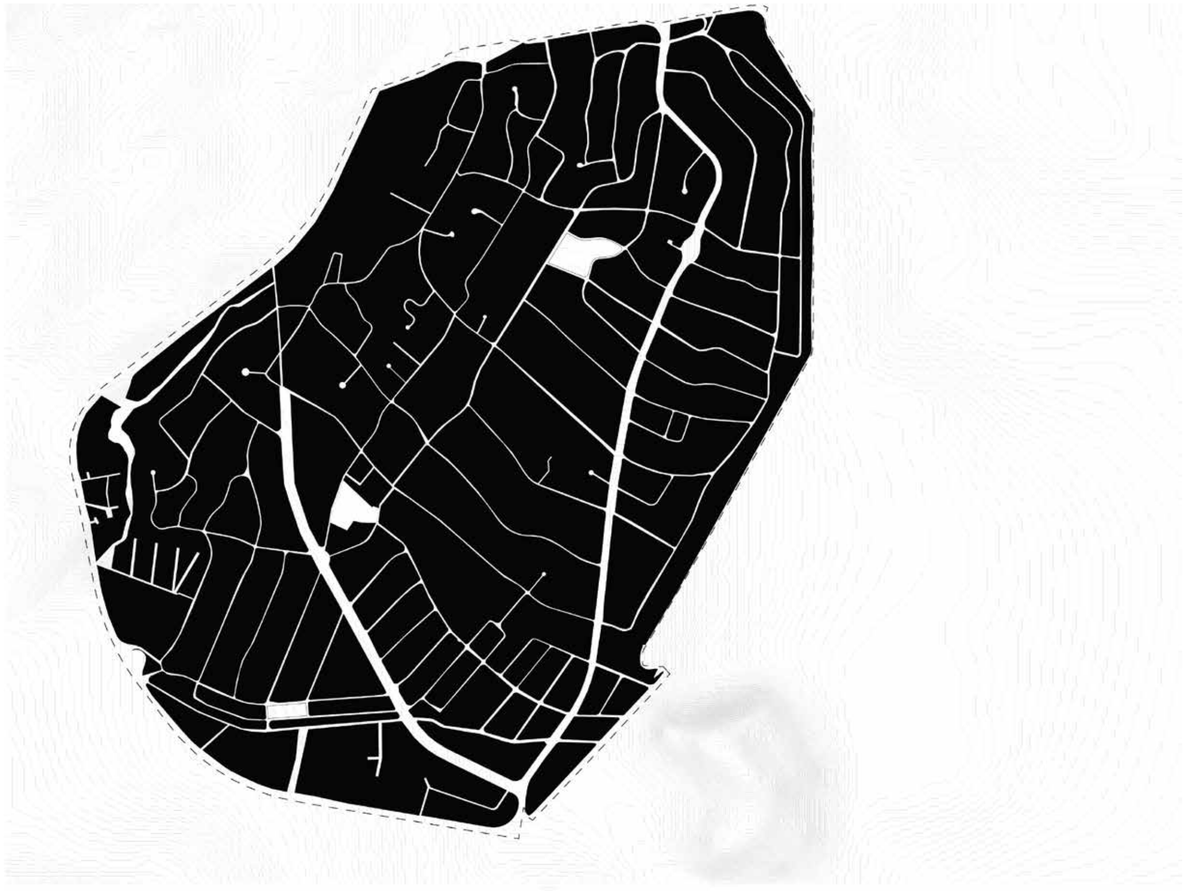
Geoform
corded lava

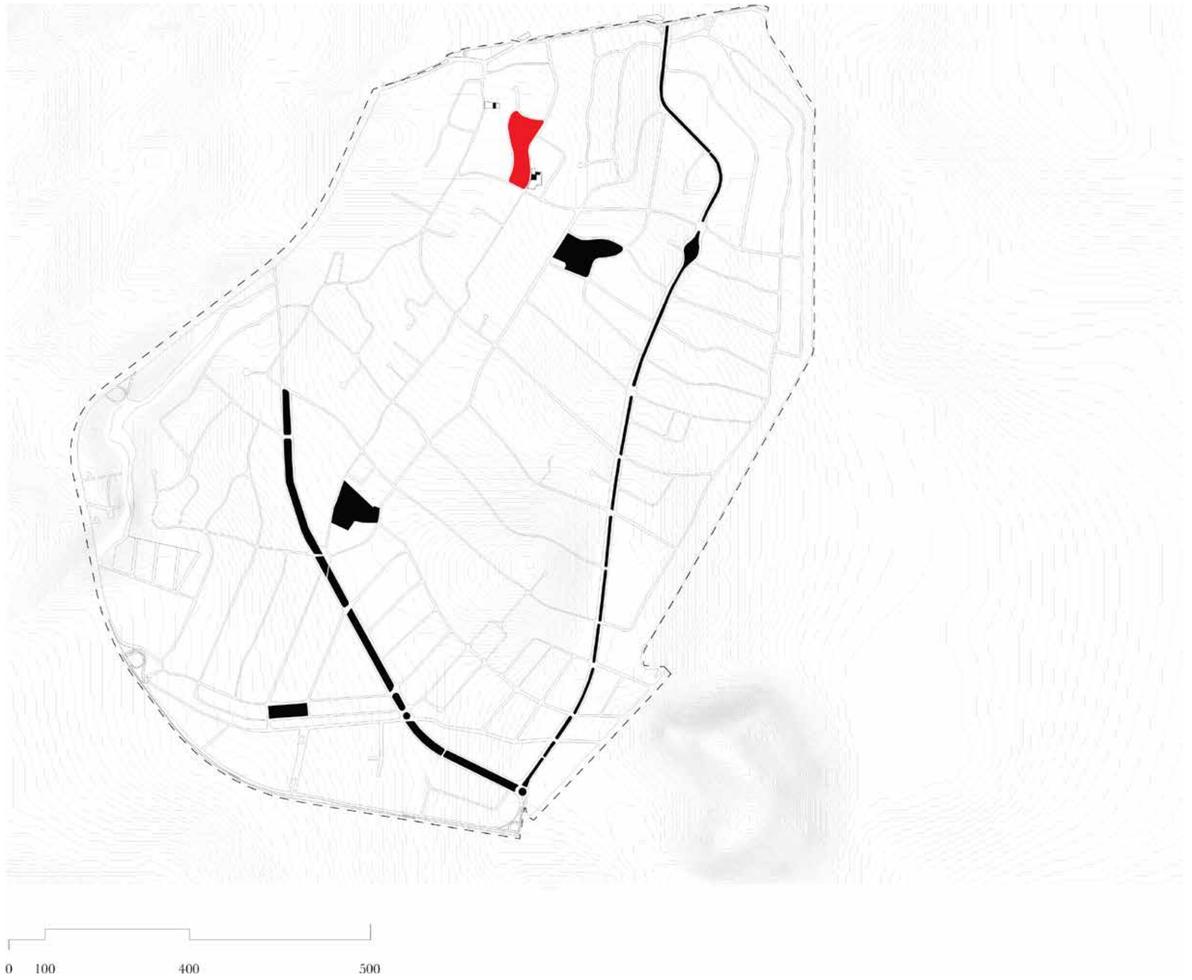


Geoform
mound lava

El Pedregal is a place to remember the historical and cultural importance of a lava spill of incredible biodiversity and that it is necessary to preserve it.

Fragmentation areas
Geological traces have disappeared and the initial proposals from Barragán have lost their identity

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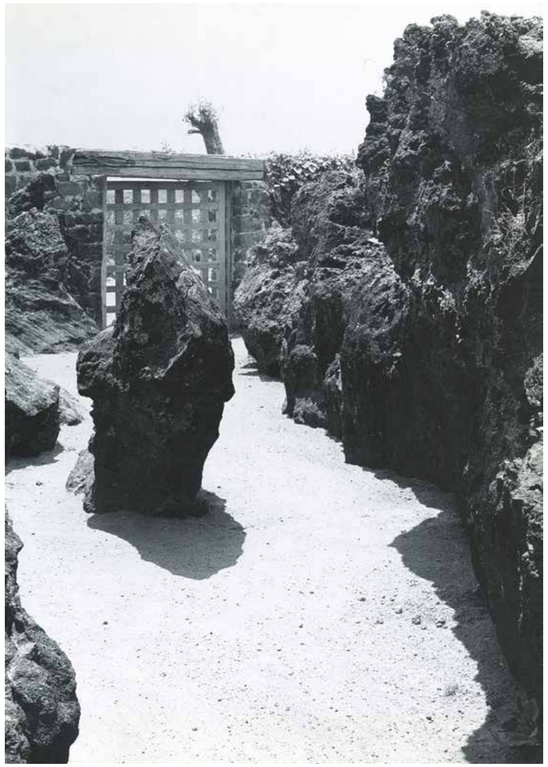
400
500

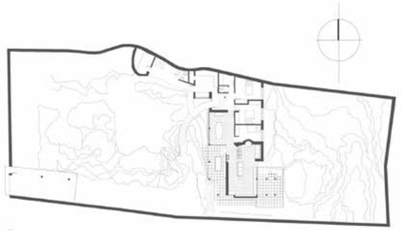


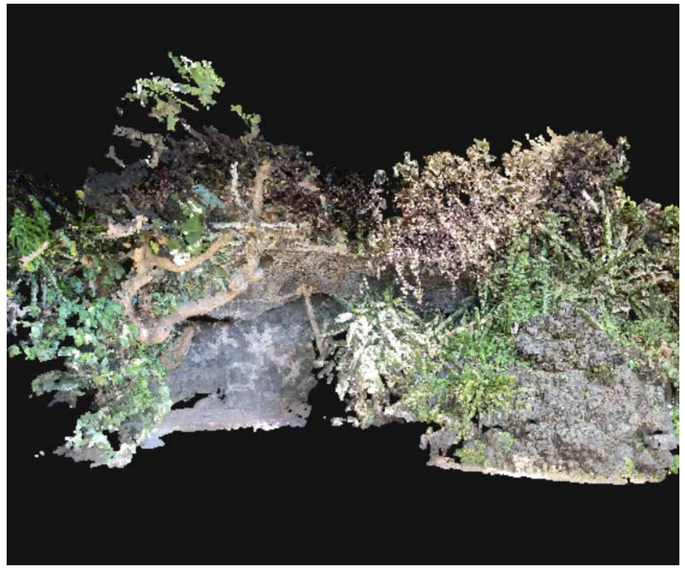
Geological route

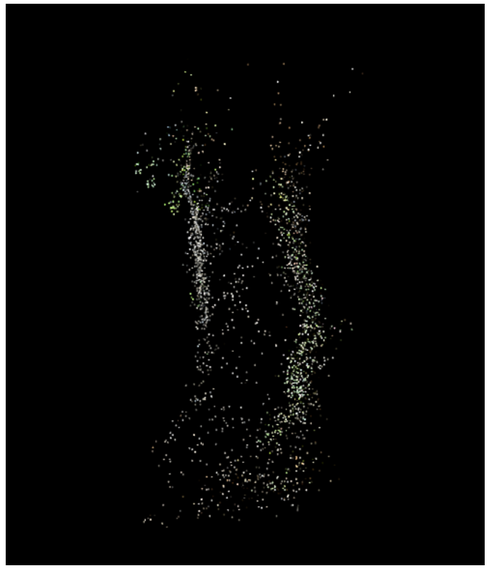
0 100 400 500

The House in the landscape the landscape in the house

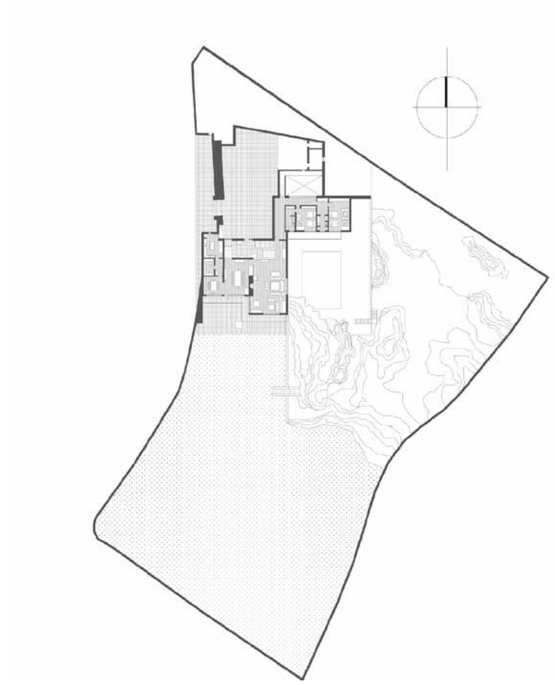
Preserved House & Garden
Cetto House

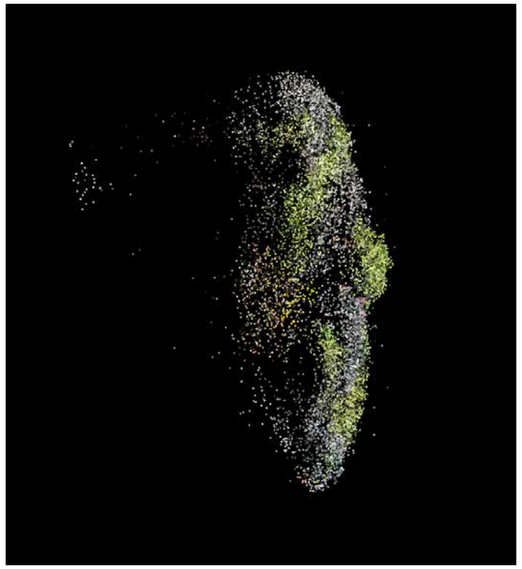


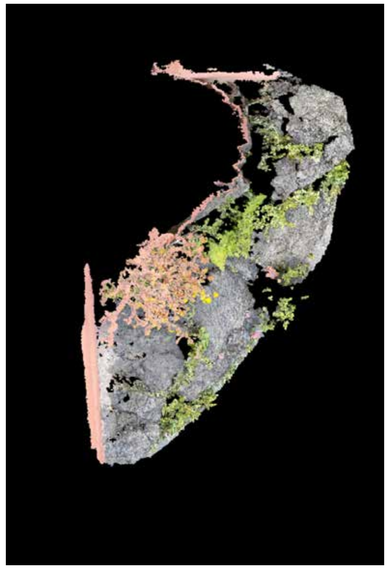




Semi Preserved House & Garden
Prieto López House







Intimacy in the public space

Preserved Parks

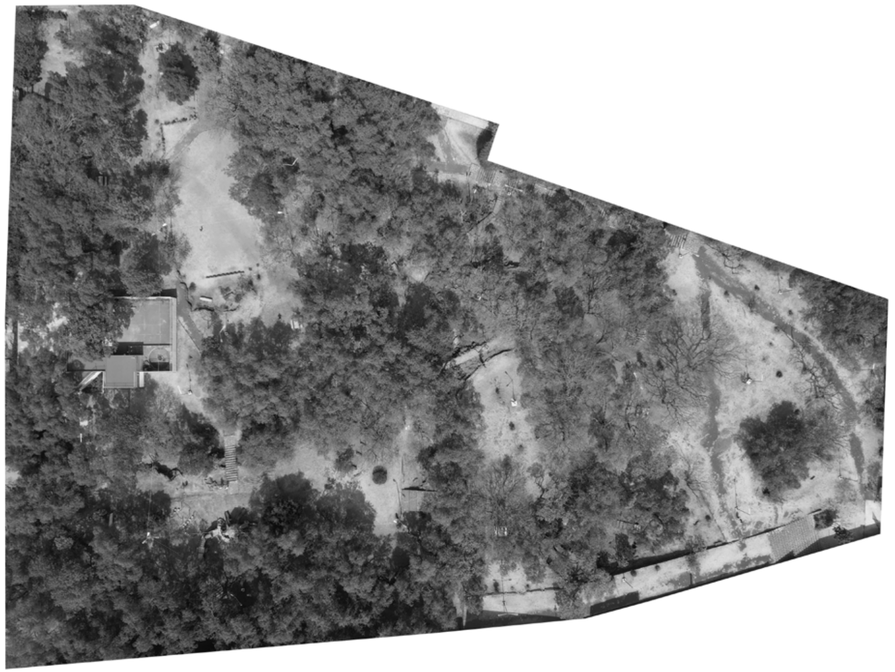
Fuentes Park

Drone mapping

Drone mapping

Preserved Parks

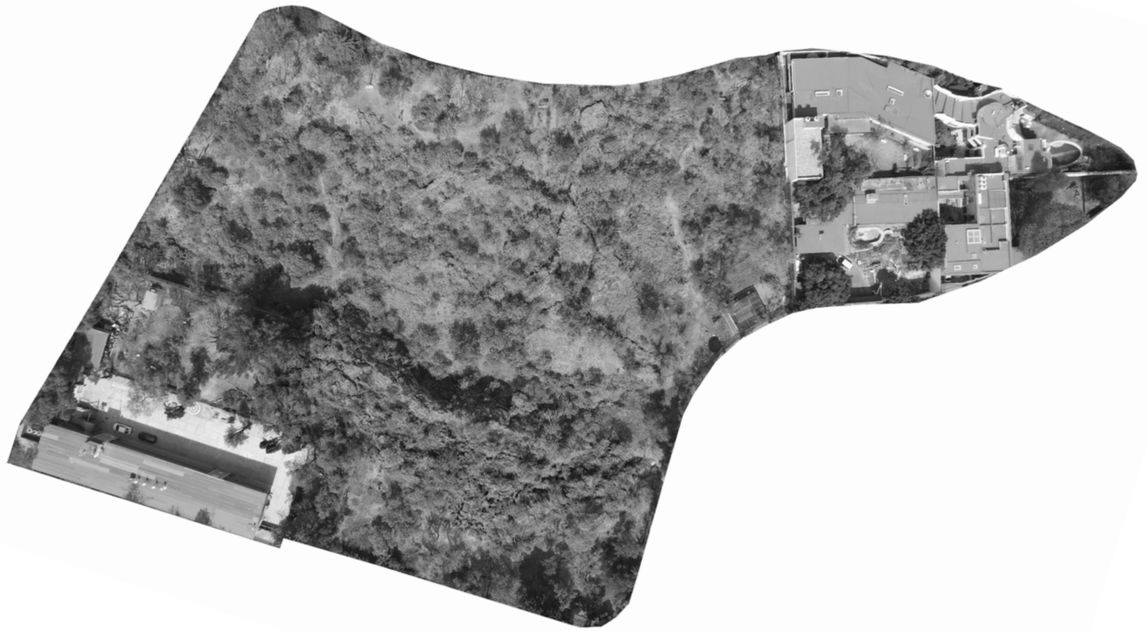
Barragán Park
In use



Drone photo

Preserved Parks

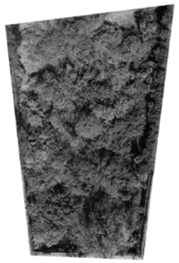
Teololco Park
Fenced (not accesible)



Drone photo

From private gardens to public gardens

Empty Plot 1
Public garden instead of a house



Drone photo

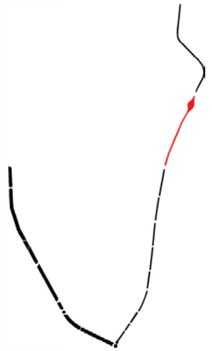
Empty Plot 2

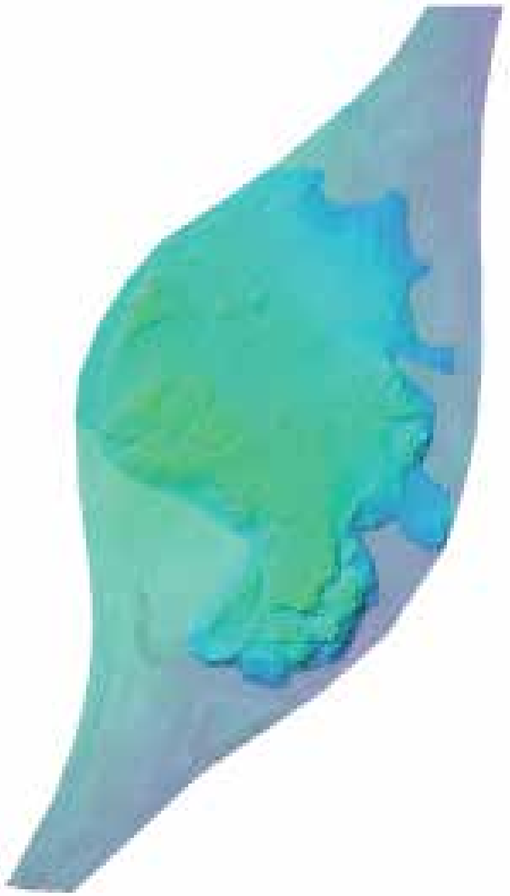
Drone photo

The relationship between the raw material and the final material, between the pre-existing and the designed space. A rocky landscape and stone project.

Preserved Ridges

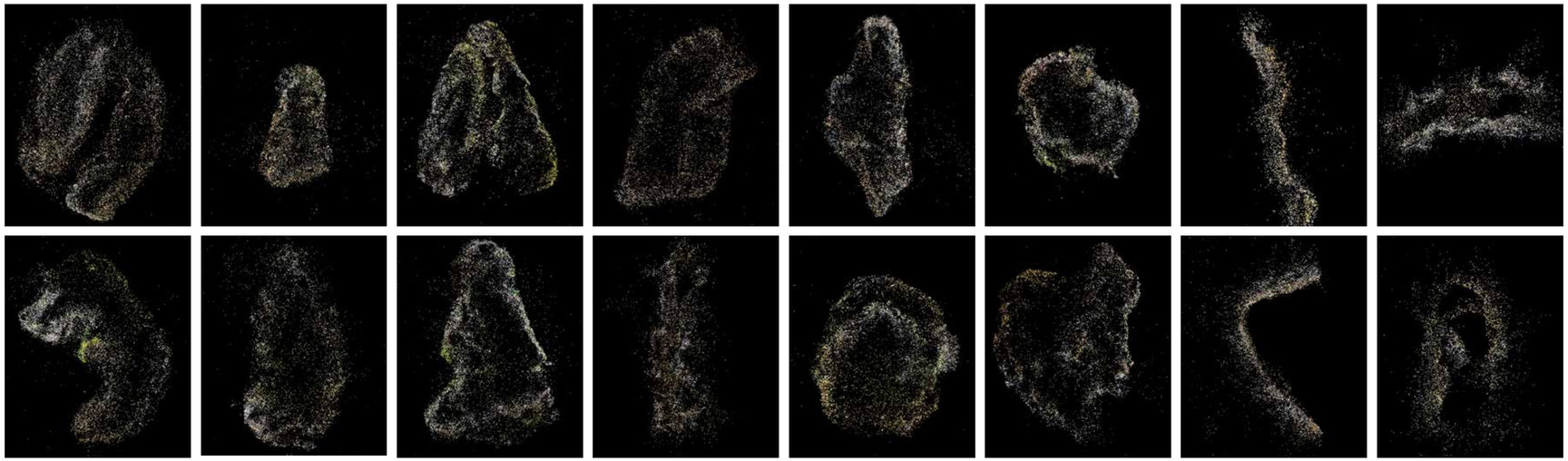
Drone mapping



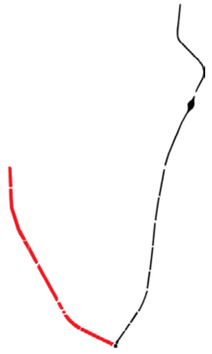


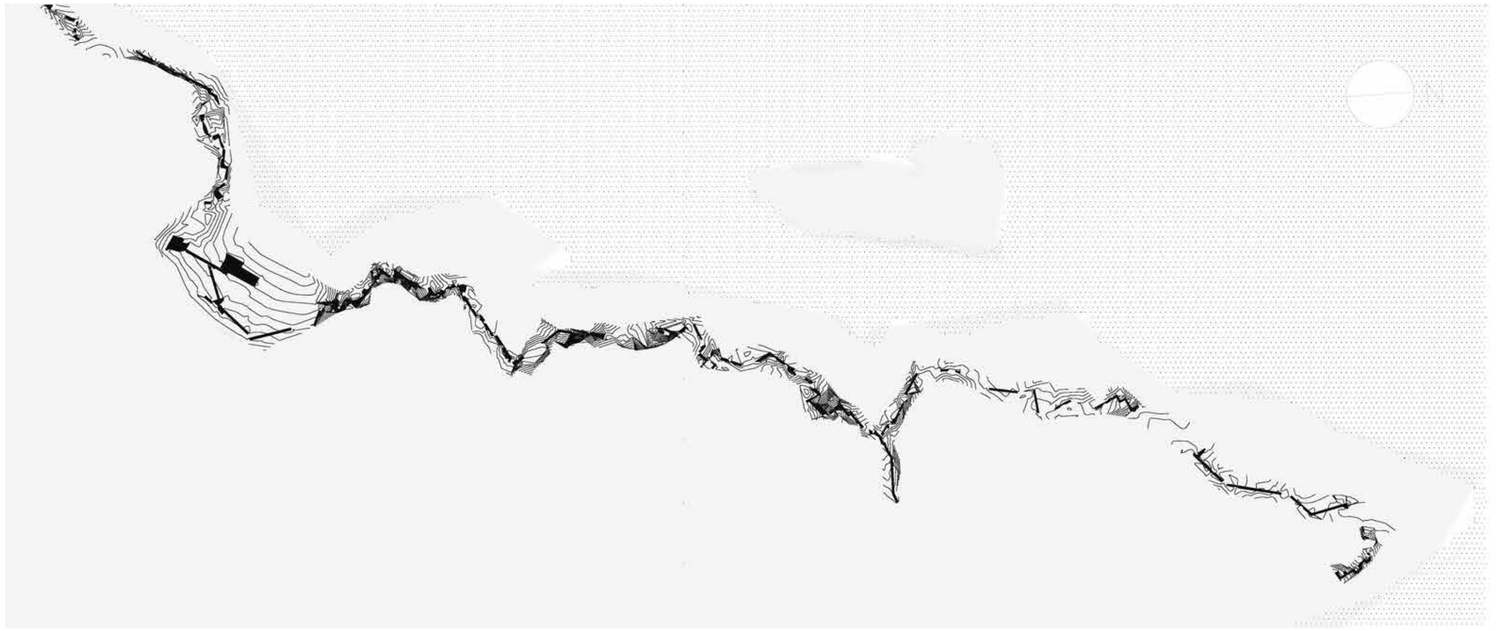
Drone mapping

Ridges
Stone revelations

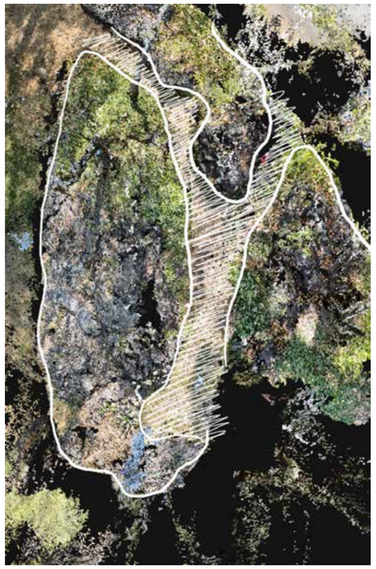


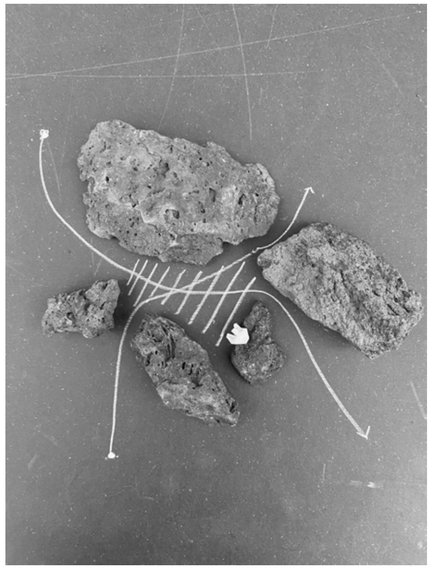
1/1 scanning

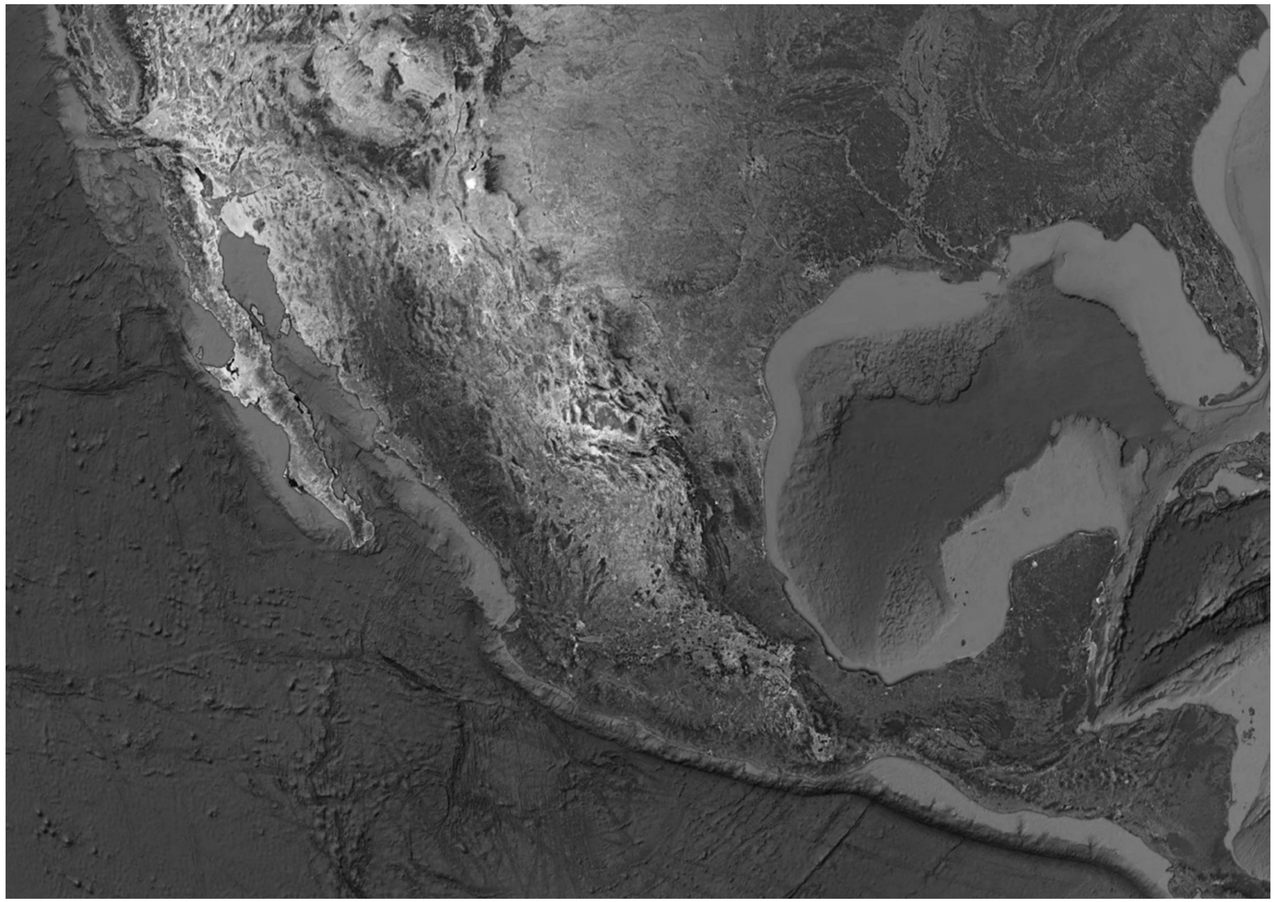




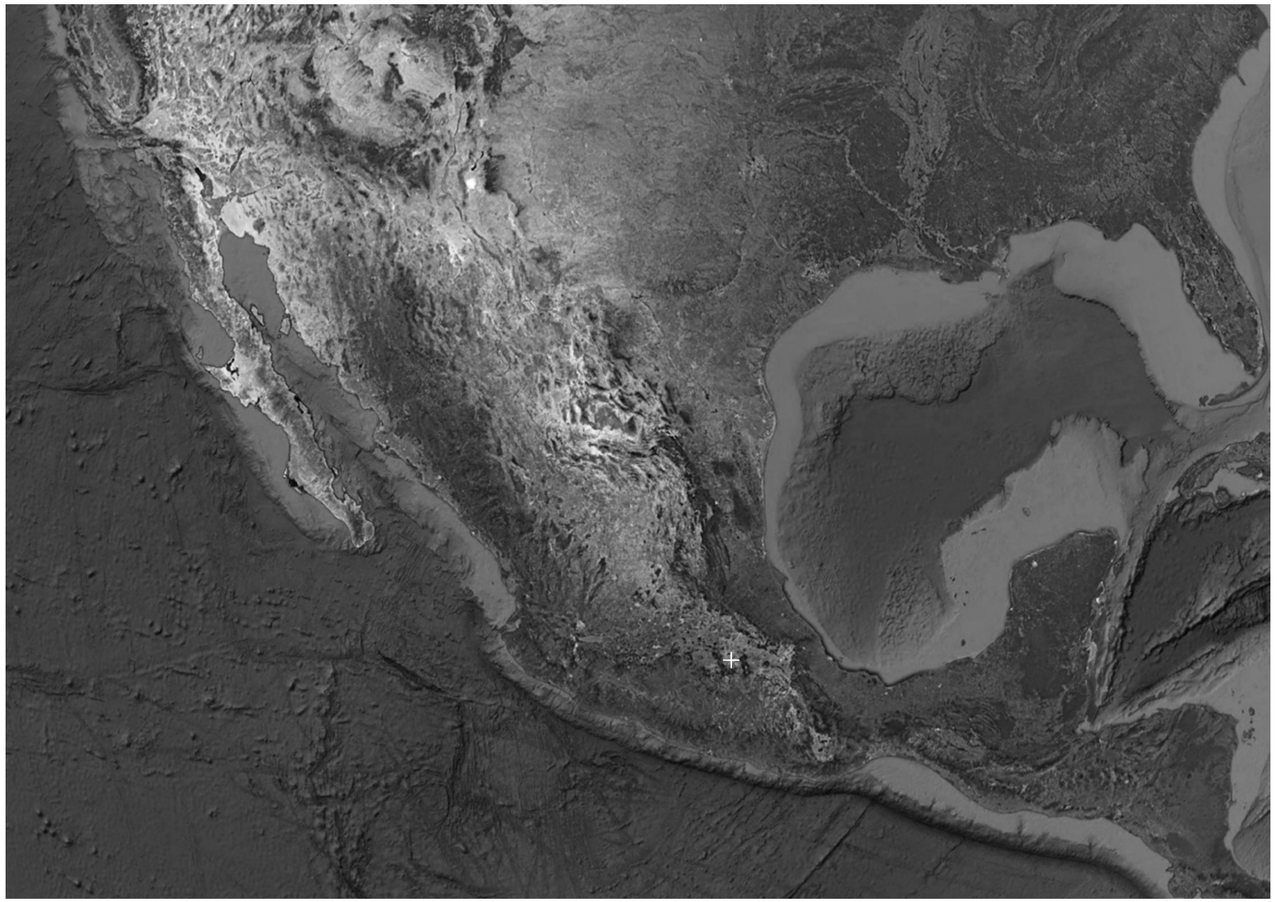
Punta Pite
Teresa Moller





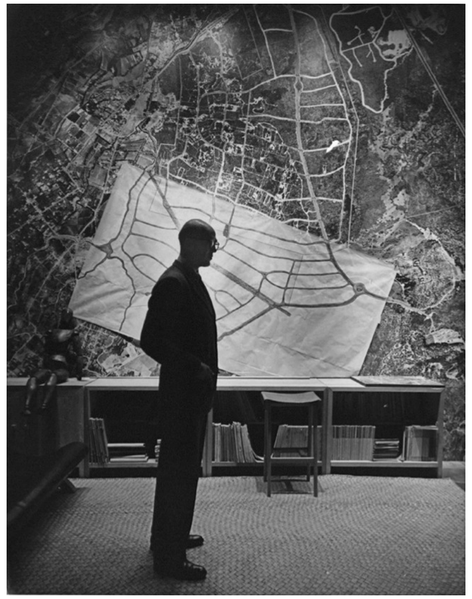


Mexico City



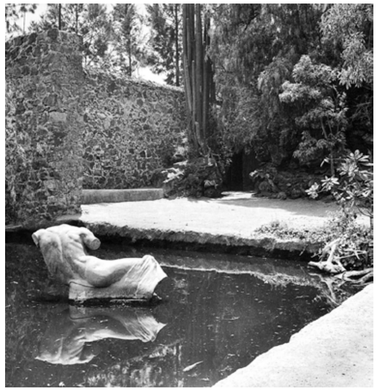
Luis Barragán

In 1940 Barragán, disenchanted by the commercial purposes of architecture tired of so much activity and pressure from his clients, he decided to "withdraw" from dealing with them. Of course, his "retirement" is temporary, Barragán returns to work with the geographical and historical conditions of the place, and from 1942 to 1944 he built four private gardens, one of them from casa Ortega and the so-called "The Cabrío" on the endge of The Pedregal.



In 1945, he began to change his architectural interest from internal to external and from private to public spaces. With the development of the Gardens of Pedregal, he began to project fountains, squares, and gardens. The few houses that he built, he chose for the interest of the realization of his gardens and patios, beginning with the Mereles house (ca. 1948), the iconic Prieto López house (1948-1950), and the sample gardens (ca. 1950-1952) in collaboration with Max Cetto.

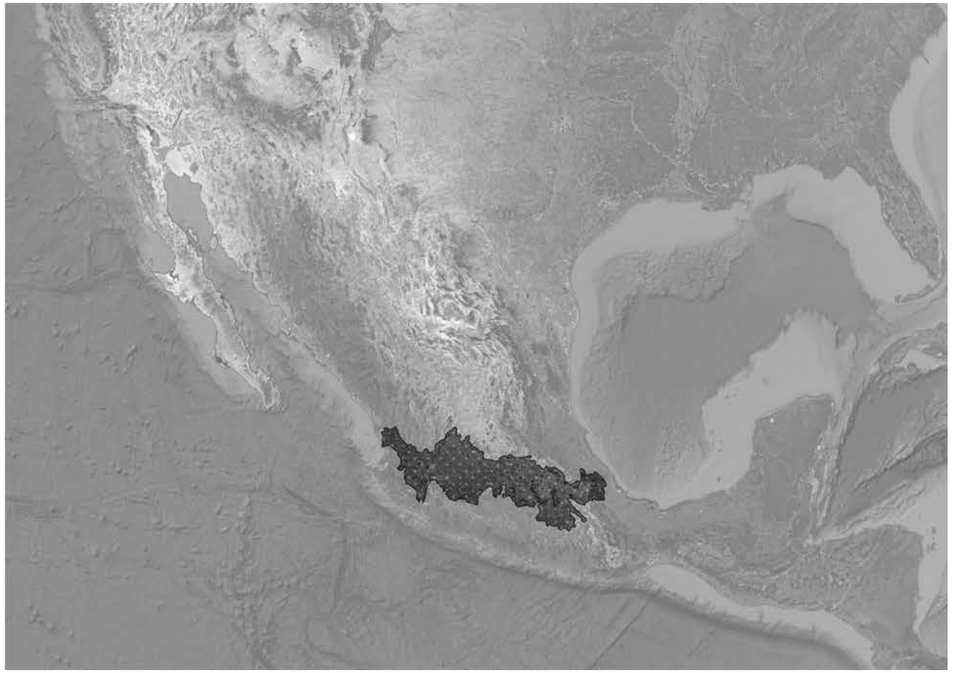
Ortega house garden



Gardens of the cabrío

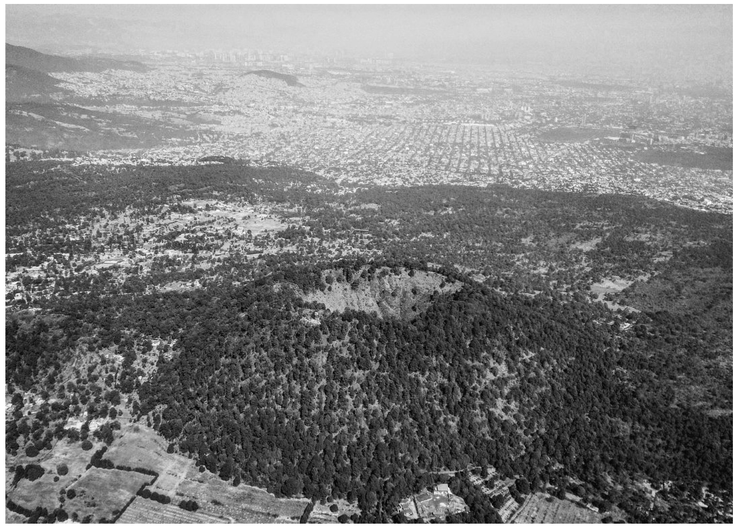
Geographical condition

Mexico is a country integrated into the so-called "ring of fire" of the Pacific, characterized by a high frequency of volcanic events. In historical times, countless volcanoes have deposited lava, ashes, and other materials that have subsequently been colonized by communities.



City of Cuicuilco

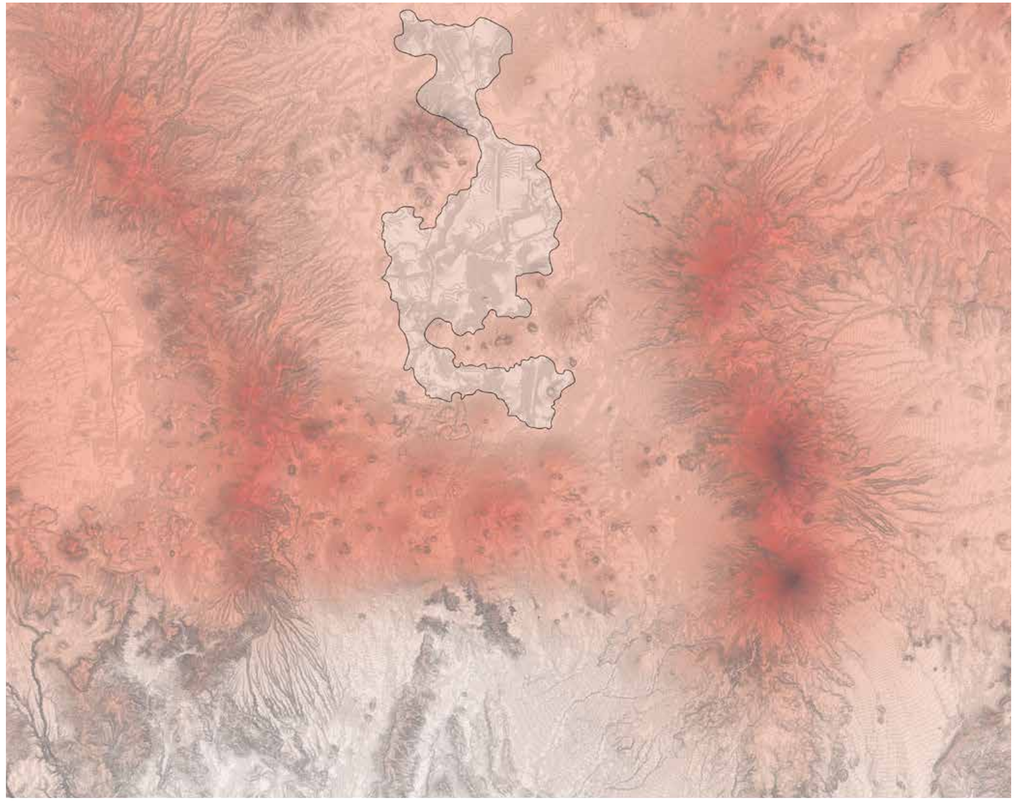
Xitle erupted about 2,500 years ago. The Xitle volcano is part of a mountain range made up of more than 200 small volcanoes that make up the Mexican volcanic belt. Due to the morphology of the volcanic cone, which has a crater tilted towards the North, it caused the lava flow to be directed mainly toward the North and Northwest. The spill covered a relatively low kidney-shaped area, a total surface of almost 8,000 Ha. (from 2,250 to 2,350 m above sea level).



Xitle volcano

Tenochtitlan

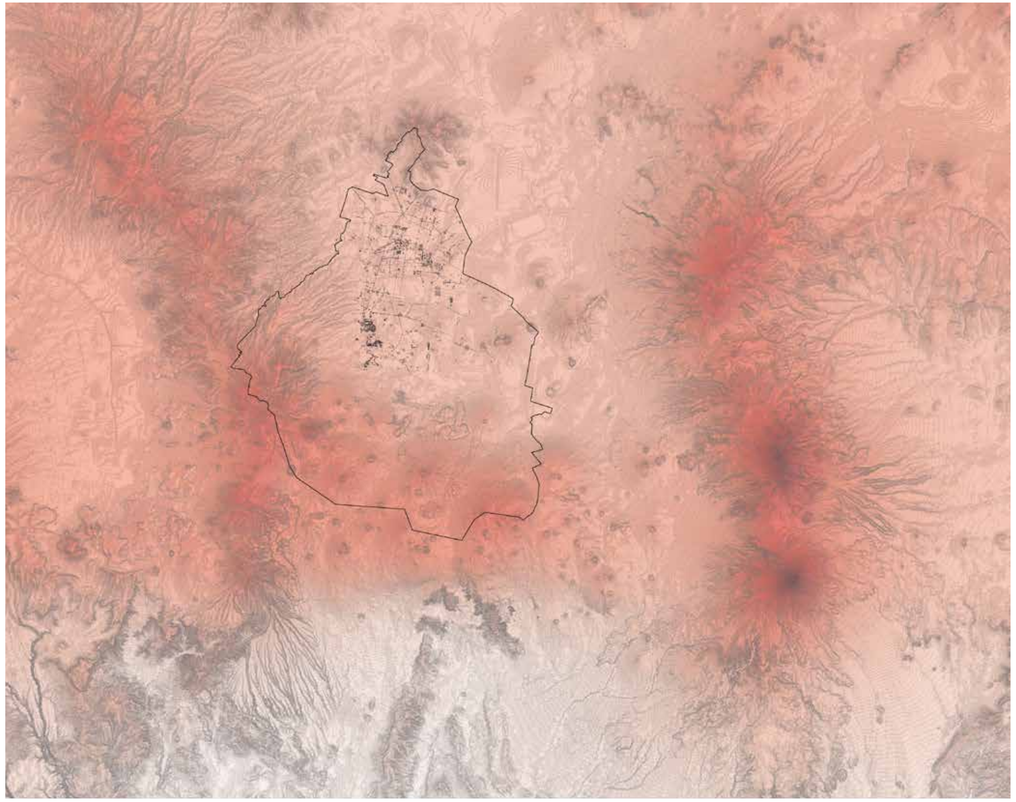
The Valley of Mexico is in constant transformation. Since its founding as Tenochtitlan, the urbanization interacted with the landscape in different ways: from the lake to the mainland and from the valley to the mountain. Like any city, it spread to the shores from the center and it was in the second half of the 20th century that the flow of the urban sprawl met the flow of petrified lava from Xitle to the south of the city.



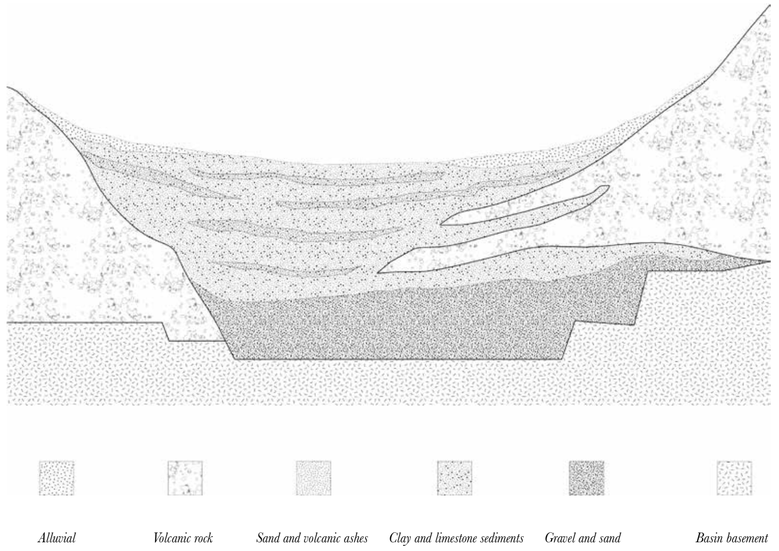
Lake of Texcoco

0 10 20 km

NEW_1500X1500 CDMX 10m topo_volcanes_REDS



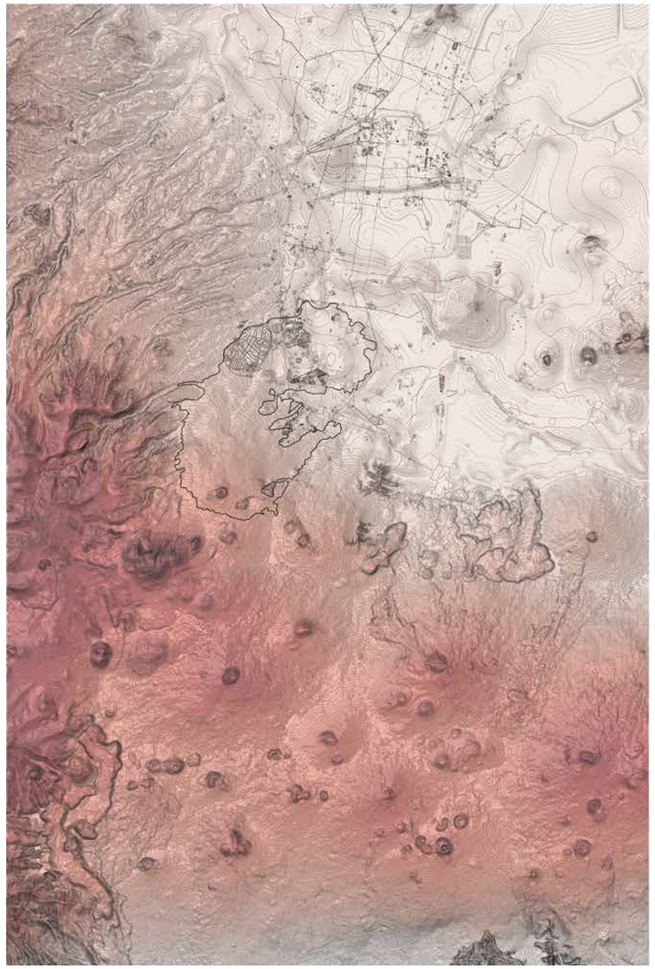
0 10 20 km



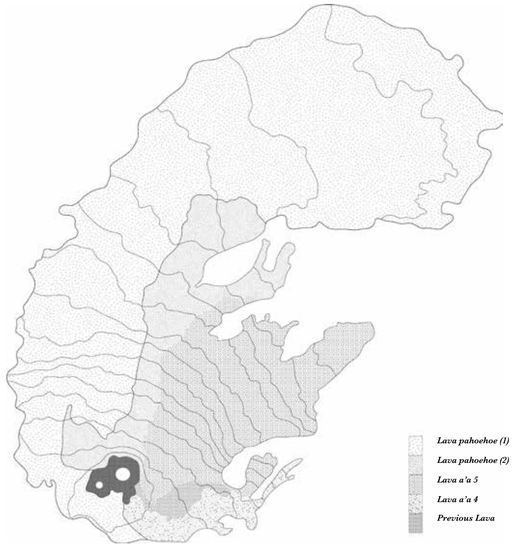
Sedimentation sheme in a basin of volcanic origin

Xitle lava spill

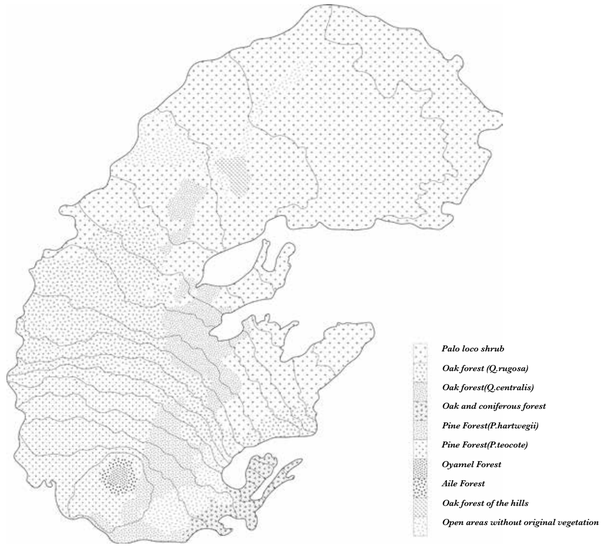
The rock created a new environment for the development of flora and fauna. This is how the Pedregal of San Ángel was born, the most biodiverse place in the Basin of Mexico City.



0 2,5 5 km



Lava layers

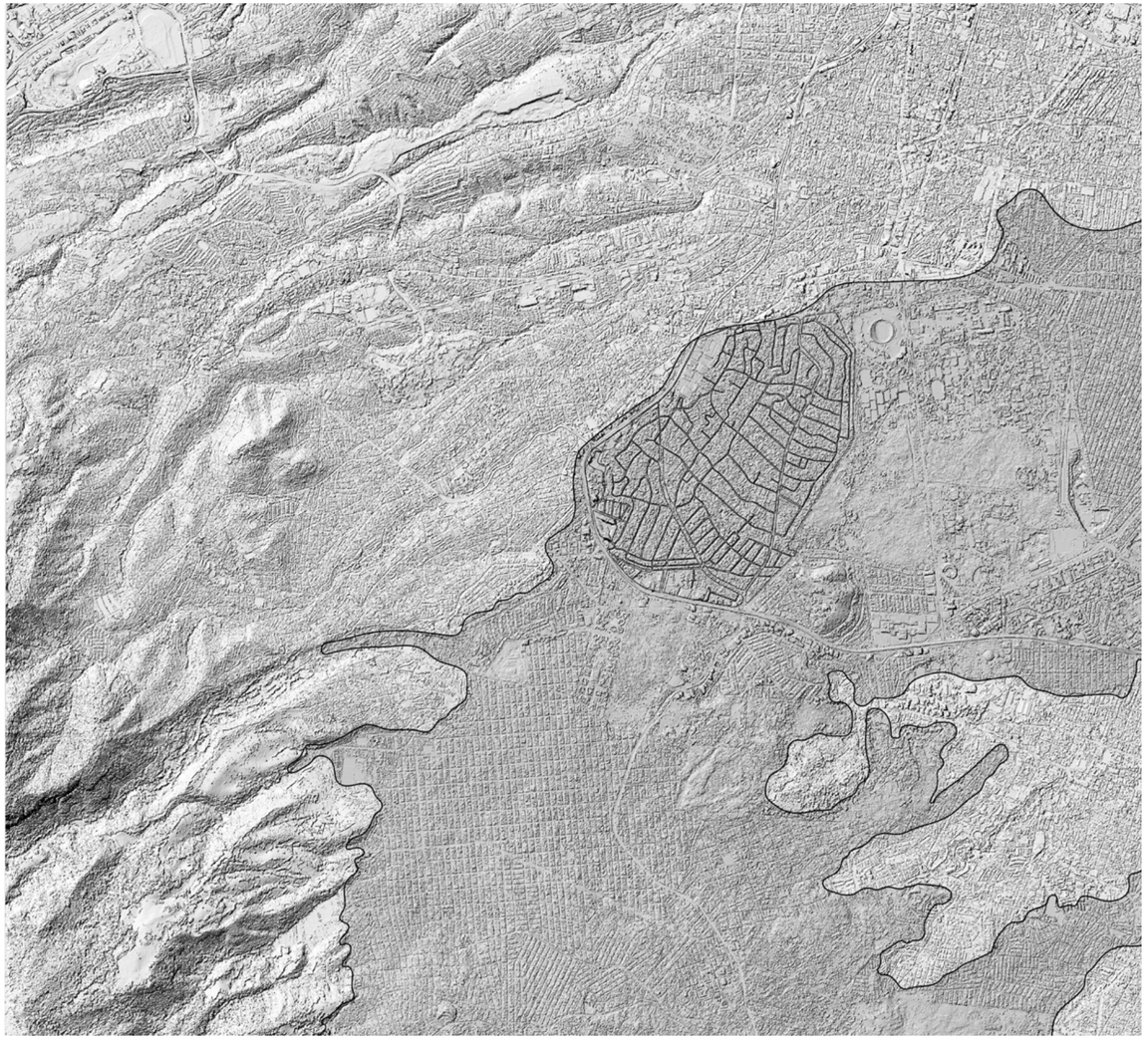


Vegetation layers

Lava spill overlap

The behavior of the lava flow is mainly a destruction of the existing and at the same time a new creation of the landscape, when losing strength or slope, the lava begins to settle in such a way that it forms a new shore that defines the pre-existing and the new.

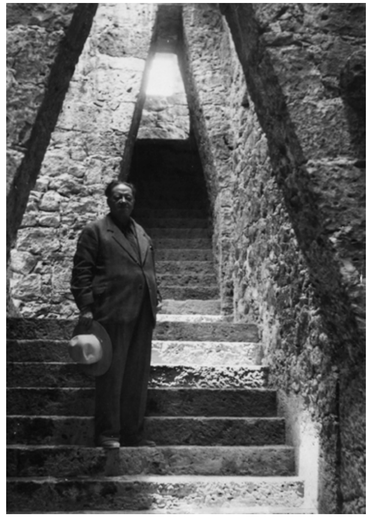
Urban Area Jardines de El Pedregal



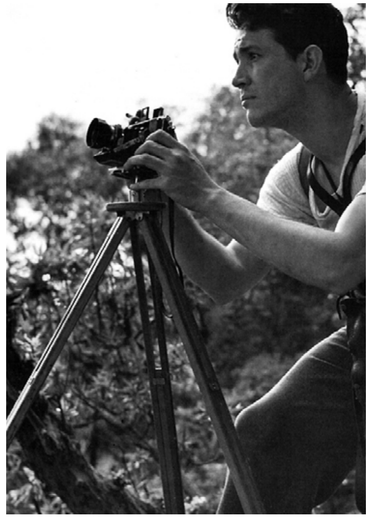
0 1 2 km

The Pedregal

Tetetlan, means place of stones and Texcallan, is, place of rocks, that's what the inhabitants of the lake region called this place. Today we call it Pedregal of San Ángel. This renewed interest in the pedregal as a landscape, as a place for recreation, foreshadowed its greatest transformation. The imaginary of a mystical and mysterious rocky area that fascinated writers, painters, and residents of Mexico City, fueled the interest in integrating it into the city without ignoring it. We label the architectural and landscape project of Pedregal that began in the 1940s with the label of "modernity". The other city, the old city, ended up beating the ambitious project. More than 60 years later, few windows remain revealing The Pedregal in places we call "reserves." And the memory of him must be fighting against oblivion.



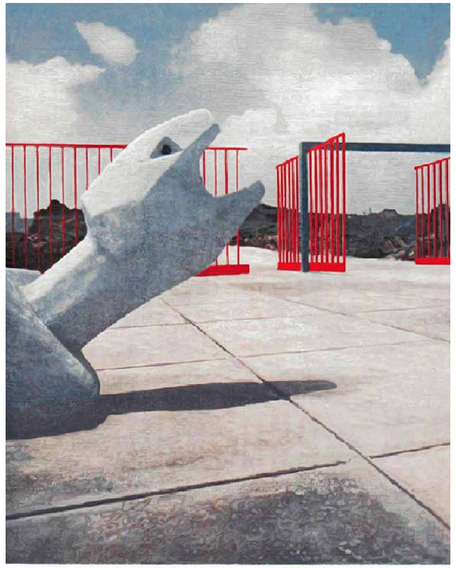
The artist



The photographer

Diego Rivera

Between 1943-1946 Diego Rivera opens an essay in fomr of a manifesto by propounding El Pedregal advantages over Mexico City: "The Pedregal as the place of a posible new city, this volcanic field has none of the climatic or economic disadvantages that Mexico City suffers from its old location." Through the essay, Rivera´s thoughts are dominated by a concern for the existing landscape.



Entrada principal al fraccionamiento "JARDINES DEL PEDREGAL DE SAN ANGEL".

Requisitos para la Organización del Pedregal

POR DIEGO RIVERA.

1. The country's authorities must establish, in agreement with the owners or companies interested in The Pedregal, a minimum type of extension of lots, which ensures the conservation of the geographical character of the site. One sixth of the area of the lot should be designated for construction, this being less than 10,000 m2.

2. Nothing will be achieved if the constructions destroy the natural beauty of the place. To avoid this, it is enough to set a few construction conditions that, of course, would be entirely to the benefit of the owners:

3. It would not be allowed to destroy more than partially one of the three layers of lava that make up the basaltic mantle, limiting their use as quarries to the current exploitation and setting a time limit on surface and volume.

4. Many of the wonderful cacti areas of Mexico are practically inaccessible to the traveler who does not undertake a true expedition. All the species could be brought to The Pedregal, and as a whole it would constitute by itself a universal atraction. In the horizontal cracks where airborne topsoil, vegetable and animal organic matter accumulates, they are marvelous receptacles for planting flowering trees and shrubs, being of extraordinary fertility, much greater than anywhere else in the Valley of Mexico.

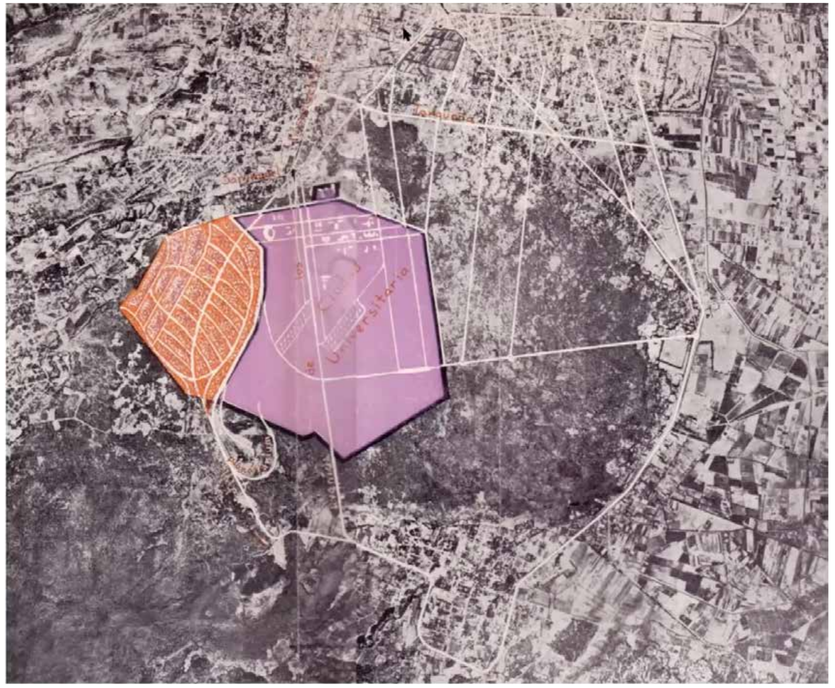
Armando Salas Portugal

When we talk about the photography of Luis Barragan's work, it is necessary to emphasize the value that Barragan adds to it, not only as a technique but also as a process. Luis Barragan was able to see the photography of Armando Salas Portugal as an inexhaustible source of possibilities, which built an indissoluble bond between them. For Barragan, photography was not only an instrument of visual communication to promote his own work or to design a corporate image in order to show The Gardens of the Pedregal to the world. For him, the value of photography laid in the potential that its own meaning has - phos (light)-graphs (writing) "writing or drawing with light" - throughout the whole design process. El Pedregal de San Angel is the first work where Luis Barragan, hand in hand with Armando Salas Portugal, introduced the use of photography as a design tool in the creative process.

Salas Portugal transfigured the virgin landscape into a dialogue between stone form and vegetation, and Barragán transformed it into an architectural project. "The dialogue is continuous and circular, with a poetic tone: the architect builds from the photographer's visual investigation, and the photographer then returns the quality of vision to the architect's construction." This becomes a dialogue between image and matter, stone and nature, imaginary and reality, utopia and rationality.

Gardens of El Pedregal

Luis Barragán and a realtor, José Alberto Bustamante, both acquired 865 acres of the Pedregal very inexpensively. Barragán's plan was to create a residential area, respectful of both the existing lava formations and the extraordinary natural vegetation. Rather than houses, Barragán had in mind perhaps a vision closer to the ancient Persian concept of living quarters: he conceived of the garden as the soul of the house. A new city in a prehistoric environment, a project as a reaction to the lack of spiritual unity of his time, in contrasted to the perfect harmony of humankind, work, and religiosity of time past.



1944

The vision, idea and project of the Gardens of Pedregal, is identified as one of the most important works, and experiments, of modern architecture in Mexico.

1950

1950 1st stage

1954 2nd stage

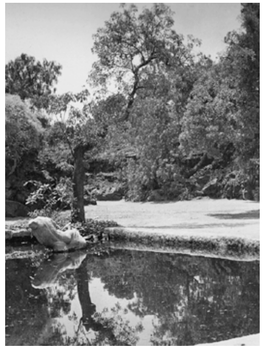
1958 3rd stage

0 750 1.5 km

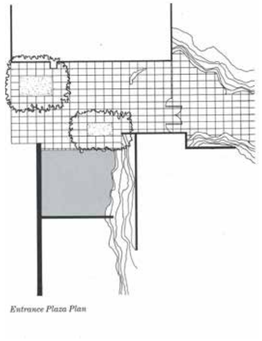
Final layout

0 750 1.5 km

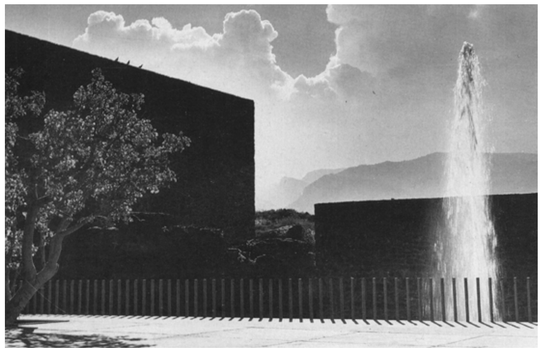
El Cabrío
Demolished



Fountain Square
Demolished



Entrance Plaza Plan



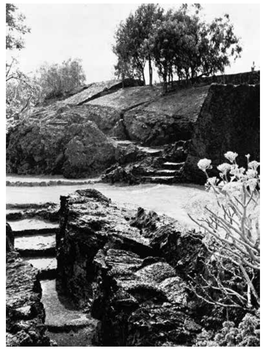
To define entrances to the subdivision, Barragán opened the walls here and there with fences of tall iron pickets painted phosphorescent reds and greens, and built decorative fountains and plazas. The main entrance to the subdivision.

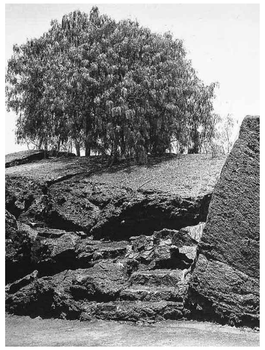
Max Cetto House
Preserved House & Garden

Sample House
Demolished

Prieto López House
Preserved House & Garden

Sample Gardens
Demolished





The sample gardens were created by bringing in topsoil and using the native Pedregal cacti, wildflowers, graceful pepper trees, and gnarled Palo bobo (crazy tree). Steps and pathways were carved into the rocks; water pools and stone walls were disposed of in such a seemingly effortless manner that the gardens seemed to have been born together with the sea of lava.

Public Gardens
Preserved

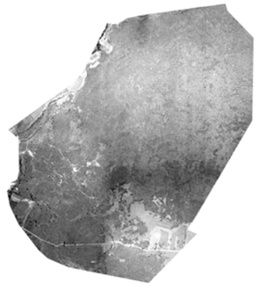
Area of analysis

0 750 1.5 km

The problematic

There is an anthological instability of the land settler, a one-dimensional, uncontrolled, excessive development that conquers geo-landscapes and even covers the bases of volcanoes, it is the denial of the basic conditions of the land.

Most of the original architecture in the Gardens of Pedregal has been demolished or disrespectfully modified, generally replaced by low-quality, higher-density architecture. As for its landscape, the problem is even more serious.
Mexico basin has suffered extremely rapid and destructive urban growth during the last 50 years, and the preservation of the last remains of fauna and flora that is endemic of this region and unique in the worl strongly relies on the conservation of the Xitle lavas, whose elevated diversity in morphology and vesicularity creates a wide range of microhabitats that host a considerable number of species.



1941

1952

1980

Area of focus

If we believe that in these issues " there is no reverse ", fortunately actions have already been taken on the density and land use (the start of works for a partial plan for Gardens of Pedregal was announced). It remains to review what concerns the preservation of the urban and architectural heritage, what is still remaining. Seeing it in terms of sustainable public space (of heritage value) should guarantee a better future or preservation of the urbanization and gardens by the architect Luis Barragán.

2022

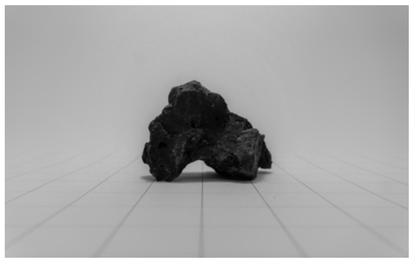
Mexico has an important cultural charge towards the matter of stone. In Nahua mythology, their legends refer to the order of things, heaven and earth. These legends echo historical events: the memory of a terrible natural disaster that destroyed the Valley of Mexico with an eruption that covered the place in a blanket of lava over a period of 11 years.

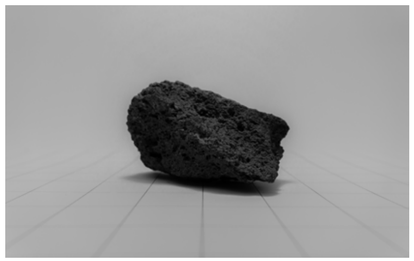
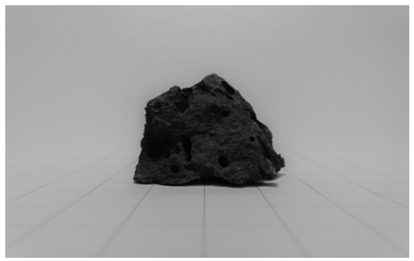
1944

Juan Palomar emphasizes that "the great significance of the residential project was the total intellectual and physical appropriation of a virgin landscape in order to establish a new alliance between man and the earth".





Lava plateau

The plateau are formed by uniform inflation by broad pahoehoe sheet lobes

Tumulus Ridge

Surface manifestation of an inflating pathway

Tumuli

Formed when flow inflation locally exceeds that of the surrounding lava.

Development Hummucky Pahoehoe

Gentle but irregular paleotopography

Development Sheet Pahoehoe

Gentle but irregular paleotopography

Development of interlobe transitional lava type

Rubbly pahoehoe

Transformation of pahoehoe to aa flow

Steep paleotopography

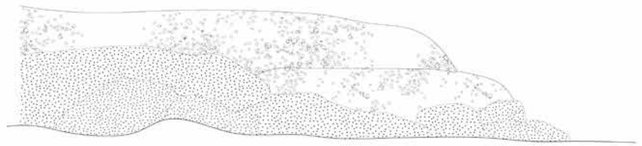
Pahoehoe tumuli formation

(a) The initial, small pahoehoe lobes are confined to the lowest areas.
(b,c) As the flows continue to advance, they also inflate and spread laterally, filling the depressions.
(d) Depending on the rate of inflation relative to the rate of crust growth, either a continuous sheet or an inflation pit forms over the previous high point(s). Most inflation pits widen with depth as the lobe cools inward with time.

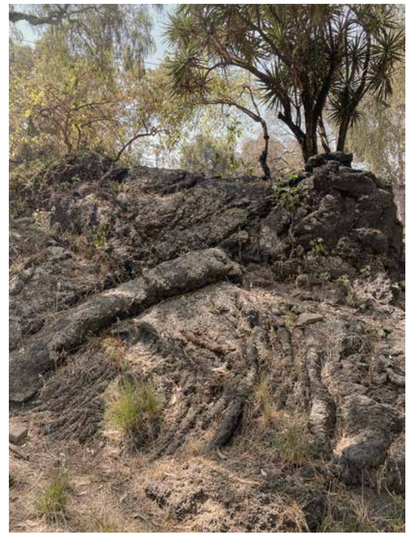
Geosites

Today the Pedregal and some of its endemic elements can be rescued to emphasize the unique qualities of this volcanic and biodiverse area. Examples like; volcanic areas, cactus areas and orchid areas to name a few.

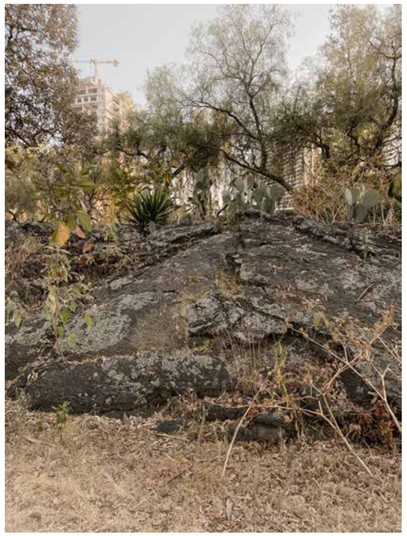
Development of interlobe transitional lava type



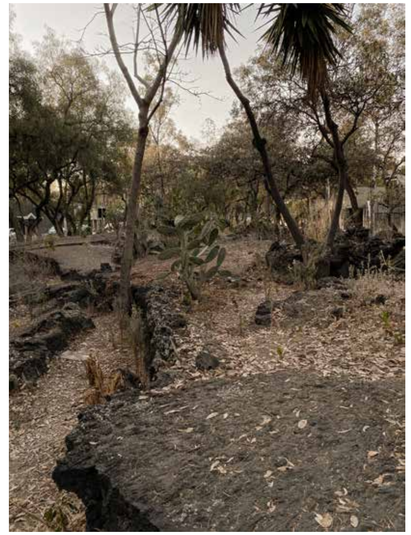
Rubbly pahoehoe



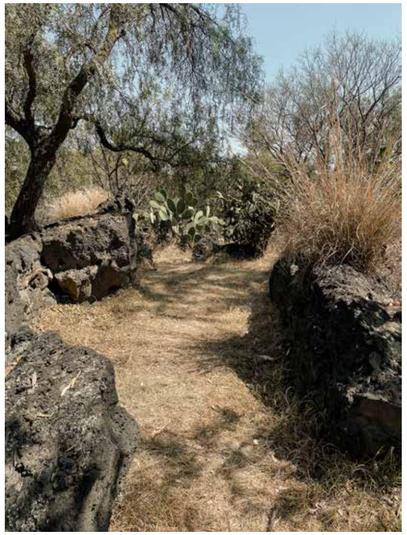
Corded lava



Tumuli



Crack



Skylight

Myriopteris aurea

Zephyranthes

Cammelina tuberosa

Tigridia pavonia

Begonia gracilis

Bletia campanulata

Pittocaulon praecox

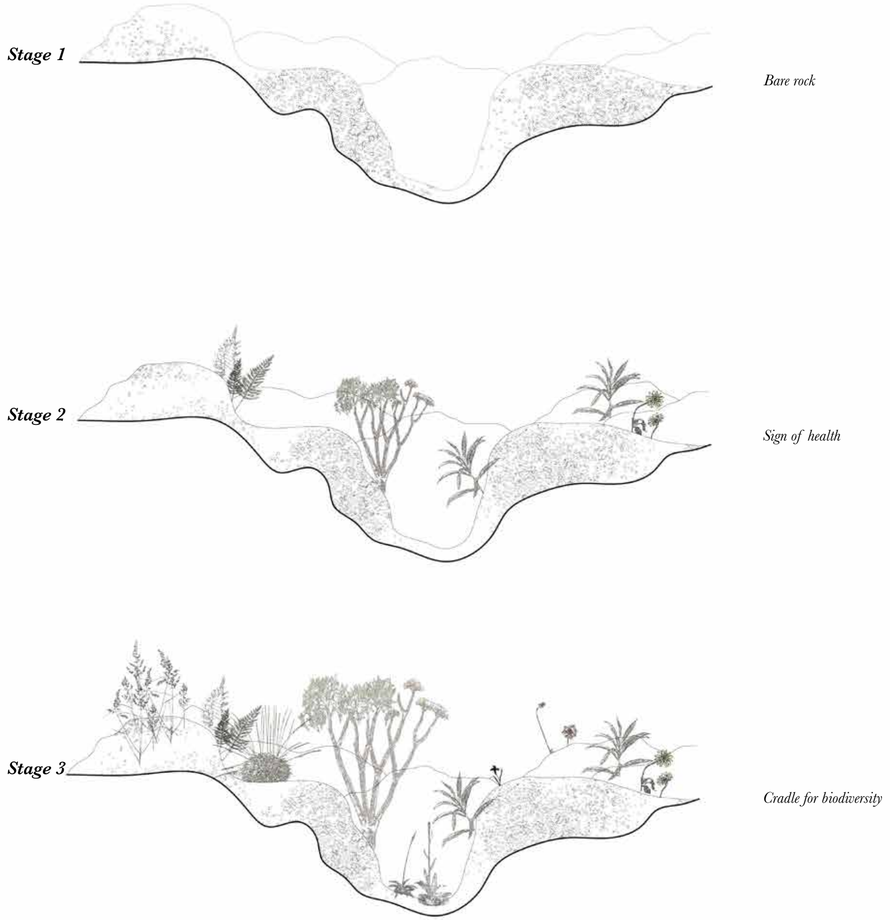
Opuntia tomentosa

Melinis repens

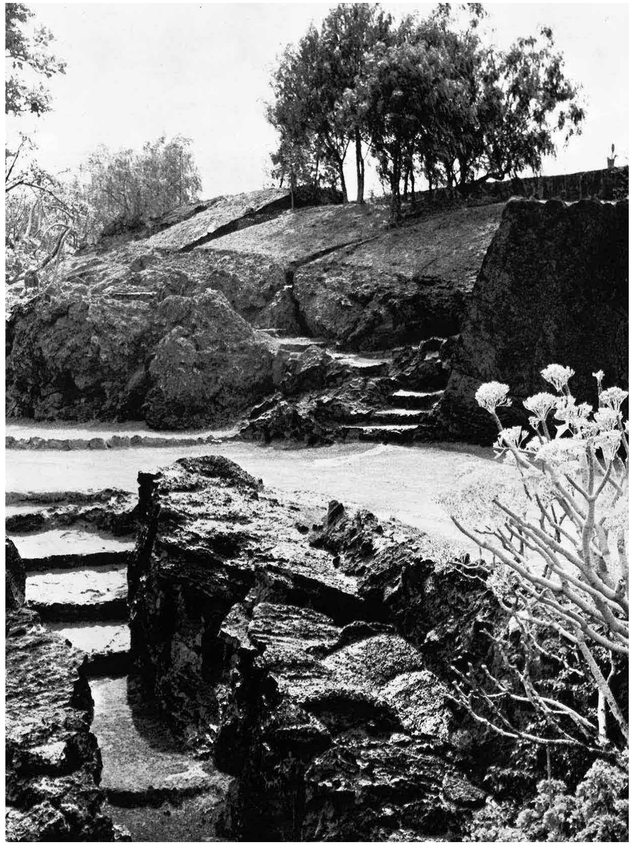
Manfreda scabra

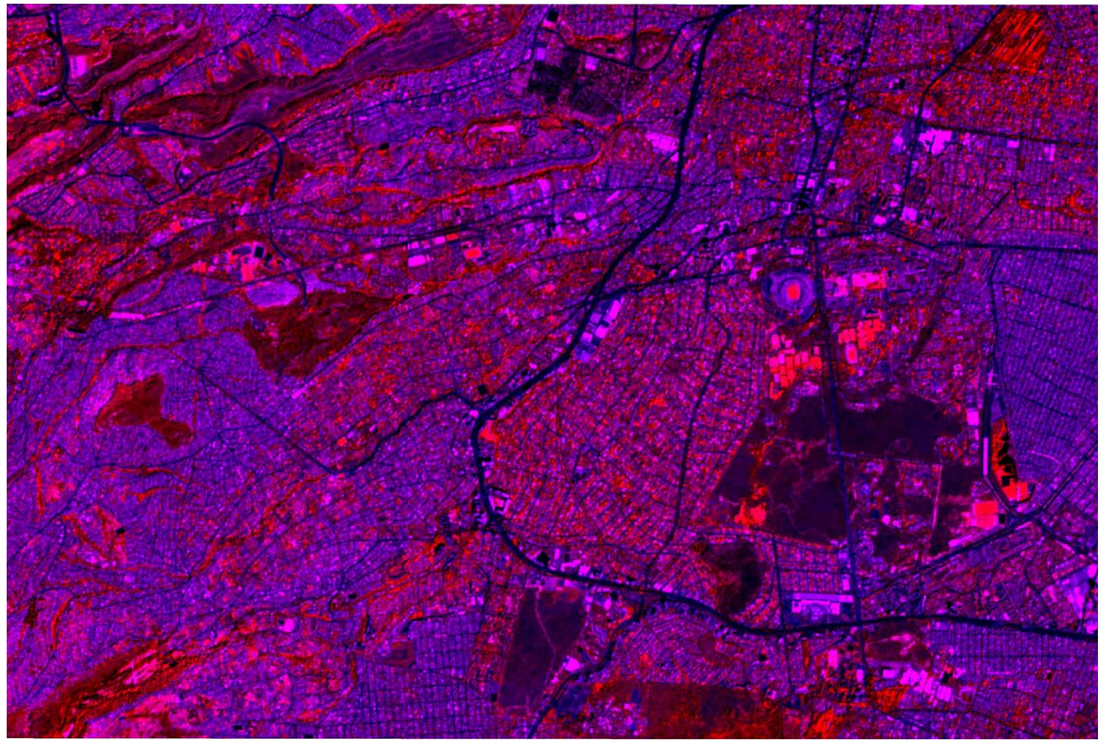
Vascular plants

The Xitle geosites are a good example of urban geosites, as they remarkably conserve the testimony of the long-lasting interaction of volcanic activitywith human development, during a ca. 2000-year period streachign from the eruption until today.



Salas Portugal and Barragán used the technology of the time to achieve a unique image that could highlight the conditions of the rocky landscape. It was through the use of infrared filters that they were able to highlight the vegetation from the volcanic rock and with this, define their design intentions for the sample gardens.

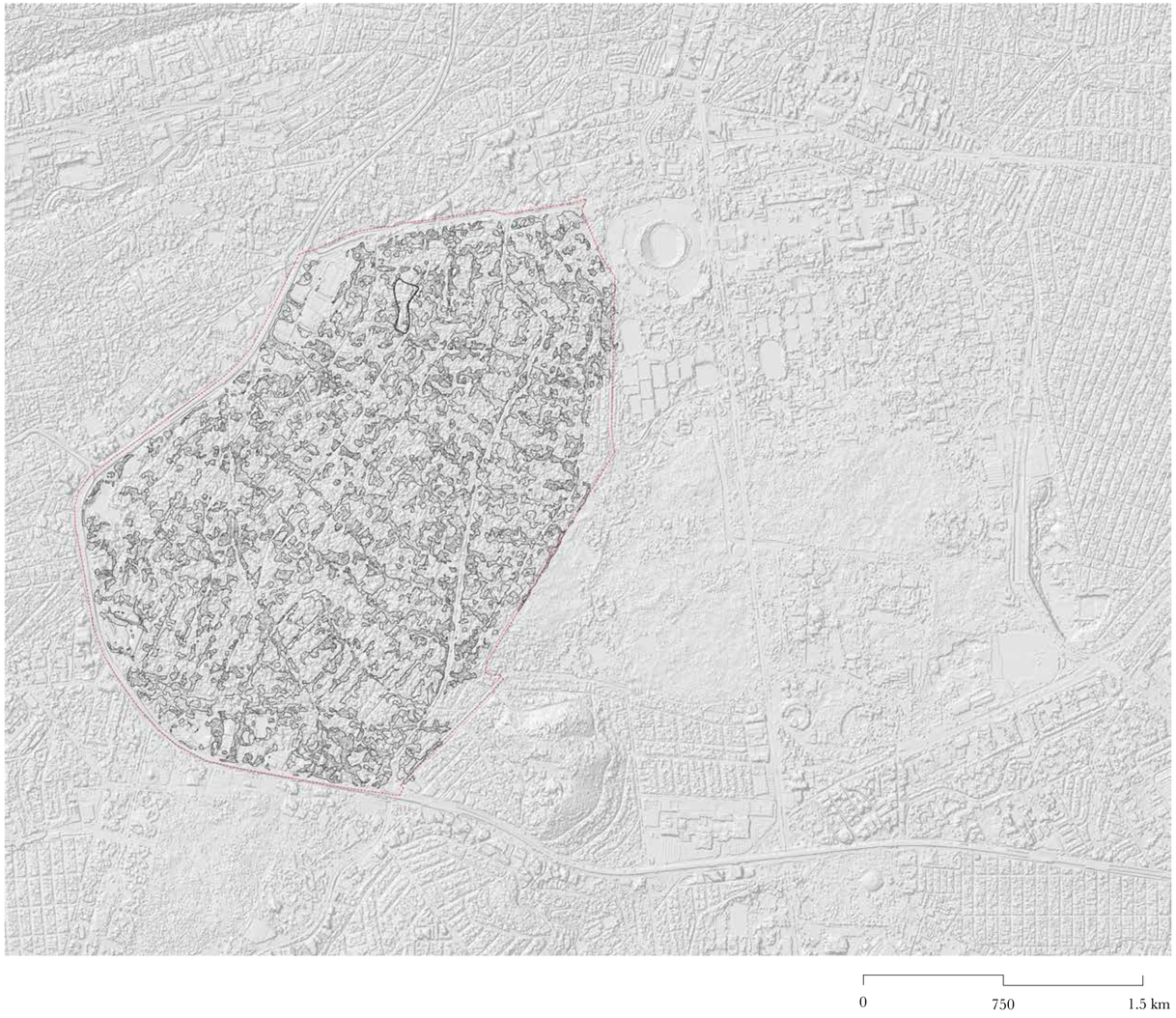




Multispectrum image revealing minerals and vegetation

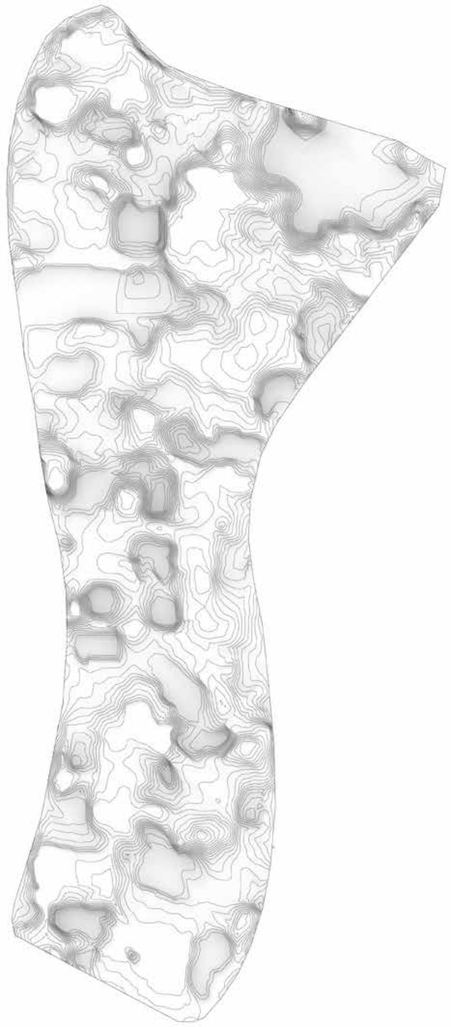
Remnants pattern

Remants in the Sample Gardens original plot



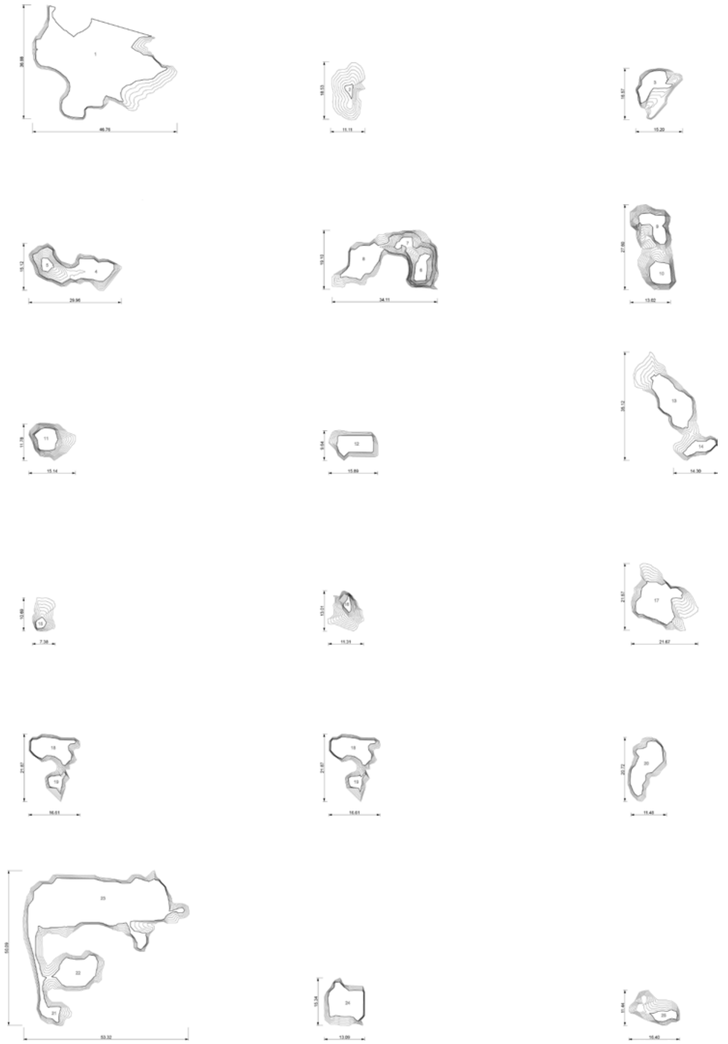
Barragán built a reinterpretation or modern re-understanding of the mexican tradition, but his influence on mexican architects has been poor and limited. And if we speak that its influence is limited in relation to the architectural language or elements of spatial representation, the ability to intervene and think in an open space, patio or garden is even less lucky, that magic and mysticism that its outdoor spaces had still does not find a successor.

2022



Currently this area is

Interpretation of the sample garden plot in its original state

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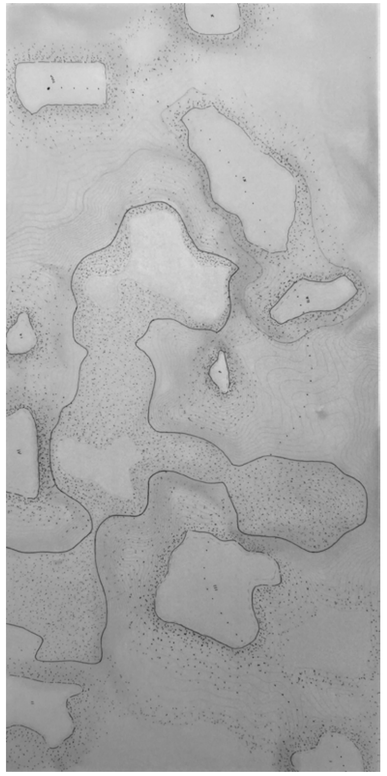
Gardens

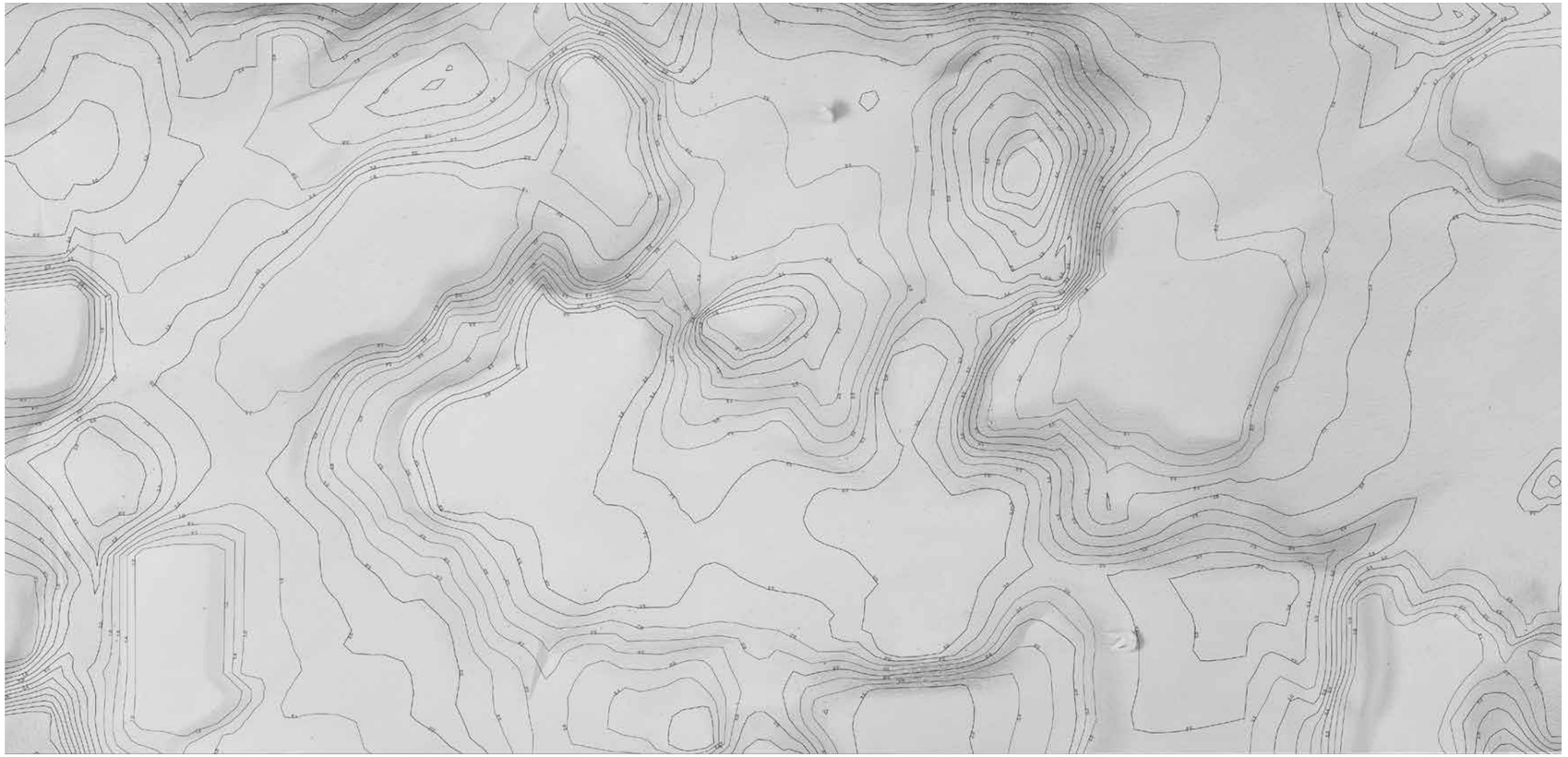
Exposed rock

High rock formations

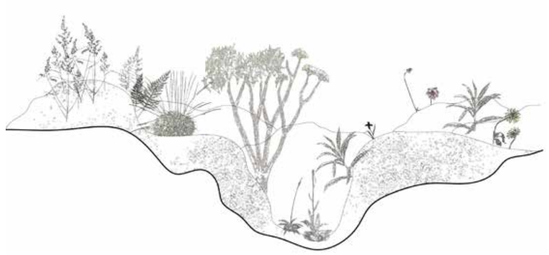


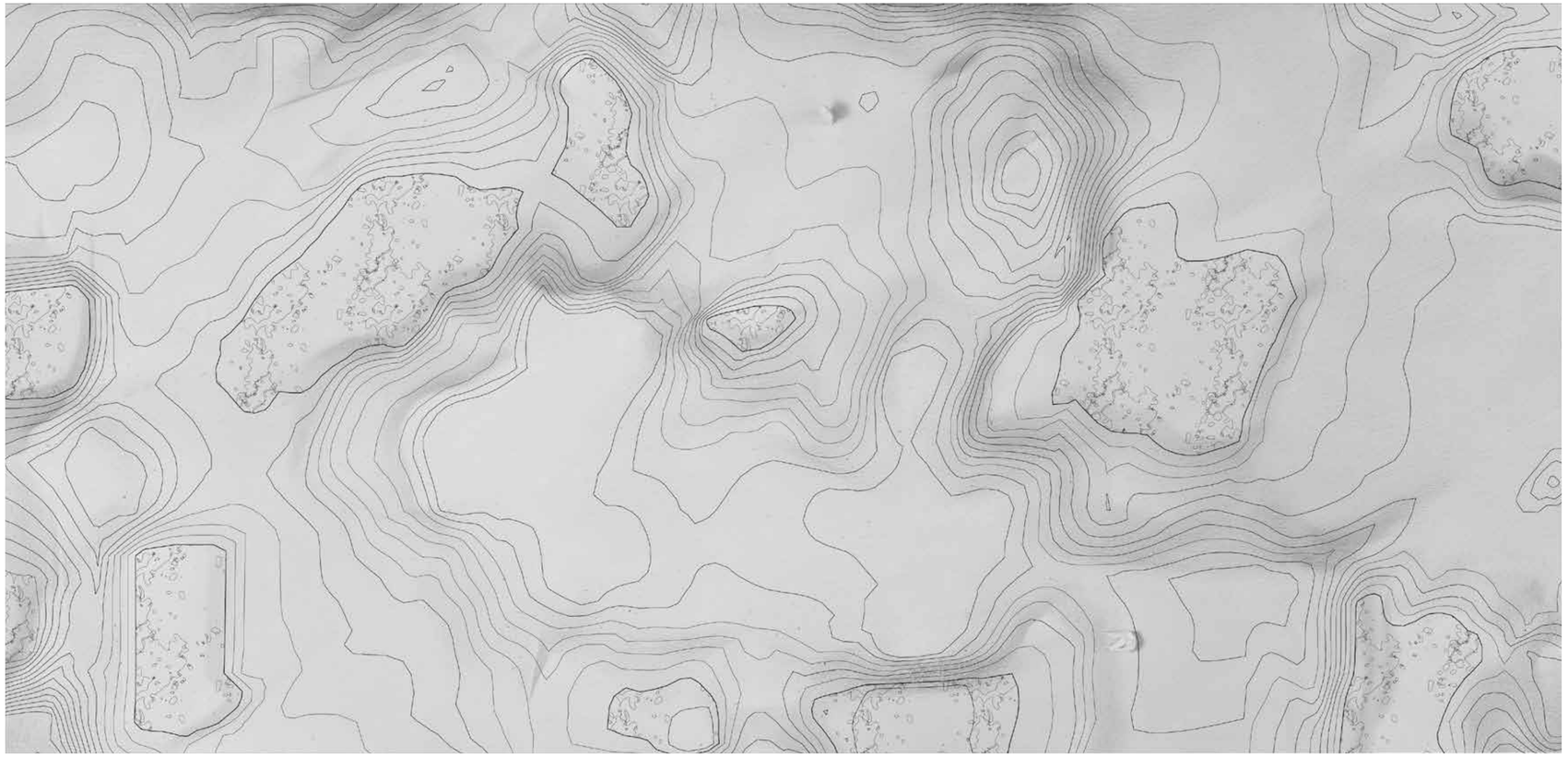
Garden entities

Contours 20cm

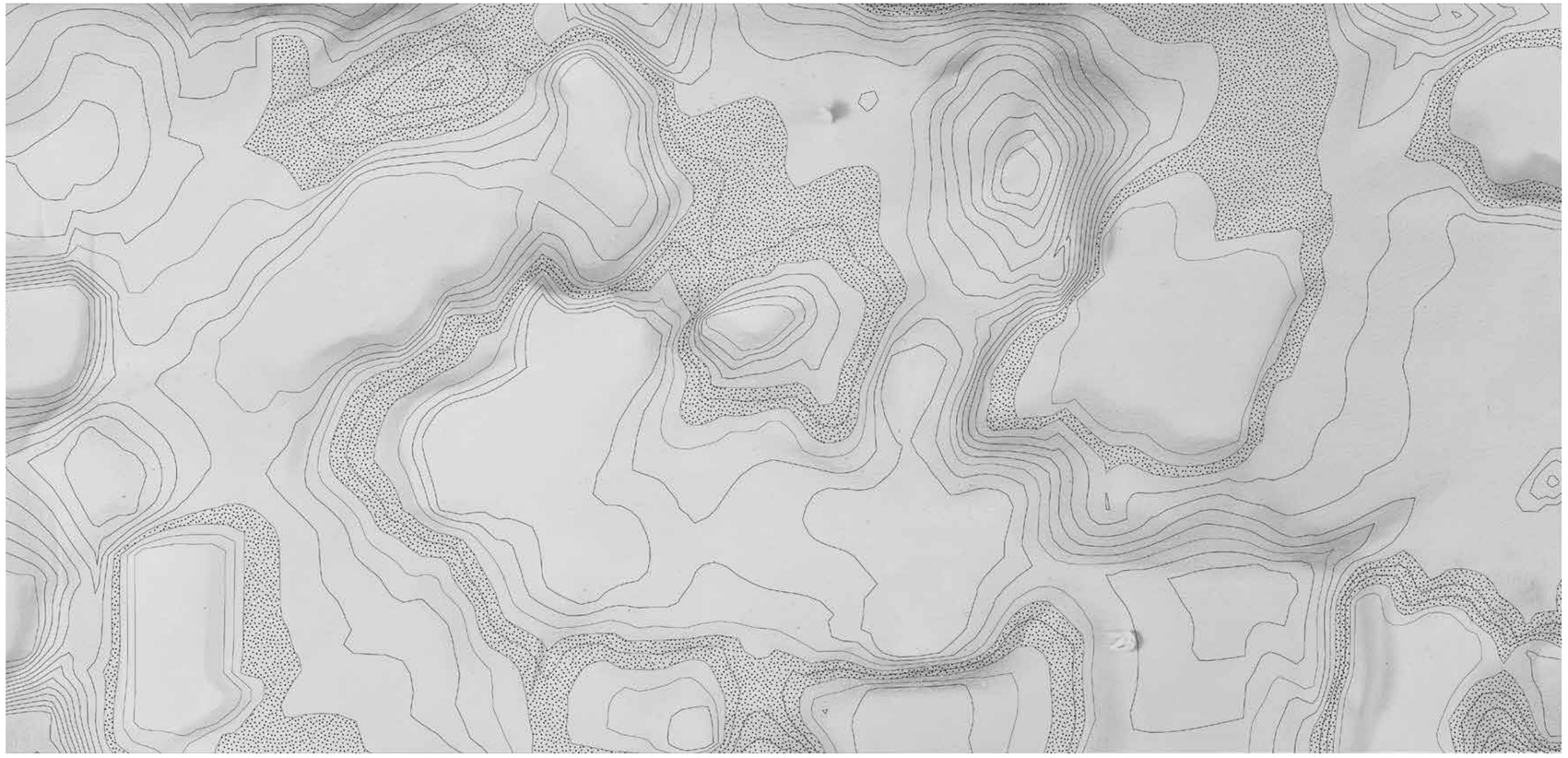


Sunken gardens

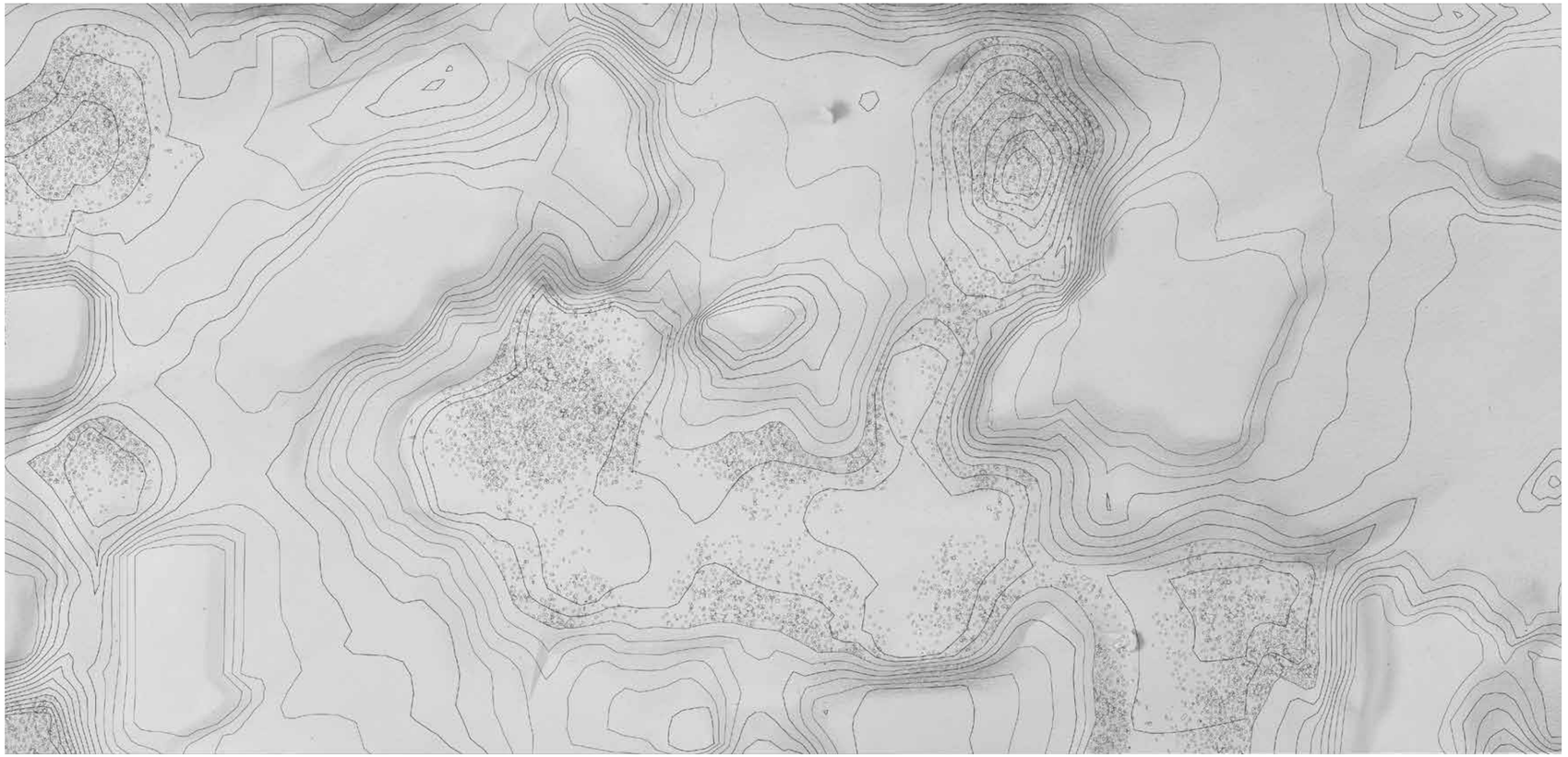




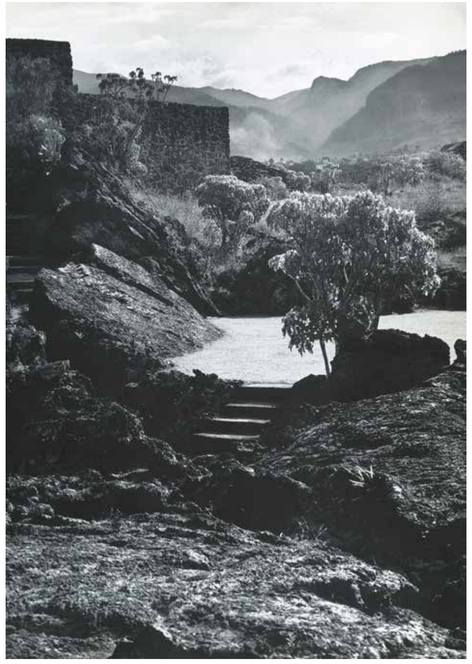
Moss

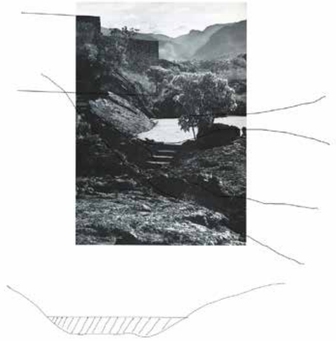


Exposed rock

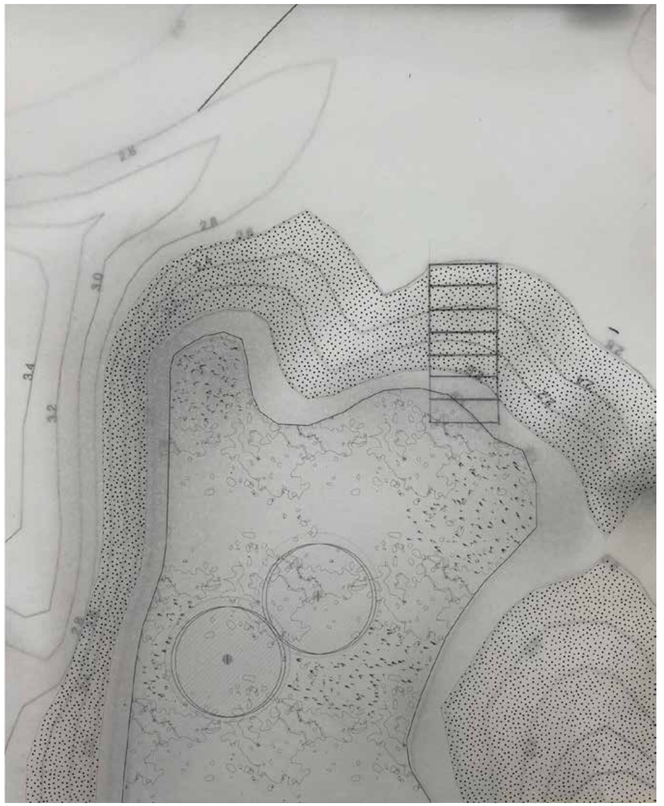


Although the sample gardens were designed as a public space, the gardens here were planned as models for the development of private space. They were to illustrate barragan's idea of the "correct" construction





"The land was transformed into a wild garden and Barragán made it habitable"



My intention is to bring back the intimacy into the public space

Layers of intervention

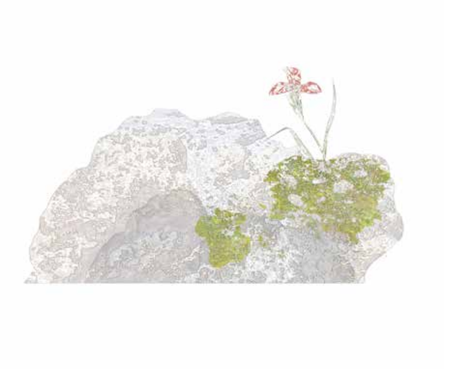
(a) *Red brick dust for paths and access areas*

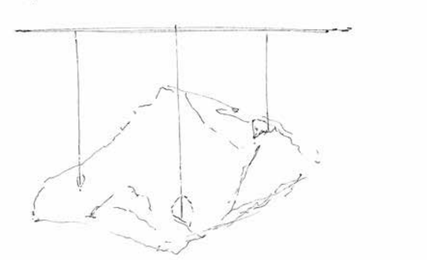
(b) *Stairways along the geo-formations*

(c) *Fillers for green areas*

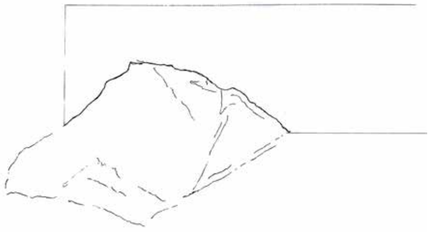
Healthy remnant

There is no specific way to identify a healthy or undamaged geopedregal, each remnant has its own life and behaves very differently from one another. In one remnant we can find a high density of moss and in another, just a few meters away, we could find orchids. Each remnant behaves under its own universe.

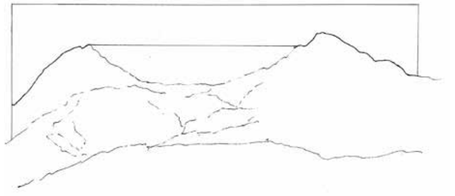




(a) *Shelter*



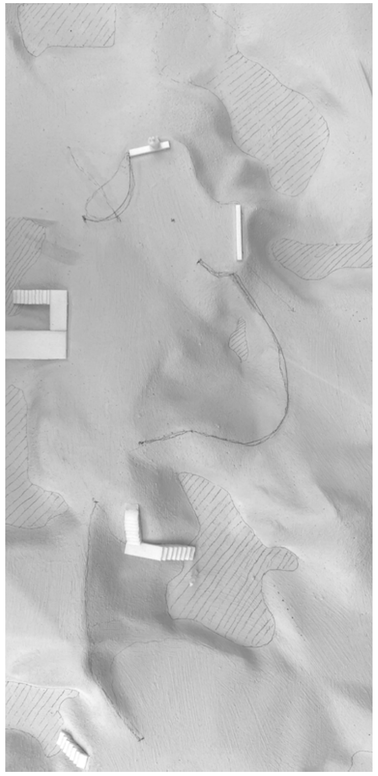
(b) *Framing*



(c) *Contemplation*

Plane model

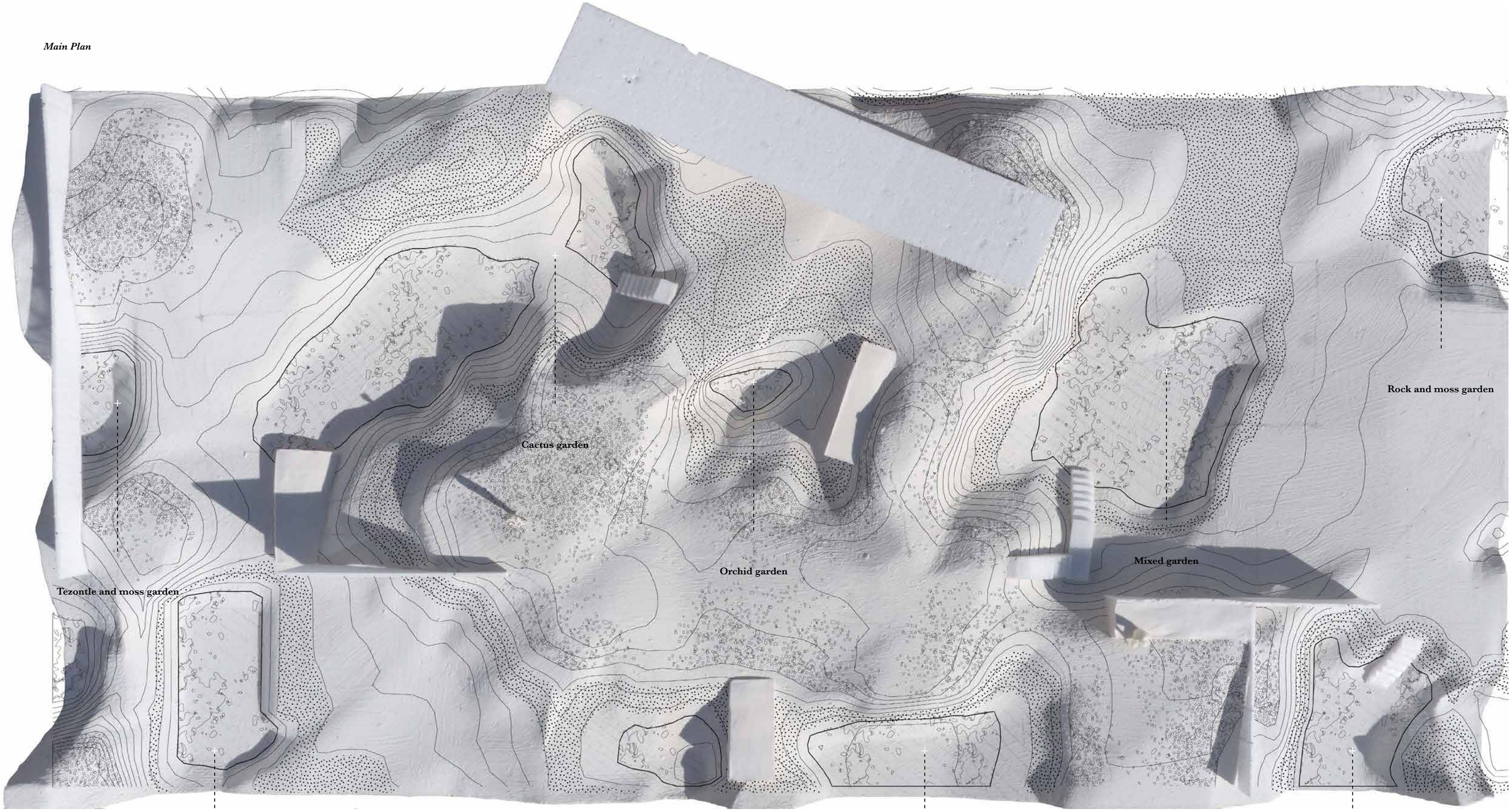
Exposed rock



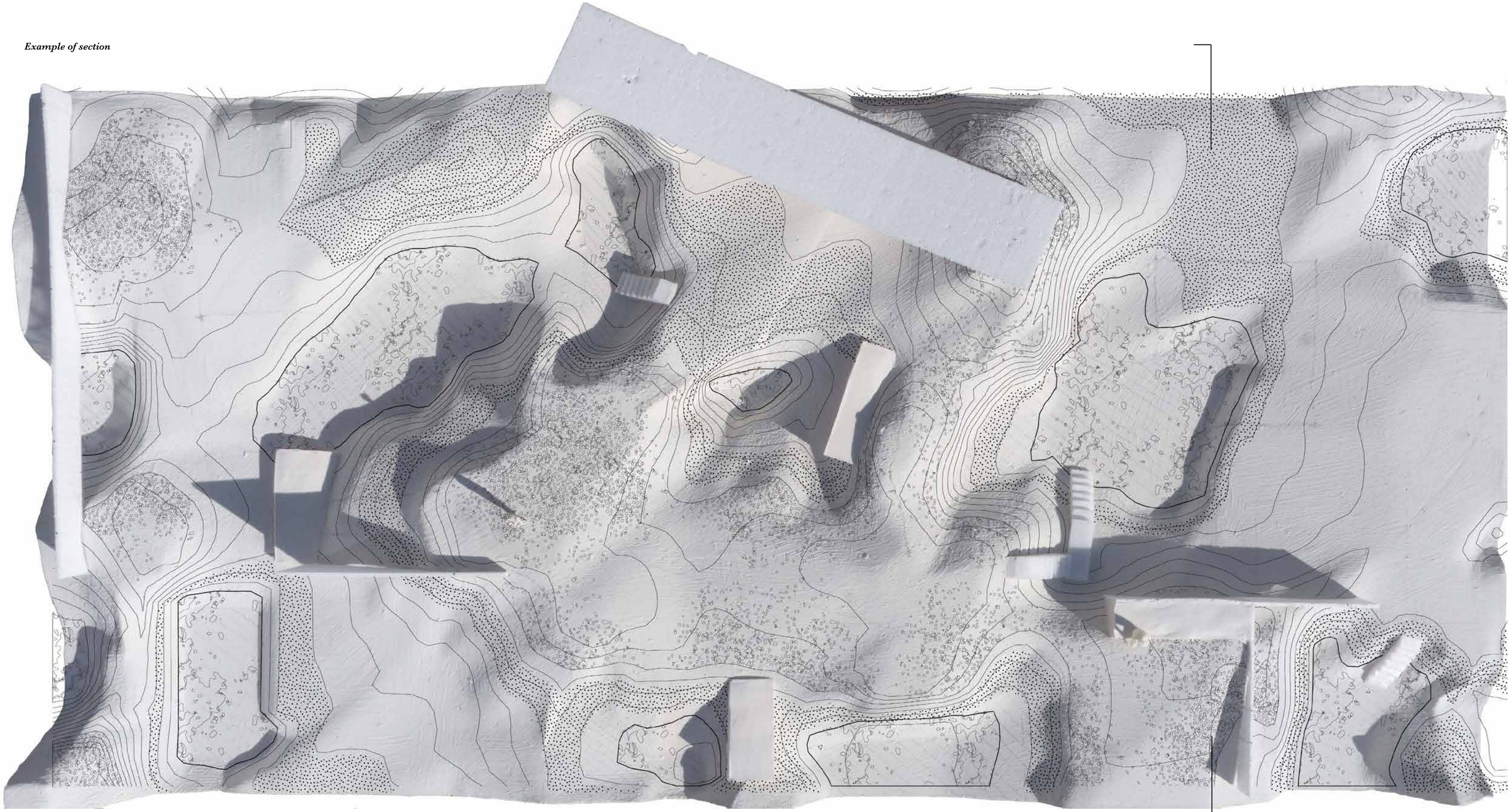
High rock formations

Garden entities

Main Plan


Cactus garden
Rock and moss garden
Orchid garden
Mixed garden
Tezontle and moss garden
Stone and herbs garden
Tezontle and palo loco garden
Rock and flower garden

Example of section



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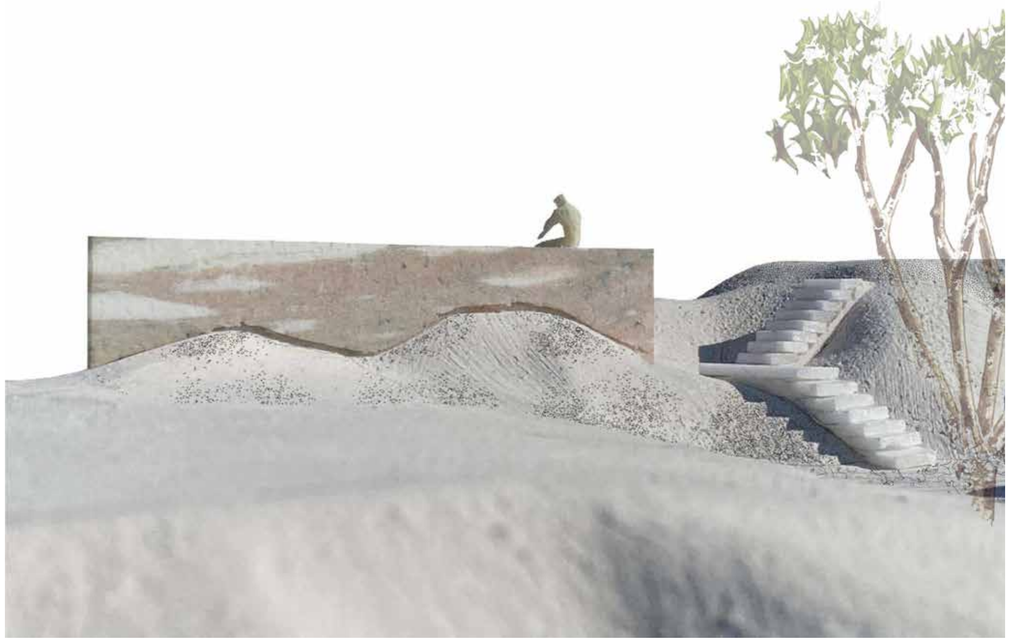

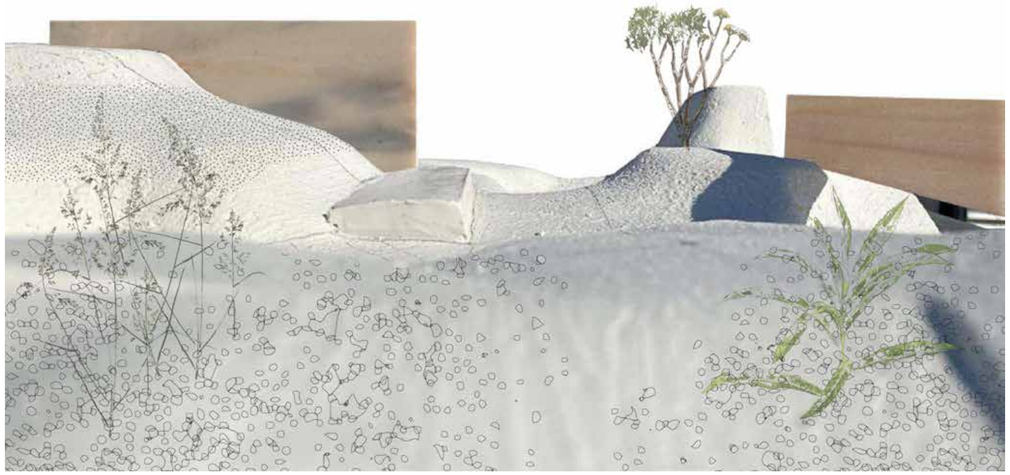

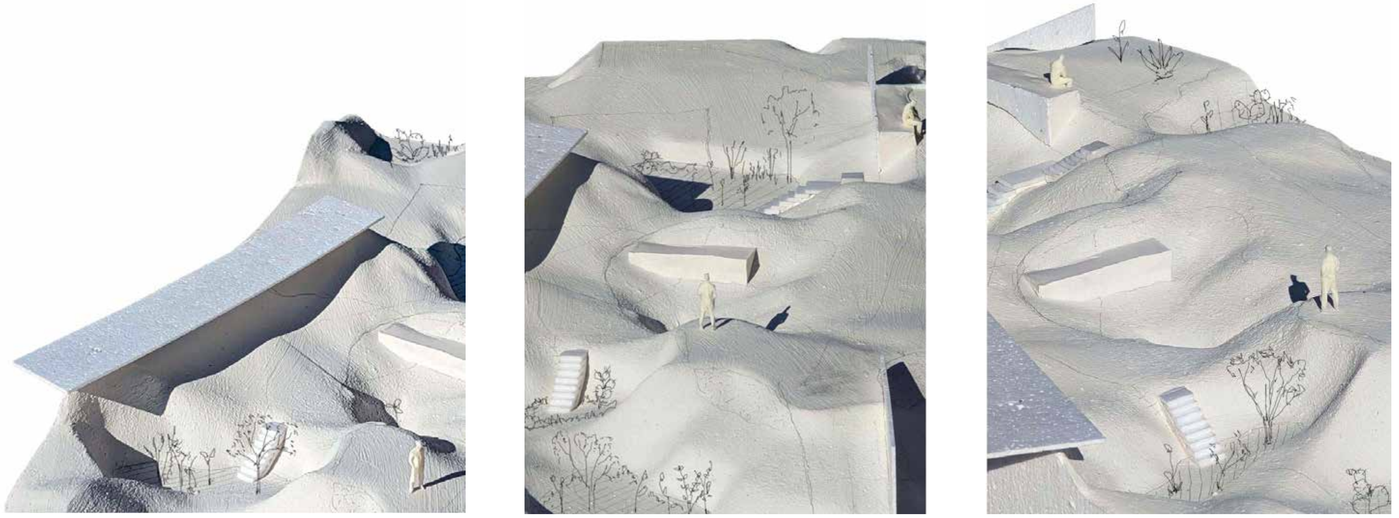

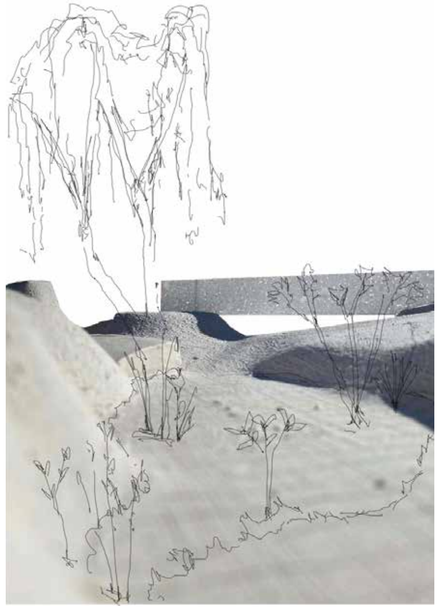

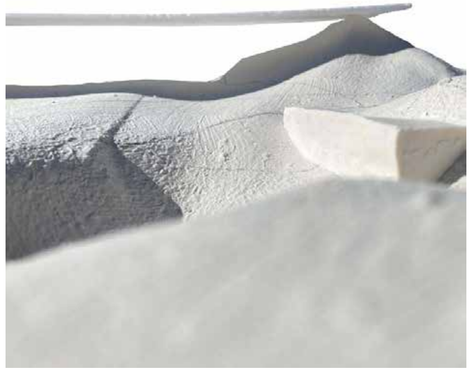

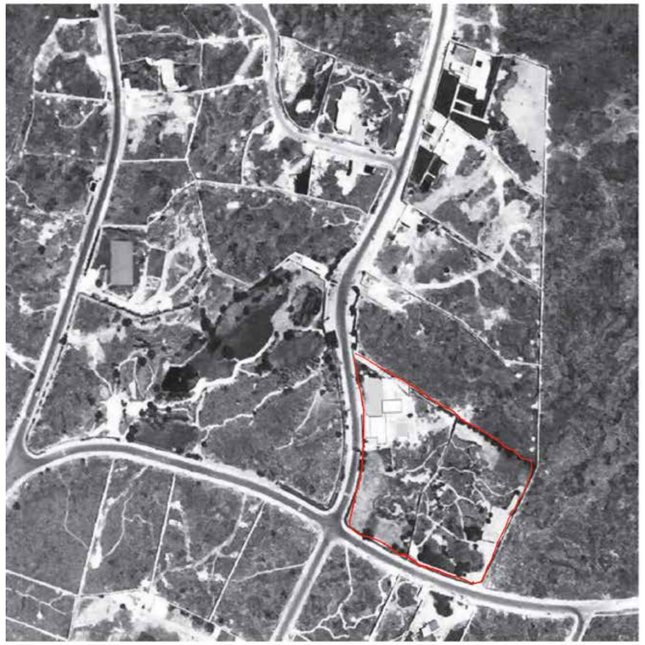

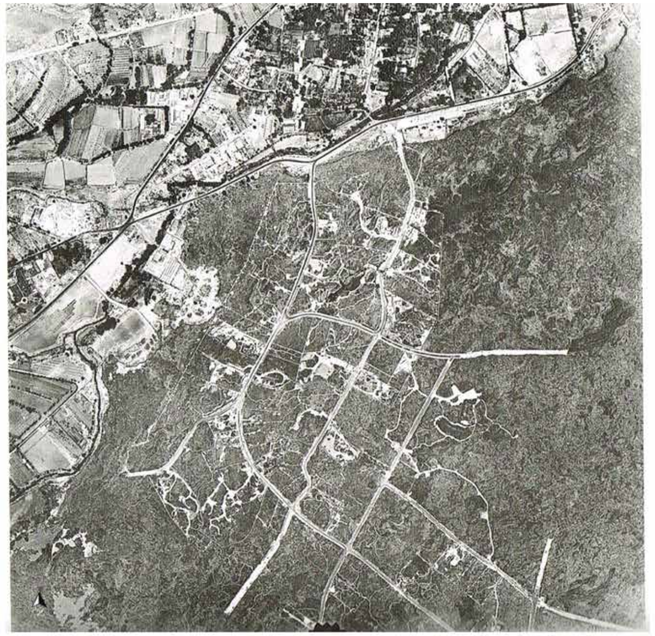

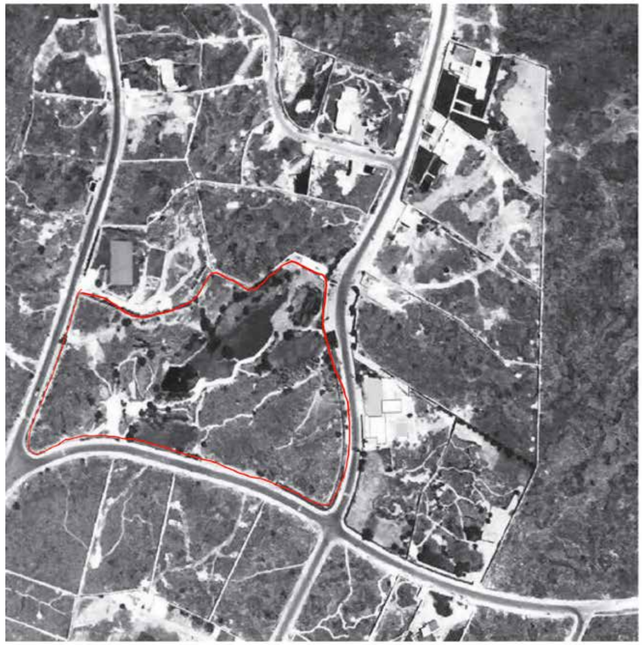

1947-48 LUIS BARRAGAN : VUE AÉRIENNE DE L'ENTREE DU PEDREGAL PLAZA FUENTES