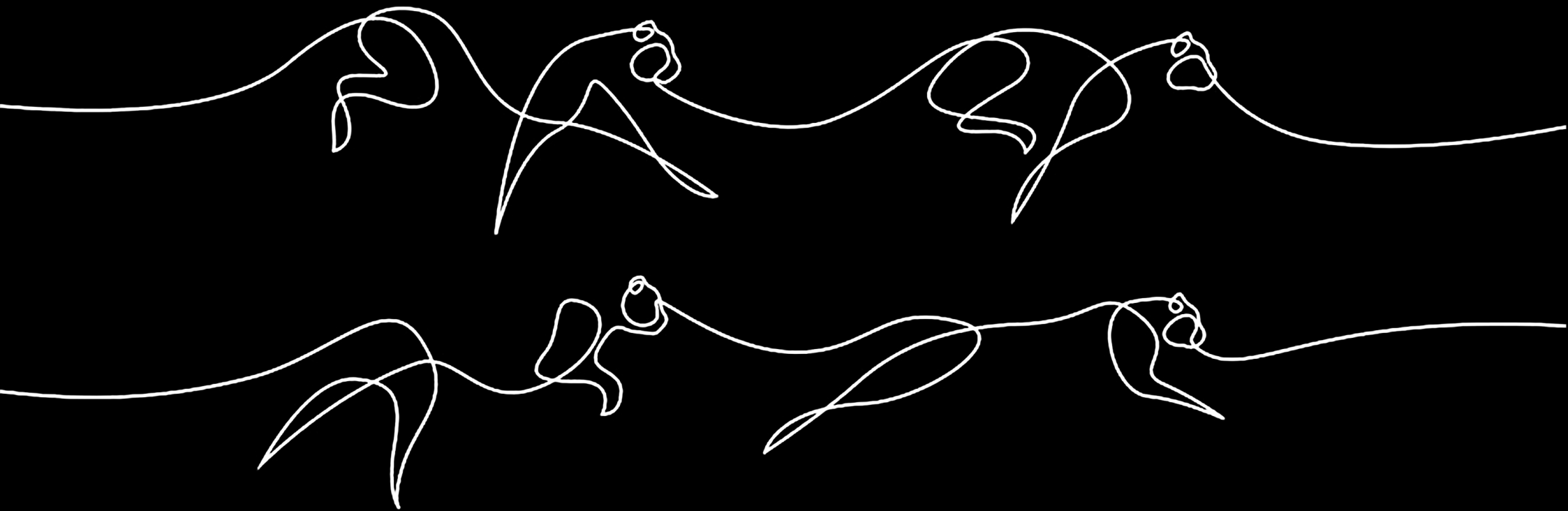




unidad docente aranguren + gallegos //DPA ETSAM



Zootopia

Disney

UD. ARANGUREN + GALLEGOS

DEPARTAMENTO DE PROYECTOS ARQUITECTONICOS DE LA E.T.S.A.M.

PROYECTOS 1 y 2

semestre primavera 17/18

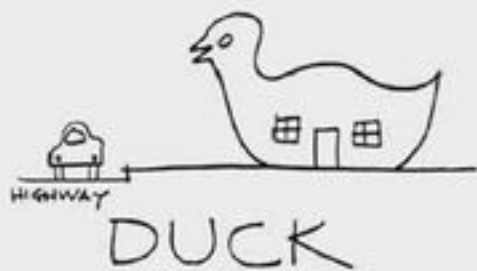
Profesores: María José Aranguren. José González Gallegos. David Casino Rubio. Alberto Martínez Castillo. Pablo Oriol Salgado. María José Pizarro Juanas. Marcelo Ruíz Pardo. Vicente Sáenz Guerra. Ricardo Sánchez González. Blanca Juanes Juanes. Toni Gelabert Amengual. Ricardo Montoro Coso. Manuel Pascual García. Juana Canet Roselló.



73. "Long Island Duckling" from God's Own Junkyard



74. Road scene from God's Own Junkyard



75. Duck



76. Decorated shed





I'M A B&B
208962-3647







OPEN







WORLD'S LARGEST ELEPHANT

PARKING FOR LUCY THE ELEPHANT AND GIFT SHOP ONLY ONE HOUR LIMIT ALL OTHERS TO BE AT OWNER'S EXPENSE

PARKING FOR LUCY THE ELEPHANT AND GIFT SHOP ONLY ONE HOUR LIMIT ALL OTHERS TO BE AT OWNER'S EXPENSE

PARKING FOR LUCY THE ELEPHANT AND GIFT SHOP ONLY ONE HOUR LIMIT ALL OTHERS TO BE AT OWNER'S EXPENSE

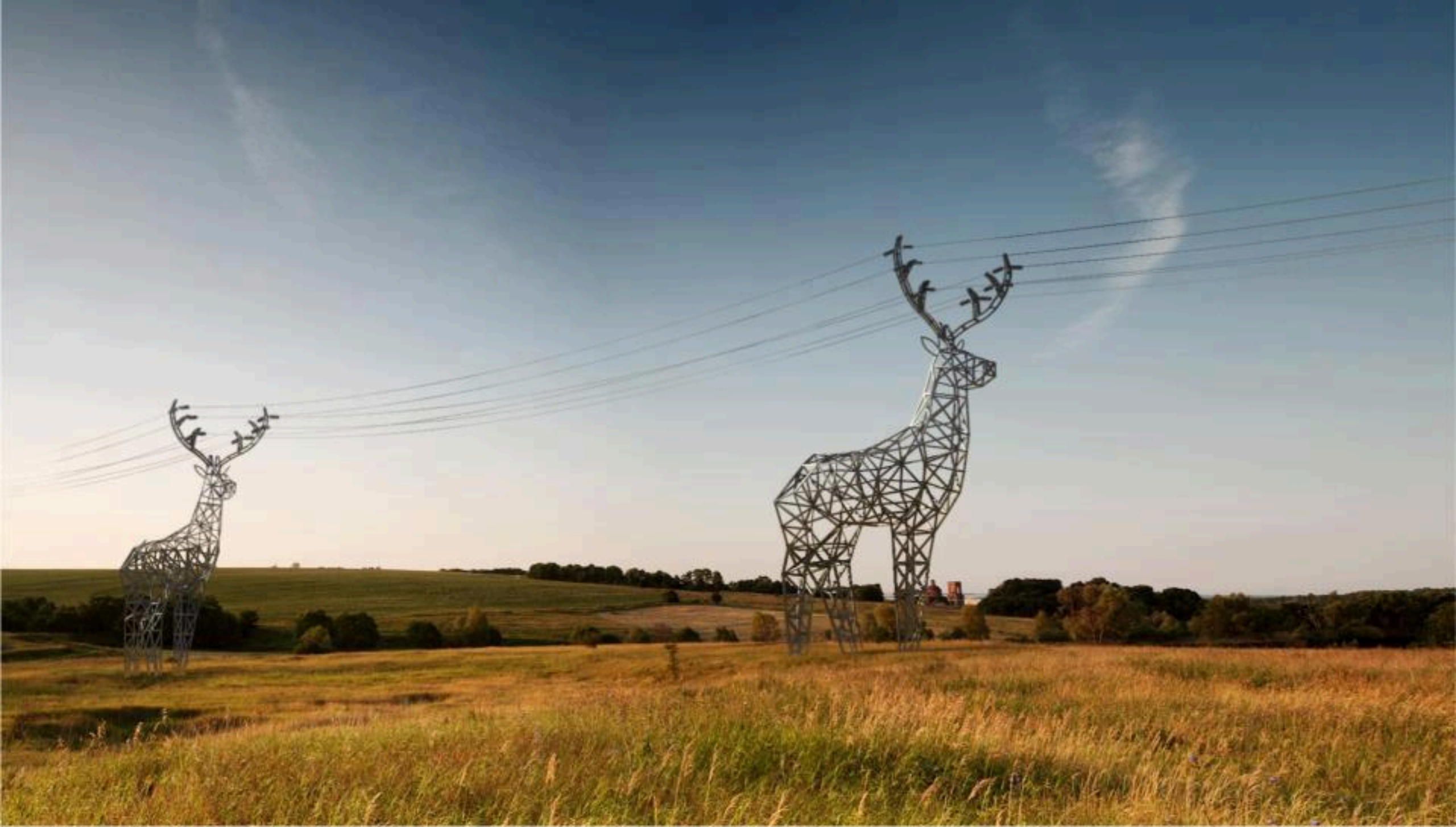
PARKING FOR LUCY THE ELEPHANT AND GIFT SHOP ONLY ONE HOUR LIMIT ALL OTHERS TO BE AT OWNER'S EXPENSE

LUCY PARKING ONLY ONE HOUR LIMIT ALL OTHERS TO BE AT OWNER'S EXPENSE

WELCOME to Lucy

Ready for Summer? Great Safety

PARKING FOR LUCY THE ELEPHANT AND GIFT SHOP ONLY ONE HOUR LIMIT ALL OTHERS TO BE AT OWNER'S EXPENSE







-LONGABERGER-









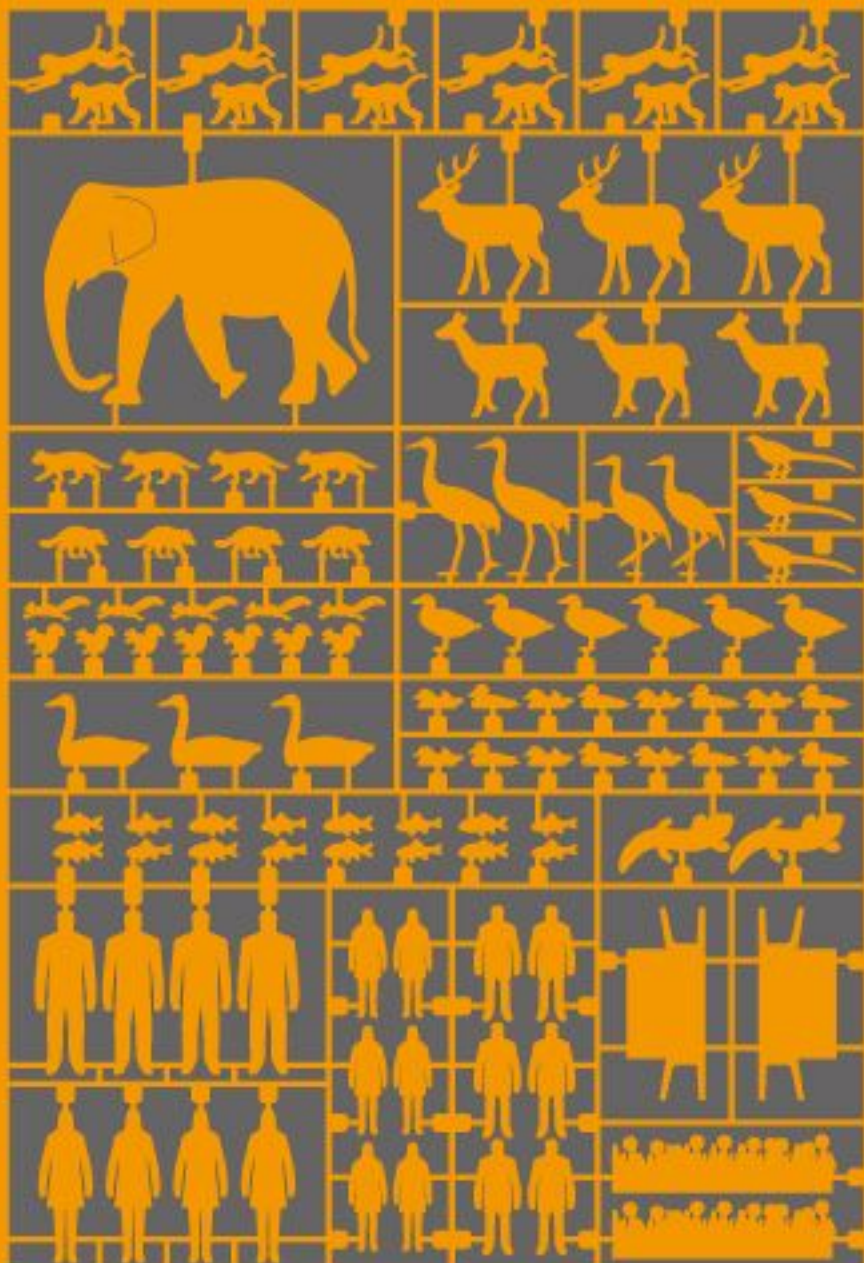




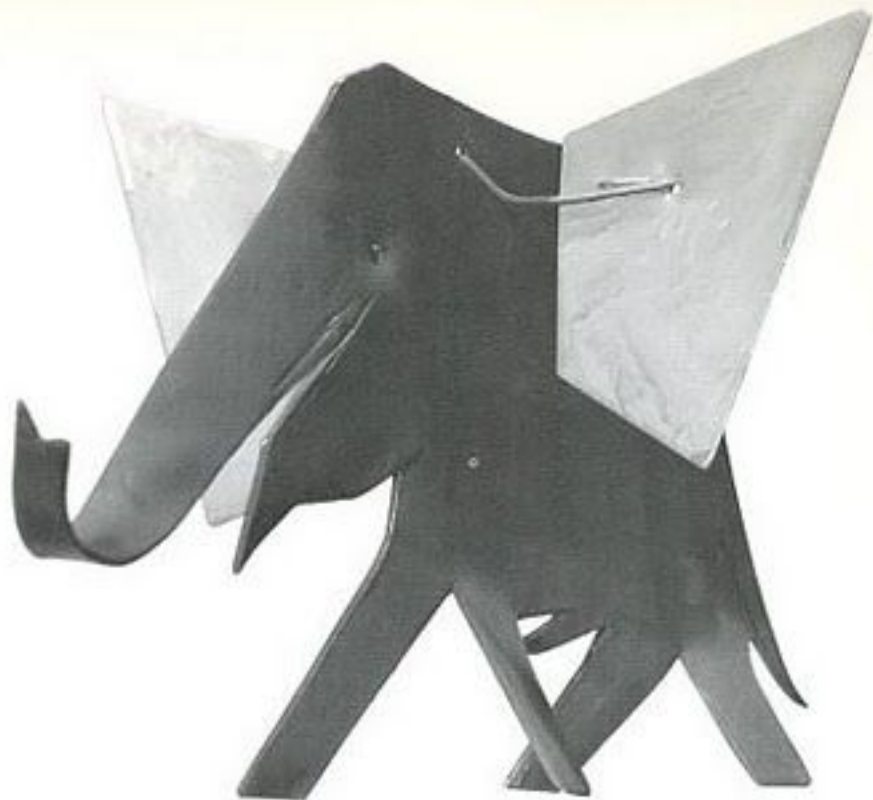




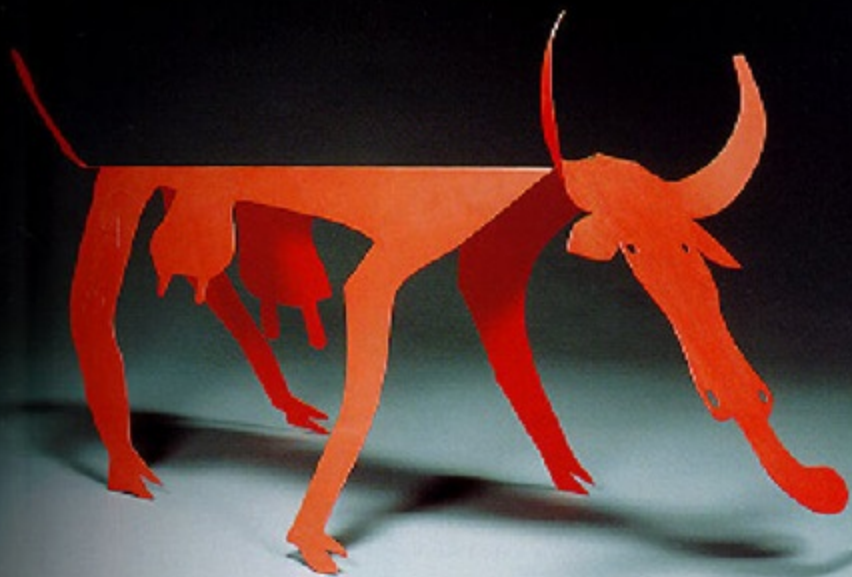




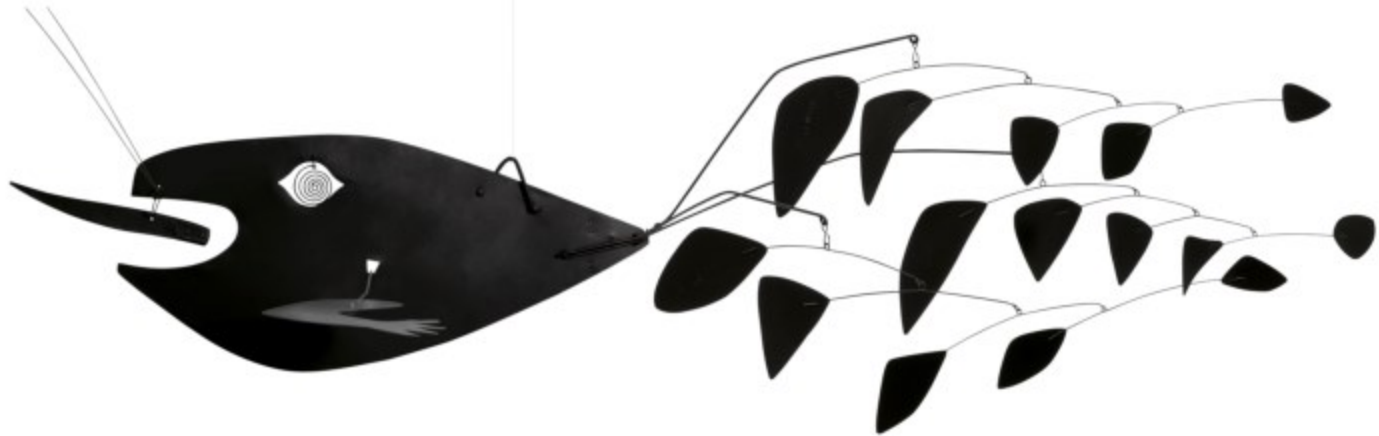


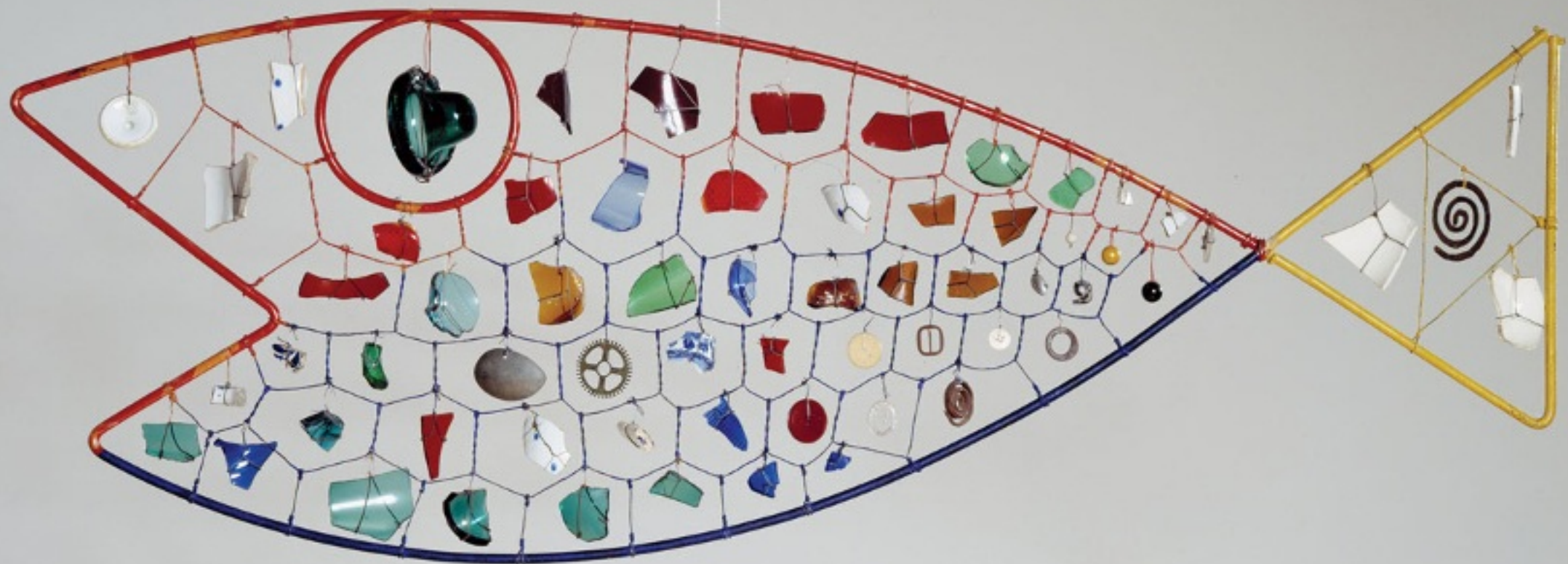














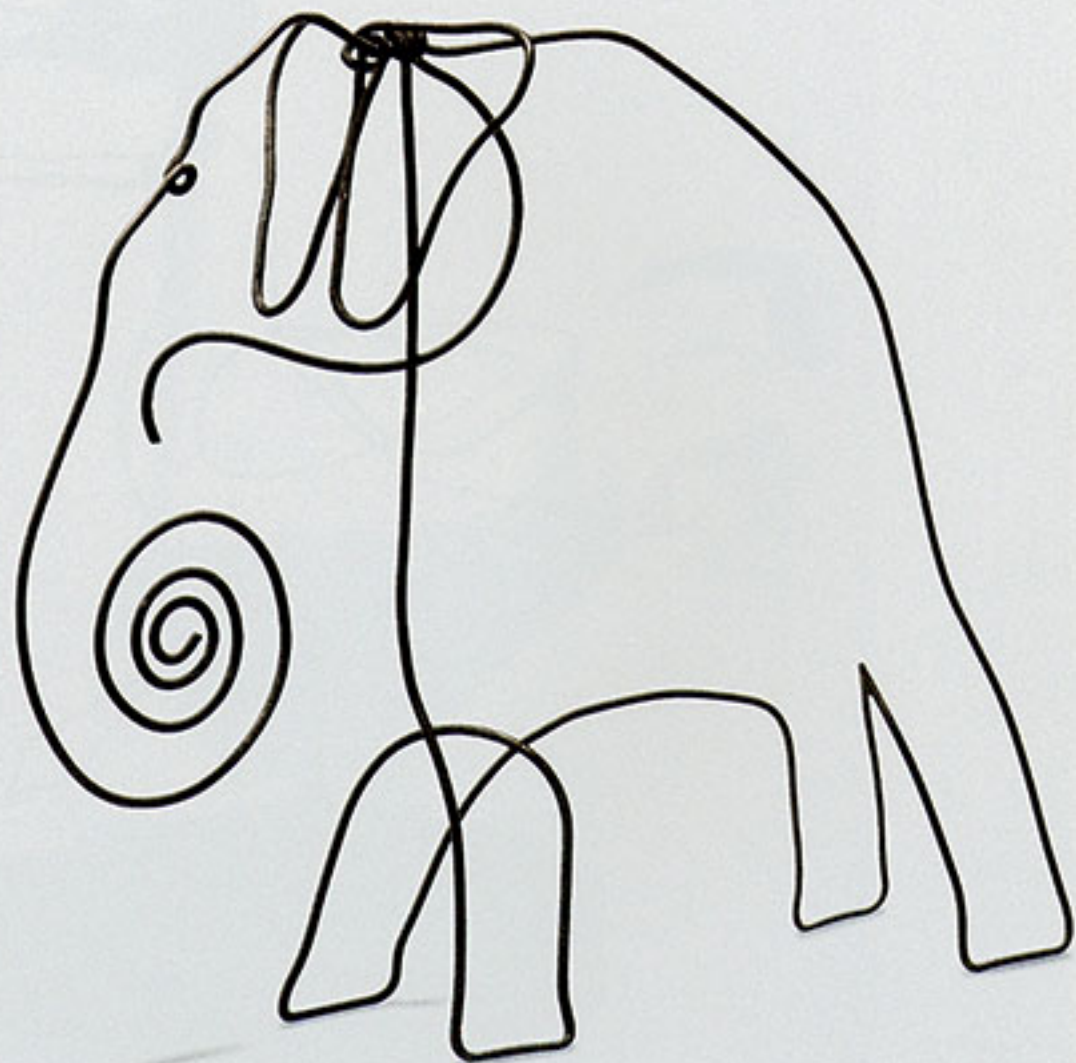






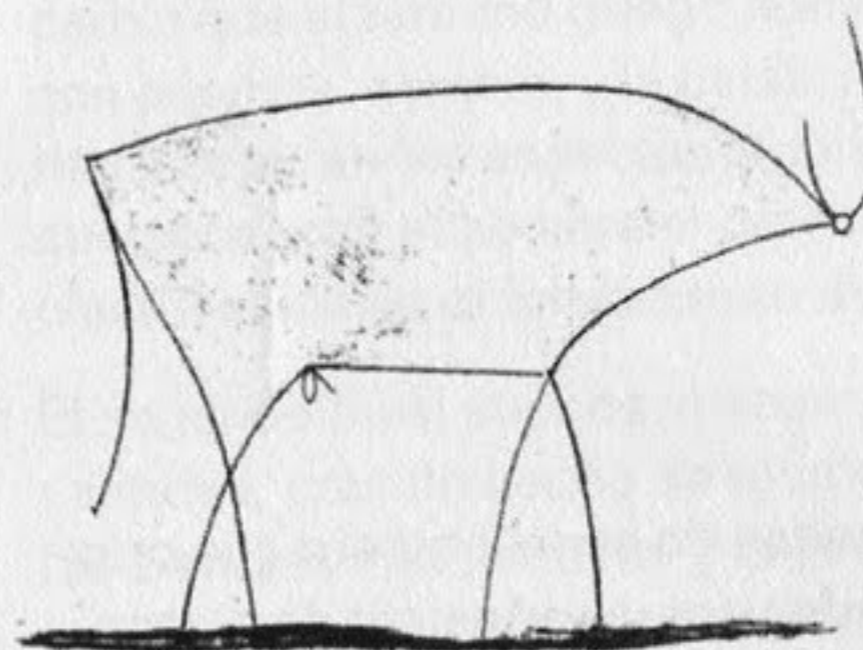
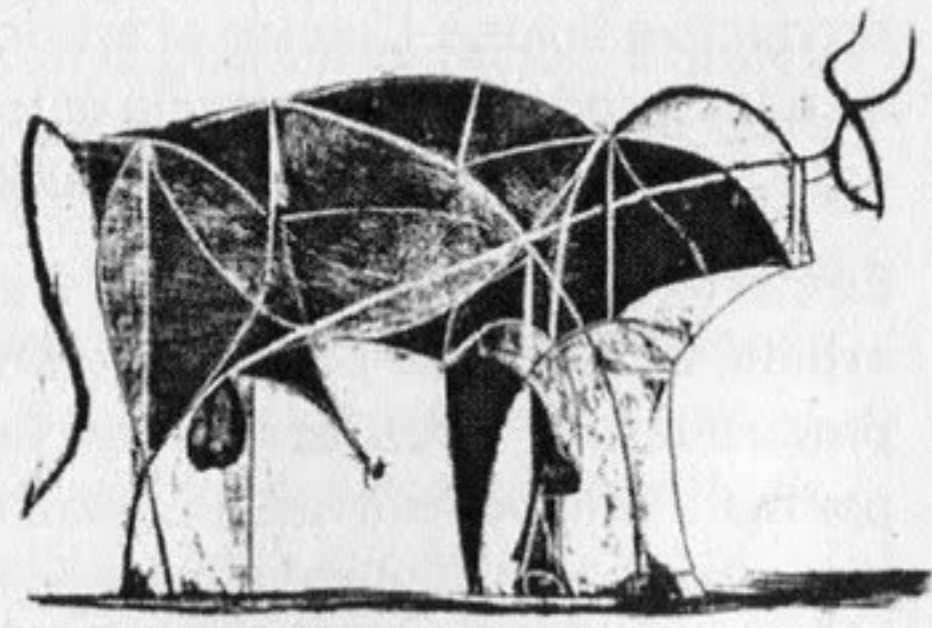
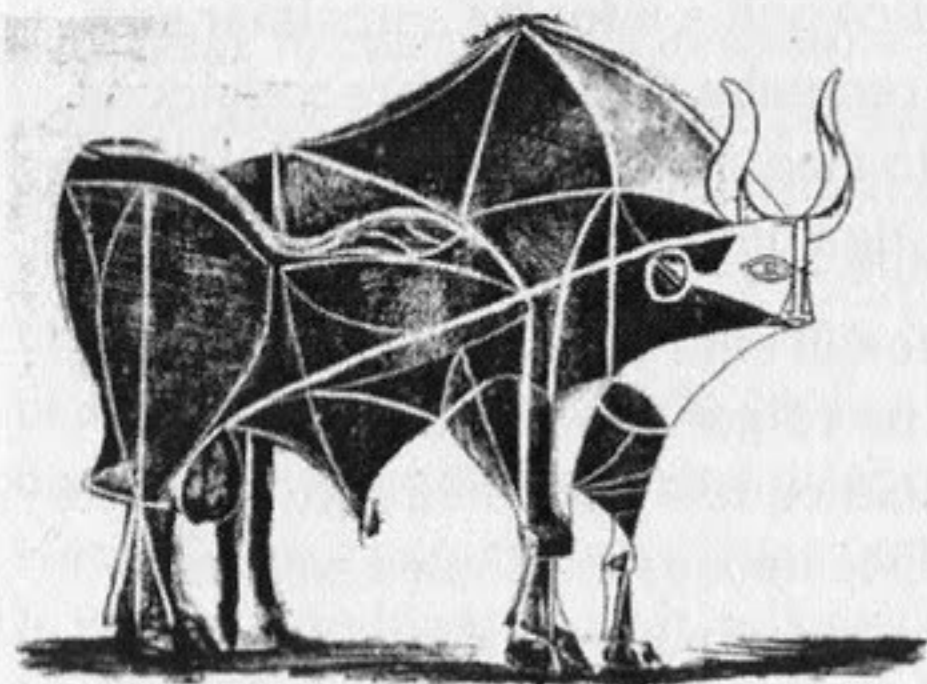
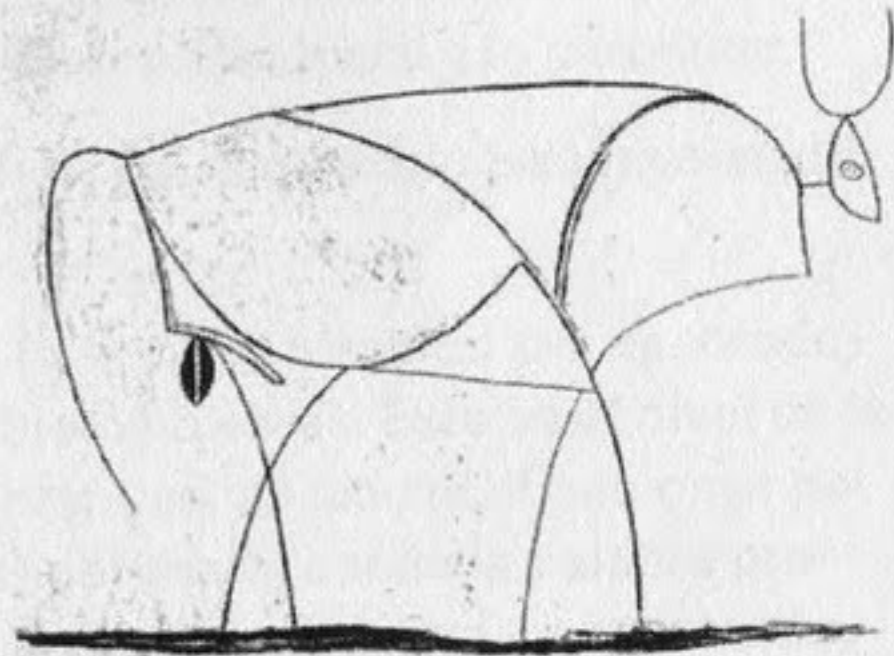
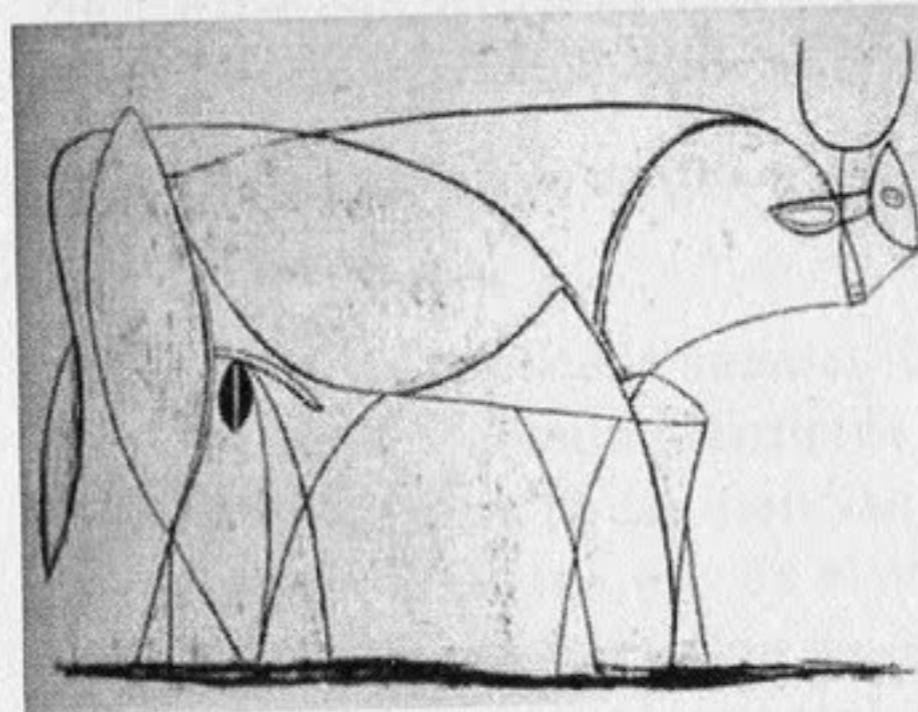
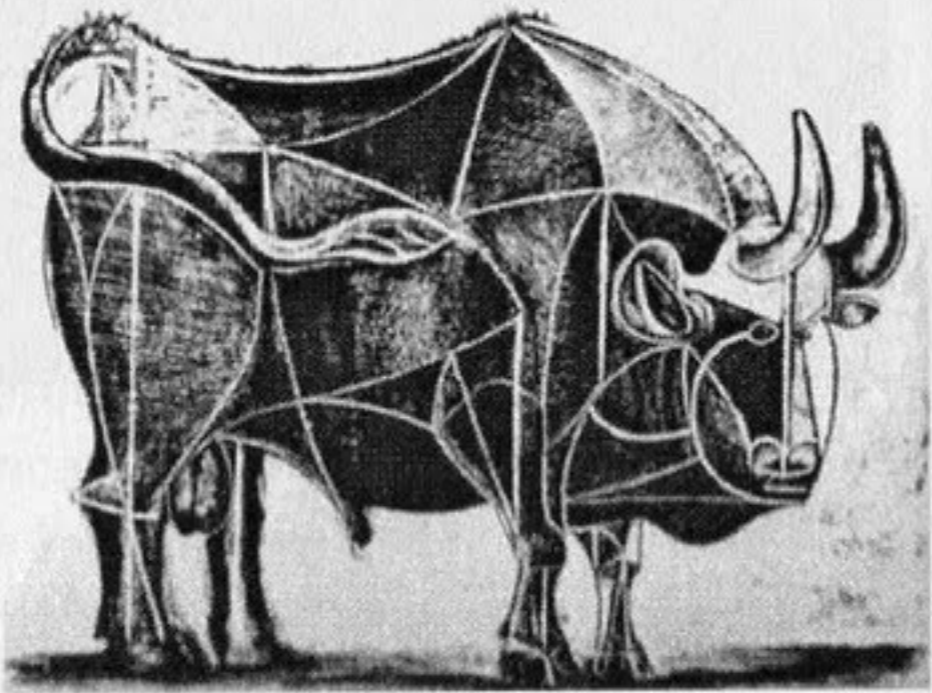
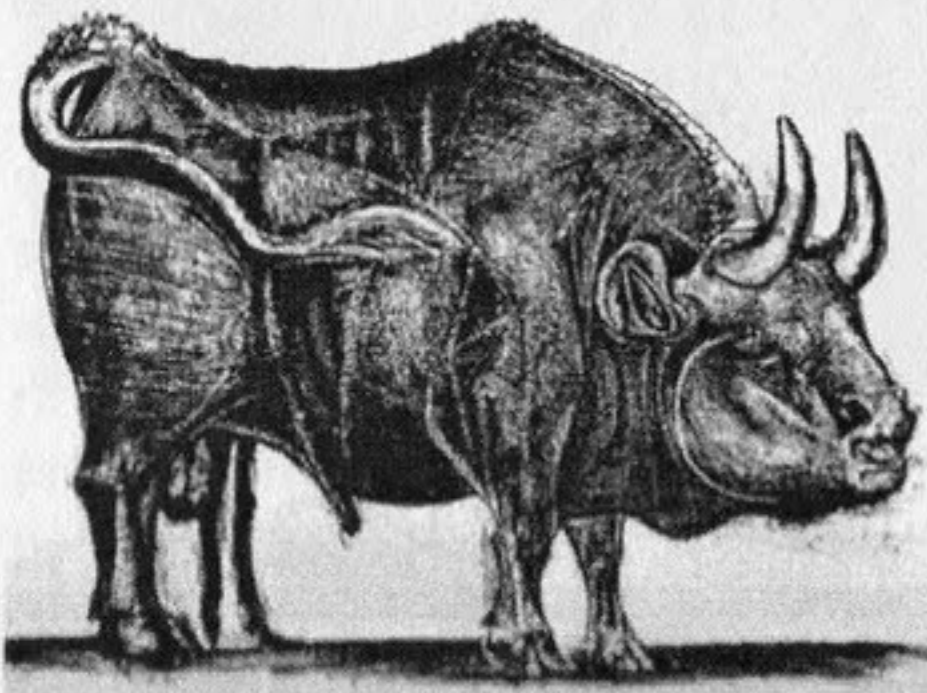
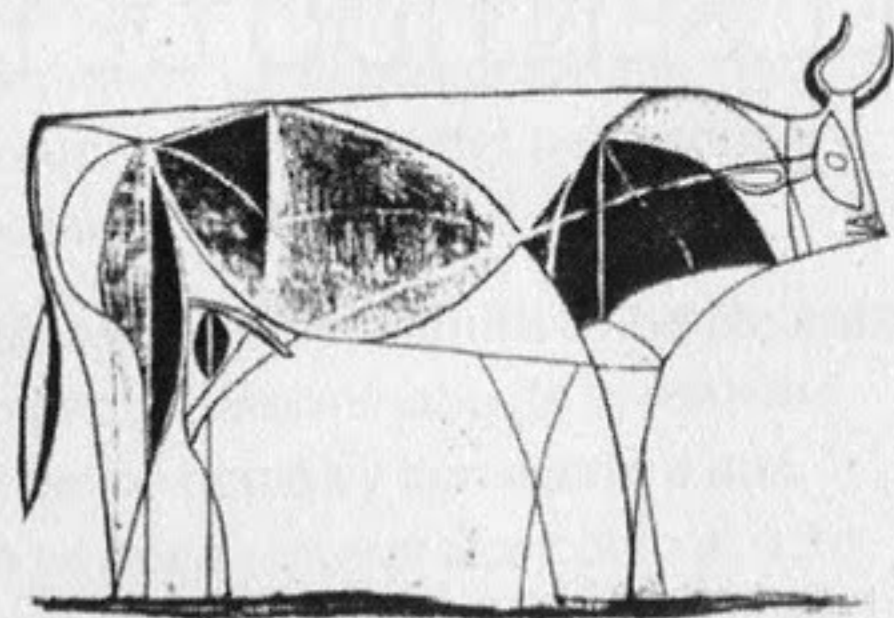
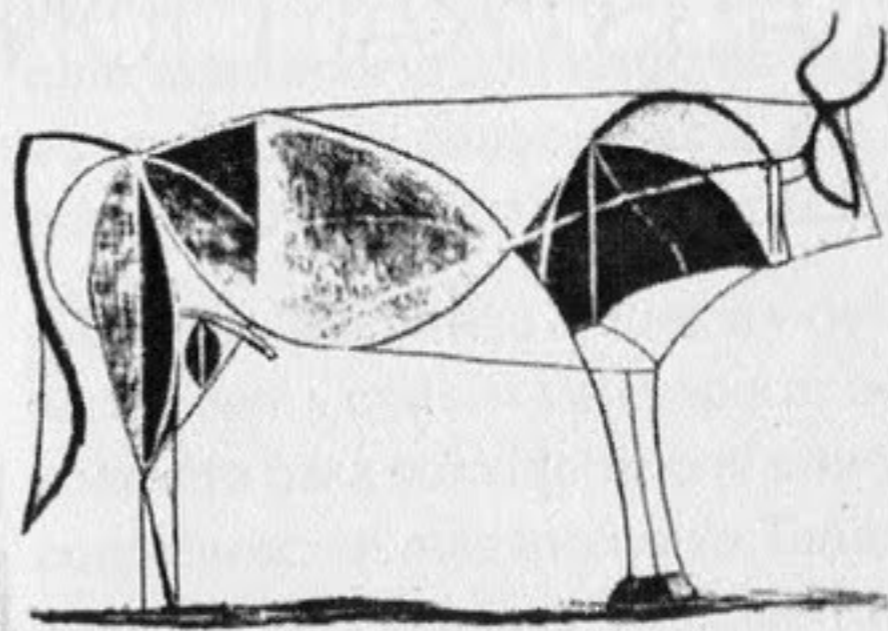
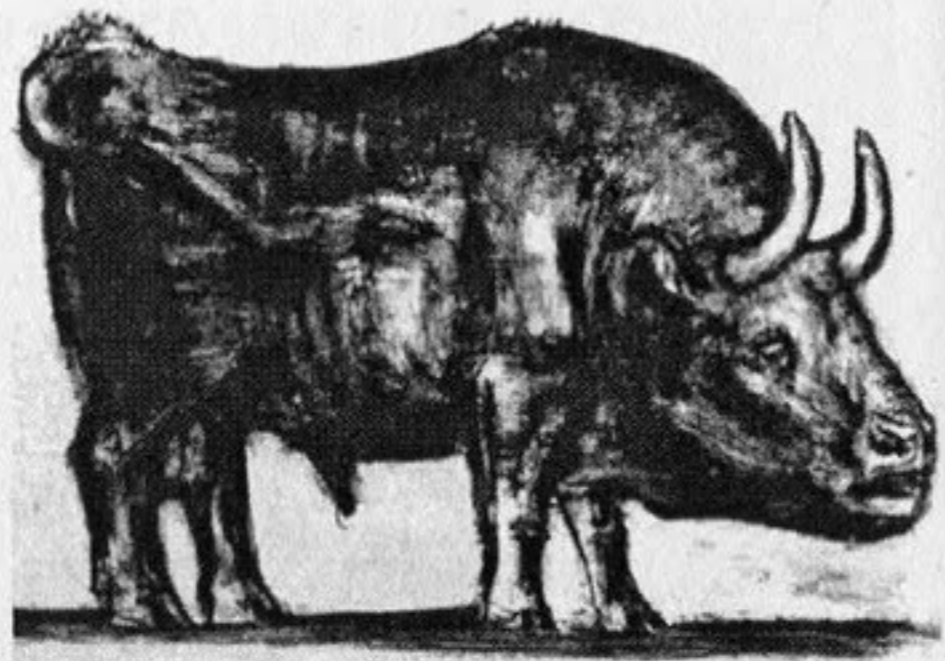
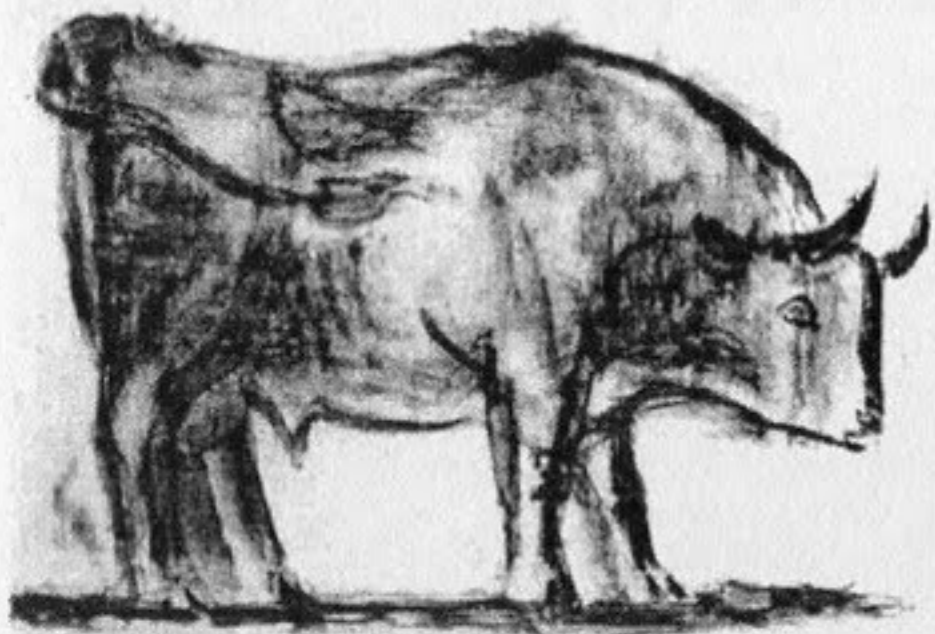




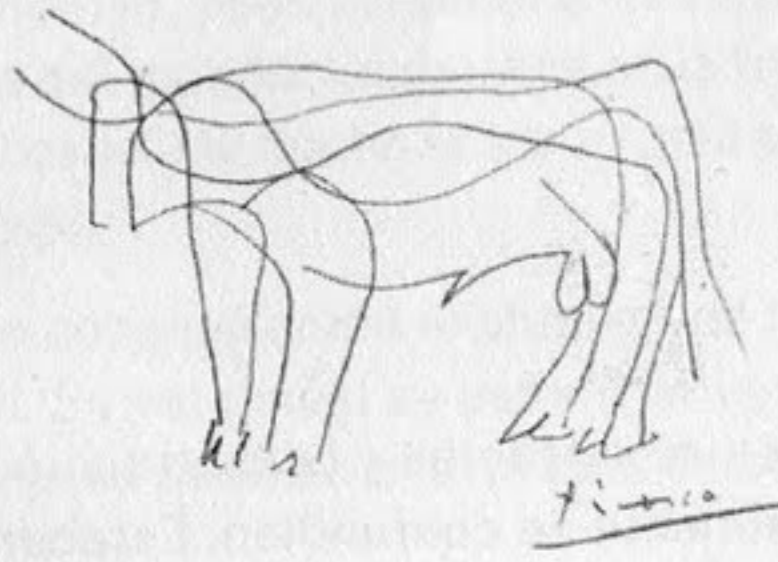




سید

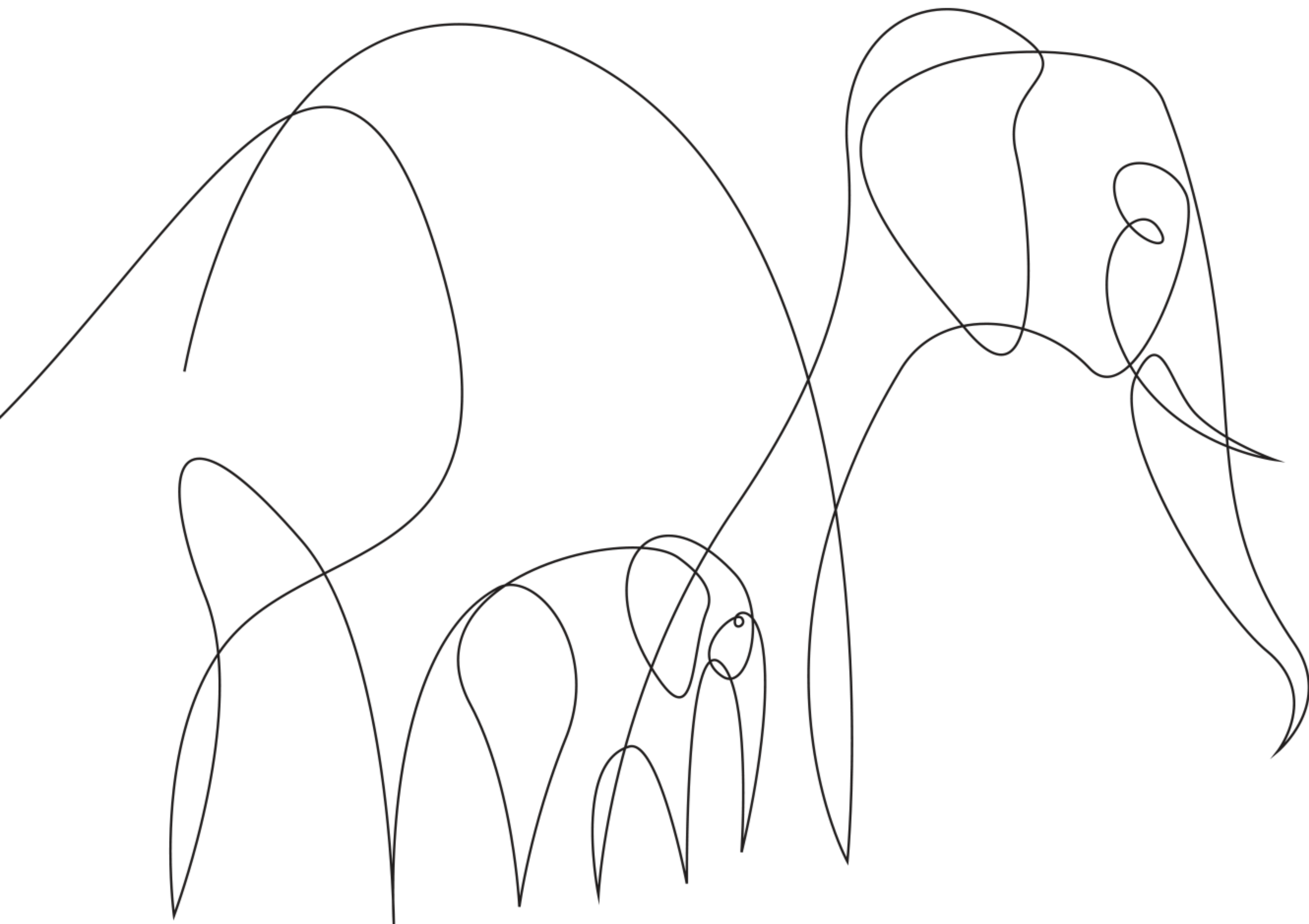


3584-





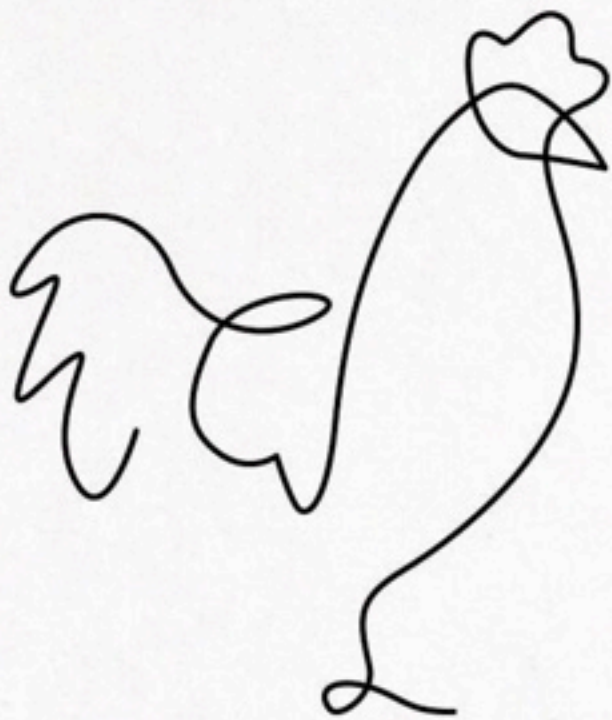


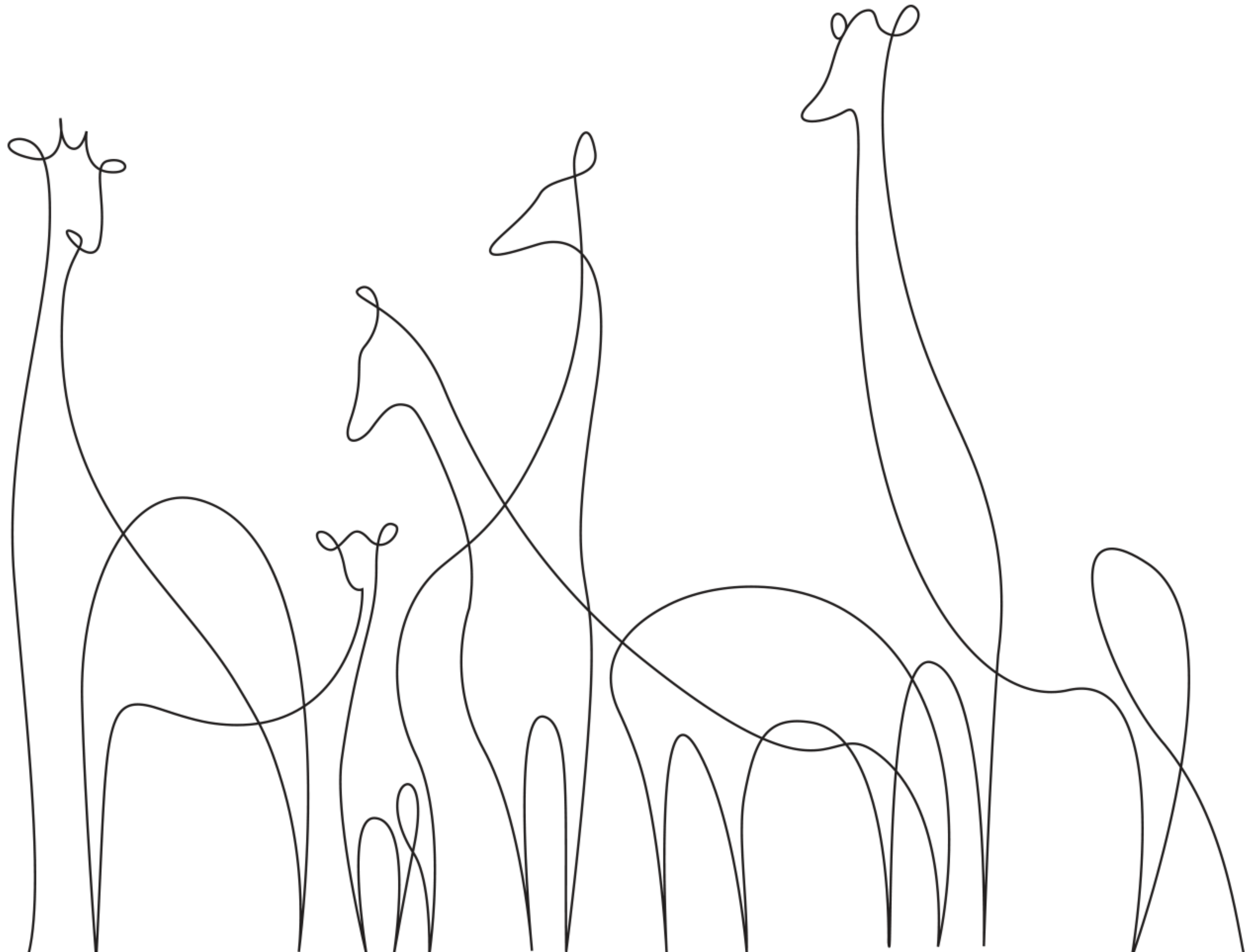


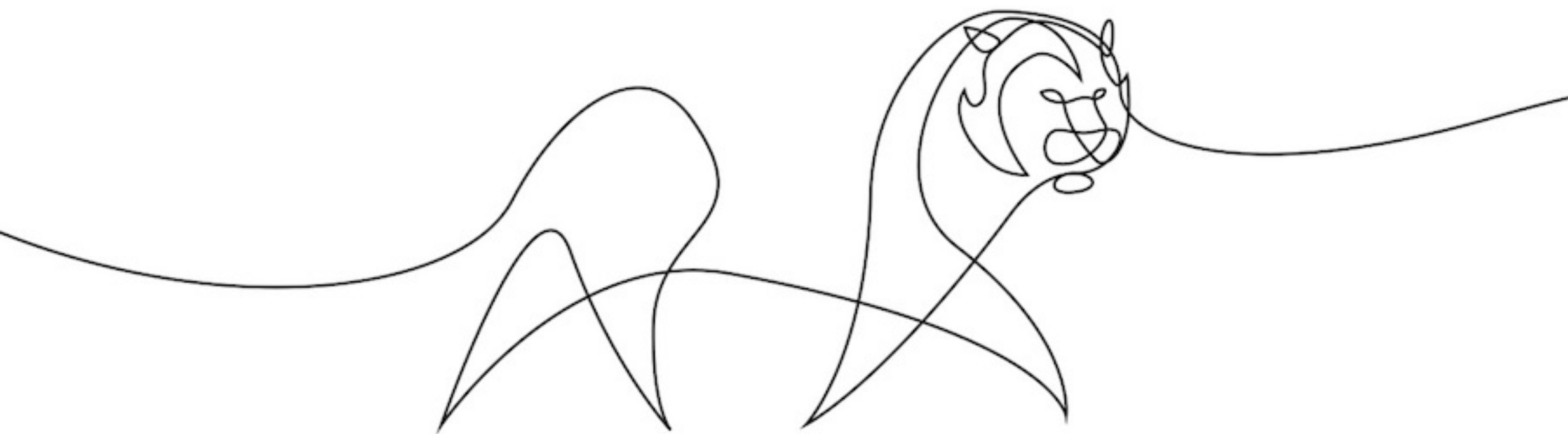


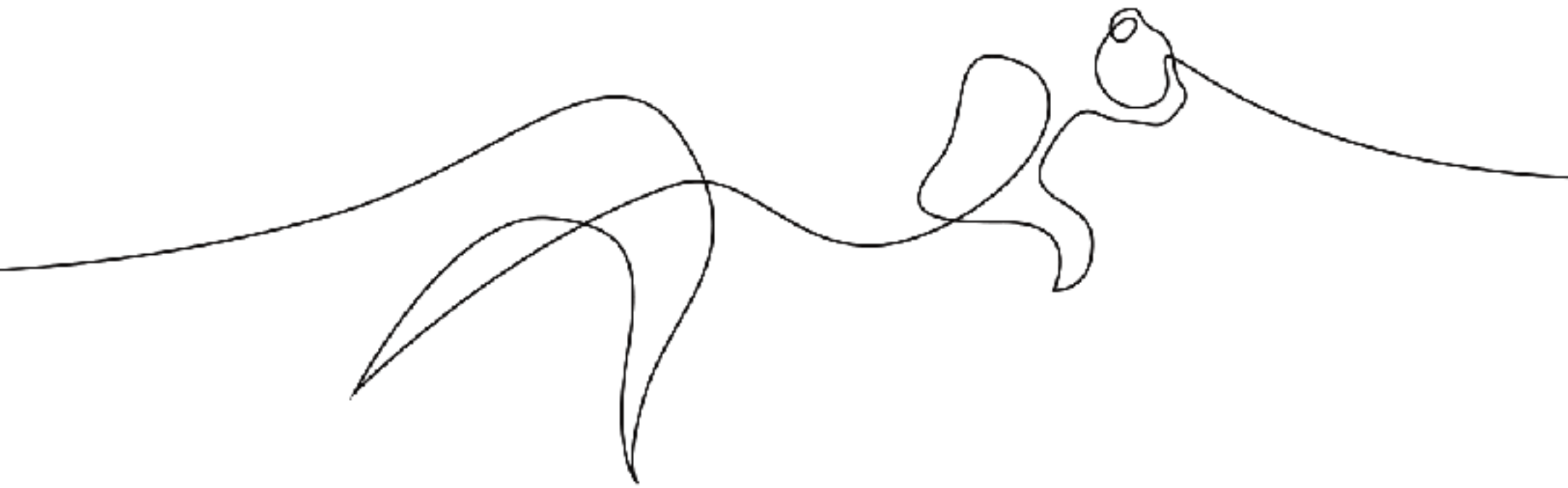










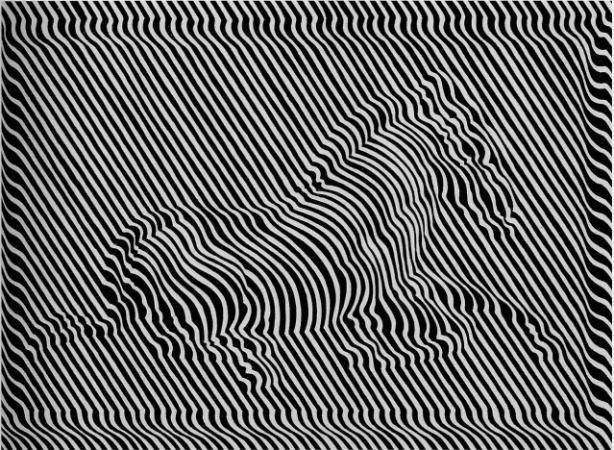








© 2004 by [unreadable]























NORHO.TAOBAO.COM

NORHO.TAOBAO.COM



NORHO.TAOBAO.COM

NORHO.TAOBAO.COM

NORHO.TAOBAO.COM

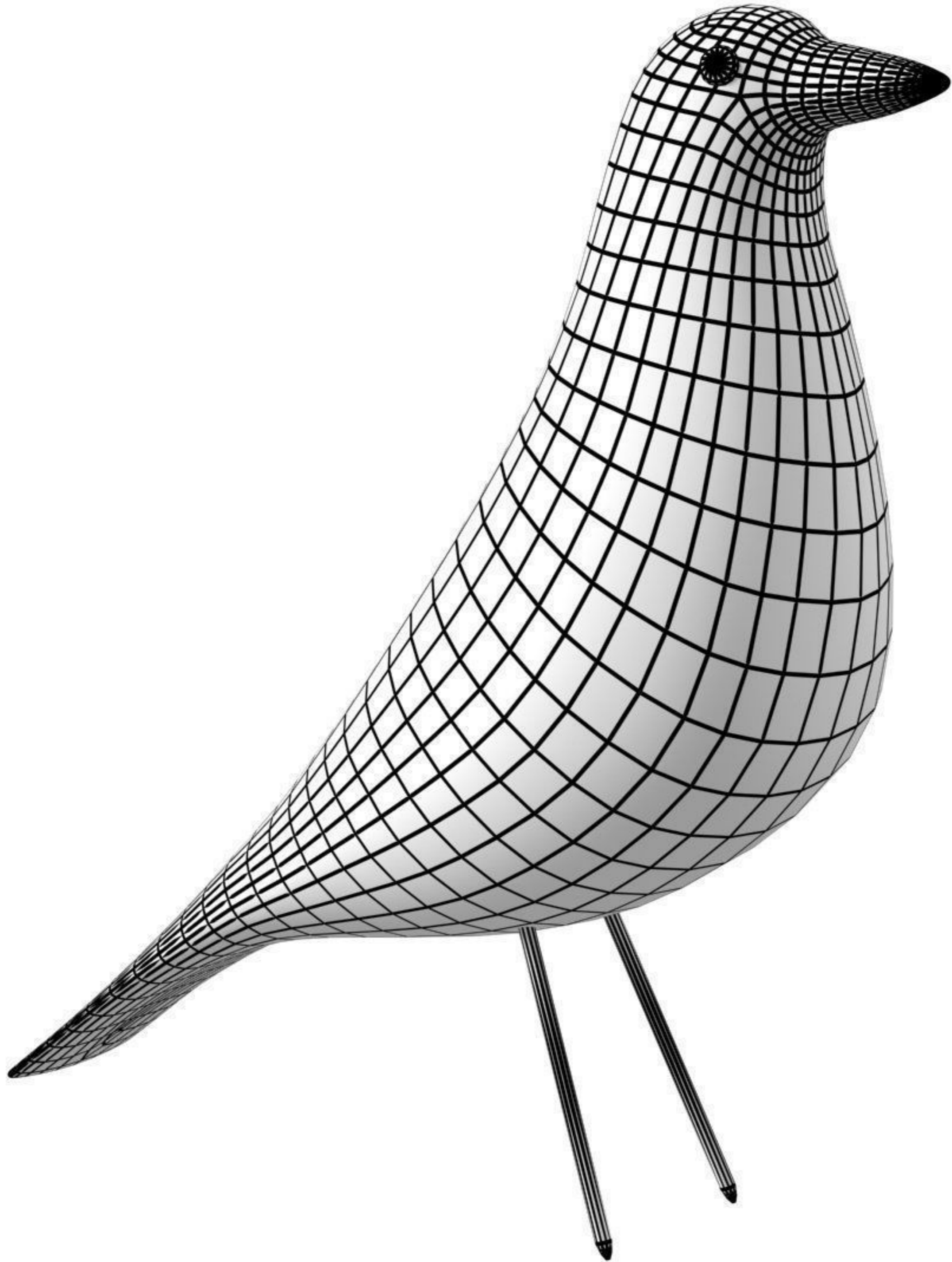
NORHO.TAOBAO.COM

NORHO.TAOBAO.COM

NORHO.TAOBAO.COM

NORHO.TAOBAO.COM

NORHO.TAOBAO.COM

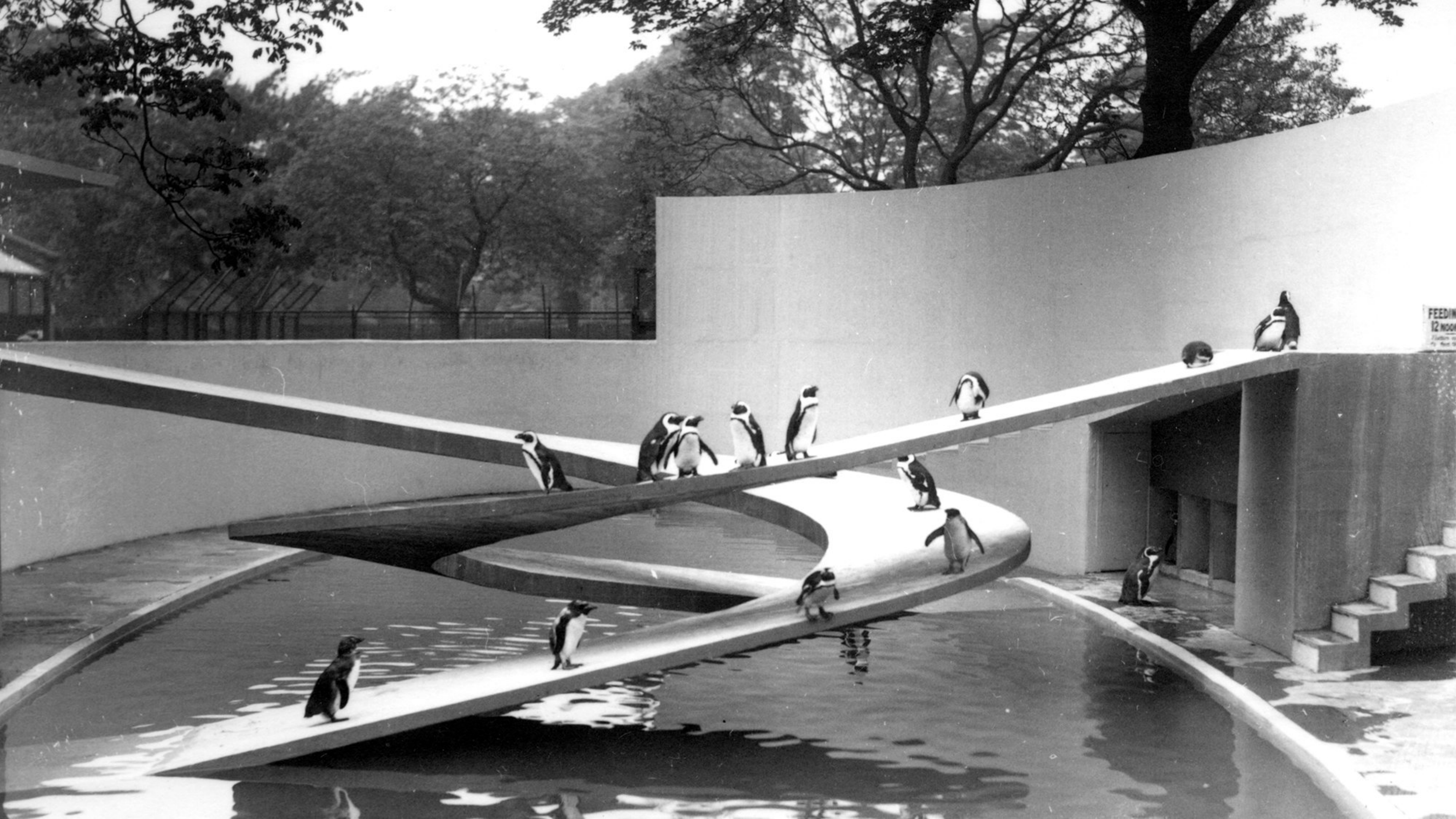


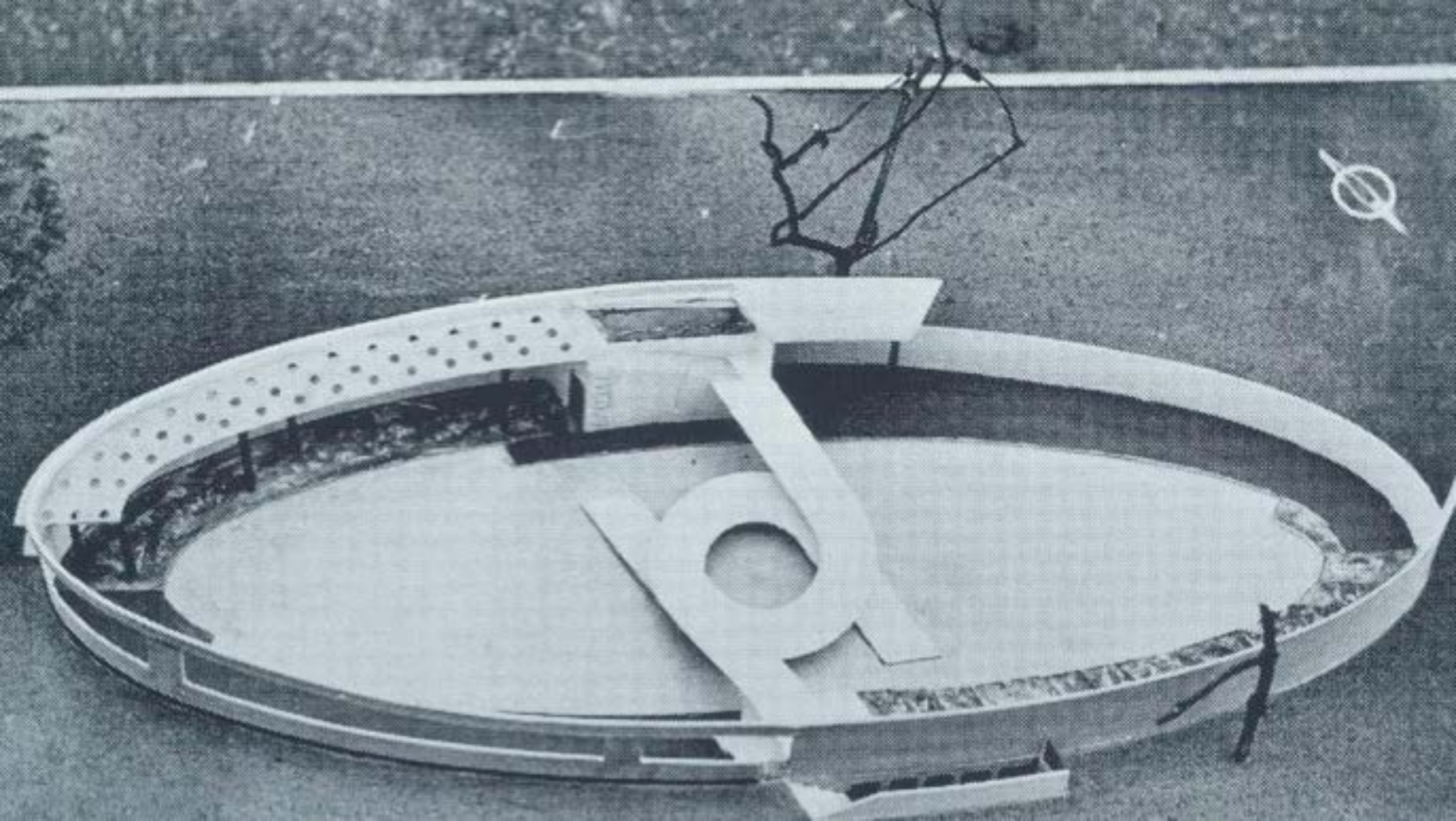
Eames House Bird





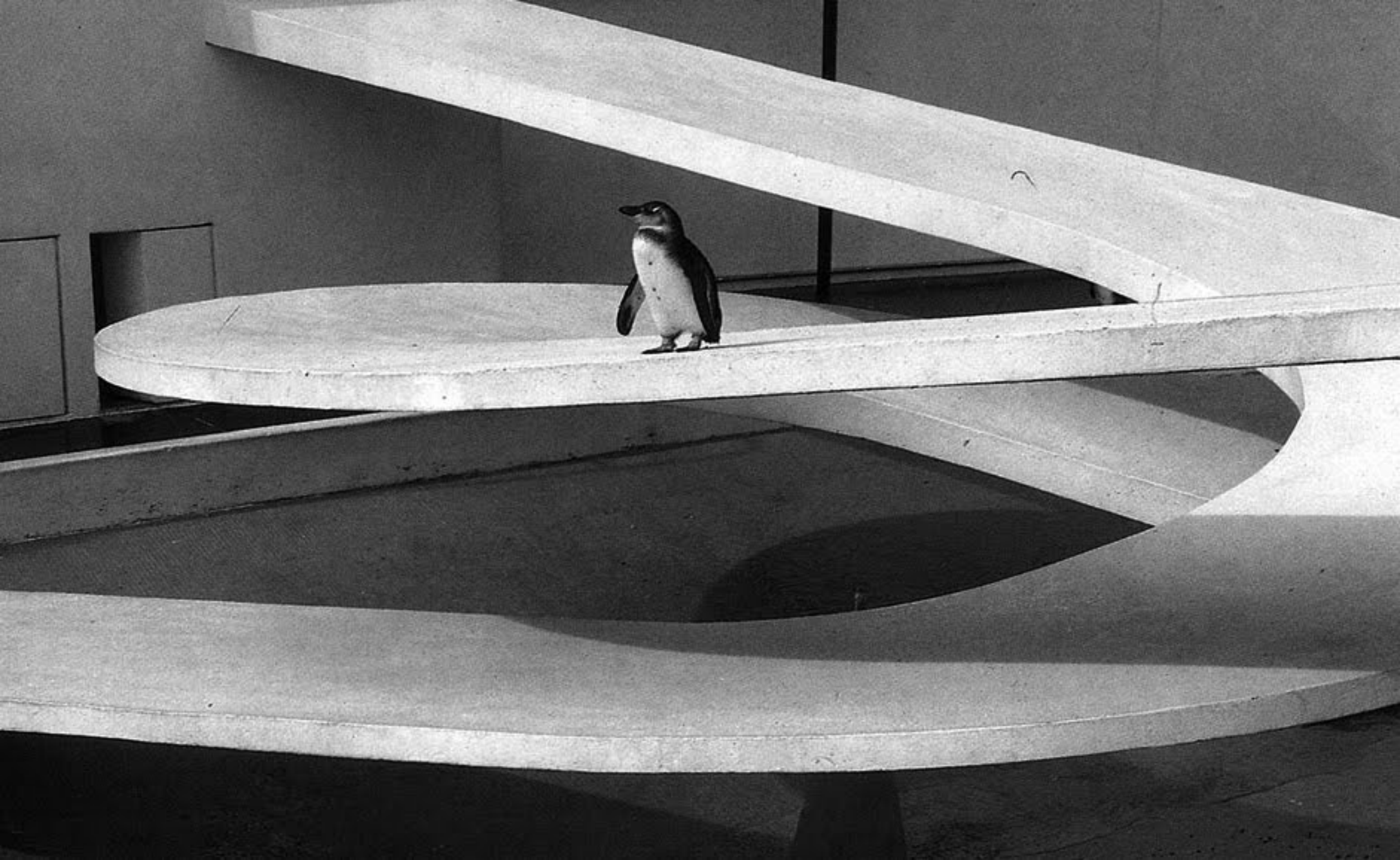






PENGUIN POOL



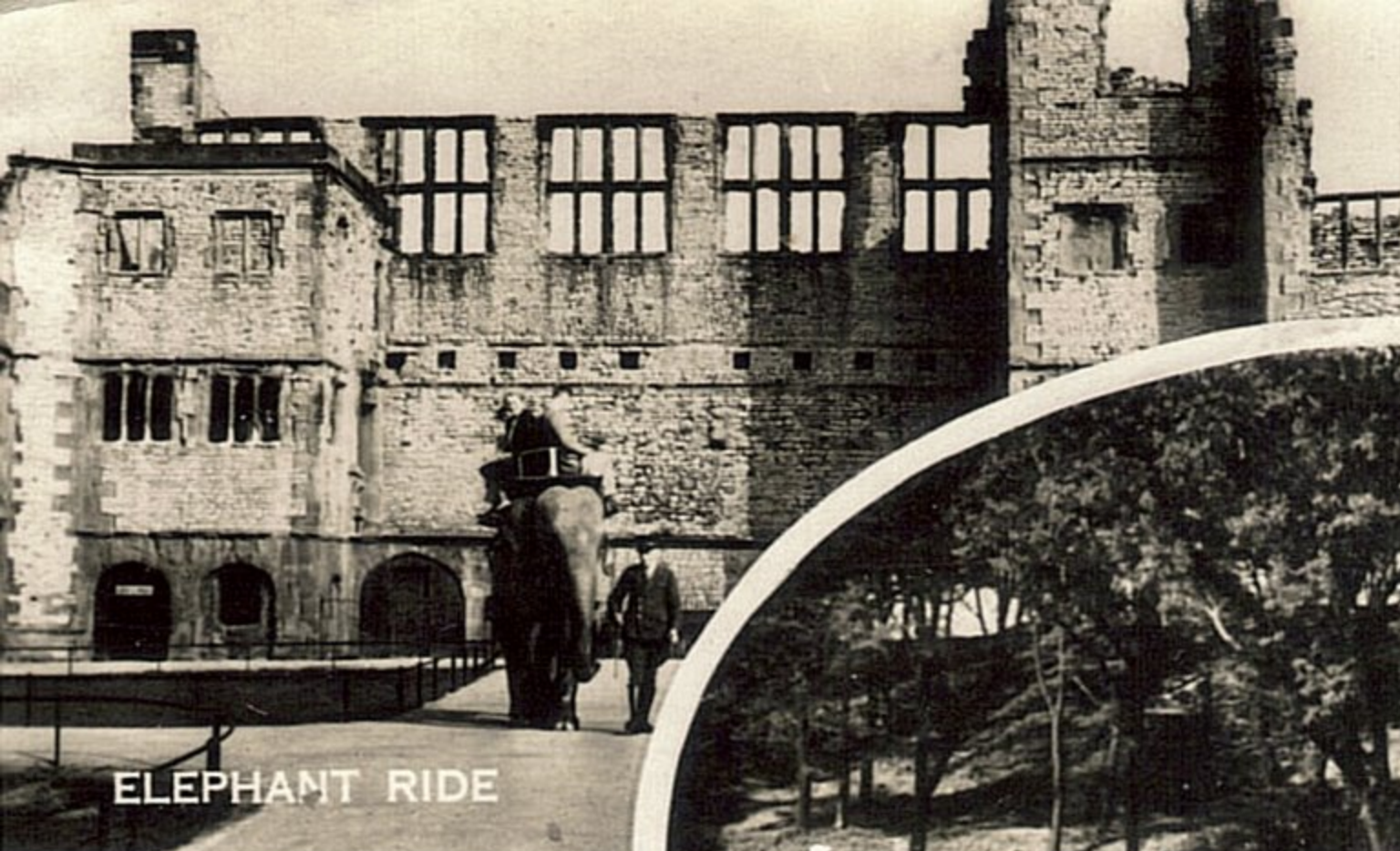




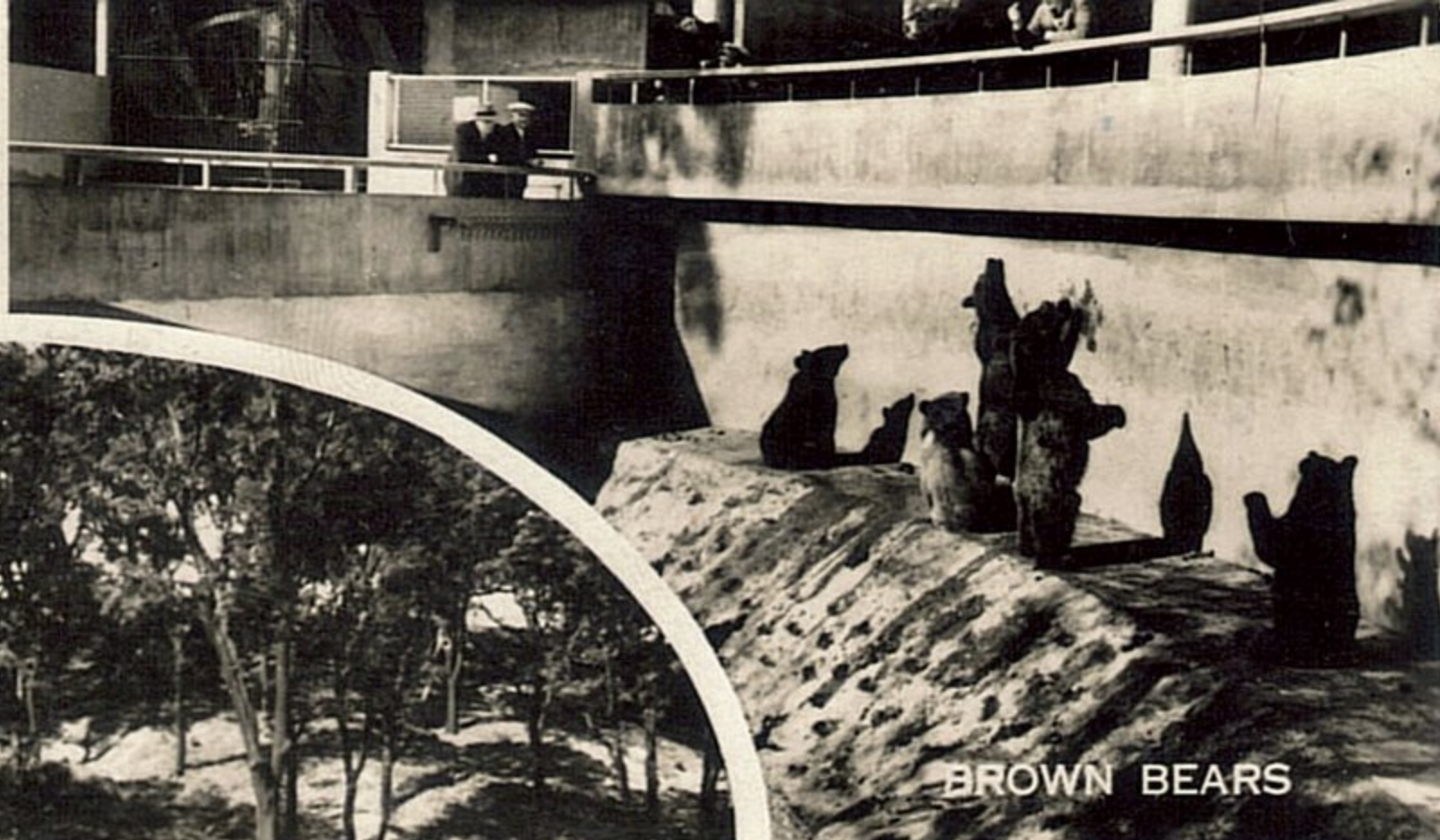


DUDLEY ZOO

An Ancient Castle... a Wooded Hillside
*The most Up to Date **ZOO** in the World*



ELEPHANT RIDE

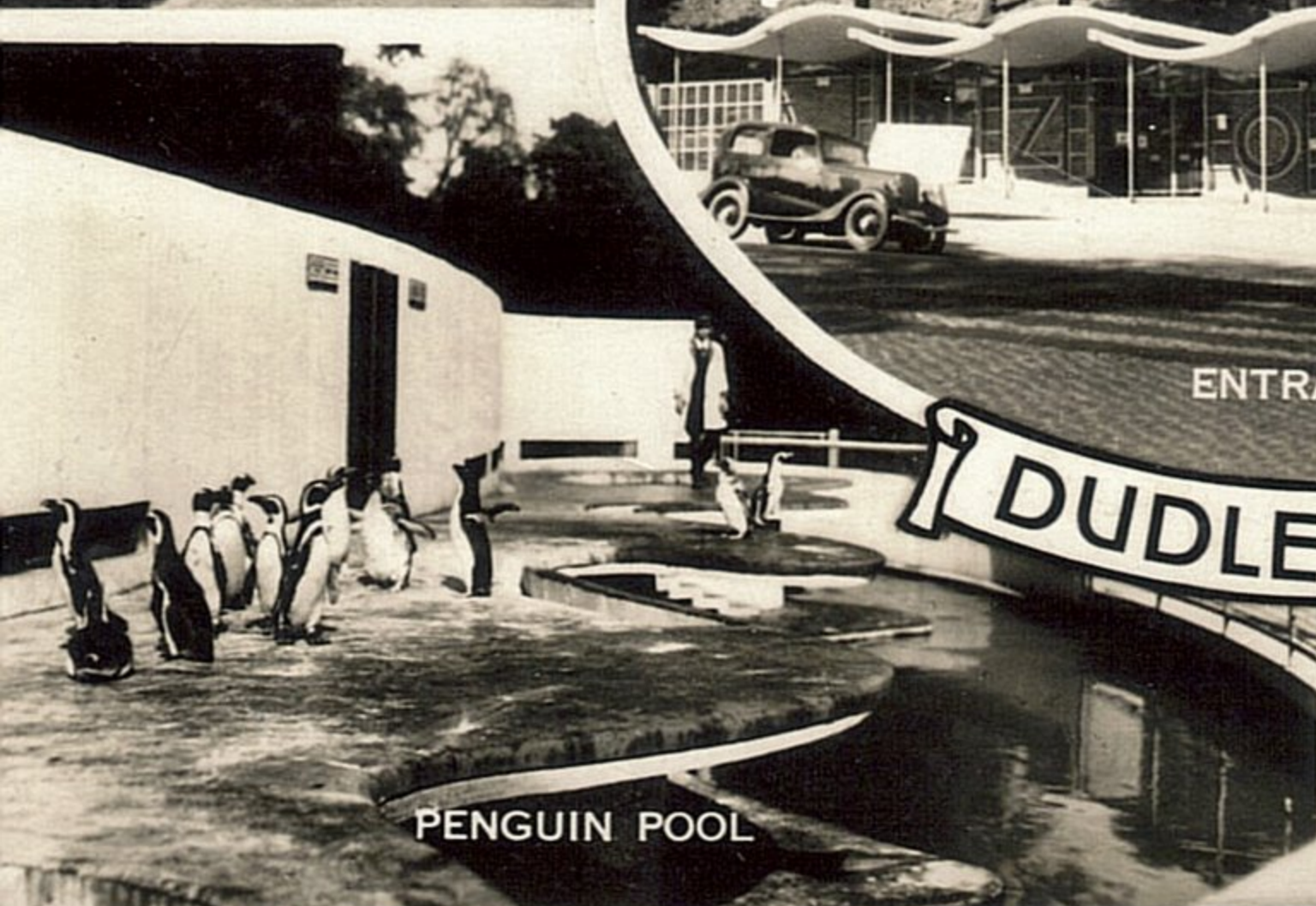


BROWN BEARS



ENTRANCE

DUDLEY ZOO

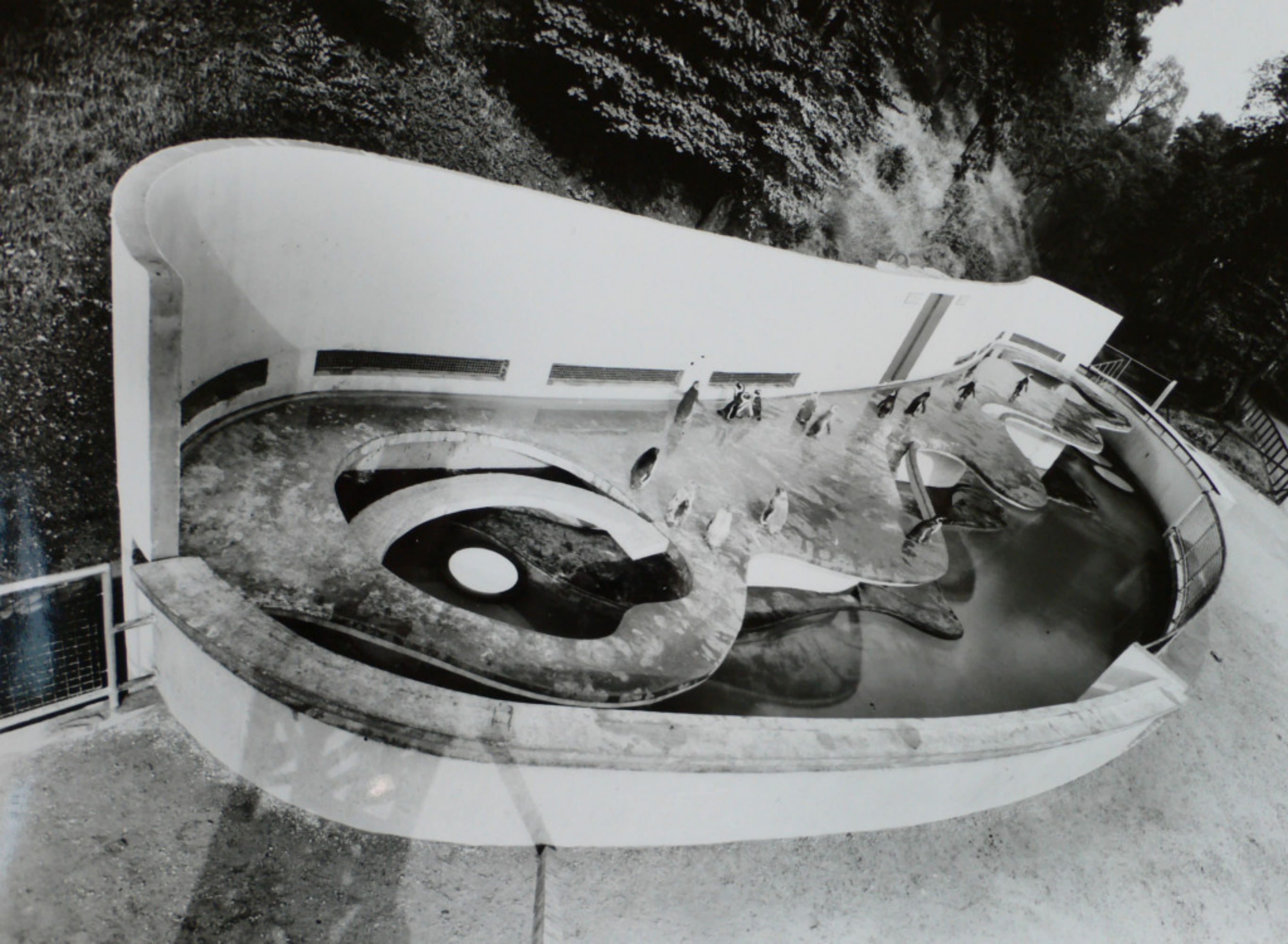


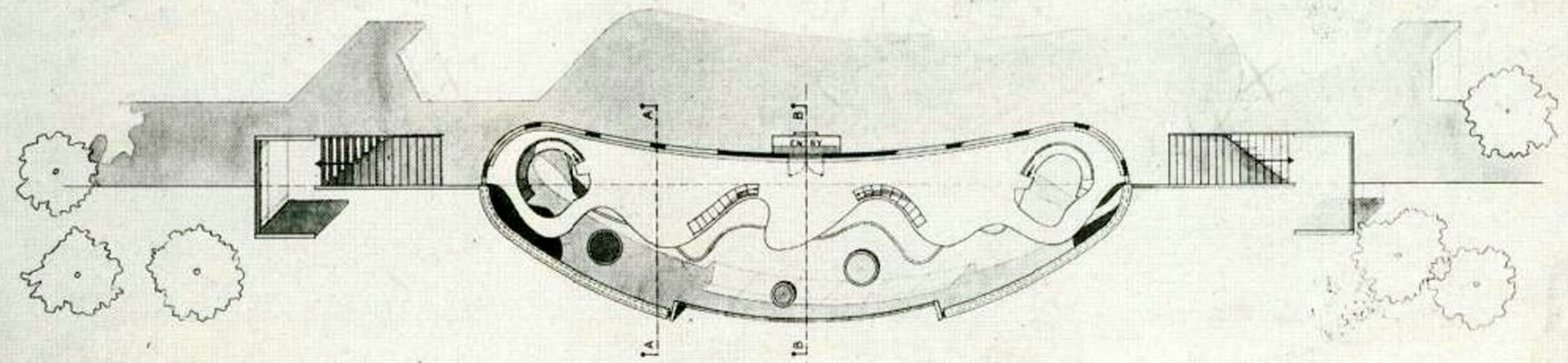
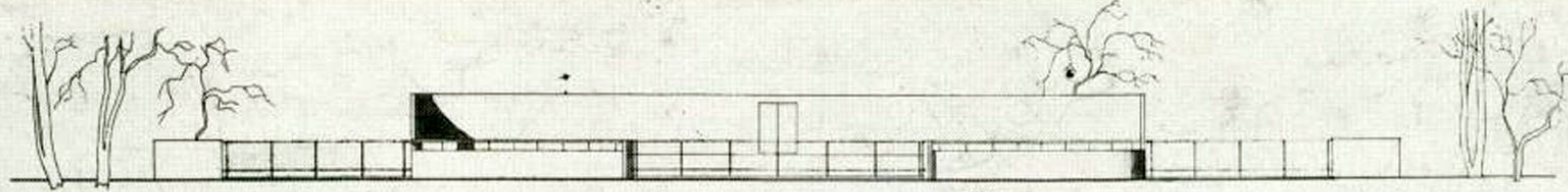
PENGUIN POOL



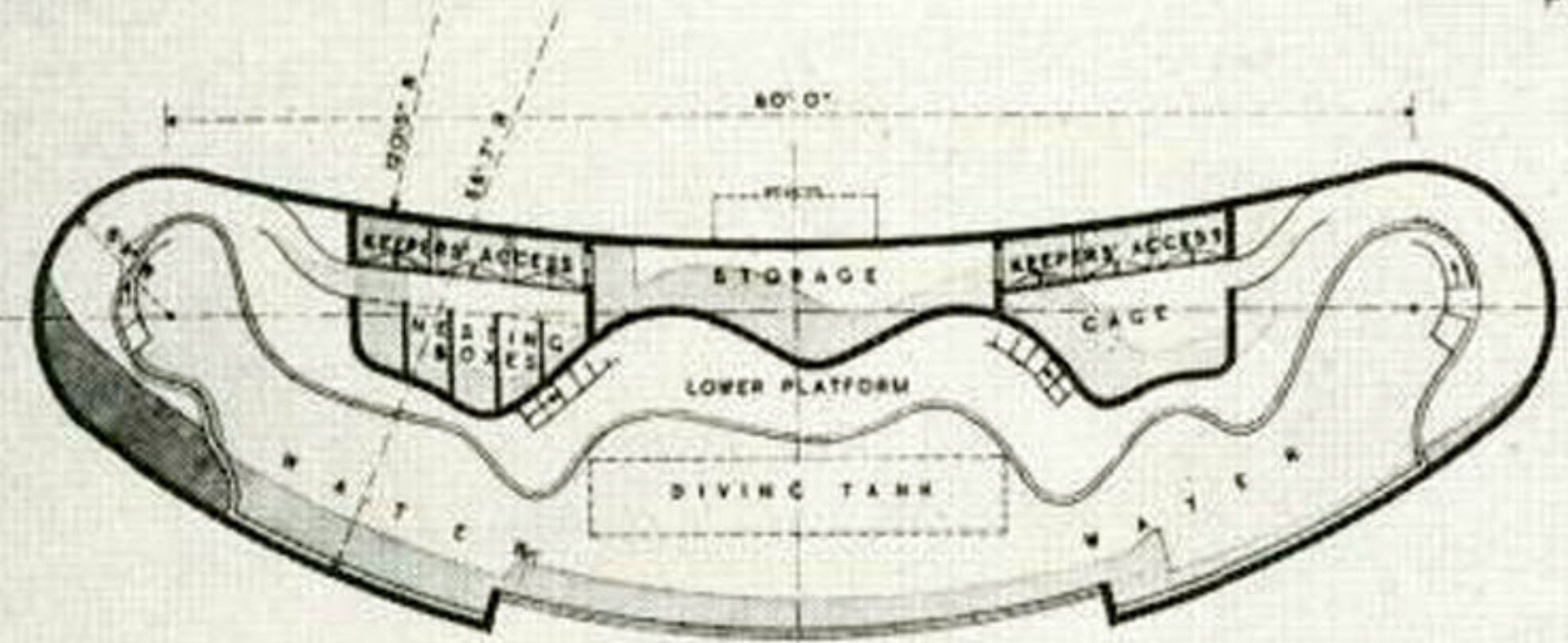
SHETLAND PONIES

L.1574

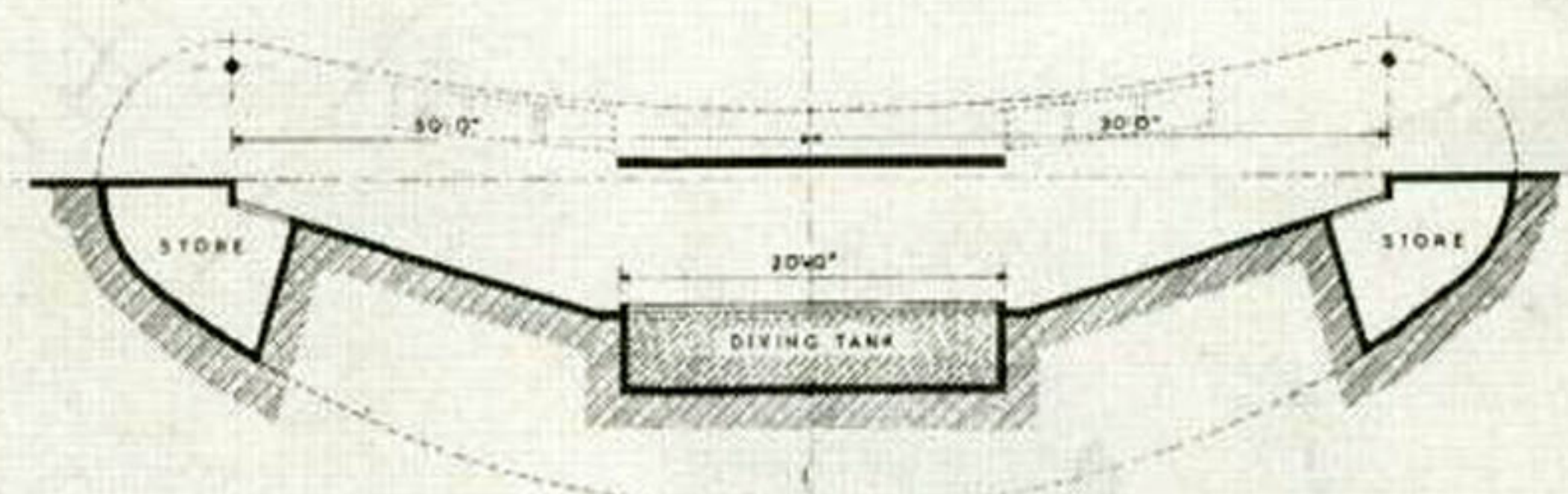




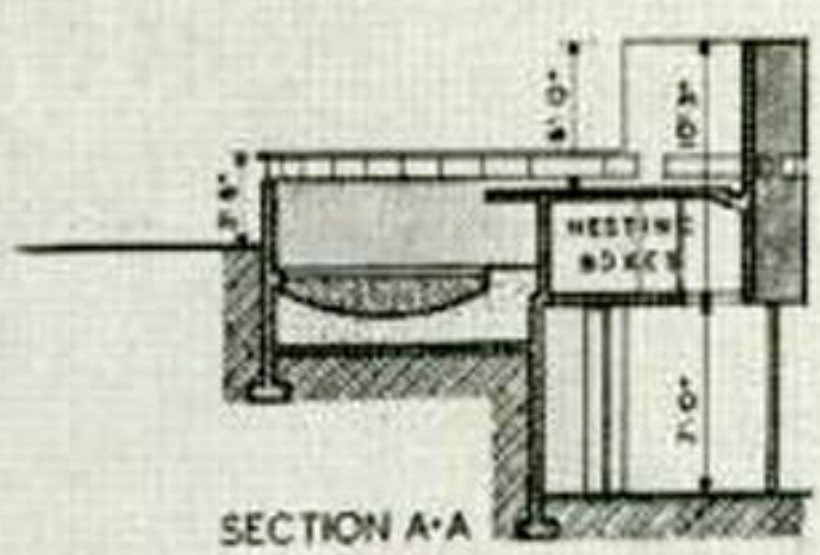
PLAN AT UPPER PLATFORM



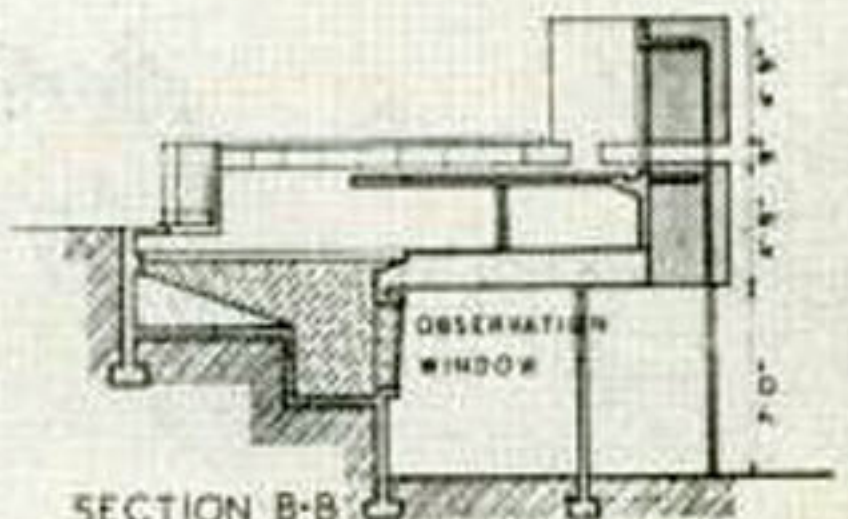
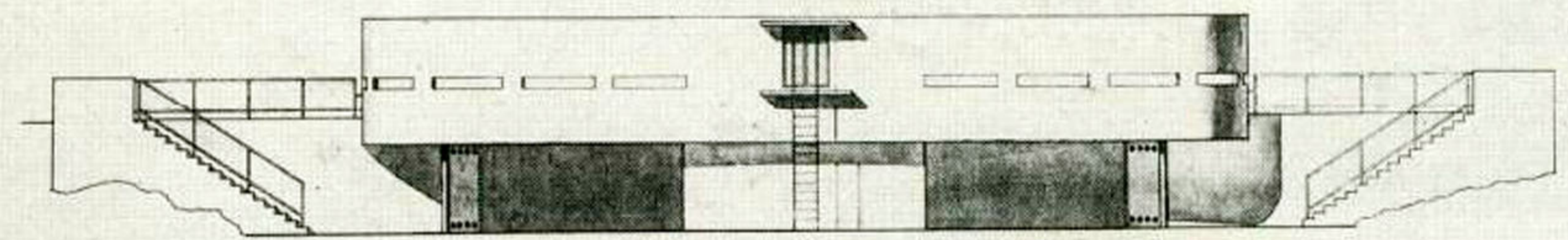
PLAN THROUGH NESTING BOXES



PLAN THROUGH OBSERVATION WINDOW

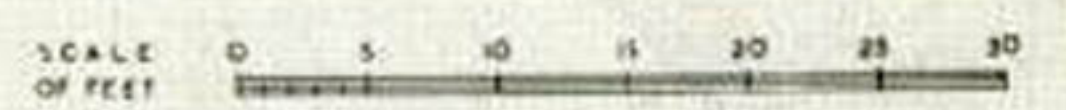


SECTION A-A



SECTION B-B

DUDLEY ZOO PENGUIN POOL

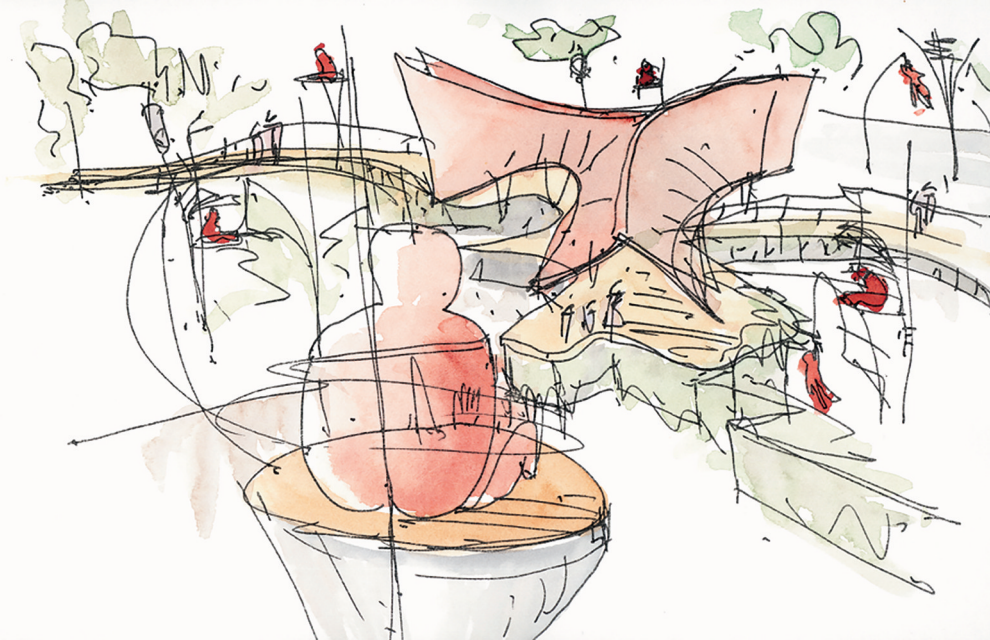




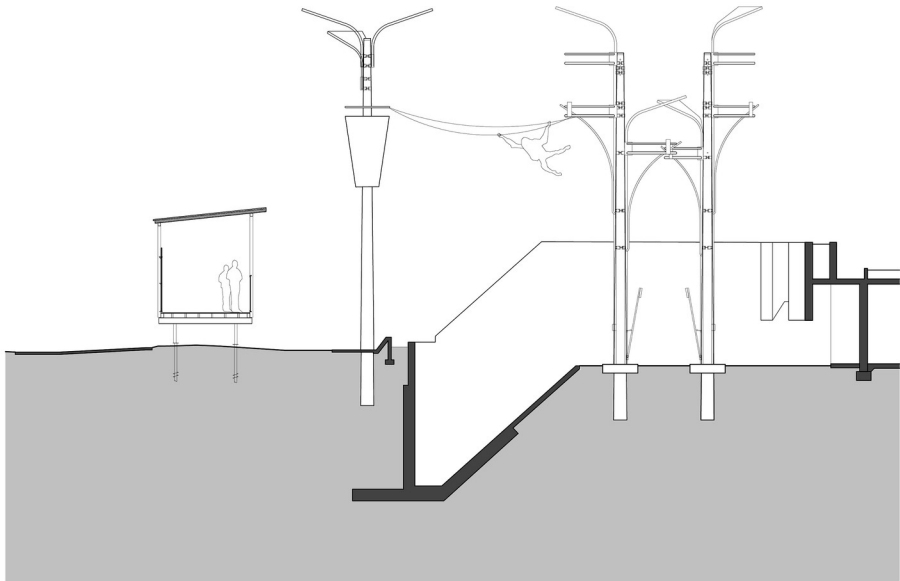














Adult Elephant viewing

KEY TO DRAWINGS

- Tree top walk ramp or bridge.
- High rain forest to 20m.
- Giant bamboo to 15m.
- Low level plants.
- Screening plants.
- Habitat floor.
- Habitat meat.
- Water feature.



African Village

Entry

Lesser Primates

Orang-utan exhibit

Plan

redale pedersen hook architects

Redale Pedersen Hook Architects, P.O. Box 1000, PO Box 440, Copenhagen, DK-2200

New enclosure 1

New enclosure 2

Roof-top Viewing

Orang-utan tree nest

Orang-utan exhibition

Orang-utan exhibition

Orang-utan exhibition

Orang-utan exhibition

Orang-utan tree nest

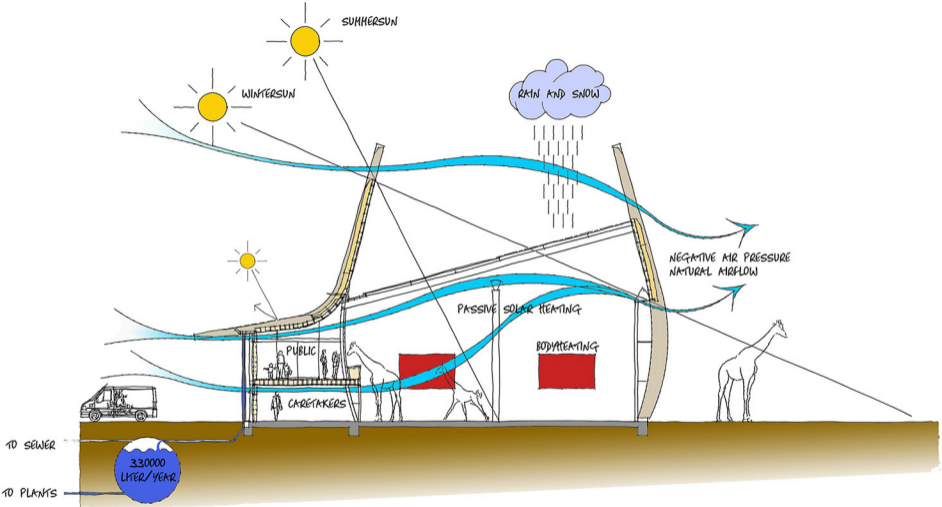
Orang-utan tree nest

Orang-utan exhibition

Orang-utan tree nest

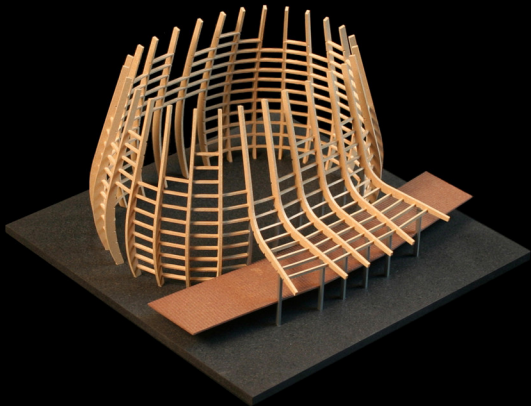
Nocturnal House



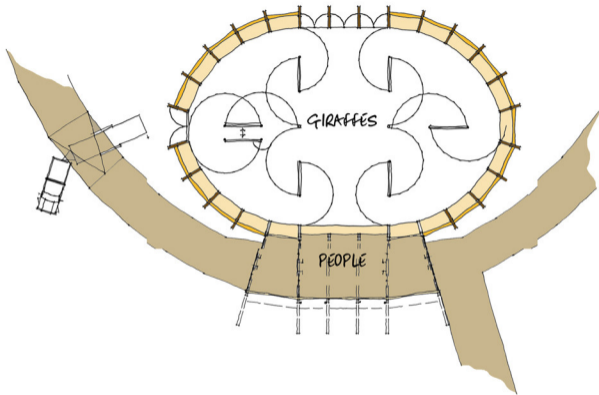


SECTION GIRAFFEHOUSE ROTTERDAM ZOO



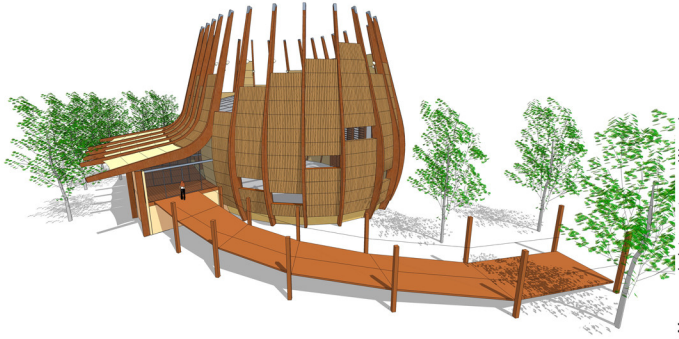


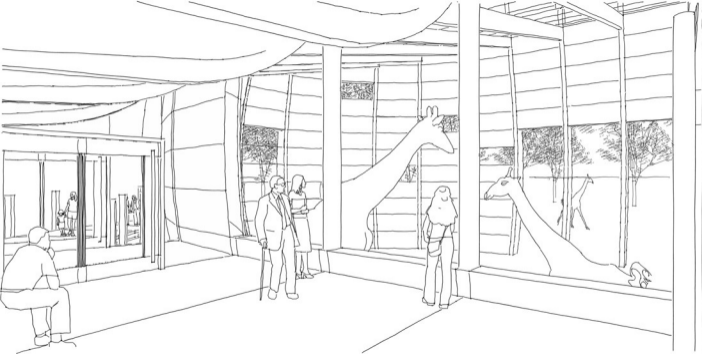




0 5 10 15 20 25 METER

FLOORPLAN GIRAFFEHOUSE

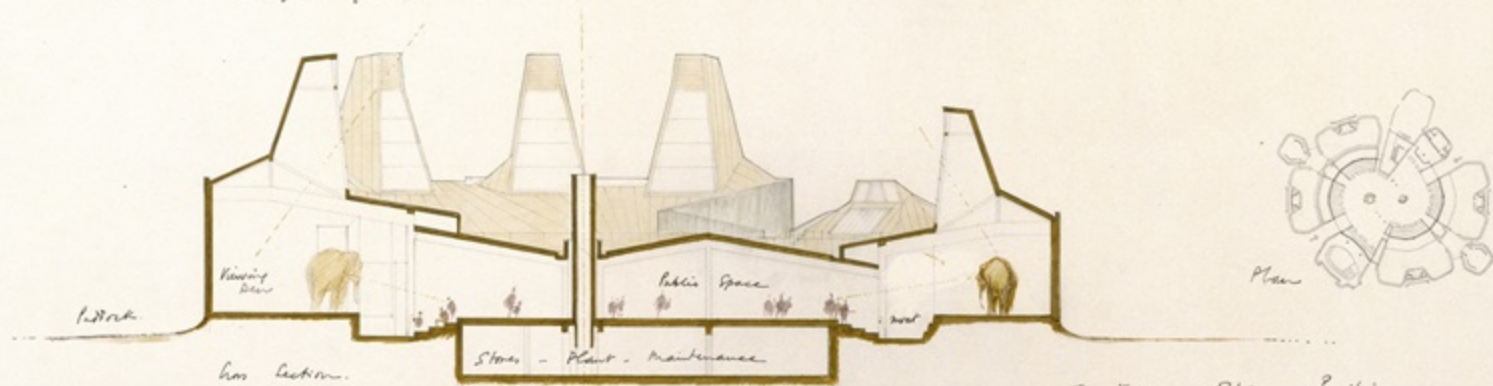








Elevation & Zoological Gardens -

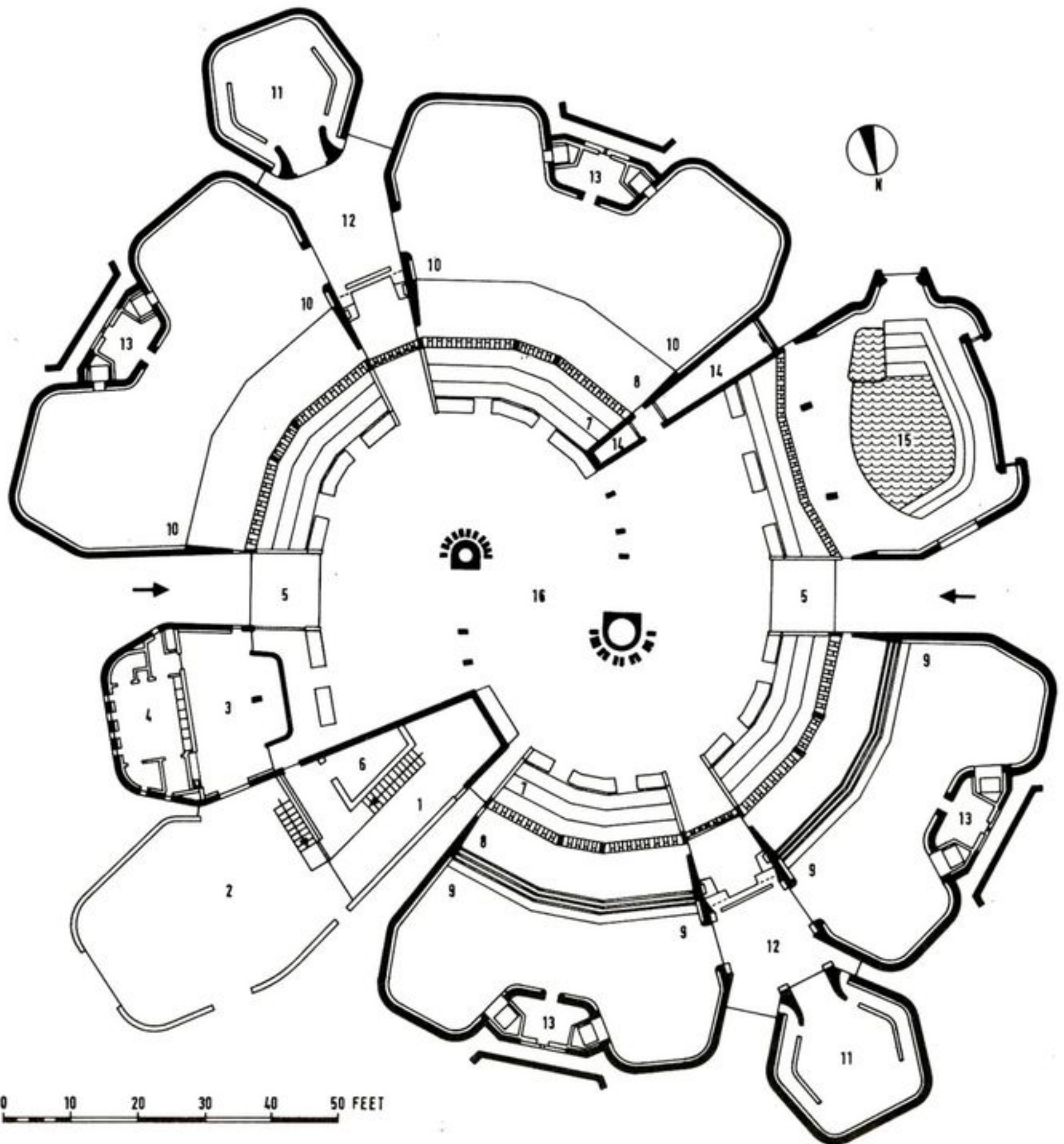


Long Section.

Scale 1/8" = 7 feet.

The Elephant & Rhinoceros Pavilion -
 designed for the Zoological Society, Regent's Park,
 by Cassin Under & Partners 1889-1899.
 Drawn by Herbert Connor R.A. -



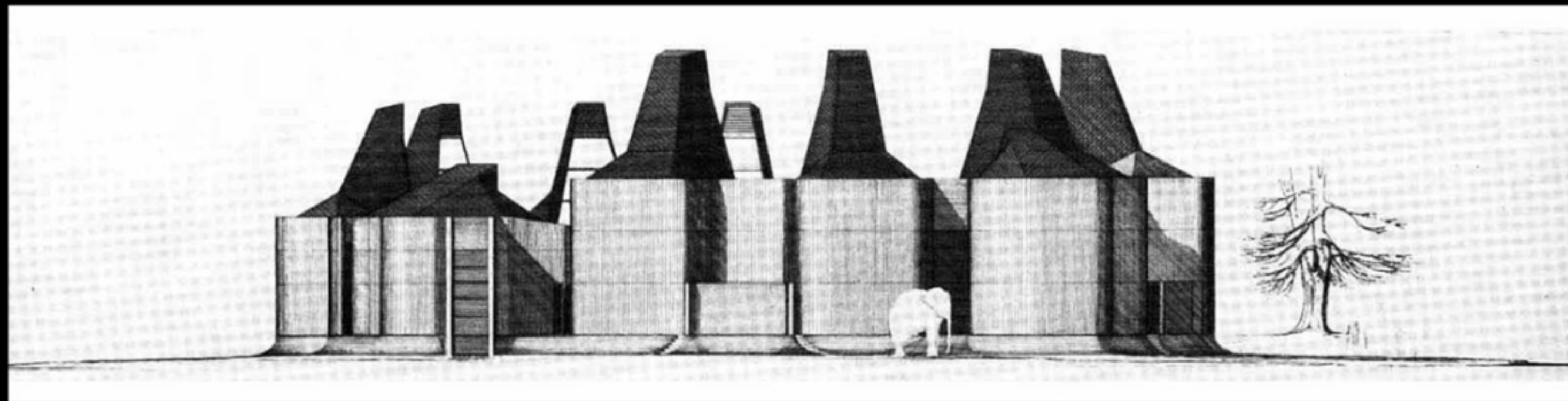
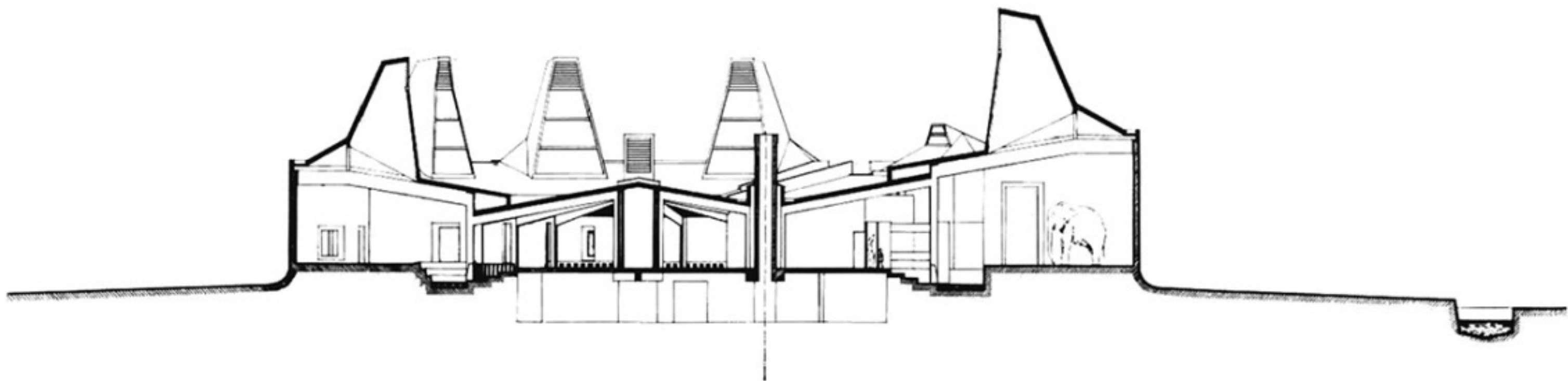


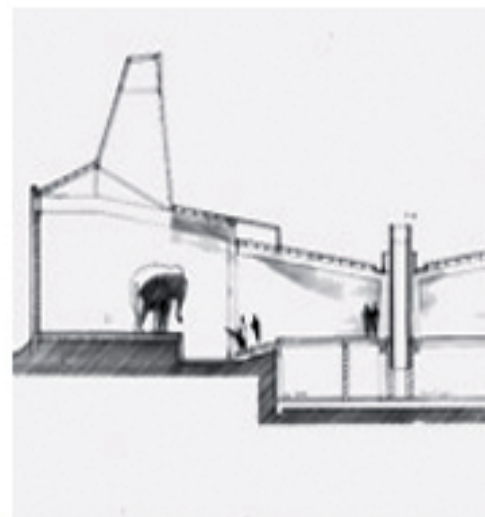
- 1 RAMP FROM SERVICE YARD
- 2 SERVICE YARD
- 3 MESS ROOM
- 4 STAFF LAVATORIES

- 5 PUBLIC ENTRANCE
- 6 STORE
- 7 OBSERVATION TIERS
- 8 ANIMAL DITCHES

- 9 RHIND DENS
- 10 ELEPHANT DENS
- 11 SICK BAYS
- 12 DEN LOBBIES

- 13 DRINKING TROUGH AREAS
- 14 MAIN RISING DUCTS
- 15 ELEPHANT POOL
- 16 PUBLIC SPACE



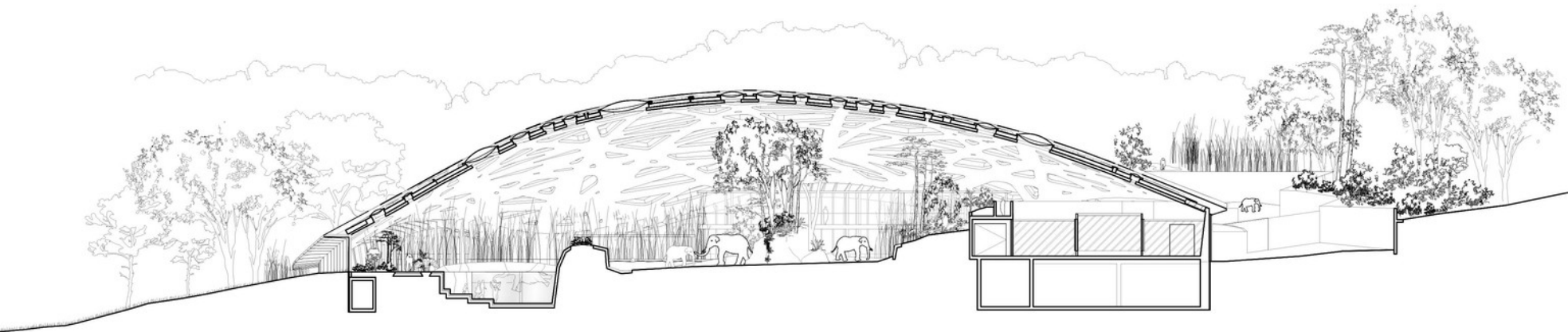




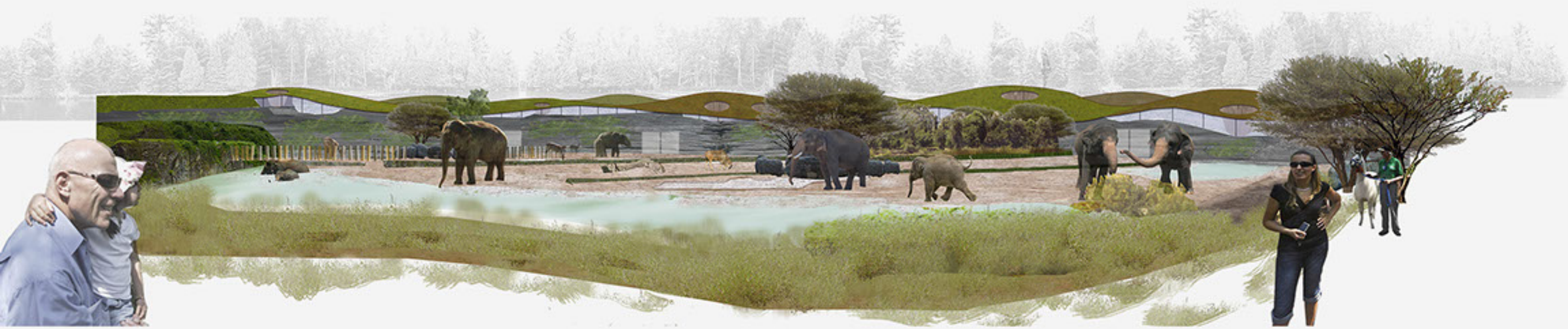




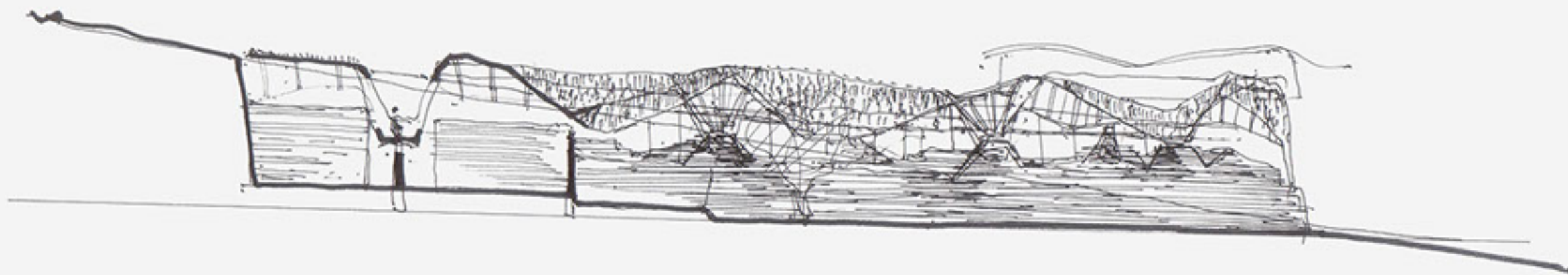
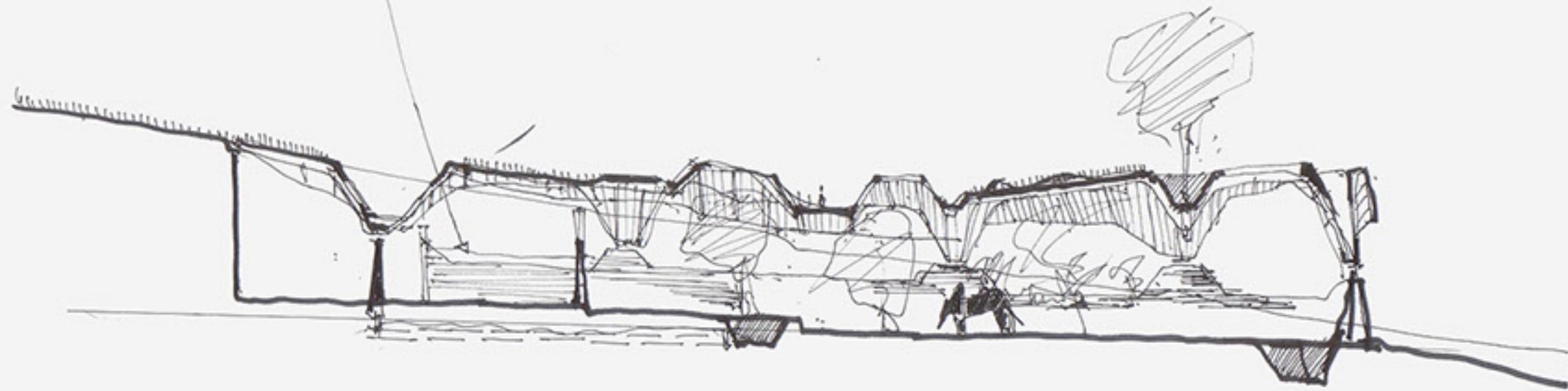
















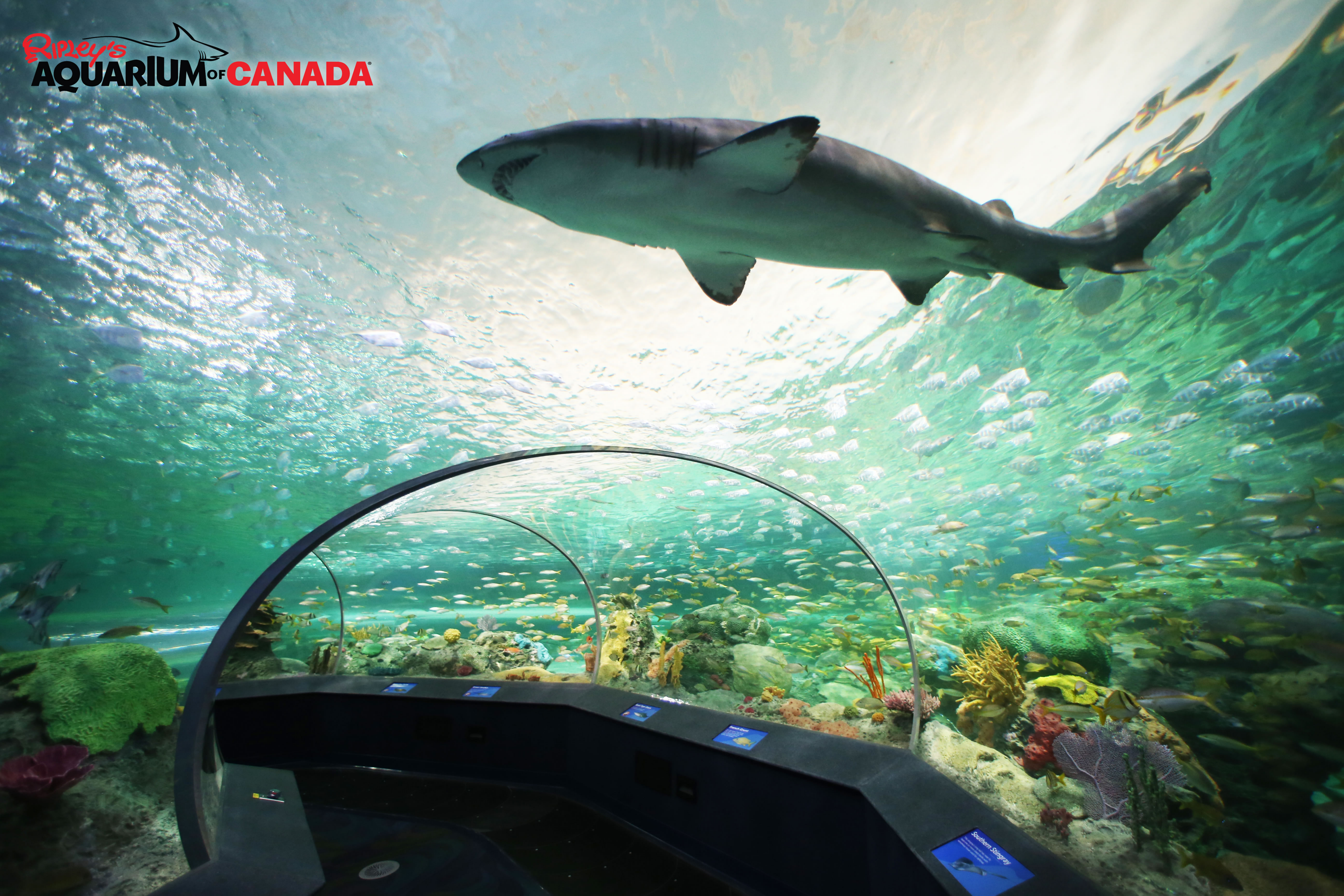










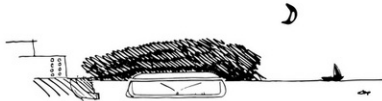




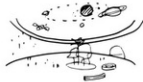




NIGHT TIME THE SHELL IS CLOSED



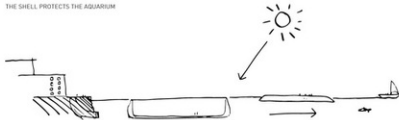
THE SHELL PROTECTS THE AQUARIUM



THE ATRIUM BECOMES A PLANETARIUM



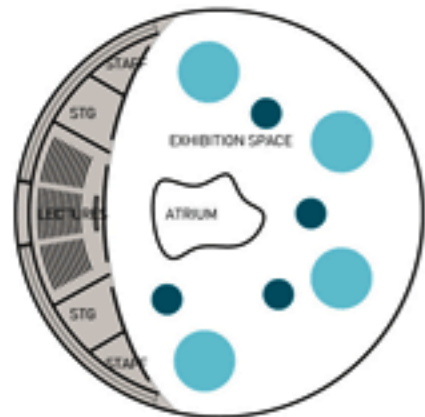
DAY TIME THE SHELL IS OPEN



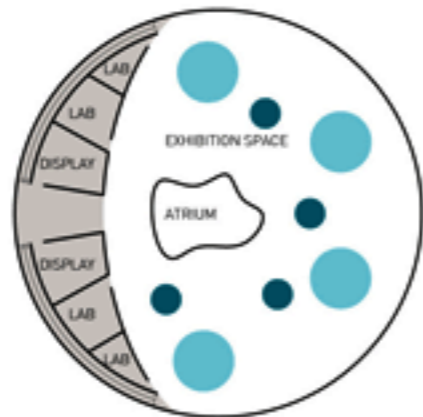
THE SHELL REVEALS THE AQUARIUM AND BECOMES AN ISLAND



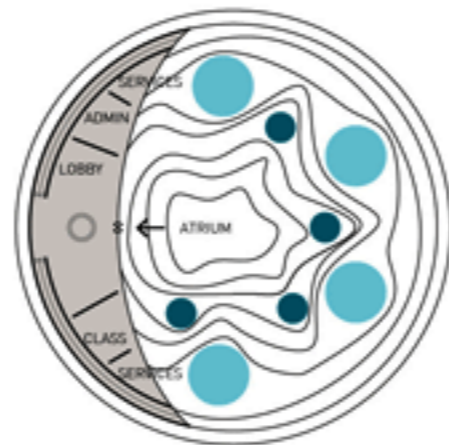
THE ATRIUM BECOMES A COURTYARD OPEN TO THE SKY



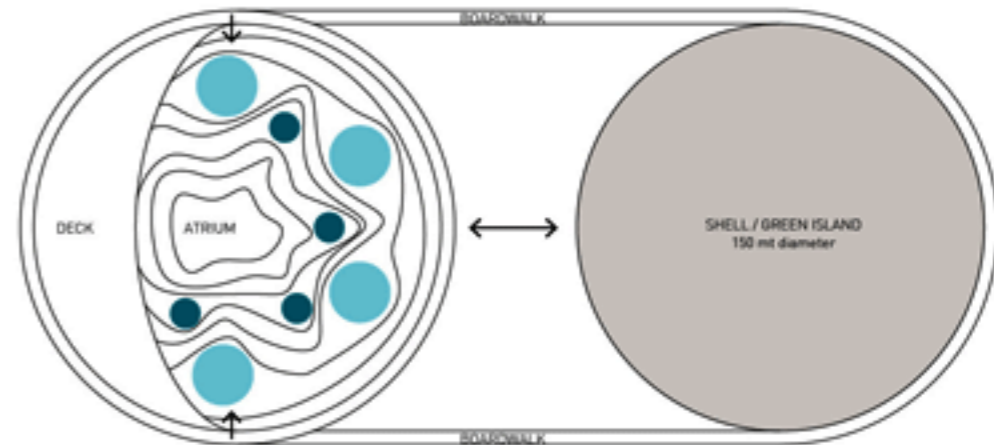
LEVEL -2 / WATER



LEVEL -1 / ENVIRONMENT

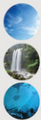


LEVEL 0 / AIR

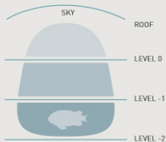


ROOF LEVEL / SKY

0 meters 75



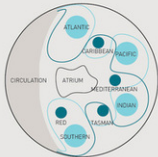
THE 3 ELEMENTS OVERLAPPED IN THE BIOME DOME



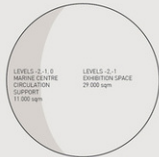
THE BIOME DOME ACROSS THE LEVELS



THE EXHIBITION SCHEME



CIRCULATION SCHEME



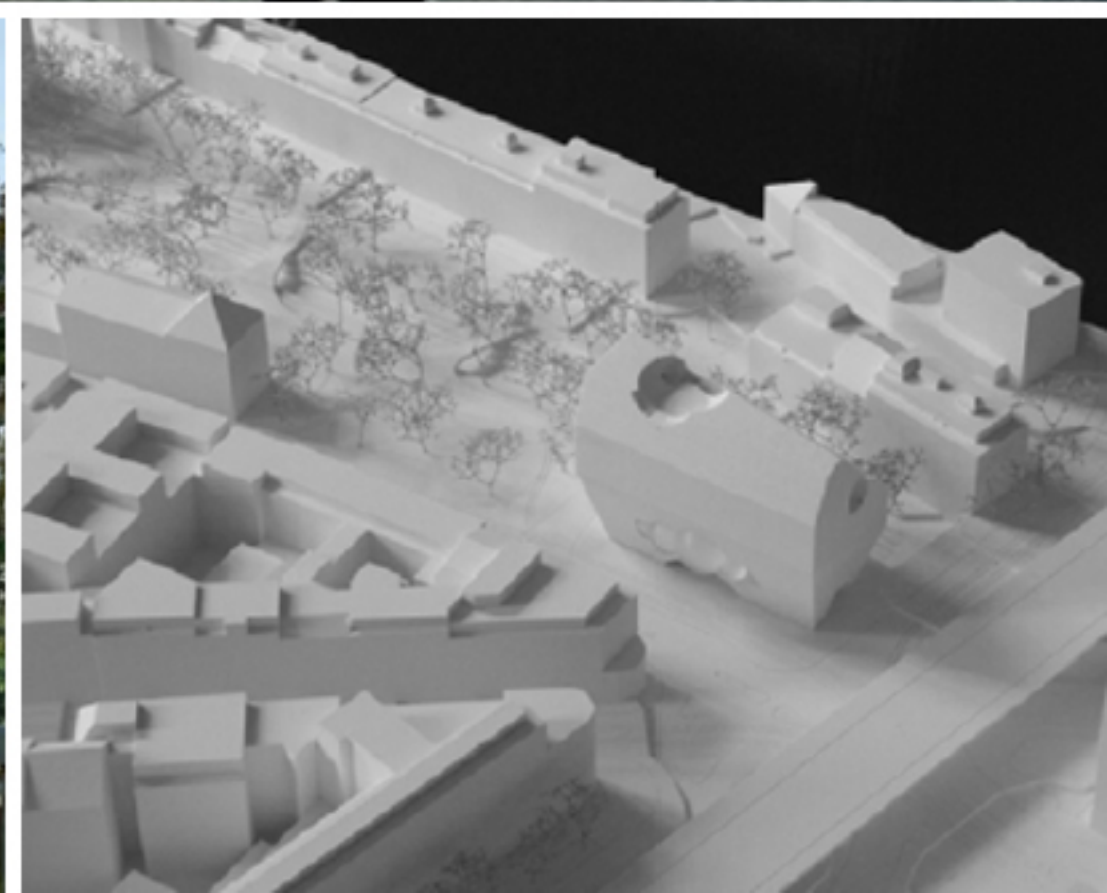
PROJECT AREA = 40.000 sqm

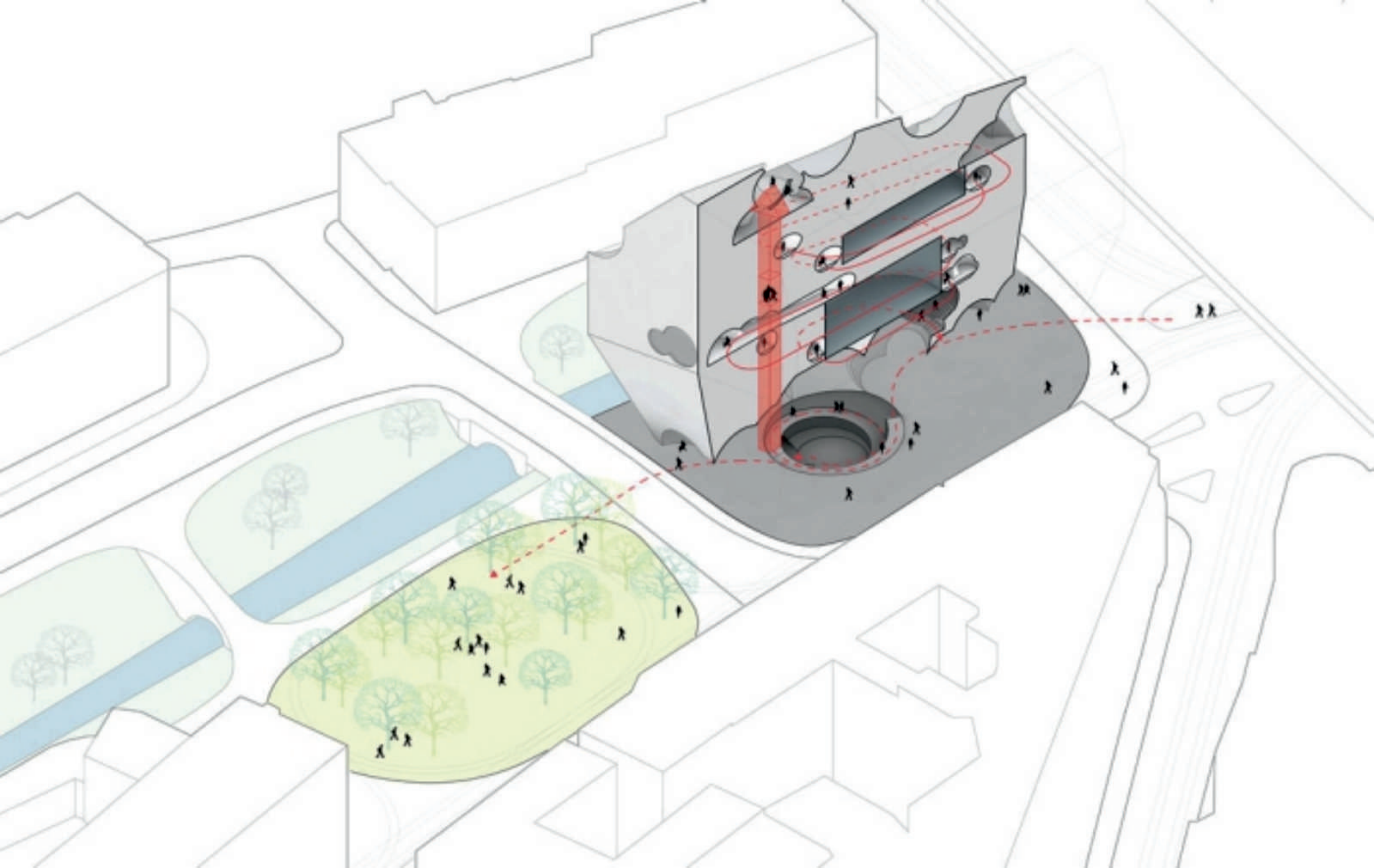




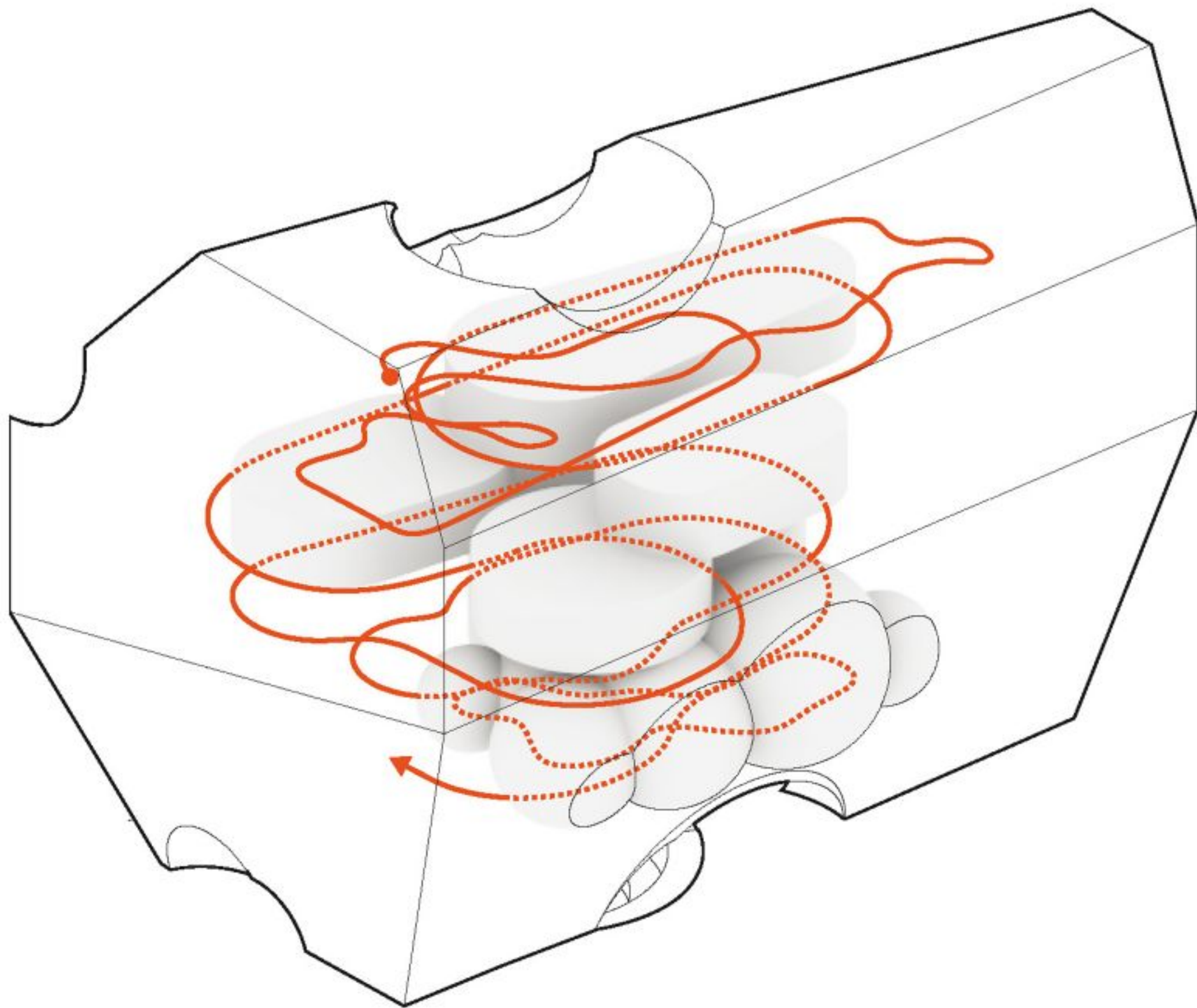


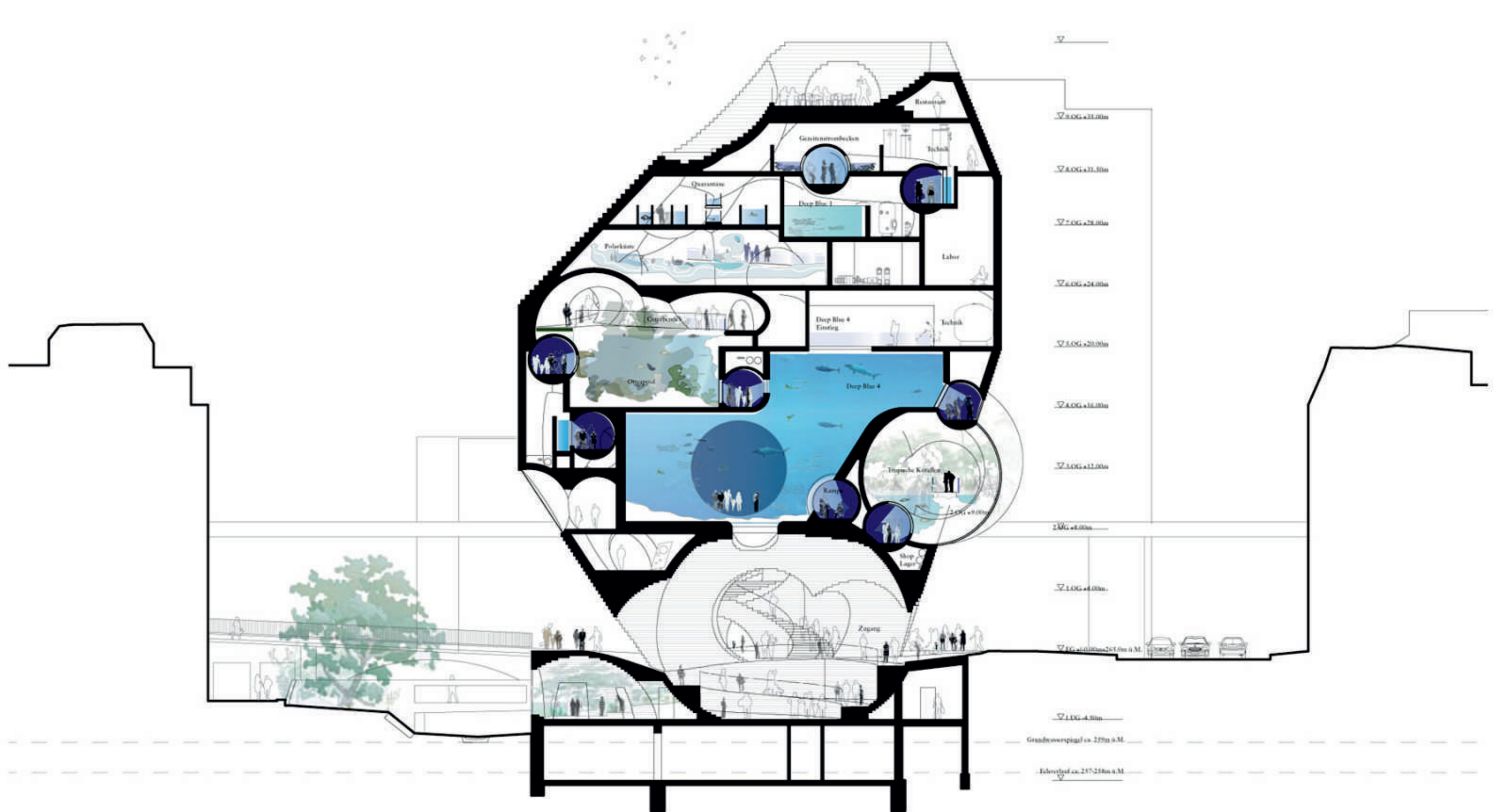












▽

▽ 3.OG +31.00m

▽ 2.OG +31.50m

▽ 1.OG +29.00m

▽ 0.OG +24.00m

▽ 1.OG +20.00m

▽ 4.OG +16.00m

▽ 3.OG +12.00m

1.OG +8.00m

▽ 1.OG +4.00m

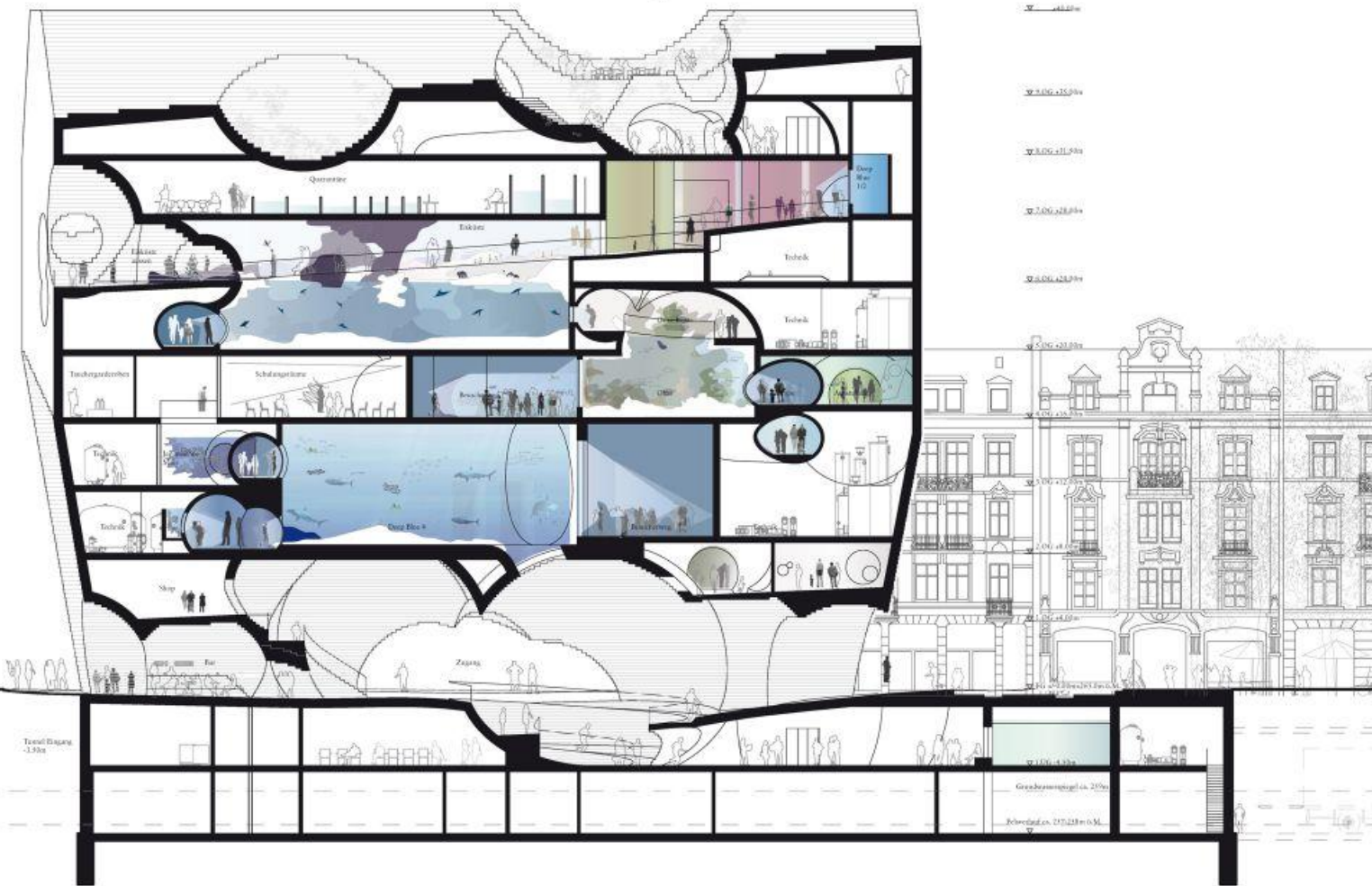
▽ 0.OG +0.00m ± 0.00 a.M.

▽ 1.OG -4.50m

Grundwasserpiegel ca. 239m a.M.

Erdbevel ca. 257-258m a.M.

▽



W. 1.00 +1.00

W. 2.00 +2.00

W. 3.00 +3.00

W. 4.00 +4.00

W. 5.00 +5.00

W. 6.00 +6.00

W. 7.00 +7.00

W. 8.00 +8.00

W. 9.00 +9.00

W. 10.00 +10.00

W. 11.00 +11.00

W. 12.00 +12.00

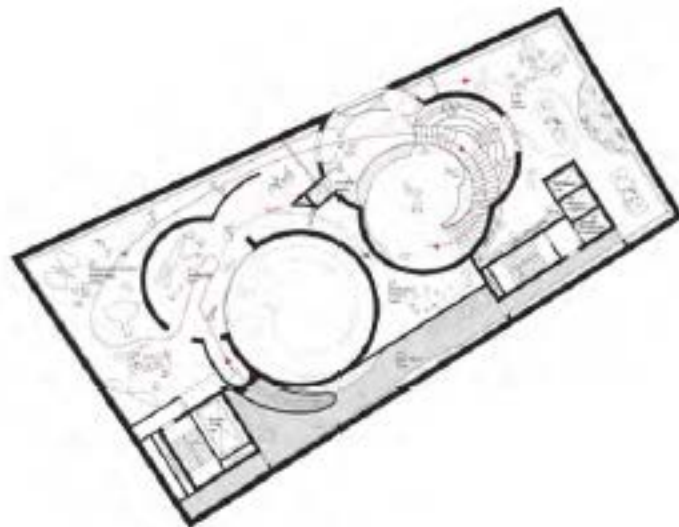
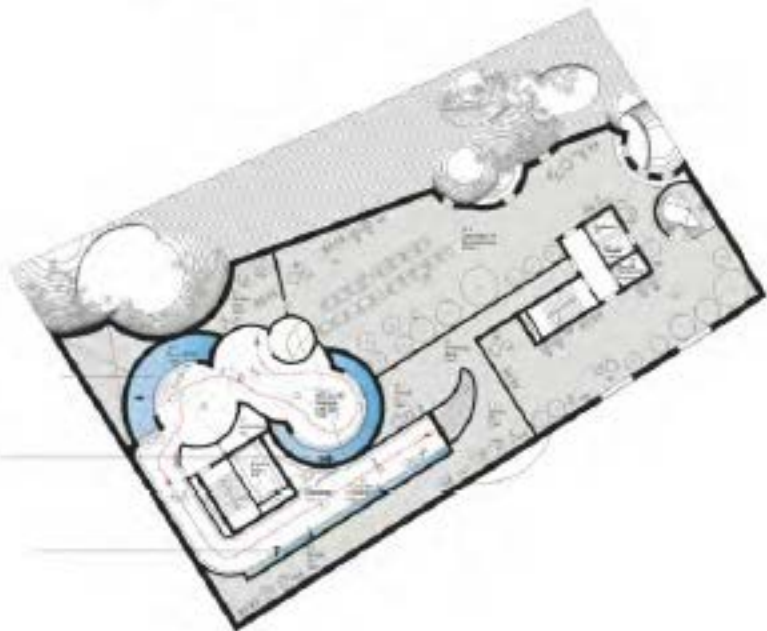
W. 13.00 +13.00

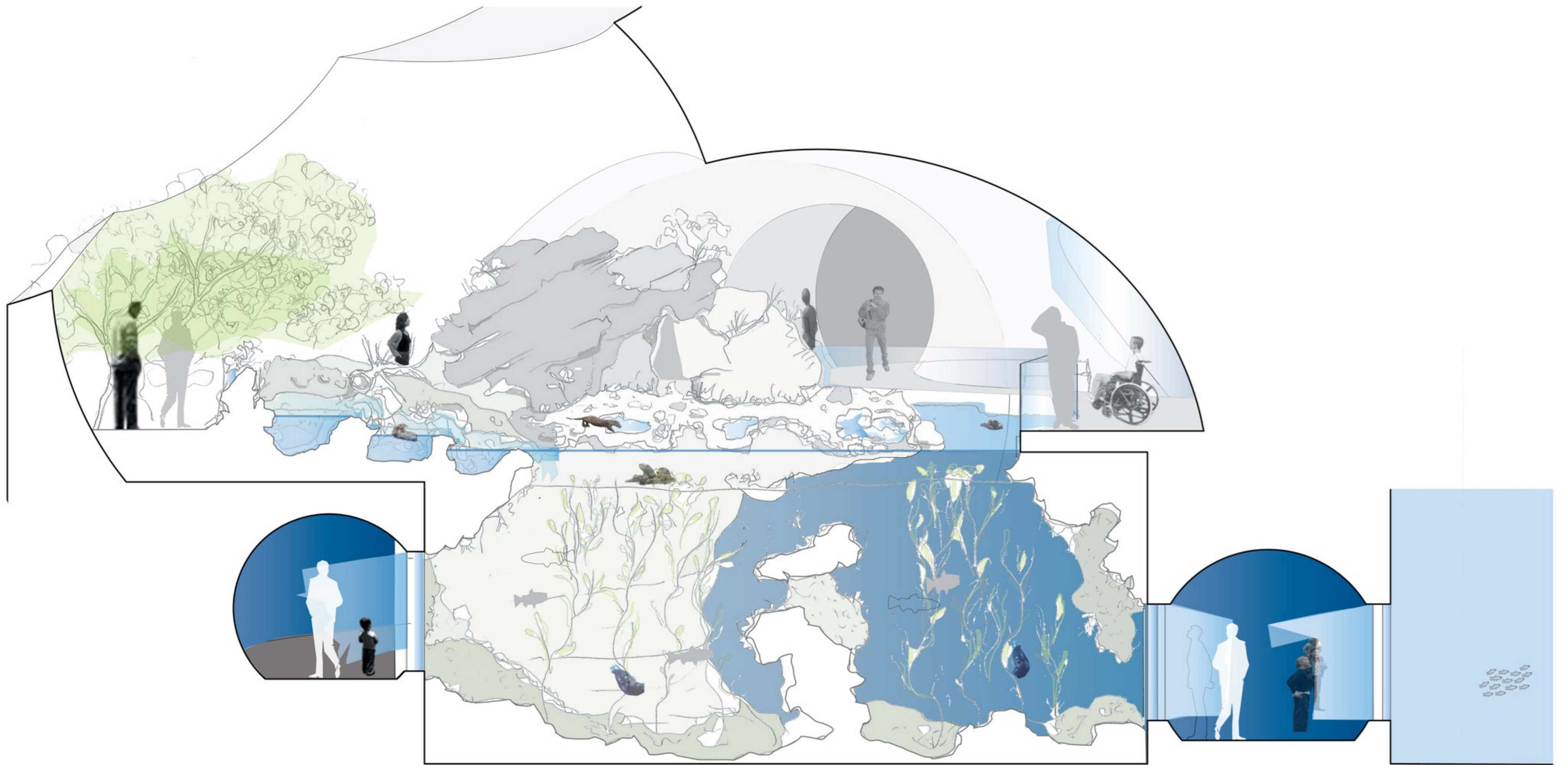
W. 14.00 +14.00

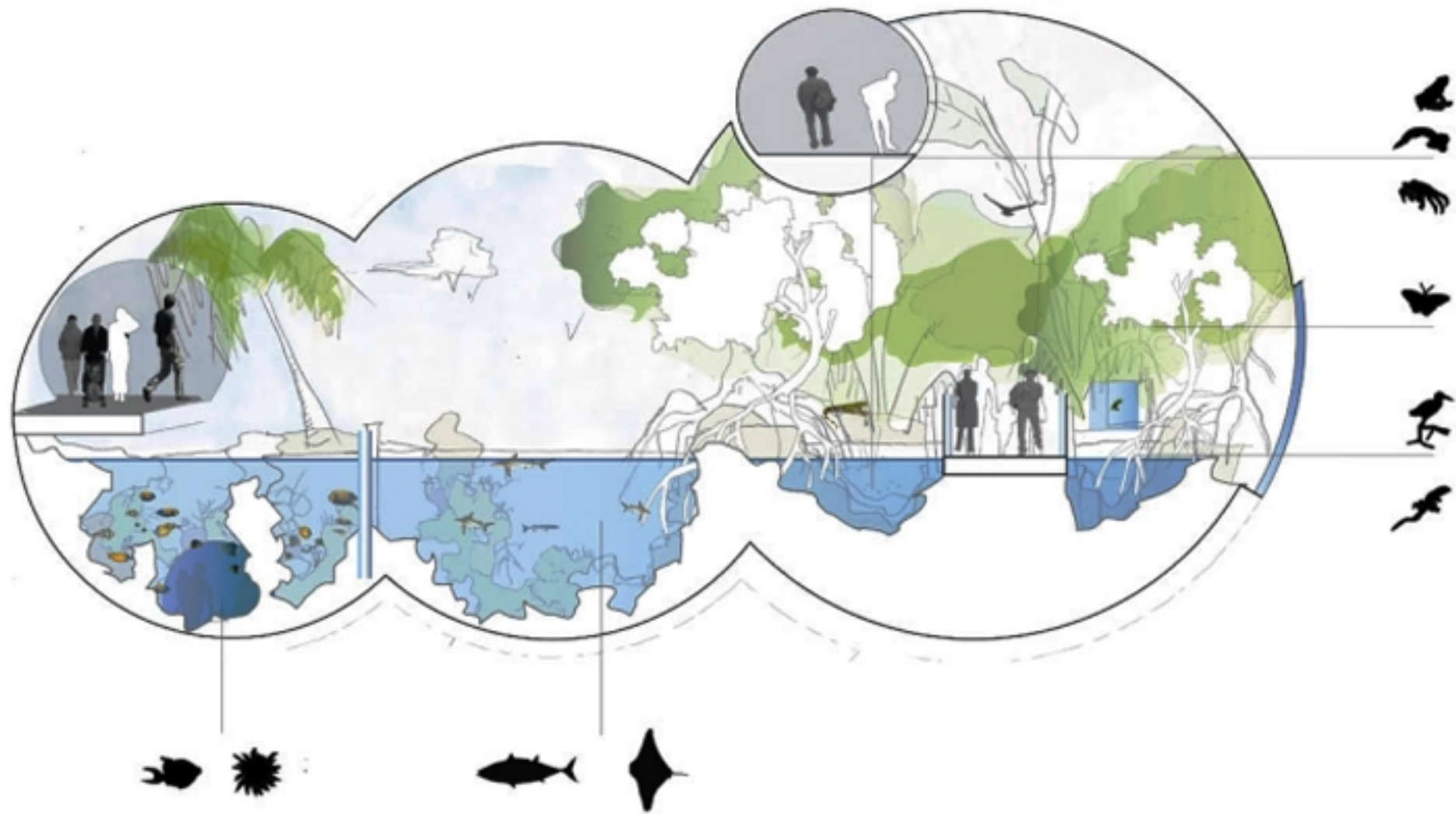
Tisch 1.00

Geschossespiegel ca. 20%

Rechnung ca. 270.000 € o.M.



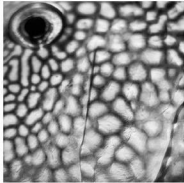




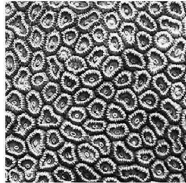




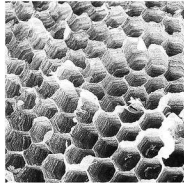




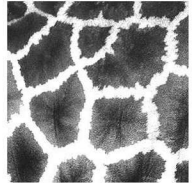
Tropical Fish



Corals

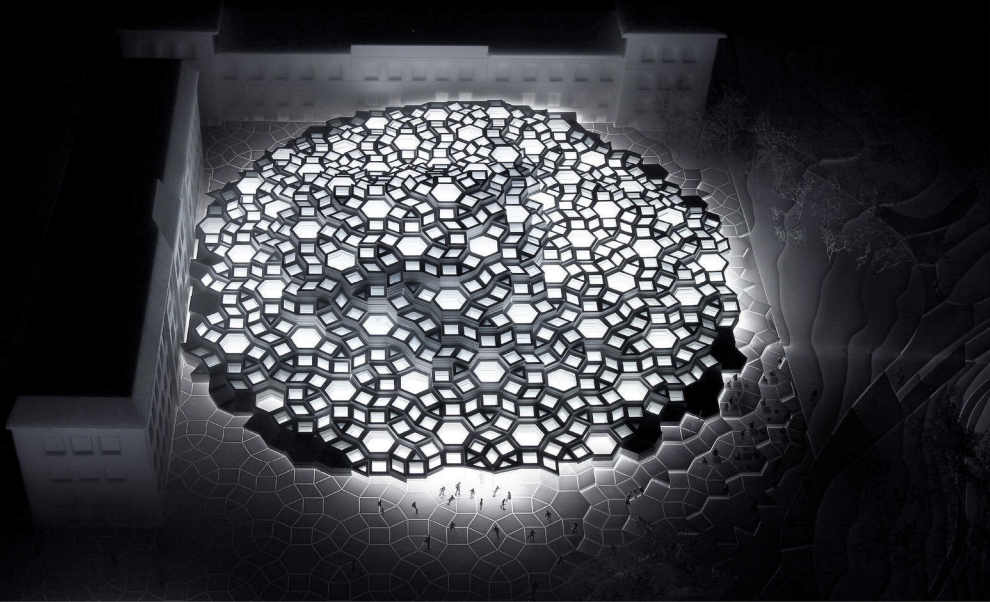


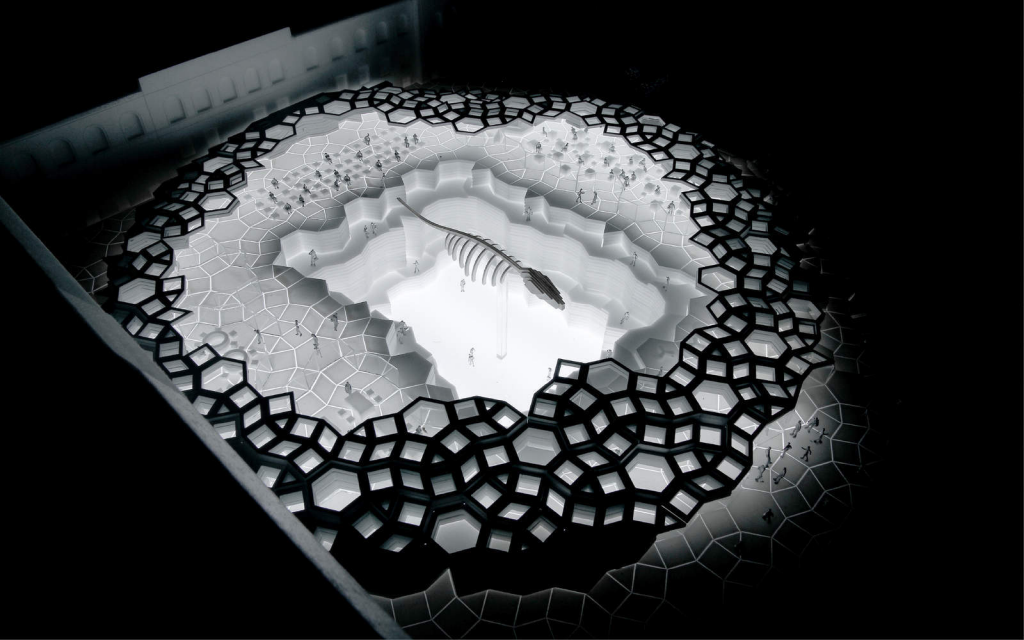
Beehive



Giraffe

ZOOLOGICAL GEOMETRIES













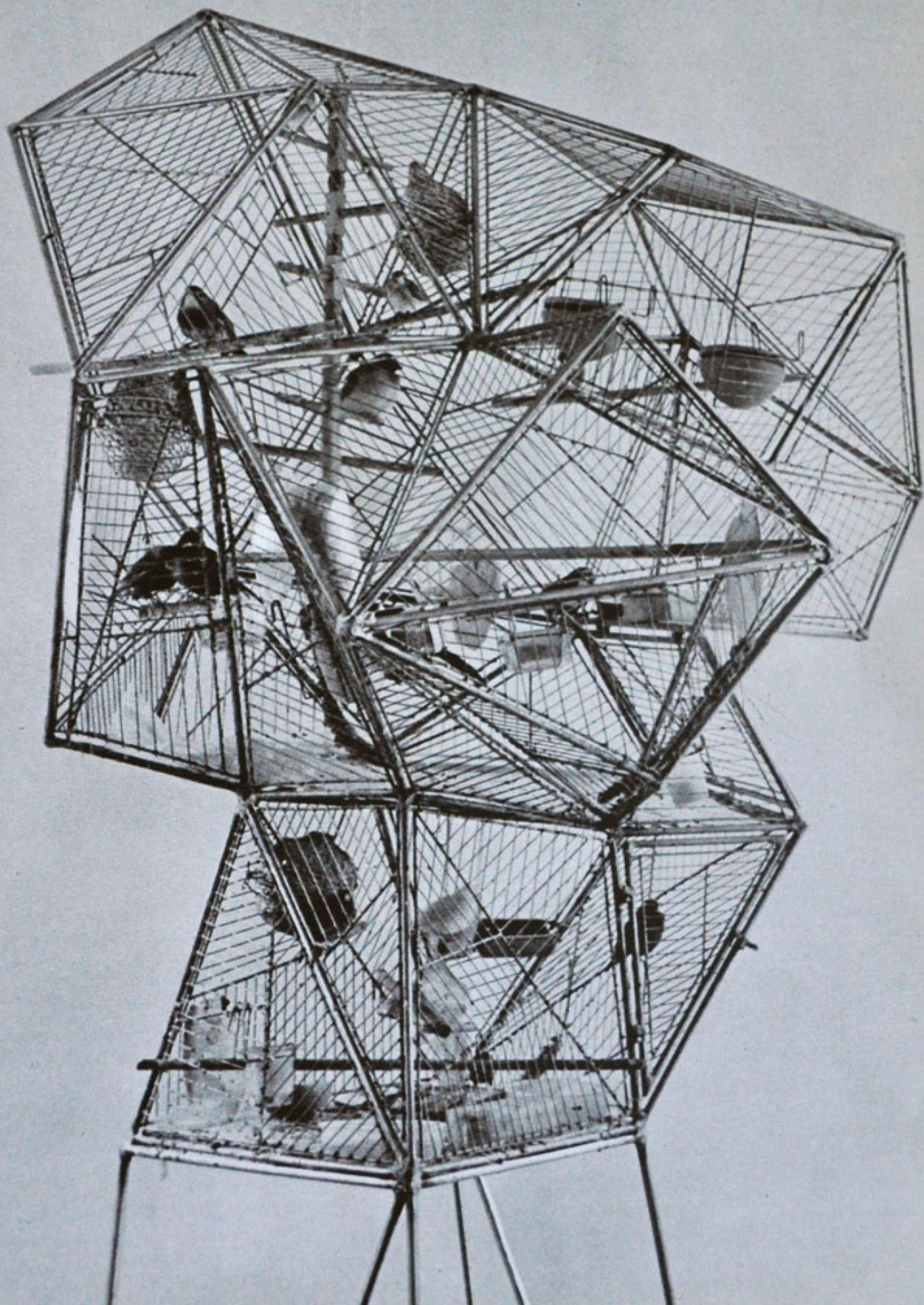


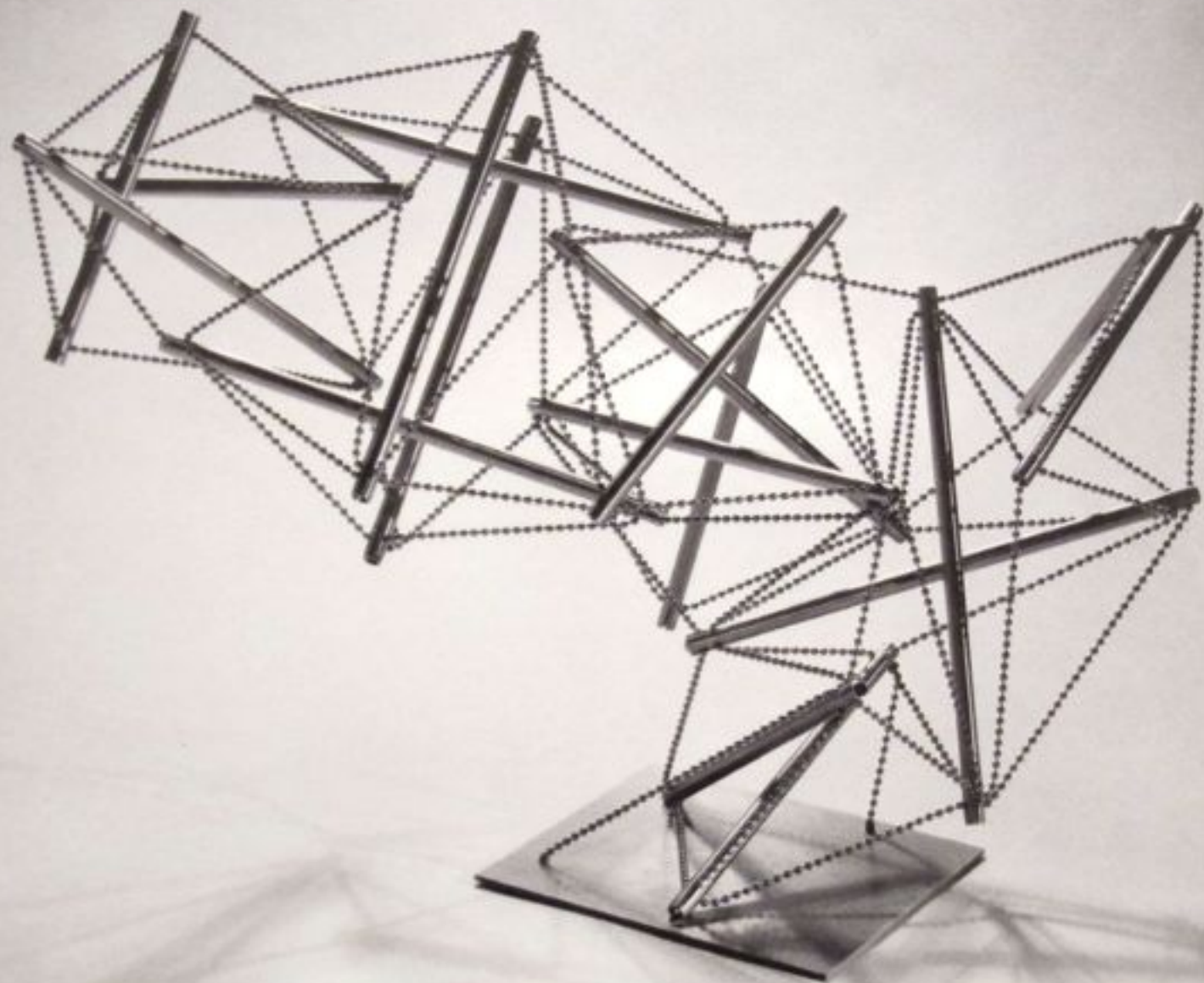


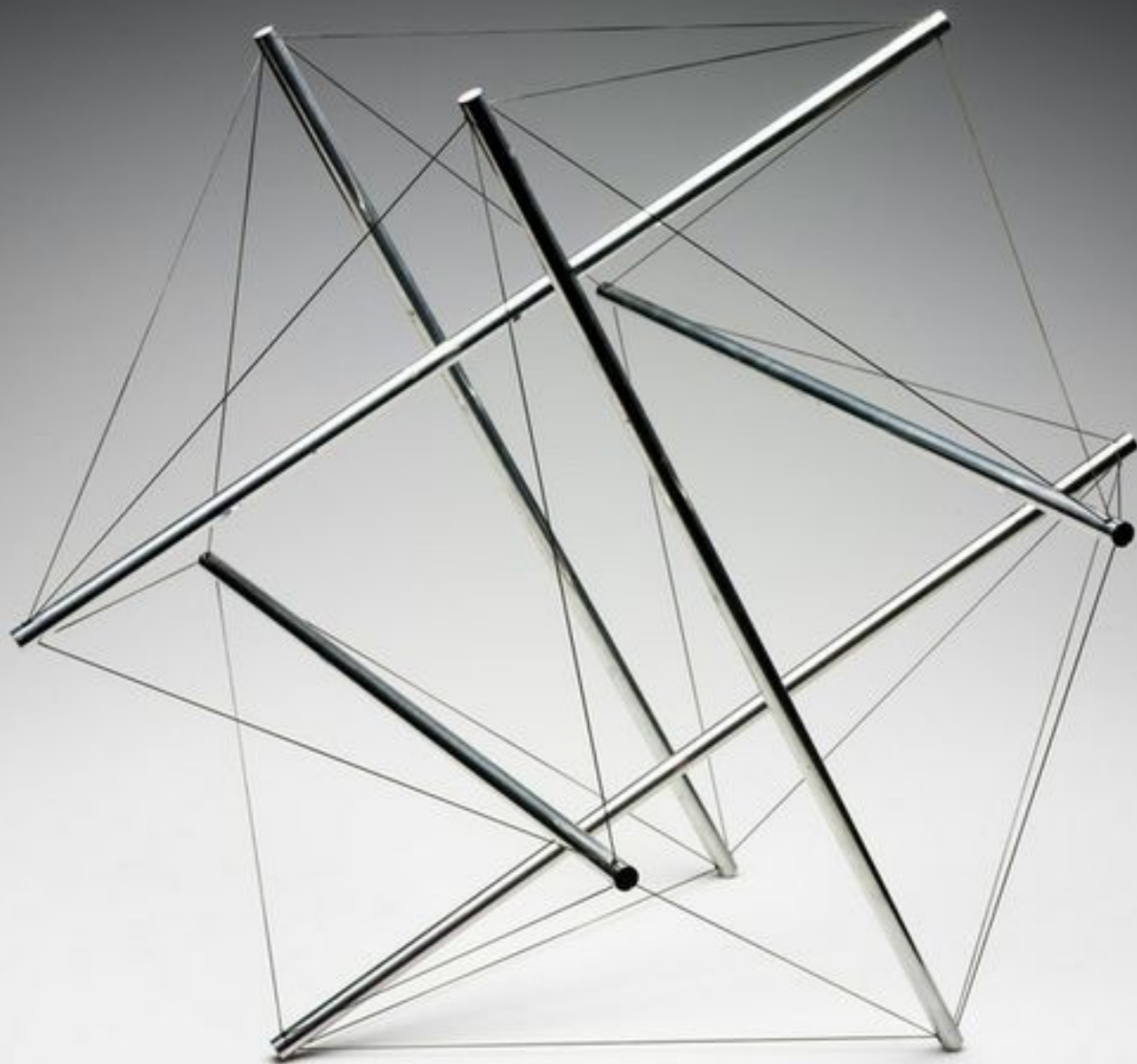


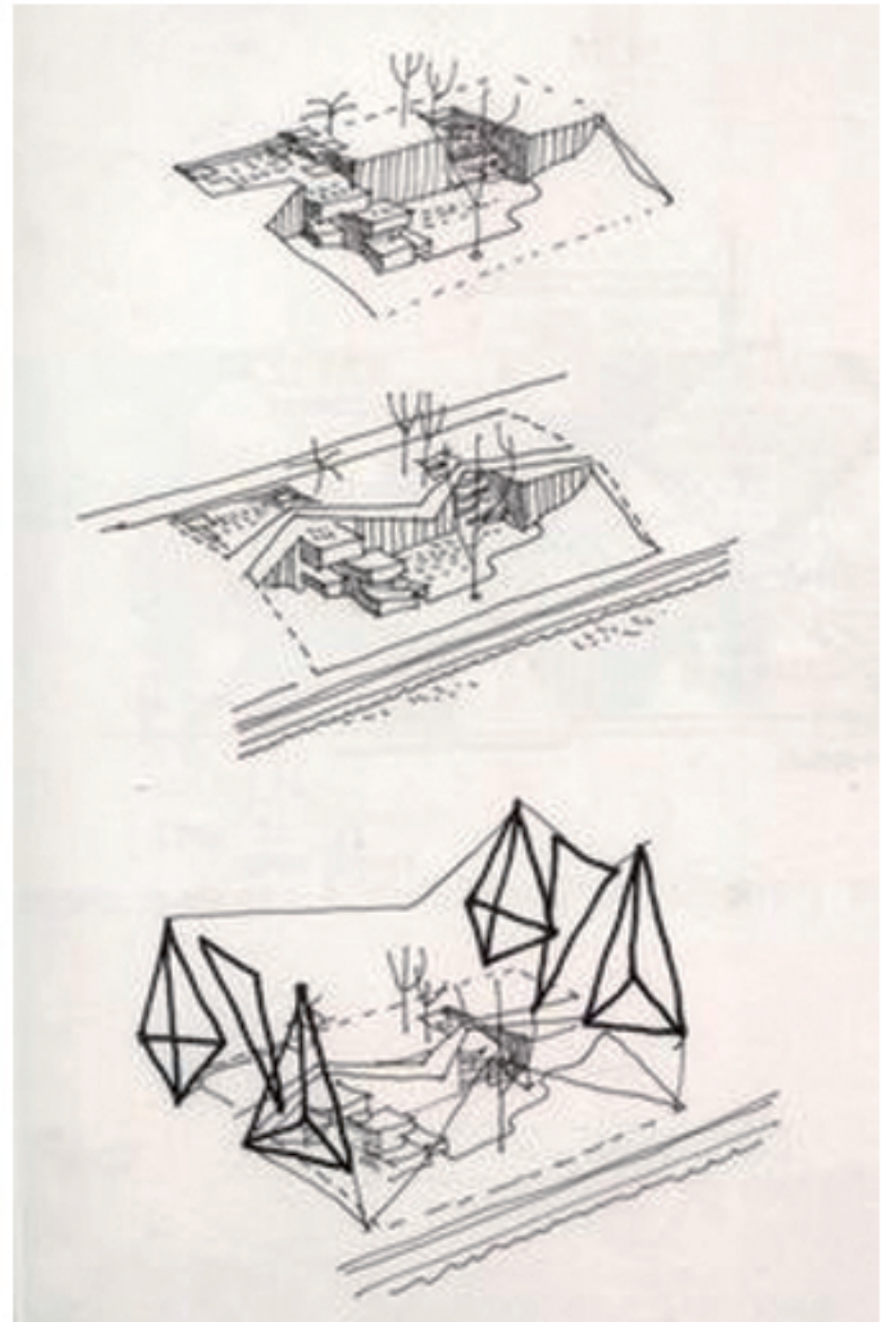
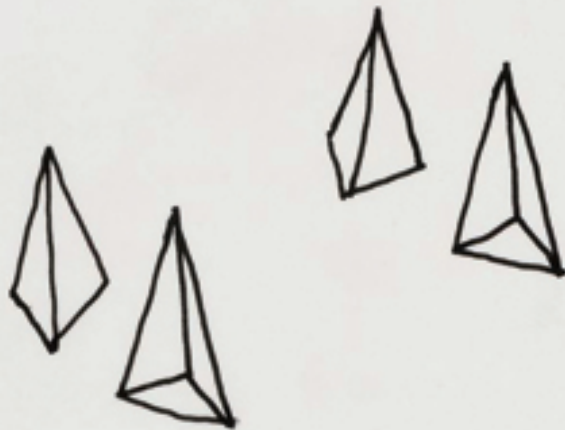


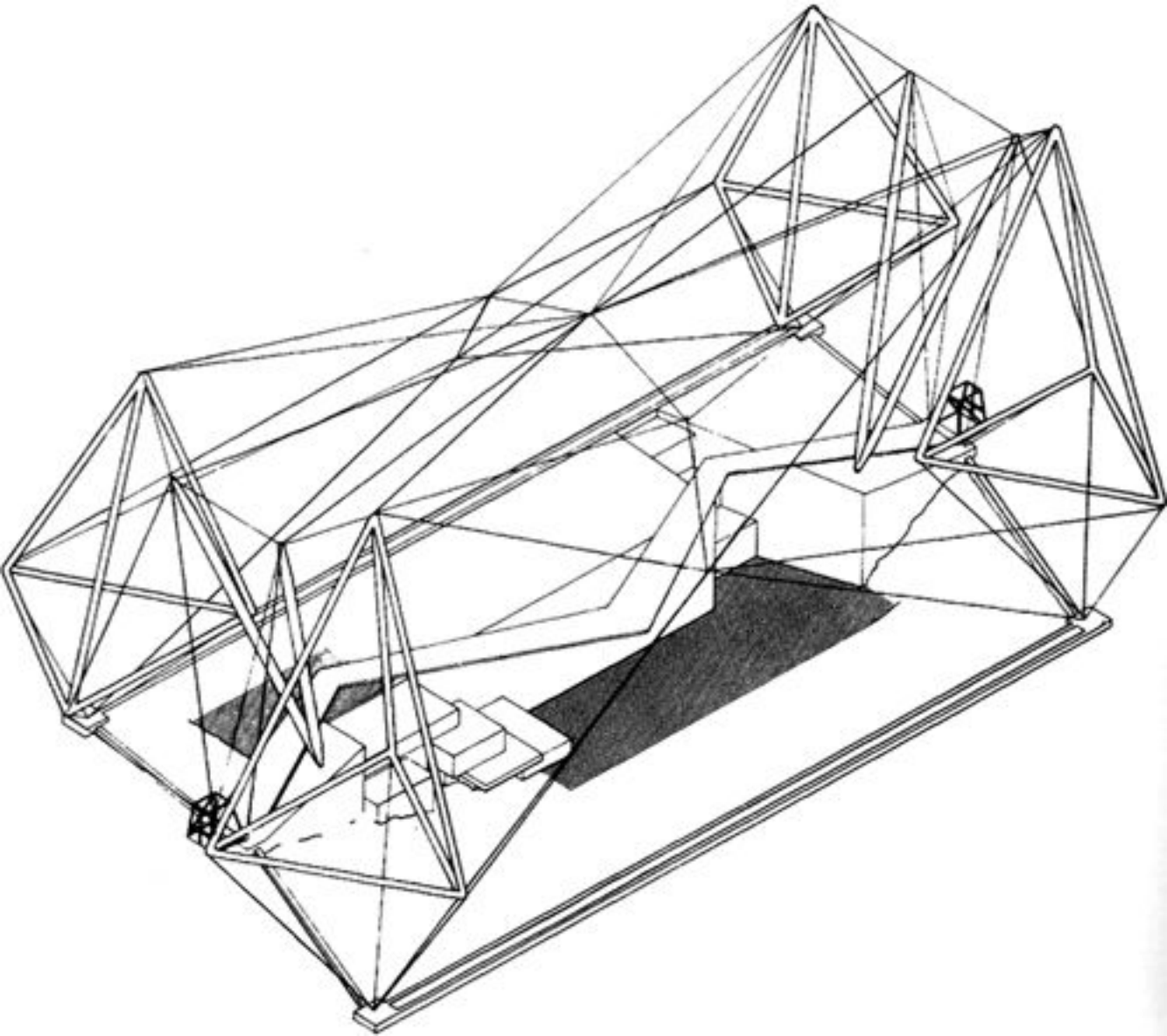


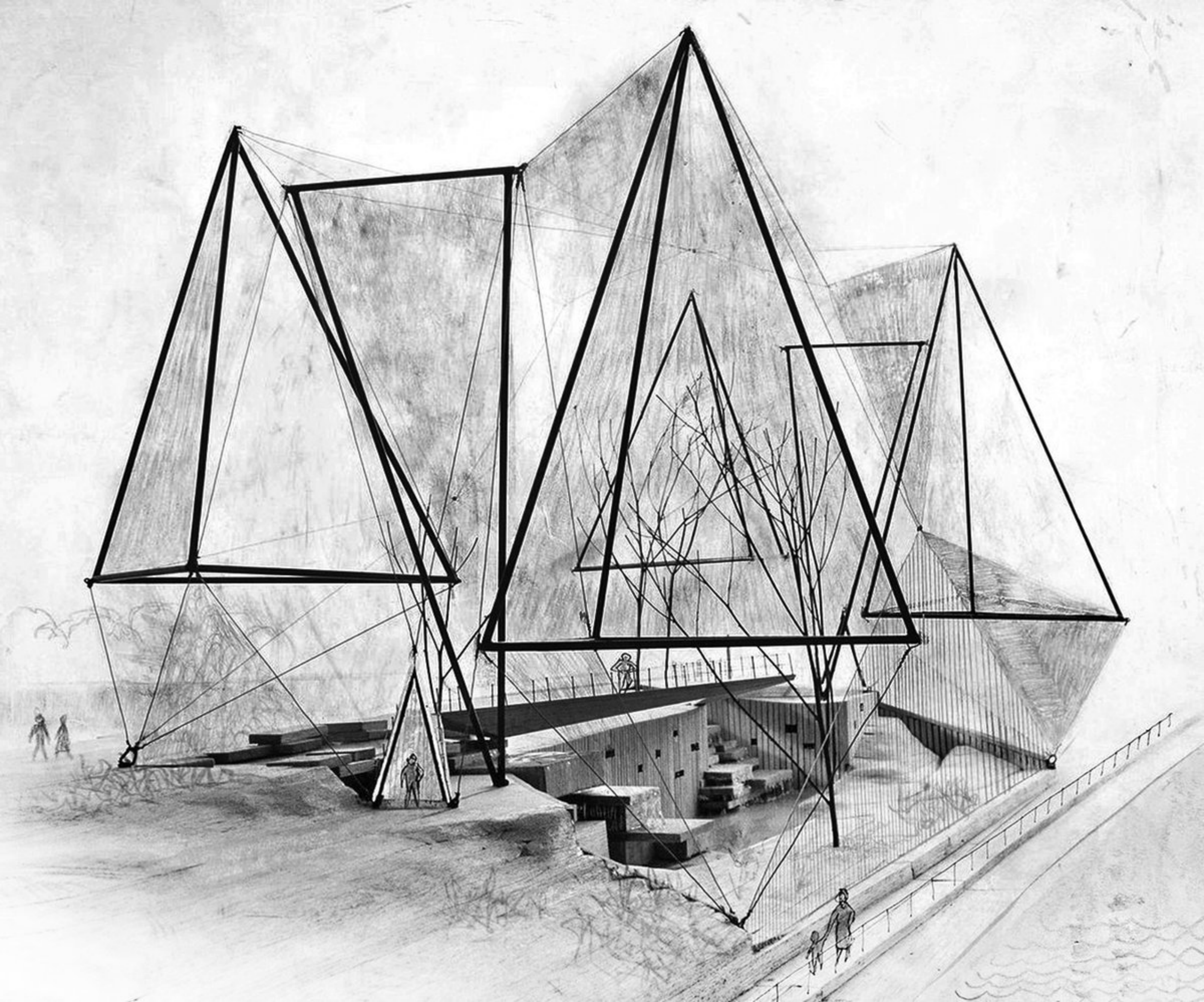


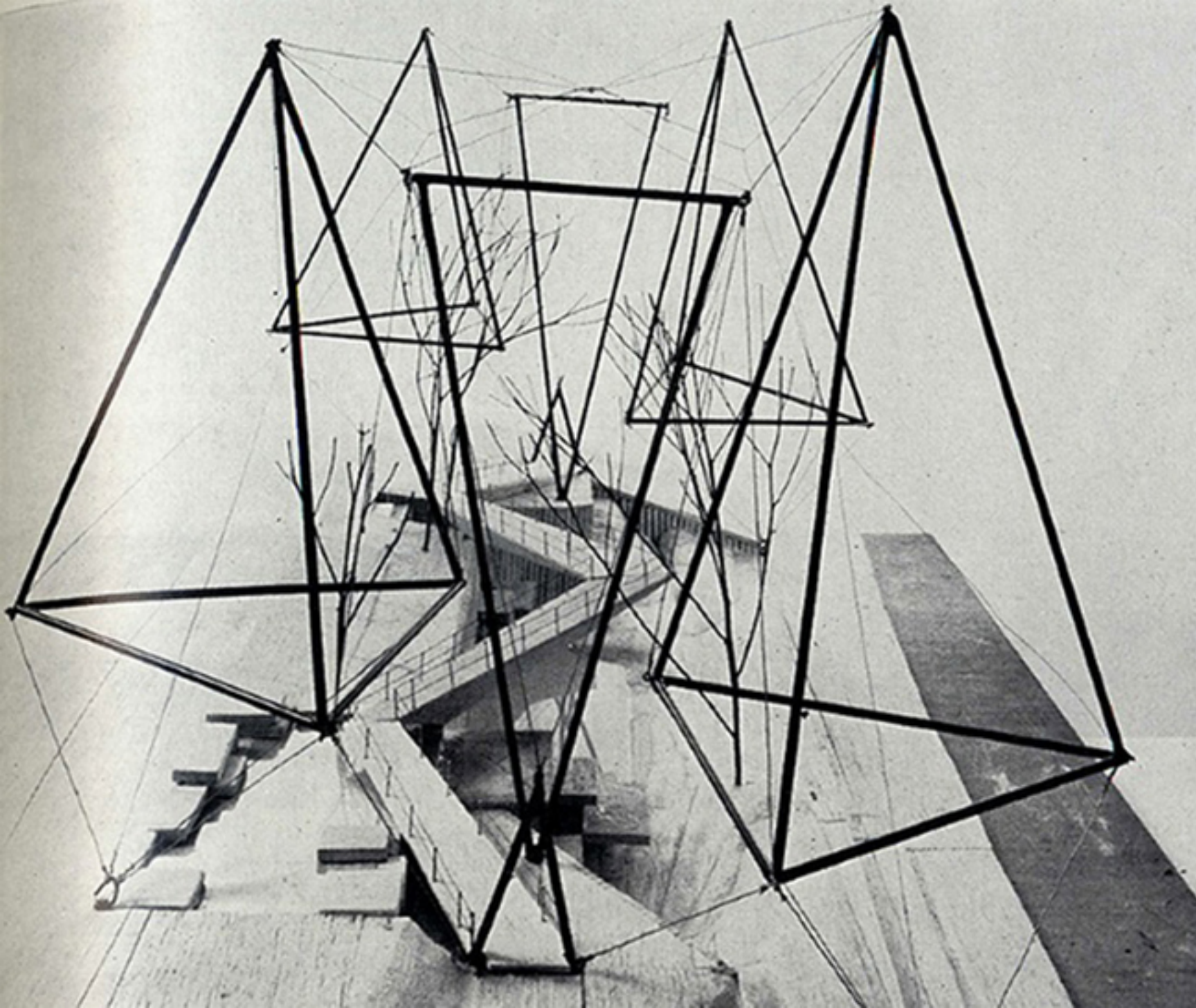


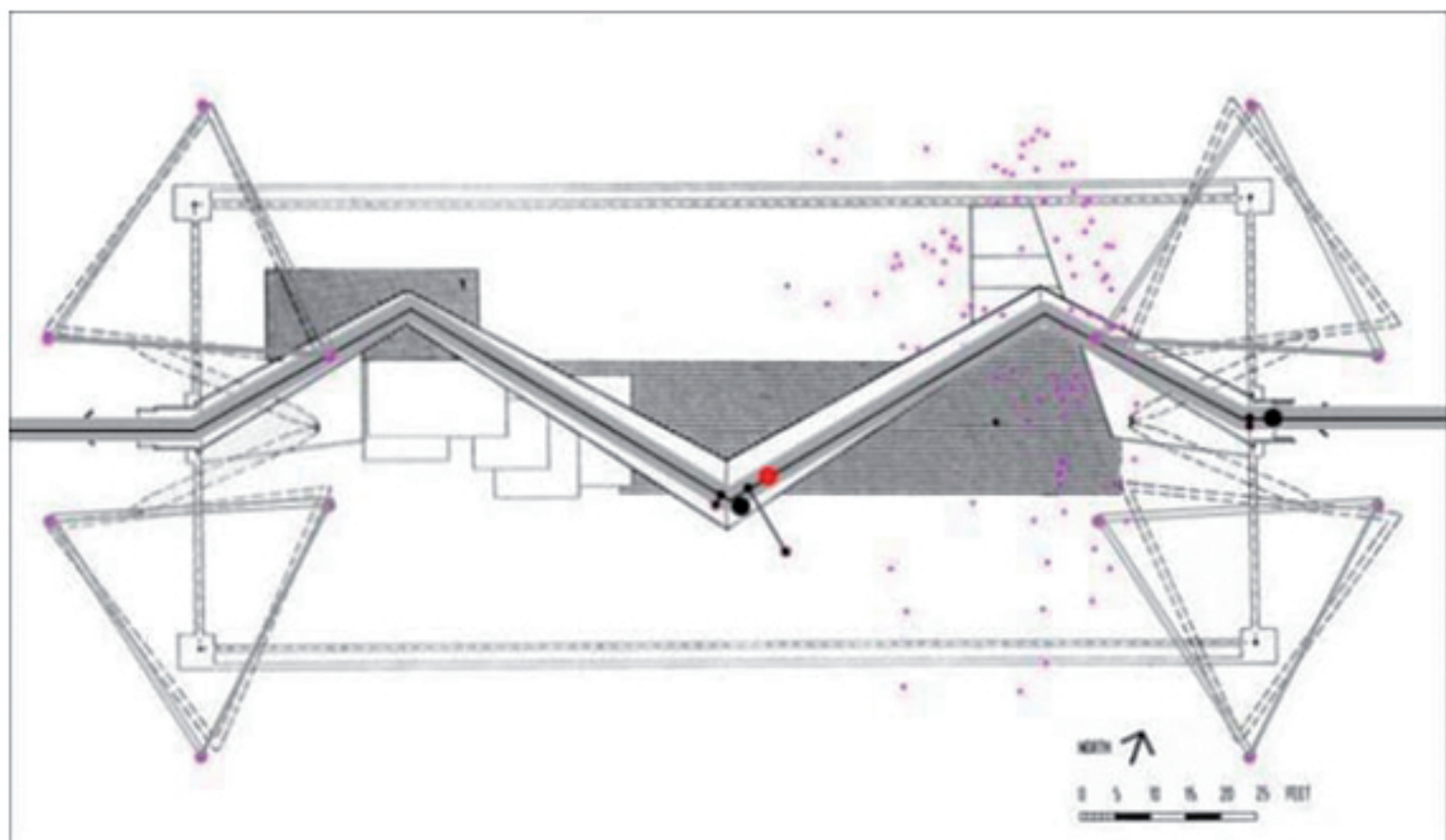
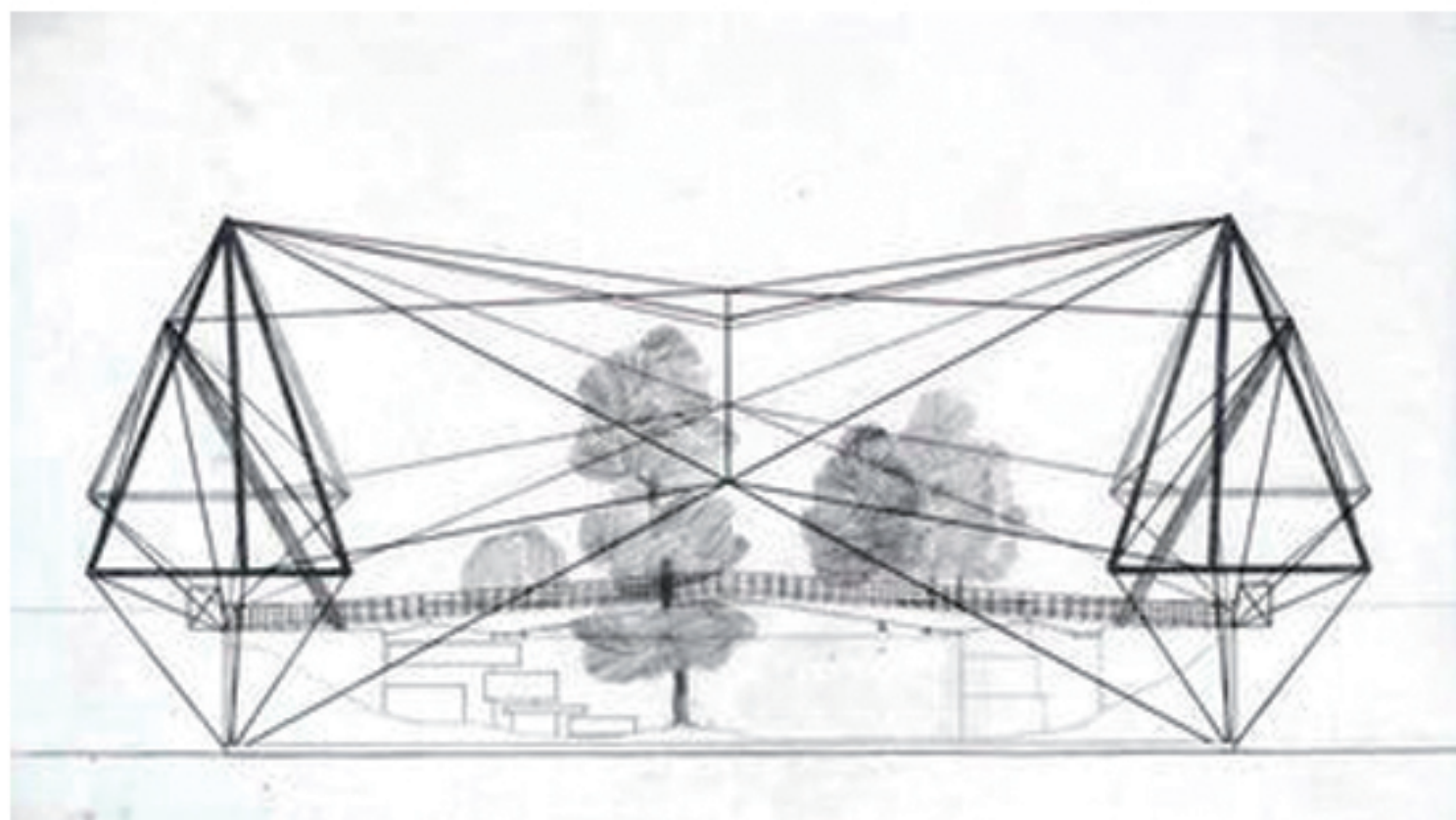


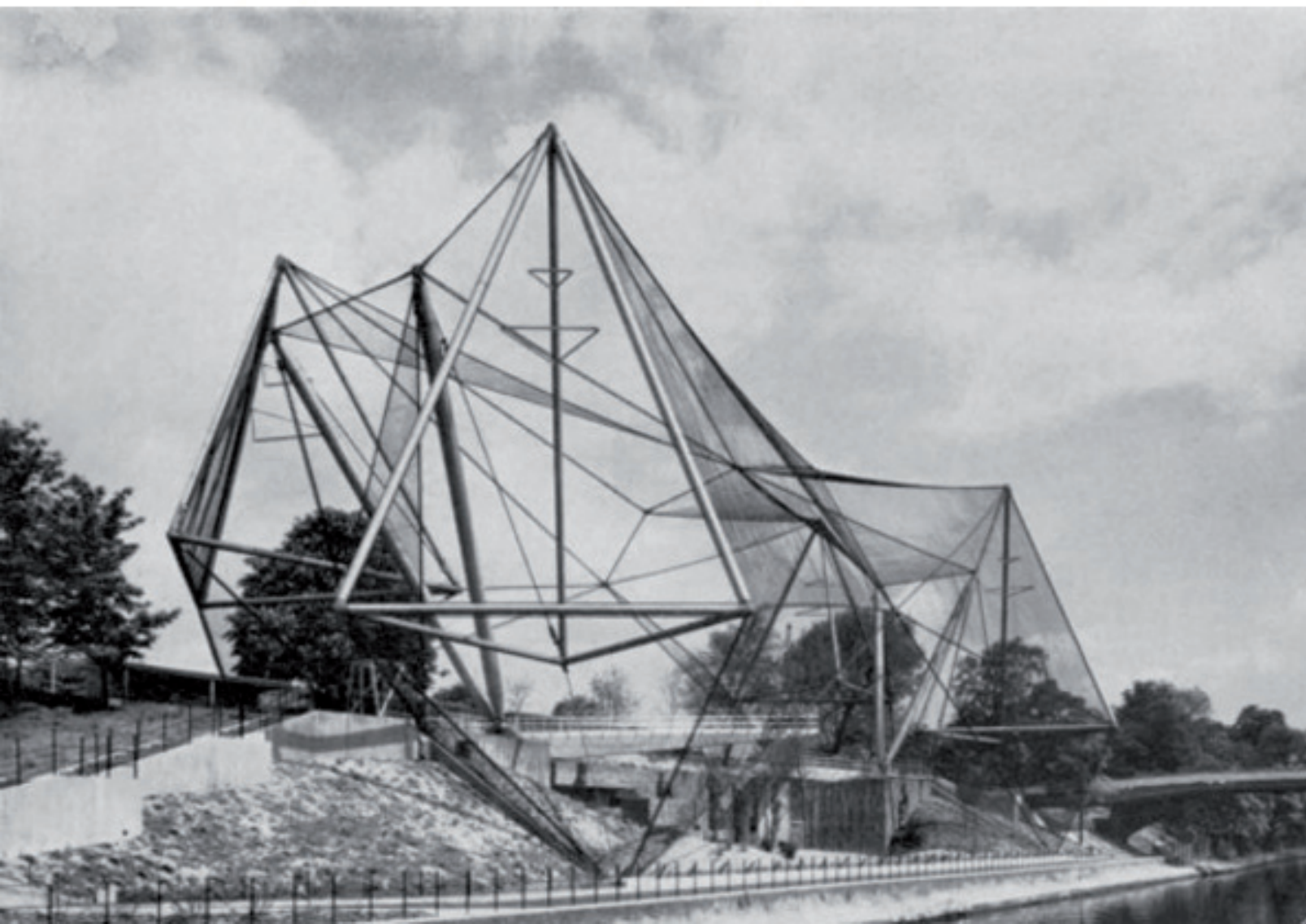
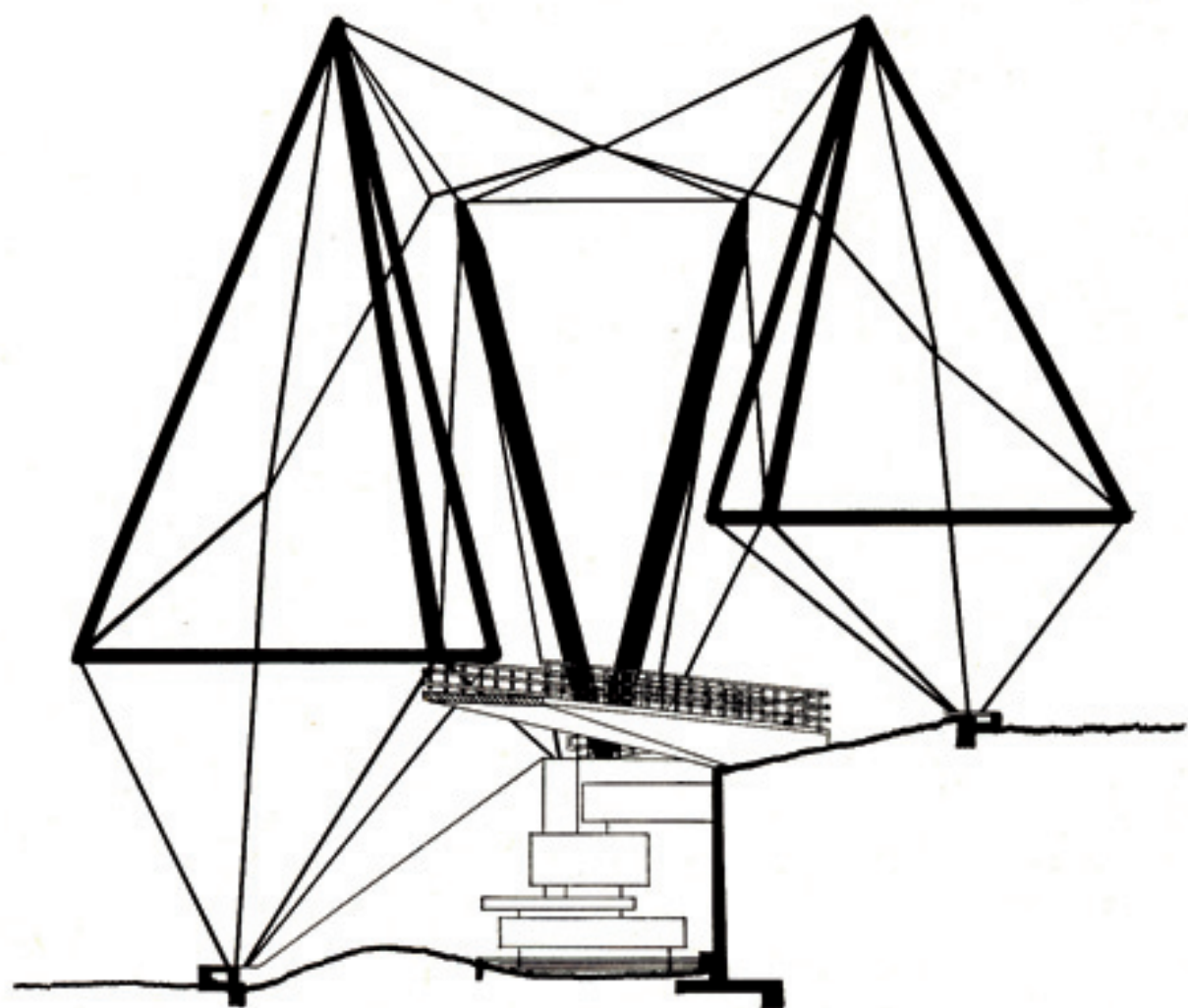




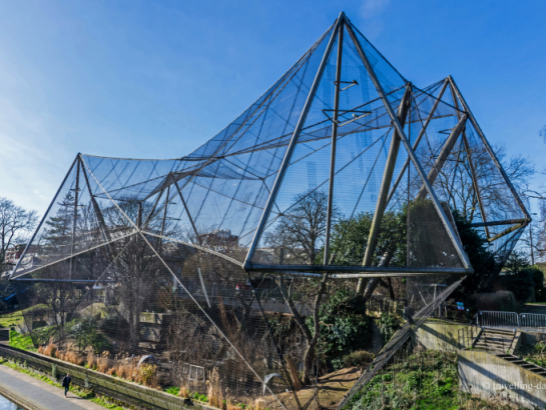








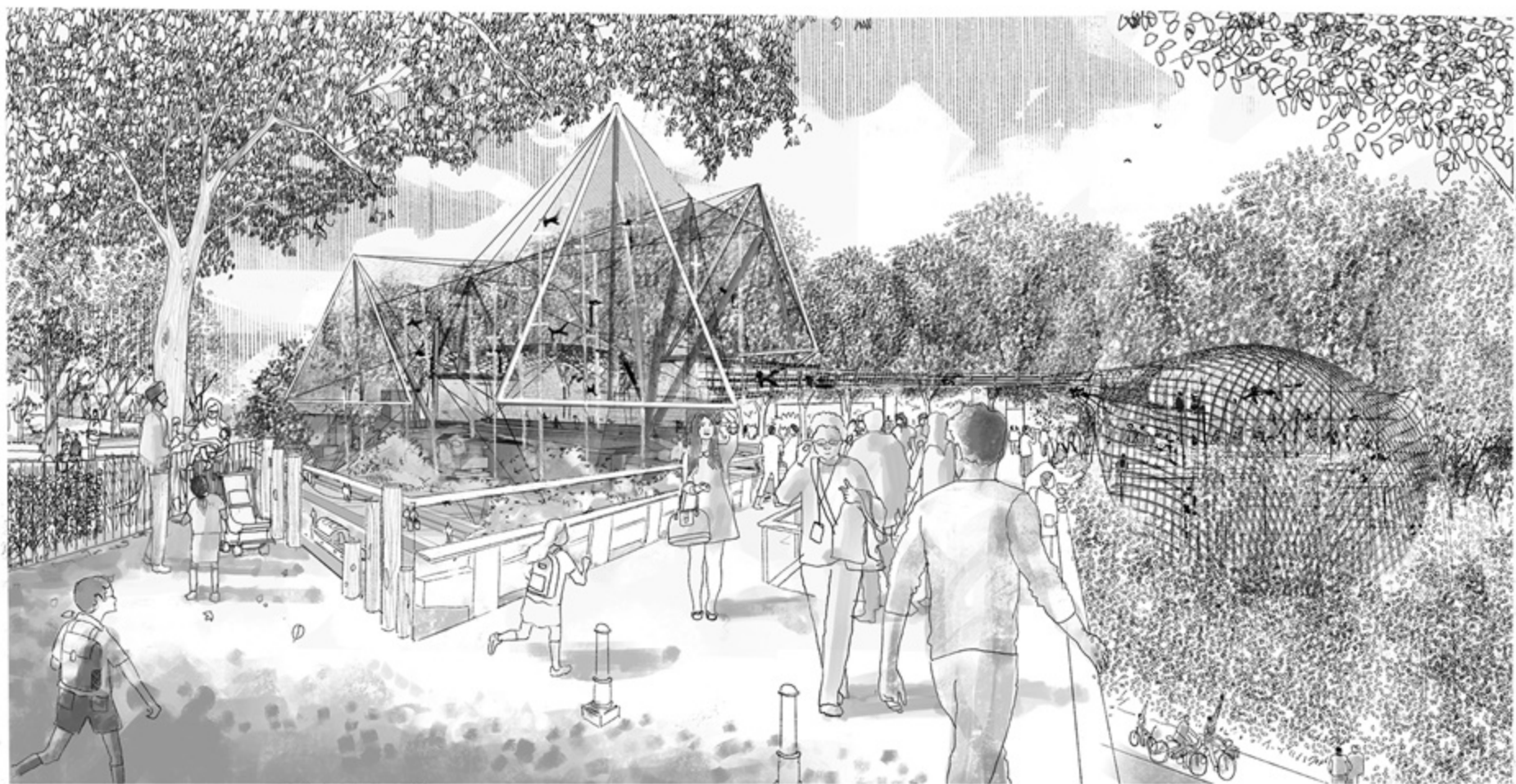


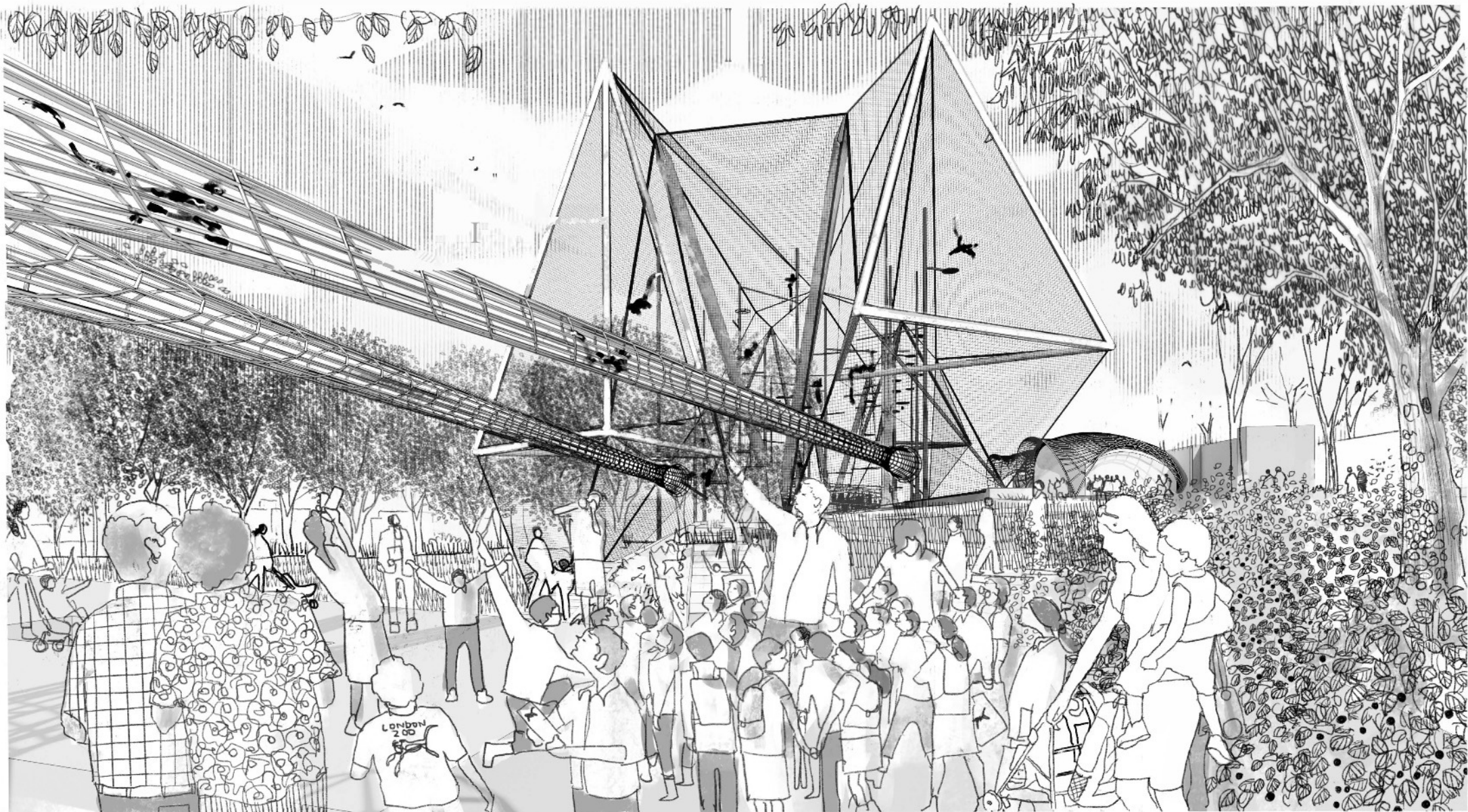


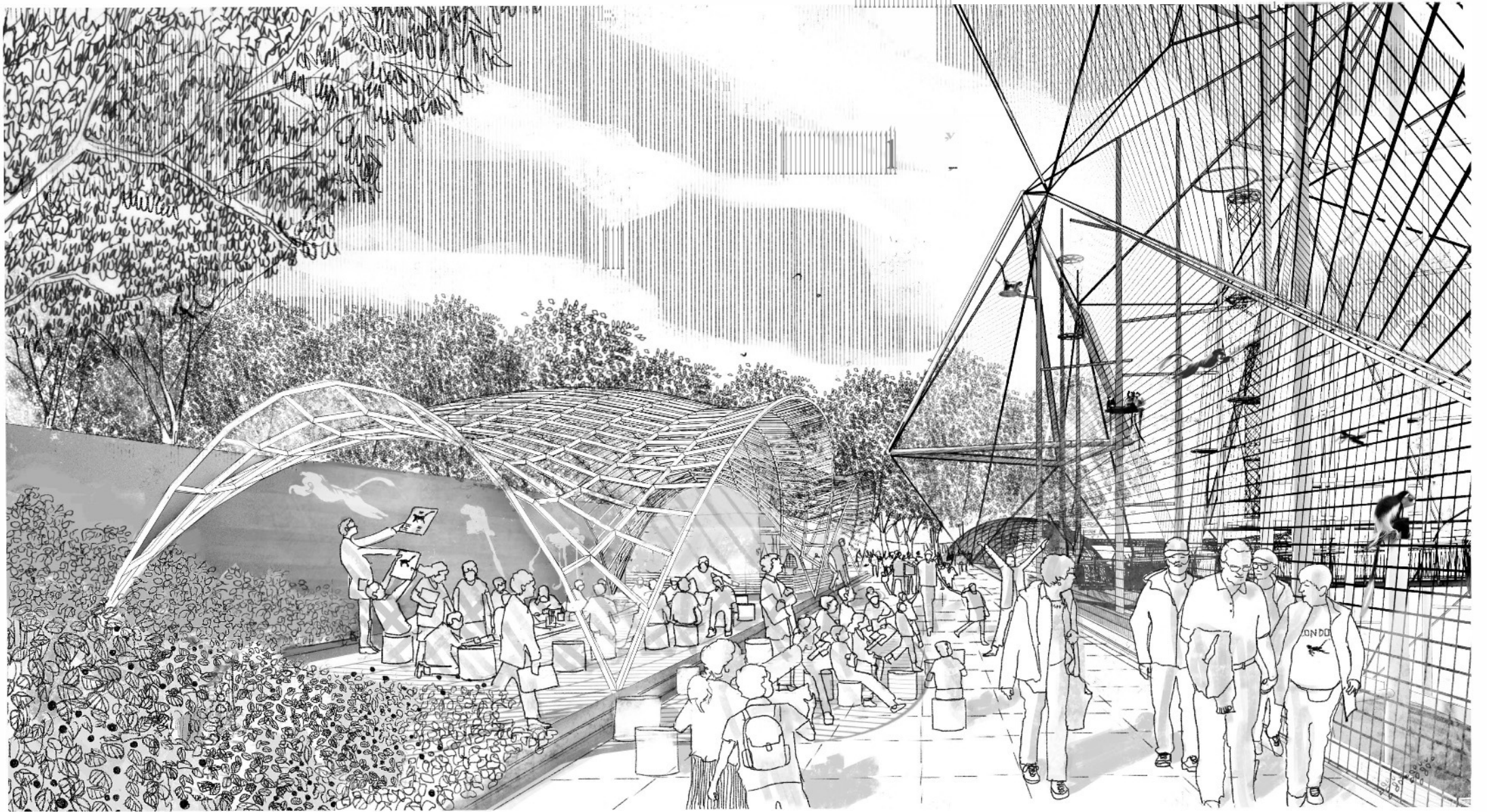




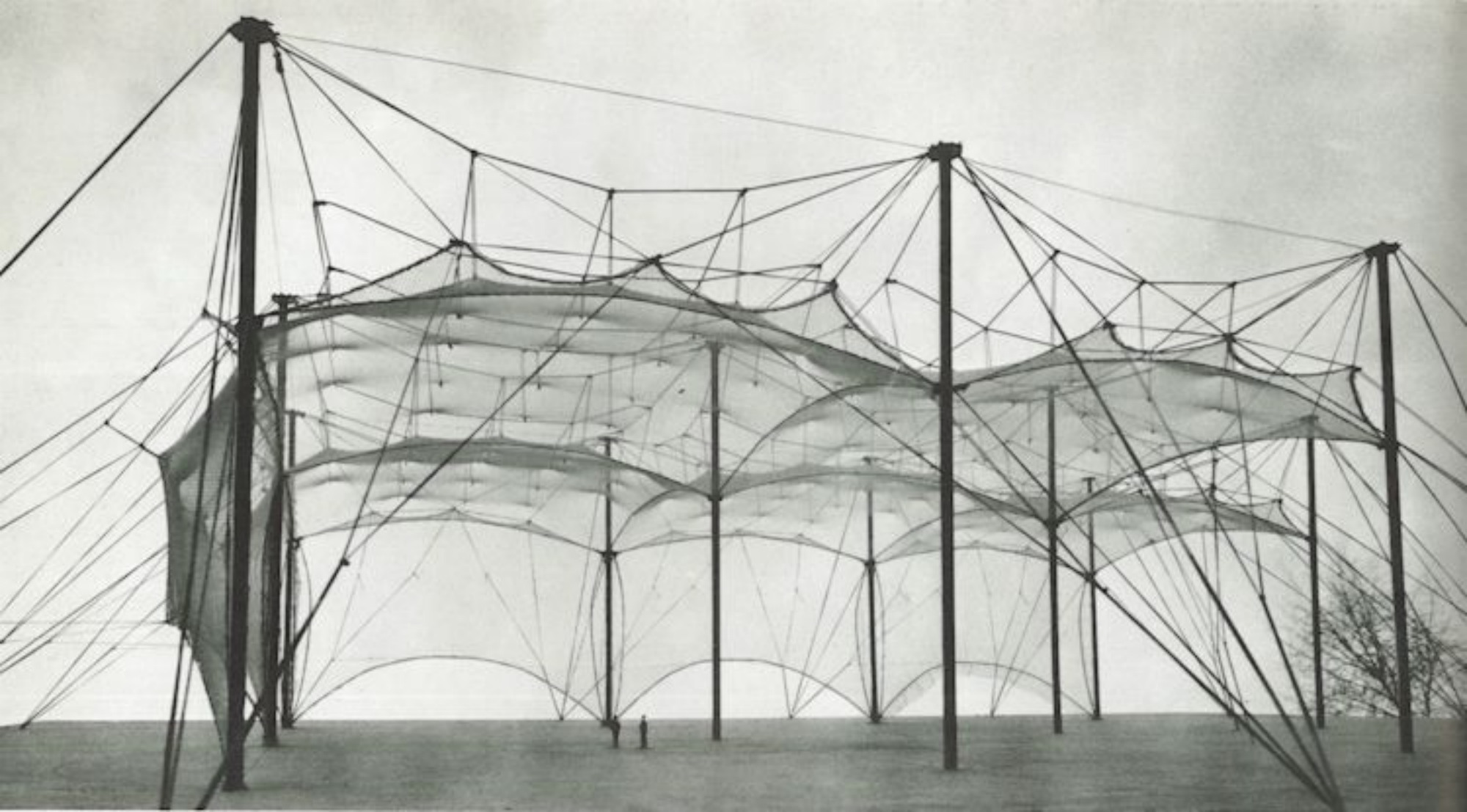


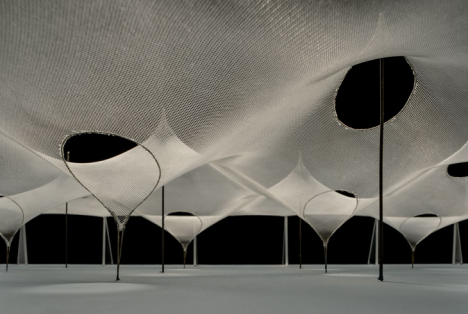


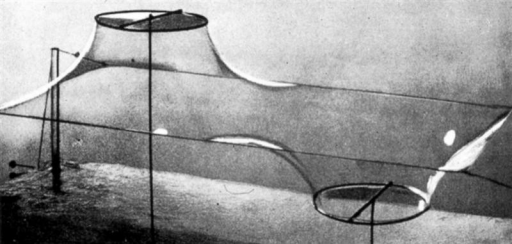


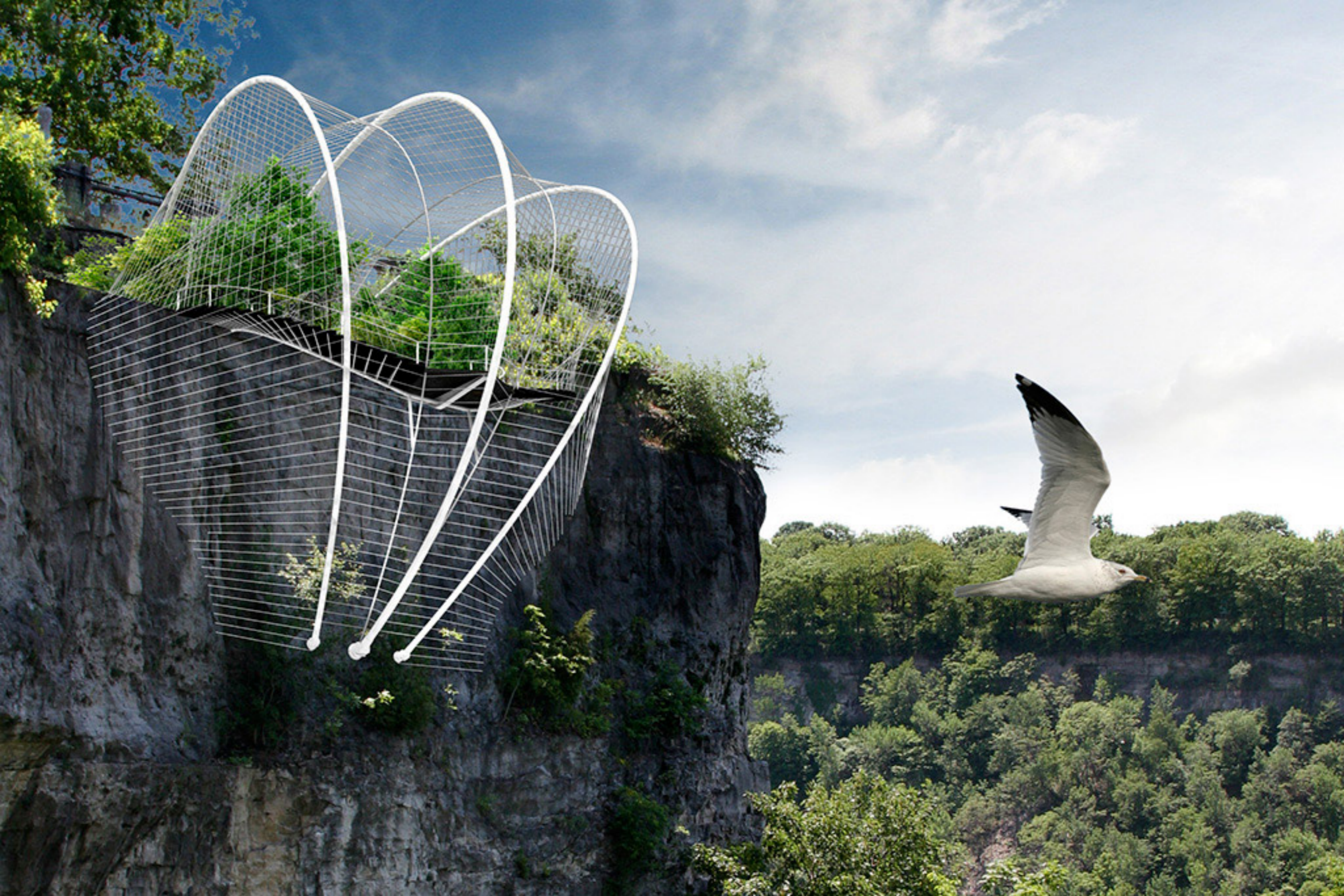


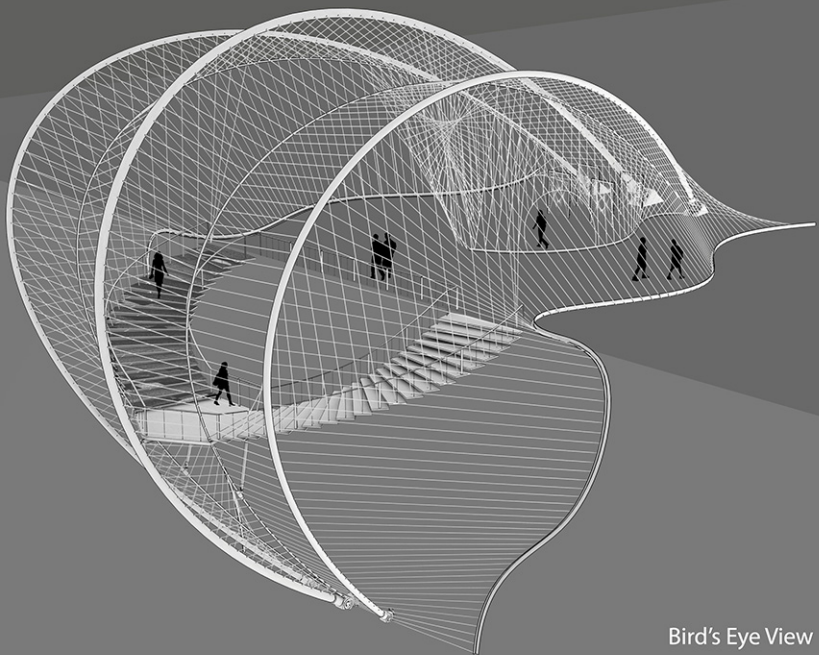




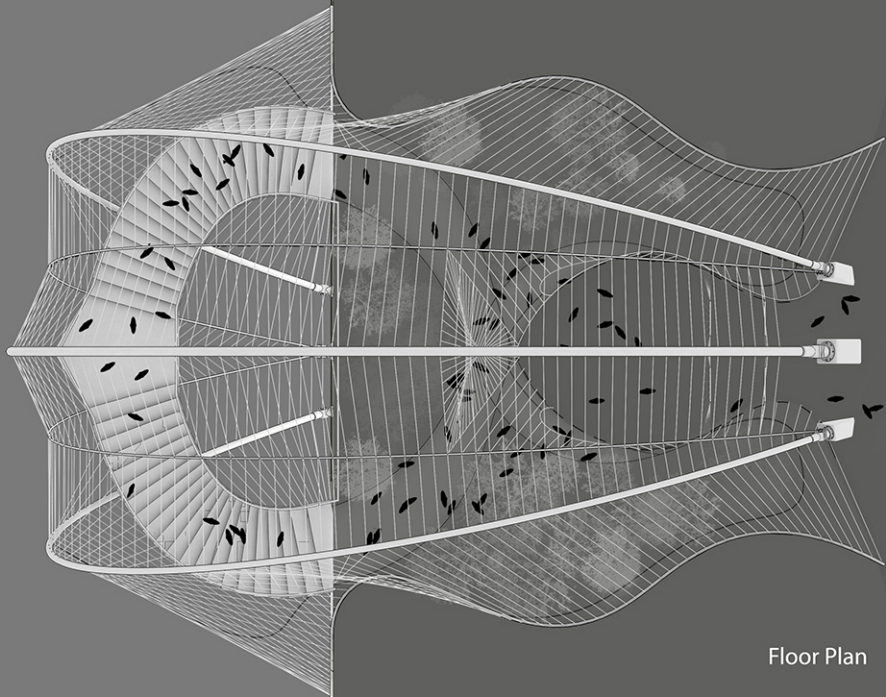




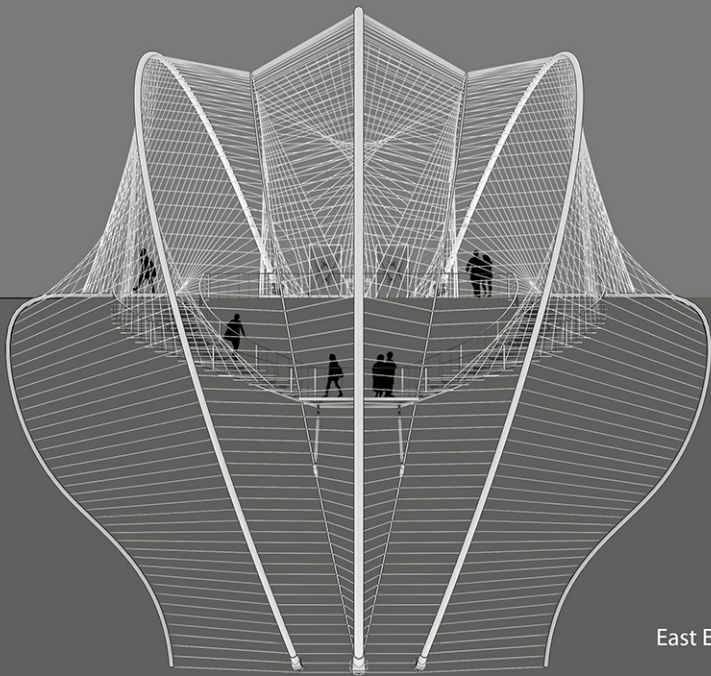




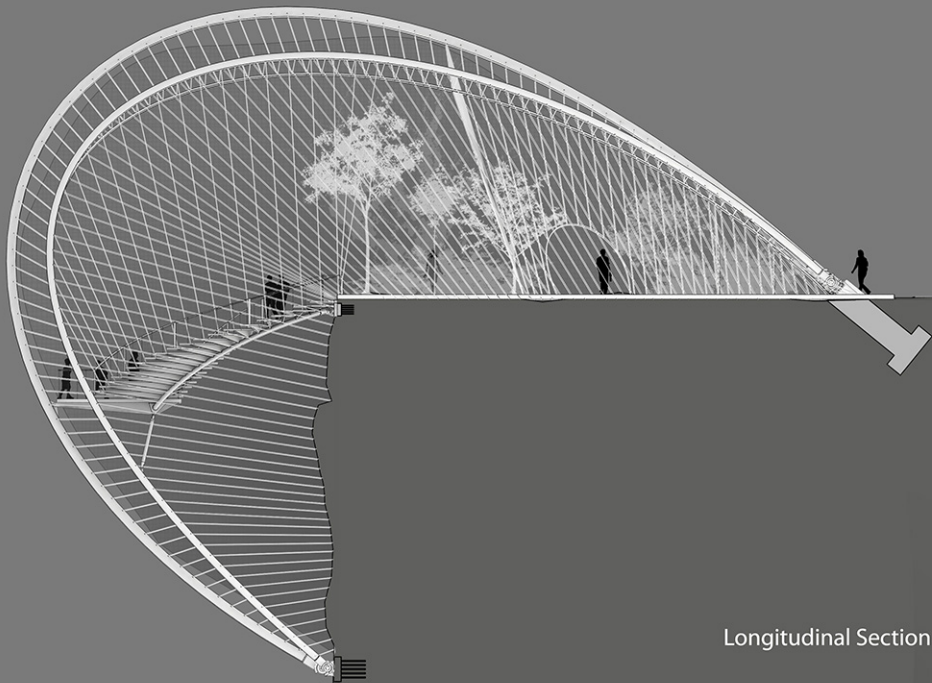
Bird's Eye View



Floor Plan

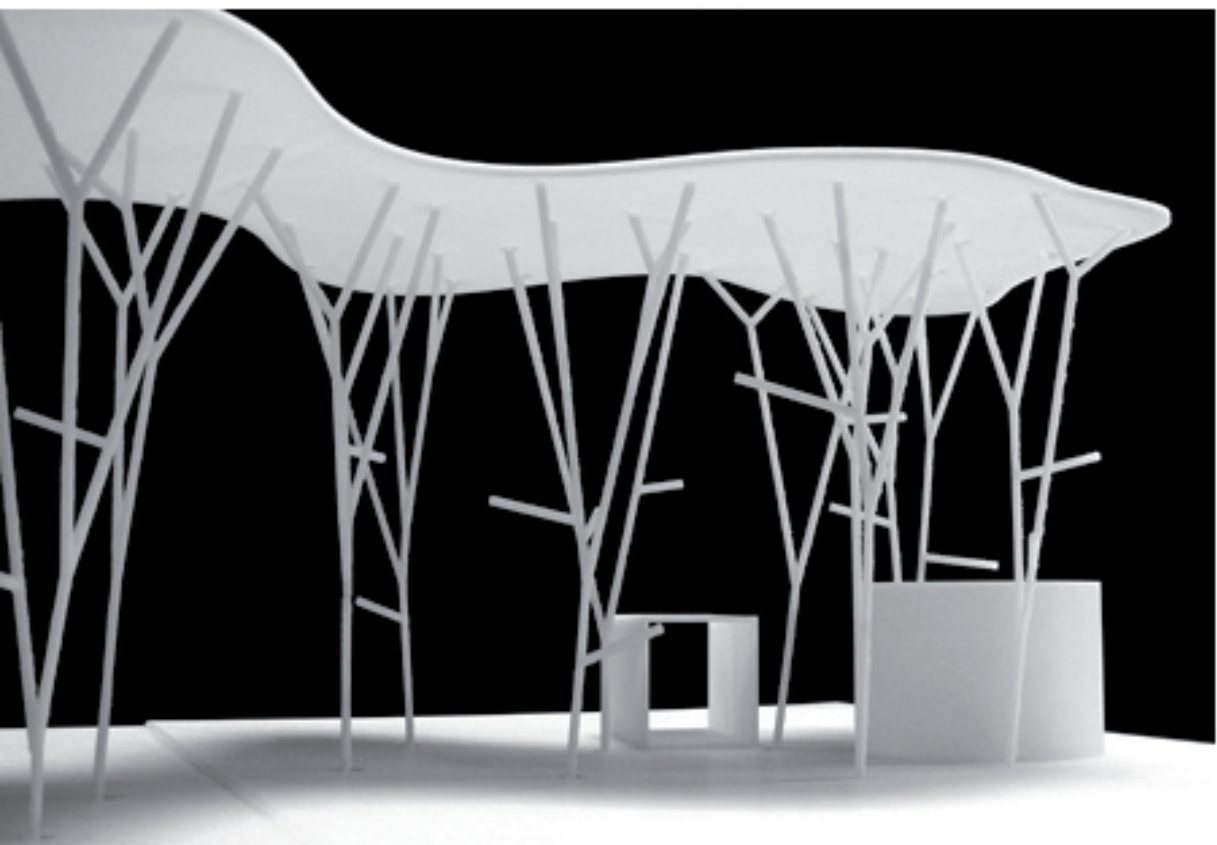


East Elevation



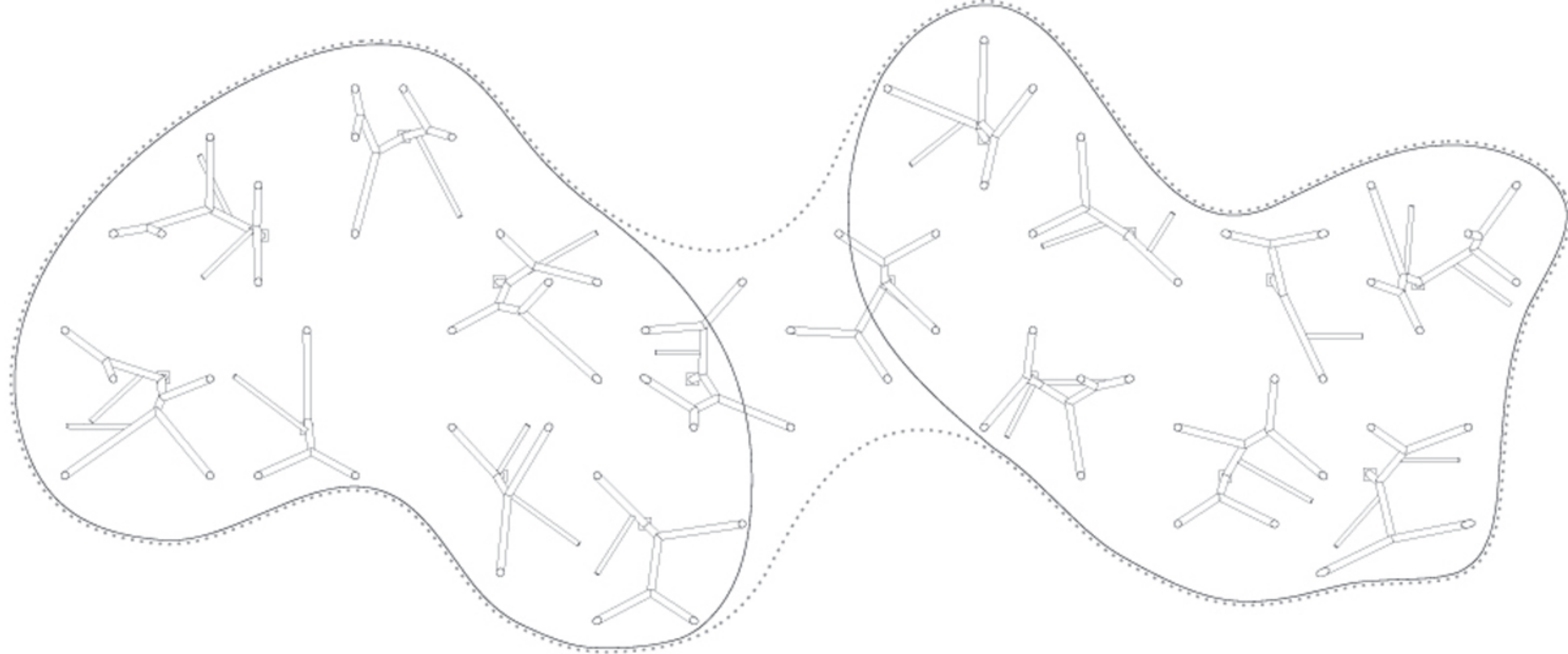
Longitudinal Section











0 1

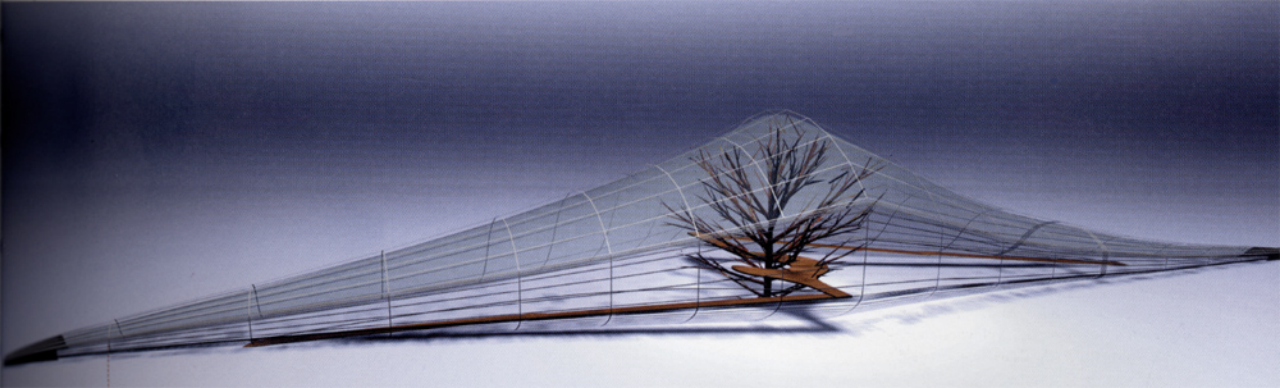
5

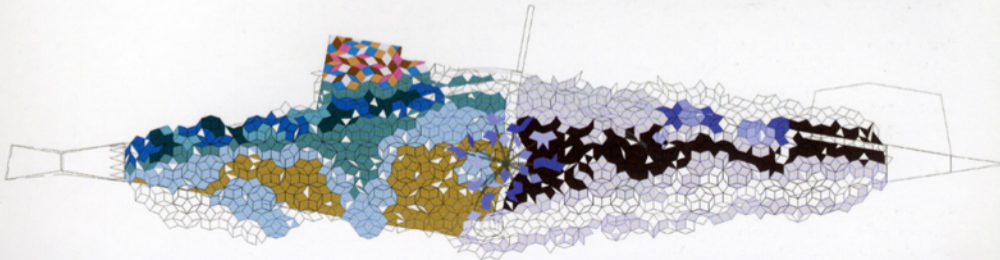
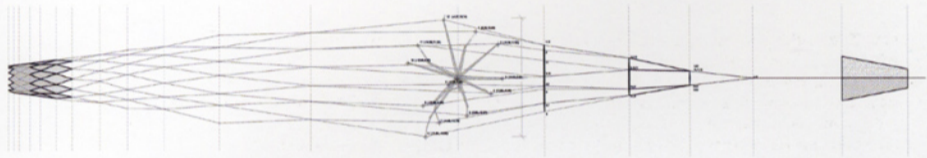
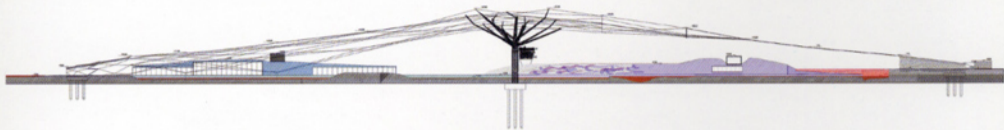
10



















Hollow Tower

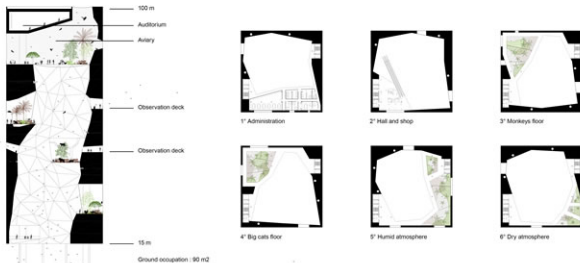
a fauna refuge

History erased the custom office and its pier, which was in the past the gate of the vice-kingdom. The ecological reserve marks now the limit of the Argentina's capital, Buenos Aires.

Like a signal, a lighthouse, the vertical zoo is set in a contrast game which dialogue with the infinite horizon, given by the "freshwater sea", the Rio de la Plata and as well by the Pampa's plain.

In the continuity of this opposition's game, like a monolith rock, a menhir, the Hollow Tower emphasizes the reserve's Nature and therefore respects it.

In opposite of the strong external shape, the inside space is designed by the digging of the rocky mass. This void is moved in levitation above the ground of the ecological reserve, like a vertical receptacle of life, of the fauna and the flora, like a reserve in the reserve.



FARMLAND WORLD SECTION

Scale 50' 100' 200'



FARMHOUSE BULB HOTEL

Like stables for people, rows of farmhouses line the walls of the resort. Each house is distorted rendering each one unique while reaching for maximum sunlight on the exterior and craning for the best view of the central exhibition space on the interior.

ANIMAL FARMATURE VIEWING

Resort guests are encouraged to get close to both sets of animals, the farmature machines and the domesticated organic variety. As part of the resort experience, they tend to the needs of each as well as reap the rewards.

IRON HORSE TRAIN STATION

The proposed high-speed rail lines weaving through the fabric of the Midwest will bring a renewed consciousness of the middle and connection to the land. The resort capitalizes on the pulses of this new network through the rail station located underneath the resort.



Biodiversity *

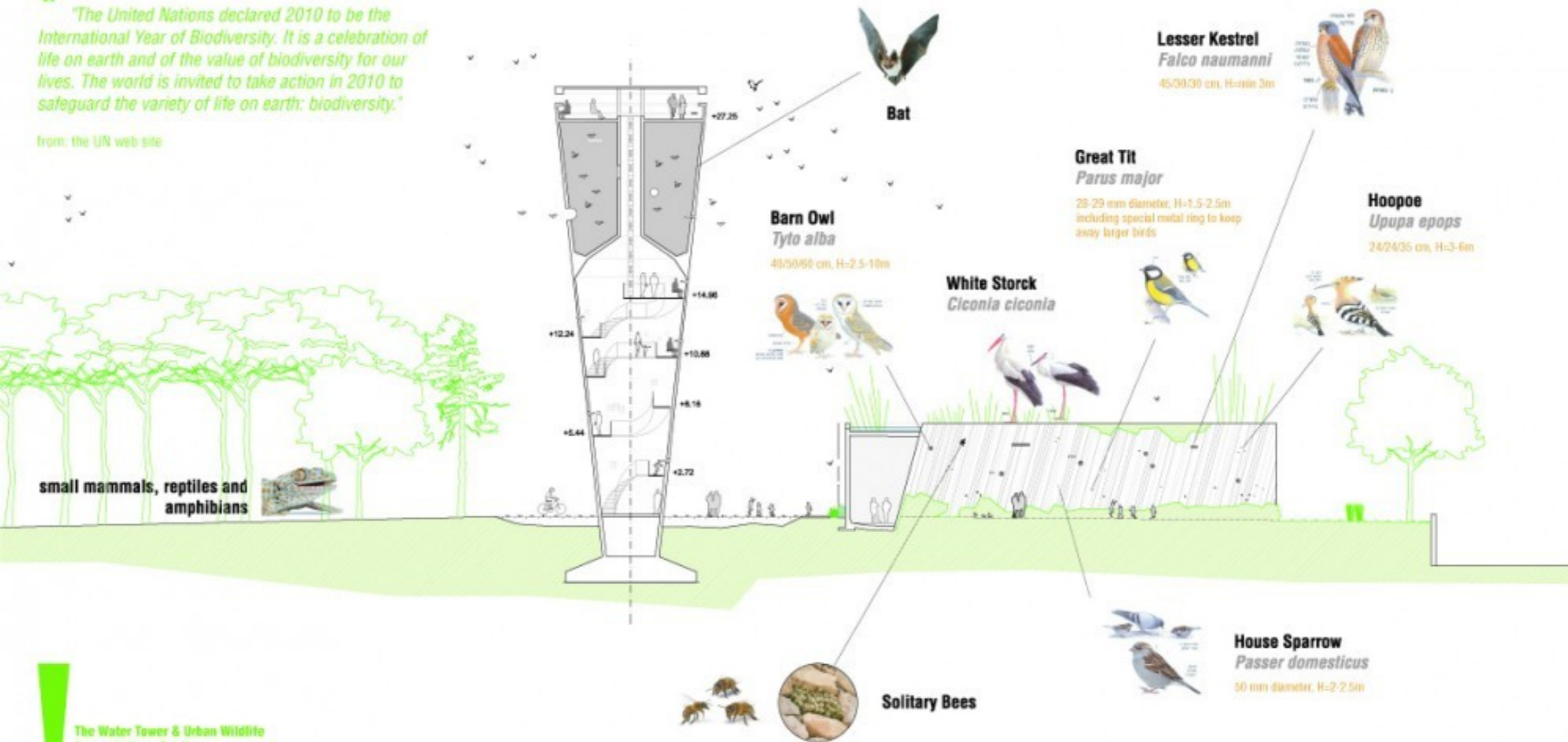
Living buildings function as natural systems and keep a balanced equilibrium between the structure and its natural surroundings. According to its geographical location and the resources it "uses", the living structure needs to supply hidden areas, nesting spaces and food resources in order to strengthen the natural biological, ecological and visual systems.

By locating and defining a variety of existing or potential animal and plants species in the area, we are able to create a series of **openings** and internal voids - each specifically sized and positioned to allow for a rich and varied range of animals - from fruit bats and song birds to small mammals, reptiles and amphibians.



"The United Nations declared 2010 to be the International Year of Biodiversity. It is a celebration of life on earth and of the value of biodiversity for our lives. The world is invited to take action in 2010 to safeguard the variety of life on earth: biodiversity."

from: the UN web site

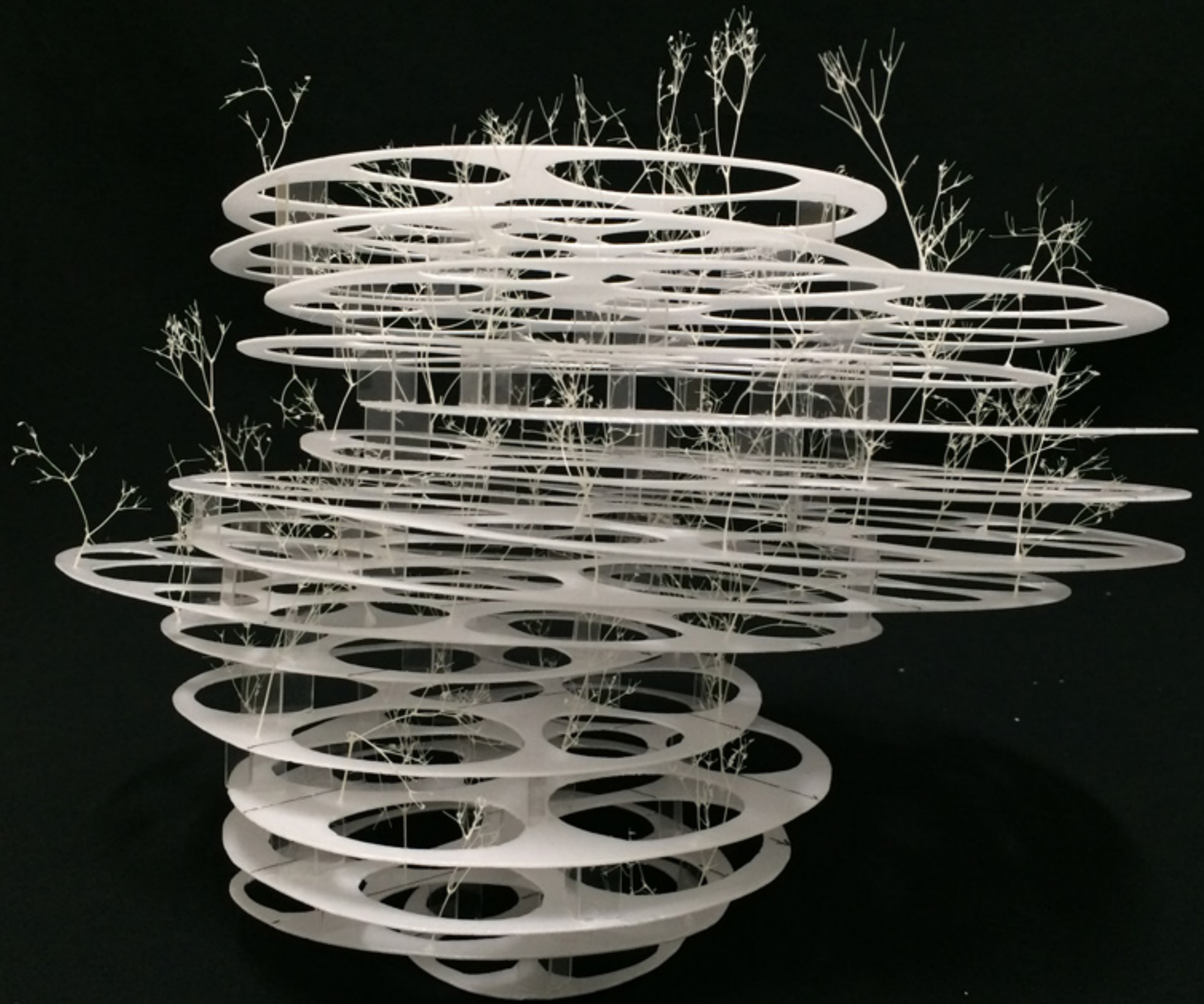






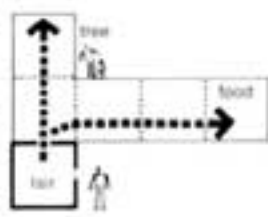
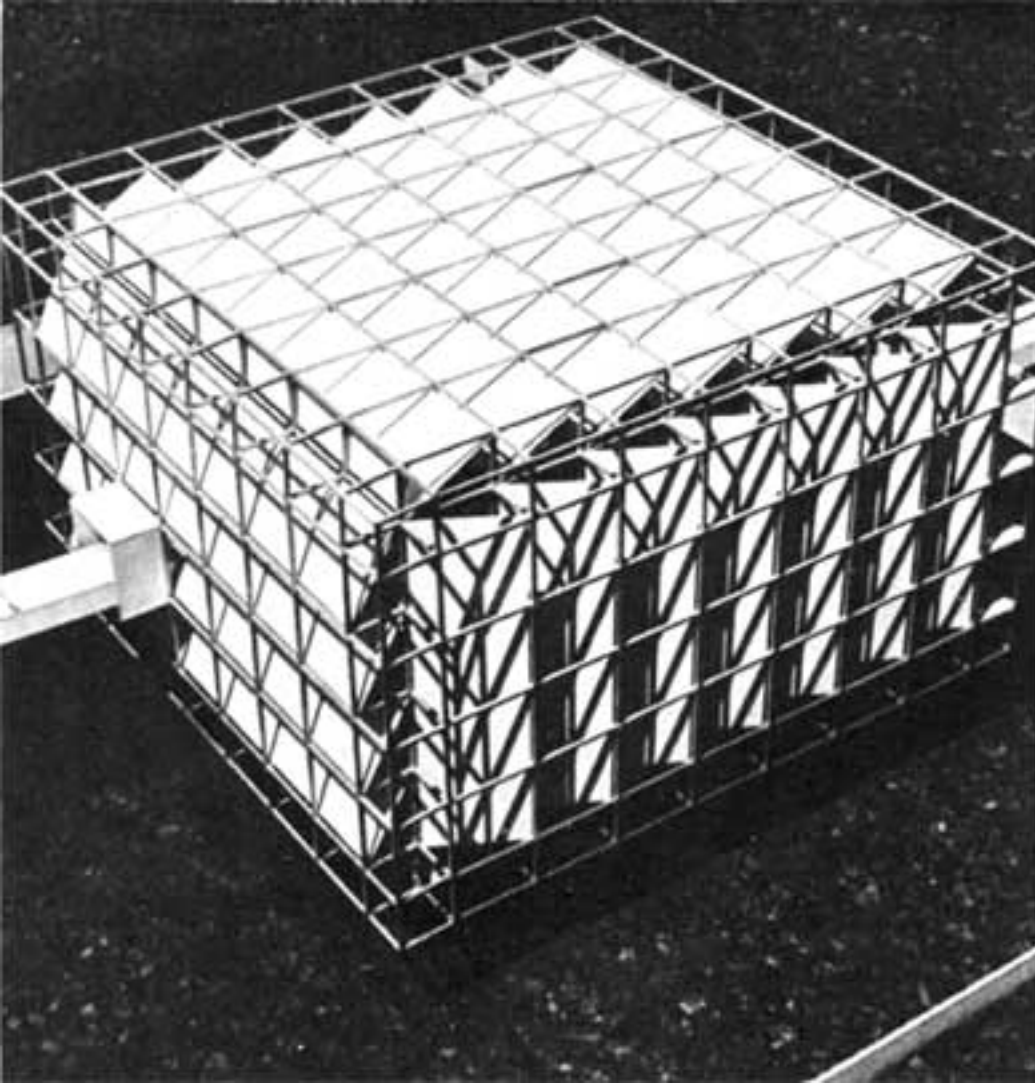


MoMA

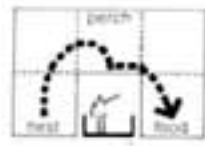




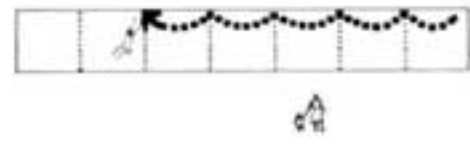




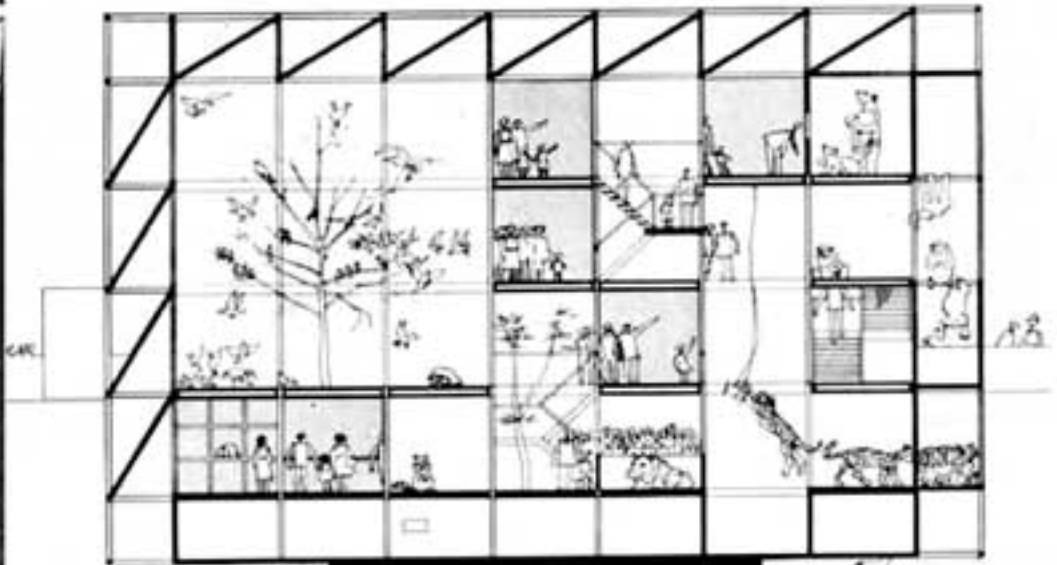
Terrestrial lears



Leaping cats

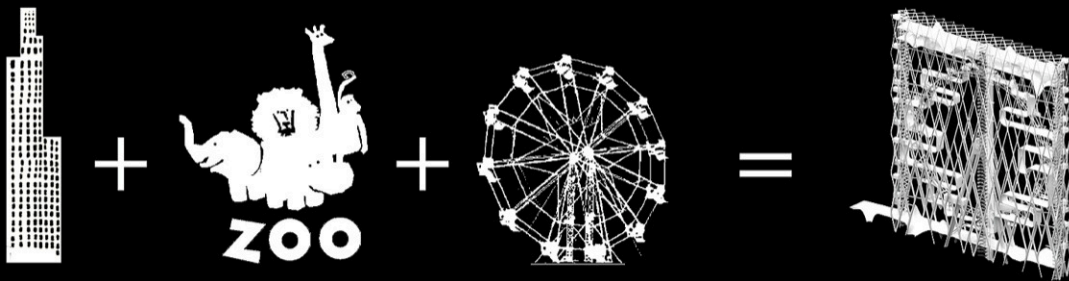


Brachiation gibbons





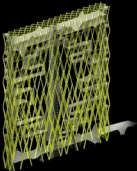
circular urban safari



new hybrid type: vertical safari

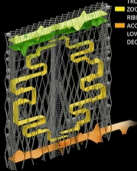


TREE LIKE STRUCTURAL NETWORK

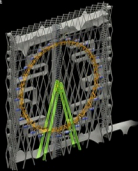


RIBBONS SYSTEM

- ROOF GARDEN AND 360° OBSERVATION DECK
- FACILITIES LEVEL AND TROPICAL BIOSPHERE
- ZOOLOGICAL RIBBONS
- ACCESS RIBBON AND LOW OBSERVATION DECK

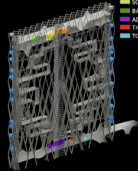


FERRY WHEEL



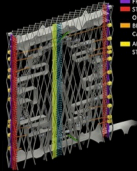
PROGRAM DISTRIBUTION

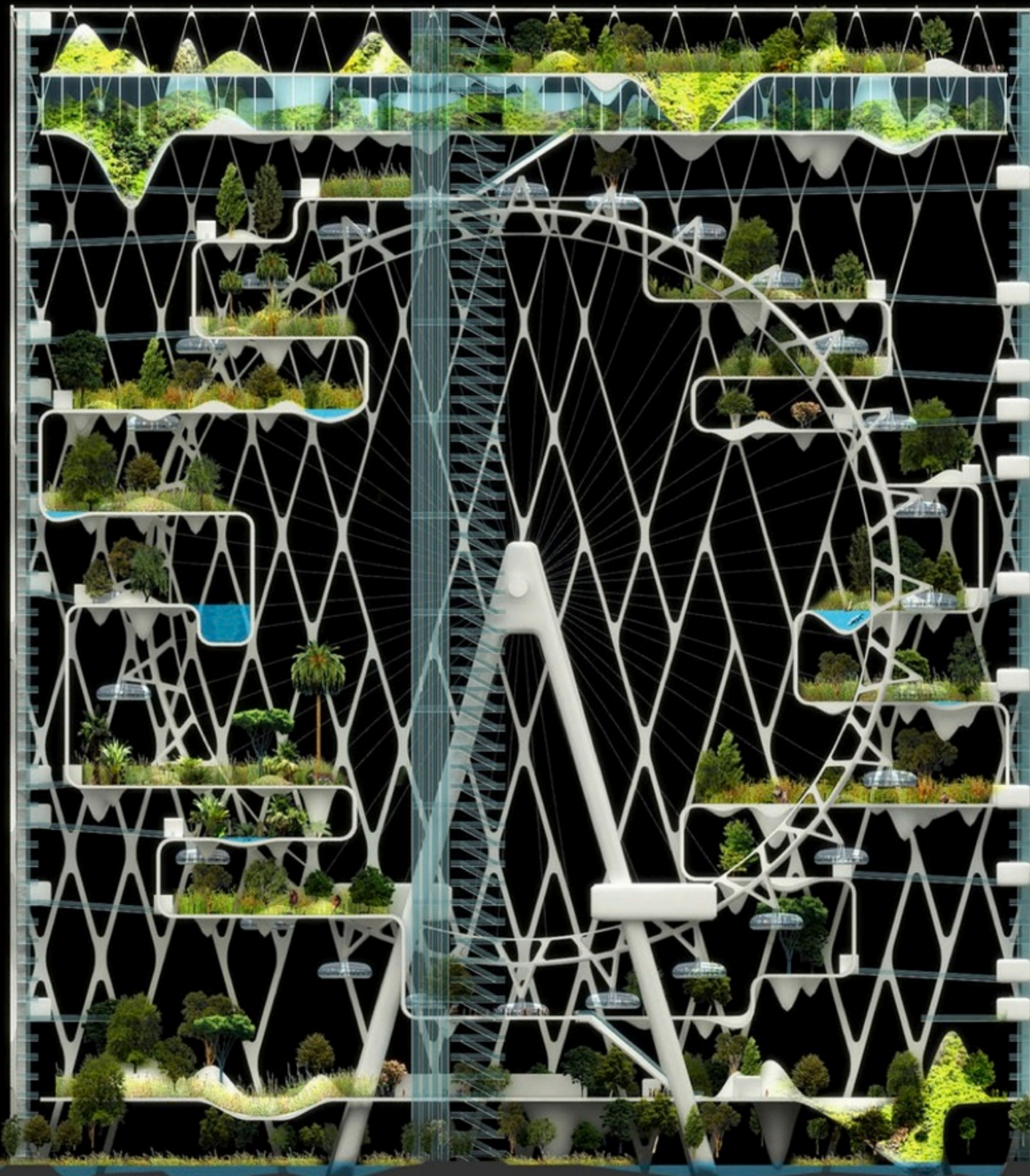
- ANIMAL'S FOOD STORAGES
- AUDITORIUM
- MULTI-USE SALON
- SOUVENIR SHOP
- BAR
- ADMINISTRATION
- TICKETS
- TOILETS



CIRCULATIONS

- PUBLIC STAIRS
- PUBLIC ELEVATORS (4)
- MECHANICAL STAIRS
- FREIGHT ELEVATORS (2)
- STAFF STAIRS (PUBLIC ONLY IN EMERGENCY)
- BRIDGES TO ANIMAL'S CAGES (STAFF ONLY)
- ANIMAL'S FOOD STORAGES





125 M

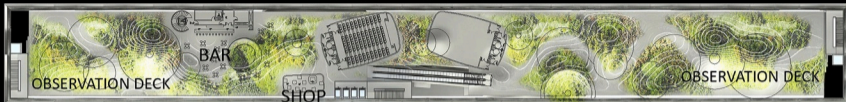
PLANS



FACILITIES LEVEL +215m

AUDITORIUM

MULTIPURPOSE ROOM



ZOOLOGICAL TYPE LEVEL +175m



ACCESS AND ADMINISTRATION LEVEL +14m



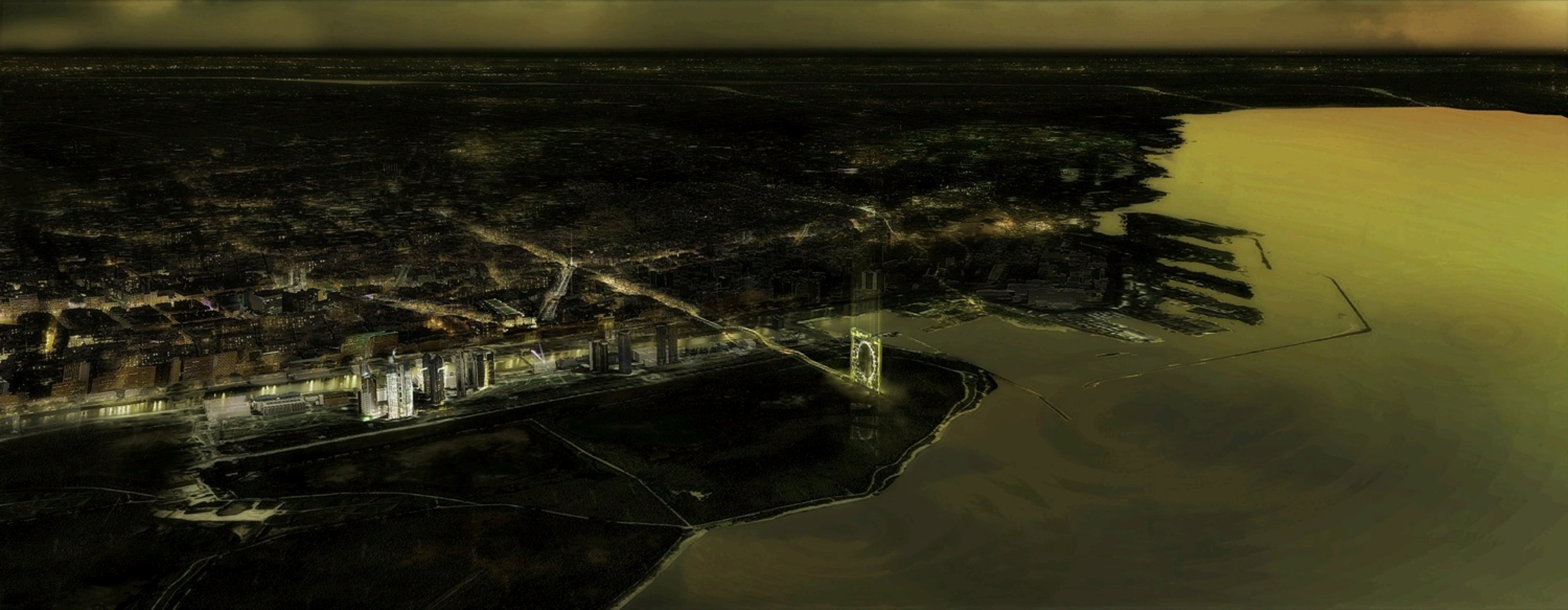




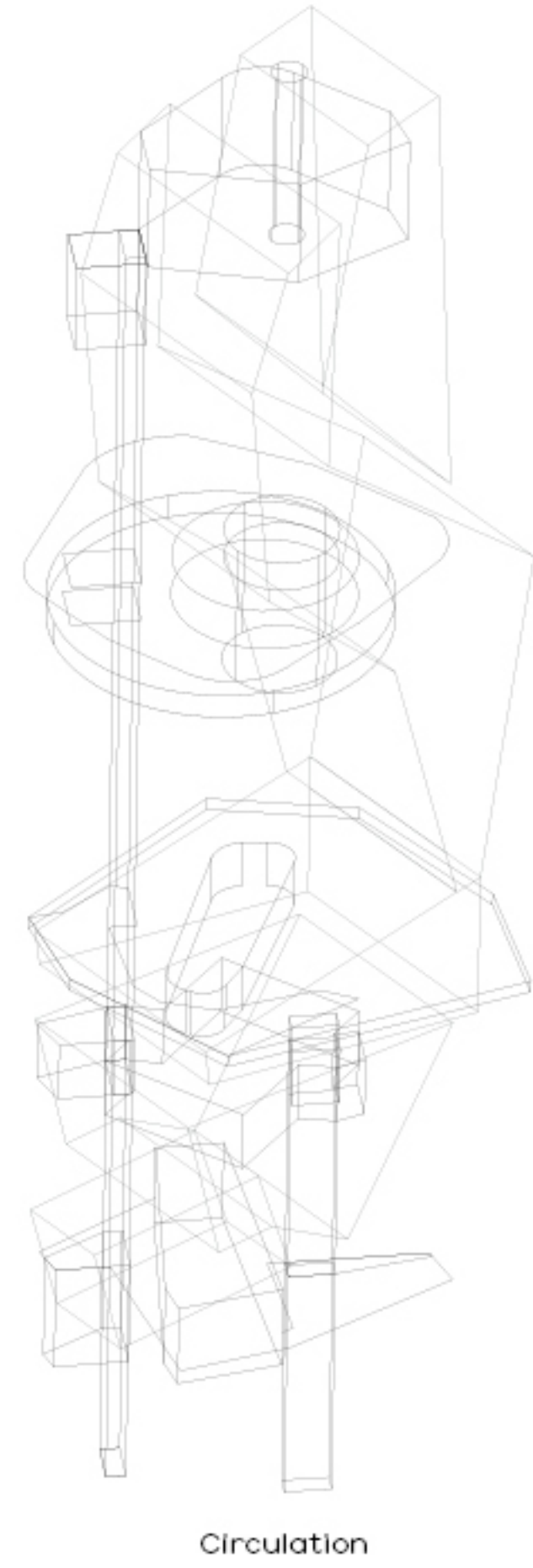
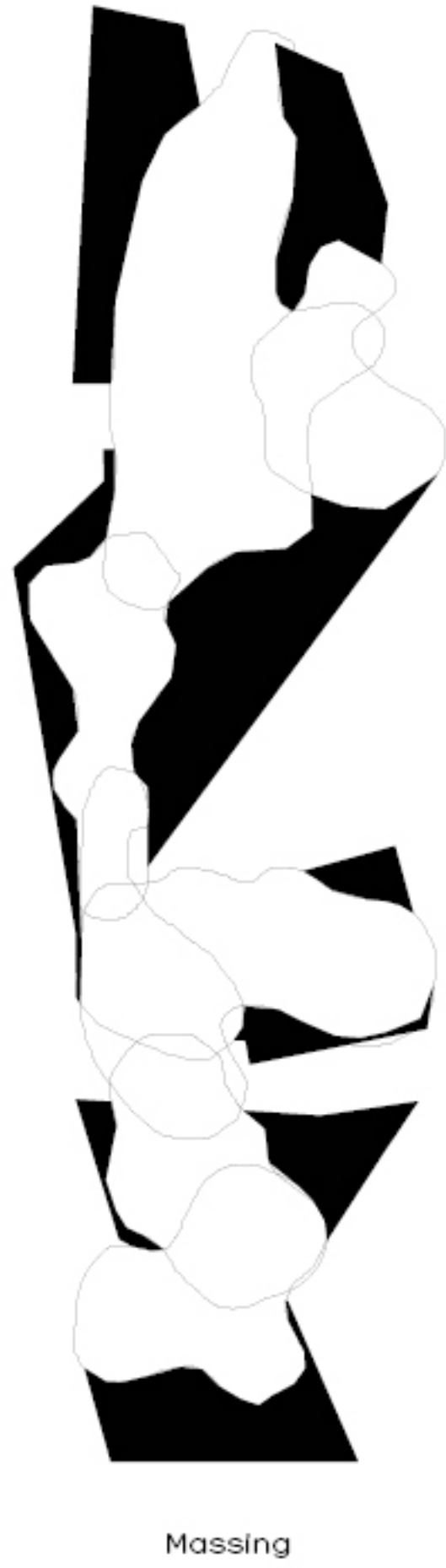
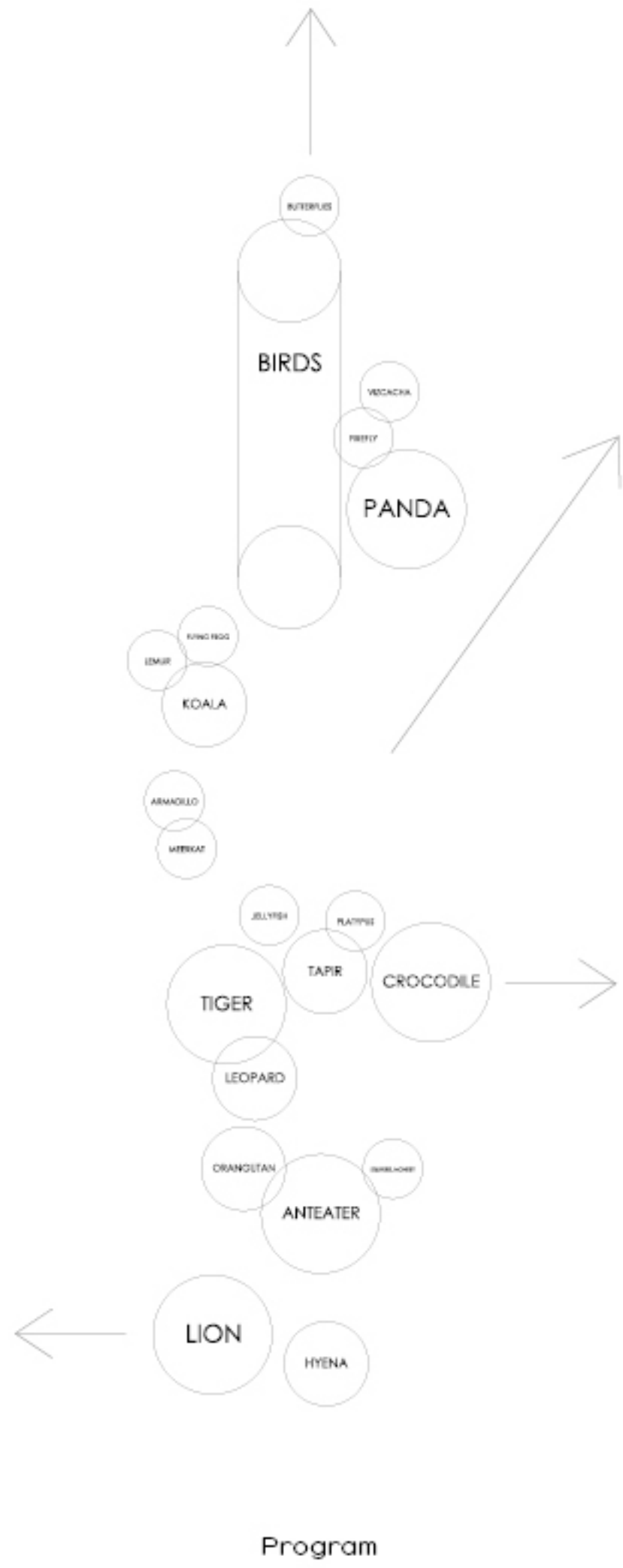


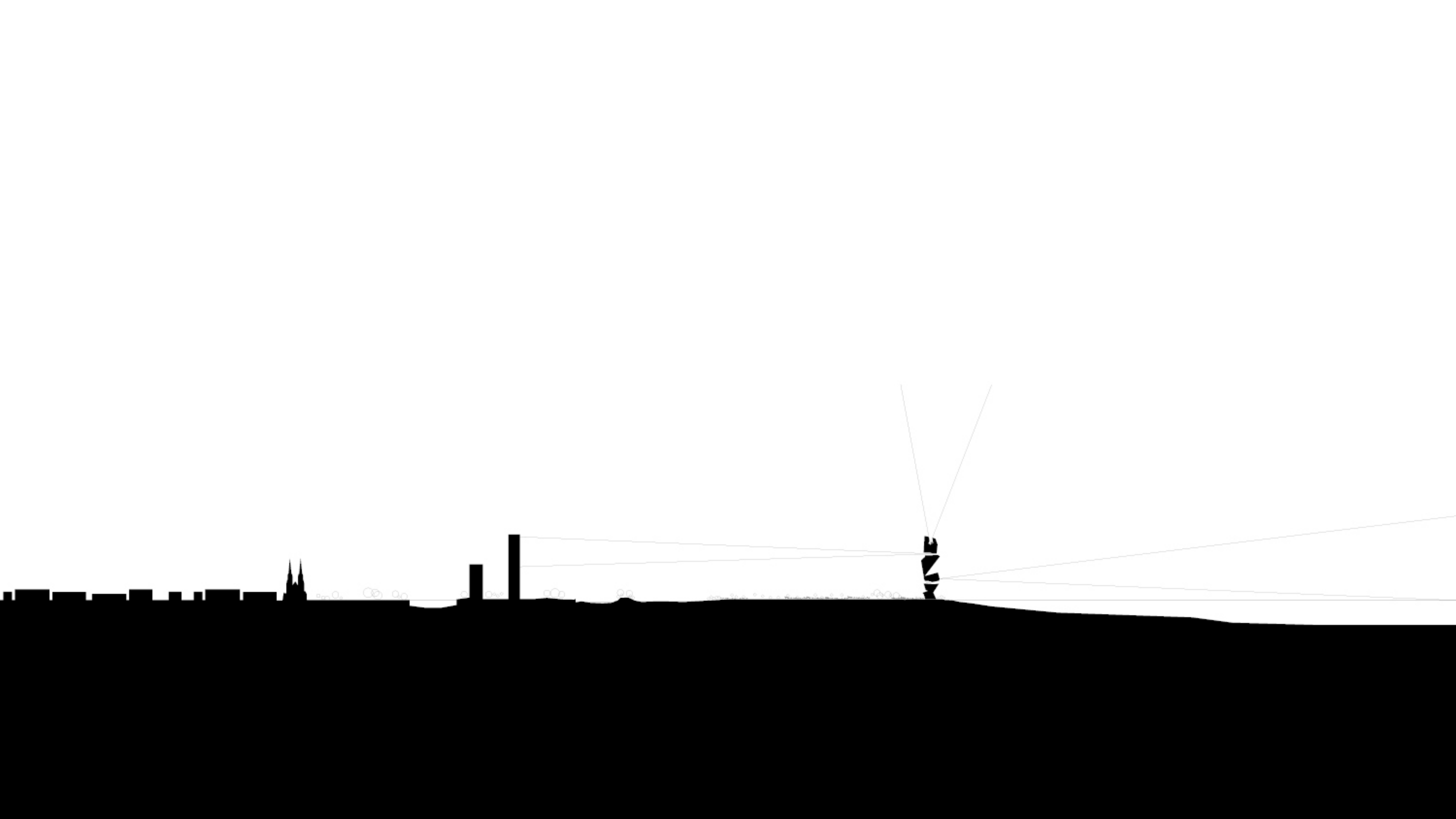


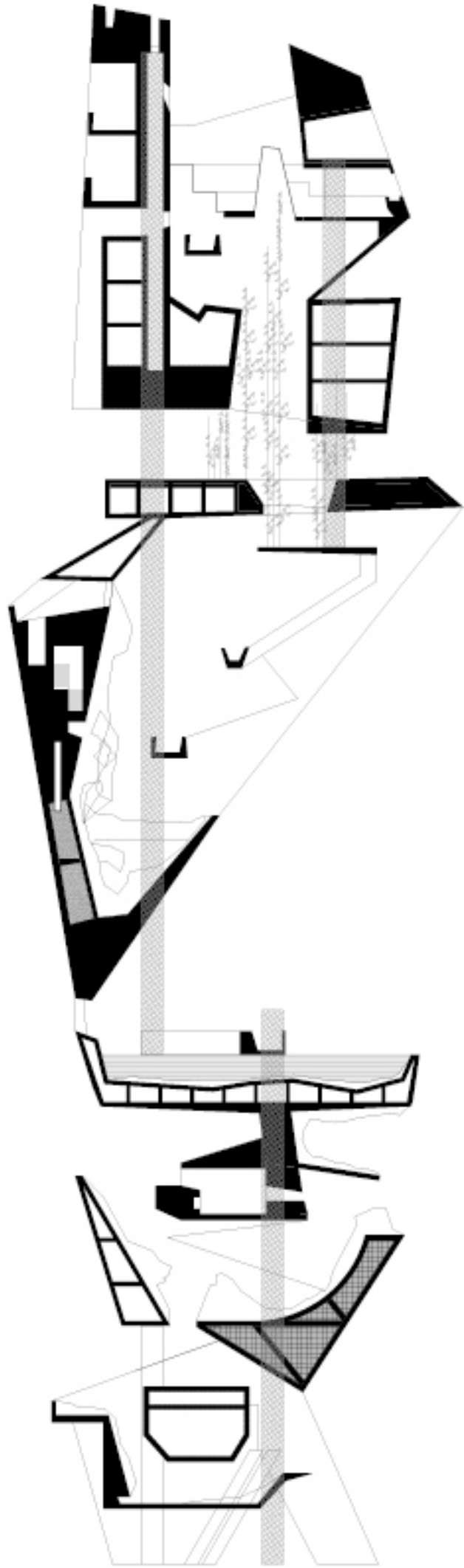


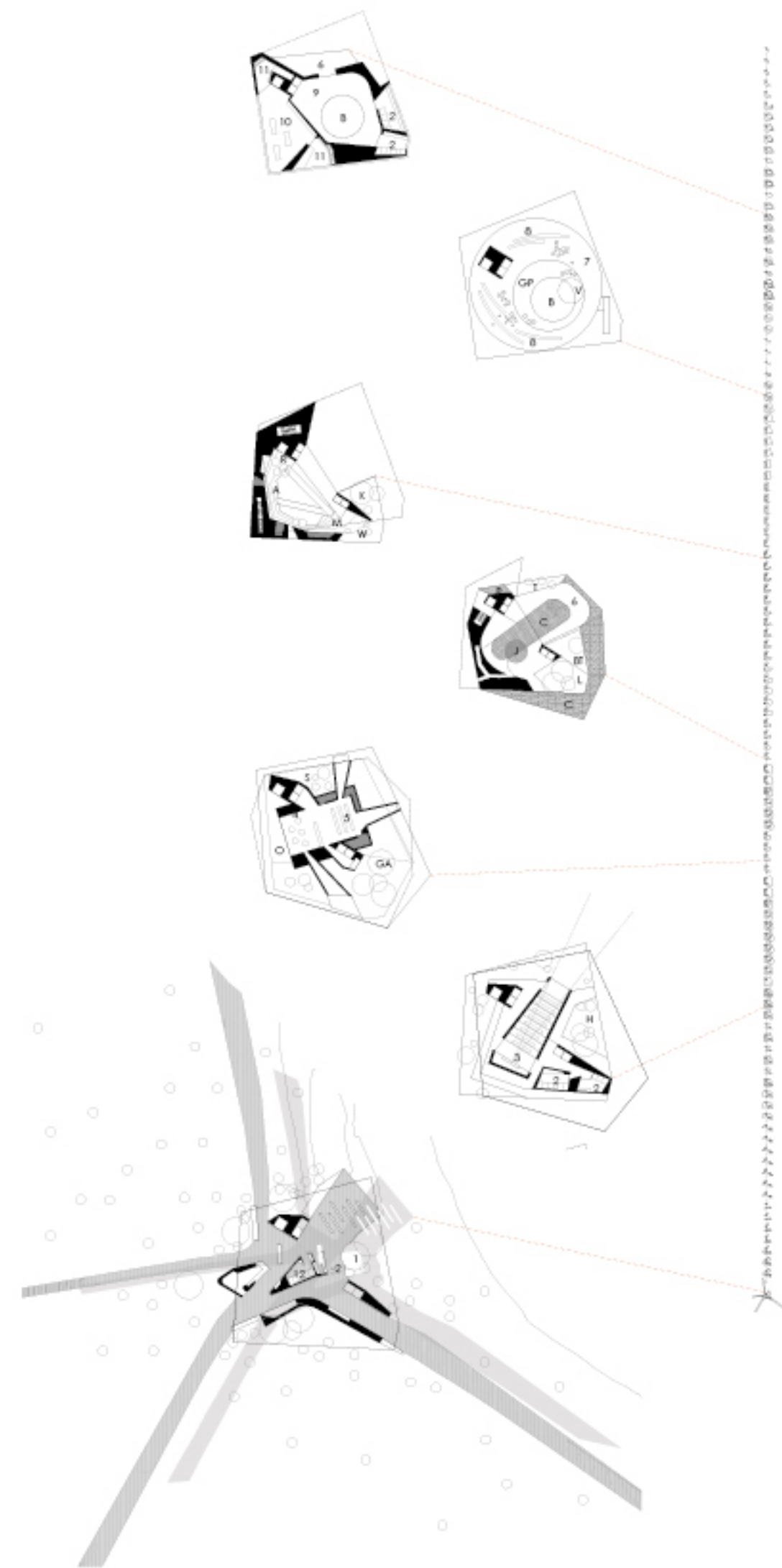
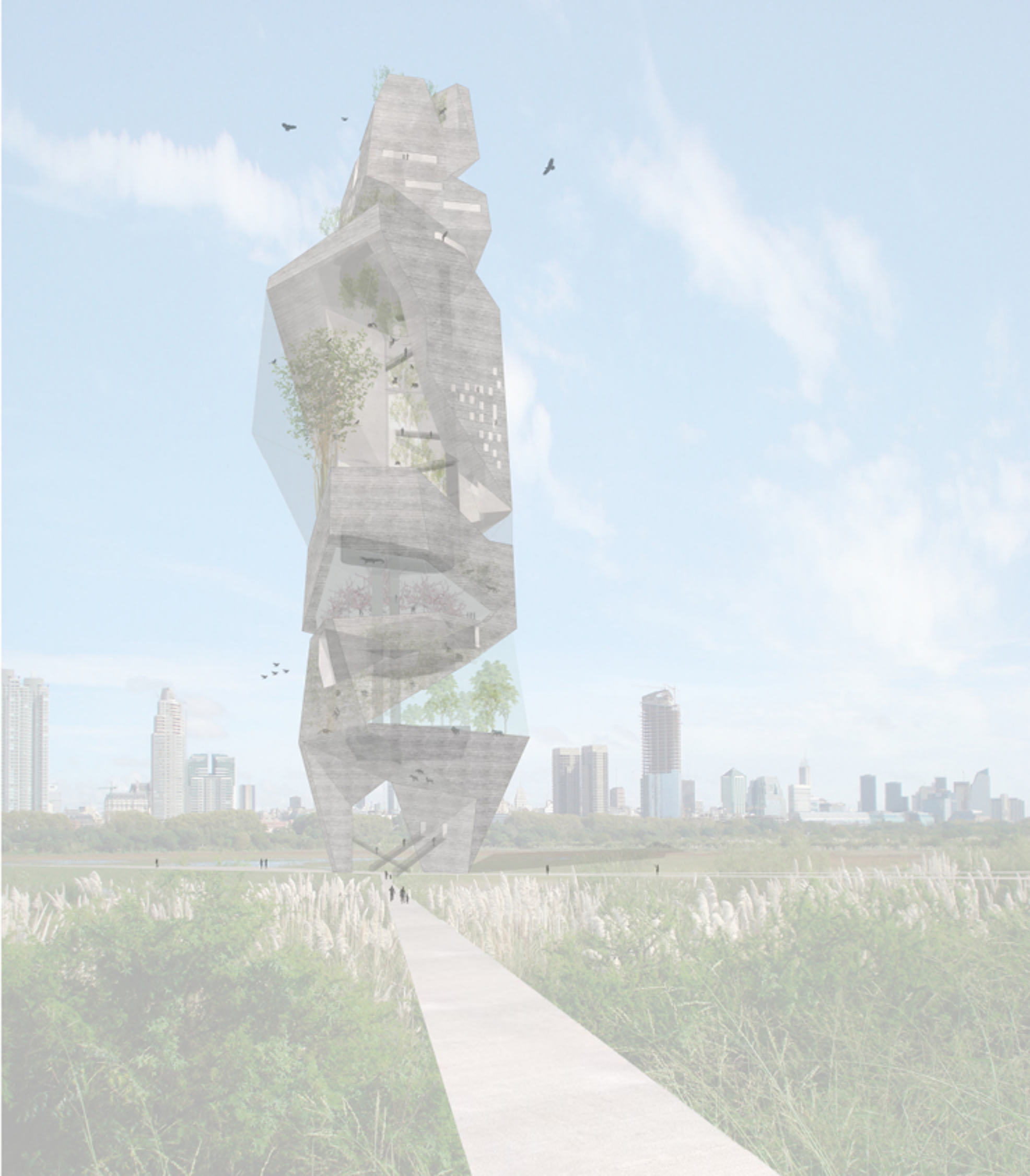










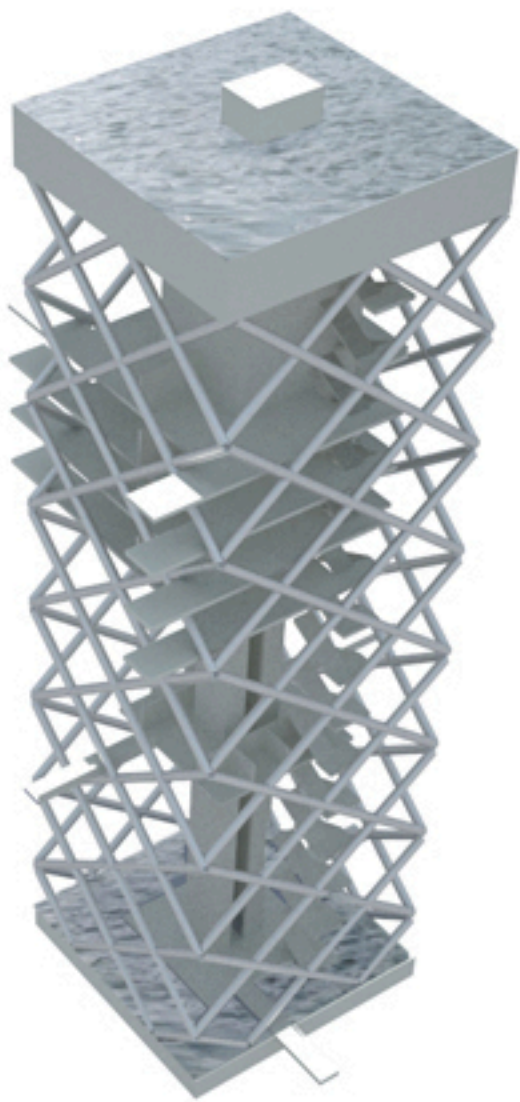


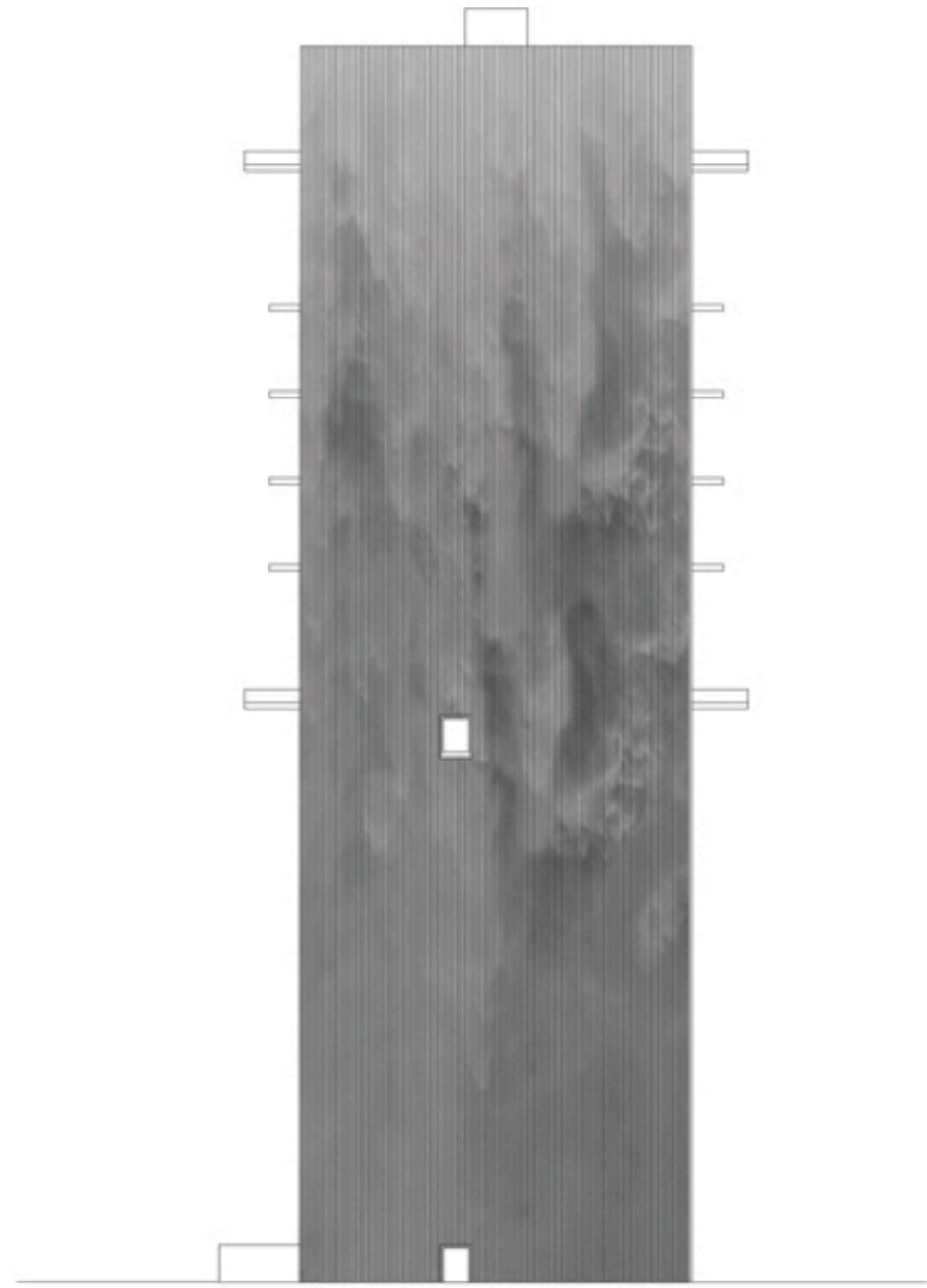
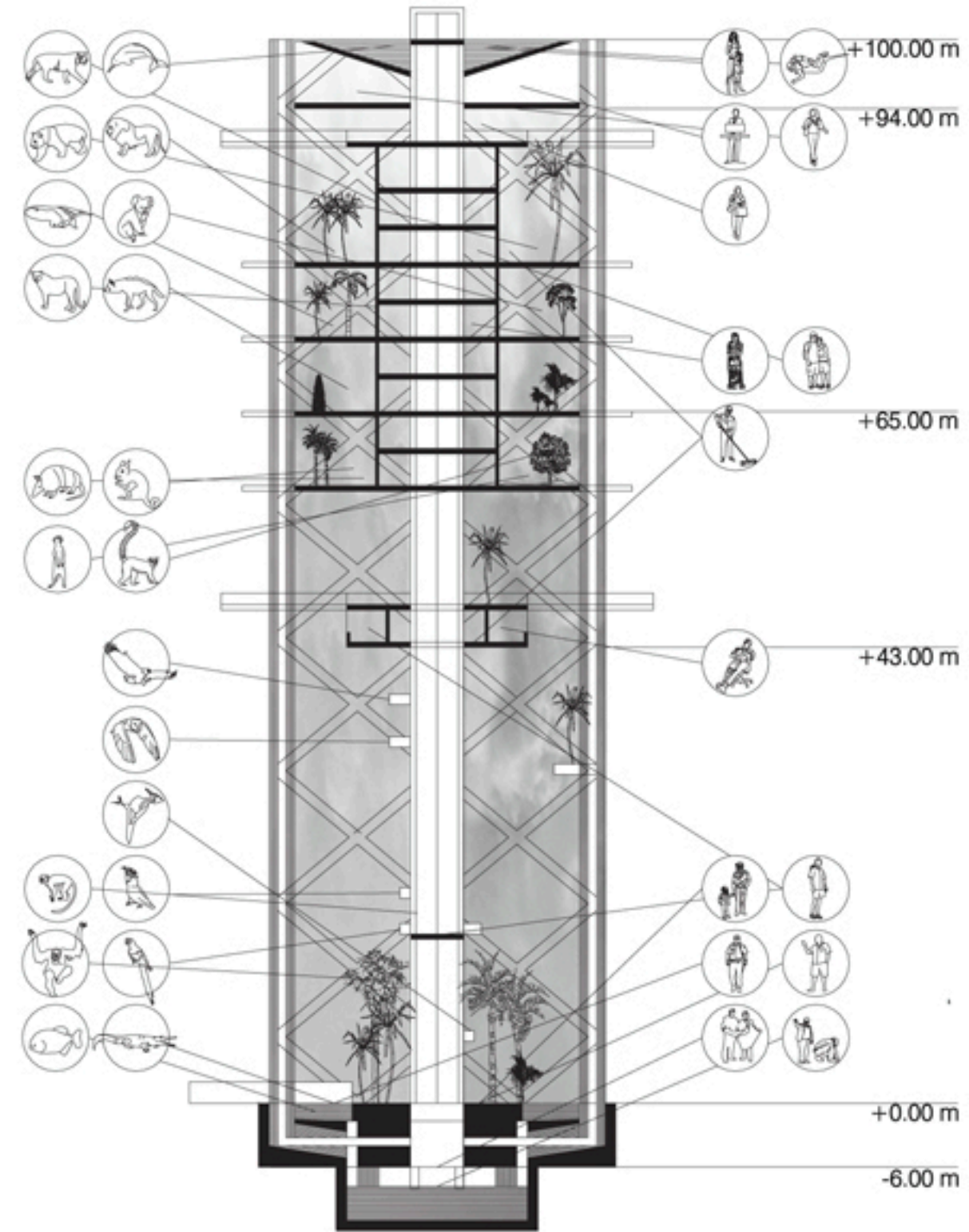
- 1 ENTRANCE
- 2 RESTROOMS
- 3 AUDITORIUM
- 4 SMALL CAFE
- 5 SOUVENIR SHOP
- 6 SMALL OBSERVATION DECK
- 7 360 OBSERVATION DECK
- 8 LARGER CAFE
- 9 MULTI USE SALON
- 10 STAFF SERVICES
- 11 STAFF CHANGING ROOMS
- 12 ADMINISTRATION

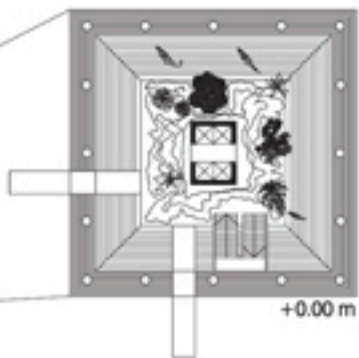
- A ARMADILLO
- AL AFRICAN LION
- B BIRDS + BUTTERFLIES
- BT BENGAL TIGER
- C CROCODILE
- F FREELY
- GA GIANT ANEATER
- GP GIANT PANDA
- H HYENA
- J JELLYFISH
- K KOALA
- L LEOPARD
- M MERRKAT
- O ORANGUTAN
- P PLATYPUS
- R RING TAILED LEMUR
- S SQUIRREL MONKEY
- T TAPIR
- V VICACHA
- W WALLACE'S FLYING FROG



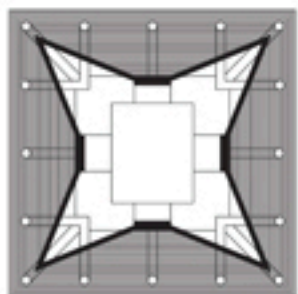




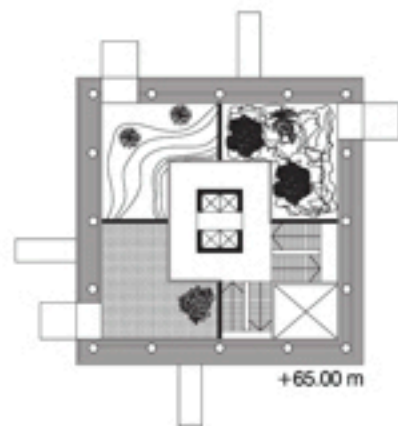




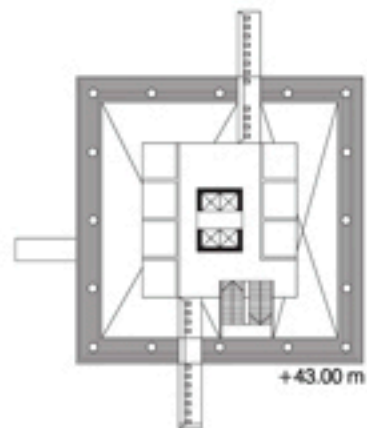
+0.00 m



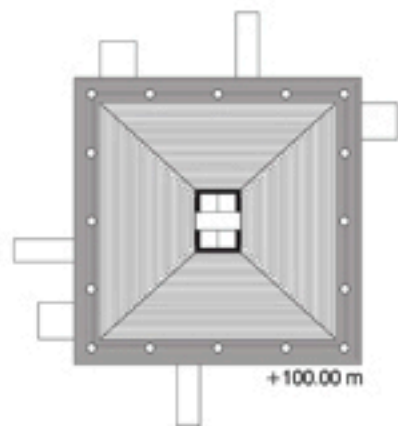
-6.00 m



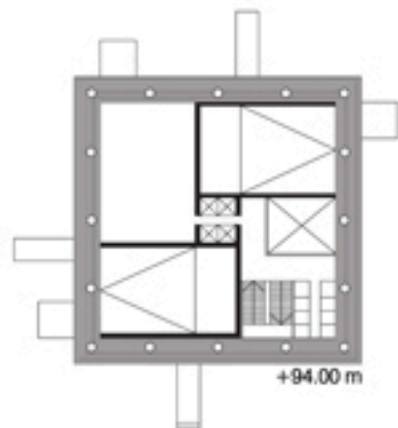
+65.00 m



+43.00 m



+100.00 m

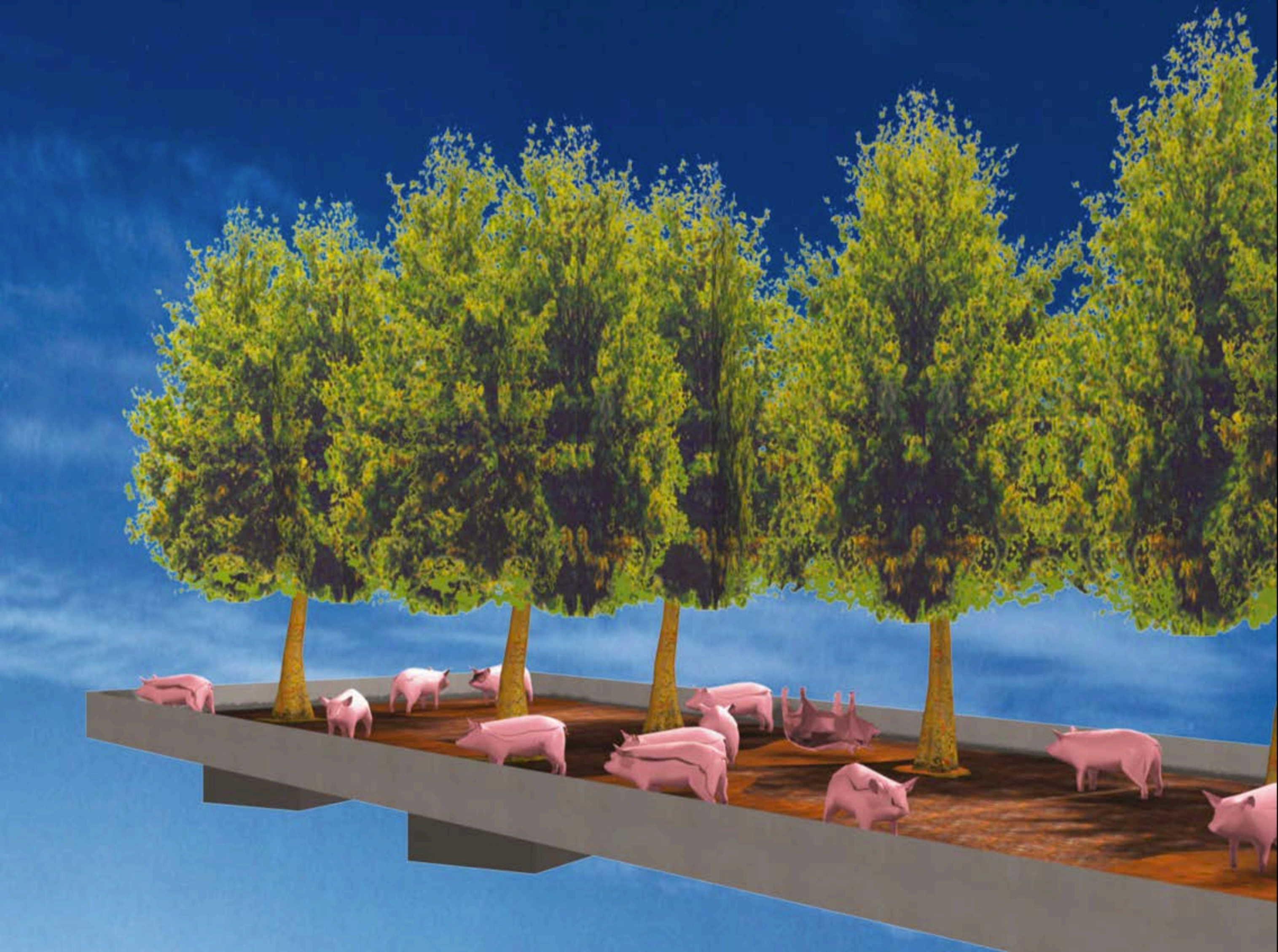


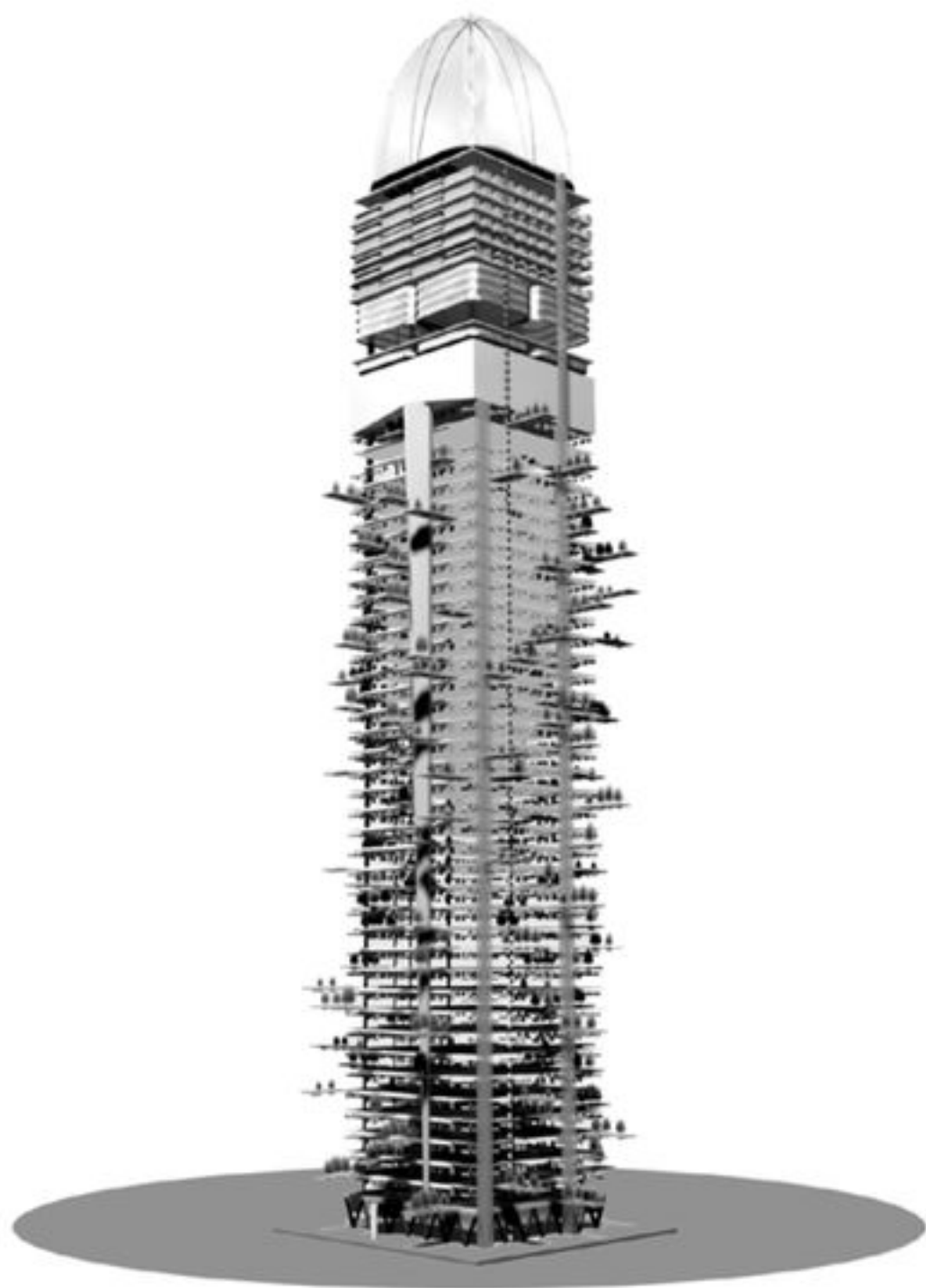
+94.00 m



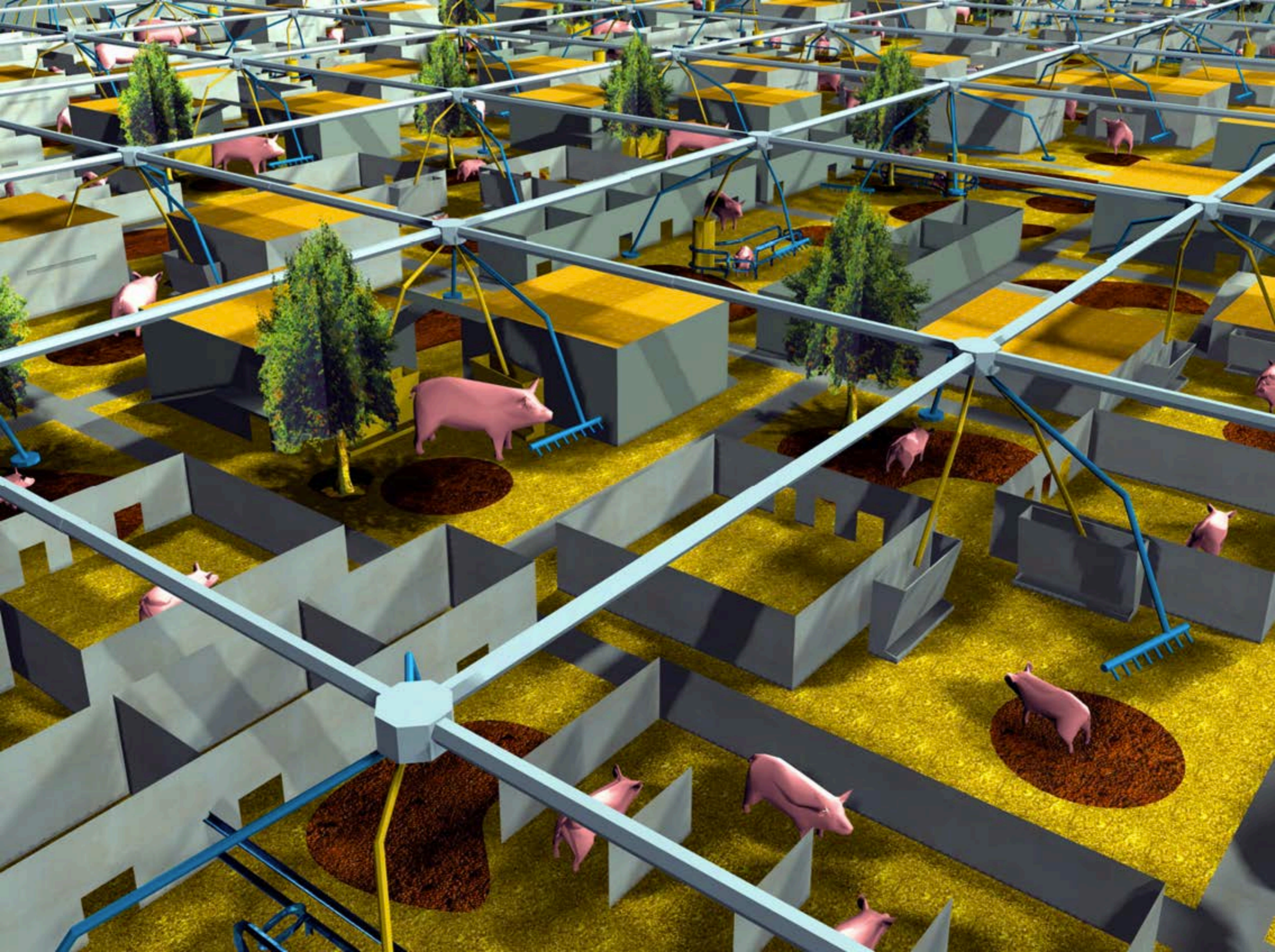






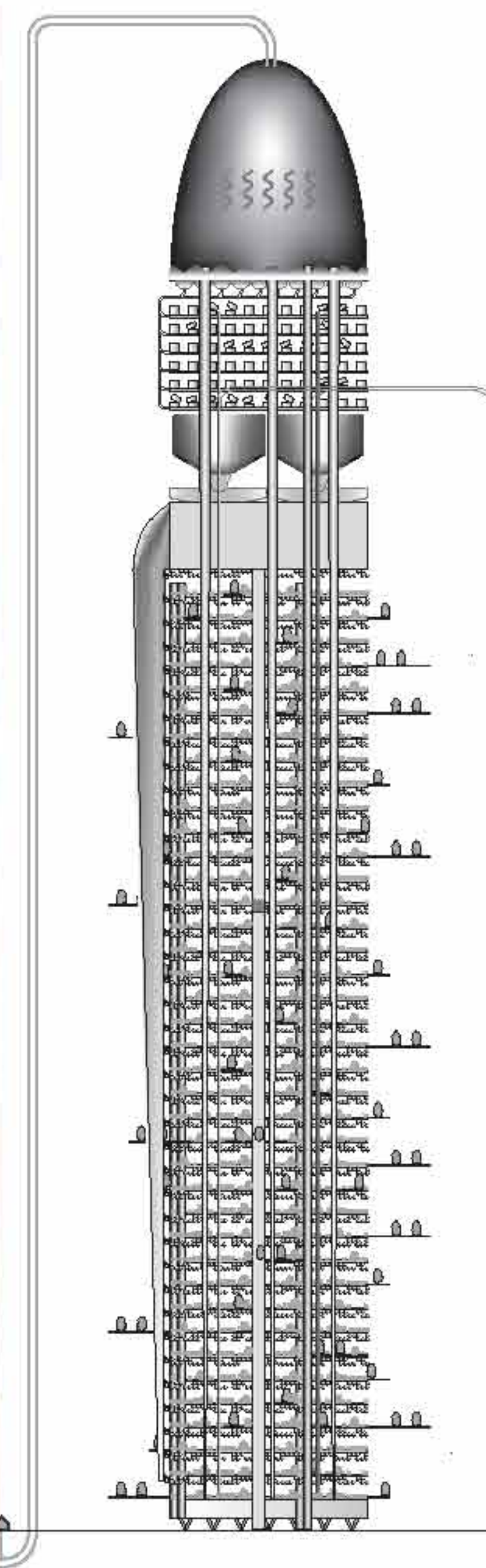




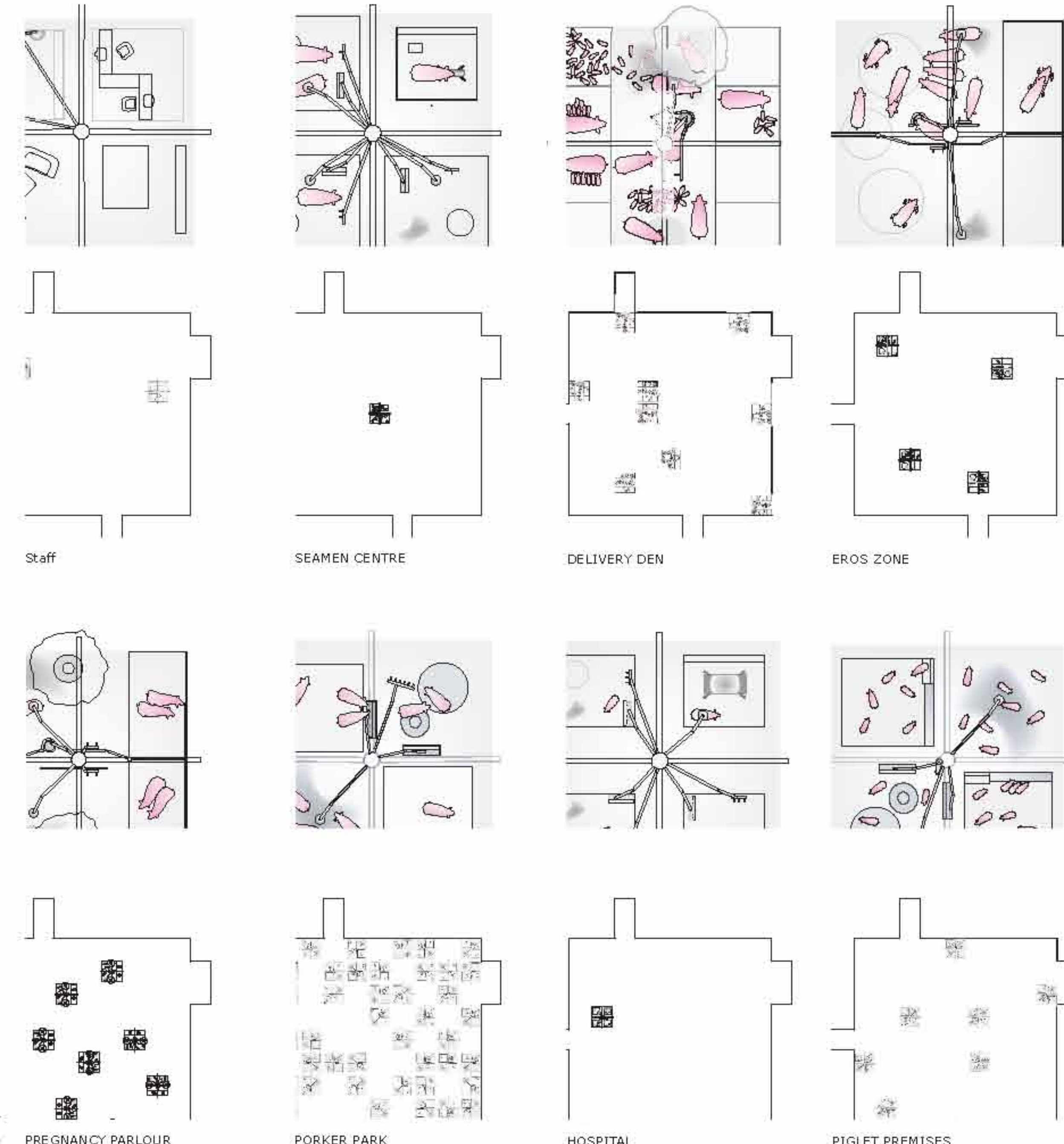




VIEW OF PIG TOWERS IN THE GREEN HEART AREA



ELEVATION OF PIG TOWER



PROGRAM DIAGRAMS

TOTAL FARM AREA

Area required for each function:

Eros Zone	81 m ²
Pregnancy Parlour	972 m ²
Delivery Den	567 m ²
Semen Center	81 m ²
Piglet Premises	567 m ²
Porker Park	3,969 m ²
Hospital	162 m ²
Staff	162 m ²
Truffle Gardens (outside)	729 m ²
Traffic area	1,008 m ²

Total net floor area	8,298 m ²
Total gross floor area	10,000 m ²

“Imagine the entire export of pigs concentrated in one location with 44 towers housing over 4 million pigs: a genuine Pig City”

With a production of 16.5 million tons of pork, The Netherlands is the chief exporter of pork within the European Union. In 1999, 15.2 million pigs and 15.5 million humans officially inhabited The Netherlands. One pig typically needs 664 m² of land for current processing: composed of 50% intensive grain production and 50% industrial by-products.

In the case of organic farming, pigs are fed with 100% organic grain. This increases land intensity by 130% due to the reduced grain yield. This increases the area needed to 1,726 m² per pig, including organic food processing. If all 15.2 million pigs were farmed this way, 75 % of the land area of the Netherlands would be dedicated to pigs.

Is it possible to combine organic farming with a further concentration of the production activities so that there is enough space for other activities? Is it possible to compact all the pig production within concentrated farms, therefore avoiding unnecessary transportation and distribution, and thereby reducing the spread of diseases? Can we, through concentrated farming, create the economical critical mass to allow for a communal slaughterhouse, a self-sufficient fertiliser recycler, and a central food core, so as to solve the various problems found in the pig-industry?

Pig City proposes 44 Pig Towers which would produce enough pork to maintain the present export levels from The Netherlands. These towers would take up just over 5 percent of Dutch land area, when taking the surrounding reed fields into account. To minimize transportation, the towers would be positioned near a harbor.

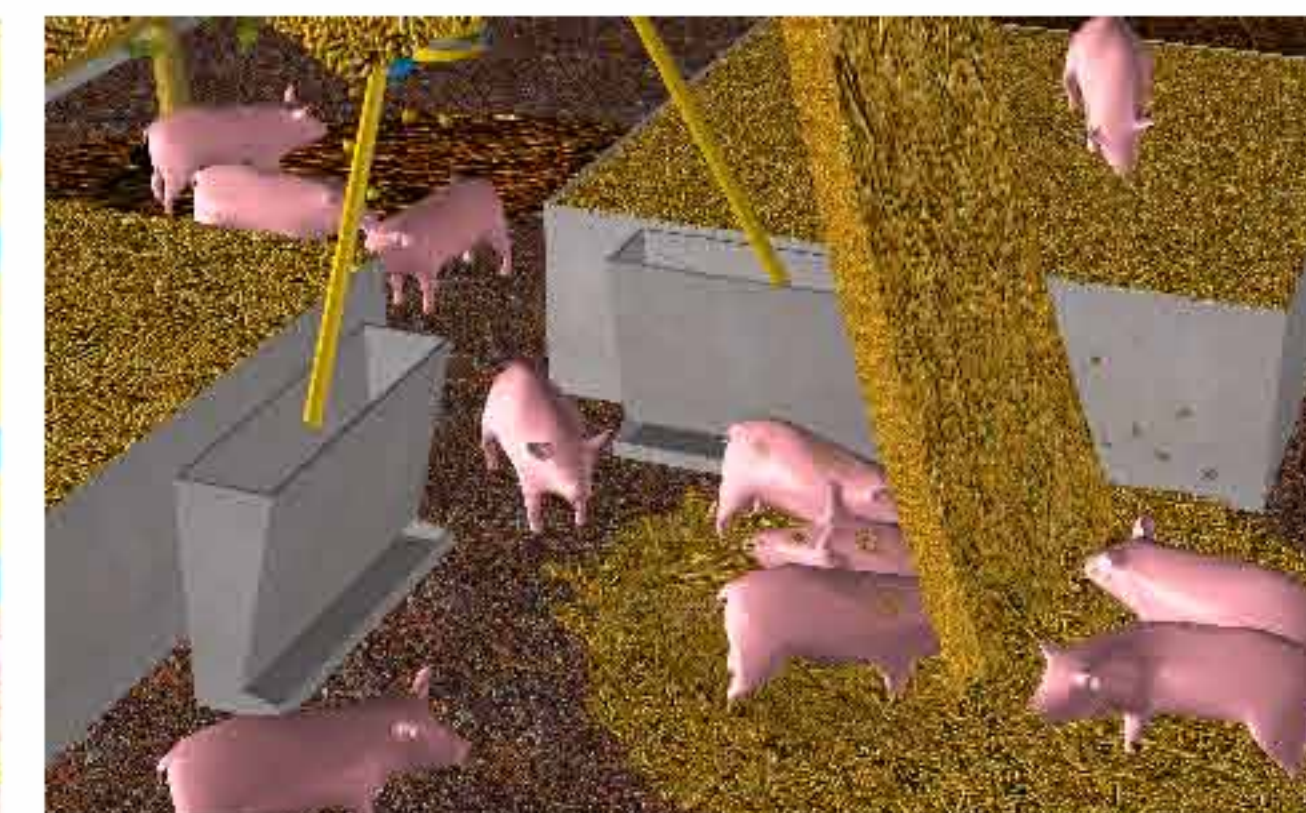
Each tower can feed half a million people, so 31 Pig Towers would be needed to supply the Dutch population with sufficient meat. Ten of the towers should be positioned inside the so-called Green Heart - an agricultural area within the urban agglomeration of the Western Netherlands. The remaining 20 towers can be distributed more or less equally throughout the rest of The Netherlands.



IMAGE OF PIG FARM



VIEW LOOKING DOWN ON THE PIG TOWER

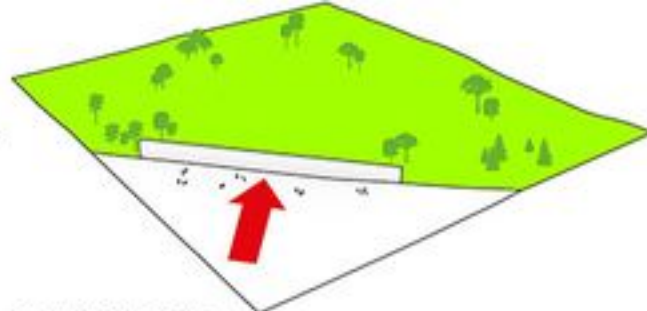


ADDITIONAL IMAGES OF THE PIG FARM

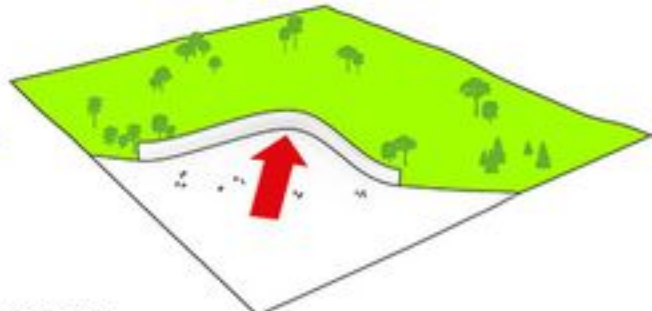
Images & text courtesy of Paula van Baak and Winy Maas, MVRDV



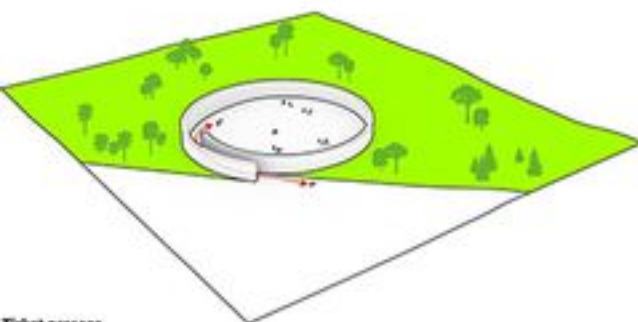
Denmark vs. Zootopia
 How can we create a new entrance for Zootopia where all the public functions: restaurant, shop, ticket sale, toilets etc. are integrated and at the same time can give the visitor a easy overview of the park and where to go?



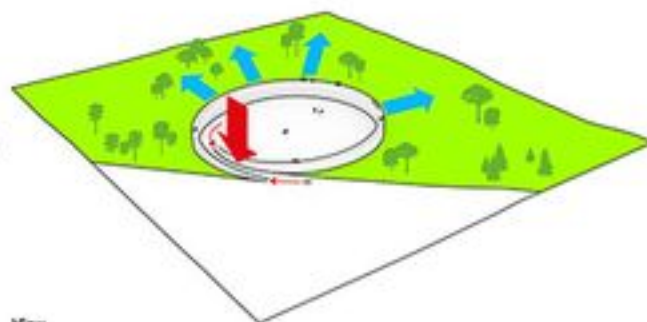
Entrance functions and gates
 The functions are spread out along the border between Zootopia and the rest of Denmark.



Entrance plaza
 The building is bent to make space for a central arrival square.



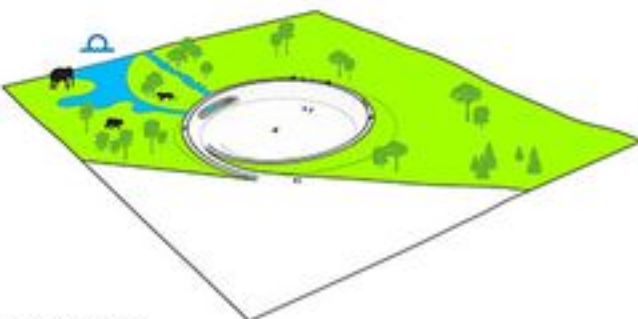
Ticket passage
 The building is wrapped around itself to create a natural entrance gate.



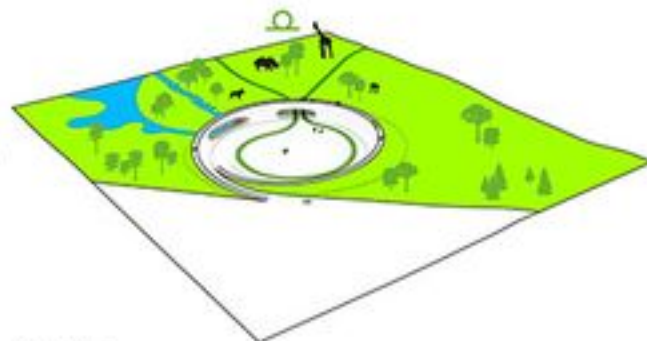
View
 When arriving to Zootopia the visitor can either choose to climb the arrival building and get an overview of the park or to walk straight into the central square.



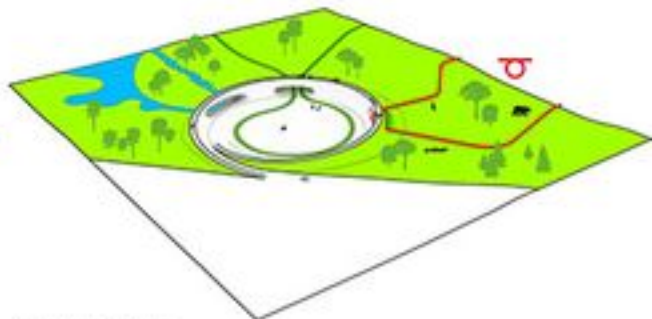
Building-landscape
 The arrival building and main square are hard paved on the inside and blending into the landscape on the Zootopia side.



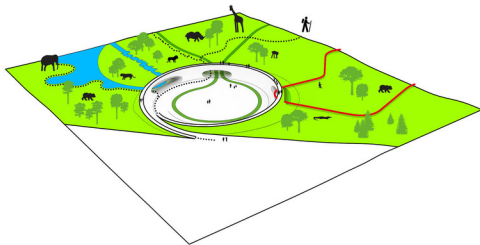
Sailing through Asia
 The entrance to each of the continents is done through 3 different gates in various heights.
 Access to Asia is 1 floor down at the river.



Biking in Africa
 The entrance to Africa is straight from the central square to the heart of the park - the Lion enclosure.



Flying through America
 To enter America you will have to get 1 floor up to fly across the continent.



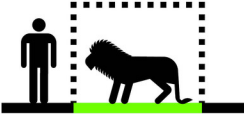
10. Hike

There will be one long hike across all 3 continents, starting with the loop along the entrance building. The hike is 4 km long.

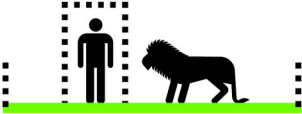




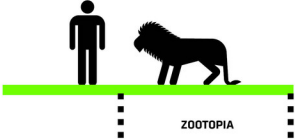
HOW TO REINVENT THE ZOO SAFARI?



TRADITIONAL ZOO

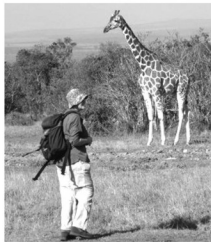


MAJOR REINVENTION - THE SAFARI



ZOOTOPIA

ON GROUND, WATER OR IN THE AIR



1. On ground - hiking...



...bike safari...



...or car safari



2. By boat - boat safari

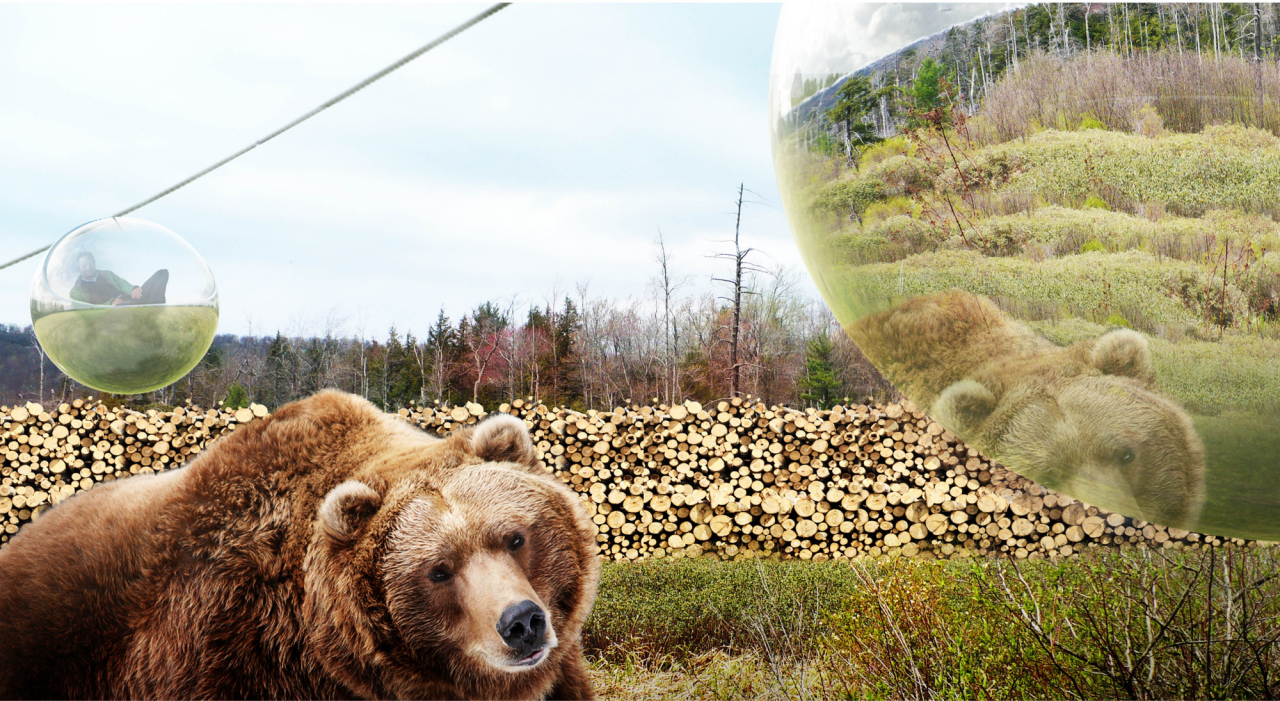


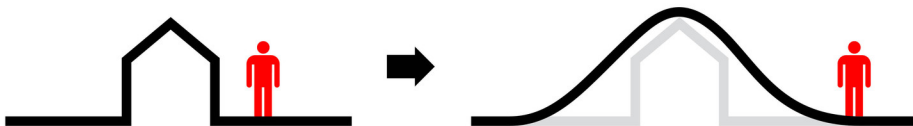
3. In the air - flying safari







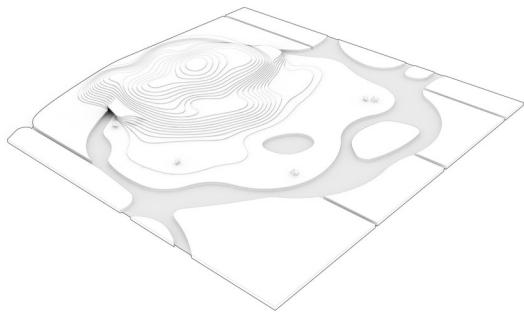




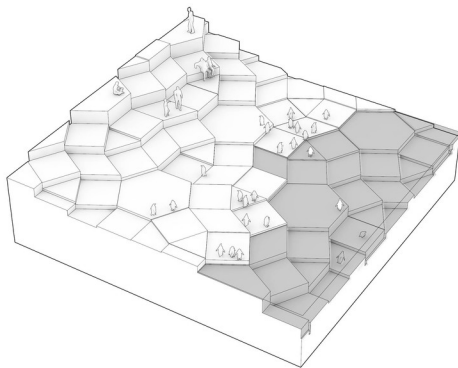
ARCHITECTURE

Instead of copying the architecture from the various continents by doing vernacular architecture, we propose to integrate and hide the buildings as much as possible in the landscape. We would like to build homes for the animals that are both tailor-made especially for them and at the same time has the qualities from their original surroundings.

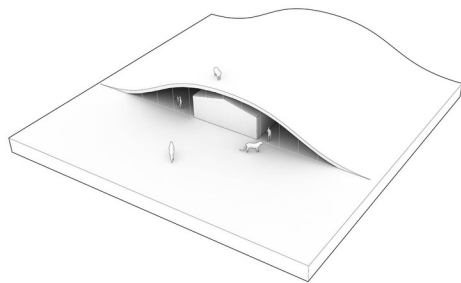
The Elephant house could be a small hill of rice fields, the huts by the bears would be in between a stack of lumber and there could be small cottages build into the safari-crater on the savannah.



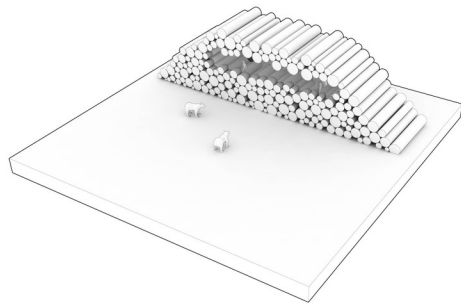
1. ELEPHANT RICE FIELD ENCLOSURE



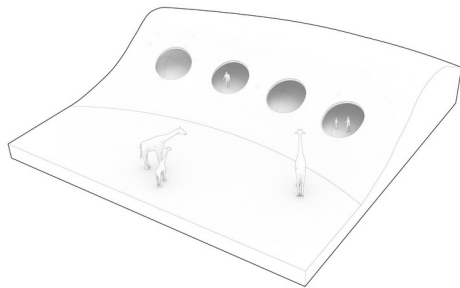
3. PENGUIN ROCK ENCLOSURE



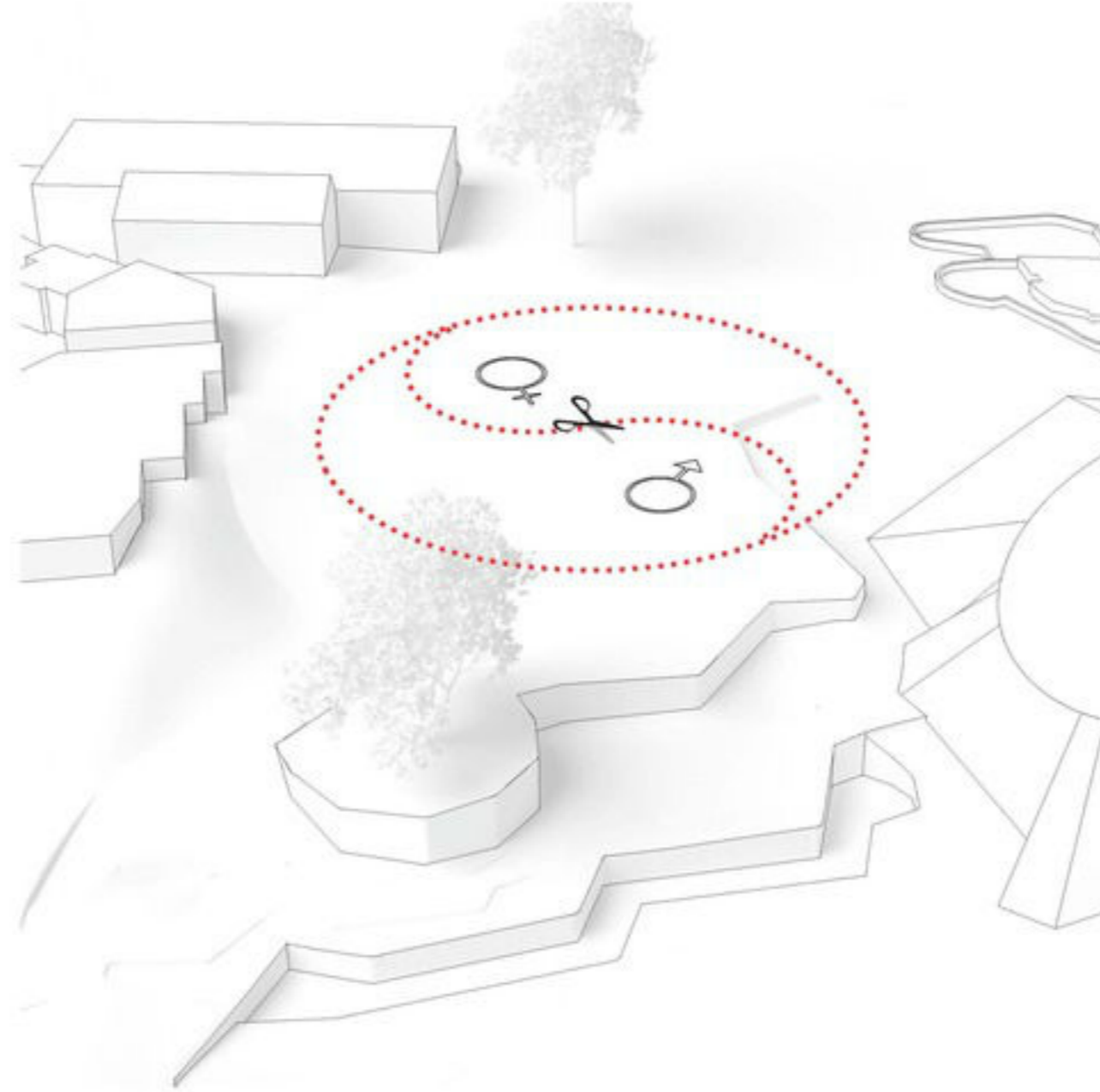
4. LION HILL ENCLOSURE



6. BEAR LUMBER ENCLOSURE AND HUTS

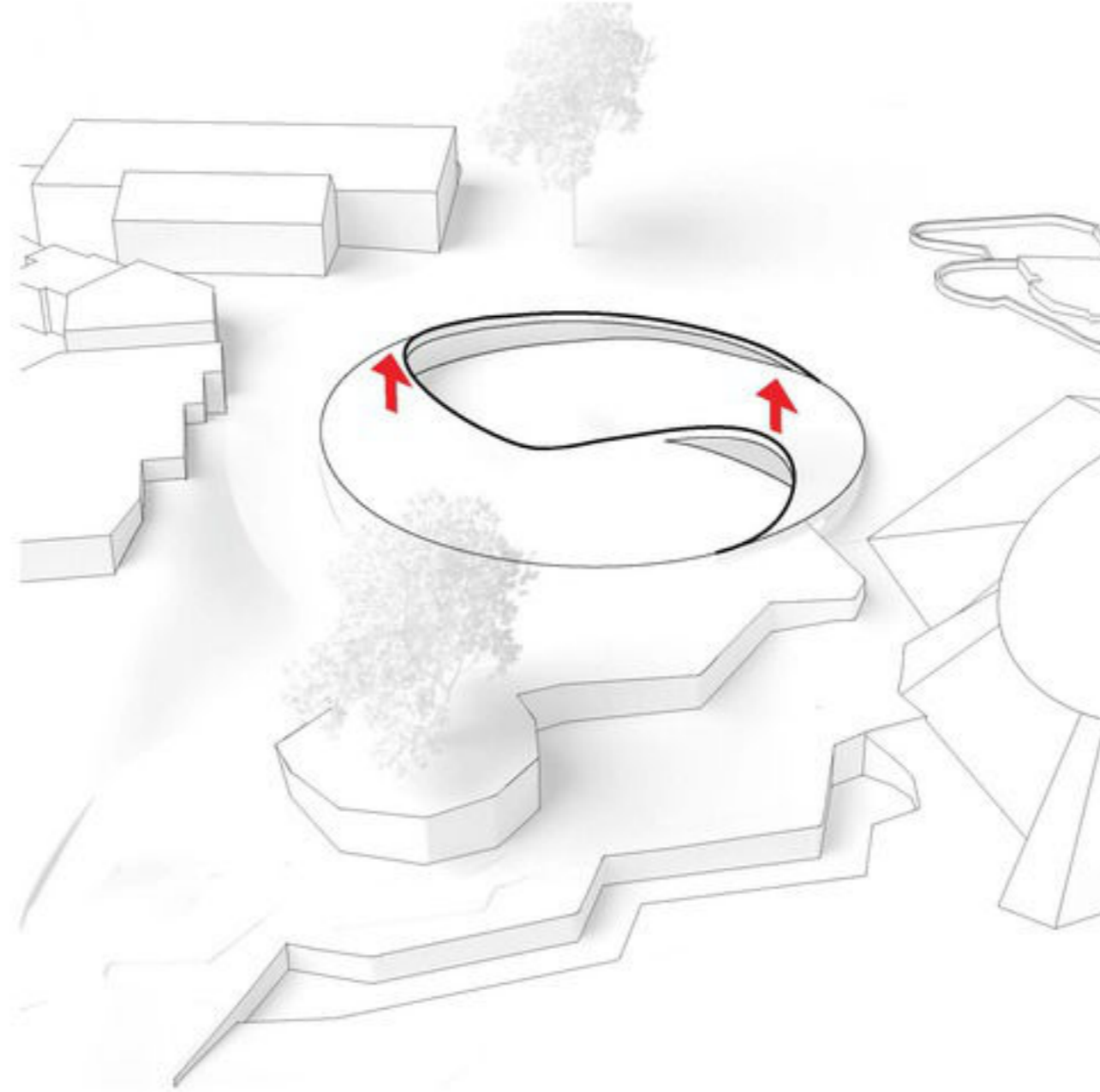


7. SAVANNAH CRATER LODGES



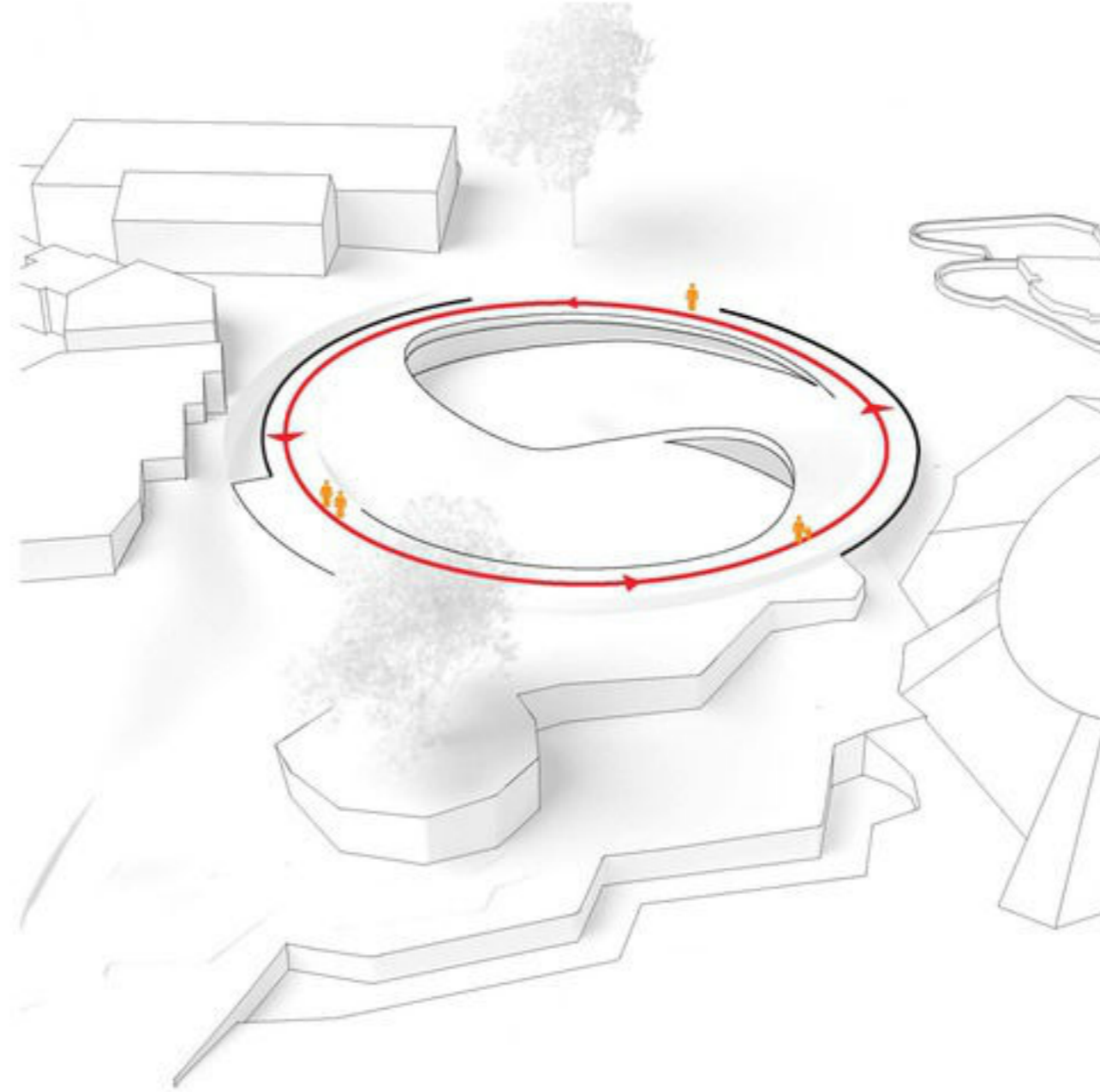
2 PANDAS

The circular shape fits perfectly between the existing buildings. The site is divided into two sites, following the ying and yang symbol and creating separate enclosures for male and female Pandas.



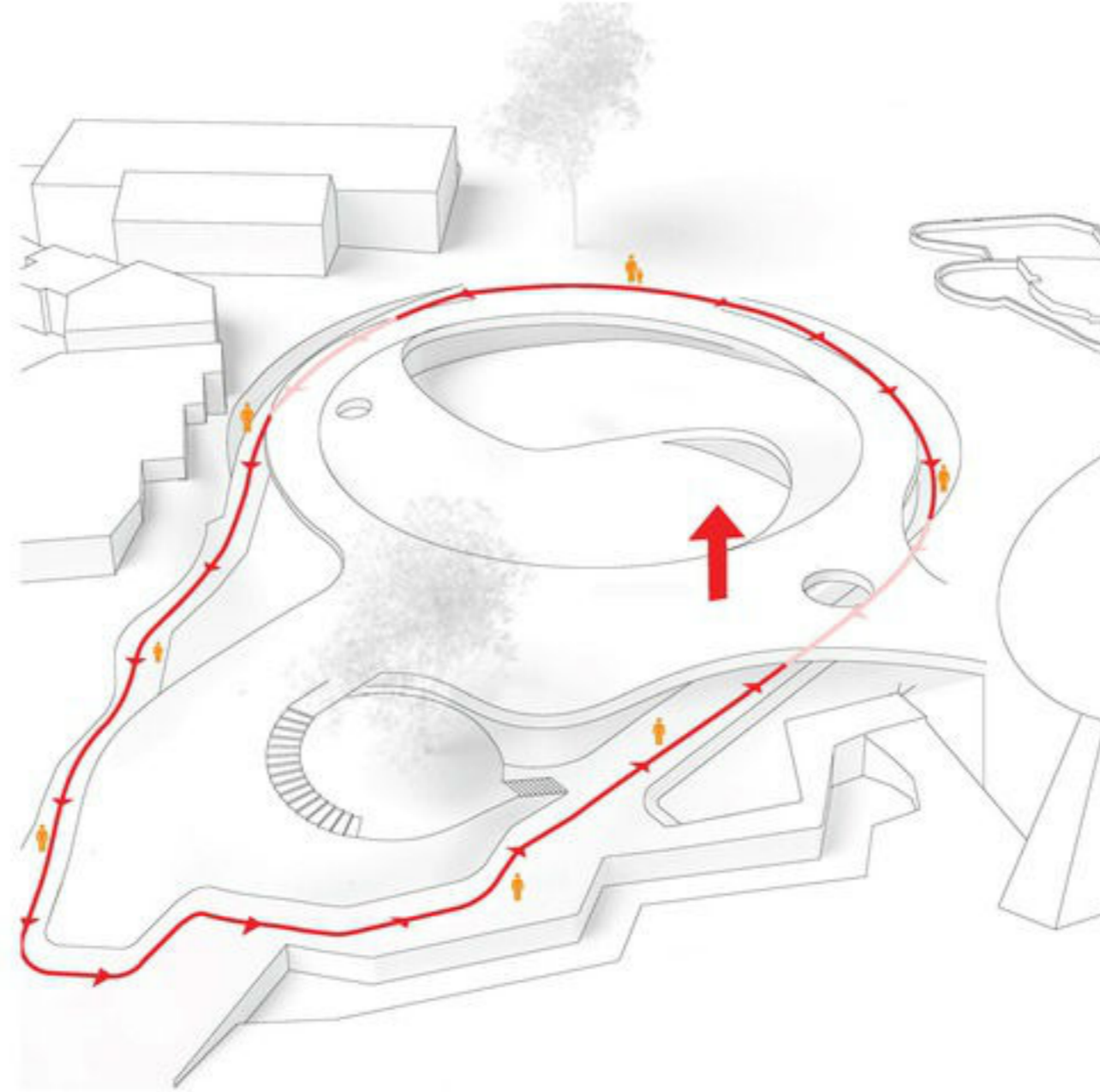
INTEGRATED STABLES

The architectural parts of the earth are lifted to form space for stables belowground. A natural slope is created, enabling visitors to face the Pandas as much as possible.



MAIN LOOP

The visitors' circulation is along the perimeter of the rounded facility. There are two downward inclines allowing visibility into the Pandas' interior backfunctions such as training facilities, bamboo coolers, etc.



RESTAURANT

With the restaurant located between Panda House and the elephants' enclosure, visitors can simultaneously observe both sights over a meal.



PANDA OBSERVATION CENTER

On one side, the lush landscape fuses seamlessly with the roofs of the elephants' house, and on the other, with bamboo forests as well as plants native to the Nordic region. The large, green centre gives visitors an opportunity to watch the Pandas from every angle and at various elevations.











