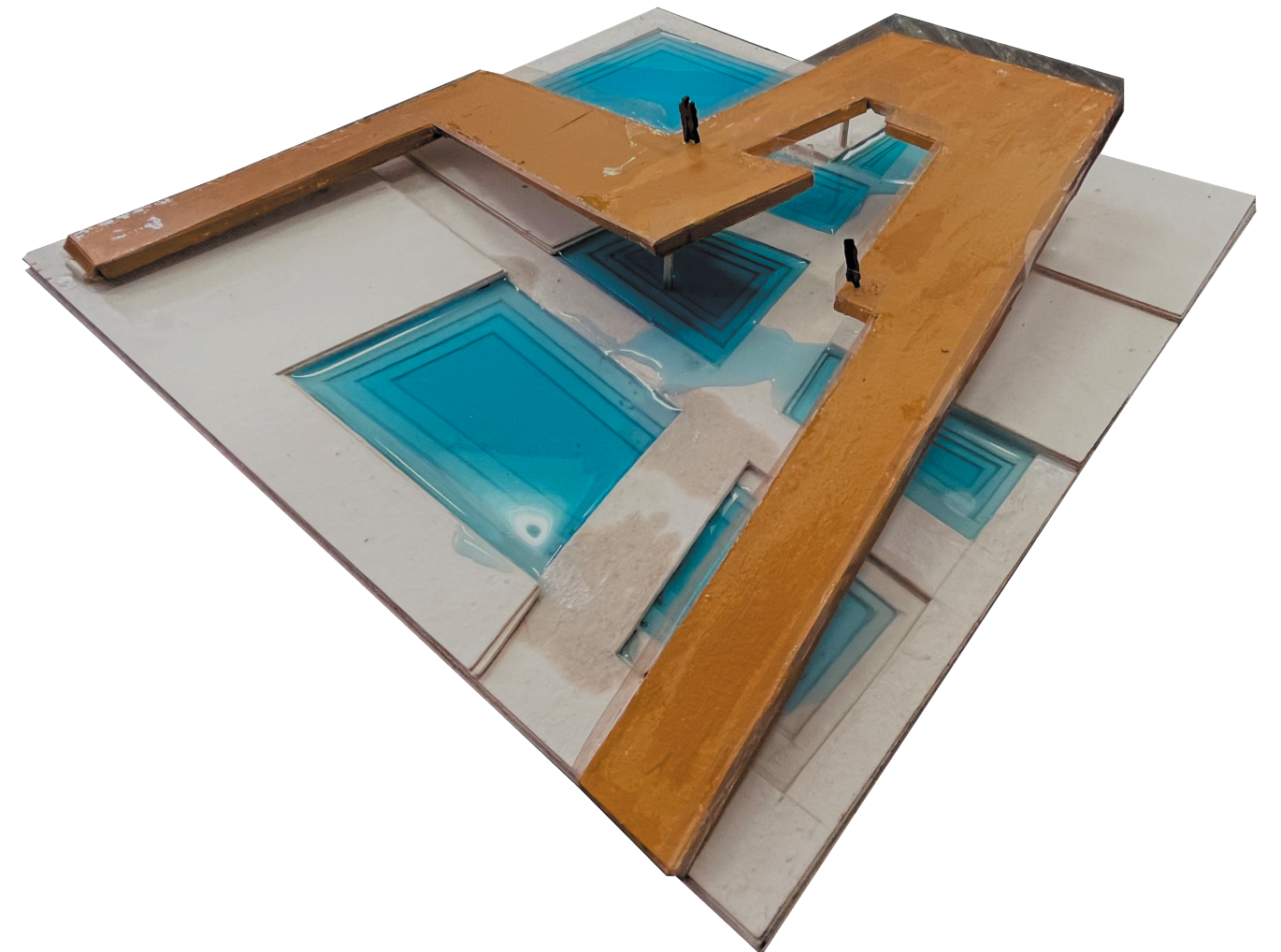
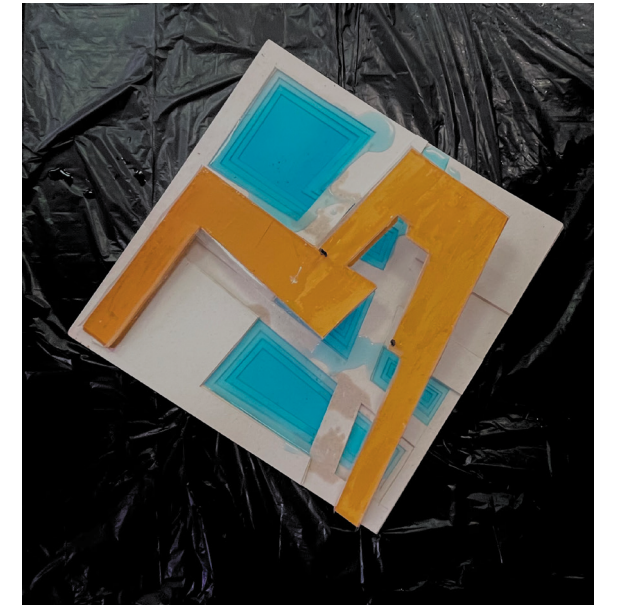




At the Pontificia Universidad Javeriana, the Landscape Architecture is approached in three stages during the Architecture career through a theoretical subject, a project or as a final degree project. The exercises chosen are a sample of the methodology used in the process of learning and reflection on landscape. Through short, exploratory exercises focused on a specific theme, the student acquires tools and learning to put them into practice in more complex and longer exercises. Thus, knowledge of tree architecture (Francis Hallé and his morphological patterns) is the basis for exploring different compositions with potential for designing urban forests, where they reinforce the strategies of planting frames. In another, (Microtopographies) the earthworks serve to create water bodies with different functions (wetland, detention basin, lake, among others) allows to understand the variability of the landscape and its mutation according to different levels. The incorporation of a bridge explores the way in which this aquatic landscape is perceived. With the bio-fun artefacts, the student conceptualises and designs urban furniture, in which he/she must know, understand and master the bushy and ground-covering plant material with its associated biodiversity. In doing so, it proposes intensive nodes of socio-ecological interaction. Urban children are the privileged users where they will be able to connect with and learn from nature in environments that are increasingly hostile to their development. The 'Pijao Bio-Park' exemplifies the ability and sensitivity of the Xaverian student towards the relationship between the artificial and the natural in complex social and spatial contexts. By linking ancestral traditions and contemporary techniques, different scales, materials, perceptions and temporalities of the landscape all these exercises conserve and promote Colombian biodiversity with a regenerative approach.





**Country/City**

Colombia, Bogota

**University / School**

Pontificia Universidad Javeriana

**Academic year**

4th

**Title of the project**

Microtopographies: Landscape bridges

**Authors**

Santiago Osorio Castaño / Laura Manuela Alemán Avila / Shraddha Maryam Gonzales Pérez / Katherine Daniela Rojas Cárdenas / Sara Manuela Londoño Lopez / Juan Diego Rodríguez Ariza



Title of the project	Microtopographies: Landscape bridges
Authors	Santiago Osorio Castaño / Laura Manuela Alemán Avila / Shraddha Maryam Gonzales Pérez / Katherine Daniela Rojas Cárdenas / Sara Manuela Londoño Lopez / Juan Diego Rodríguez Ariza
Title of the course	Landscape architecture: Urban natures
Academic year	
Teaching Staff	José Javier Alayón González (Studio Director), Isabel Tobón, Alejandro Serrano, Laura Mantilla, Javier Guerra and Ligia Bautista (Advisors)
Department / Section / Program of belonging	Department of Architecture / Architectural Design / Architecture Degree
University / School	Pontificia Universidad Javeriana / Faculty of Architecture and Design



Written statement, short description of the project in English, no more than 250 words

Julio Cortázar once asked, *"What is a bridge? A bridge is a person crossing a bridge."* Cortázar reminds us that it is the action within space that creates architecture. But at the same time, the architecture that surrounds and limits the body, is the way architecture and the inhabitants become inseparable.

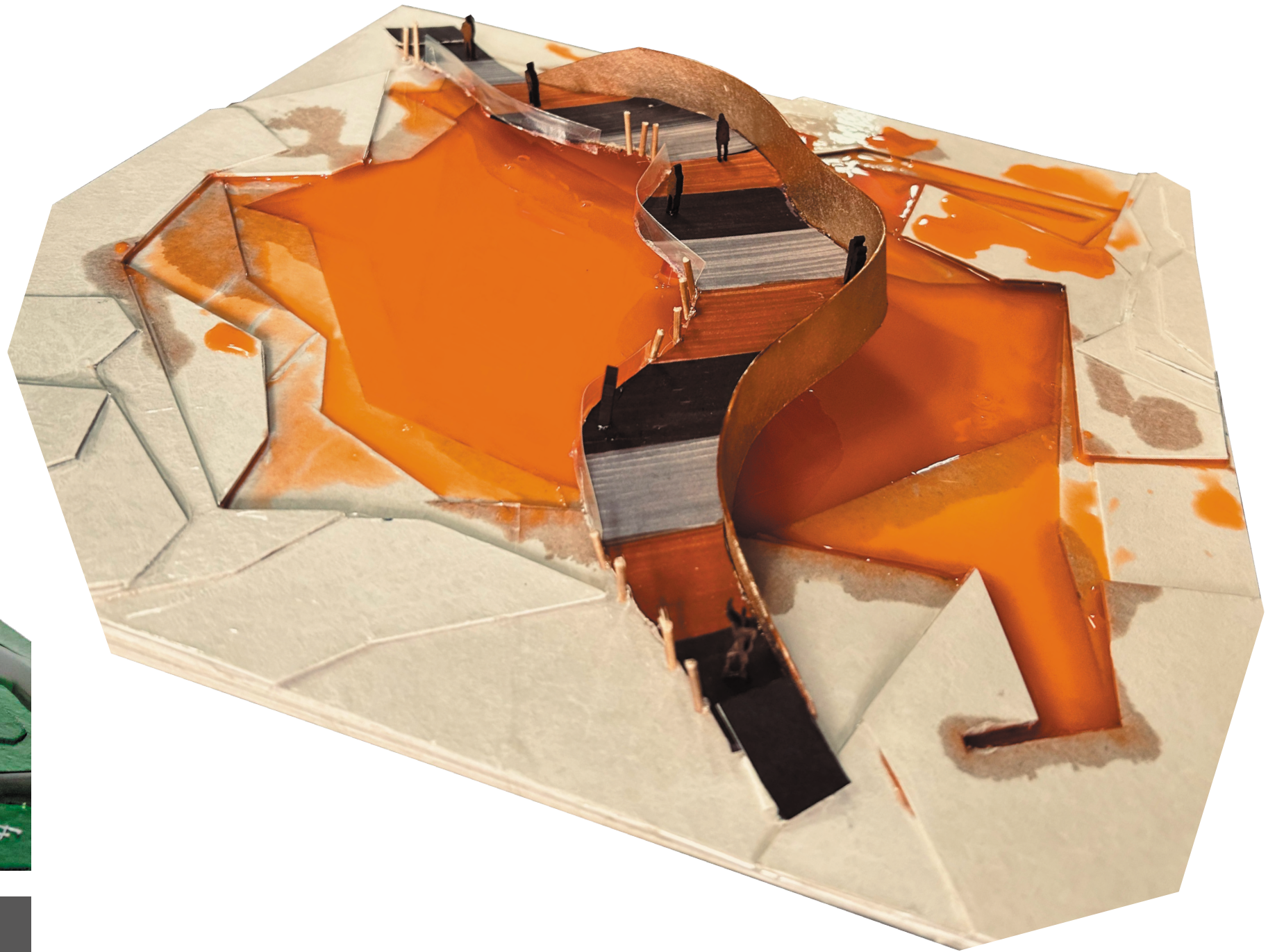
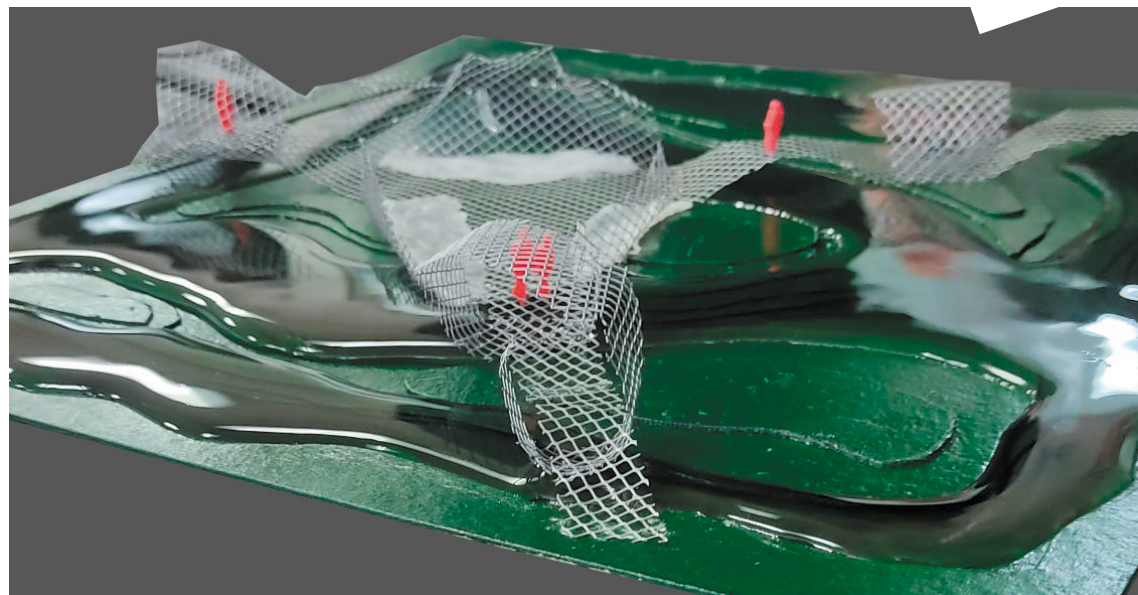
On this exercise topography and the bridge designed specially for it, is the key element of designing the landscape. For this the overall model should have the following conditions: Elevation (the bridge should rise to dominate the landscape while respecting the maximum slope allowed for accessibility) Directional changes (includes changes in direction to offer multiple perspectives and visual experiences along the path) Resting spaces (it must incorporate at least one resting area along its route, creating a pause within the journey) and Hydrological integration (within the topography it should create a small meander to slow down water and at certain points retain water temporarily. It is important to note that the bridge is not only a means of connection, but is an architectural and experiential element embedded in the landscape.

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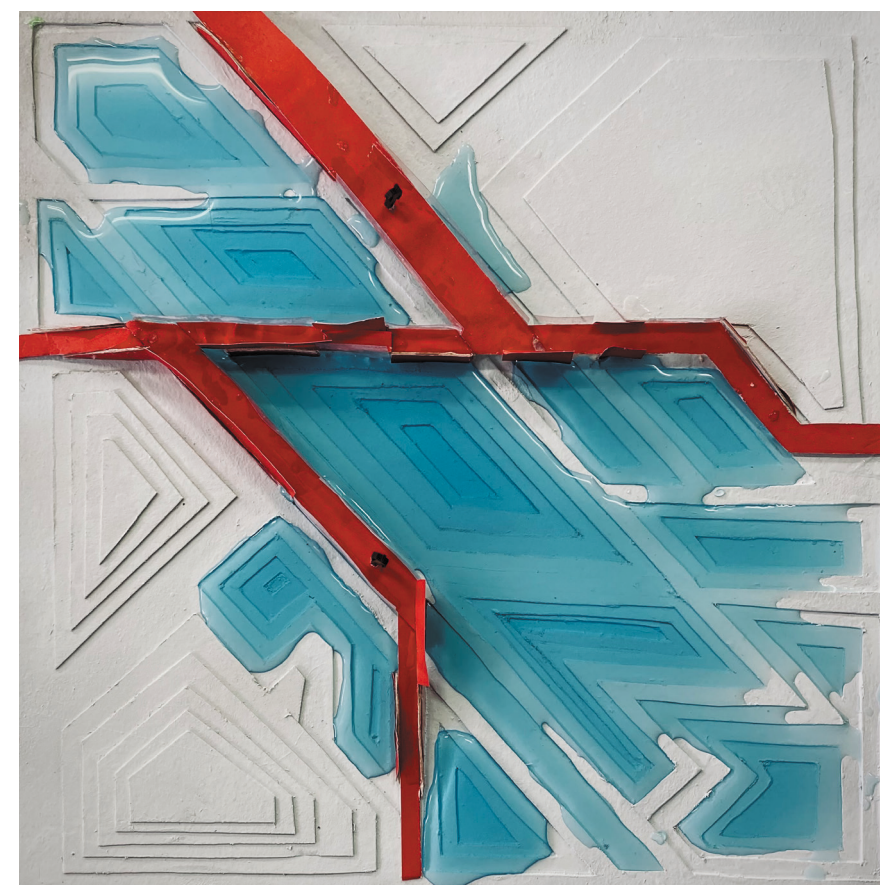
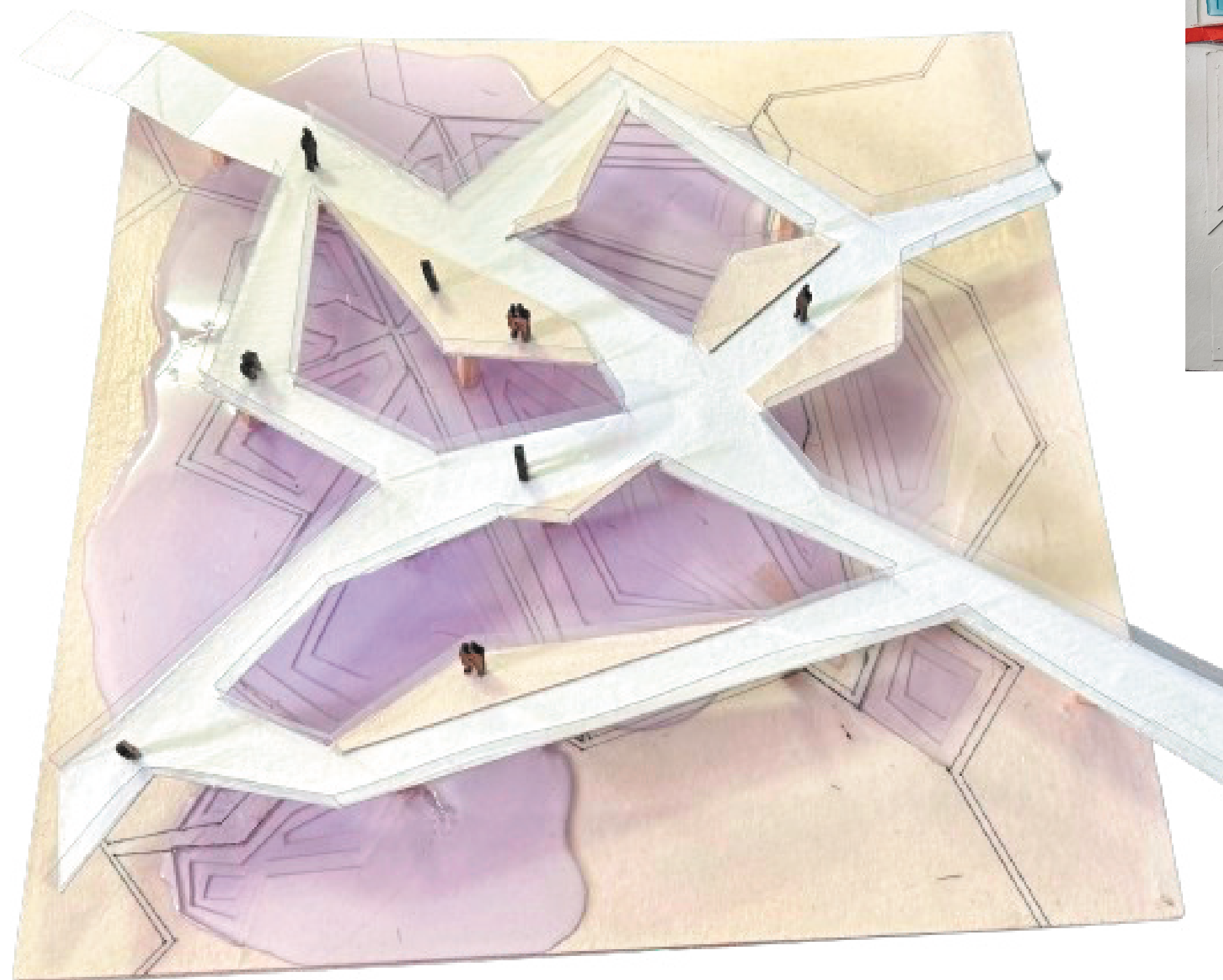
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Venue:  
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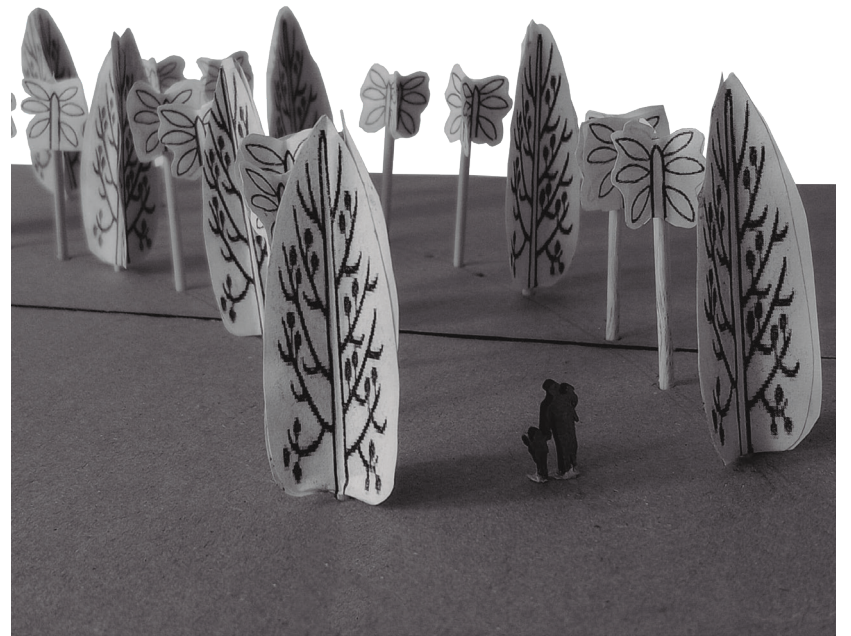
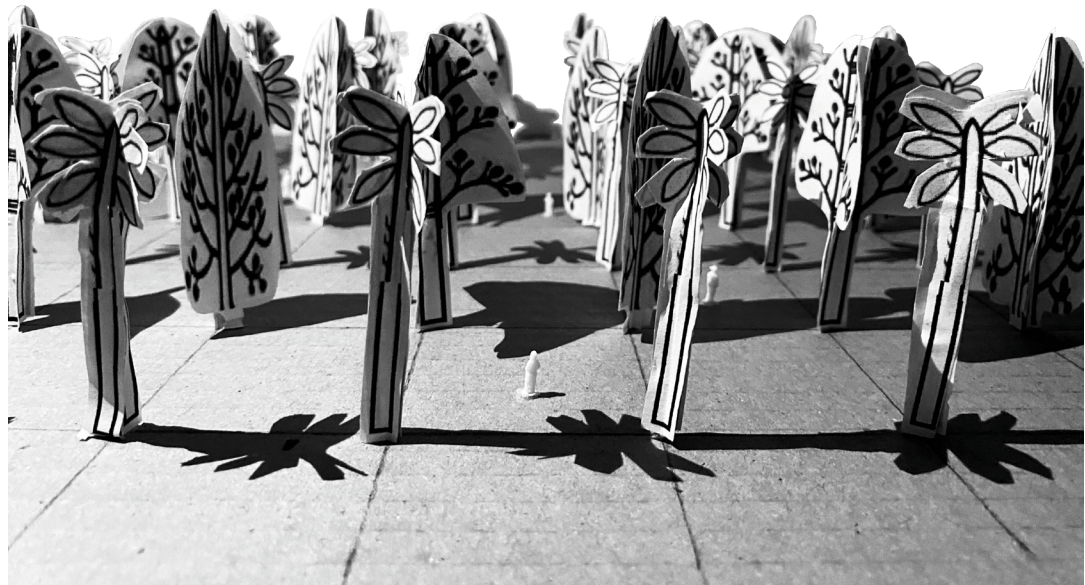
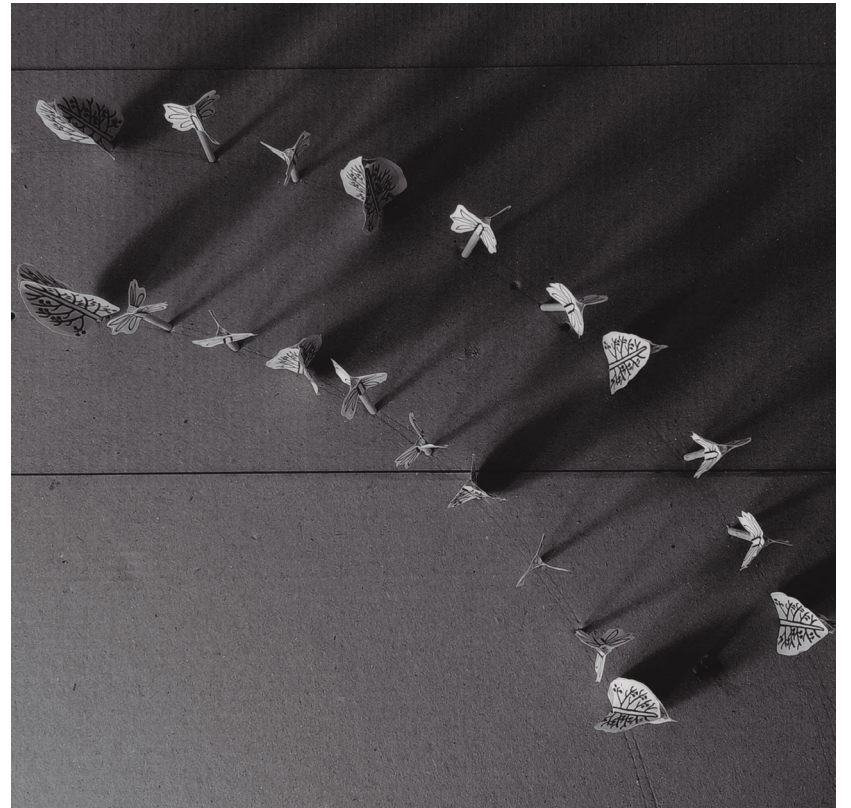
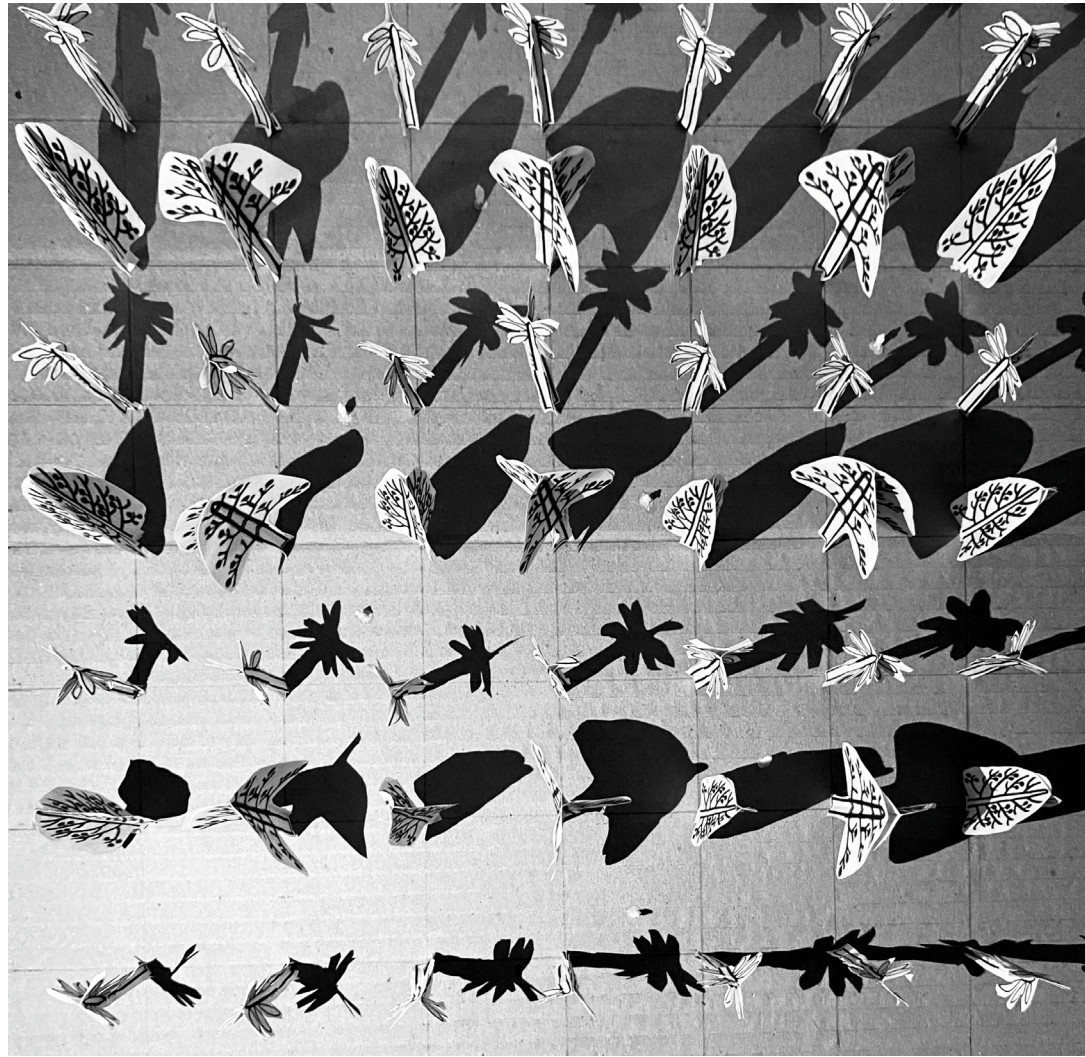












Country/City

Colombia, Bogota

University / School

Pontificia Universidad Javeriana

Academic year

4th

Title of the project

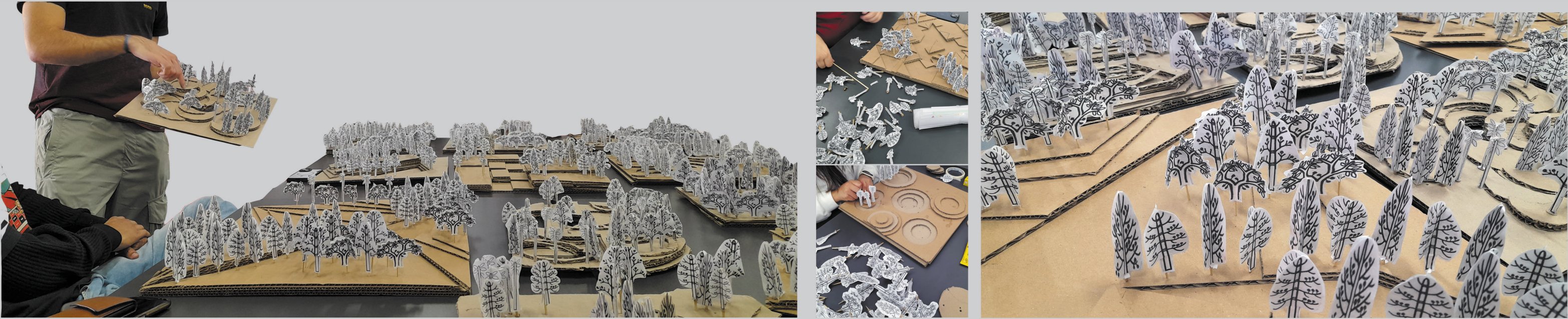
Architecture of trees

Authors

Mariana Catherine Amaya Martínez / Laura Daniela García / Michelle Quimbay / Nicolás Tamayo



Title of the project	Architecture of trees
Authors	Mariana Catherine Amaya Martínez / Laura Daniela García / Michelle Quimbay / Nicolás Tamayo
Title of the course	Landscape architecture: Urban natures
Academic year	
Teaching Staff	José Javier Alayón González (Studio Director), Isabel Tobón, Laura Mantilla, Javier Guerra and Ligia Bautista (Advisors)
Department / Section / Program of belonging	Department of Architecture / Architectural Design / Architecture Degree
University / School	Pontificia Universidad Javeriana / Faculty of Architecture and Design



Written statement, short description of the project in English, no more than 250 words

The goal of this project is to learn how to compose spaces and volumes using tree masses and lines, based on the understanding of their architectural characteristics. By recognizing the architecture of the trees, the students create compositions within a planting framework defined by themselves. The project includes three types of spatial compositions using different species and arrangements of trees, which are, the double linear, grid and the patch composition, each of these configurations will result in different ways in which the individual can perceive the landscape.

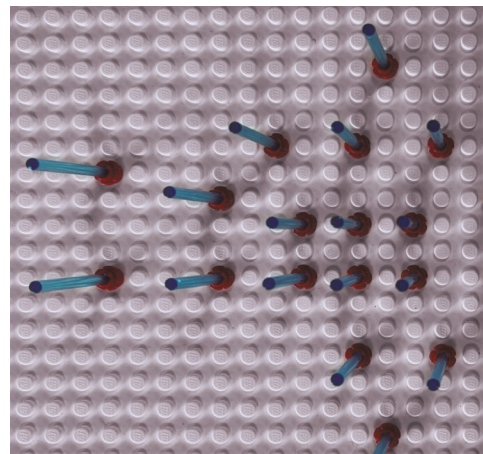
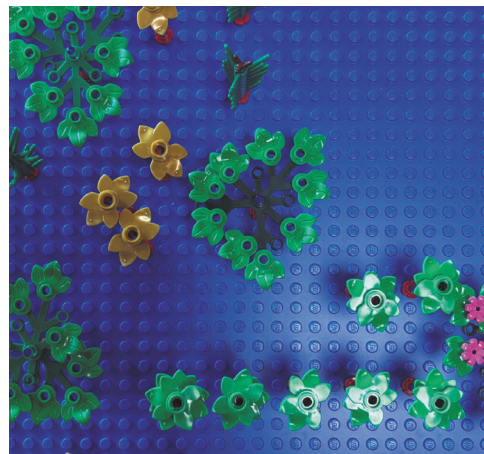
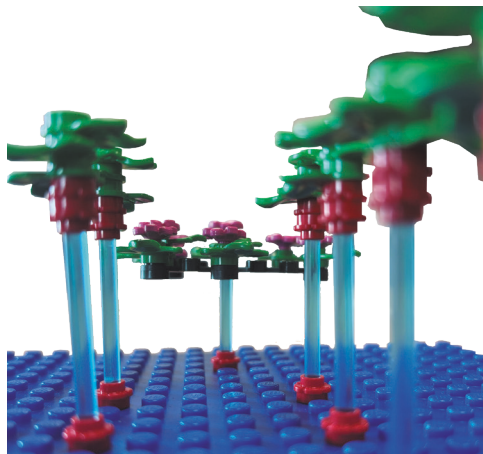
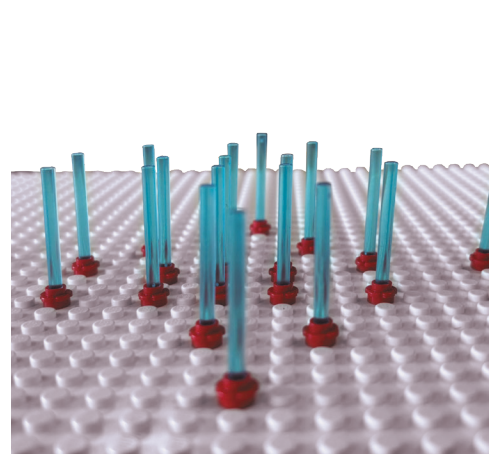
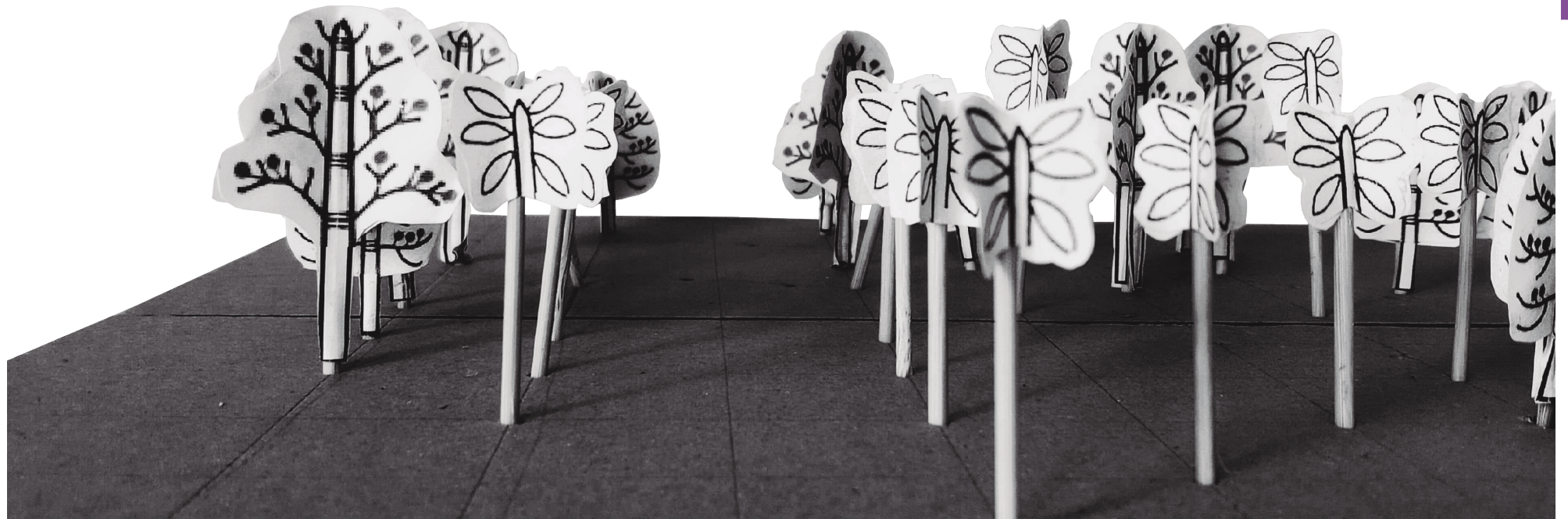
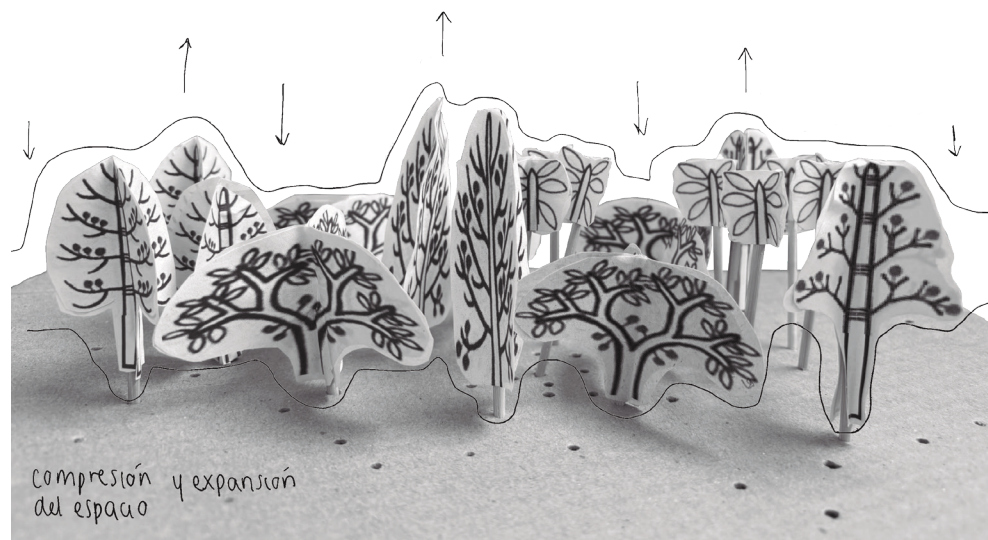
Through these exercises, students will develop a deeper understanding of how trees, as architectural elements, contribute to the definition and articulation of space in landscape design.

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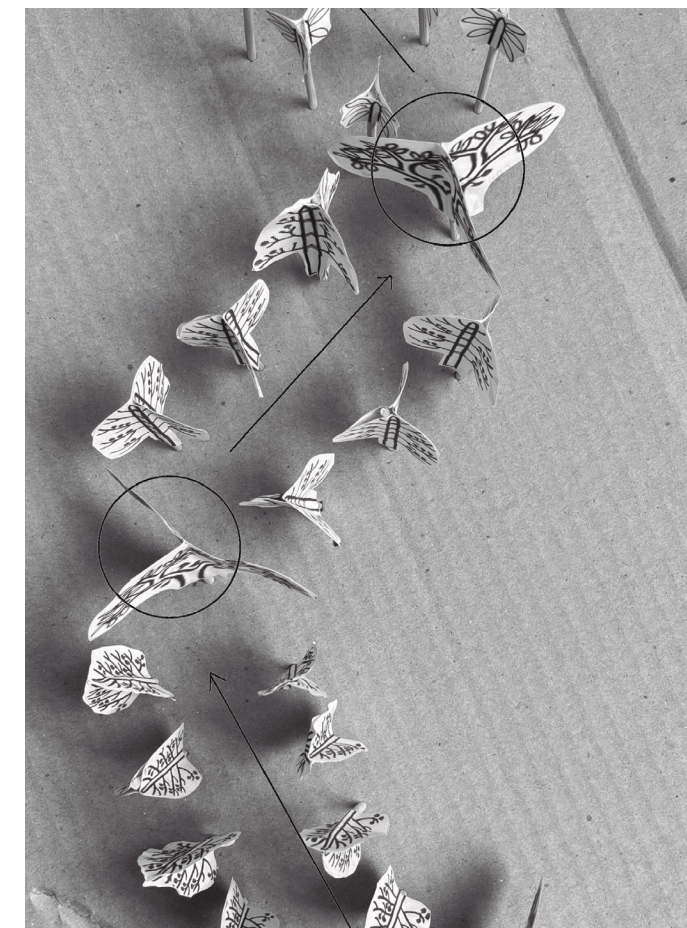
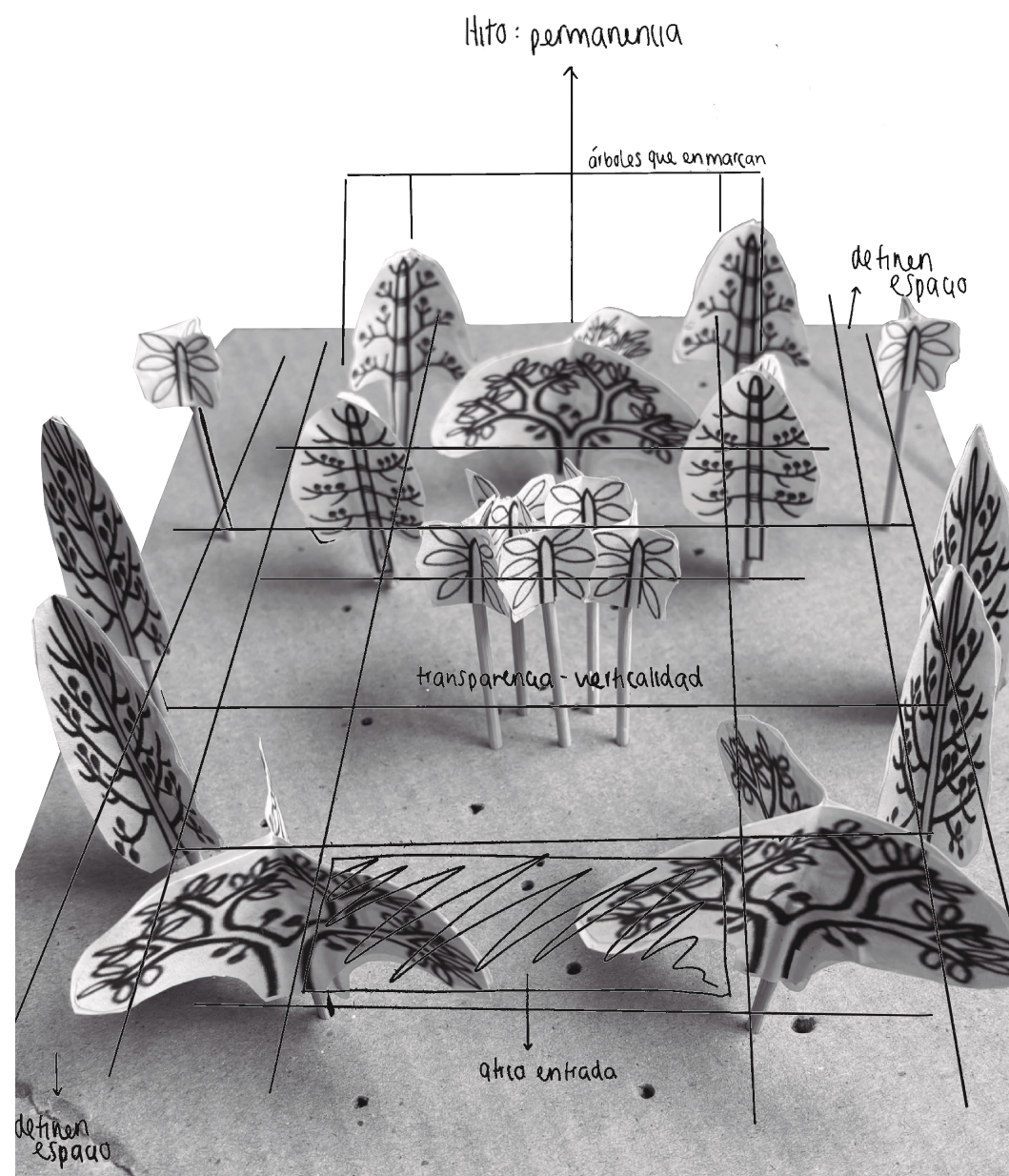
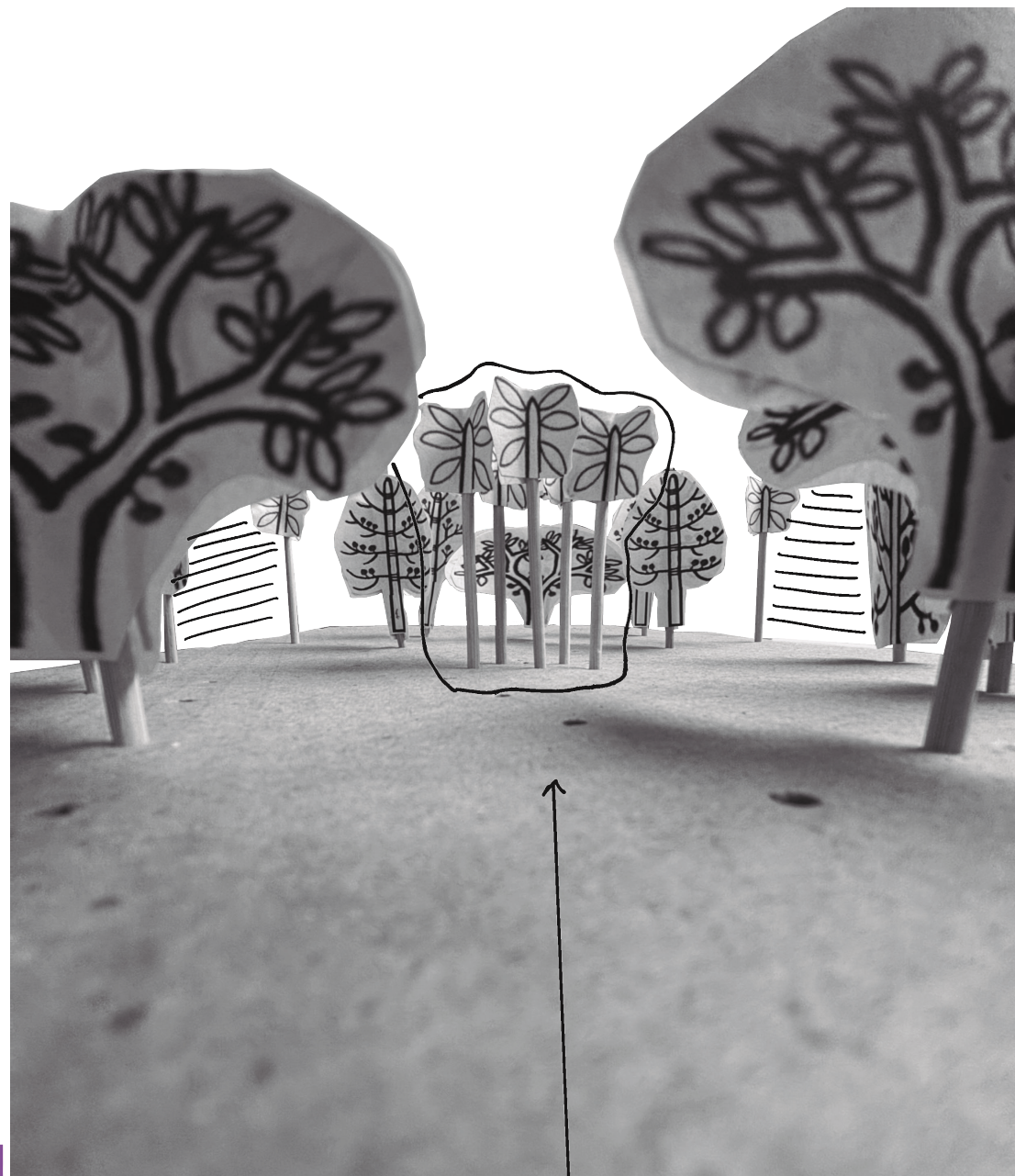
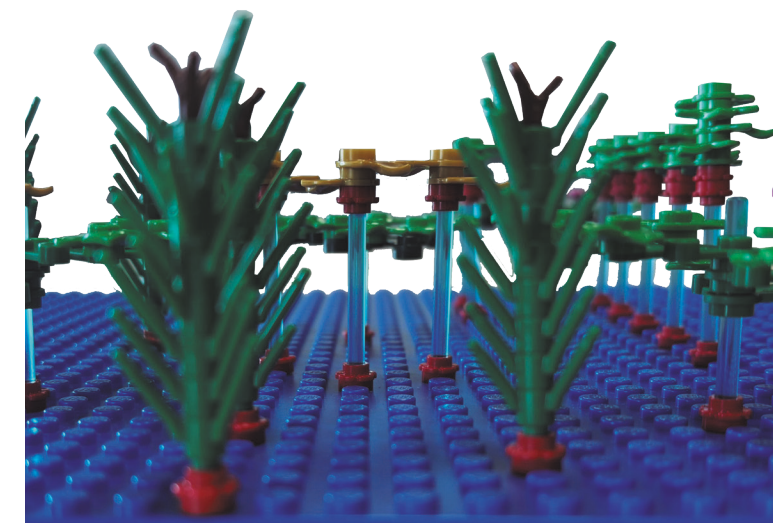
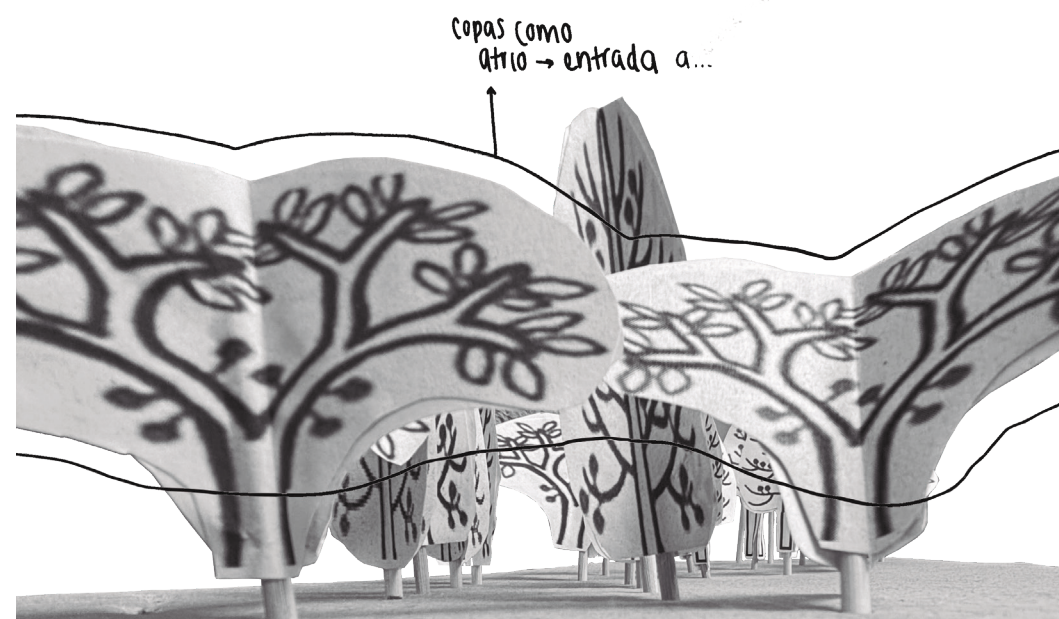
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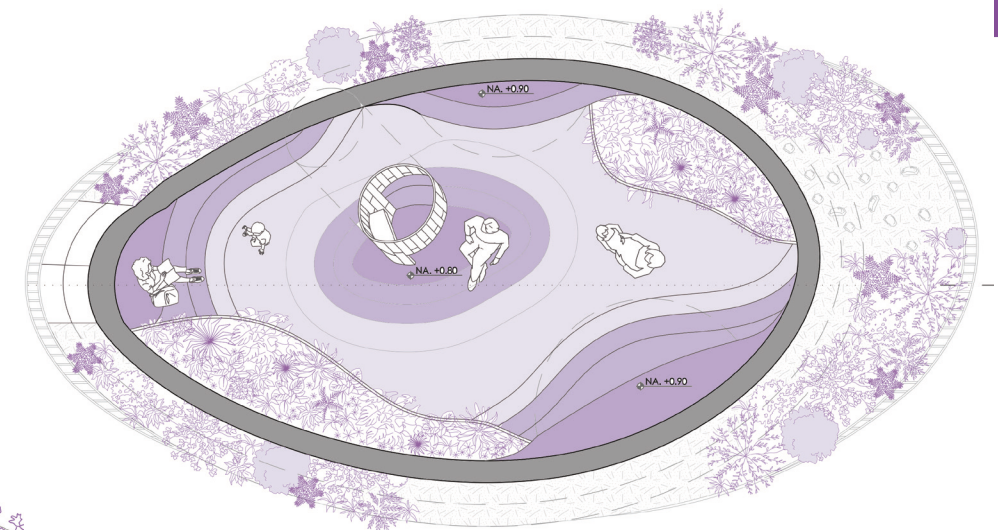
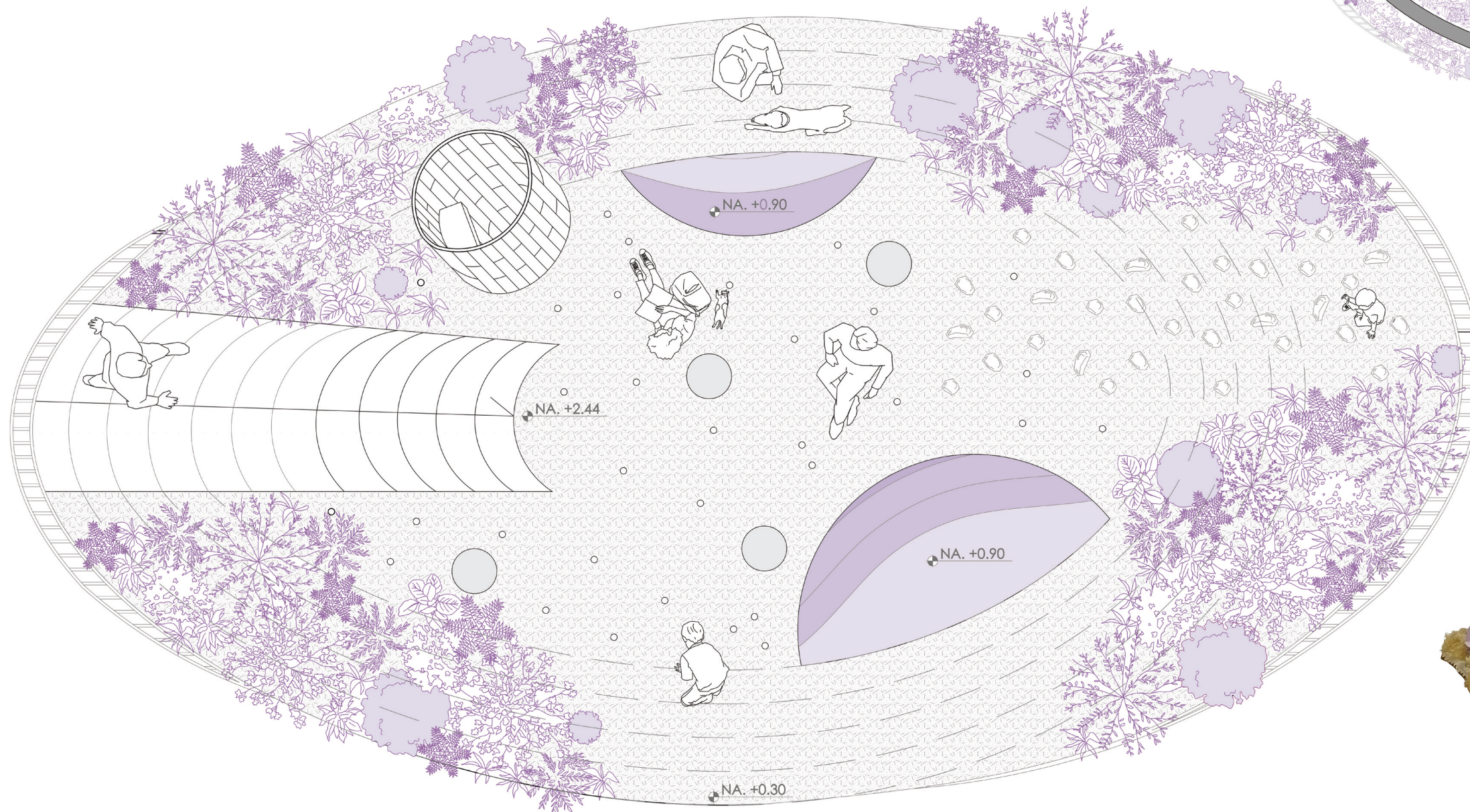








A ▯



▯ A'



Country/City

Colombia, Bogota

University / School

Pontificia Universidad Javeriana

Academic year

4th

Title of the project

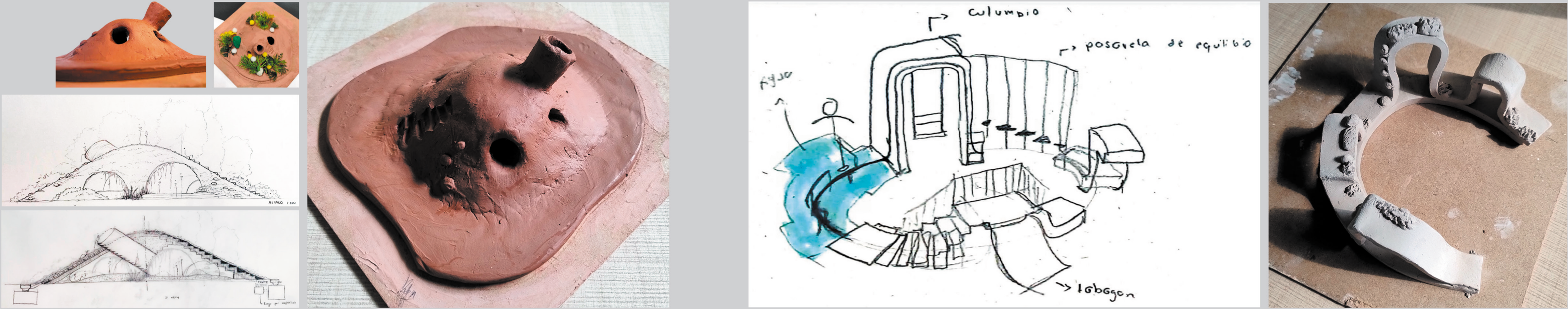
BIO-Fun Devices an exploration on biodiversity and childhood in the city

Authors

María Catalina Ruiz Hoyos / Juan Manuel Sanchez Pacheco



Title of the project	BIO-Fun Devices an exploration on biodiversity and childhood in the city
Authors	María Catalina Ruiz Hoyos / Juan Manuel Sanchez Pacheco
Title of the course	Landscape architecture: Urban natures
Academic year	4th
Teaching Staff	José Javier Alayón González (Studio Director), Isabel Tobón, Alejandro Serrano, Laura Mantilla, Javier Guerra and Ligia Bautista (Advisors)
Department / Section / Program of belonging	Department of Architecture / Architectural Design / Architecture Degree
University / School	Pontificia Universidad Javeriana / Faculty of Architecture and Design



Written statement, short description of the project in English, no more than 250 words

The Bio-Fun devices main objective is to design artifacts aimed to attract biodiversity and to generate community gathering spaces where people can learn key elements on different qualities of the Bogotá landscape, through the use of different characteristics of playground games (swinging, spinning, sliding) and architecture archetypes (wall, staircase, roof). These can be located in urban areas lacking public spaces, and green areas.

The "Diver Huerta" is based on the staircase archetype and the playground game characteristic of spinning and swinging. These elements create an outdoor circuit with a seed bank, where the objective is to teach about the importance of urban gardens and its impact on biodiversity in the city. Priority is given to planting "fruit" and native species that have the ability to attract pollinating species and introduce a "biodiversity node" in neighborhoods lacking biodiverse green areas.

The "Cueva de sueños" artifact is based on sliding games and uses the staircase archetype. It generates micro-landscapes in small spaces, in this case a mountain, which provides a refuge not only for children to explore but also for pollinating species and birds. By planting yellow, white and purple species it alludes to the plant palette of the high Andean forest, reinforcing the form of the artifact.

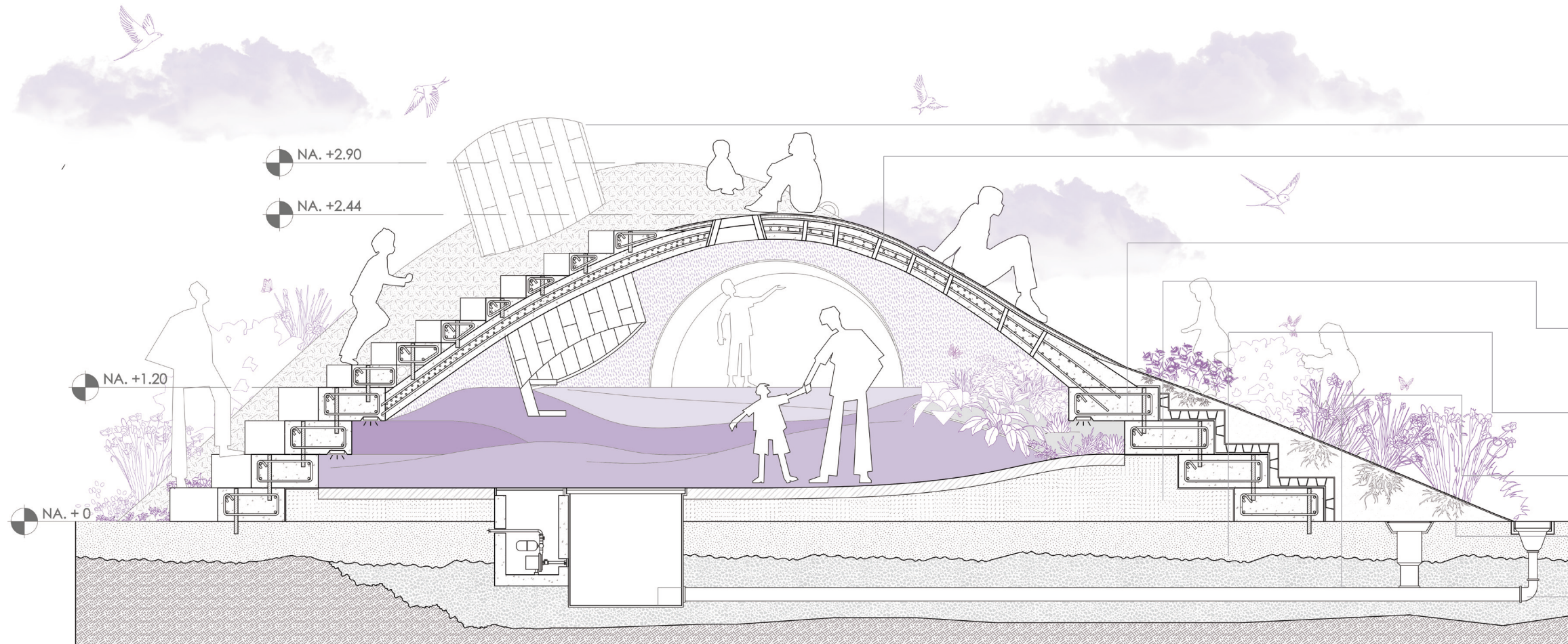
The devices aim to be a space capable of building community ties through play and participation, as a learning space about biodiversity, species, and native ecosystems.

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#### "TELESCOPIO"

Hecho en listones de madera reciclada

#### TAPETE SEDUM

Tapete vegetal de bajo mantenimiento que no requiere podas y se colocó en un grado de inclinación de 20 grados, para evitar la erosión se aplicó una capa de fibra de coco  
Dimensión: 60 cm x 200 cm  
Espesor: 2cm

#### ANILLOS DE CONCRETO

Prefabricados de concreto estructural, resistencia de 3000 psi con varillas #5 (incadas)  
Dimensión: 60 cm x 30cm

#### RELLENO DE GRAVA

Capa granular de mortero para nivelar con revestimiento de caucho triturado

#### CAPA DE ARENA

Capa de arena de asiento aluvial redondeada con humedad del 5% para nivelar la base

#### RECEBO COMPACTADO

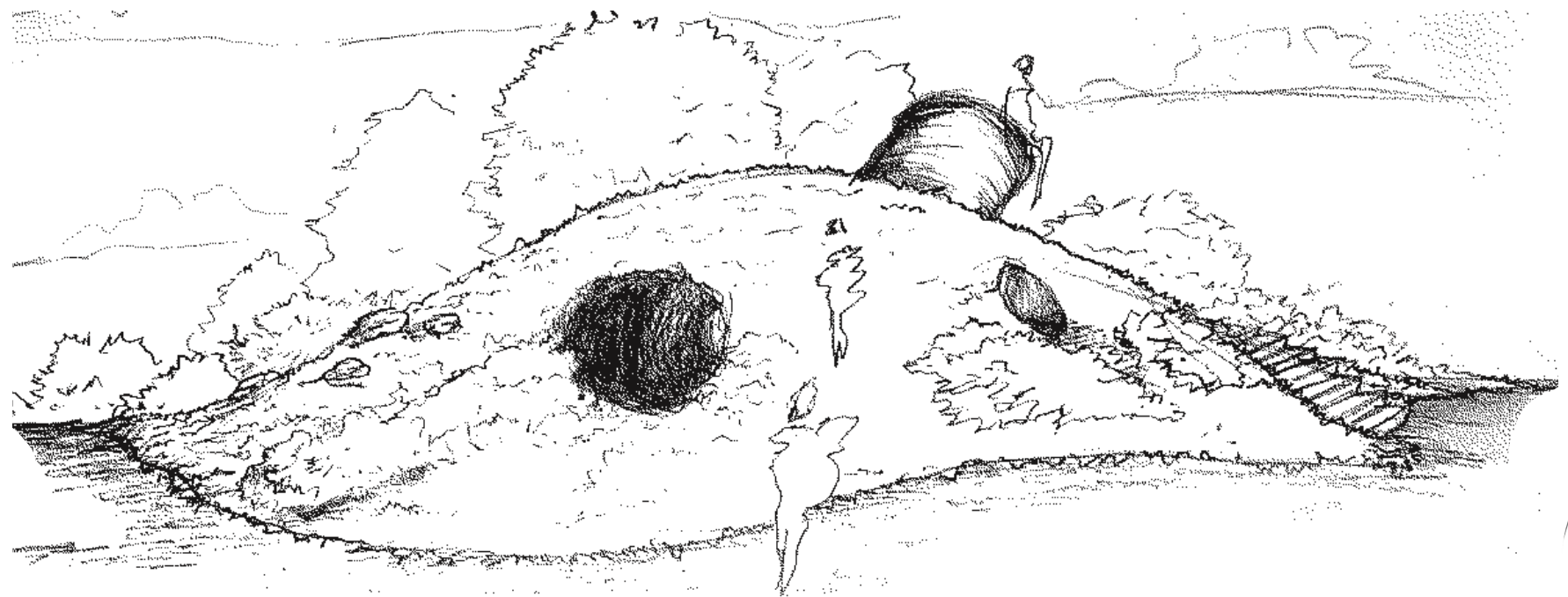
Capa en material granular (grava con arena y grava)

#### SUSTRATO

Material de origen orgánico

#### SISTEMA DE DRENAJE

Con pendiente de 2% se recoge el agua lluvia para ser filtrada y almacenada en un tanque de agua, para luego ser bombeada para riego de las plantas del artefacto





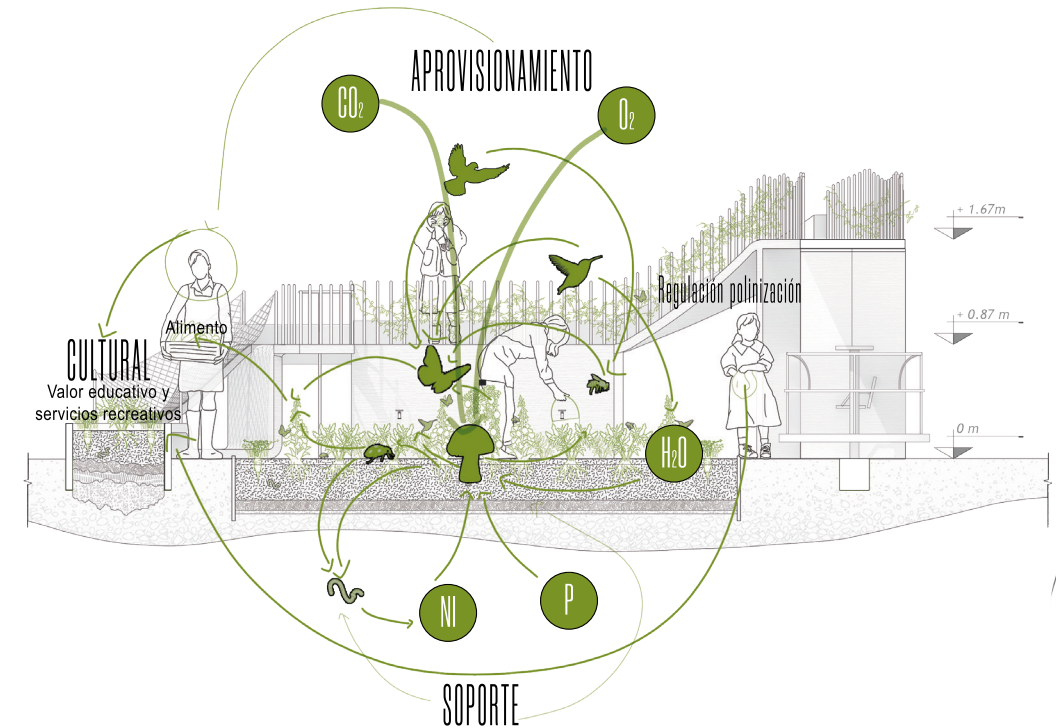
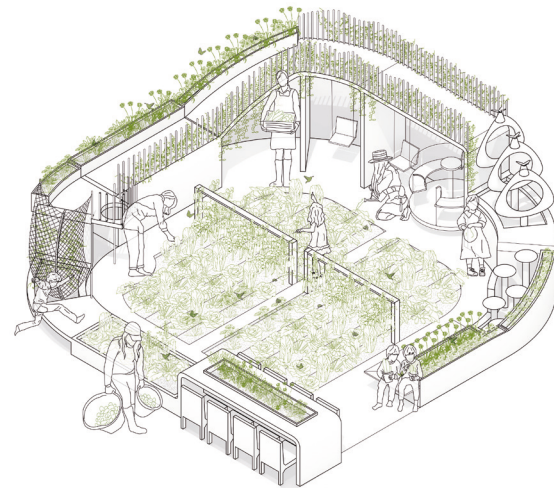
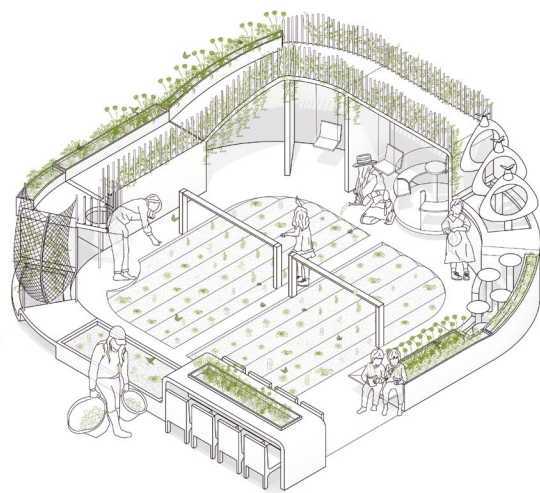
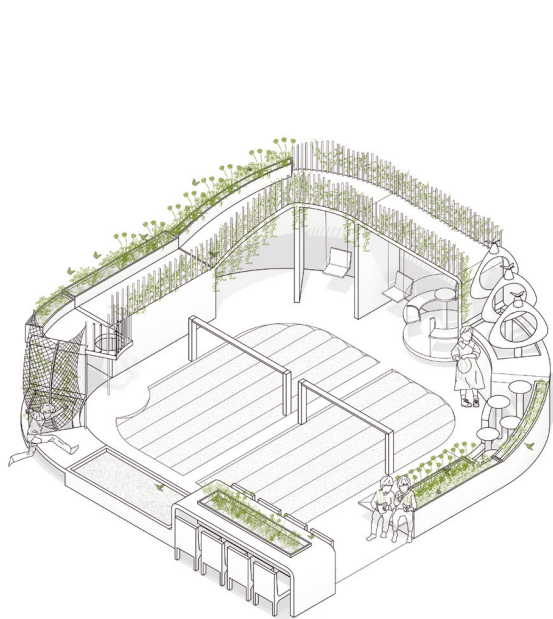
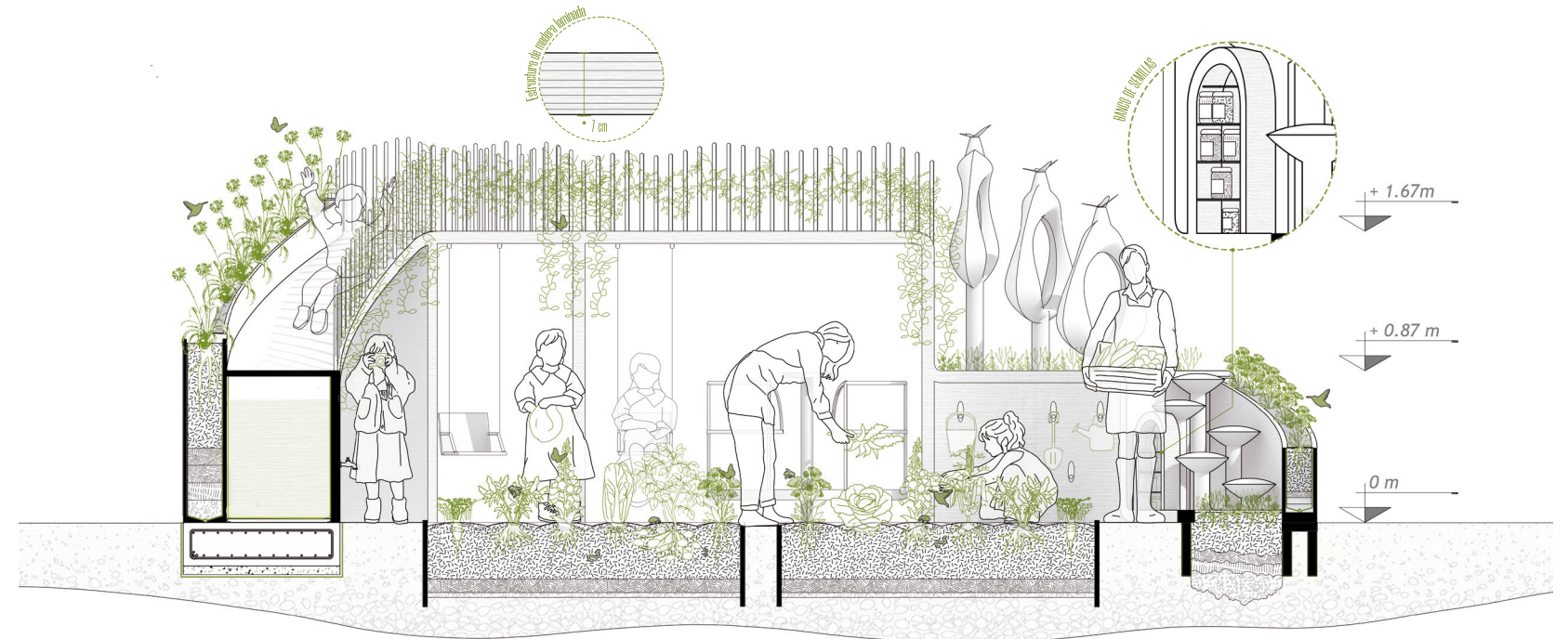
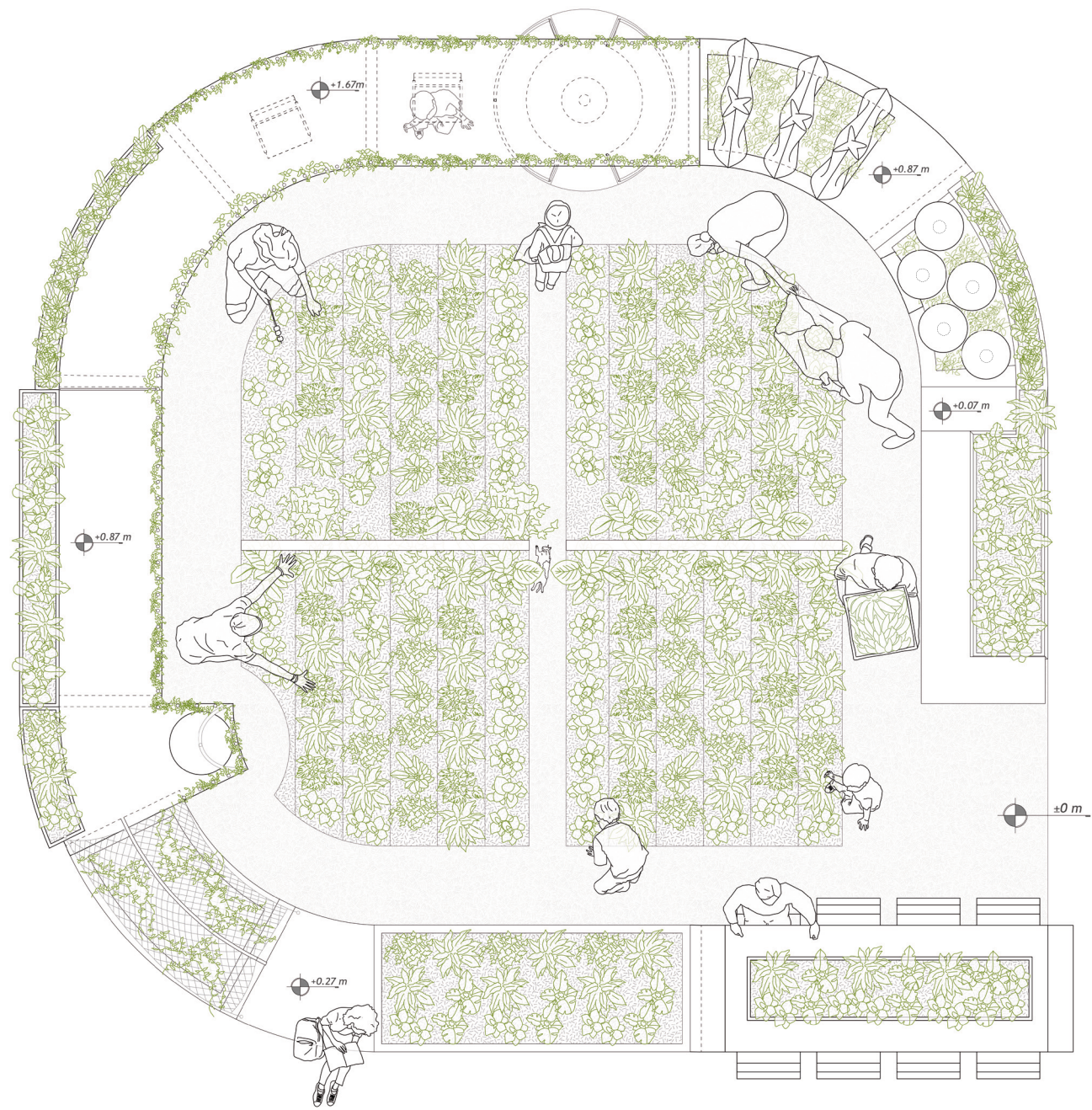


**"Cueva de sueños"**  
María Catalina Ruiz Hoyos



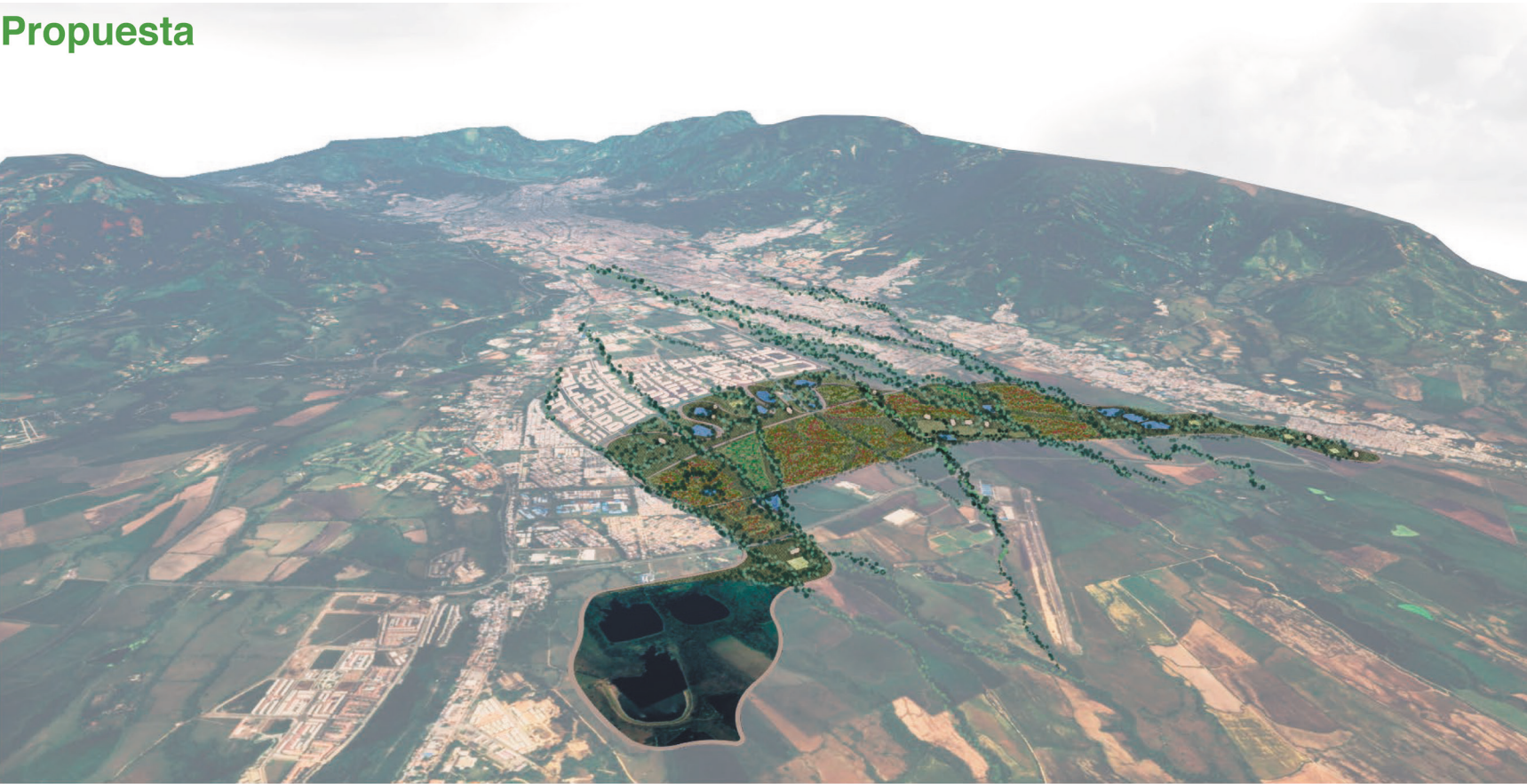
**"Diver Huerta"**  
Juan Manuel Sanchez Pacheco



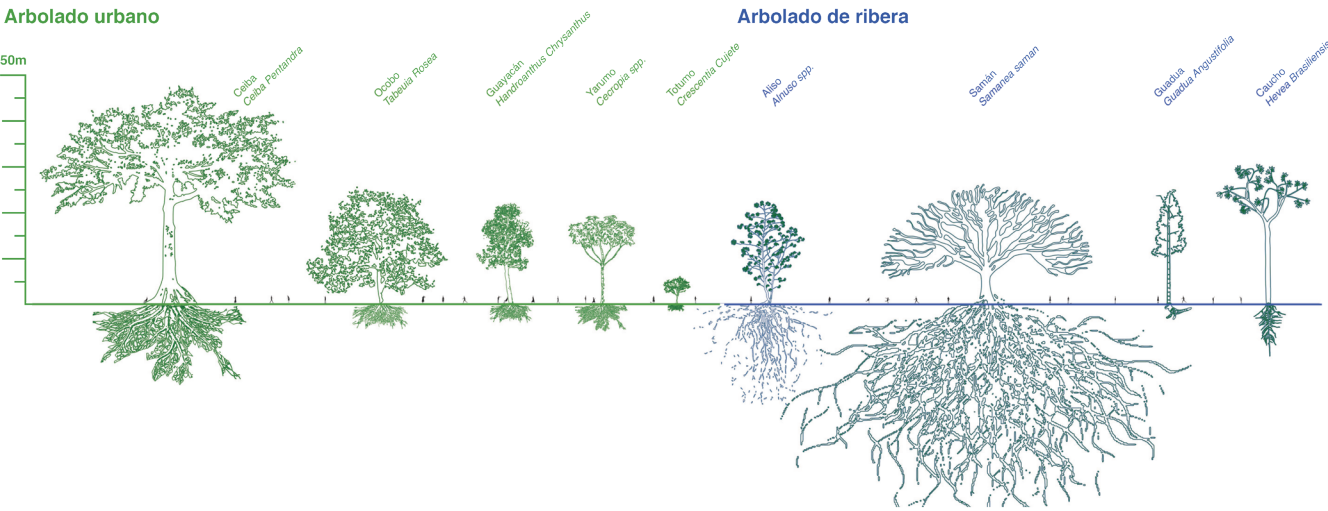




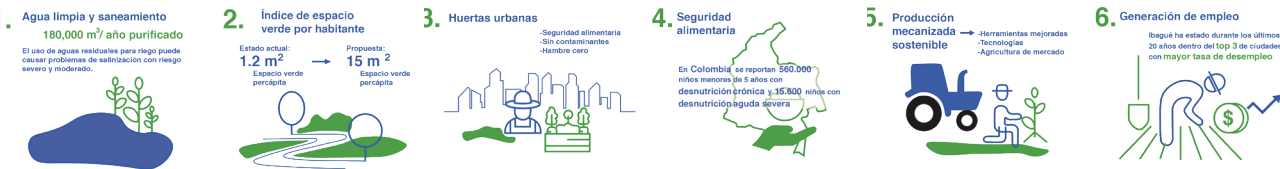
# Propuesta



## Catálogo de vegetación básico



## Indicadores



## Imaginario



Establishing human and ecological connectivity, considering that the landscape is:

“The territory that emerges from human and/or natural actions and interactions over time, where abiotic and biotic factors interact with anthropogenic elements.”  
(European Landscape Convention, 2000)

Country/City

Colombia, Bogota

University / School

Pontificia Universidad Javeriana

Academic year

5th

Title of the project

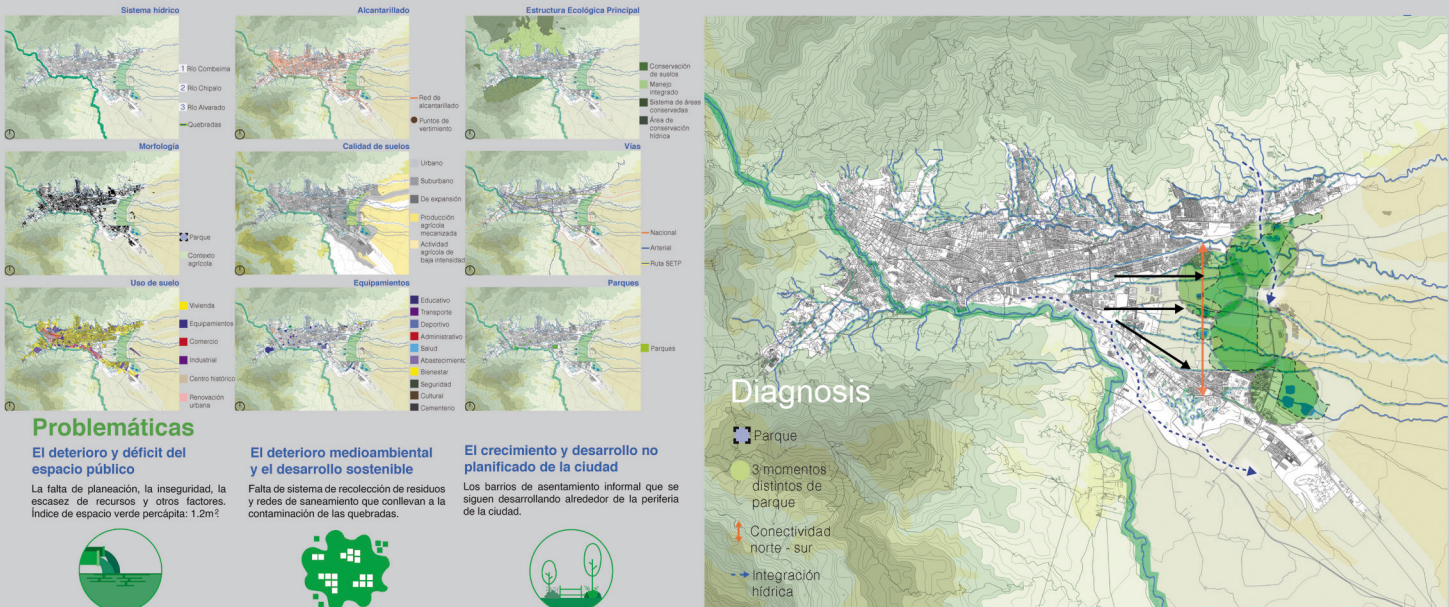
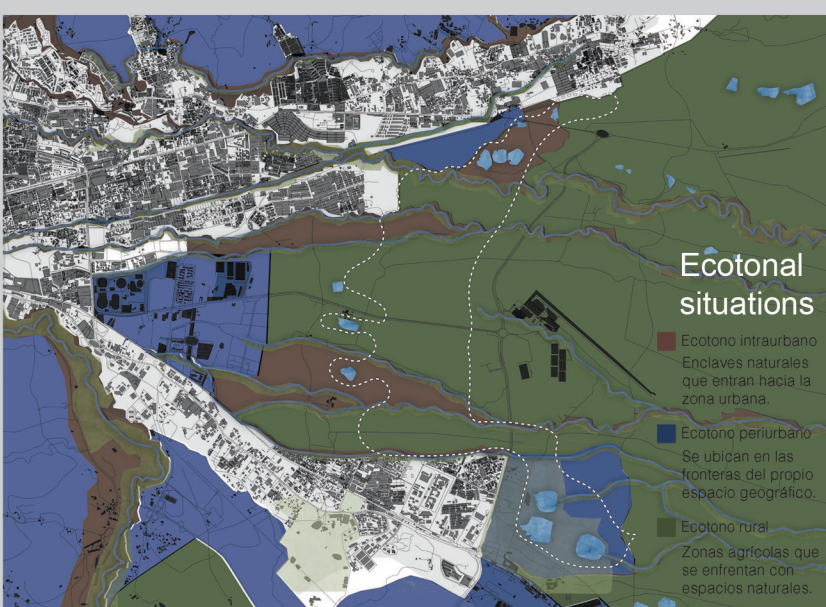
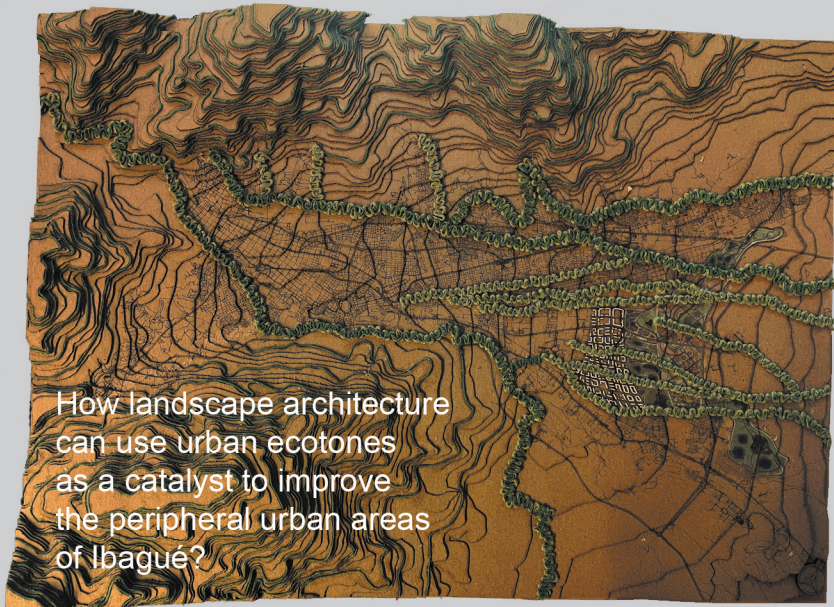
Pijao Educational Ecopark - Landscapes among urban ecotones

Authors

Jaehyun Lee



Title of the project	Pijao Educational Ecopark - Landscapes among urban ecotones
Authors	Jaehyun Lee
Title of the course	Undergraduate Thesis work
Academic year	5th
Teaching Staff	José Javier Alayón González (Director)
Department / Section / Program of belonging	Department of Architecture / Architectural Design / Architecture Degree
University / School	Pontificia Universidad Javeriana / Faculty of Architecture and Design



Written statement, short description of the project in English, no more than 250 words

Pijao Educational Ecopark is a productive, metropolitan-scale park located in Ibagué, Colombia, known for its rich cultural heritage and natural landscapes. Tolima, where Ibagué is situated, has long been a major agricultural producer, thanks to its rich hydrology. It is also home to indigenous communities, including the Pijao. The project responds to the need to create a boundary on Ibagué's eastern side to curb urban sprawl, while offering a multifunctional public space that integrates social, ecological, educational, and economic aspects.

Urban ecotones are the processes developed in tension zones between rural and urban ecosystems. As the main concept to the development of the park, it seeks to reestablish the relationship among the urban, natural, and rural through transition areas and the activities in each level connecting natural and artificial. The park introduces spaces for community-based agriculture, environmental education, and recreation. It emphasizes four key aspects of Pijao's production system: rotational agriculture, slash and burn, polyculture, and fishing. In collaboration with educational institutions, the park provides opportunities for visitors to learn about these ancient agricultural practices, which offer solutions to modern ecological challenges.

Ecological restoration is central to the design, with strategies for recovering native vegetation, managing stormwater, and boosting biodiversity. The park also serves as a buffer zone, reducing environmental risks and improving the quality of life for surrounding communities. Ultimately, the park is envisioned as a dynamic living infrastructure that strengthens community ties, reconnects people with the land, and supports a more sustainable urban future for Ibagué.

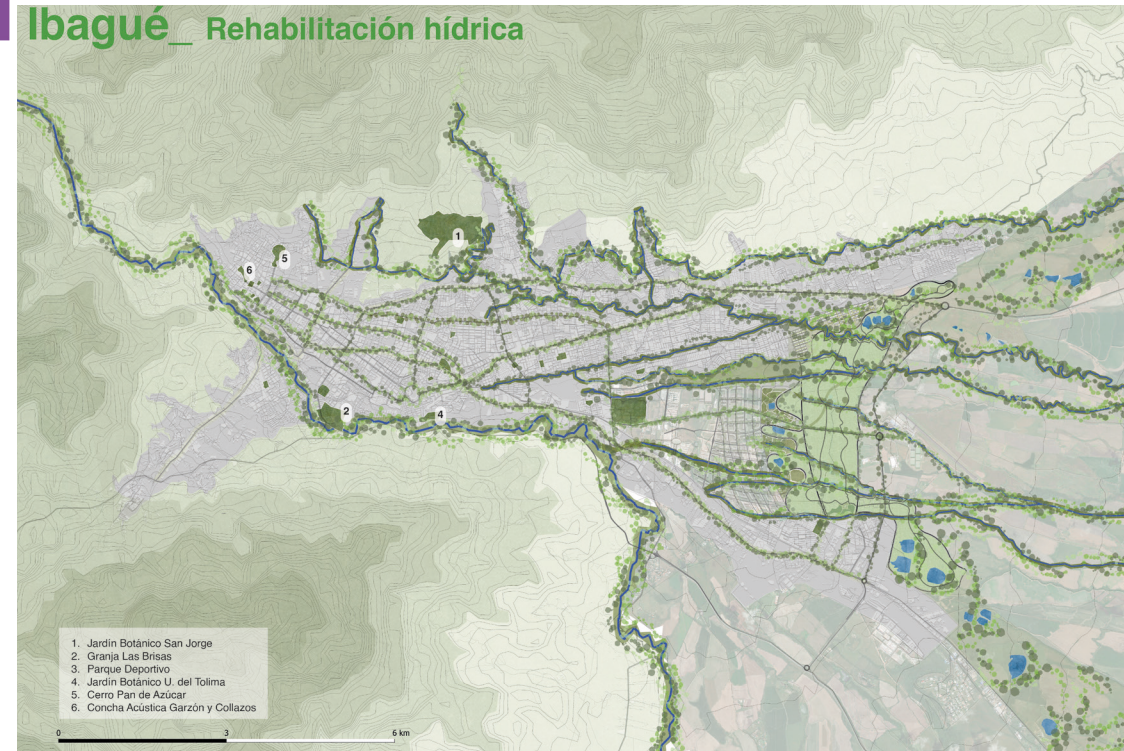
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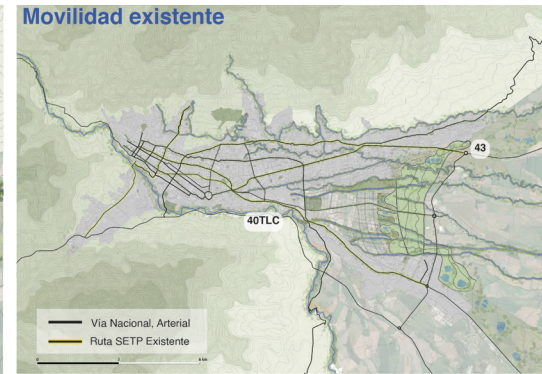


## Ibagué\_ Rehabilitación hídrica

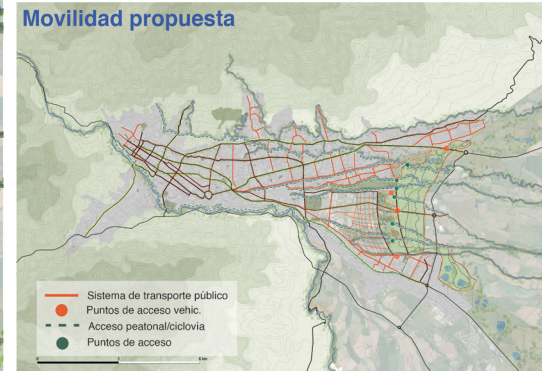


ESC 1:40000

### Movilidad existente



### Movilidad propuesta



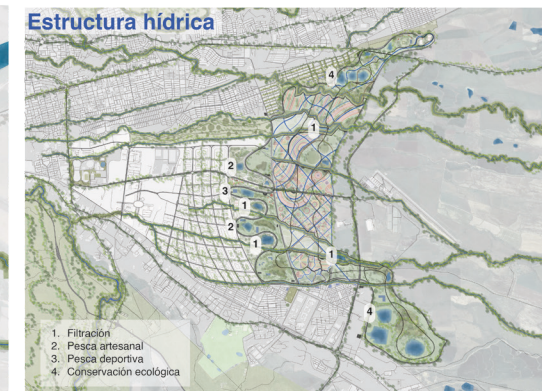
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## Ecoparque Educativo Pijao\_ Plan Maestro

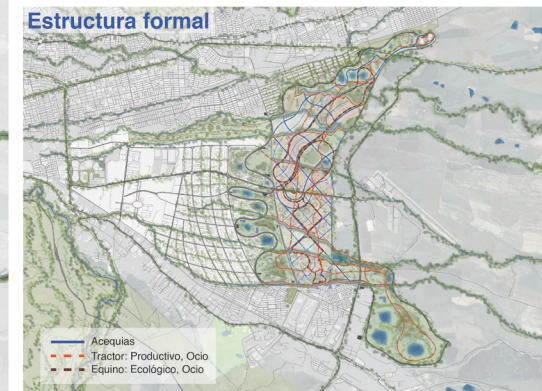


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### Estructura hídrica

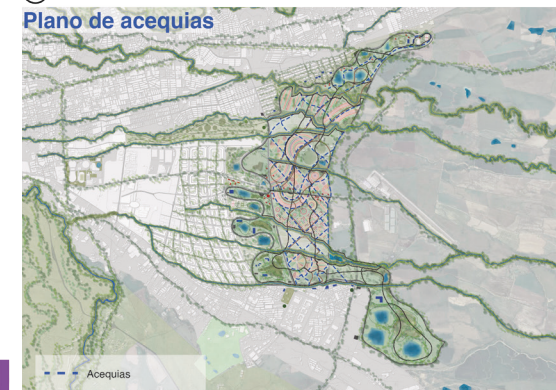


### Estructura formal

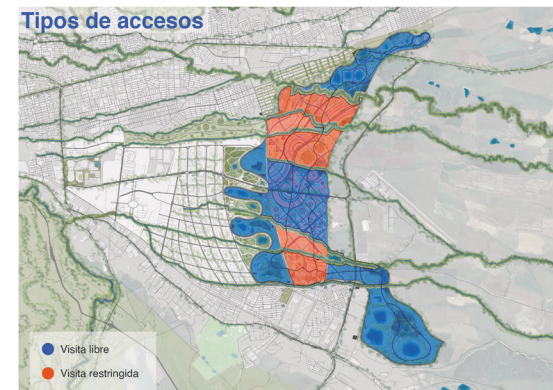


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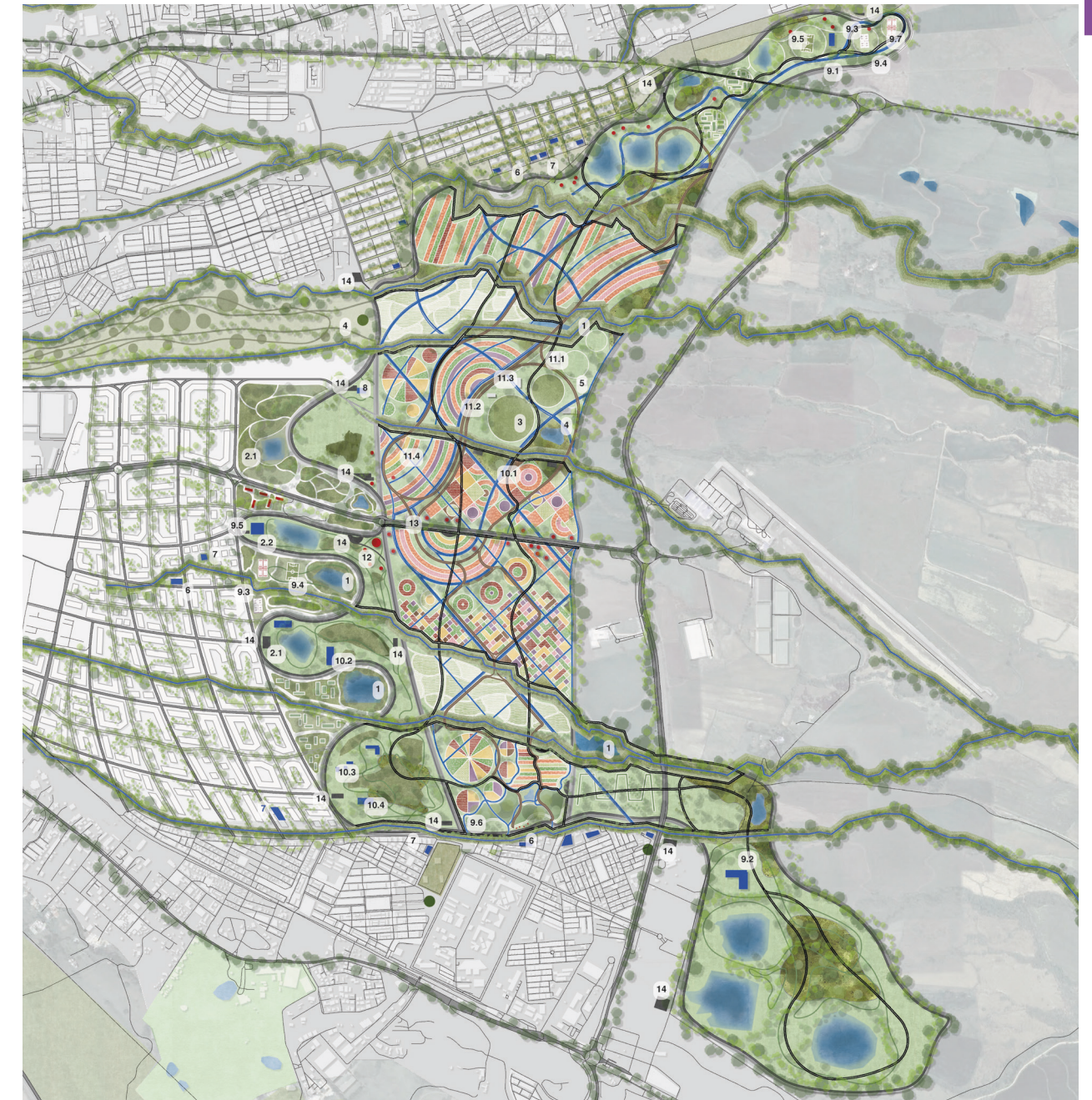
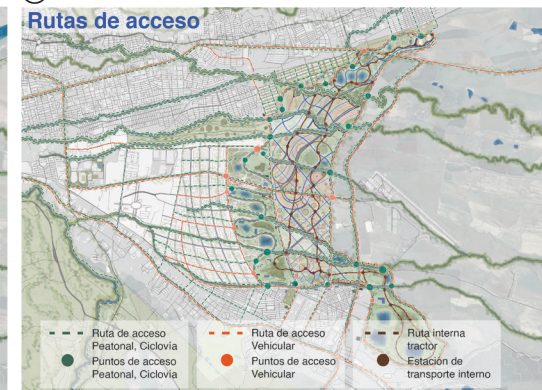
### Plano de acequias



### Tipos de accesos



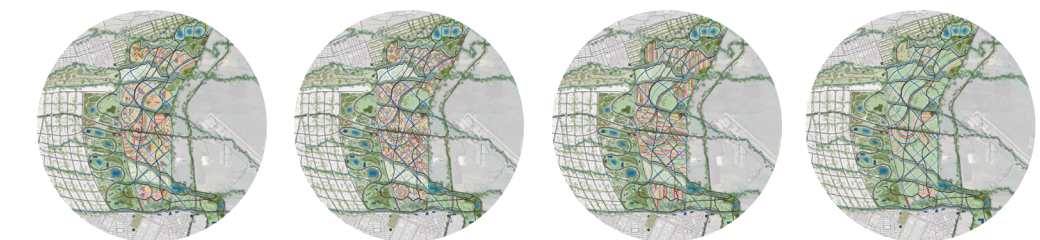
### Rutas de acceso



- Flowers
- Cotton
- Corn
- Tubers
- Coffee
- Fruits
- Vegetables
- Legumes
- Rice

### ACTIVITIES

- |                        |   |                                |                             |
|------------------------|---|--------------------------------|-----------------------------|
| 1. Filtration lagoons  | 4. Internal recycling centers           | 9.4. Tennis court              | 11.1. Dairy                 |
| 2. Fishing             | 5. Biofertilizer processing             | 9.5. Swimming Center           | 11.2. Grains and cereals    |
| 2.1. Artisanal fishing | 6. Children's Neighborhood Eco Playroom | 9.6. Athletics Track           | 11.3. Fruits and vegetables |
| 2.2. Sport fishing     | 7. Community Center                     | 9.7. Volleyball court          | 11.4. Cotton                |
| 3. Cattle raising      | 8. Pijao Historical Museum              | 10. Research center            | 12. Farmer Market           |
| 3.1. Dairy cattle      | 9. Sport Center                         | 10.1. Agriculture              | 13. Horse grooming ground   |
| 3.2. Sheep             | 9.1. Covered coliseum                   | 10.2. Biology                  | 14. Parking lots            |
| 3.3. Goat              | 9.2. High Performance Center            | 10.3. Environmental sciences   |                             |
| 3.4. Horses            | 9.3. Soccer field                       | 10.4. Engineering              |                             |
| 3.5. Poultry farming   |   | 11. Agro-industrial processing |                             |



AGRICULTURAL LANDSCAPE VARIABILITY



## ROAD SECTIONS

### Vía Norte - Sur con borde Este



Vegetación del arbolado urbano:

- *Cecropia peltata* (Yarumo)
- *Handroanthus chrysanthus* (Guayacán)
- *Crescentia cujete* (Totumo)

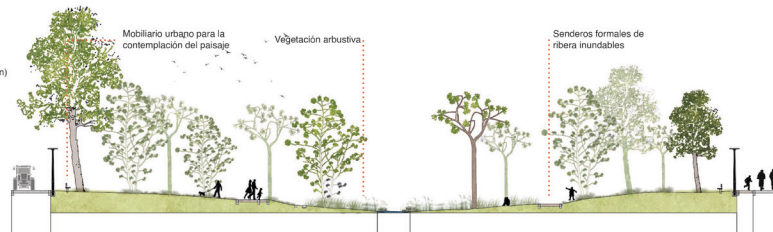
Jardines de lluvia para la captación de las aguas pluviales. Se utiliza como una herramienta para filtrar contaminantes y recargar los acuíferos.

El sistema de redes hidrosanitarias se divide en dos partes: la red del alcantarillado y la red de captación de aguas lluvias por medio de las cunetas en las vías.



El diseño del alumbrado público se realiza estratégicamente para resaltar senderos, áreas recreativas y elementos paisajísticos.

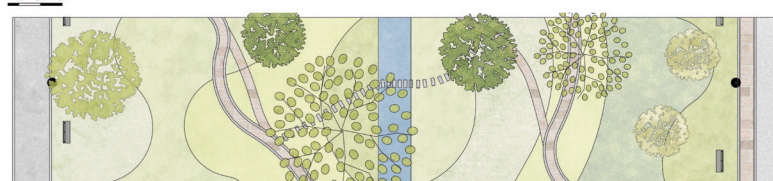
### Zona de parque de ribera



Mobiliario urbano para la contemplación del paisaje.

Vegetación arbustiva.

Senderos formales de ribera inundables.



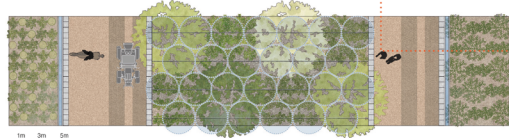
### Zona de parque productivo Acceso restringido



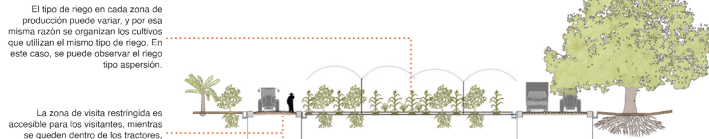
La materialidad de las vías de las zonas de producción son de piedra pegada con franjas de concreto, según las áreas donde deban pasar tractores o camiones.

Las vías se dividen entre las secciones donde pasan los vehículos, y los pasajes equinos y/o peatonales.

Se desarrollan en policultivos de acuerdo con la optimización de cultivos y el tipo de riego que se utiliza para cada uno.



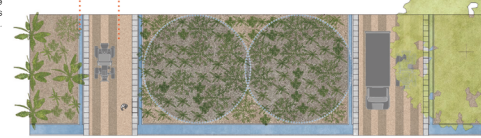
La zona de visita libre es manejada por entidades públicas y educativas, que permiten el libre acceso e interacción con los visitantes.



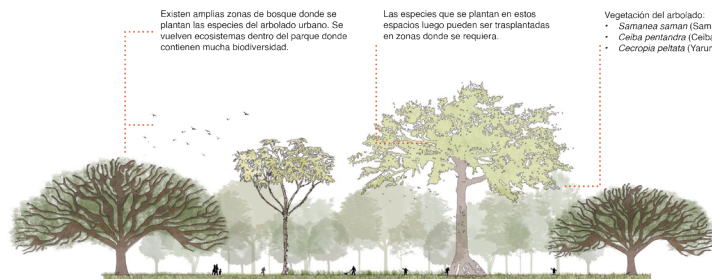
El tipo de riego en cada zona de producción puede variar, y por esa misma razón se organizan los cultivos que utilizan el mismo tipo de riego. En este caso, se puede observar el riego tipo aspersión.

La zona de visita restringida es accesible para los visitantes, mientras se queden dentro de los tractores, como modo de transporte interno.

Los bajantes de aguas lluvias en las vías se conectan con las acequias que están distribuidas en todo el parque para el manejo óptimo del riego de los cultivos.



### Zona de parque boscosa

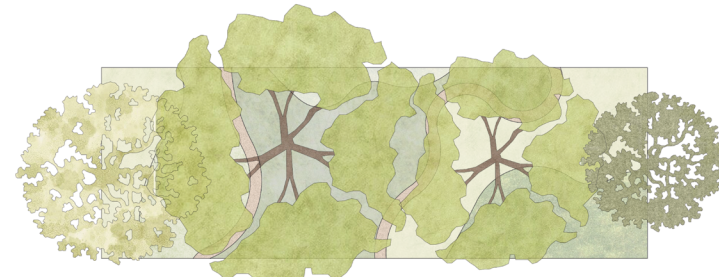


Existen amplias zonas de bosque donde se plantan las especies del arbolado urbano. Se vuelven ecosistemas dentro del parque donde contienen mucha biodiversidad.

Las especies que se plantan en estos espacios luego pueden ser trasplantadas en zonas donde se requiera.

Vegetación del arbolado:

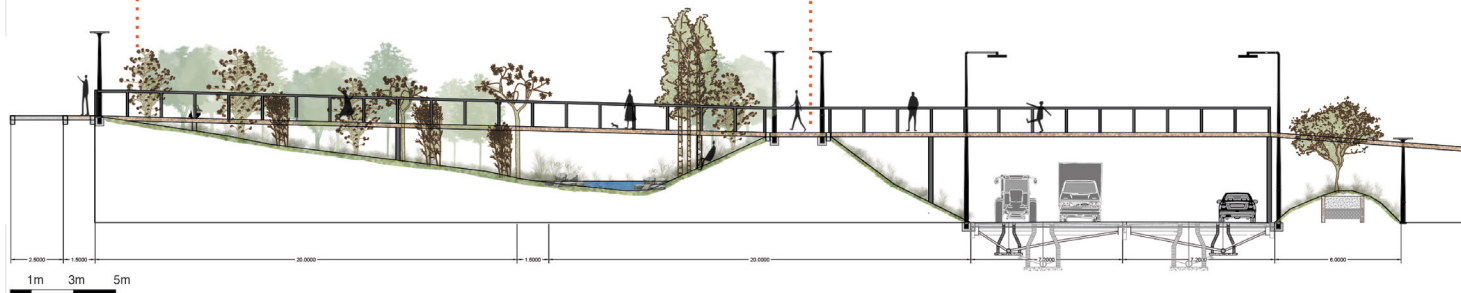
- *Samanea saman* (Saman)
- *Cecropia peltata* (Yarumo)



Se aprovecha el cambio de la pendiente para contener la quebrada y también generar el espacio de transición desde la zona urbana hacia la zona del parque.

Vegetación del arbolado de ribera:

- *Guadua angustifolia* (Guadua)
- *Ficus spp.* (Caucho)
- *Alnus acuminata* (Aliso)



## SITUACIONES ECOTONALES

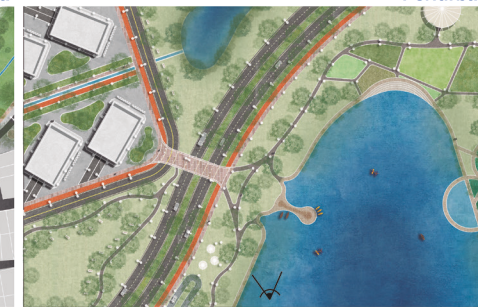
### Intraurbana



ESC 1:1500



### Periurbana



ESC 1:1500



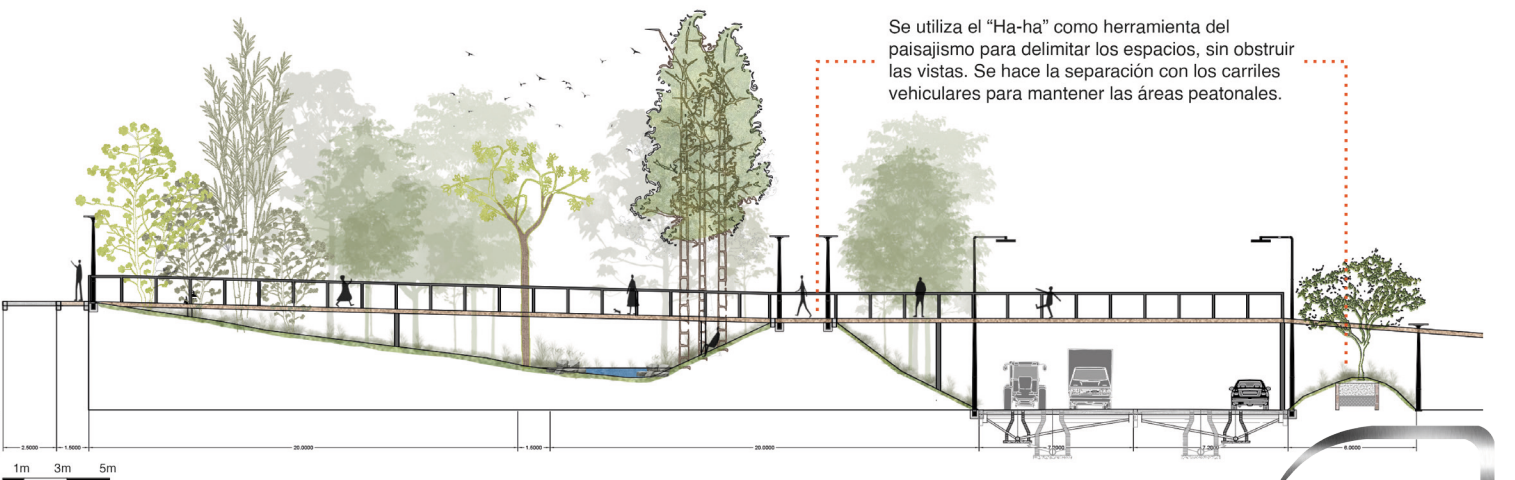
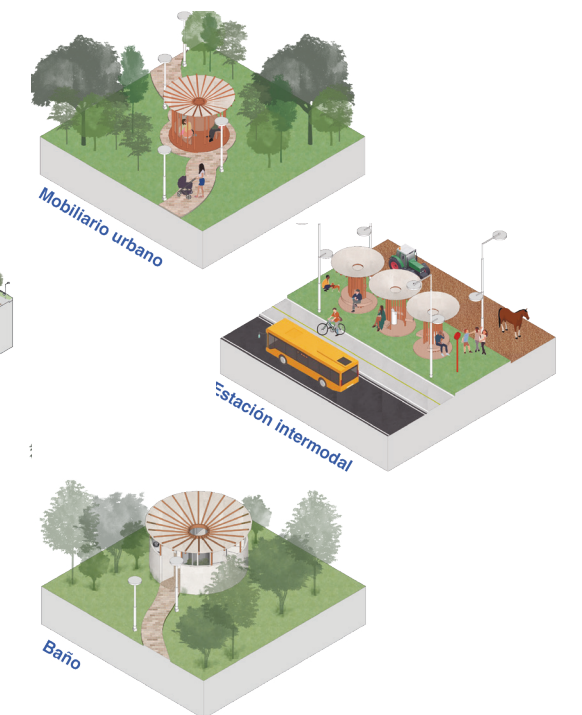
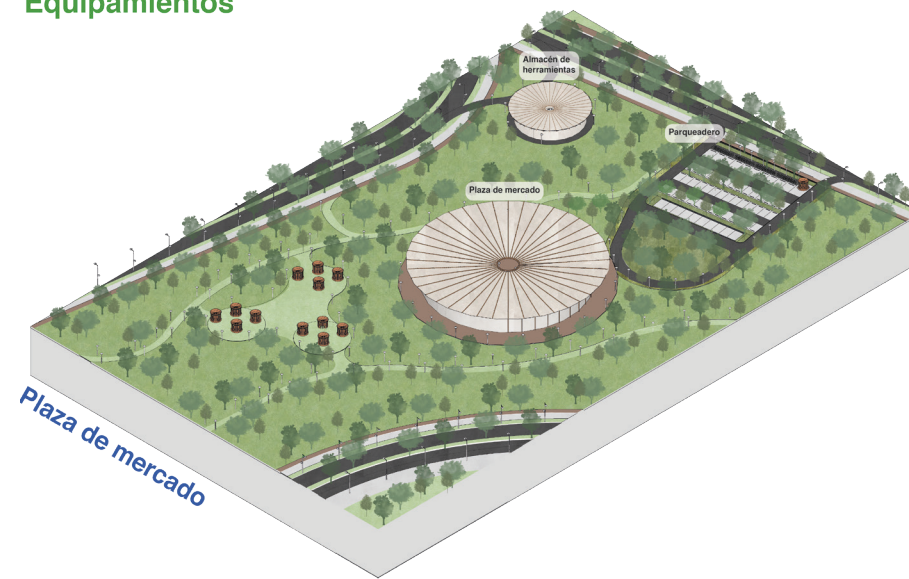
### Rural



ESC 1:1500



## Equipamientos



Se utiliza el "Ha-ha" como herramienta del paisajismo para delimitar los espacios, sin obstruir las vistas. Se hace la separación con los carriles vehiculares para mantener las áreas peatonales.

Arbolado 5 años de crecimiento

Conexión borde sur, barrios informales  
Arbolado 30 años de crecimiento