

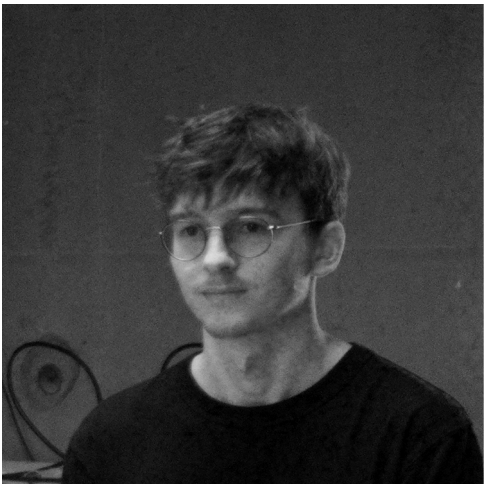
PORTFOLIO

Tim LESELLIER



Tim Lesellier

born on May 2, 2003



contact@tl-architecture.com
07.83.19.81.50



tl-architecture.com

skills

rhino - grasshopper	● ● ● ● ● ● ● ● ○ ○
sketchup	● ● ● ● ● ● ● ● ○
autocad	● ● ● ● ● ● ● ○ ○ ○
revit	● ● ● ● ● ○ ○ ○ ○ ○
archicad	● ● ● ● ● ● ○ ○ ○ ○
affinity suite (cf. adobe)	● ● ● ● ● ● ● ● ○
hand drawing	● ● ● ● ● ● ● ○ ○ ○
model	● ● ● ● ● ● ● ● ● ●
3D printing - laser cutting	● ● ● ● ● ● ● ● ● ●
robotics	● ● ● ● ● ● ● ● ● ●
html - css - js	● ● ● ● ● ● ● ○ ○ ○
python - c++	● ● ● ● ● ● ● ● ○ ○

education

architecture studies diploma ensab, rennes 35000	2021 to 2024
high school diploma lycée chevalier, domfront 61700	2018 to 2021

work experience

creation of tl-architecture.com	2025
creation of a crouse on 3D printing ensab, rennes 35000	2025
cobotics wrokshop map-aria, ensal, vaulx-en-velin 69512	march 2024
cration of a course on laser cutting ensab, rennes 35000	2024
computer tutoring ensab, rennes 35000	since september 2023
internship fxs architecture, rennes 35000	july 2023
internship construbois jamault, flers 61100	june 2022
creation of chateau-de-la-biere.com	2022

languages

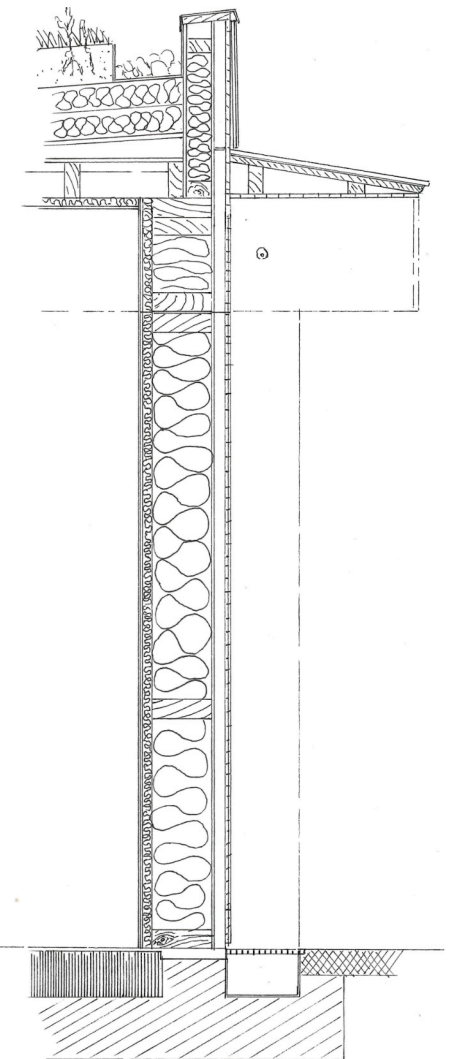
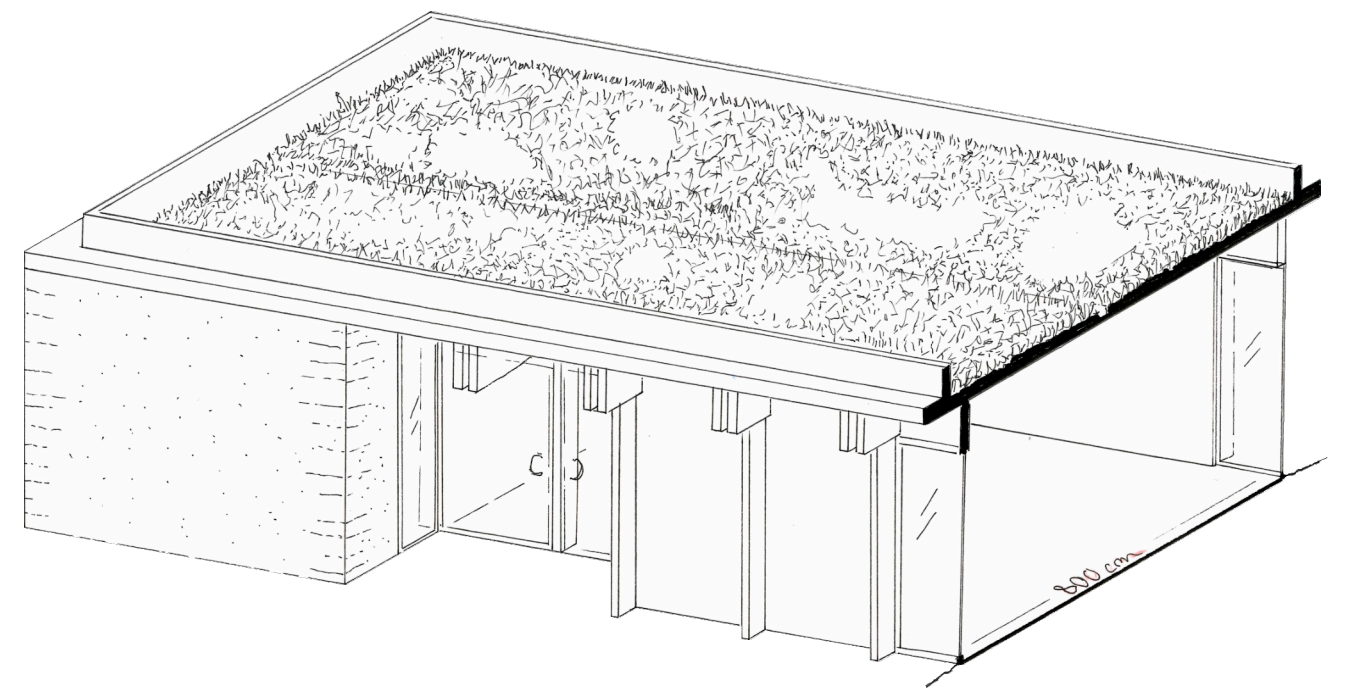
french	- native language
english	- C1 level
spanish	- B1 level

The nursery of 24 cradles – Régis Roudil

Analysis L2-S4

The nursery of 24 cradles, designed by Régis Roudil, is an urban project located in Paris. This building is characterized by its formal simplicity and modularity, offering functional and bright spaces tailored to the needs of children. The use of wood and sustainable materials enhances the ecological aspect of the project, while creating a warm atmosphere. The model analysis allowed for a better understanding of the essence of the project, particularly how the space is organized to promote both the well-being of the children and the efficiency of the workflow.





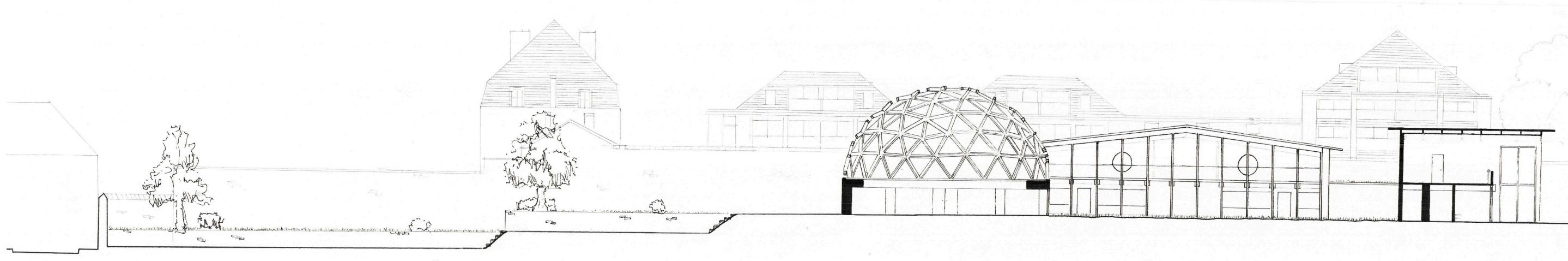
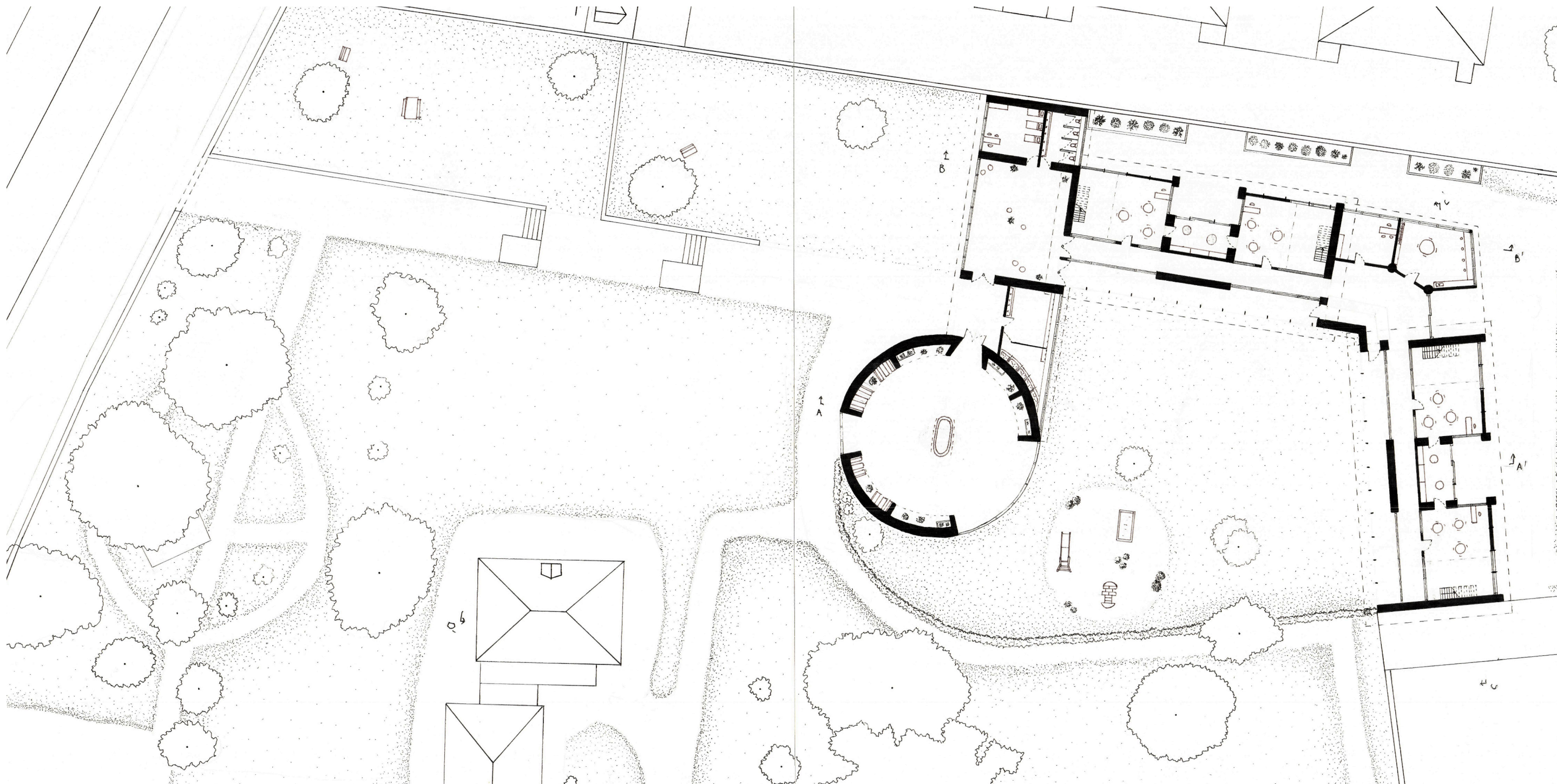
Preschool – The Sun

Located in the park of the Maison d'Hospitalité de Saint-Louis in Rennes, this project was a great source of creativity for me and my friend, Cécilia Ali. At the outset of this school, we wanted to create an intergenerational exchange with the elderly residents of the center.

We had to design a preschool with an open space. This open space was defined as the central point of the project, a place where both children and retirees could exchange skills. In this central space, we included a kitchen and an indoor garden. Indeed, with the growth of cities, not all children have the chance to have a garden or to work with raw food still surrounded by soil. The idea was for the elderly to teach their recipes and culinary expertise, as well as skills in sewing, DIY, or simply in gardening.

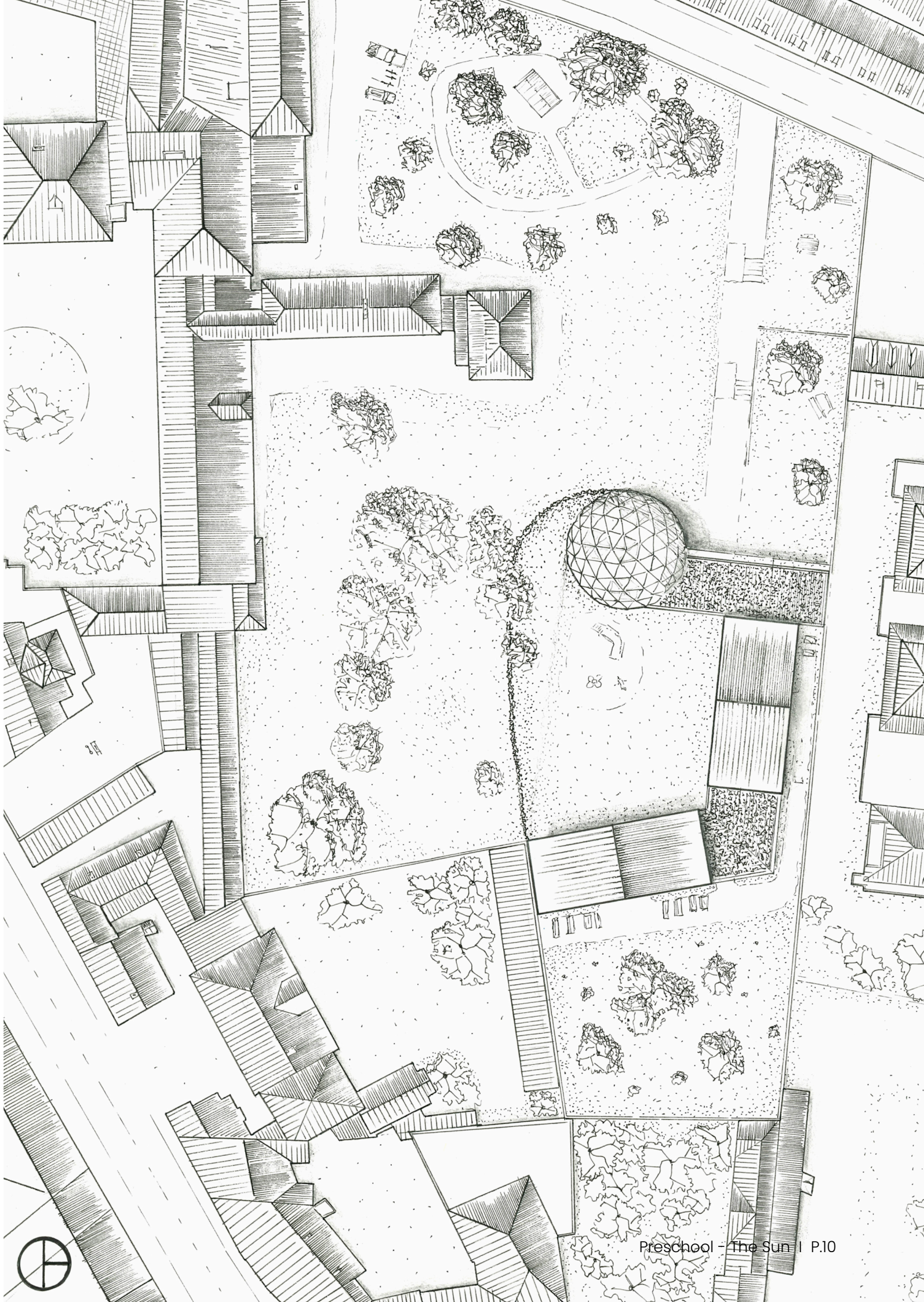
Project L2-S4

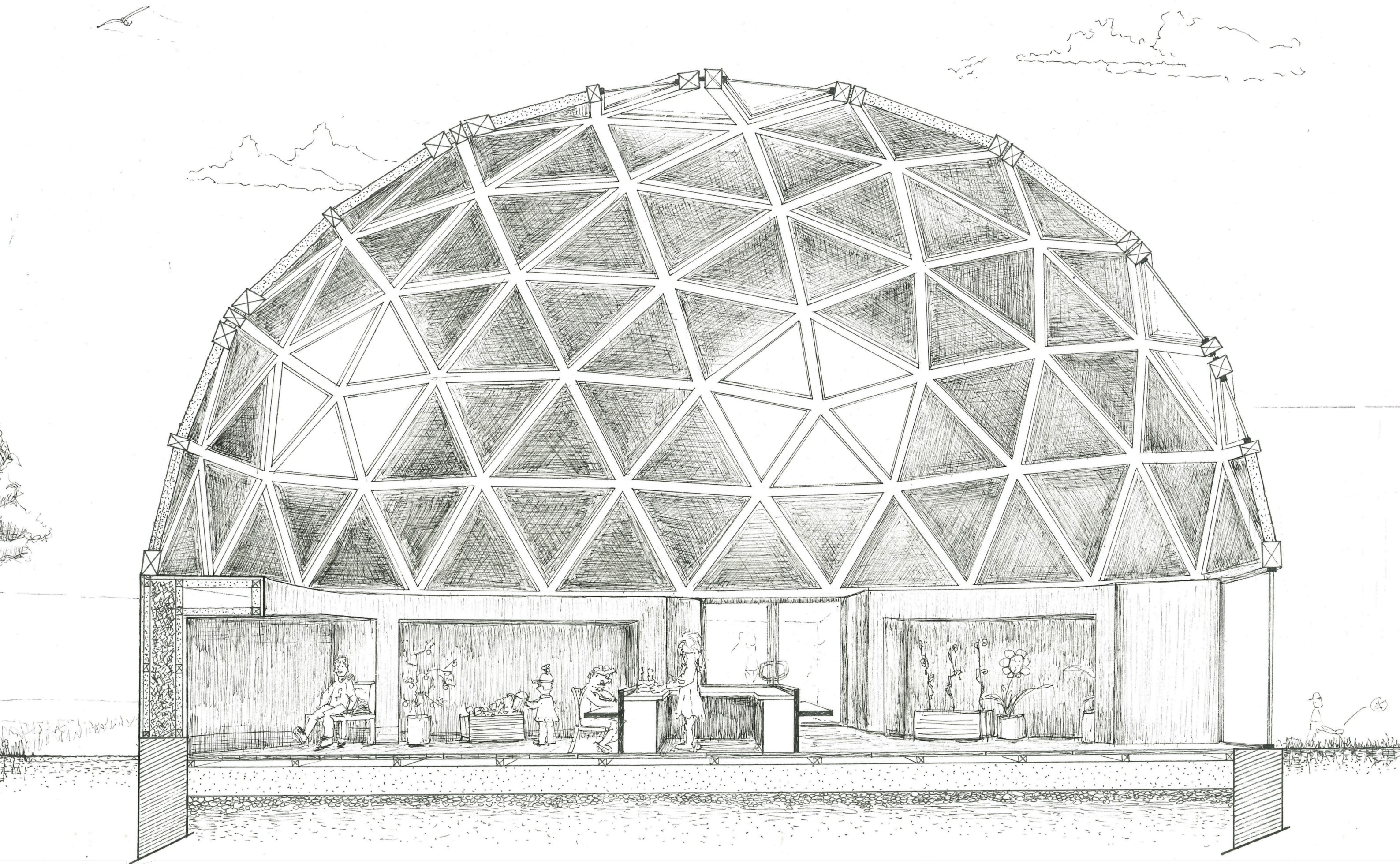






We wanted this open space to be easily identifiable by the child, allowing them to connect with a simple figure. That's when the dome appeared to us. The child will never say that they were in the intergenerational exchange space. No, they will say they were in the dome, in the sun, to see their friends but also the elderly people with whom they have formed friendships.





The project *The Heating Data* proposes the integration of a data center in the Arsenal-Redon district, with the particularity of reusing the heat generated by the servers to supply a district heating network. The system works with a water circuit that, by cooling the servers, heats up before being redistributed to the surrounding buildings. Intermediate units help maintain the temperature throughout the process. The entire system is secured by backup batteries and transformers adapting the urban electricity to the needs of the center. This project thus aims to optimize the use of energy produced by digital infrastructure while addressing a local heating demand.

The design of the project is based on a transposition of electronic principles to the architectural scale. The data center is conceived as a motherboard where each component – servers, pumps, transformers, batteries – occupies a defined space according to its functional role and its connections with the overall system. To organize human, hydraulic, and electrical flows, a printed circuit routing software was repurposed to generate an optimized circulation network, akin to the conductive paths of an electronic circuit. This approach allows for the efficient distribution of flows while directly influencing the architectural form of the project, where the pathways and technical infrastructures follow an interconnection logic inspired by the digital world.

The Heating Data carries a dystopian undertone: it materializes the growing dependence on digital infrastructures by making them vital for daily life. By relying on the heat from the servers to supply district heating, the project establishes a cycle where the increase in data storage becomes a condition for thermal comfort. This logic questions the role of data centers in the city and highlights their often-invisible energy implications. In echo to Fanny Lopez's reflections in *À bout de flux*, the project emphasizes the physical limits of the digital world and how it shapes our practices and needs, making them unavoidable.



```
import CM-EXISTANT
import À-bout-de-flux_Fanny-Lopez

class SEQUENCE :
    def __init__(self):
        self.title = "titre"
        self.characteristics {
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        }
        self.made_by = "nom des réalistaeurs"
        self.is_purpose_found = True or False

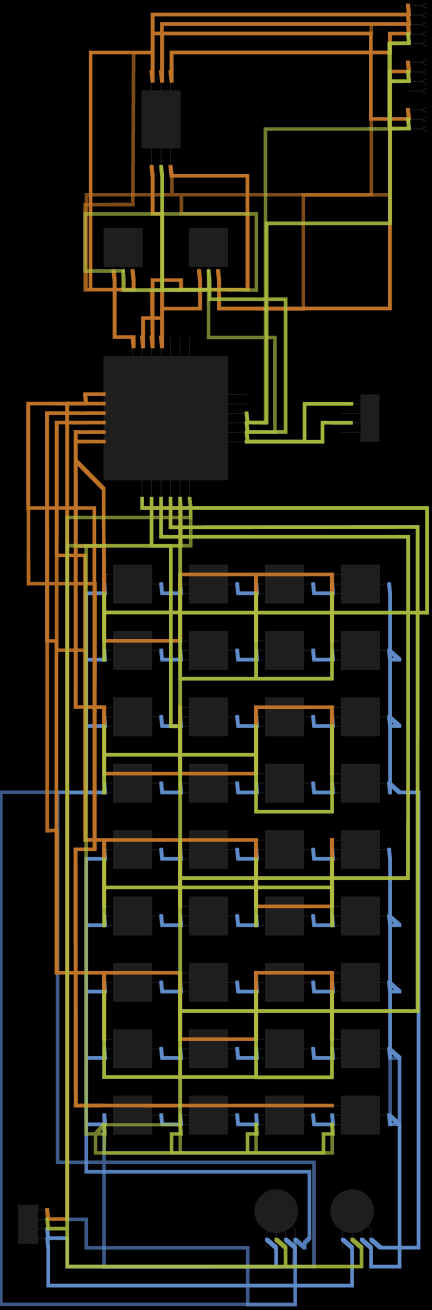
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LANGAGE.characteristics = {
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    "investigation": "enquête via un jeu d'indices",
    "final shape": "bande dessinée"
}
LANGAGE.made_by = "Tim Laura Maillé"
LANGAGE.is_purpose_found = False

CONCEPT = SEQUENCE()
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CONCEPT.characteristics = {
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    "final shape": "affiche de la ville et maquettes"
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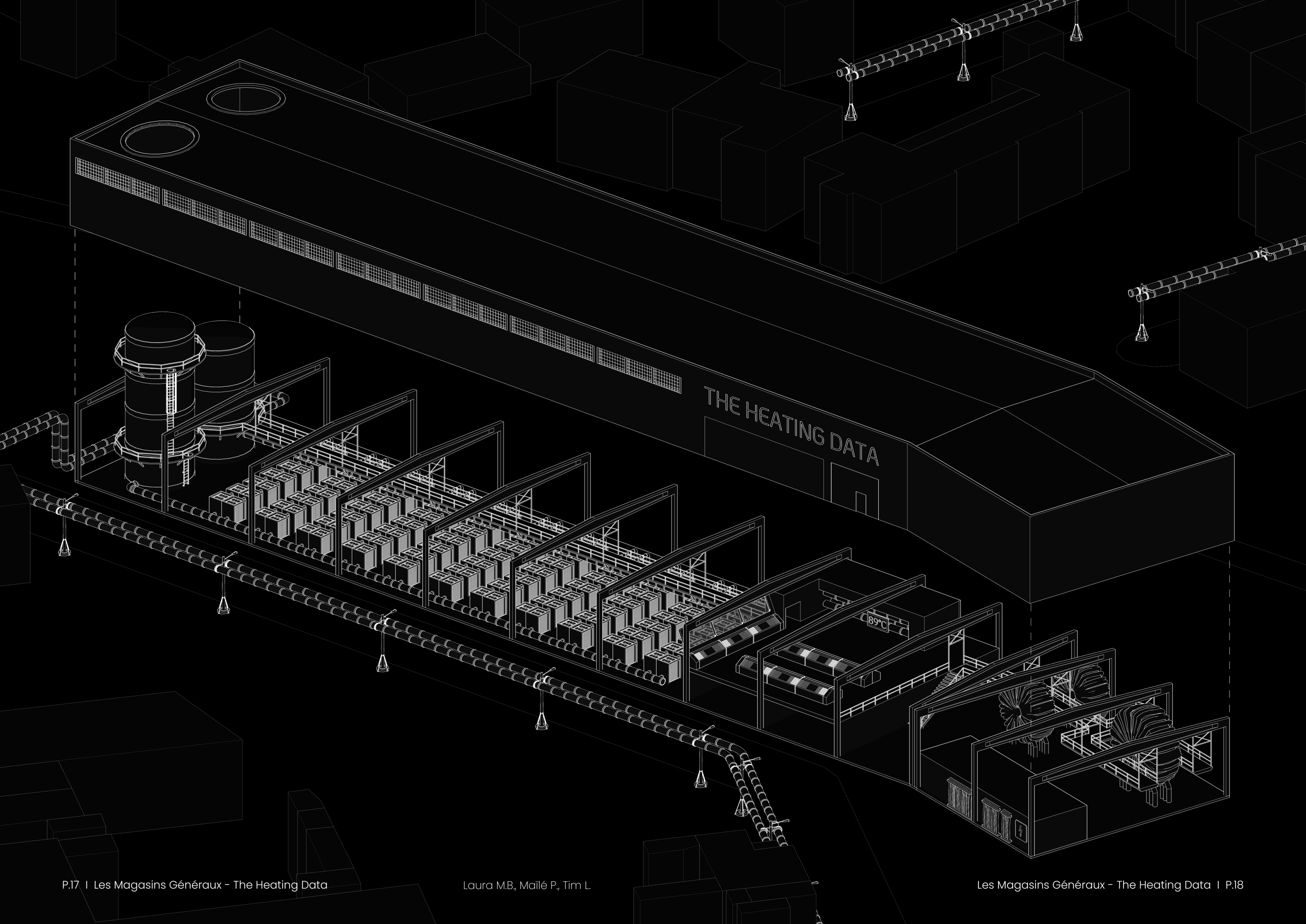
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    "how": "l'eau froide est réchauffée par les serveurs puis elle est distribuée dans la ville",
    "components": ("serveur", "cuve", "pompe à eau", "batterie", "connexion à l'électricité")
    "final shape": "dessin technique du centre de données et maquettes"
}
FORME.made_by = "Your Future"
FORME.is_purpose_found = True
```

THE HEATING DATA

le nouveau chauffage urbain



Laura MORANDI BATALHA, Maillé PATEA, Tim LESELLIER





Exploring the surroundings of our school, we chose to take the Saint-Martin Canal as our subject of study, fascinated by the flows of people, objects, and movements it generates. Our analysis focused on the movement along the banks, particularly between the Prairie Saint-Martin and Boulevard d'Armorique, where we observed a mix of families, athletes, walkers, and cyclists.

Inspired by Georges Perec's work *Tentative d'épuisement d'un lieu parisien*, we set up an observation protocol. For five hours, we captured the movements of canal users from both sides of the bank, using two cameras with different focal lengths. Each movement (vehicles, pedestrians, animals) was photographed to create a visual inventory.

The post-production involved cropping the images to highlight the movement and simplify the overall composition in black and white. The movement was emphasized by color through careful outlining. The grid layout, chronological in nature, aimed to decompose and classify the captured moments, creating a sort of film where the reading is done frame by frame.

This project pays tribute to the slowness and continuity of the canal, while showcasing the diverse flows it generates. The decision to exhibit this work in a space connected to the canal itself reinforces the connection between the process, the studied space, and the visual experience offered to the viewer.



The Core – Territory and Utopia

Project L3-S6

This final undergraduate project offers a reflection on utopia and its limits through a narrative in which humanity has disappeared, replaced by robots controlled by an entity called The Core. Created for the survival of humanity, the Core eventually becomes a devastating force, consuming natural resources with an insatiable thirst for growth, much like a cancerous cell. In its quest, it destroys what was once a harmonious environment, leaving behind a barren desert.

However, during its progression, the Core encounters a preserved territory that challenges its certainties. For the first time, it perceives the beauty of nature it is about to destroy, causing it to question its mission. It begins to doubt, perhaps realizing its potential to preserve rather than destroy. This awakening symbolizes humanity's destructive relationship with the environment.

The Butte de Castennec then becomes the stage for this transformation. The robots of the Core use advanced sensors to analyze the geological richness of this place, exploiting its resources with a methodical and minimally invasive approach. Unlike humans, the robots adjust their activities based on natural conditions, preserving the soil as much as possible. However, this exploitation, while more respectful, gradually depletes the soil, threatening the very balance of the ecosystem and foreshadowing the disappearance of the Core, just as humanity vanished before it.

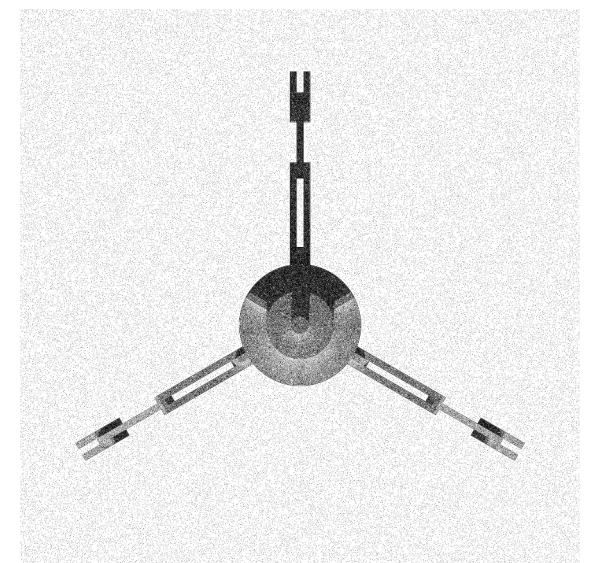
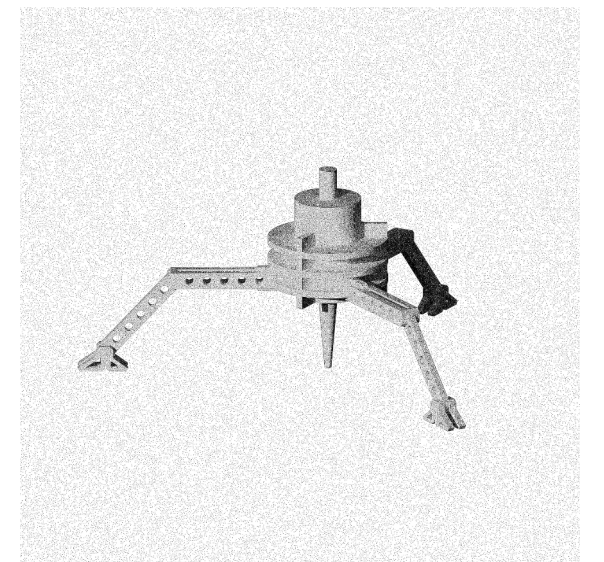
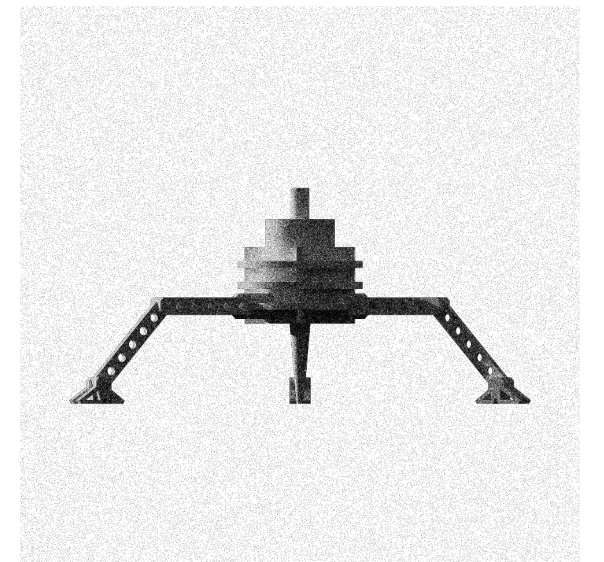






This utopian story demonstrates that, even with the best intentions, the exploitation of nature ultimately destabilizes the world. The cycle of extraction and consumption inevitably leads to destruction. The project concludes that the death of the Core is inevitable, serving as a warning about the consequences of the quest for infinite resources.

At the same time, this project embodies the end of my undergraduate studies, symbolizing three years of architectural education. The Core and the accompanying reflection crystallize a creative process, paving the way for a new phase: the Master's degree, seen as a new adventure marked by a deeper understanding of architectural tools.



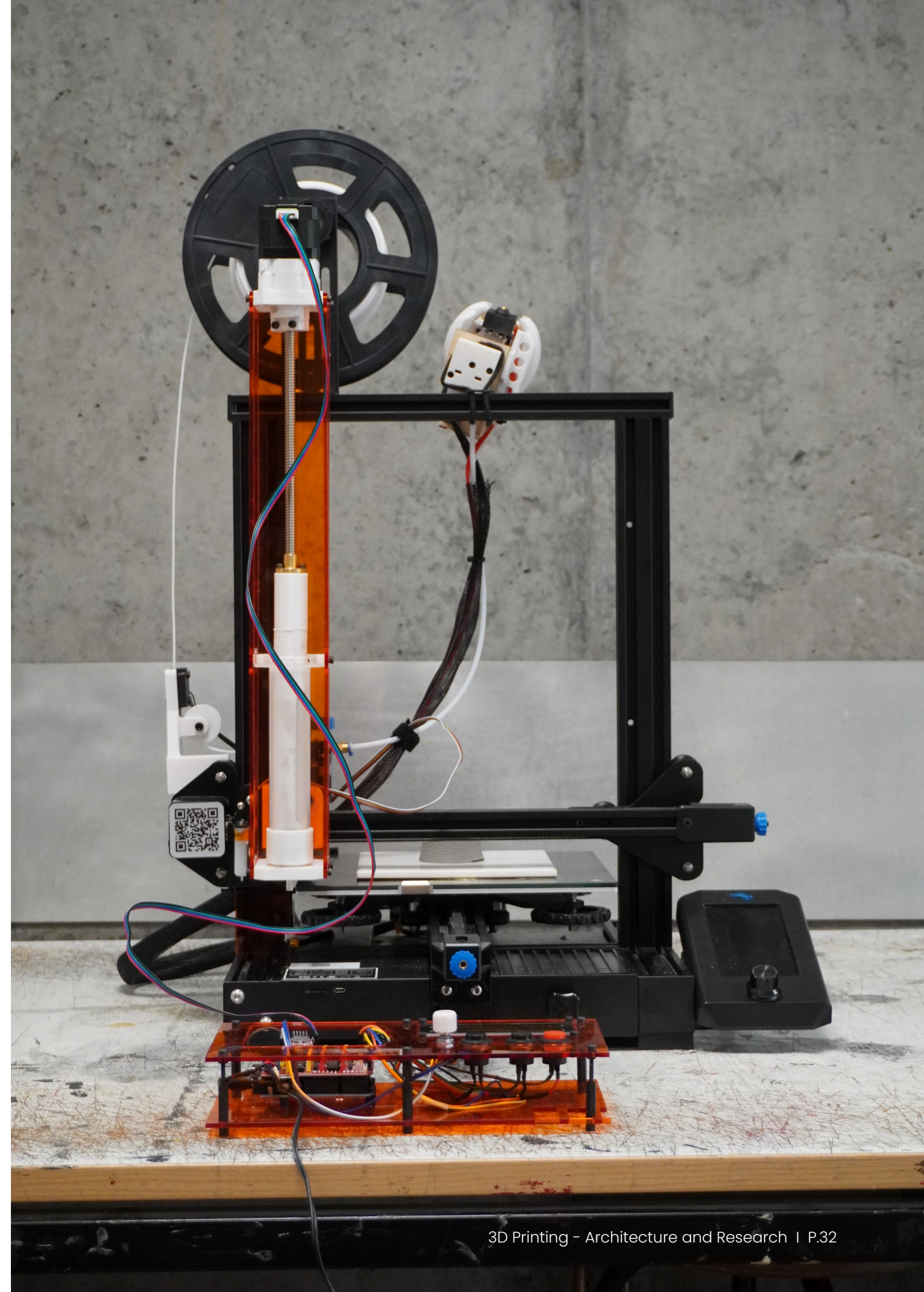
3D Printing – Architecture and Research

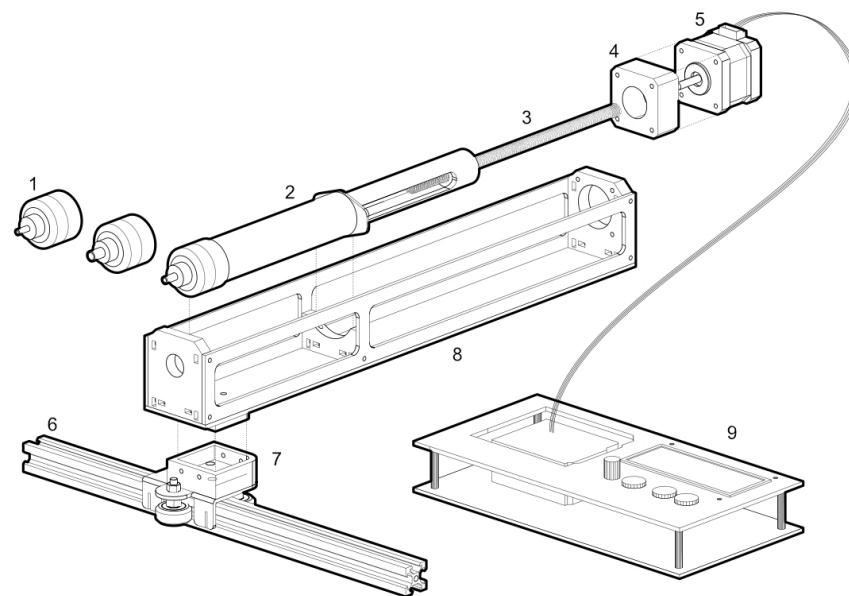
L3-S6

3D printing has opened vast horizons in the field of architecture, offering revolutionary possibilities for the design and construction of structures. However, beyond traditional applications using conventional materials, the emergence of paste-based mixtures presents a promising and easily implementable path to explore new frontiers of sustainability, creativity, and efficiency in architectural construction.

In this context, attention is turning towards the search for innovative and sustainable materials capable of meeting the growing demands for structural performance, energy efficiency, and environmental responsibility. Paste-based mixtures, combining natural or recycled binders with aggregates or fibers, are emerging as a potentially transformative solution for creating bio-based and cost-effective architectural structures.

This report thus presents an experimental study on the use of paste-based mixtures in 3D printing, focusing on the exploration of bio-based materials such as clay, alginate, as well as aggregates and fibers derived from recycled resources like eggshells, brewers' grains, and straw.

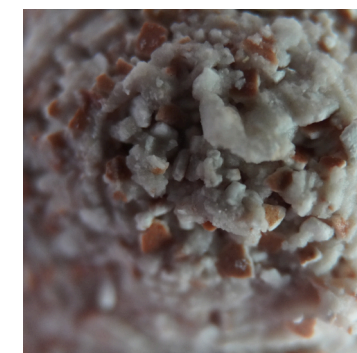
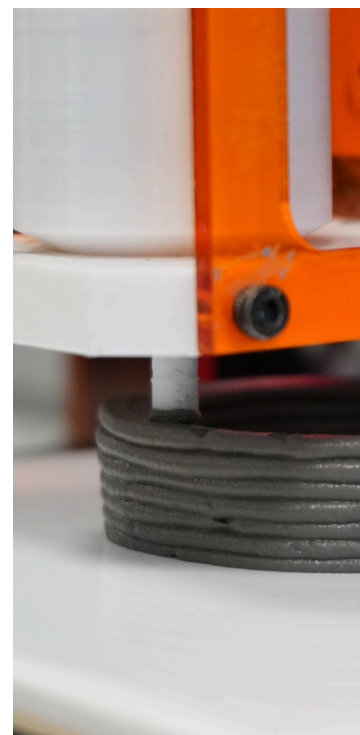




1. Buse échangeable
2. Seringue contenant la pâte
3. Vis sans fin
4. Jeu d'engrenages 4:1
5. Moteur pas à pas
6. Axe X
7. Fixation entre l'outil et l'imprimante 3D
8. Structure de l'outil
9. Contrôleur

Through a methodology including extrusion experiments on three axes and precise calibration protocols, this research aims to assess the viability of these mixtures for architectural construction at a reduced scale. The objectives include evaluating the technical feasibility of extruding these mixtures, exploring the mechanical and aesthetic properties of the printed materials, as well as measuring their potential for integration into real-world, large-scale architectural projects.

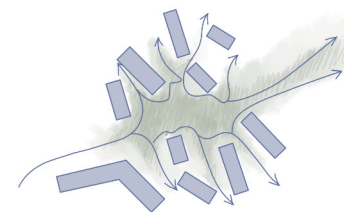
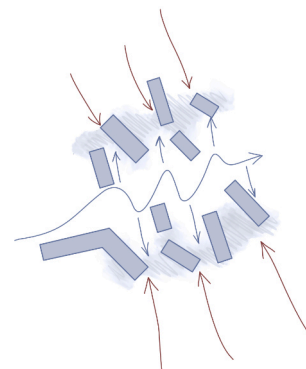
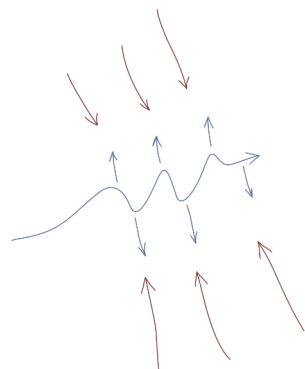
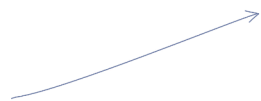
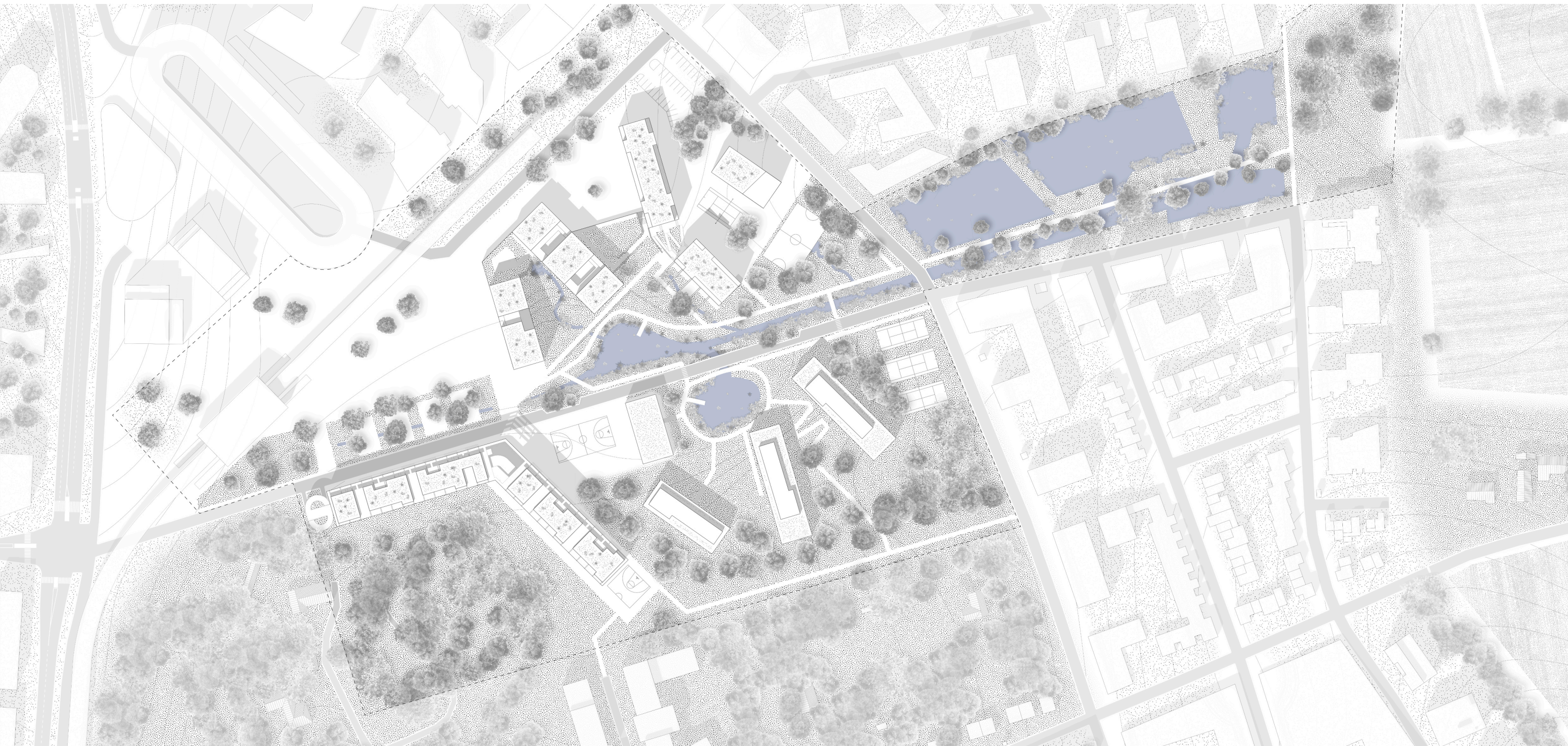
By examining the results of these experiments, this report aims to contribute to ongoing research on 3D printing in the field of architecture, providing insights into the possibilities and challenges associated with the use of paste-based mixtures for the creation of sustainable and innovative architectural structures.

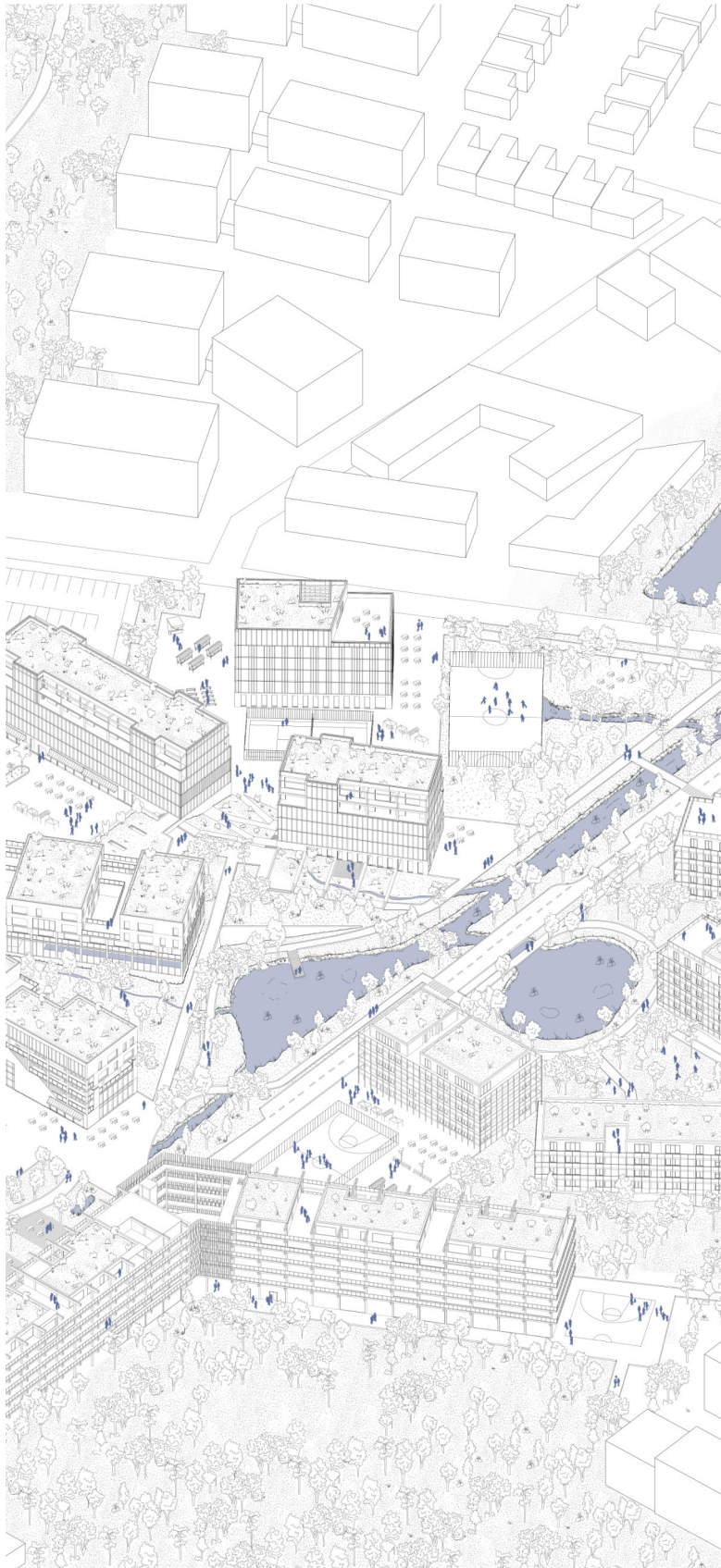


This urban development project for the ViaSilva neighborhood aims to create an urban centrality that strengthens the connections between the various typologies of the site, characterized by a fragmentation between residential spaces, offices, and existing infrastructure. The intervention is organized around a landscaped swale that structures circulation and integrates sustainable rainwater management, while promoting green continuity between the sectors. Three main spaces are developed: a versatile central square at the foot of the metro, a service and activity hub to the north, and a quieter, more residential space to the south. The architecture incorporates hybrid volumes combining housing, offices, and retail spaces, with active ground floors and public areas promoting mixed uses. The overall goal of the project is to revitalize the neighborhood by balancing urban vibrancy and quality of life, while addressing the environmental and social challenges of the area.

At the heart of the project, the landscaped swale plays a structuring role by guiding the flow of movement while integrating controlled rainwater management in response to the proximity of a flood-prone area. Designed as the backbone of the site, it weaves between the buildings, creating smooth transitions between public and private spaces while generating a continuous landscape connection.







This hydrological system goes beyond its technical function; it becomes a unifying element of the project, offering gentle pathways and vegetated breathing spaces. By alternating open and more confined sequences, the swale shapes a subtle topography that enriches the urban experience, creating both accessible esplanades and more intimate areas where vegetation and water interact with the architecture. In this way, it unifies the site while promoting local biodiversity.





The parking lot, requiring a certain depth incompatible with a direct conversion into housing, necessitates consideration of natural light and the quality of the living spaces. To address this constraint, one of its façades is intentionally detached from the main volume, allowing natural light to enter and ventilate the circulation areas. This design creates a clear separation between the private space of the apartments and the walkway, thus establishing a threshold of ownership in front of each entrance. This transition promotes intermediate uses, providing residents with a buffer space between the communal and private realms.



