

Architecture **of** **Transitional** **Justice**

The Cooperative as Part of Post-Conflict Reconciliation in Colombia

Federico Ortiz Velásquez



Design Booklet

Design Booklet

MSc Thesis

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Acknowledgments

This thesis has consistently proved that collective work and cooperation are the most valuable resources for post-conflict Colombia, for the comprehension of the past and the collective construction of the future.

There are many names I would like to mention. Thanks to all the people involved in the research stage, with their valuable input, comments, and time spent during my interviews: Humberto de La Calle, Claudia Giraldo, Erika Diettes, Camilo Restrepo, Gloria Quintero, Mario Gómez, Mihaela Mihai, and Alejandro. Thanks to Tejipaz and Salón del Nunca Más for welcoming me in Granada, to Arcecio and Nelly for welcoming me in their farm, to Maria Nela, Hugo Tamayo, and Mauricio Piedrahita for their endless help, as many others who offered a helping hand. I have felt humbled with all of your support.

To my parents Gloria and Juan Guillermo, and my brother Ricardo, who have given me all their love and support throughout this adventure. To all my family, to my beloved friends in Colombia, Manu, Ana, and Vico. To my dear friends here in Delft, who have become my family abroad. I owe who I am to all of you.

Special thanks to Alper and Aleksandar, for challenging me in every stage of this project, for their critical input, and their thoughtful advice on academic and personal matters.

Lastly, I would like to dedicate this thesis to every person working to build a better Colombia, a country in peace.

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01

Introduction to the Design Task

Introduction on the Design Taks

Architecture of Transitional Justice

The Cooperative as Part of Post-Conflict Reconciliation in Colombia

Mentors: Alper Alkan, Jan van de Voort, Aleksandar Stanicic

Architecture of Transition aims to address the participation of architecture within transitional justice, a judicial mechanism applied in the aftermaths of conflicts or dictatorships. The recent Colombian Peace Agreement between the government of Colombia and FARC-EP offers the opportunity to study the spatialization of political, social and economic concepts, where architecture could operate at the center of the healing, re-signifying, and reparative processes, taking as case study the rural municipality of Granada, Antioquia.

The research I carried out for the past months has provided me with the right conceptual and analytical tools to continue this project through the design of an architectural intervention that will respond to the specific political, socio-economic, and spatial conditions in Granada. The methodology I applied encompassed the understanding of the political context of the country in the aftermath of the armed conflict and the peace-making process, and the political concepts such as Transitional Justice through a literature-historical research about the Colombian conflict and the world wide implementation of Transitional Justice models worldwide; the diversity in perspectives and positions regarding the actors of the conflict through a series of interviews with the representatives of different parties; and the spatial comprehension of the municipality where the conflict staged, both on mapping and *in situ* levels, with a

photographic, journalistic and anthropological approach.

The results of the research have a strong sociological ground. During the site visit, I could experience the daily conditions of culture and behavior, the mountainous topography, and the economic practices that have taken place in this municipality for generations. The strong collective links between the residents and the agrarian background weakened by the conflict are the main two interests in my architectural design. Therefore, the project has a direct relationship between research and design, where research findings and insights gained by first-hand interviews and observations help me translate them into the design an agrarian cooperative and coffee production plant.

The End...

After every war
someone has to clean up.
Things won't
straighten themselves up, after all.

—Wisława Szymborska

The inspiration behind Szymborska's poem The End and The Beginning, as the conflict has reached its end, and a new beginning starts with the Peace Agreement.

Transitional Justice

When an internal conflict is over, a **mechanism** called Transitional Justice (TJ) is applied, in order to deal with a past of violence and injustice. **Truth** commissions, criminal trials, **restitution** compensation, and **lustration** are addressed.

Memorialization

From a spatial perspective, scholars have addressed this topic through a perspective of memorialization and **materialization** of symbols of past events. Notwithstanding the importance of those interventions, the relationship between past events and the built environment cannot be reduced to them. A more encompassing account of architectural TJ must address the challenge of re-designing and re-signifying a broader category of buildings that played an integral part in the geography of political violence.

Architecture of Transitional Justice

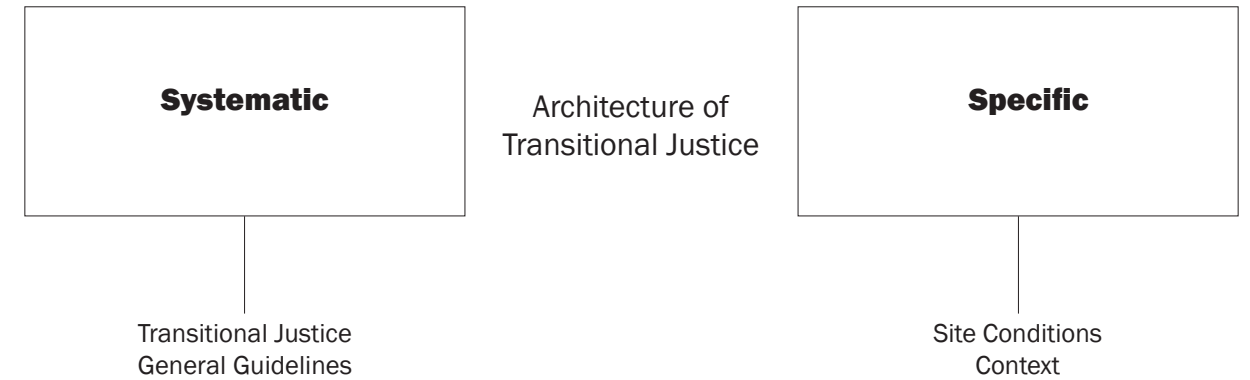
Located in the intersection of architectural theory, and political theory, addresses the participation of architecture within transitional justice, talks about the architecture's power to provide favorable space for two processes, an architecture that **bridges** the gap between a past of violence and the promise of a hopeful future of peace, taking Granada as case study.

Social Tolerance

Conflict destroys the social fabrics, dividing groups, whose mutual relations are permeated with guilt, hatred and distrust. The **process of collective (re) construction** of social tolerance acknowledges the **peaceful co-existence** after conflict.



The following set of diagrams aim to illustrate the conceptual framework of the design project, becoming the foundation for the translation from research to design.



The use of general guidelines allows the project to be developed in a structured way.



Systematic Guidelines

Components

Available Data

Forensic Analysis

The systematic guidelines are focused on the application of design concepts and policies in different contexts.



Colombia



Antioquia



Granada

Specific Guidelines - Transitional Justice from Below

Theory to cascade TJ policies in communities

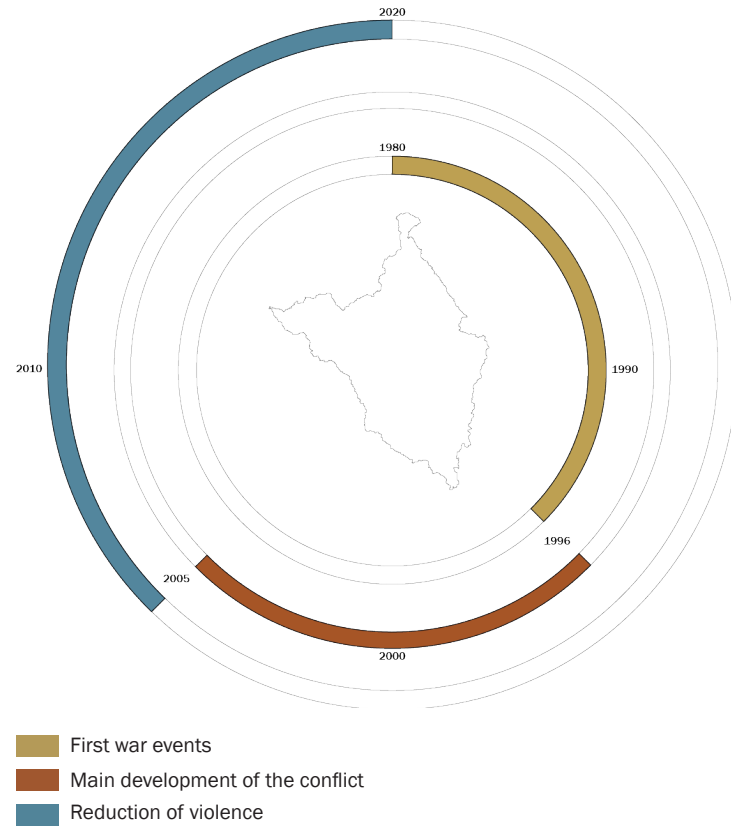
Contextual

Urban / Rural

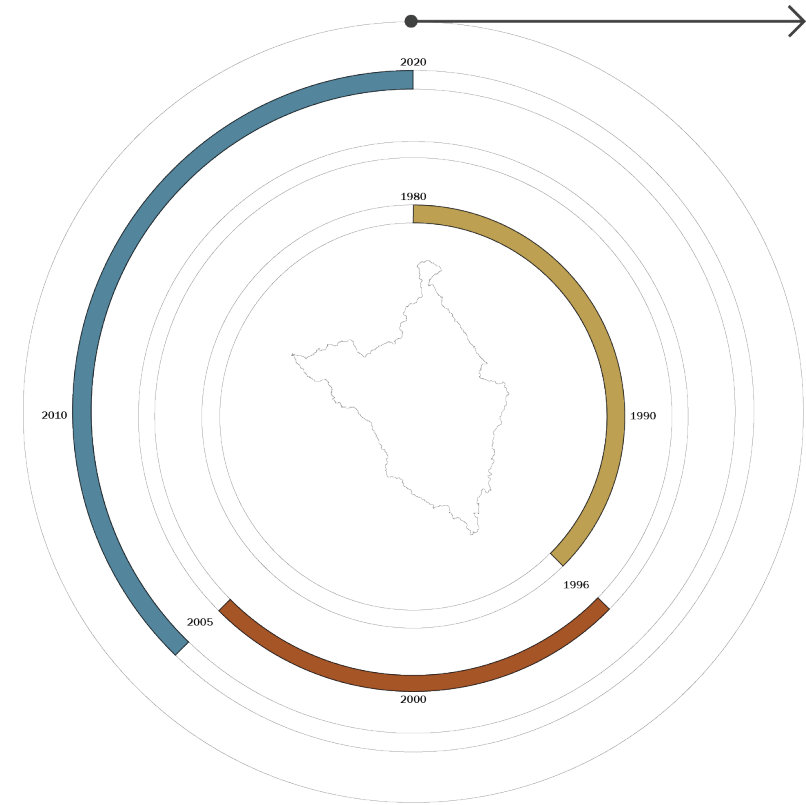
Goal

Formulate other grounds of activity to create new dialogues

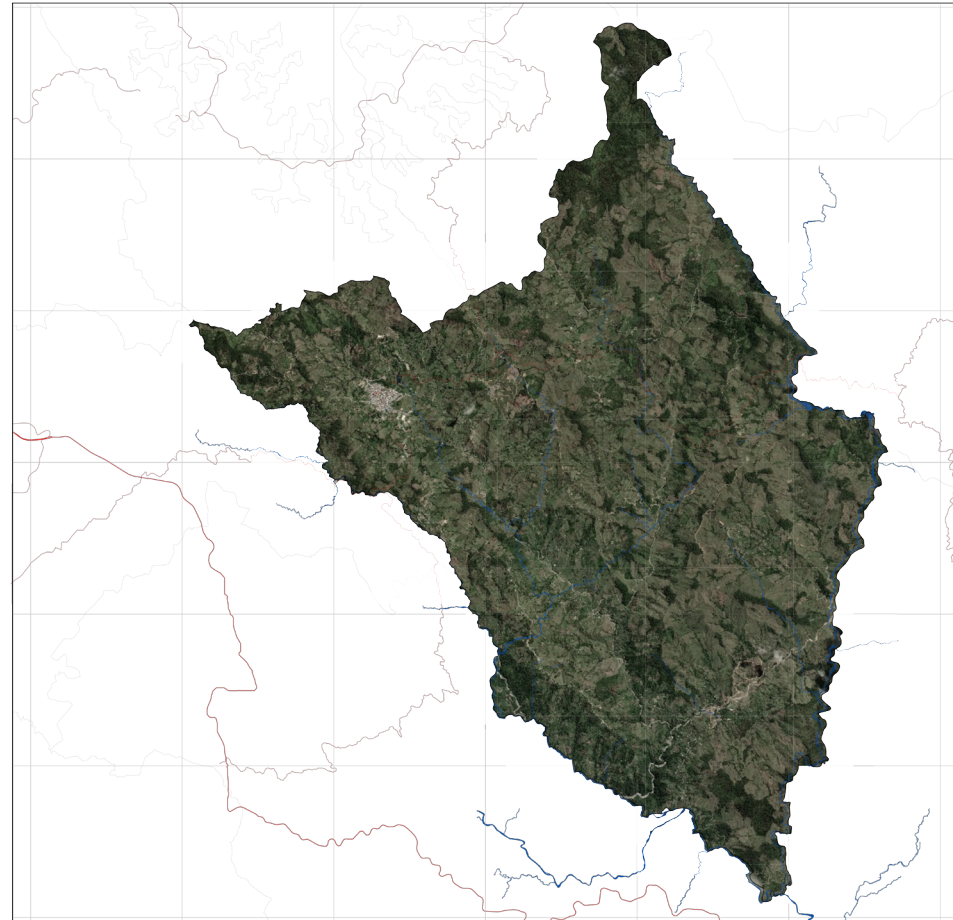
The Context Specific: Granada is chosen as site for research and design.



Timeline of the conflict in Granada: check page 148 of the Research Booklet for further information.



The Peace Agreement and the Architecture of Transitional Justice become a new stage within the history of the conflict and post-conflict in Granada.



Rural landscape

Guidelines: Components Analysis

Social

Culture and behavior

Economic

What do they do for a living?

Geographic

Landscape and climate

Through the architecture lens: How is this related to space?

Guidelines: Site Components

To heal



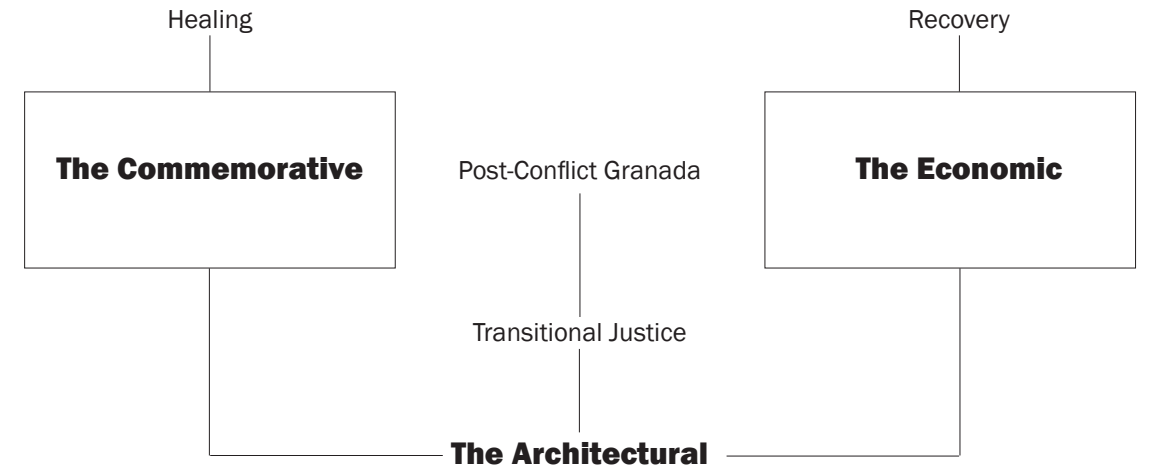
© Jesús Abad Colorado

To repair



© Federico Ortiz Velásquez

The necessity to heal the wounds and the importance of investing in the economic recovery.



Both healing and recovery processes meet through the architecture.



© Antanas Jurksaitis

Eastern Antioquia

Coffee Veredas: 535
 Coffee planters: 10.624
 Farms: 11.854
 Ha. of coffee plantation: 11.587
 Ha. of productive area: 9.636
 Ha. average size of a plantation: 1.09
 Average age of trees: 5.9
 Average density tree/Ha: 4.751

Type of farmer

Medium scale
 111 (1.04%)

Small scale
 10.490 (98.74%)

Granada

Coffee Veredas: 34
 Coffee planters: 498
 Farms: 526
 Ha. of coffee plantation: 246
 Ha. of productive area: 213
 Ha. average size of a plantation: 0.49
 Average age of trees: 5.8
 Average density tree/Ha: 3.785

Type of farmer

Medium scale
 1 (0.02%)

Small scale
 497 (99.8%)

*Type of farmer

Big: more than 10Ha
 Medium: between 5 and 10Ha
 Small: less than 5Ha

Economy and land ownership are quite linked with the origin of the Colombian conflict, the inequality in the property of land, and the (lack) opportunities for small farmers.

02

Site Conditions

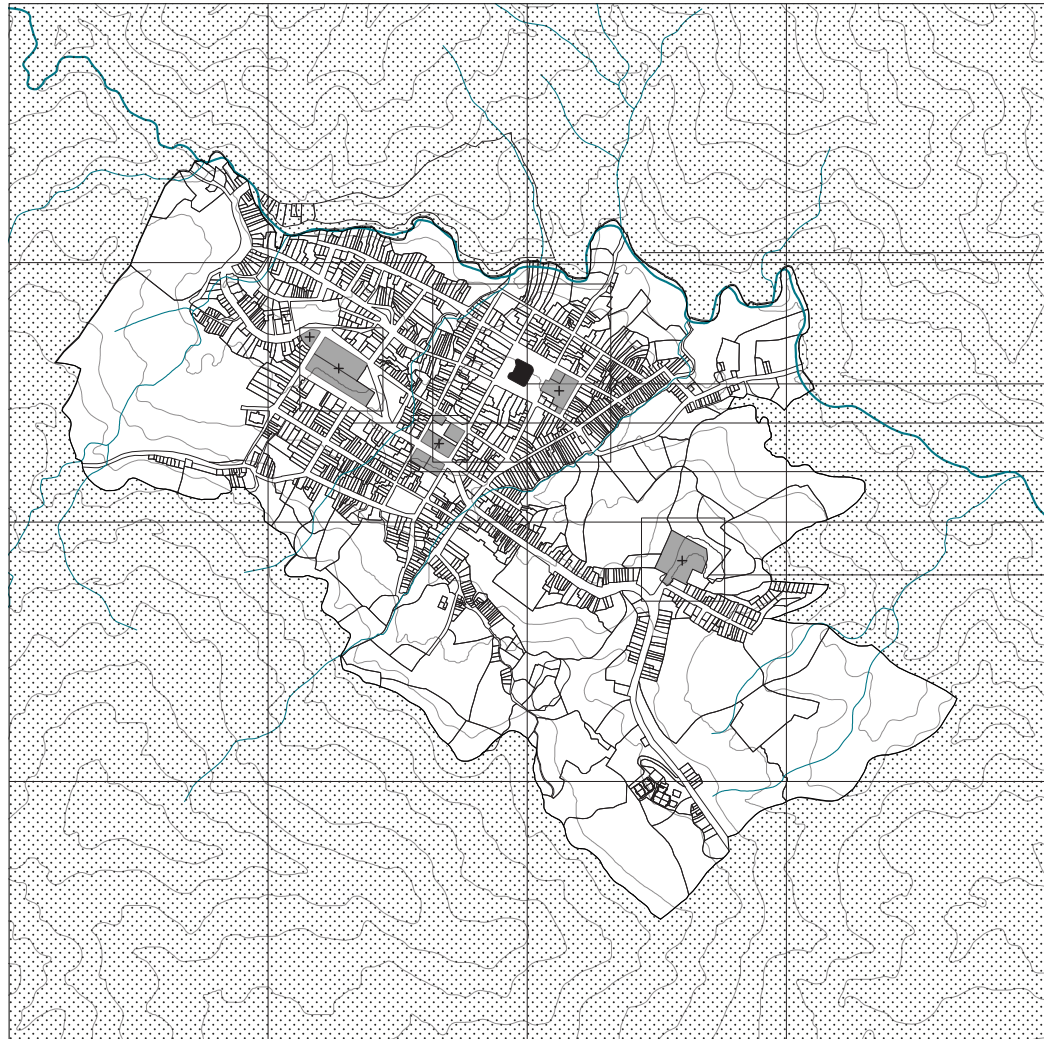
Land-Form, Built-Form, and Public Program.

The project faces the main activity hub of the town – the central square – on its upper part, while links the architecture and program with the Santa Barbara creek on the other side. In the square, the buses frequently arrive, bringing people and goods from the rural areas, therefore, the square bridges the territorial – rural – and the urban in space. Usually, the architecture surrounding the central square of rural municipalities in Colombia is mostly considered heritage, with churches and colonial buildings made out of rammed earth. Although Granada is not the exception, the amount of built heritage is significantly low. I propose to intervene in the northern block of the square due to the opportunity it presents, as it is filled with contemporary and self-made housing buildings, where the architecture could infill within the existing context and extend the operation towards the following block until it meets the main water body, the creek.

The links between urban and natural settings have been broken due to the irregular growth of the urban area, where the creek became open sewage; this project also seeks to provide the right spatial conditions for residents to meet again with their main natural resources and repair the broken link to the nature. The topography presents a minor slope – 7% – in the first urban block, while the second one has a more challenging topographic condition, with an average inclination of 30% until it meets the creek. The existing buildings already demonstrate some logics of construction, cascading the spaces until they reach the lower part of the slope, maintaining a certain rhythm in unity of the landscape, and allowing each house to have natural lighting. Other reasons – not visible on site – to intervene in such a challenging condition may be to prolong a flat surface over the slope to create more useful space, or to embed the massing on the terrain, creating a useful terrace space while connecting the main interior space at the ground level.

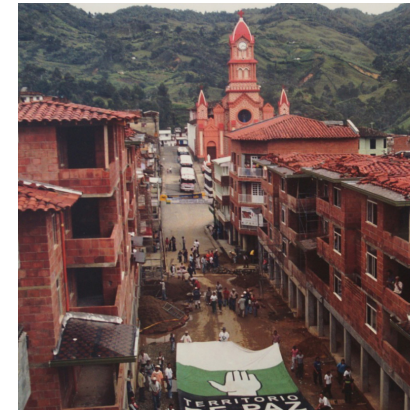
I have translated this findings into the architectural project as concept input in different degrees: the mapping and site visit exercise contribute in the site choice, where I decided to intervene two blocks, repairing the urban fabric and linking the project in the surrounding nature. The program choice for a cooperative is supported by the knowledge and sensitivity gained during the research and interview process, where the need for collective spaces and common goals find their spatialization through the creation of an Agrarian Cooperative, not only focusing on the economic and productive means, but the education, commemoration, and improvement of the daily life of the residents of Granada as well.

The project aims to answer the questions of how architecture can bridge the gap between the violent past and the promise of a peaceful future, focusing on the social and productive practices broken by conflict? And, how can the production-oriented shared facilities and public spaces revive the socio-economic infrastructure of Granada?



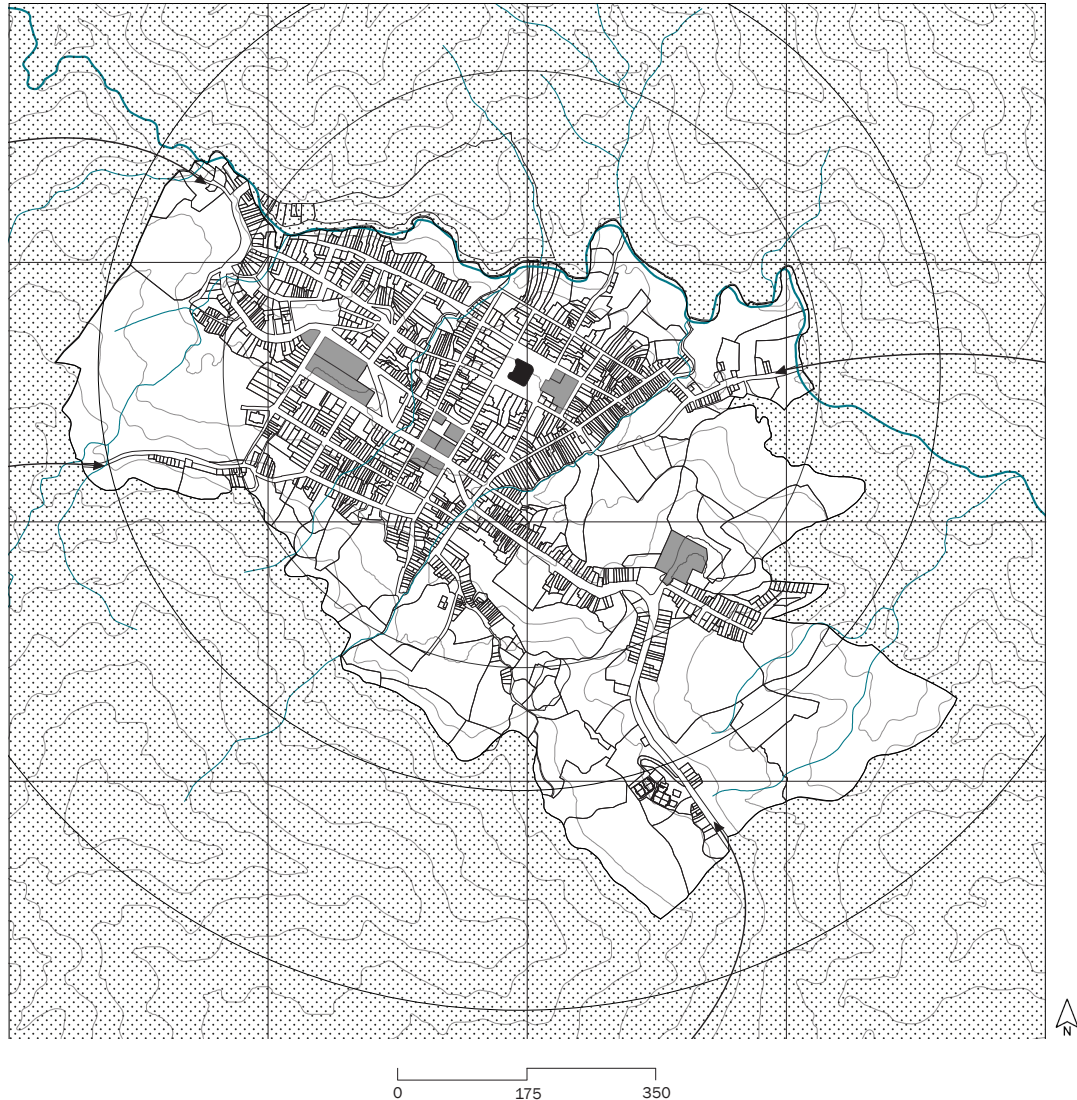
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- 1
- 2
- 3, 4
- 5
- 6



- 1. Creek
- 2. Main Square, City Hall, Church
- 3. Church
- 4. Memory Hall
- 5. Rebuilt Housing
- 6. Cemetery

Analysis of the main landmarks and components of urban Granada.



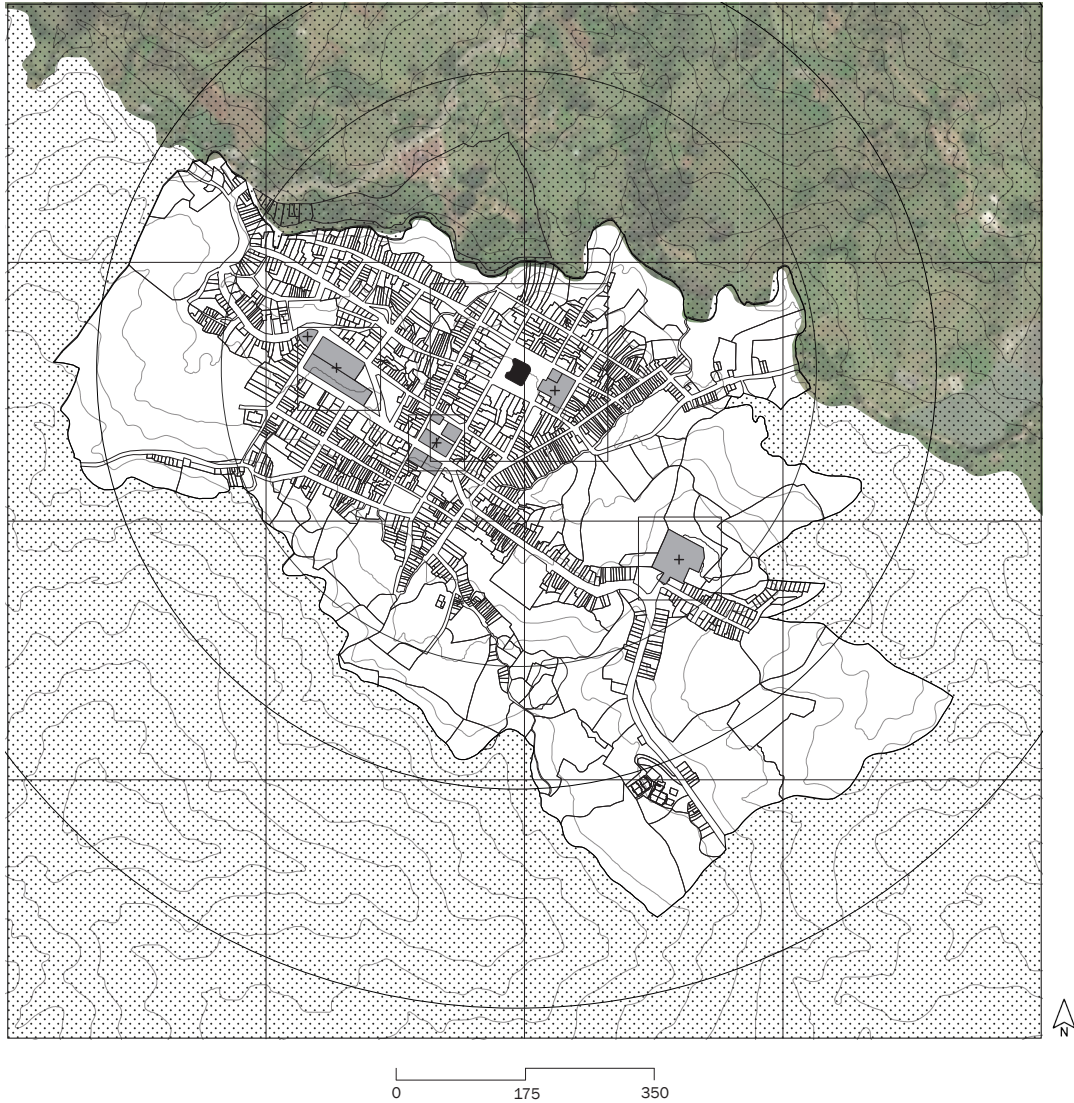
The bridge between rural and urban takes place in the main activity hub of Granada: the square.



© Mauricio Piedrahita



© Mauricio Piedrahita

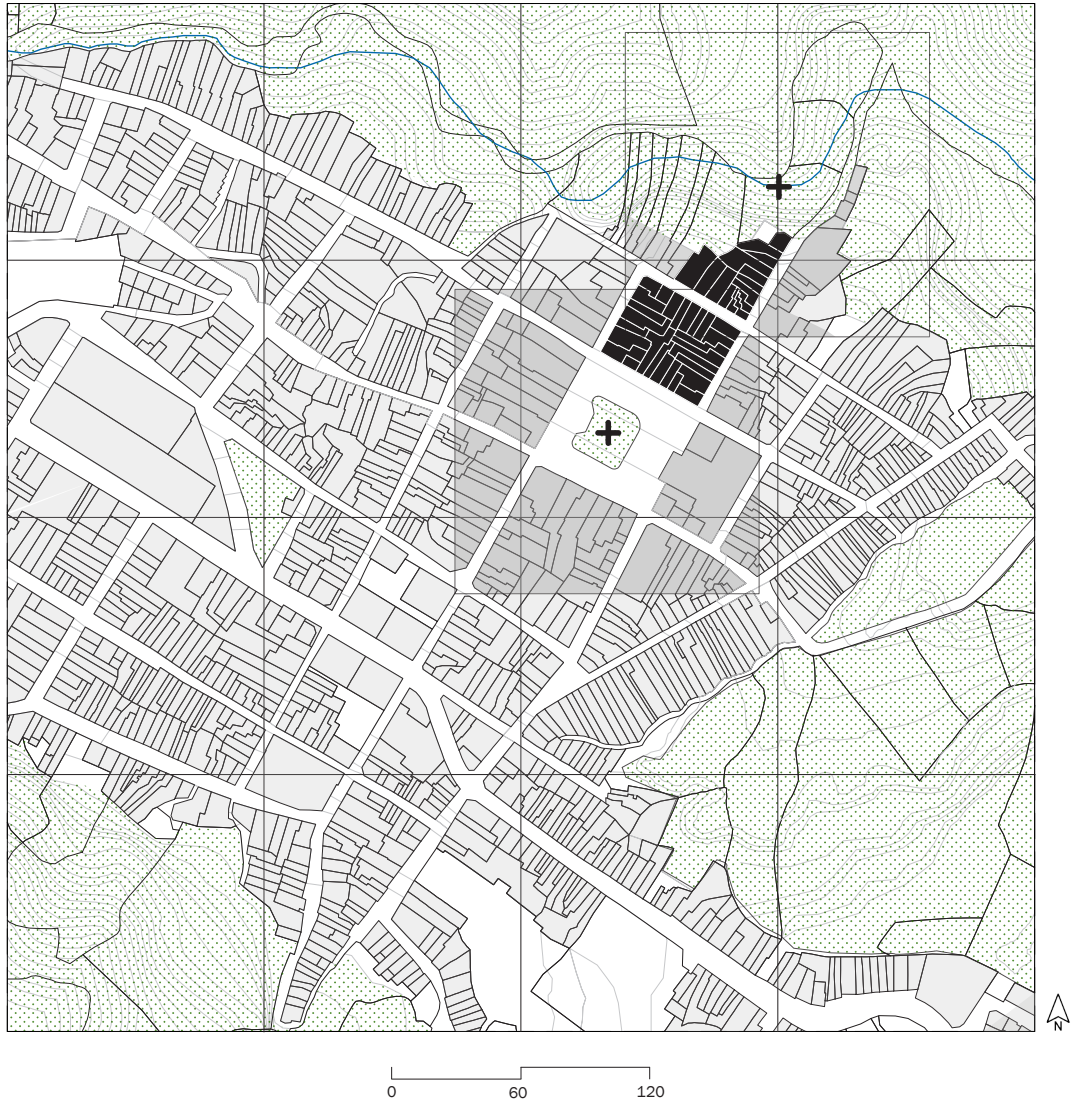


The link between the square and the creek introduces a new opportunity: repair the social, the topography, and the environment.

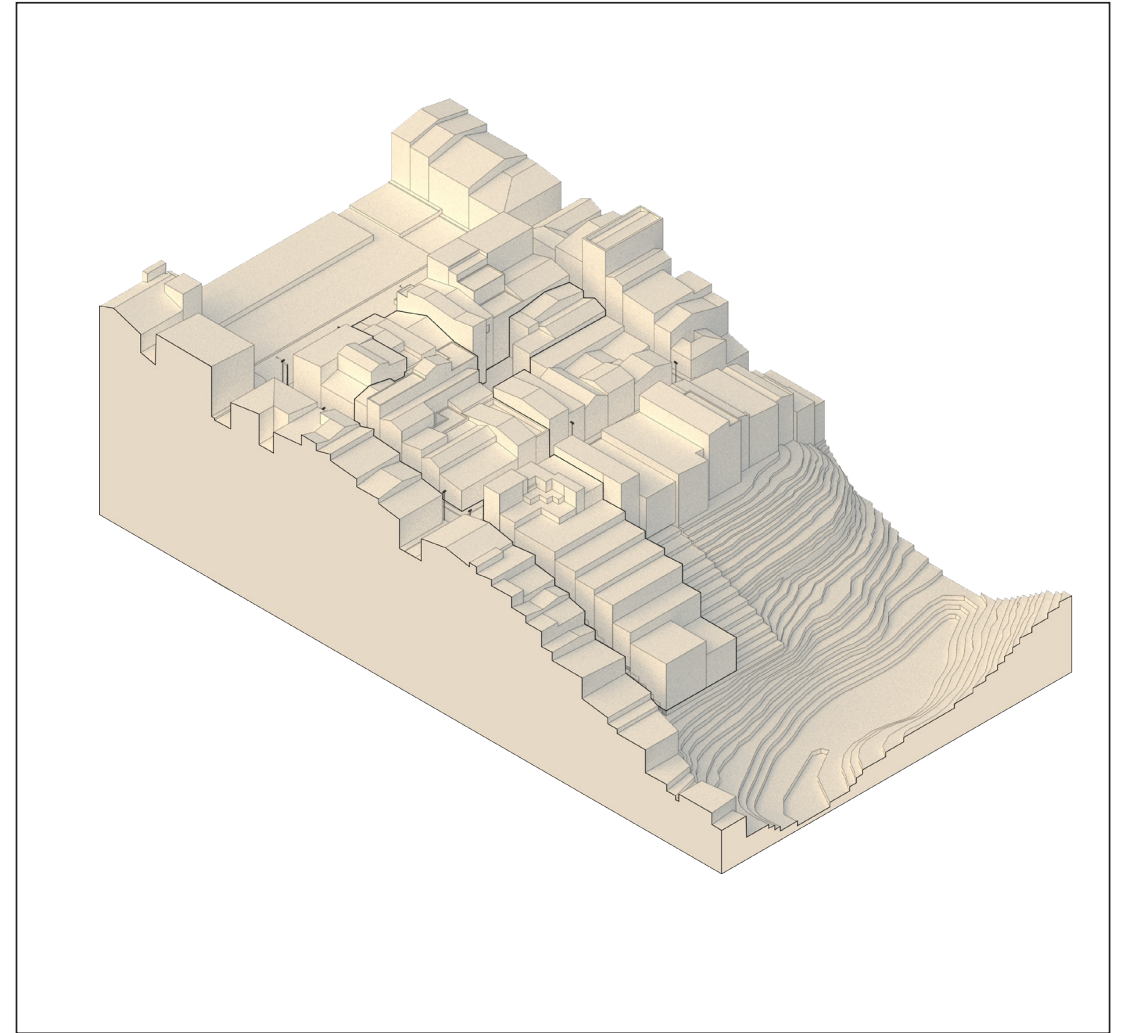
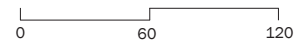
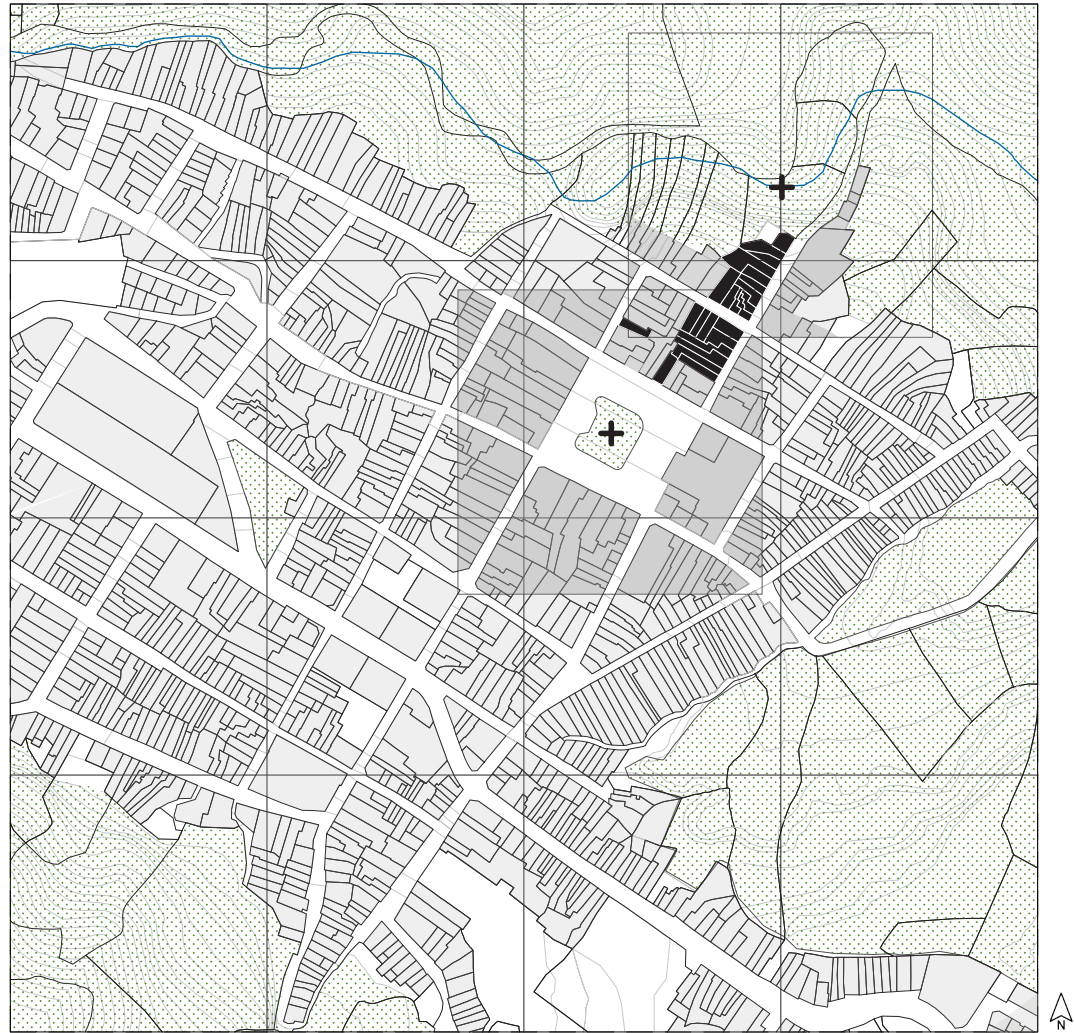


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03

The Cooperative and Coffee Processing Plant

Site Conditions – Site Strategy.

Firstly, the project operates as an infill rather than a tabula rasa approach. A selective demolition takes place, removing the buildings on delapidated conditions and poor infrastructure, making space for the new massing that aims to repair and improve the urban condition of the site through architecture as an in-between form of the present and the future of the town. The building grafts the program of the cooperative in the heart of the urban life of Granada, and enhances the repair of social links broken by the conflict. There is a direct relation with the square through the entrance hall, a volume with a modest proportion that suits its context and avoids a monumental presence on the site, while contrasting from the neighboring buildings with its materiality. Secondly, the proposed massing merges two main architectural concepts: courtyards and cascading volumes. These two concepts come from the study of the traditional and vernacular solutions for indoor-outdoor relations and the logics on topographic connections with the context previously acknowledged.

Programmatically, the cooperative is per se a collective institution where people work, produce and share together to reach common goals. The building, therefore, is a space where everyone has access and the public activities are strengthened, with spaces for gatherings and discussions, exhibition, manual work, administration, reflection, commerce, and education. The complexity of the cooperative's programs relies on the intermingling of activities, finding such connections in spaces considered as *freespaces*, namely the spaces for uses not yet conceived, defined by the local and cultural connections, rather than solely by geometrical schemes. Consequently, the project meant to act as a generator, allowing multiple reconfiguration options and adaptability.

The Cooperative

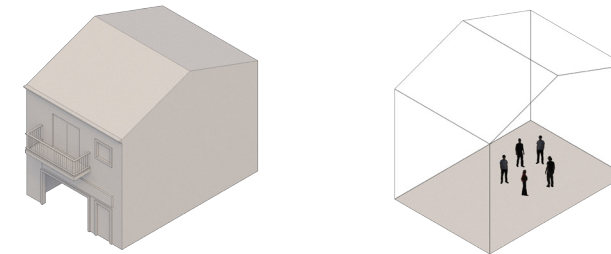
Mutual assistance in working towards a common goal

Cooperari (Latin):

1. Work together with another
2. Combine or unite

The Processing Plant

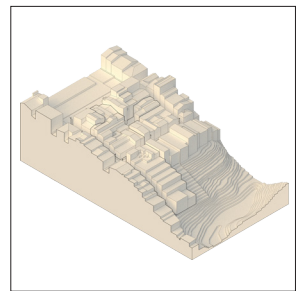
Meeting point for coffee planters where industrial and community processes take place



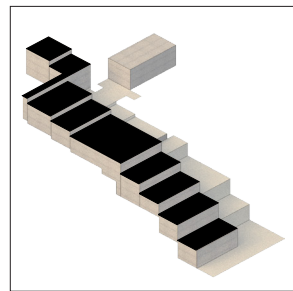
Cooperatives don't have a specific architecture typology. They usually operate within recycled infrastructures, like former houses.



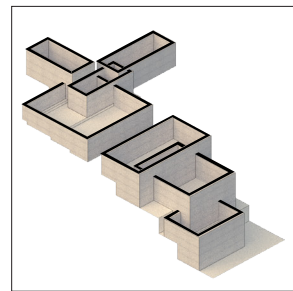
Site Choice



Cascade



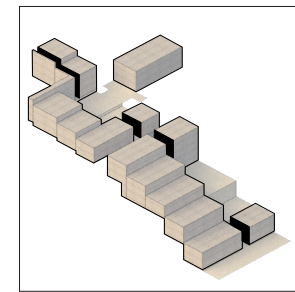
Courtyards



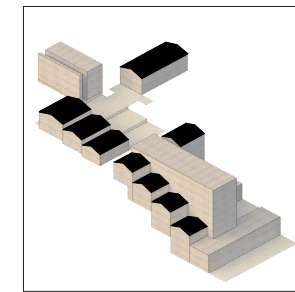
How to intervene here? Design operations.



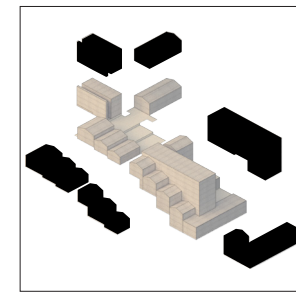
Street



Roofs

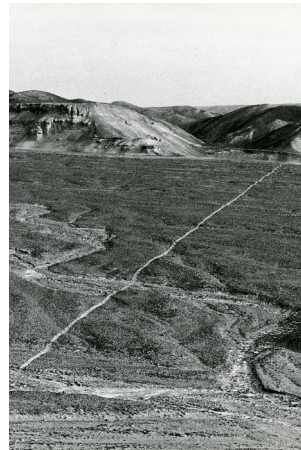
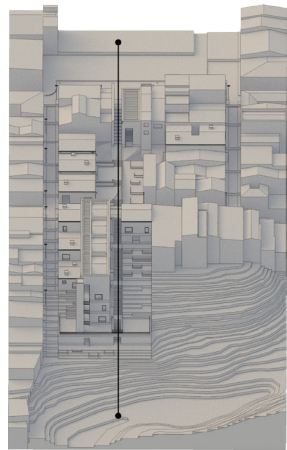


Program



How to intervene here? Design operations.



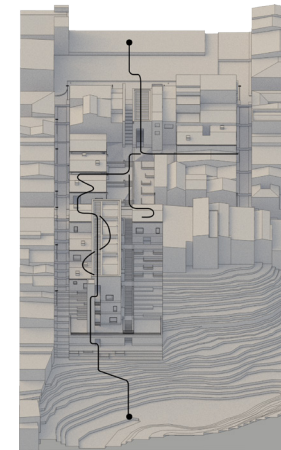


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The Journey and the Backbone: a clear connection between the square and the creek



© Richard Long

the Journey: a more complex route throughout the architecture.

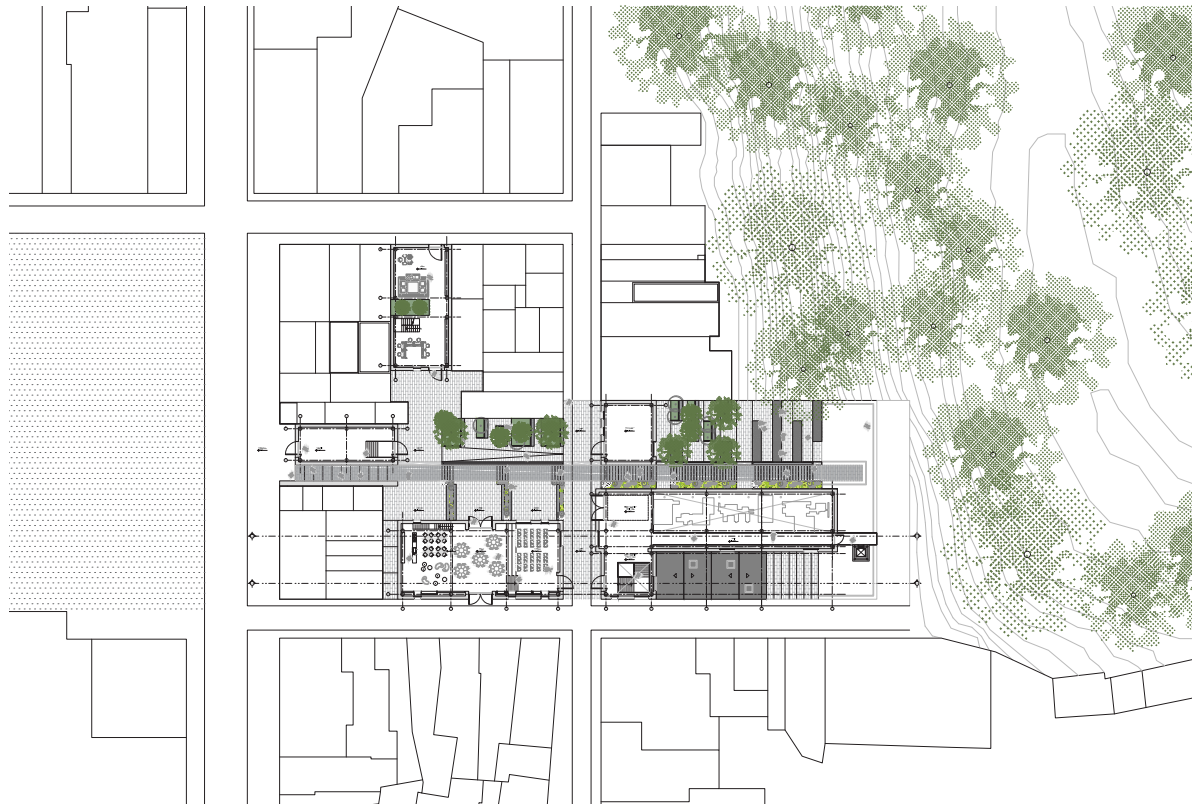




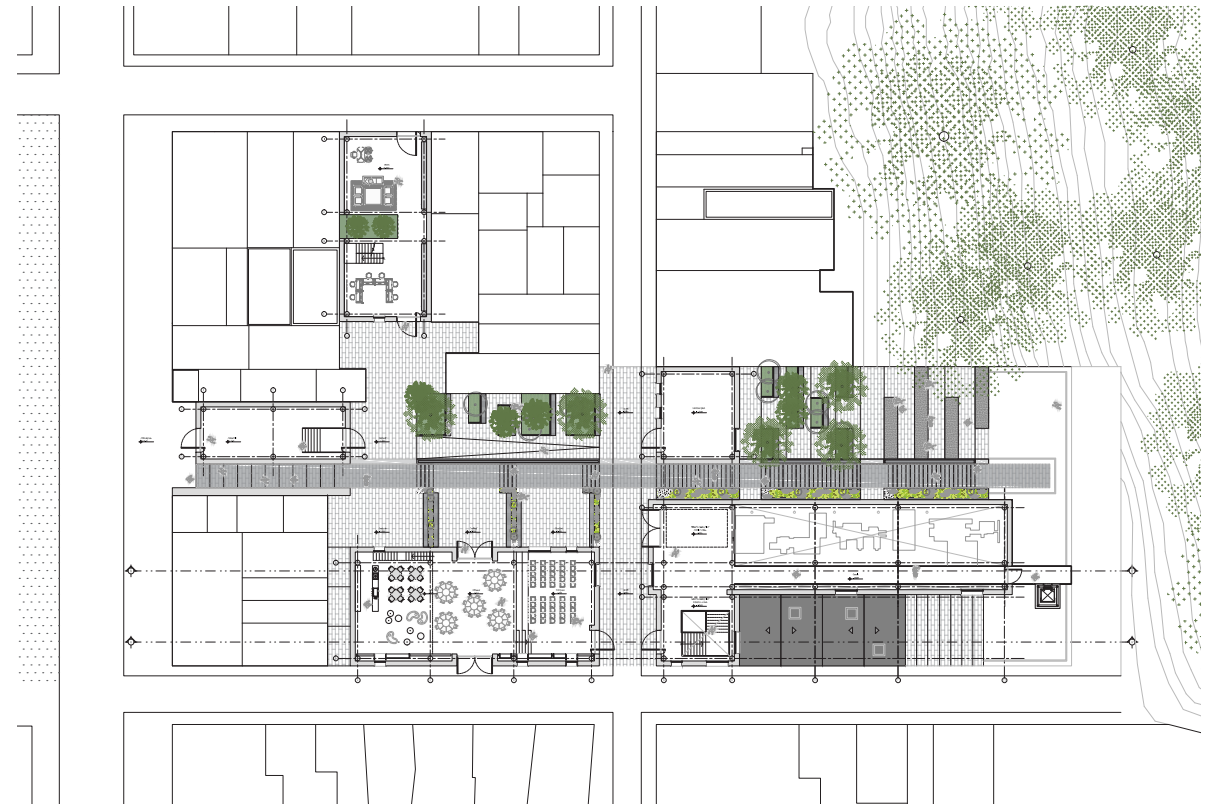
The project follows a grid of 1.20 x 1.20 meters. This allows modularity and a strong relationship with the main construction material, rammed earth.



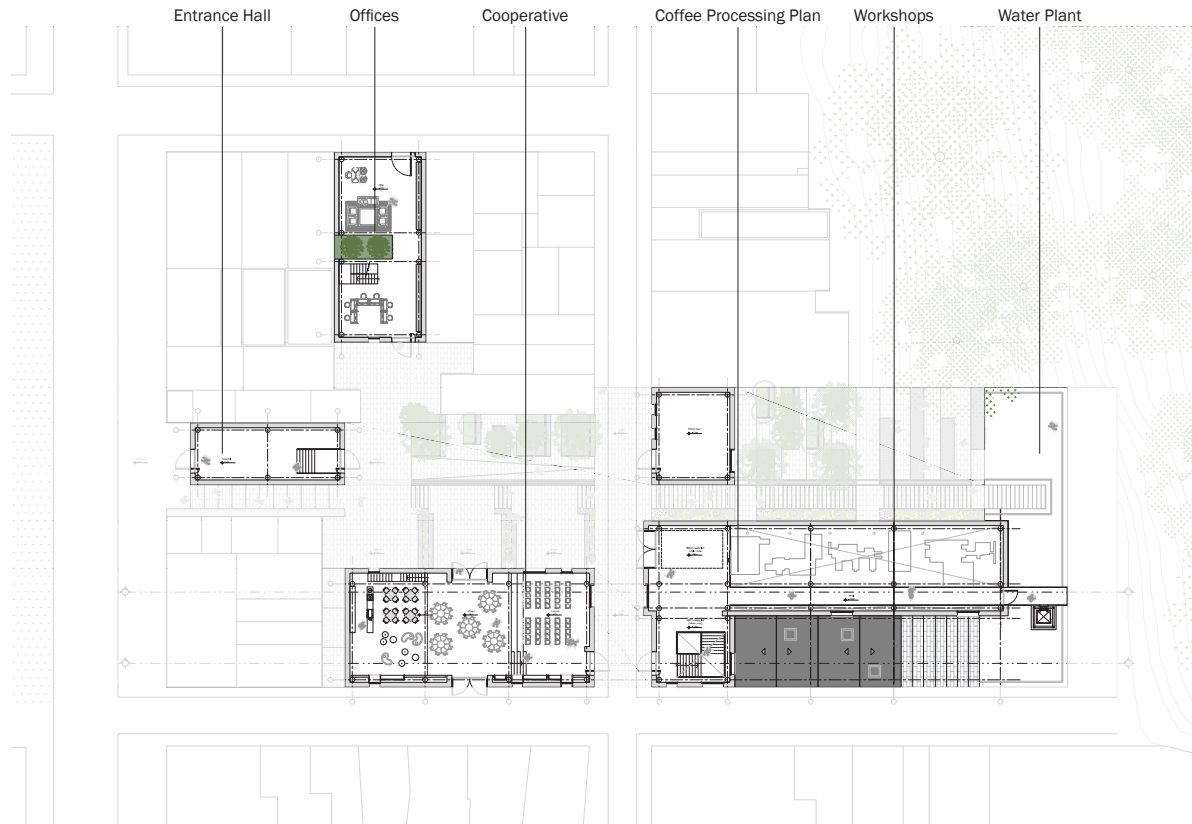
To avoid a tabula rasa approach, the project operates as an infill, repairing the urban fabric of these two urban blocks, and their relationship with the surrounding nature.



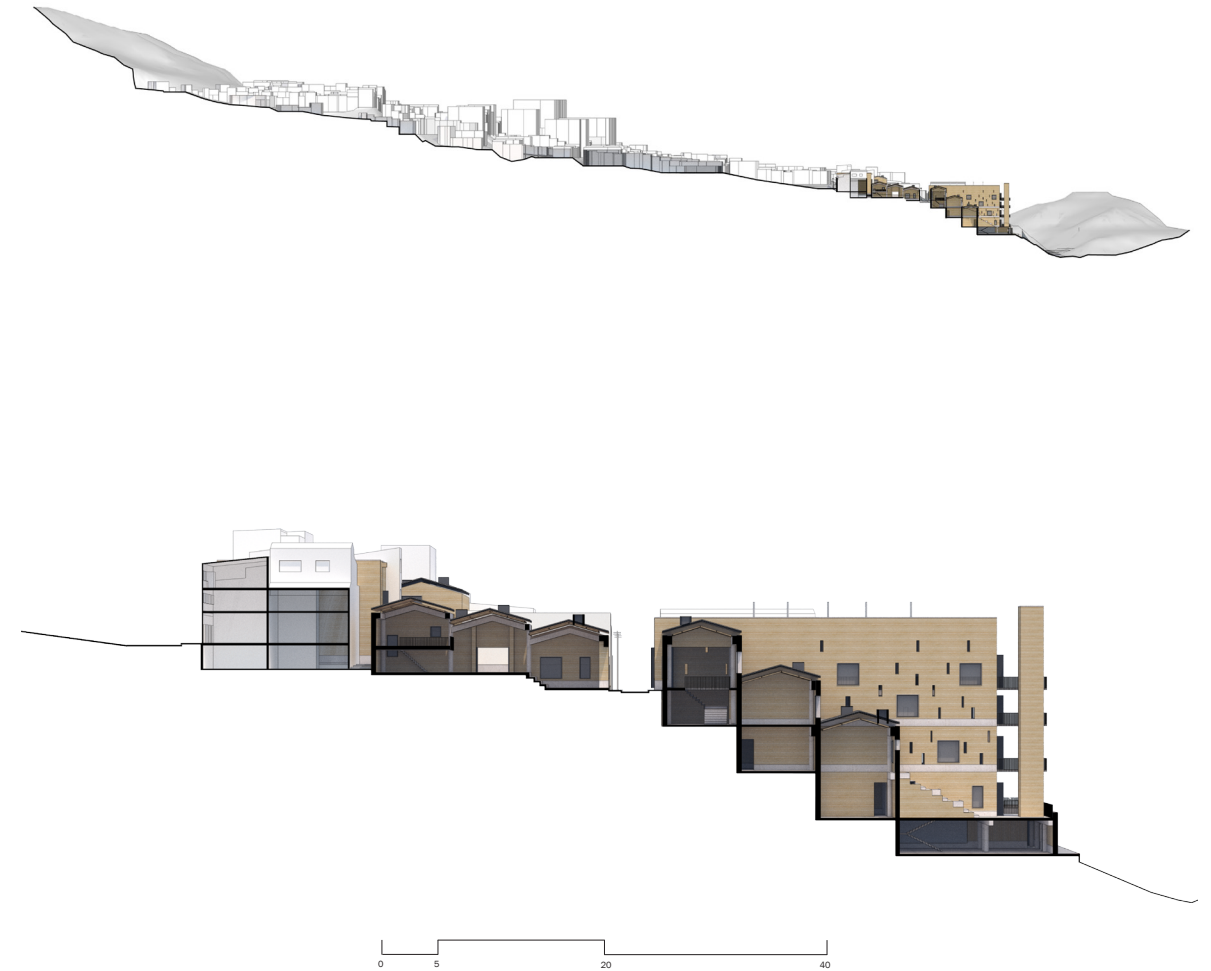
The street, the courtyards, and the architecture create an ensemble.



Main floorplant.



Program writing: the spaces of the cooperative and the coffee processing plant sew the spatial and site conditions.



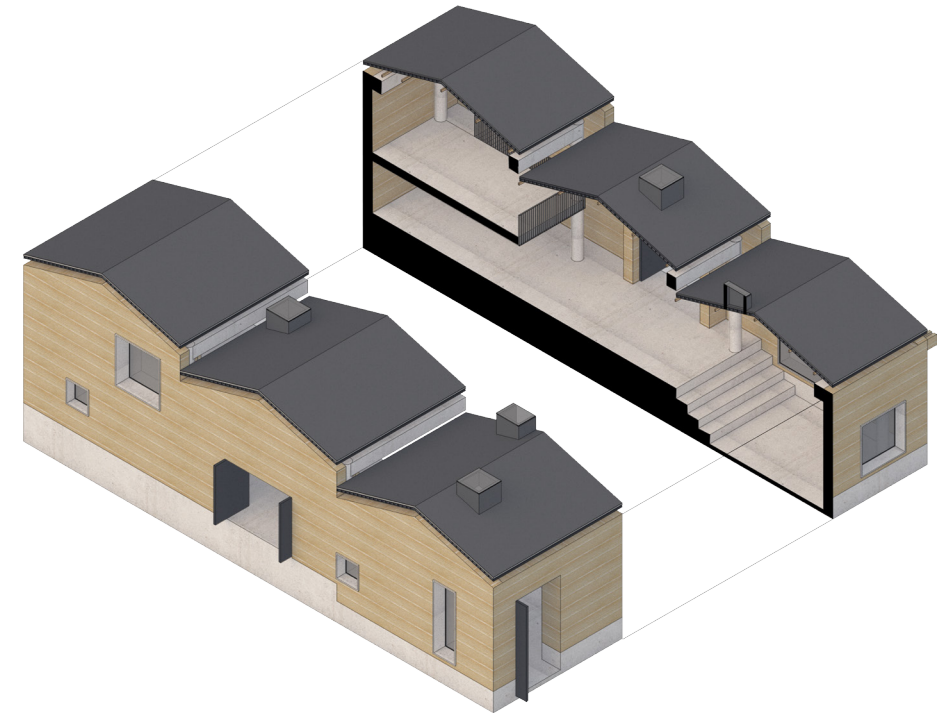
The mountainous landscape sets a strong relationship between the architecture and the topography, as volumes cascade on their way to the lower part, the creek.

Freespaces

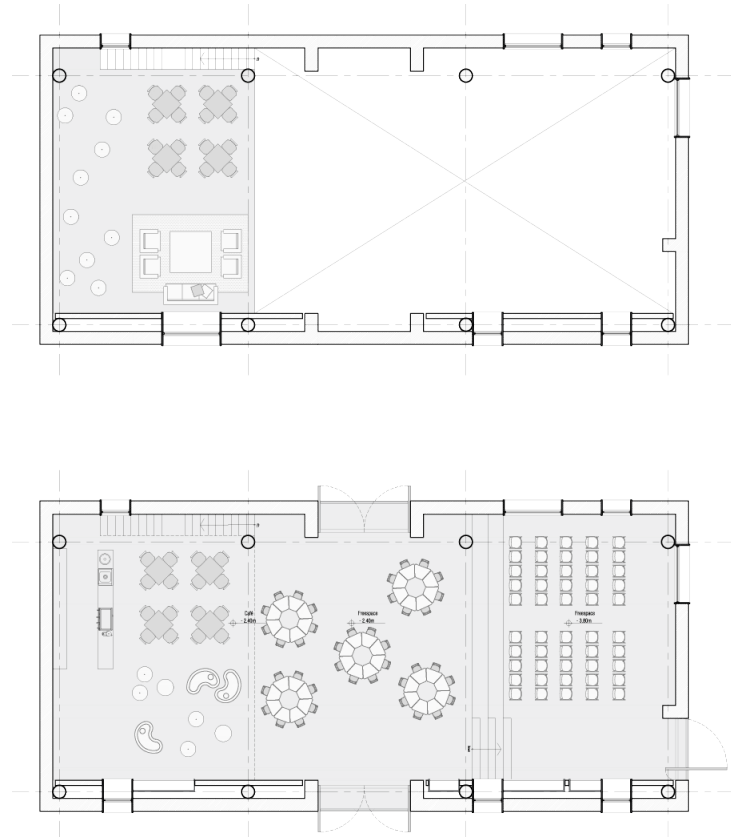
“A space for opportunity, a democratic space, un-programmed and free for uses not yet conceived. There is an exchange between people and buildings that happens, even if not intended or designed, so buildings themselves find ways of sharing and engaging with people over time, long after the architect has left the scene. Architecture has an active as well as passive life.”

Yvonne Farrell and Shelley McNamara. “Freespace Manifesto.”

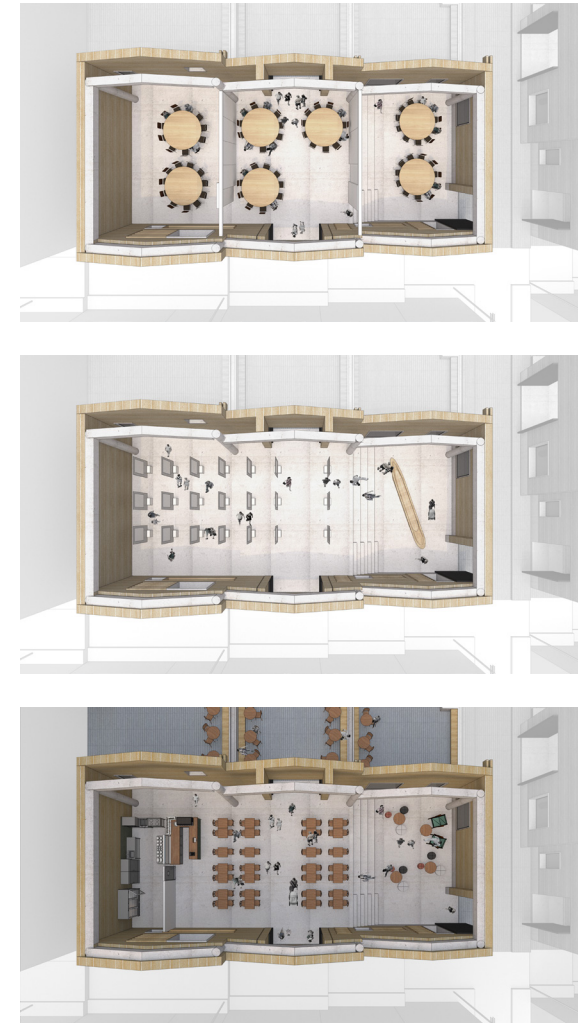
The notion of Freespace.



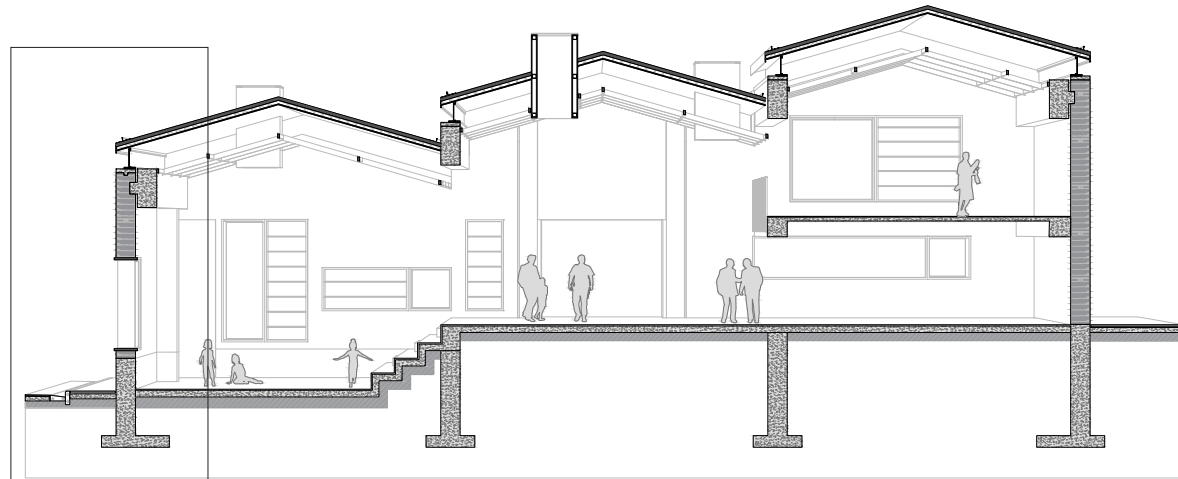
A closer look at the main cooperative space.



The main cooperative space is a pavilion with a clear purpose: host diverse collective activities, strengthening the democratic approach of the cooperative.



How will the architecture respond to future demands? Adaptability plays a big role here.



Facade detail: page 94

The cooperative.

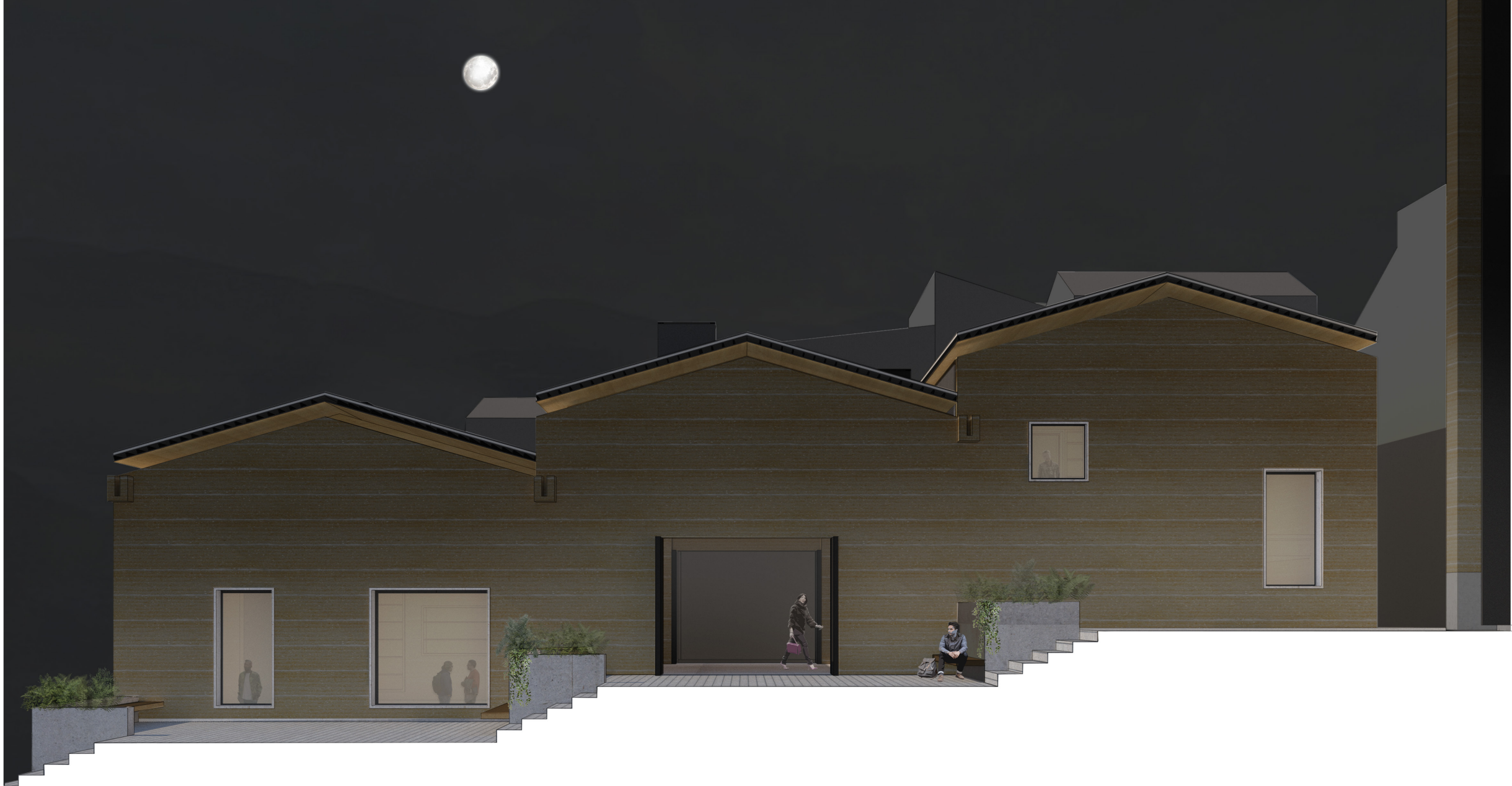


Affordances

The possible actions, relations, and interactions that the environment - physically - affords to the user. The following diagrams represent the possibilities that this architecture provides to the users and cooperative users and participants, triggering different activities and social behaviors.

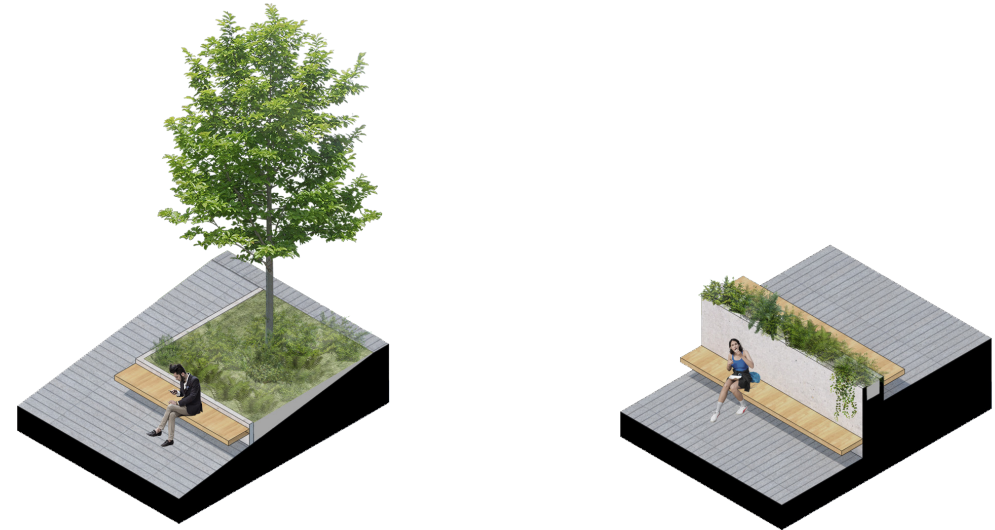




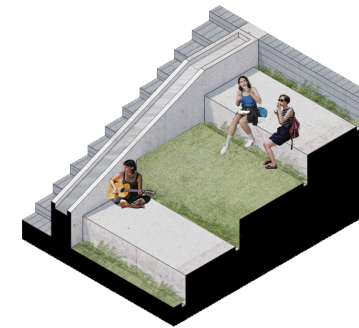
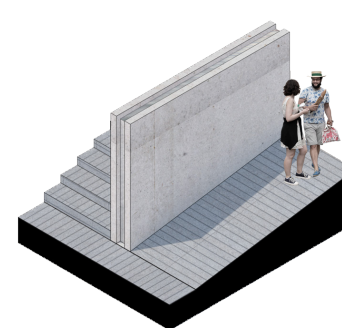




The courtyard is a fundamental space for Latin American architecture, a link between the social and the climate.



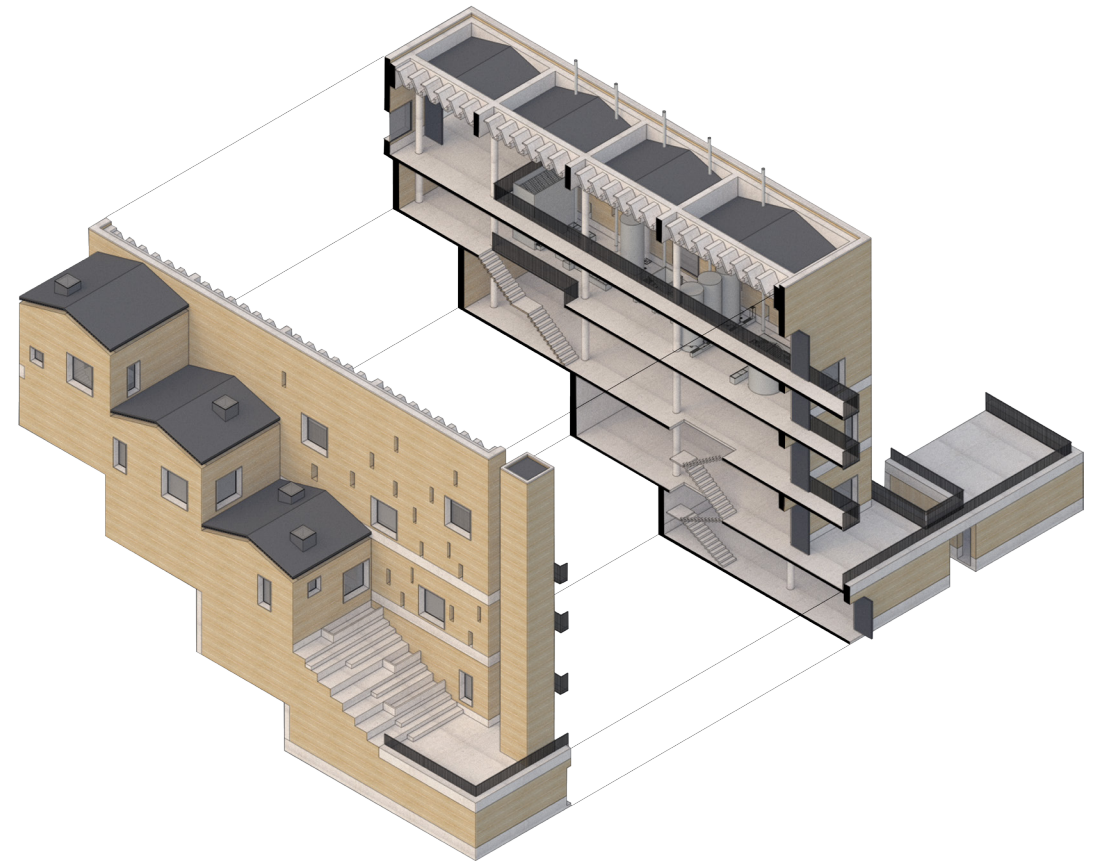
The public space also adapts to the topography, creating spaces for rest and contemplation.



A water stipe “walks” along with the participants of the cooperative, guiding the connection between the square and the creek, and creating a micro-climate in the courtyards.



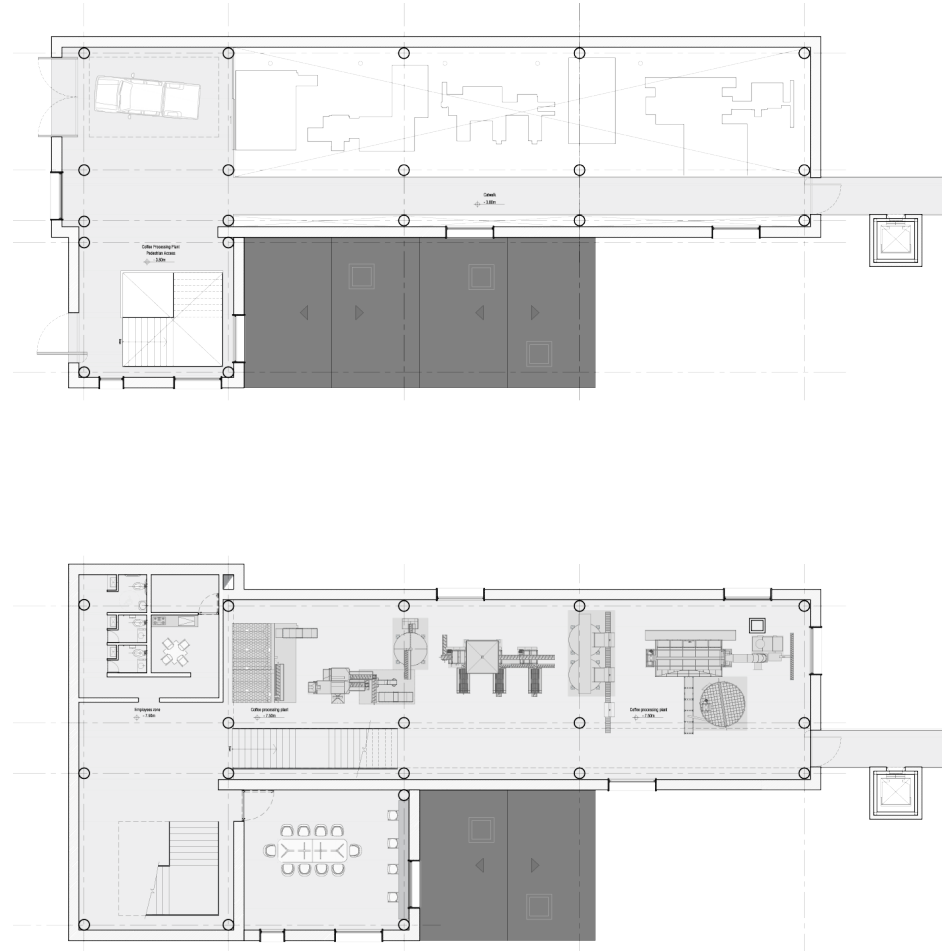
The perpendicular street becomes an extension of the courtyard, rather than a division. The change of pavement makes a clear connection.



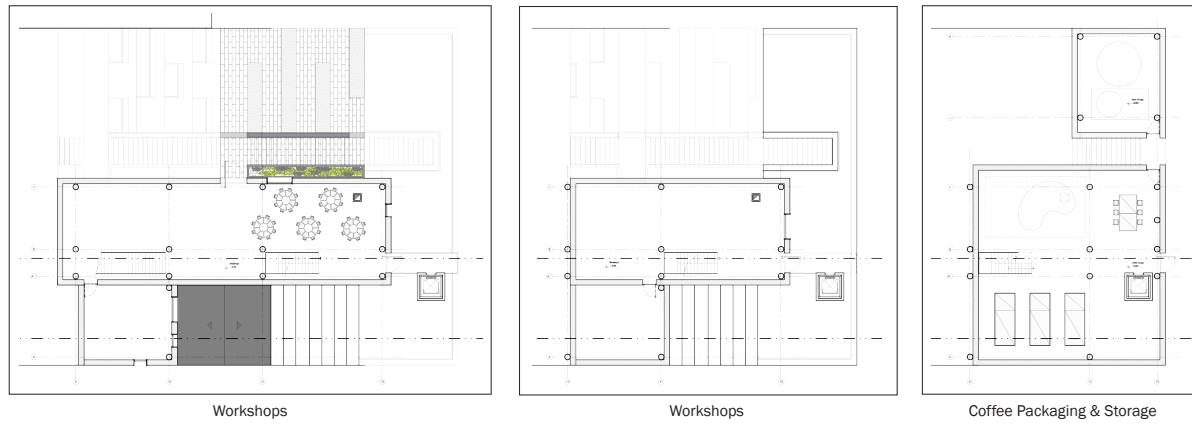
A closer look at the processing plant and the support spaces.



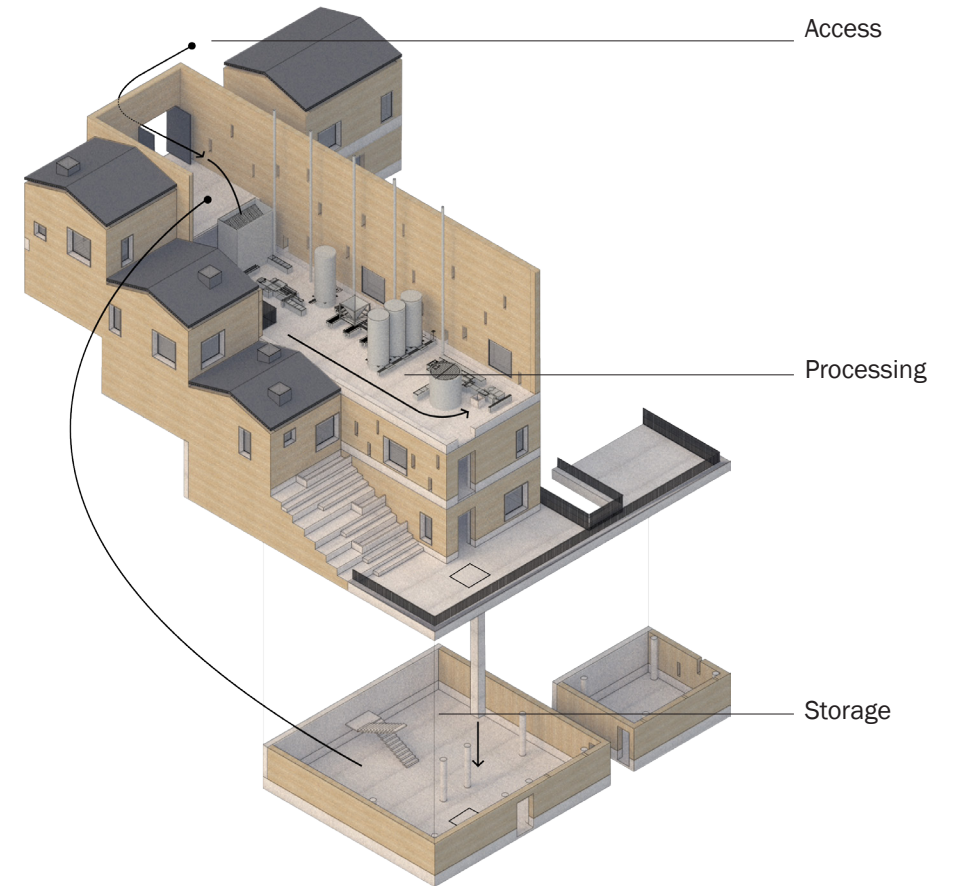
Processing plant floor plan.



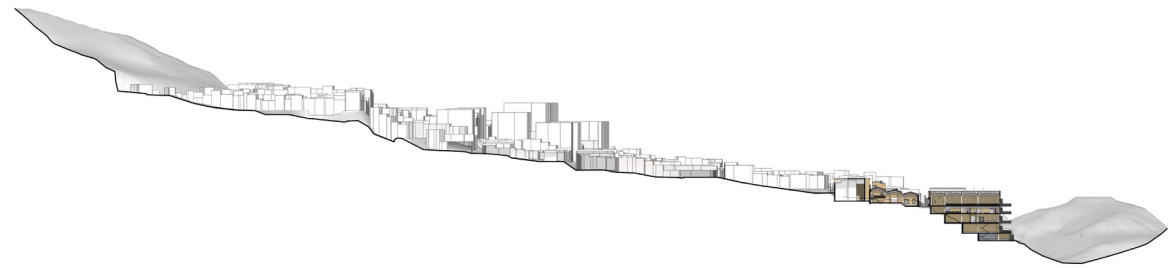
How will the architecture respond to future demands? Adaptability plays a big role here.



The support spaces -the workshops- strengthen the collective aspects of the architecture. Are, the participants can take classes, build furniture, among other activities.



Coffee logistics: the coffee brought from the plantations and farms is processed following the ECOMIL technology. Then, it is dropped to the lower plant, where it is stored and packed.

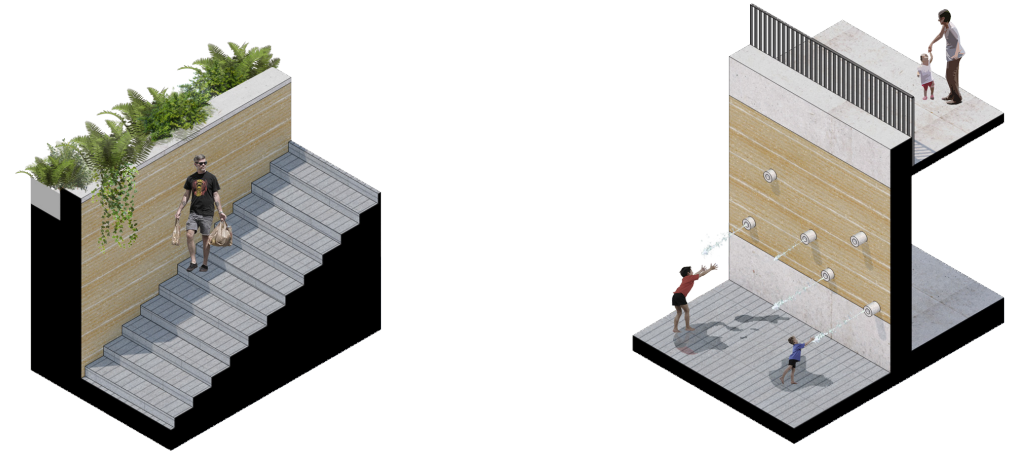


The mountainous landscape sets a strong relationship between the architecture and the topography. In this case, the extension of horizontal surfaces allow activities that require more area.





The courtyard adapts to the steep topography, affording spaces for an open auditorium.



Vegetation and water are constantly interacting with the pedestrian.

04

Material Conditions

Multiscalar Approach: Site, Tectonics, and Material.

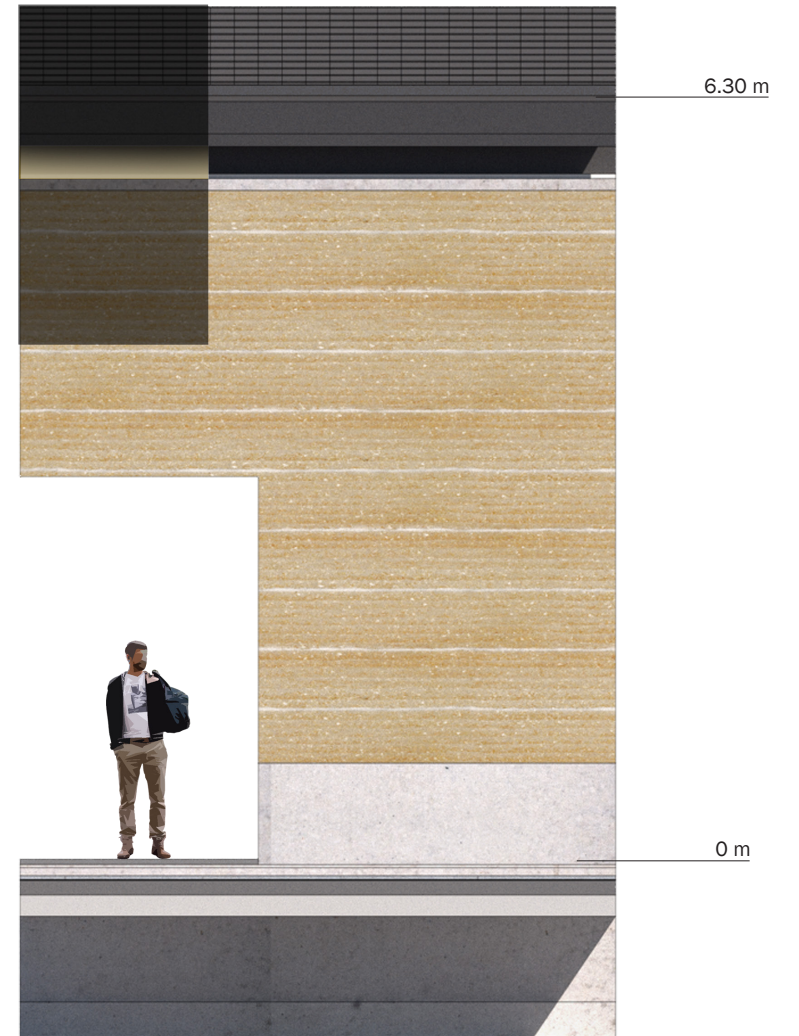
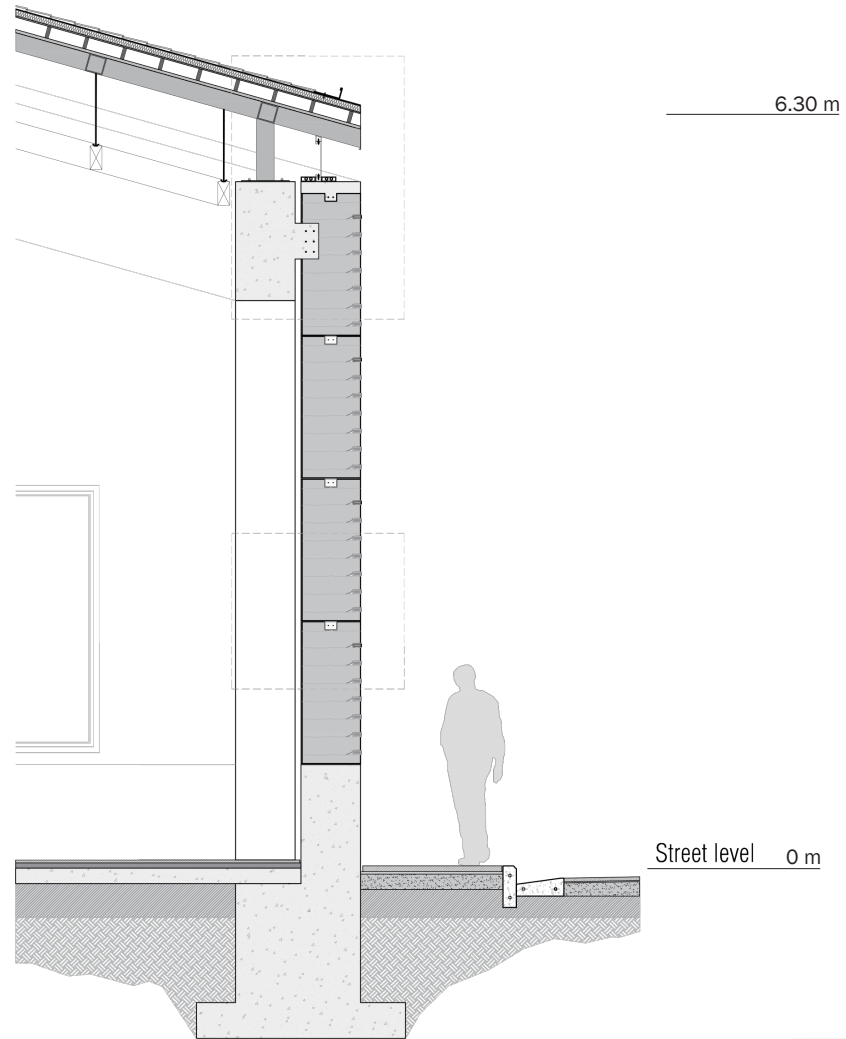
The strategy for indoor-outdoor connections serves a double function. On the one hand, enhancing the collective activities with wider spaces – larger *freespaces* – where more people can meet and work together, children can play in the open spaces, and flexibility takes place as a gesture of anticipation, where the building is capable of adapting itself to future changes and needs. On the other hand, the courtyards help adapt better to the climatic conditions, with cross ventilation and natural lighting for each space. From the square to the creek, the experience of the cooperative's space unfolds a journey for local participants and visitors, an open system of public and semi-public spaces where the community plays a fundamental role in the social, economic, and political future of the municipality, sustaining the communal growth in the long term.

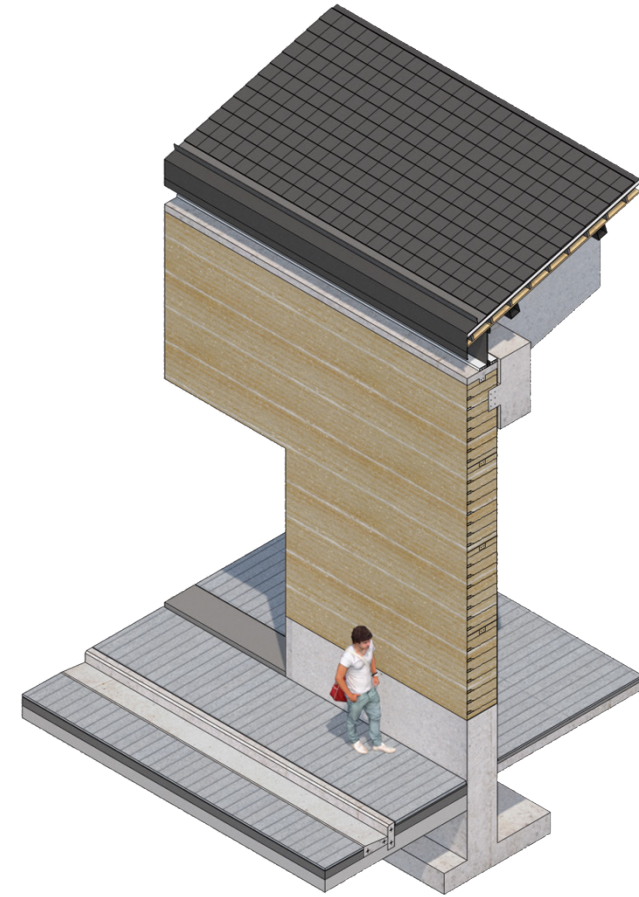
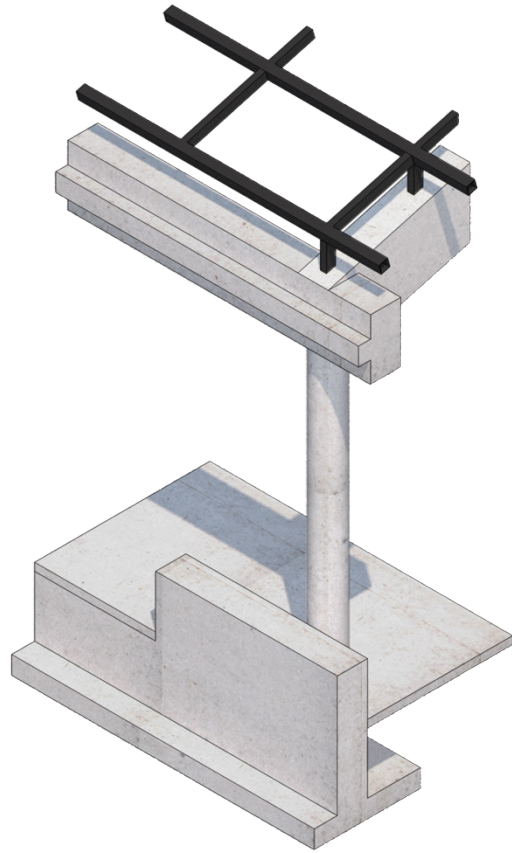
I apply a combination of tectonic and stereotomic operations in design. The massing of the cooperative complex follows a grid of 1,2m x 1,20m creating a module that prolongs or shrinks depending on the programmatic necessity. These modules appear as heavy masses that are “carved” from the two materials I will use, which are inherent in the identity of Granada: brick and rammed earth. Brick might be the most common building material employed in this region since the mid-20th century, easy to transport, build and maintain.

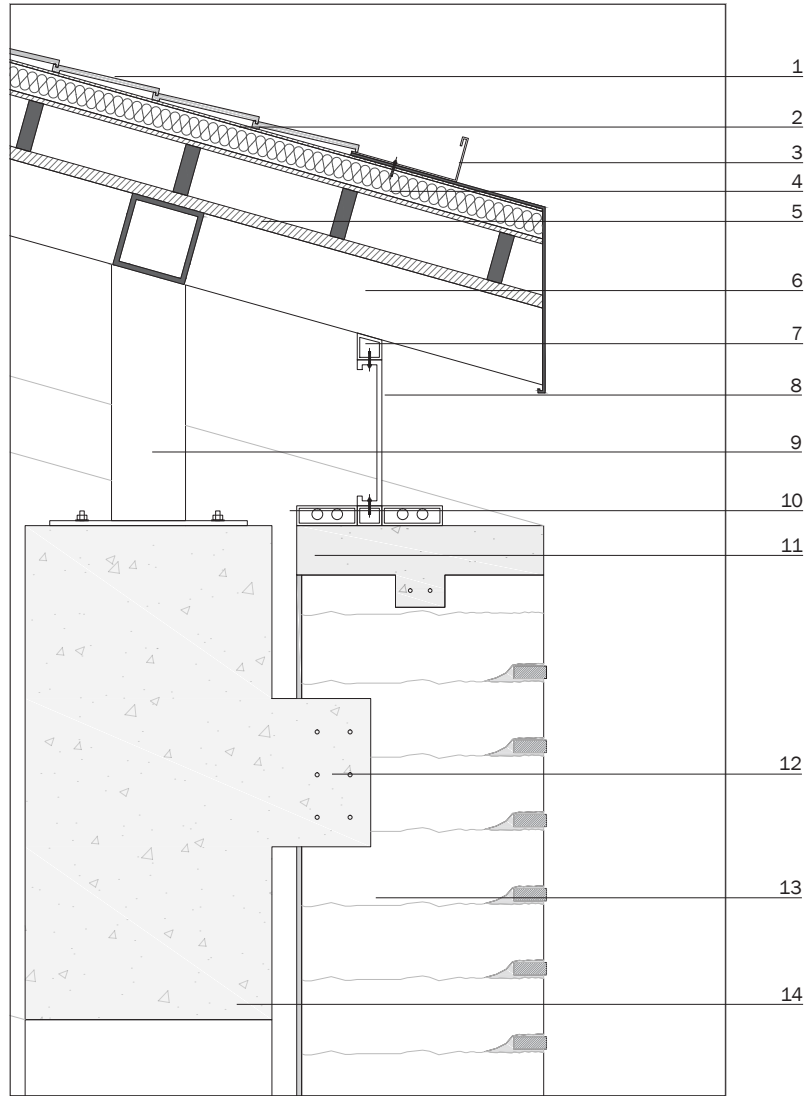
The Brick March, one of the most symbolic events that took place in Granada represented the reconstruction of the townscape after the bombing of 2000. Hundreds marched together holding bricks in their hands and, according to the interviews I carried out, those bricks were used for the reconstruction of the housing units. Although brick is the common building material in Colombia and its symbolic meaning in Granada is relevant, the Cooperative project demands certain degree of innovation and reinterpretation of the symbolism behind the material choice. I argue

that rammed earth represents this responsibility, a common material in the Andean region of Colombia since colonial times. Granada is not the exception, and many rural houses and public buildings have been built with this material, now replaced with contemporary building systems. Rammed earth can be employed for the materialization of the architecture of TJ to the smallest scale, encompassing the involvement of the community as part of the processes of production and maintenance it requires, contributing to the necessity of a collective work that builds social tolerance, and on the more considerable extent, maintaining the peace.

In my project, I propose to use prefabricated rammed earth wall panels as a mean to involve the residents in Granada in the construction of the cooperative in safe working conditions, similarly as the victims were part of the construction of Fragmentos, where women – victims of sexual violence during the conflict – built the aluminum plates which were later used to cast the iron from FARC's weapons, becoming the floor and main artistic installation. Consequently, the social and collective purpose of the project is inscribed in its realisation on the land, site, program and built form.

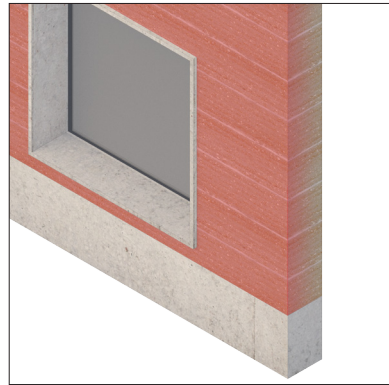




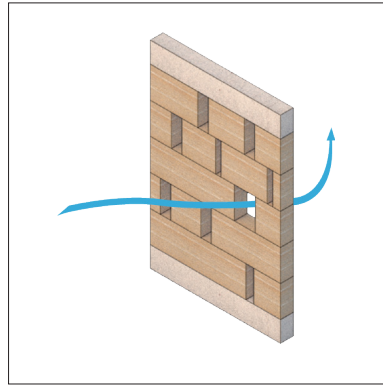


1. Slate roof tile 34x22x1 cms
2. Polyester waterproof layer 4 mm
3. Cold-rolled metallic gutter
4. Glass fiber soft thermal insulation
5. Pinewood ceiling
6. Metal beam
7. Aluminum profile
8. Aluminum composite panel
9. Metal roofing structure
10. LED lighting
11. Concrete wall coping
12. Reinforced concrete lintel
13. Prefabricated rammed earth module 1.20 x 2.40m
14. Concrete beam





Rammed Earth: Climate Capacity

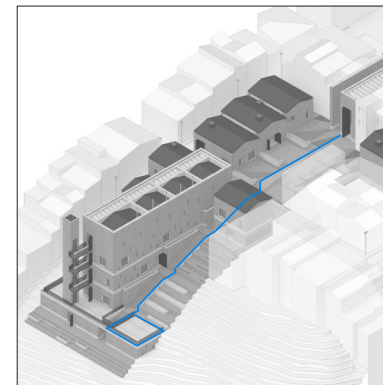


Ventilation

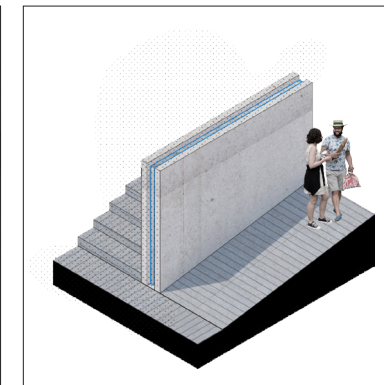


Courtyard Climate

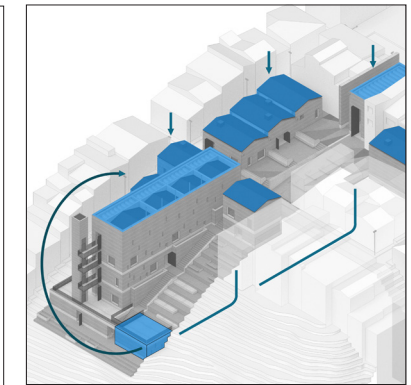
Rammed earth has positive climate features to cope with the weather in Granada, which is on average 18 degrees throughout the whole year.



Backbone



Water Element



Water Cycle

As stated before, water has a symbolic and important meaning within the project. It is also a technical element, as it is collected and reused in the coffee processing plant.

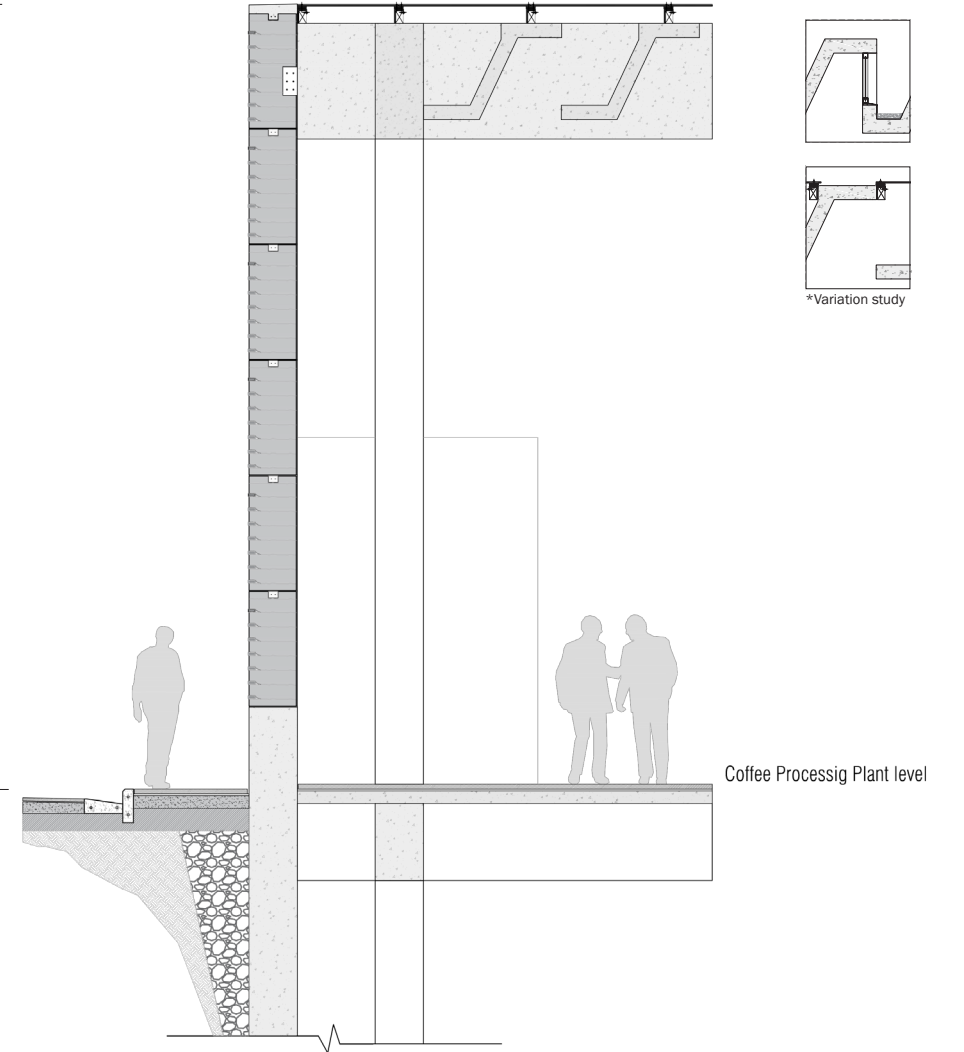
8 m



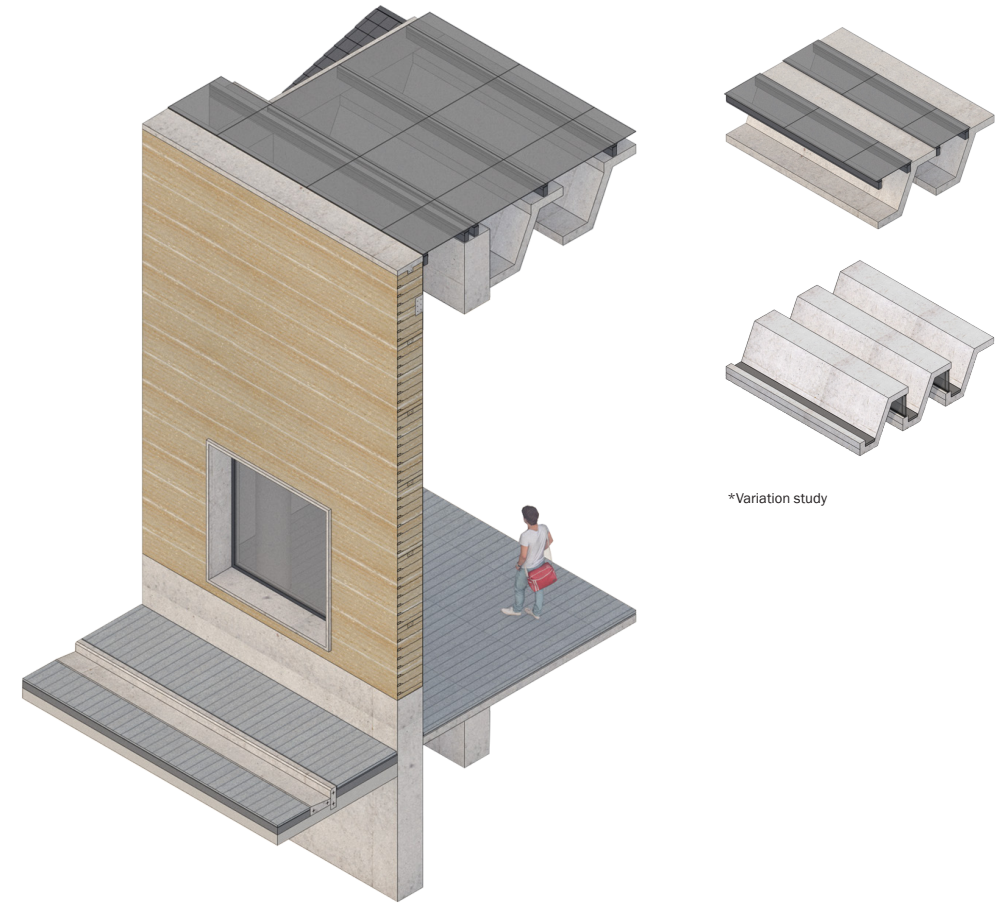
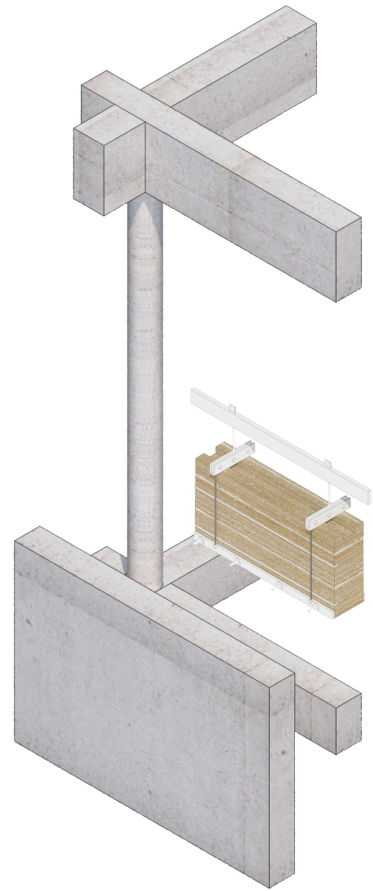
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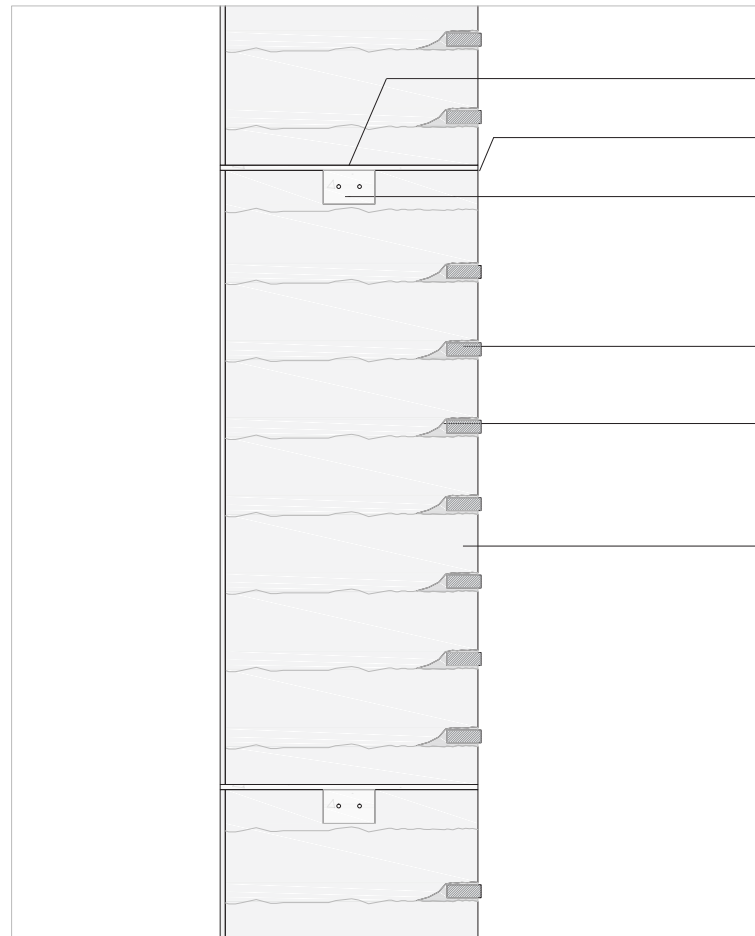
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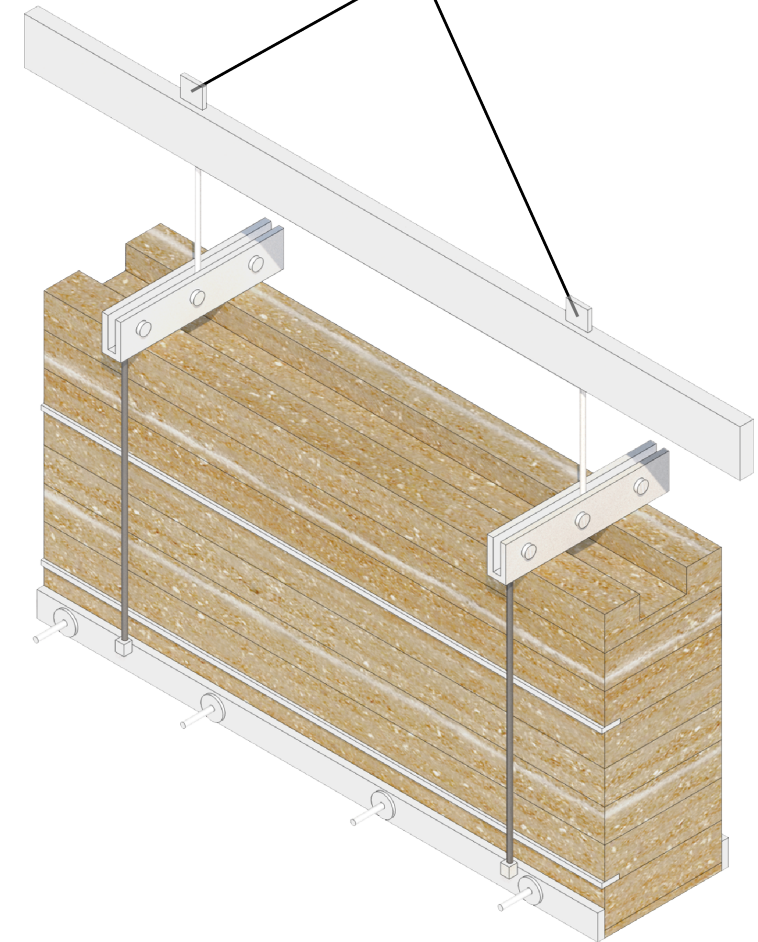


Coffee Processing Plant level





1. Friction-fit bracket
2. Joint filled with rammed earth and retouched by hand
3. Rebar (horizontal and vertical)
4. Brick check
5. Clay mortar
6. Rammed earth 50 cms





© Martin Rauch



© Doris Salcedo

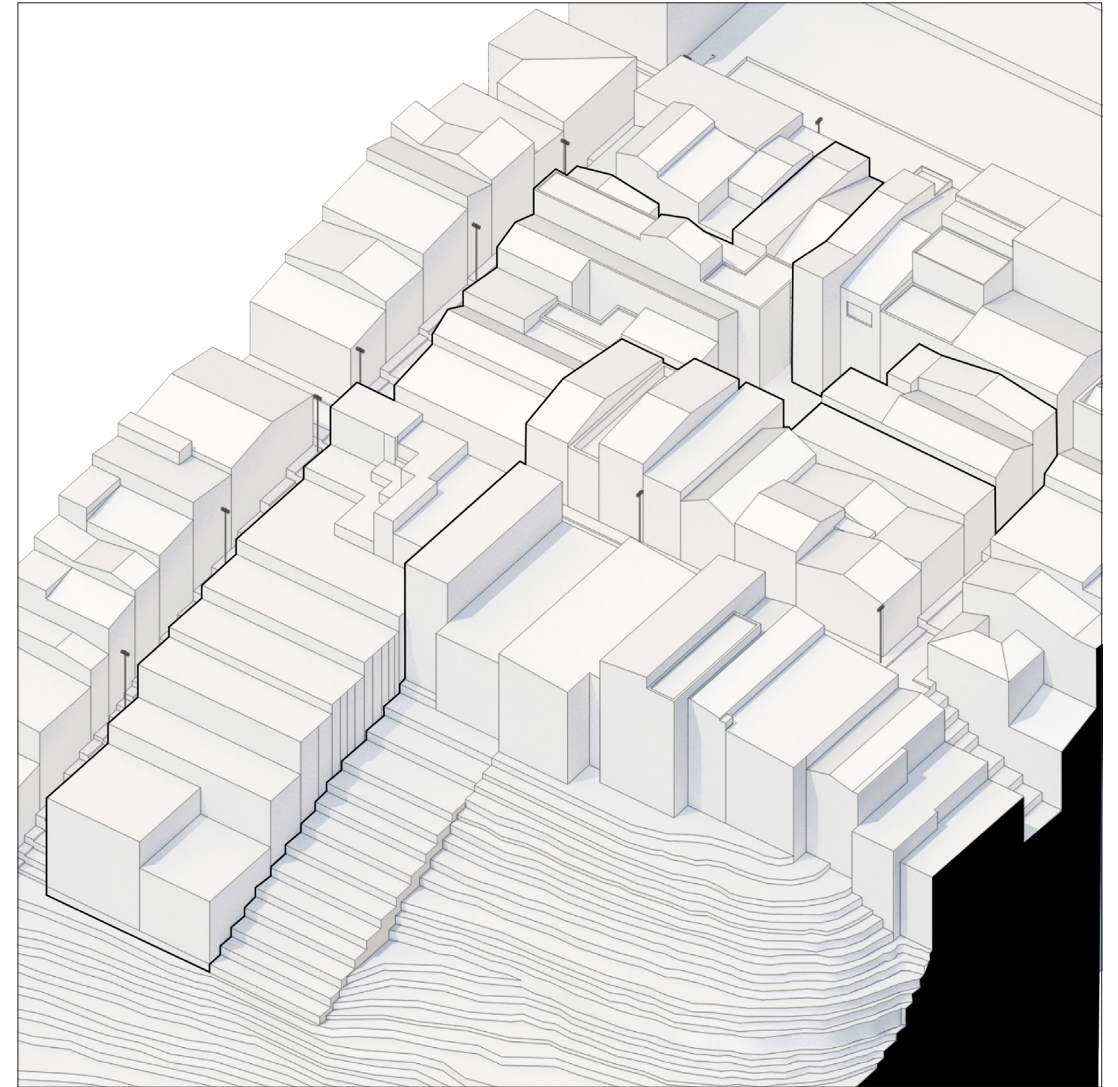


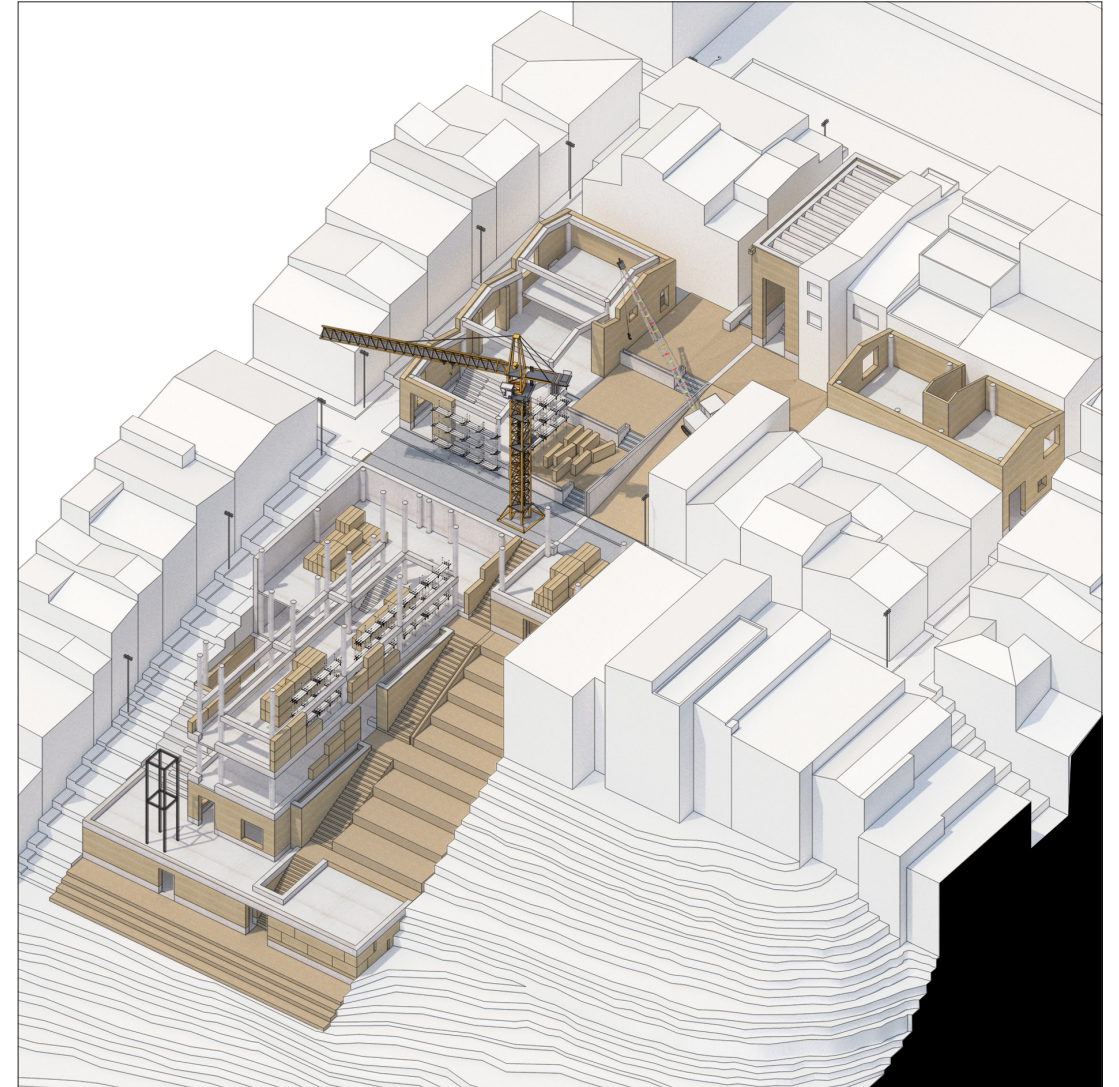
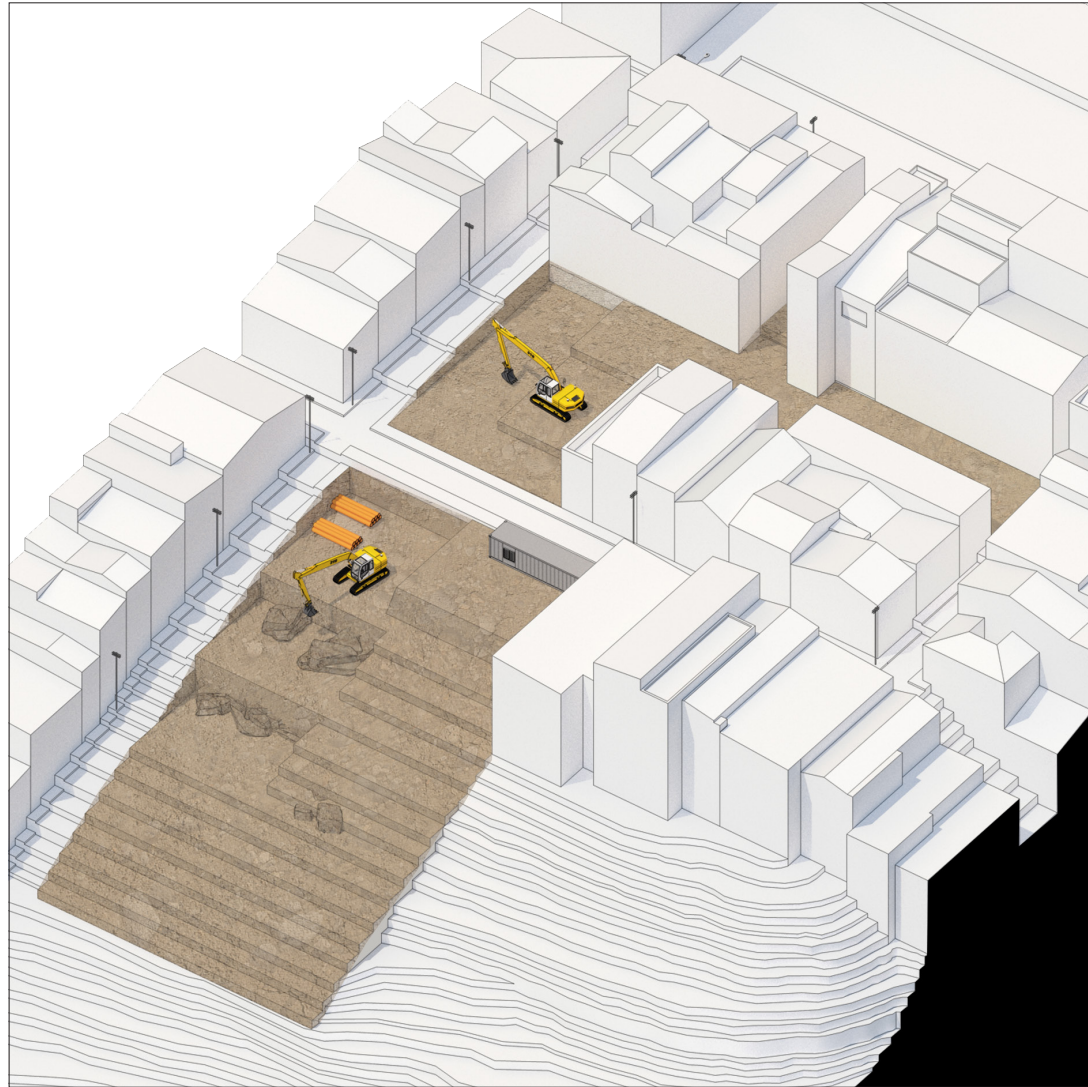
The residents of Granada are invited to build together the rammed earth modules (1.20x2.40m). Later, these modules are taken to the construction site and placed as the walls of the project.

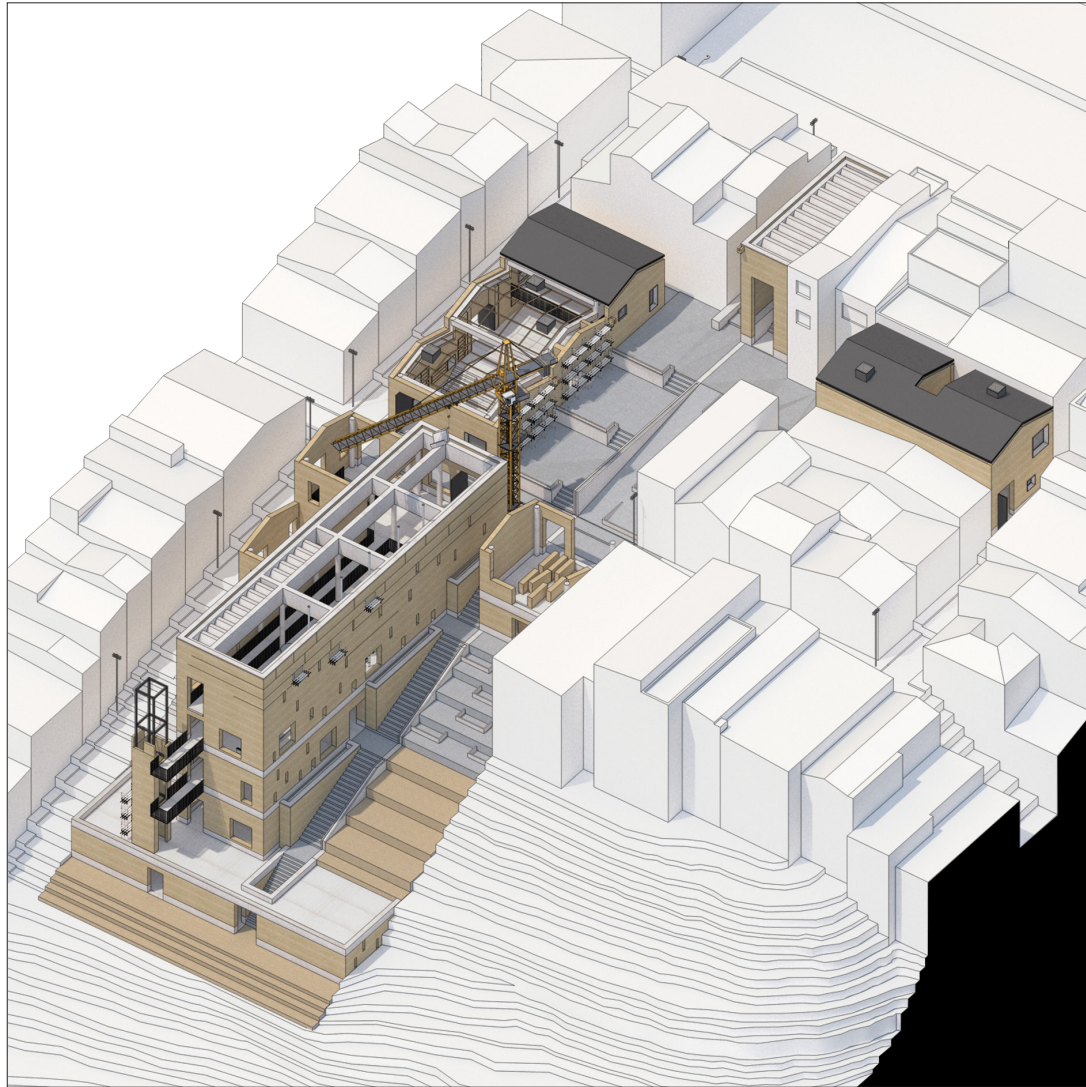
The importance to honor the material, which goes beyond the tectonic, and becomes social, symbolic, and commemorative.

Construction process

How are the Agrarian Cooperative and Coffee Processing Plant built? These diagrams represent the different construction steps, from the demolition of 14 housing units in poor conditions to the soil terracing, structure, and assembly of the prefabricated rammed earth modules, until its completion.









... and the Beginning

In the grass that has overgrown
causes and effects,
someone must be stretched out
blade of grass in his mouth
gazing at the clouds.

—Wisława Szymborska



**Explore Lab Graduation Studio
Faculty of Architecture and the Built Environment
Delft University of Technology
2020**



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