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To Understand the Territory to Be Part of It

Extracts from the course programme of the Atelier Mayol at the Accademia di Architettura di Mendrisio 2023–24. Second-year students

Keywords
– Architecture, Climate, Tradition, Ecosystem, Mediterranean.

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This essay delves into the course programme of the Atelier Mayol at the Accademia di Architettura di Mendrisio 2023–24. The atelier focused on the topic of the summer house, understanding summer as a moment where daily routine is temporary suspended and conventional domestic spaces are questioned.

The semester was an occasion to collectively discuss living and to re-think the way we approach the theme of habitation. Learning to doubt. To think the building as an ecosystem. To approach the house as part of a territory. To observe, understand and interpret the local tradition and identity of a place. To work locally. To make responsible use of local resources. To value the logic of construction. To understand that form follows climate. Learning from tradition to revert the global warming tendency.

The atelier worked in three different places located in three distinct areas of Mallorca. Banyalbufar, a terraced landscape in the north of the island. Sant Joan, a flat landscape in the centre. Es Salobrar de Campos, salt flats next to the sea. Three locations that explain Mallorca.

The Mediterranean Sea as a common ground.
The Mediterranean Sea as a common territory.
The Mediterranean Sea as a common culture.
The Mediterranean Sea as a common tradition.
The Mediterranean Sea as a common identity.

The Mediterranean islands and seashore will be the fields where we will work during the upcoming semesters.

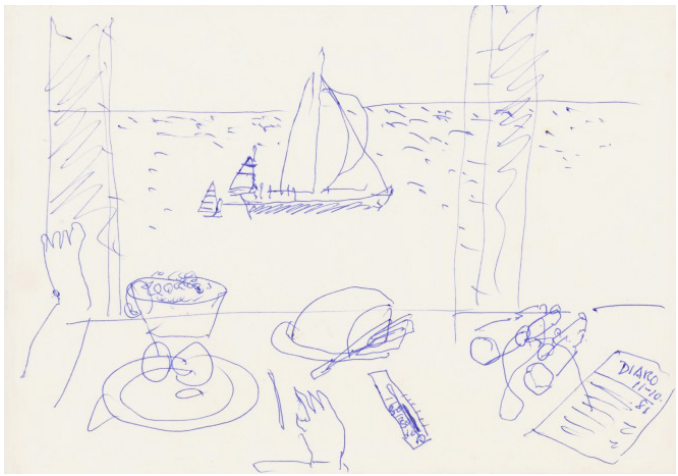
The same history, the same latitude, the same climate... but a wide range of local identities... identities inside a common identity... ultra-local specificities. Every particular place in this world has its own peculiarities.

Local climate needs.
Local typologies.
Local resources.
Local craftsmen.
Local material.
Local culture.

To value every tiny specificity of each place.
To root intentionally in the place where we work.
To become ultra-local.
To respond to the climate needs.
To reduce the impact on the territory.
To become part of the territory.
To reverse the climate tendency.

fig.1 Jorn Utzon. Sketch from Can Lis.
11 October 1981.

fig.2 Abraham and Jafuda Cresques. Mediterranean
sea map. 1375.



Decarbonizing

The construction industry accounts for 38% of total global energy-related CO_2 emissions.
UNITED NATIONS ENVIRONMENT PROGRAMME

The Way We Build Has a Direct Effect on the Global Carbon Footprint

The Mediterranean Sea is a pole of attraction for tourists.

On the other hand, the Mediterranean Sea is a radiography of the climate change. The progression of its temperature and sea level shows the pressure of the actual climate emergency.

Climate change is one of the biggest threats to the Mediterranean Sea. Its water masses have exhibited increased temperature and salinity over the entire depth range since the mid-twentieth century. Sea surface temperature has increased since the early 1980s at a rate three or four times higher in the Mediterranean Sea than in the global ocean, and the intensity, duration, and frequency of marine heatwaves are increasing substantially. The sea level has risen since the end of the nineteenth century with an acceleration since the early 1990s.

We need to change the way we build in order to achieve carbon neutrality. We need to reduce the energy we need to build, but we also need to find solutions to reduce the energy which the buildings need throughout their lives.

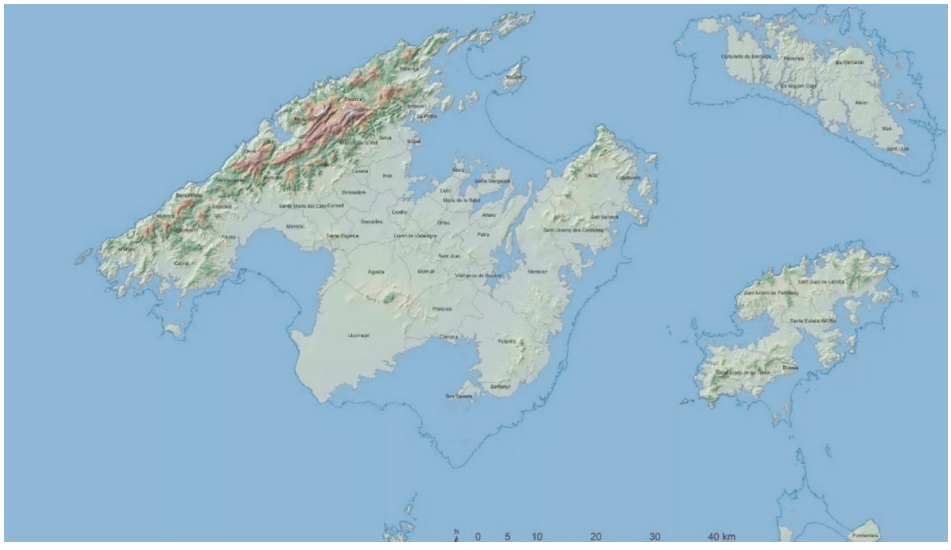


fig.3 *Viatge a unes illes imaginàries.* Travel to imaginary islands. Joan Bauzà. Ara Balears. 2018.10.02.

What do We Have? And What Can We do with the Things We Have?

A project is born from the surroundings. Always. Discovering the logics of the place itself. The intervention makes reference and reverence to the place where it is inserted. To be autonomous and dependent. To depend on the environment and to achieve autonomy. To develop the intervention with this simultaneous purpose of dependence and autonomy. To anchor the intervention to the place. Rooting.

Use what you have available at hand. The material, a local resource. Use what is given to you. Use the resources at your disposal. Most of the time, the material is given, gifted or imposed, hinted or suggested. Imposed by local constructive logics, by compromise or by economic restrictions. We welcome restrictions and impositions; they facilitate the game.

On one hand, we have material resources. In Mallorca we have the well-known sandstone, called *marès,* or the strong stone called *pedra viva*, or clay to produce bricks or lime. At some point we can combine them to produce other materials, such as the rammed earth produced adding earth and lime. In Mallorca there's not much wood, but some. Good forest management in the Serra de Tramuntana would reduce fires and generate a surplus of material. On the island we can also find some secondary materials, such as *Posidonia oceanica*, the endemic Mediterranean seagrass, straw, the bales that farmers produce when harvesting cereals such as wheat and barley, or *llatra*, taken from the Mediterranean fan palm tree, called *garballó*.

fig.4 *Escar* in S'Estalella. Pic. TEd'A arquitectes.

fig.5 *Marès* blocks in Sa Teulada quarry in Sta Margalida. Mallorca. Pic. TEd'A arquitectes.

fig.6 Dry stone wall. Pollença. Mallorca. Pic. TEd'A arquitectes.

fig.7 Can Soler brick factory. Felanitx. Mallorca.
Pic. TEd'A arquitectes.

fig.8 BTC block. *Bloc de Terra Comprimida*.
Fet de Terra.

fig.9 Fat lime. Unicmall. Felanitx. Mallorca.

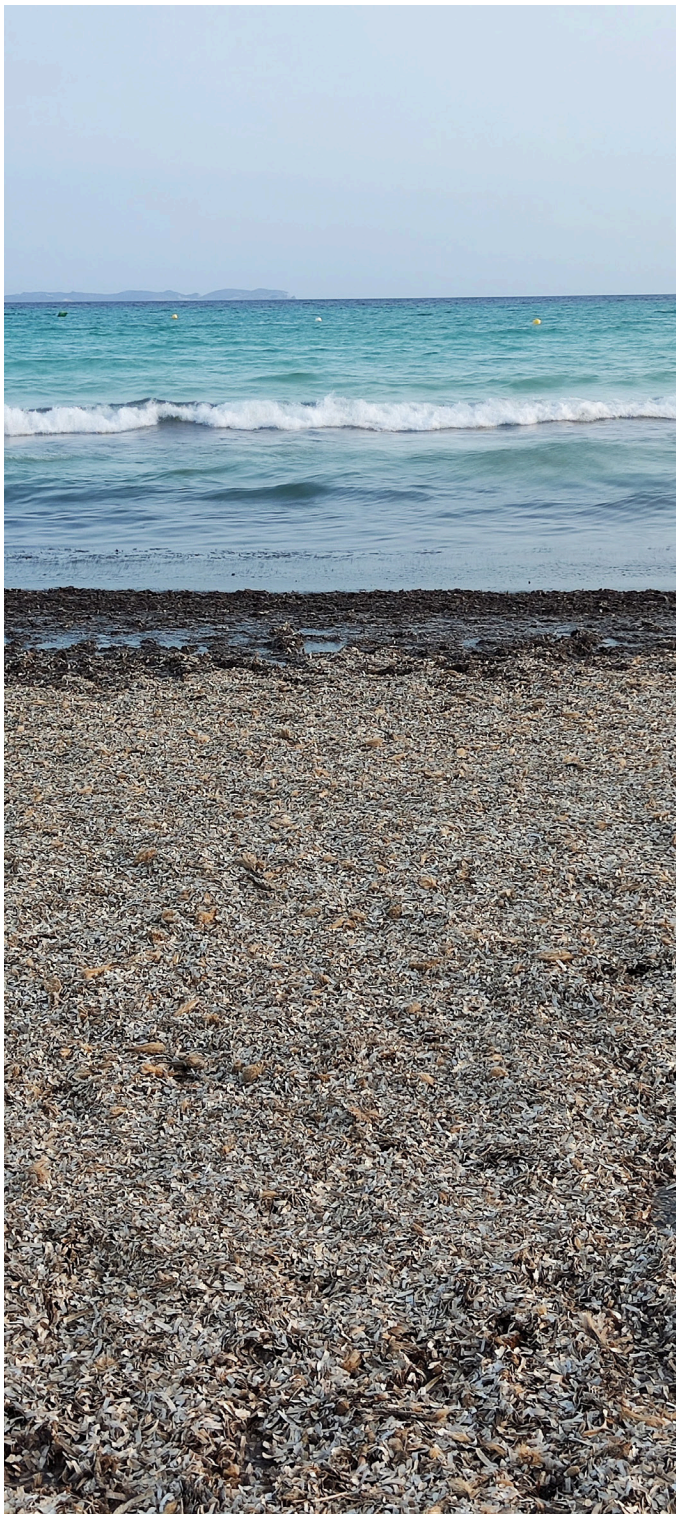
fig.10 Storm effects. Tramuntana area. Mallorca. 2020.

fig.11 Forest Management. *Amarar*. Mallorca.

fig.12 Straw bales in Villafranca. Mallorca.

fig.13 *Llatra* products. Mallorca.

fig.14 Posidonia oceanica dead leaves on Ses Covetes beach. Mallorca. Pic. TEd'A arquitectes.



Before using, reusing.
Before using recycled or optimized products.
Before using non-local eco-friendly products.
Before using local eco-friendly products.
We have to consider the possibility of *reusing local materials*.

To see what we have around, and to consider a second life for the materials, products, elements and spaces.
Reuse.
Pre-use.
Urban mining.
These are different strategies to give another life to our local resources.

fig.15 Sa pobla. Mallorca. Pic: Rafel Moranta.

In Mallorca, there's still an important network of people. Although it is becoming older and older every year, it's still there. They are people who have incredible knowledge of local materials and resources. They know all the conditions and possibilities of materials. They know all the techniques and detailing. They know all the tools and tricks to work with those materials. They have the knowledge and the skills to work on that specific material.

We have people extracting sandstone, cutting and building with it. We have people working with *pedra viva*. We have craftsmen producing tiles out of clay and cement. We have *margers*. We have carpenters. We have craftsmen weaving *llatra*. We have craftsmen blowing glass. Others producing *llengües* fabric and making objects out of it. All these people put together can help us to imagine new techniques and new solutions, born from old local traditions.

fig.16 Pottery craftsman. Pòrtol. Mallorca. Pic. TEd'A arquitectes.

Some of the resources are scarce, such as water, and we have to collect, keep and not waste them.

Qanats, acèquies, aljubs, safreigs, sínies, molins, cisternes, pous, albellons, basses, abeuradors, cocons, terrasses, etc are different specific words referring to the hydraulic infrastructure of the island. Many local and traditional devices to collect, to transport, to store or to generate water in Mallorca.

From Romans to Arabs, a vast traditional hydraulic technology was implemented in the territory. An anthropic transformation of the landscape. Reading and understanding the precise conditions of the landscape, they built a complex and multiscale infrastructure that organizes the whole territory of the island.

fig.17 *Aljub*. Alfàbia. Bunyola. Mallorca. Pic. TEd'A arquitectes.

Vegetation itself contains many passive climate strategies to learn from. Vegetation can help architecture in many ways.
Vegetation can provide protection from solar radiation in summer and, at the same time, can allow the sun to warm the building in winter.
Vegetation can help to regulate the temperature. Trees and vegetation (e.g., bushes, shrubs, and tall grasses) lower surface and air temperatures by providing shade and cooling through evaporation and transpiration, also called evapotranspiration.

Other types of vegetation, such as the dead and dry leaves of the *Posidonia oceanica* can be found on the beaches in the early summer. It is a waste material and can be used as thermal insulation.

fig.18 *Vinetree in winter and summer. Sant Joan. Mallorca.* Pic. TEd'A arquitectes.

Form follows climate.
Typologies are strategies to answer to local climate needs with the help of local resources. The resulting local traditional typology shows the logic of construction, material and shape, that has been perfected over the centuries. Typologies are local examples that have formed over time. They are an expression of the knowledge that has been built over time.

Typologies are answers to local climatic needs. Historical and cultural testimonies, they are manifestations of the identity of a place.

Typologies and ultra-local typologies. The specific conditions of a place, whether they are meteorological, cultural, or linked to the logic of local economies, to the habits of the inhabitants, or the presence of a specific material, have given shape to typologies of typologies, ultra-local typologies.

A patio or *clastra* is probably the best-known Mediterranean typology. A patio is a strategy to double the façade in order to lose heat. A form that creates cross ventilation and a chimney effect. Passive strategies related to the shape of the building that help to fight against the climate.

Local typologies are resources to look at and to learn from.

Typologies have been tested over time. Typologies modified and adapted to the needs of people and to the properties of local materials.

fig.19 *Caseta de roter. Barraca de Curucull.* Somewhere between Santanyí and S'Amarador. Mallorca. Pic. TEd'A arquitectes.

fig.20 *Talaiots.* Son Fornés. Montuïri. Mallorca

fig. 21 *Caseta de roter.* On the way from Llucmajor to Palma. Mallorca. Pic. TEd'A arquitectes.

fig. 22 Patio Casal Solleric. 18th century. Mallorca.

fig. 23 Jorn Utzon. Can Lis. Portopetro. Mallorca. 1971–72. Pic. TEd'A arquitectes.

Local Landscape.
This is not about buildings, but about ecosystems.

Observing carefully the past and the existing.
Reading the precise conditions of the place.
Learning from tradition.
Becoming local.
Contributing to the local identity.
Using the existing as a tool.
Looking at the resources available around.
Diving into local knowledge.
Understanding processes.
Copying.
Rooting in that precise place.
Opening a pathway.
Placing a first stone.
Searching for water. Collecting it.
Shading under some trees.
Facing the sun. Protecting ourselves from it.
Catching the breeze.
Using existing traces.
Reusing the stone of a ruin.
Reducing the needs and impact.
Becoming landscape.
Becoming an inseparable part of the territory.
Building an ecosystem.

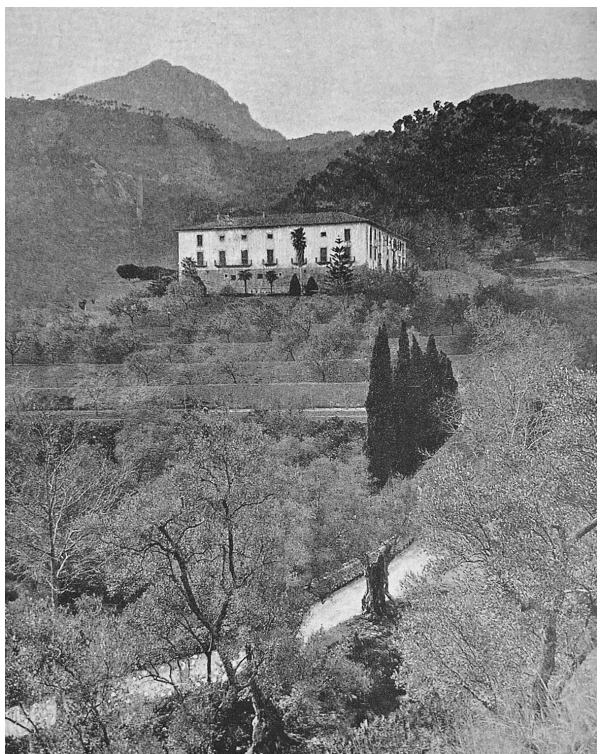


fig. 24 Possessió Son Zaforteza. Puigpunyent. Mallorca.

Design Brief

Learning to Doubt. Learning From Tradition
to Become Local.

The atelier focused on the topic of summer house. Understanding summer as a moment where daily routine is temporary suspended and conventional domestic spaces are questioned.
The semester was an occasion to collectively discuss living and to re-think the way we approach the theme of habitation.
Learning to doubt.

To think the building as an ecosystem.
To approach the house as part of a territory.
To observe, understand and interpret the local tradition and identity of a place.
To work locally.
To make responsible use of local resources.
To value the logic of construction.
To understand that form follows climate.
Learning from tradition to revert the global warming tendency.

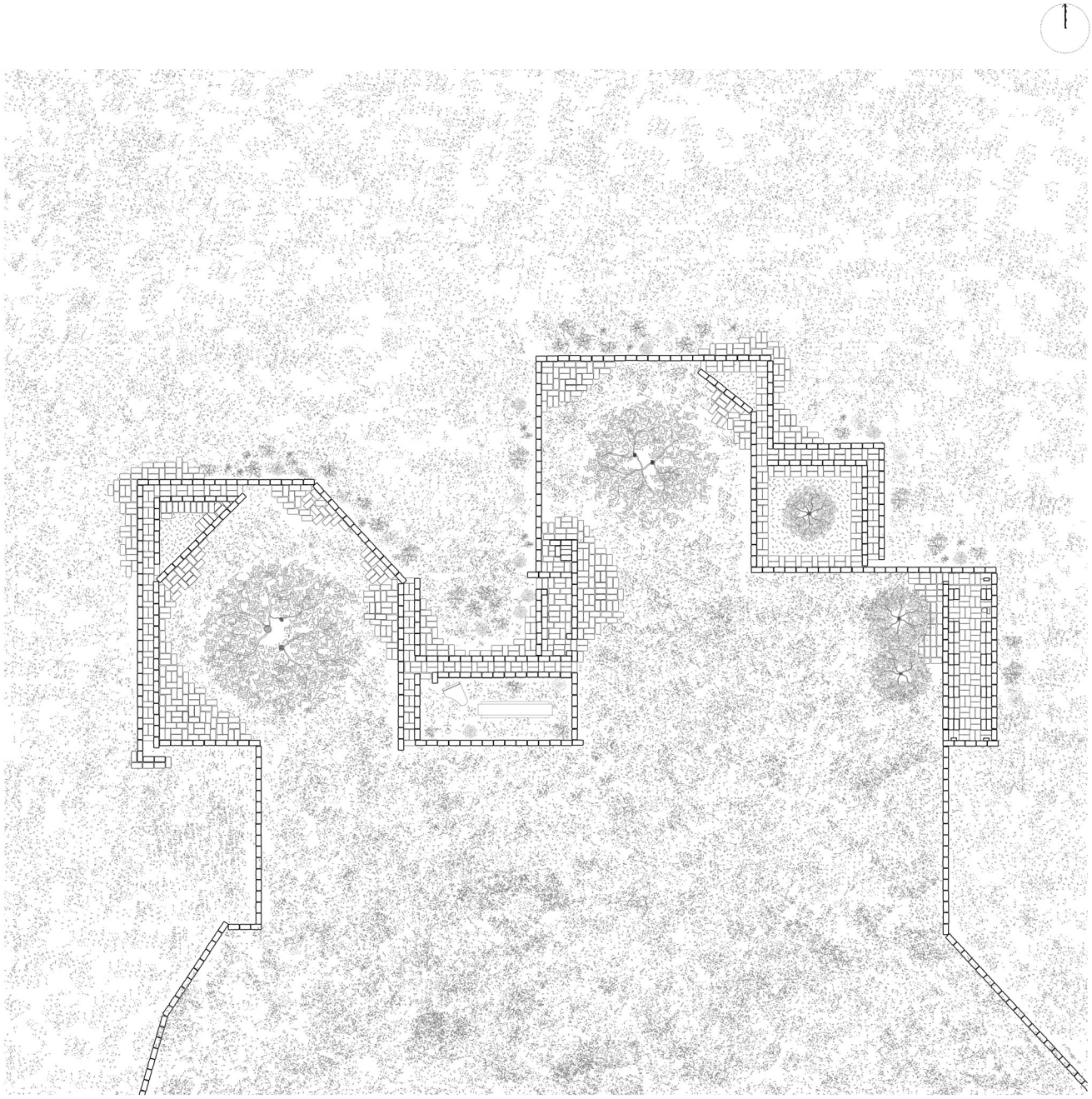
The atelier worked in three different places located in three distinct areas of Mallorca.
Banyalbufar, a terraced landscape in the north of the island. Sant Joan, a flat landscape in the centre. Es Salobrar de Campos, salt flats next to the sea in the south. Three locations that explain Mallorca.
These three places are incredible showcases of the diversity of landscapes, scales and vegetation of the island.
Three locations structured around the presence of old traditional water infrastructures.

Some Students' Responses

André Knagenhielm-Karlsson

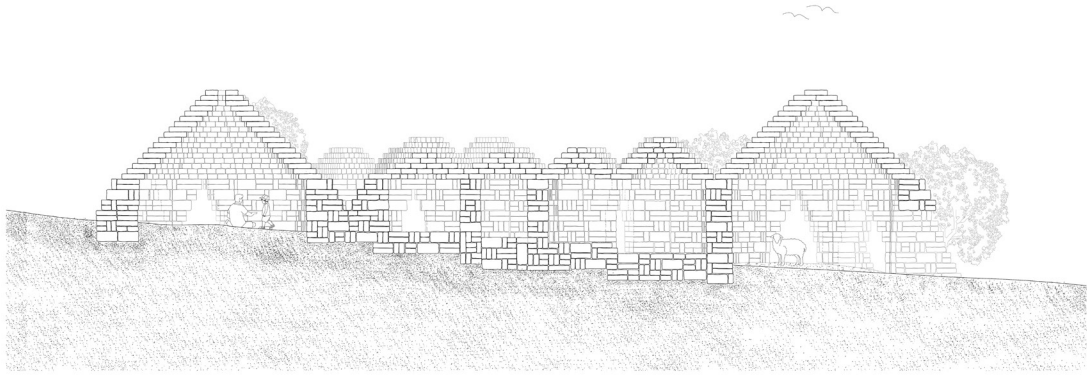
A wall defining the limit between two landscapes.
A wall containing the salt flats landscape.
A house in a wall.
A house facing south and protecting it from the north winds.
A house that catches the sea breeze as a cooling system.
A house built with the local *marès* sandstone, providing inertia and hygroscopy.
A house defined by a sequence of very different rooms.
Rooms as a result of structural testing of the stone.
Building as animals do, in balance with the natural landscape.

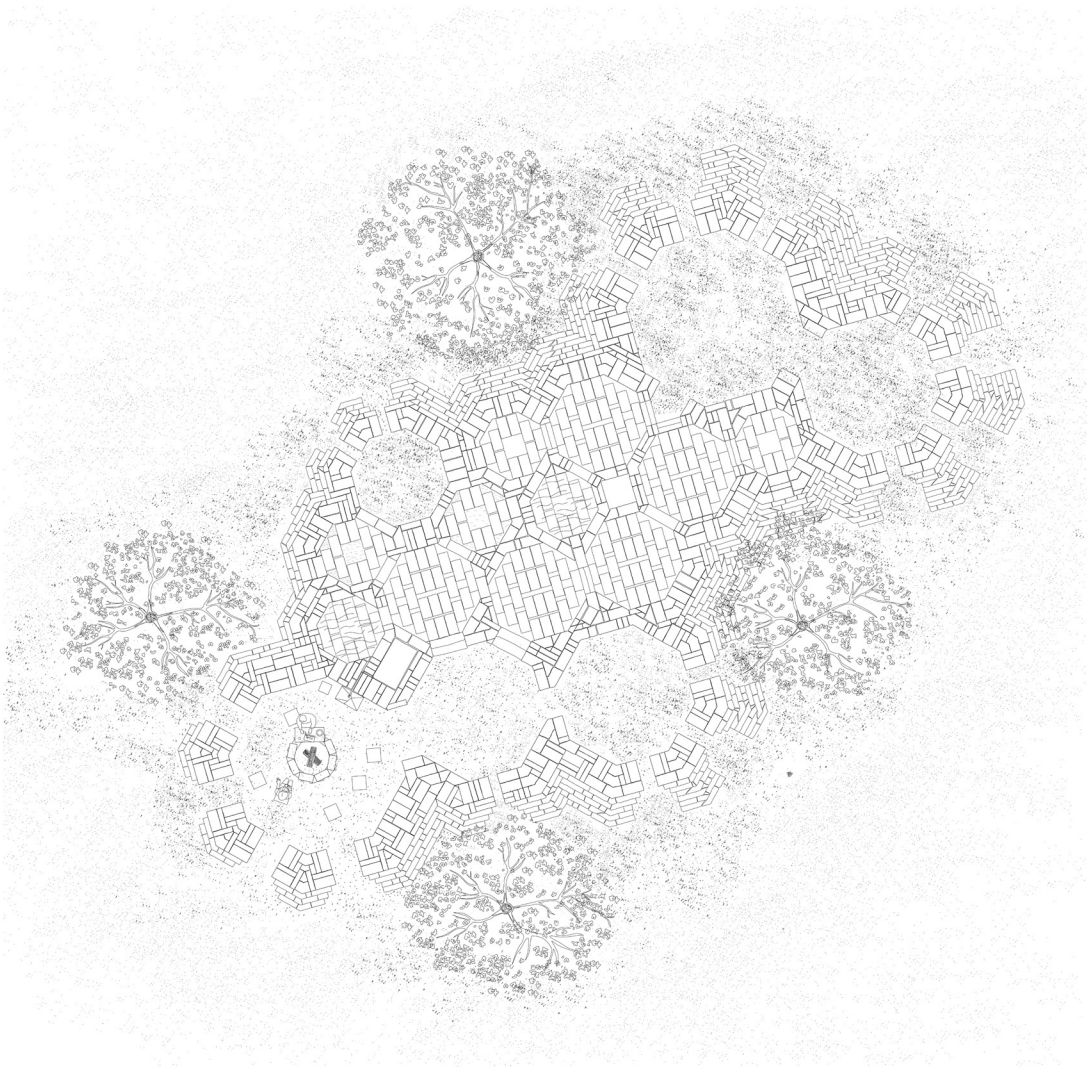
fig. 25–26 André Knagenhielm-Karlsson.



A house as a conglomerate of rooms.
Rooms built with the small stones taken from the plot in order to be able to plant local cereals such as wheat or barley.
Rooms built following the natural slope of the terrain.
Rooms built following the traditional system of the *casetes de roter*.
A traditional system that helps to build a roof as part of the topography.
A roof that is used to collect rainwater.
A roof that provides a lot of inertia.
A rough structure that provides natural comfort, using natural resources.

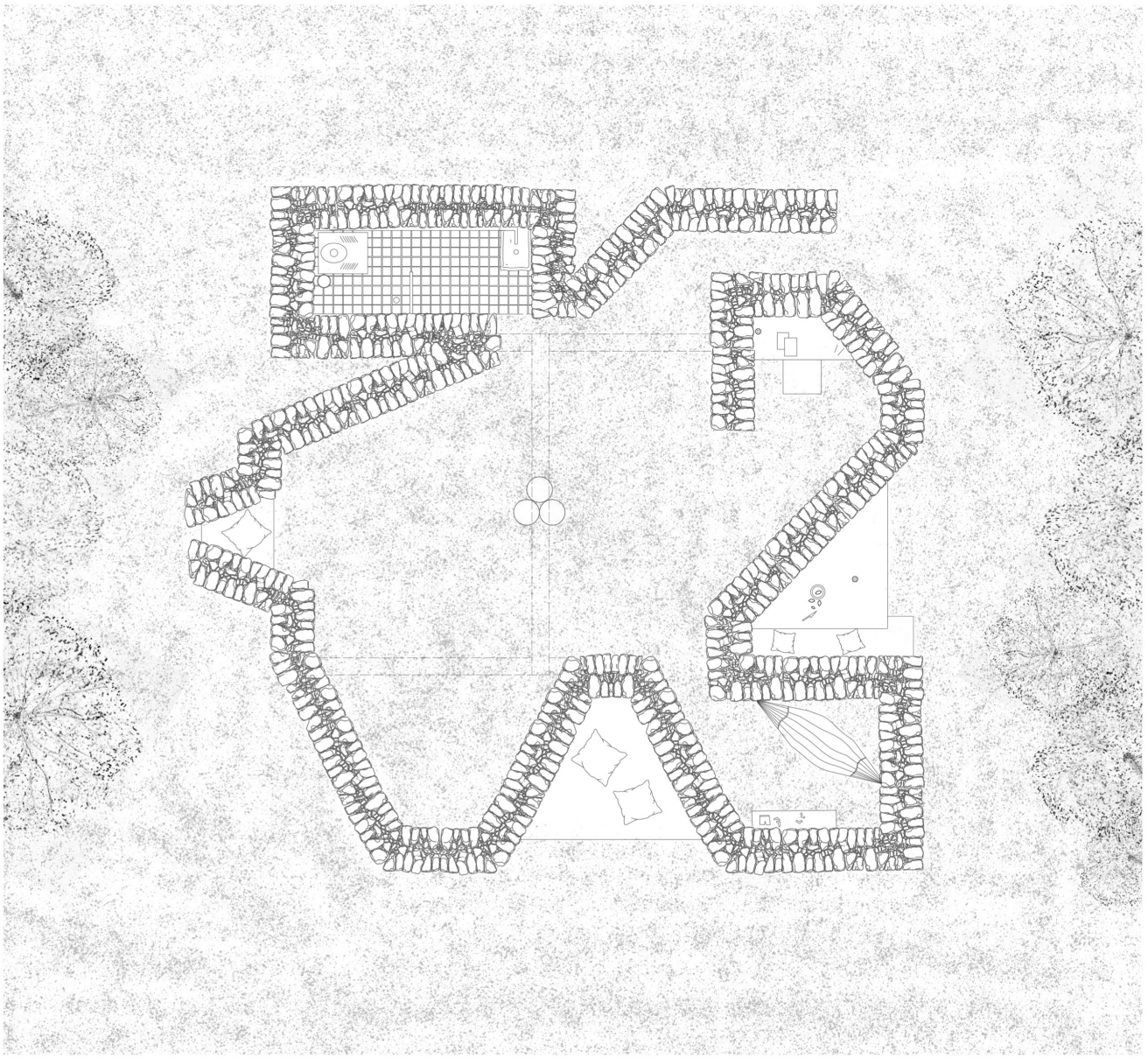
fig. 27–28 Daksa Lucas.





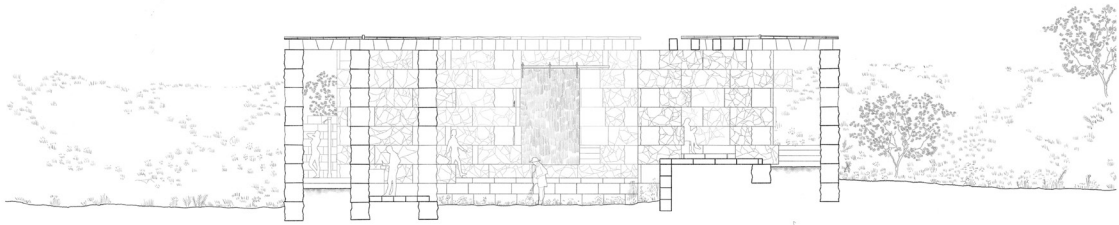
A house for both humans and birds.
A house that sits in a plot where birds stop when migrating during two seasons, twice a year.
A house that will be used for humans when birds are not there.
A house defined by a wall that folds, creating inner and outer corners and niches.
A house as a small tower.
A house built with irregular *pedra viva* and horizontal sandstone courses.
A house that passively moves the air, causing a chimney effect.
A small infrastructure as part of the local ecosystem.

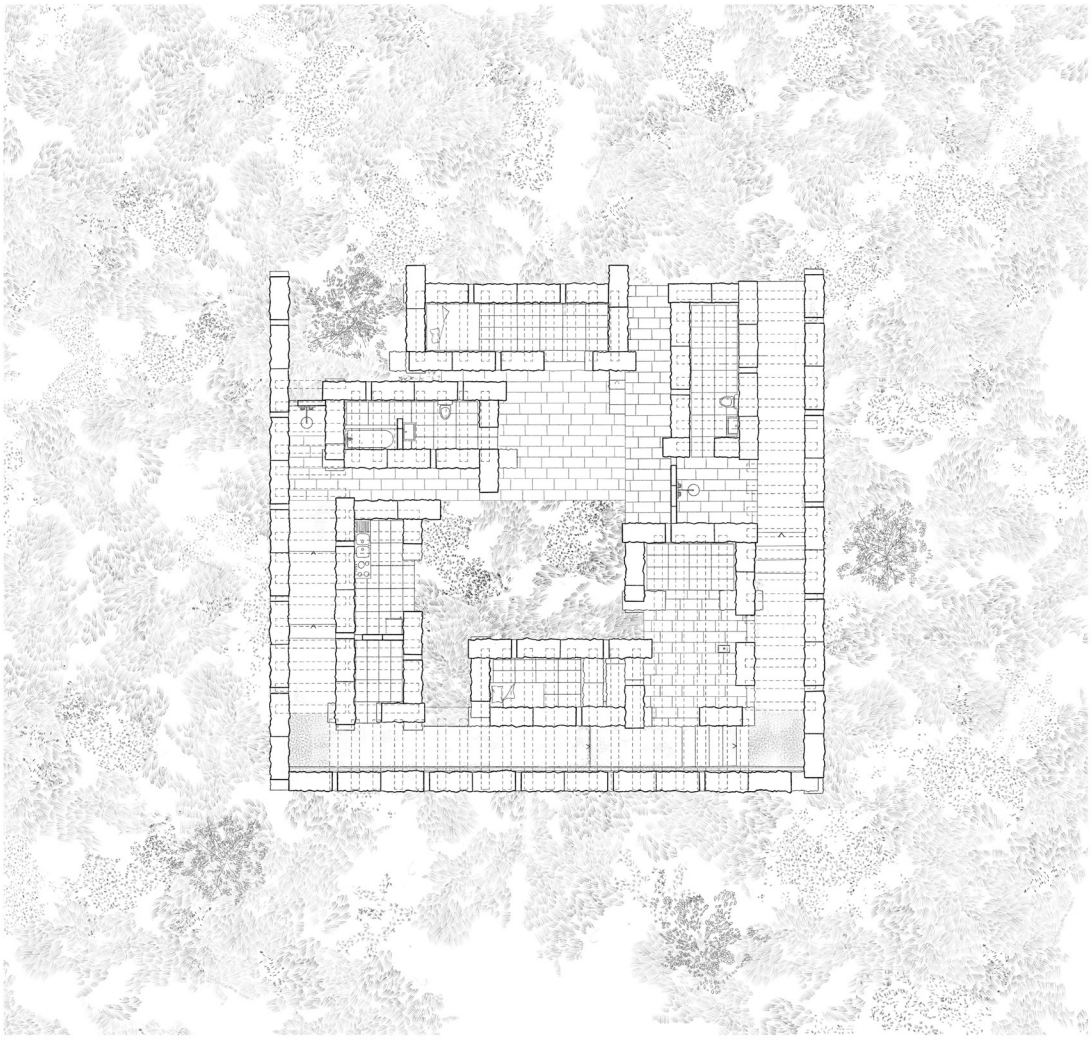
fig. 29–30 Damien Troilo.



An introspective house.
A house that aims to protect people from hot weather.
A house that uses the rough pieces of stone that are taken from the limits of a quarry for the walls. The *pell marès*. Enormous blocks directly from the quarry.
A house with a stone roof as well. A roof built with *llivanyes* of *marès*.
A roof that collects the rainwater into the patio, watering the native wild plants.
A patio understood as a thermal device.
A patio understood as an oasis.
An infrastructural and primitive construction as part of the local building typology.

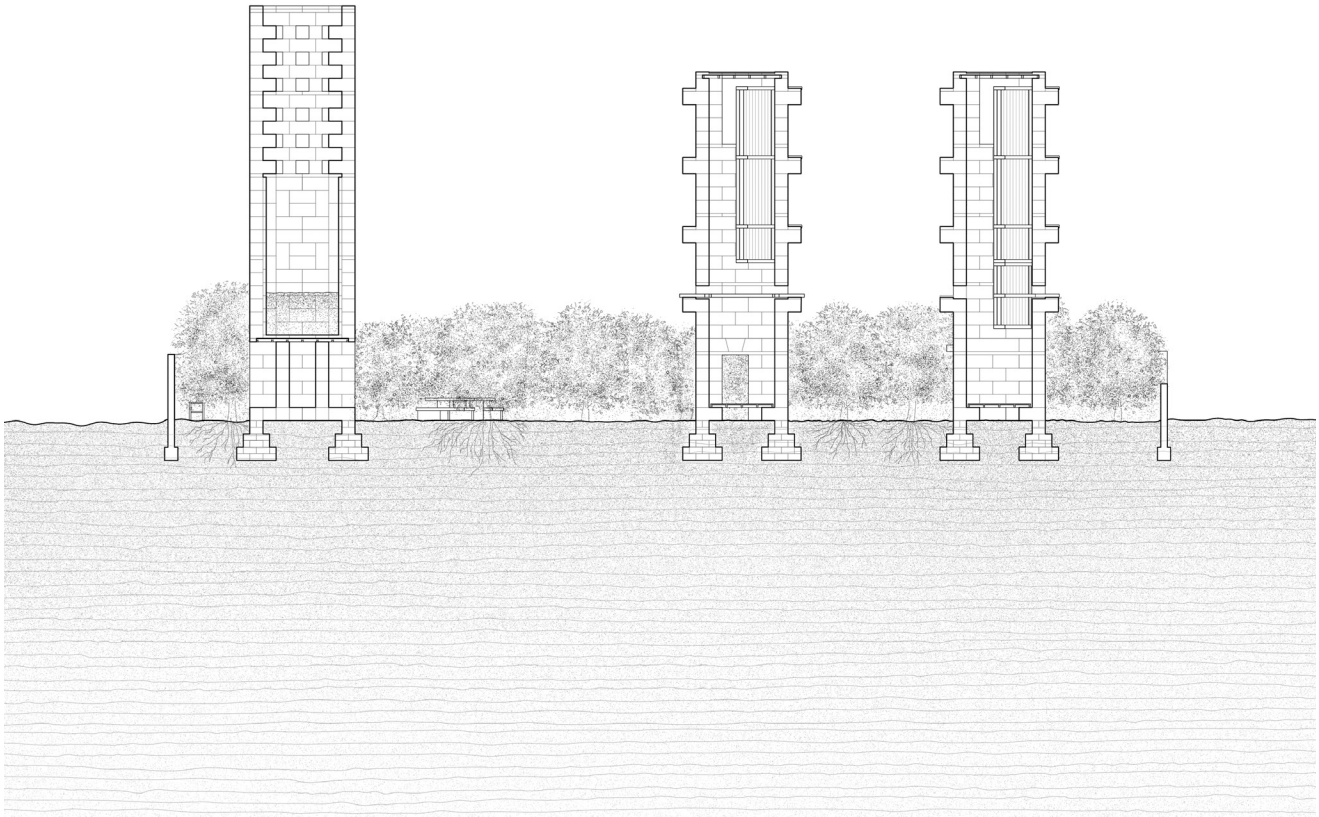
fig. 31–32 Horace De Portales.





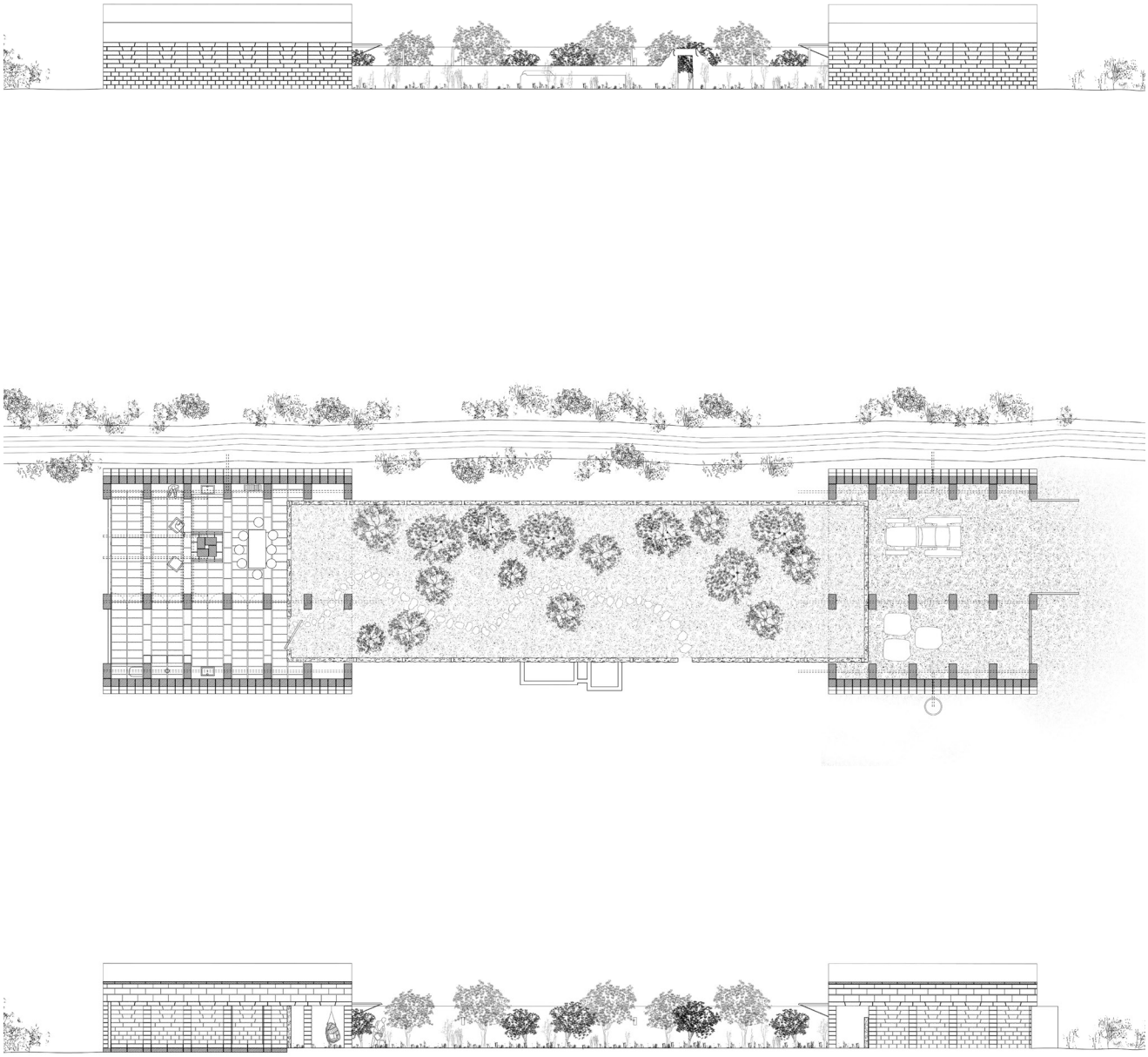
A house in an orange tree orchard.
A house as a group of independent rooms.
Rooms as towers.
Towers as infrastructural devices.
A tower as a water deposit.
A tower as a wind catcher.
A tower as a chimney.
Three towers that use and collect natural resources in order to provide comfort.
A strong landscape intervention as a result of using the natural resources we have at hand.

fig.33–34 Lucrezia Beard.



A vaulted structure as an interpretation of the bridge structure we have nearby.
A big vault and a small vault. A double vaulted structure divided in two.
A double vault, more open to one side rather than to the other, causing acceleration of the breeze when crossing the space.
A structure of vaults and pilasters. All the services are organized in the space between pilasters.
A structure as an expression of the local sandstone called *marès*.
A primitive structure that connects with the preexisting, providing the basics to live.

fig.35–36 Olga Engell.



A house in a very sensitive landscape. A house in an old saline infrastructure.
A very light house on stilts.
A dry construction system.
A wooden structure defining a repeated portico.
A house for the salt workers.
A tall porch providing shade to work beneath.
A wooden skeleton with a mobile façade. Panels that can allow the light or provide shade; they can allow views or provide privacy; they can expose or they can protect.

...
Understanding the territory to be part of it.

fig.37–38 Veronica Giunti.