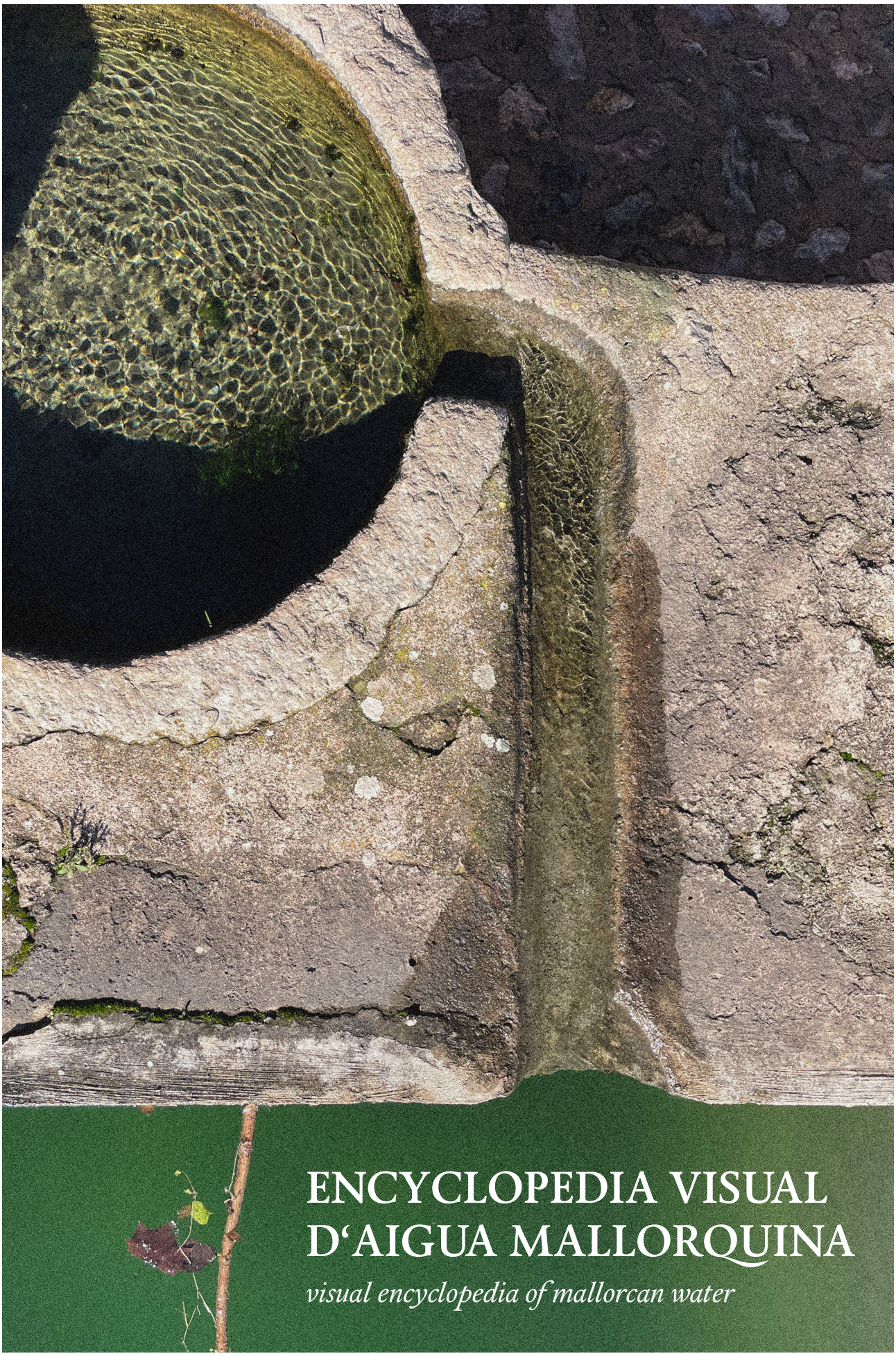


ENCYCLOPEDIA VISUAL D'AIGUA MALLORQUINA

visual encyclopedia of mallorcan water

Table of content

Mallorca‘s (hydrologic) landscape on the scale of the island

„Aquí mai se sap amb s‘aigua,
avegades hi és, avegades no.“

“Here you never know with water,
sometimes it‘s here, sometimes it‘s not“

(Juan, from travel journal, 2024)

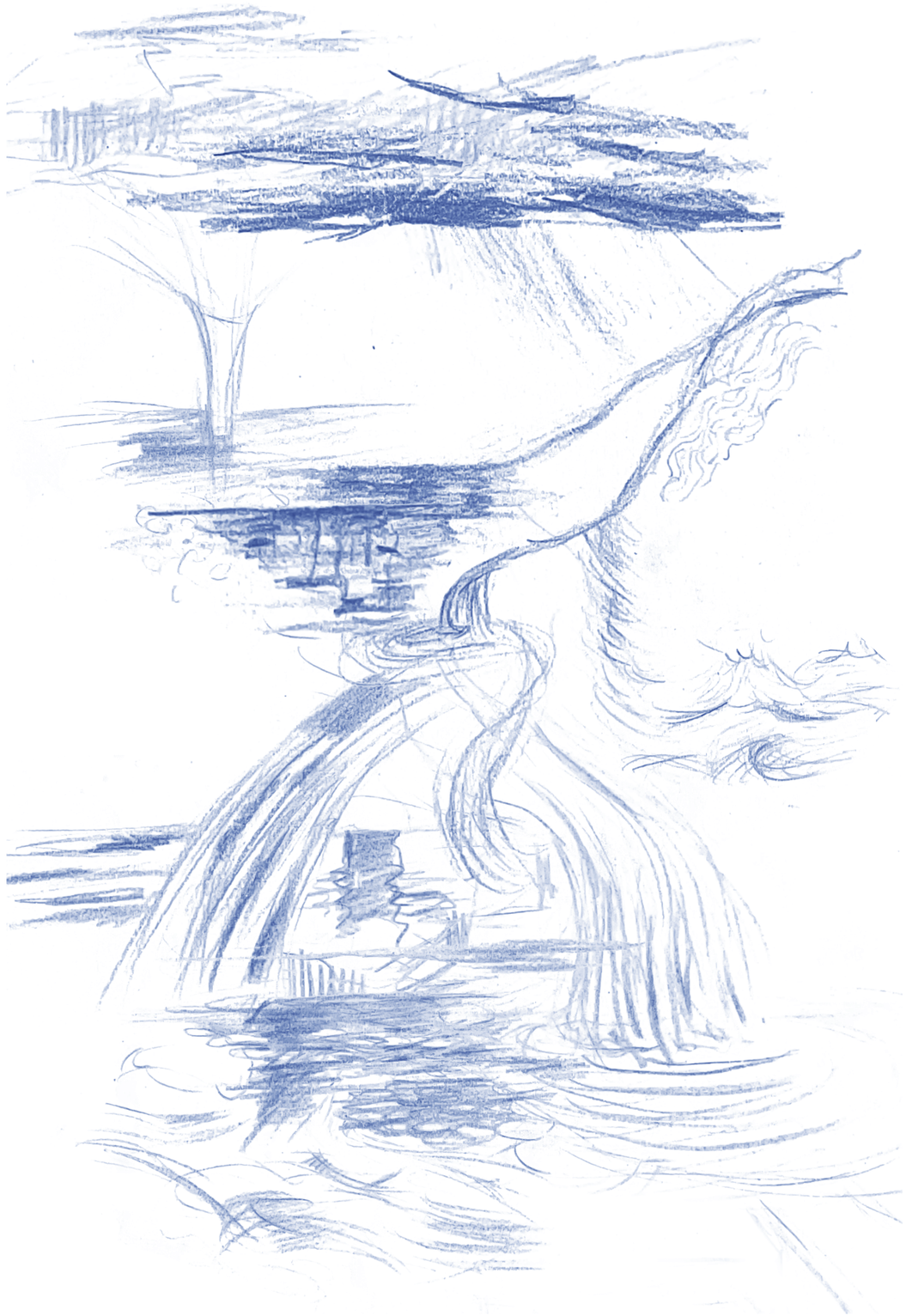


Figure 1: drawing different waters

Que es aigua? What is water?

„Aigua: font de vida,
modeladora del paisatge,
creadora de bellesa, de cultura,
font de purificació i de ritus iniciàtics.
"Water: source of life, Aigua, remor, música, bellesa… misteri."
shaper of the landscape,
creator of beauty, of culture,
a source of purification and of initiatory rites.
Water, murmur, music, beauty… mystery."
(Barón Périz, 2009, as cited in Mateos Ruiz & González Casasnovas, 2009, p.11)

Aigua embodies life, purity and rebirth

Aigua has infinite sounds,
from the delicate drip,
a tranquil murmur of a river,
a rumbling,
Aigua constantly flows,
a sudden splash
shifting between gentle curves
to a roaring cascade
to powerful rushes

Aigua never looks the same,
changes colour,
adapting to the changes of light and wind
it reflects its surrounding

Aigua is a source of amusement
it invites tactile engagement,
immersion and play

Immersed in aigua,
we are weightless,
freed from gravity's constraints,
experiencing a sense of liberation

Aigua is mysterious,
beneath it's surface lies the unknown,
stirring curiosity and imagination
for the big underwater creatures

Aigua connects ecoystems,
connects us to the globe
and with each other

Aigua is what we all have in common
who live on earth,
an inherent condition of humanity

Aigua possessed the extraordinary ability to metamorphose rapidly into substances with oppositional qualities, from solid, liquid to vapor continuously in movement and must be seen in its multiplicities: as life-giving but also life-threatening medium (Strang, 2004, p.49)

Multiplicity of aigua

aigua, aygo, aigo(s), aigües

water - the word has different ways of writing and pronounciations in the catalan language

aigua pura (pure water) clean, uncontaminated water
aigua beneïda (holy water) water blessed for religious use
aigua de pluja (rainwater) water that falls as rain

aigua dolça (sweet water) water without salt (from rivers/lakes)
aigua dura (hard water) water rich in minerals like calcium
aigua mineral (minearal water) water from a source, which carries mineral substances
aigua viva (living water) aigua que raja, que fluïx
aigua de roses (rose water) fragrant water made from rose petals
aigua morta (dead water) still, stagnant water (aigua estancada i sense corrent)
aigua negras (black water) sewage or wastewater

aigua amunt (upstream water) water flowing upward/inland
aigua avall (downstream water) water flowing downward/toward the sea
aigua blana containing a small amount of salts
aigua cavallera (knight water) stream of water that flows freely but calmly
aigua corrent (running water) water from a tap or flowing source

Everyone is familiar with aigua—water. Commonly understood as an odourless, tasteless, colourless liquid, formed by a combination of hydrogen and oxygen, essential for life (Water, 2024), its nature extends far beyond this simplicity.

As the ancient traditions believed, aigua can be seen as a total being that has a body (matter), soul (gas) and voice (liquid) (Cahner et al., n.d.).

In the context of Mallorca, water has not only shaped the physical landscape but also influenced the development of human settlements and societal structures (Trias Mercant et al., 1996). This close relationship with water has given rise to a rich culture surrounding water, reflected in a rich water-related vocabulary, traditional songs, and an abundance of local toponyms and hydronyms. Words tell us who we are and how we are. The way we speak has consequences for the way we think. This highlights the depth of cultural adaptation to the island's environmental conditions and the diverse meanings water holds (Dubon i Pretus, 2011) (Centre, n.d.).

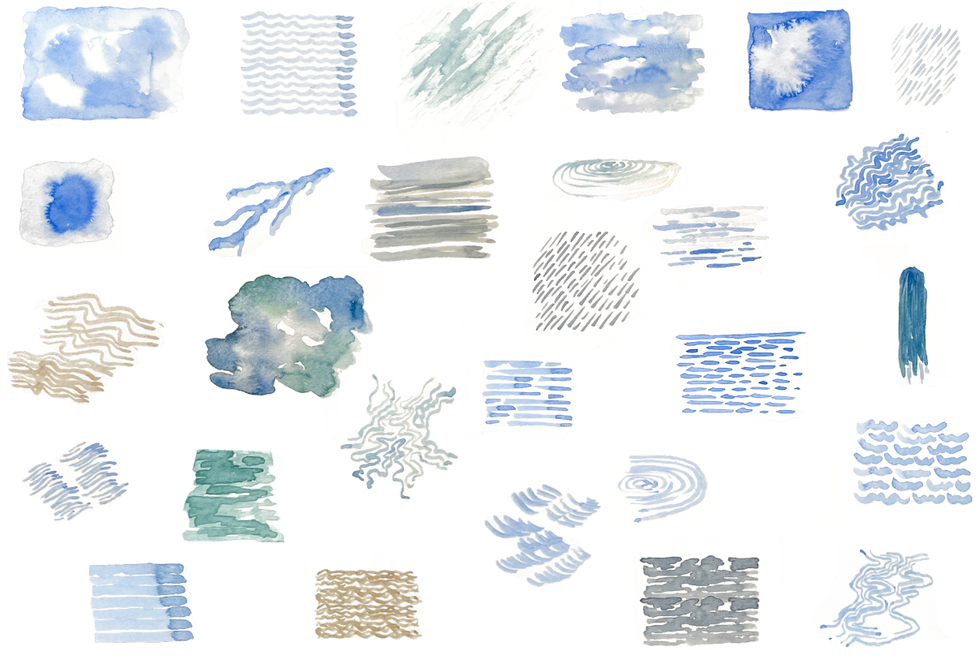


Figure 2: drawing different waters in watercolours

Composition of water

Figure 3: different waters taken durinf site visit

Water is characterised by its ability to absorb and retain a wide spectrum of colours, flavours and aromas. It is the solvent element par excellence. Gases and solids dissolve in it, and as a consequence, it is never found in a pure state in nature (Cahner et al., n.d.).

During my fieldwork, I collected samples from various sources to explore potential differences in their composition. Through conversations with locals, it became clear that water is not perceived merely as a functional resource, but as something deeply sensory and qualitative. Many spoke of distinct tastes among different springs, often referring to particularly desirable sources as „aigua bona“ (good water). Water coming from sources is also high in lime as it carries the minerals from the many layers it crosses. Water is in direct link to the lanscape and mountain.

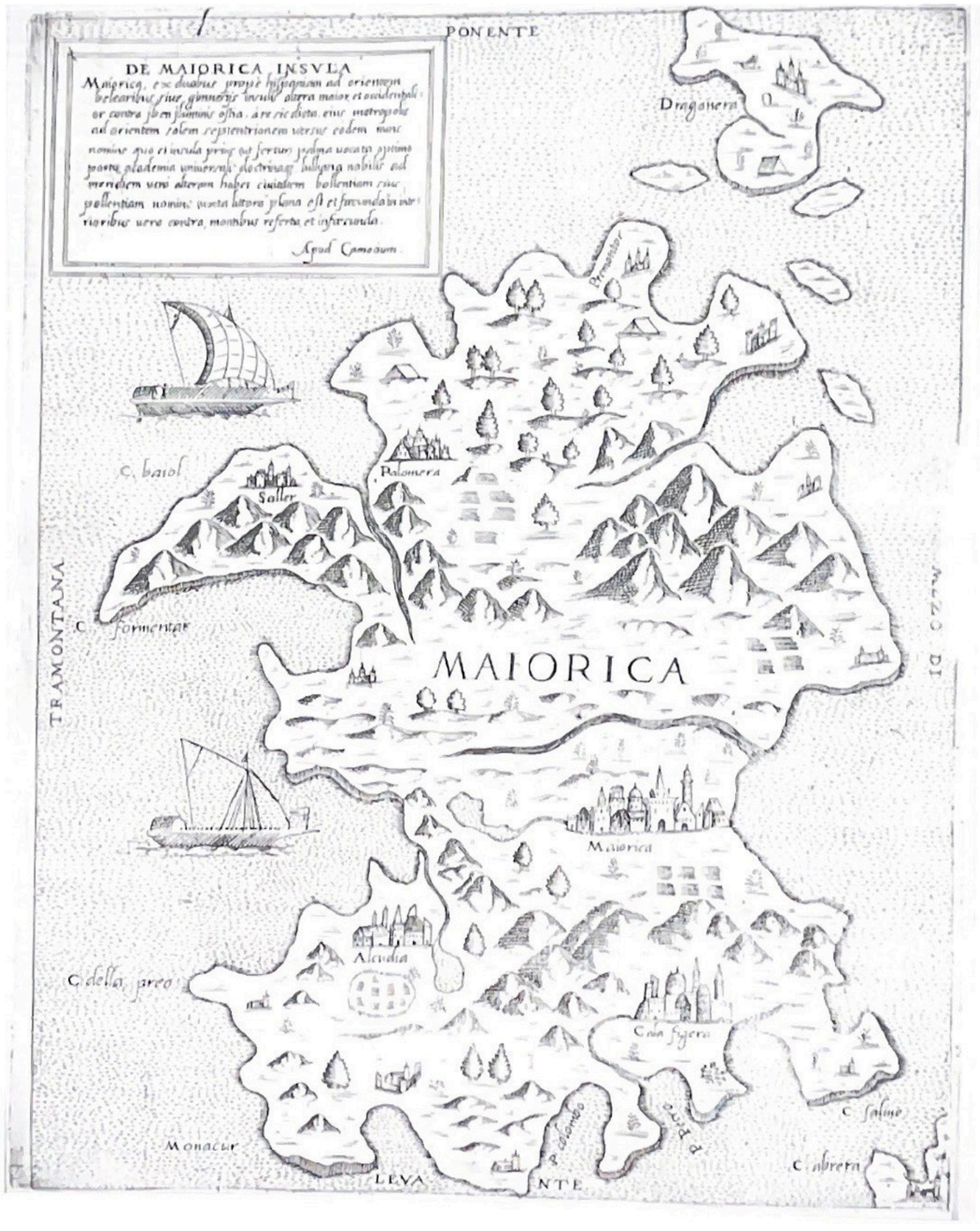


Figure 4: Mallorca insula, by Camocium, 1560

Where is Mallorca's aigua?
What is Mallorca's aigua?

Mallorca is an island surrounded by water and was a practically unknown until the 1960s. Mallorcans continued to live practically in isolation.

Mallorca‘s climate

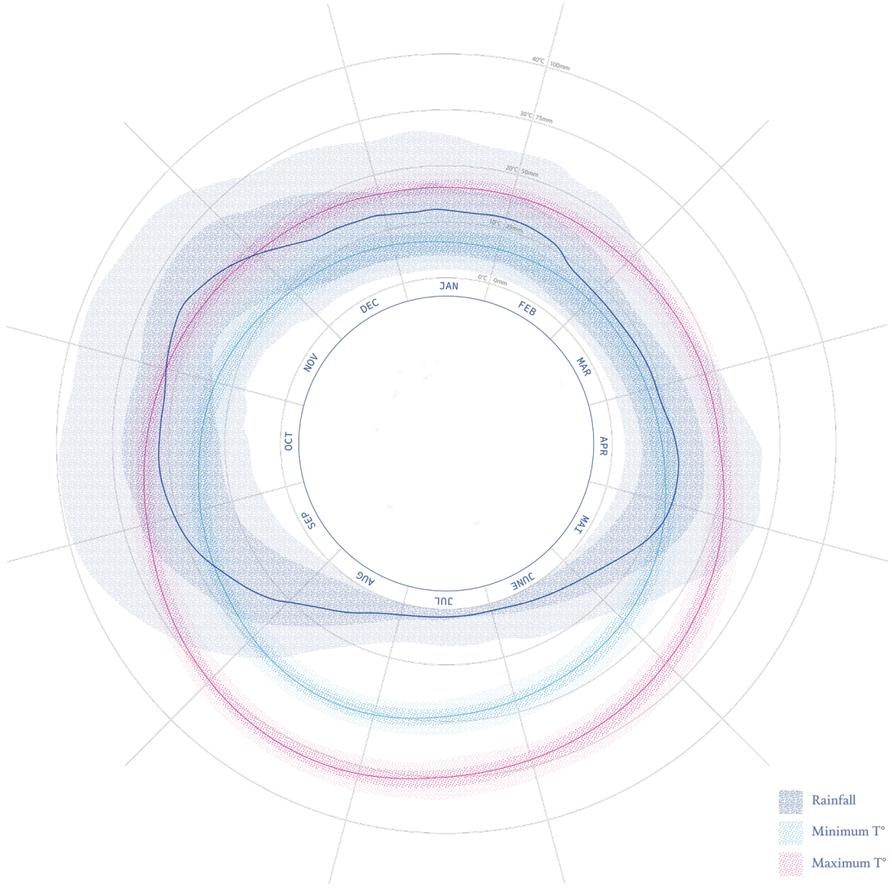


Figure 5: Average rainfall and low and high temperatures on Mallorca

Mallorca’s climate oscillates between extremes, demanding adaptation. As tourists anticipate, summers are hot and arid — marked by cloudless skies and parched soils. In stark contrast, winters bring not only high humidity and rainfall but, at higher altitudes, a surprising presence of snow. Water on Mallorca exists in all its states: as vapor saturating the air, as torrential downpours transforming dry riverbeds into floods, and as snow and ice in the elevated Serra de Tramuntana.

Mallorca‘s natural and humanized landscape

Mallorca is an island with an area of about 3.640km², and between 70-110km wide.
It has a population of about 940.300 (Palma: 430.600) compared to almost 18.000.000 tourists a year (in 2023).

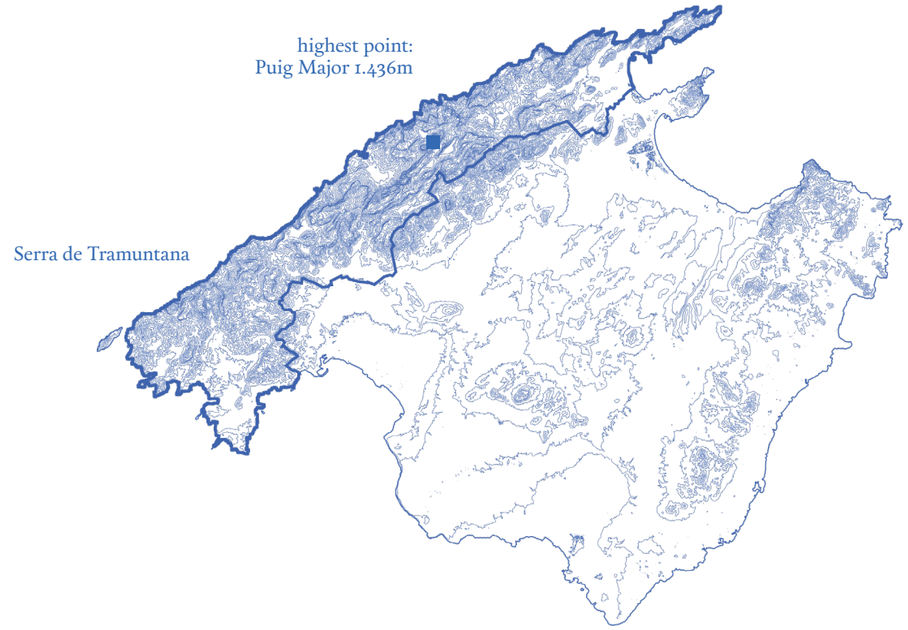


Figure 6: Mallorca‘s topography (every 50m)

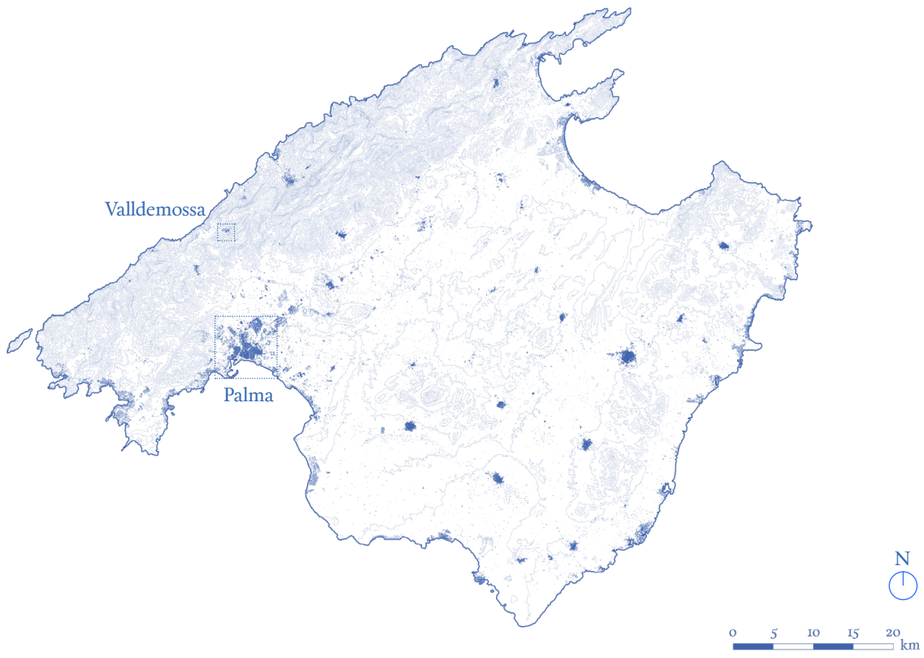


Figure 7: Mallorca‘s building plan, it has a pop. densité: 258.33/km²

Mallorca‘s surface water

The story of water on Mallorca has stared by shaping the island’s topography. Interacrting with the karstic porous limestone, water gradually dissolved it creating its own natural hydrological network. This complex network has given rise to a variety of geomorphological features, including limestone pavements, deep gorges and extensive subterranean cavities and caves. Through continuous infiltration, water has carved its own infrastructure into the rock, creating abundant underground reserves that serve as the island‘s primary water source. In fact, in 2009, 80% of the consumed fresh water was extracted from aquifers (Mateos Ruiz & González Casasnovas, 2009).

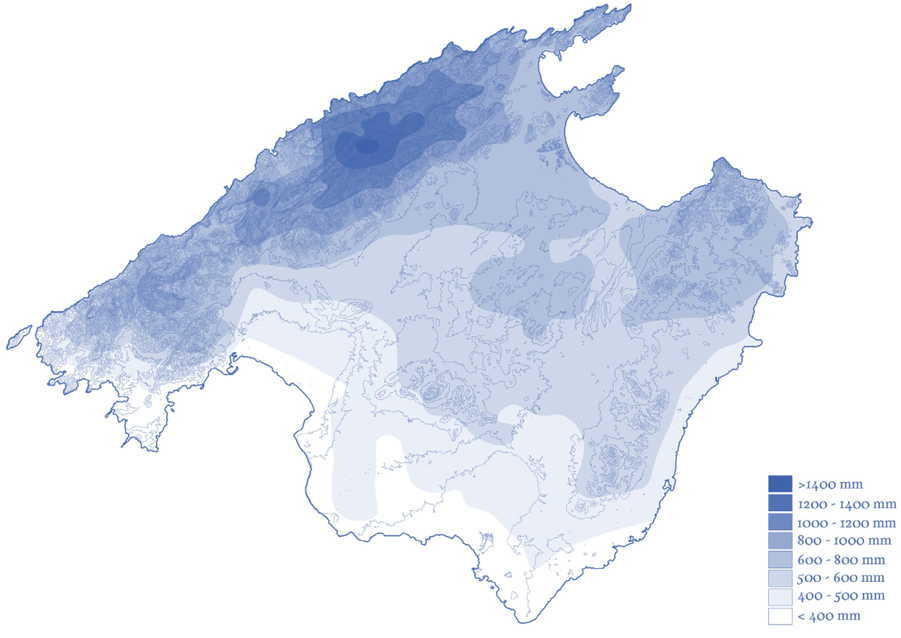


Figure 8: Mallorca has irregular rainfall pattern with peaks in autumn and spring, which are heavier in mountain range

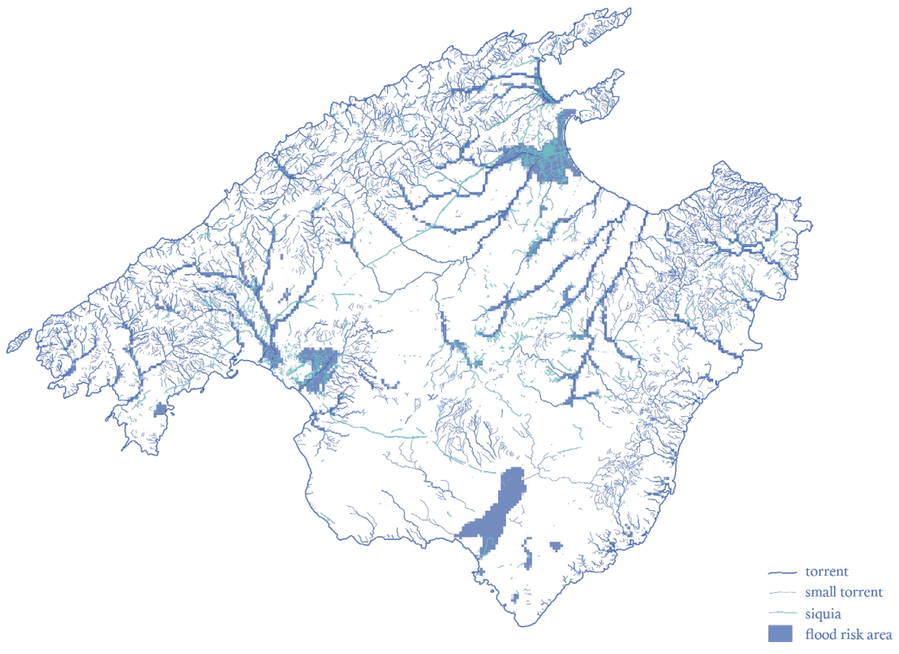


Figure 9: heavy rainfall resulting in temporal torrents and flooded areas in the flatter parts

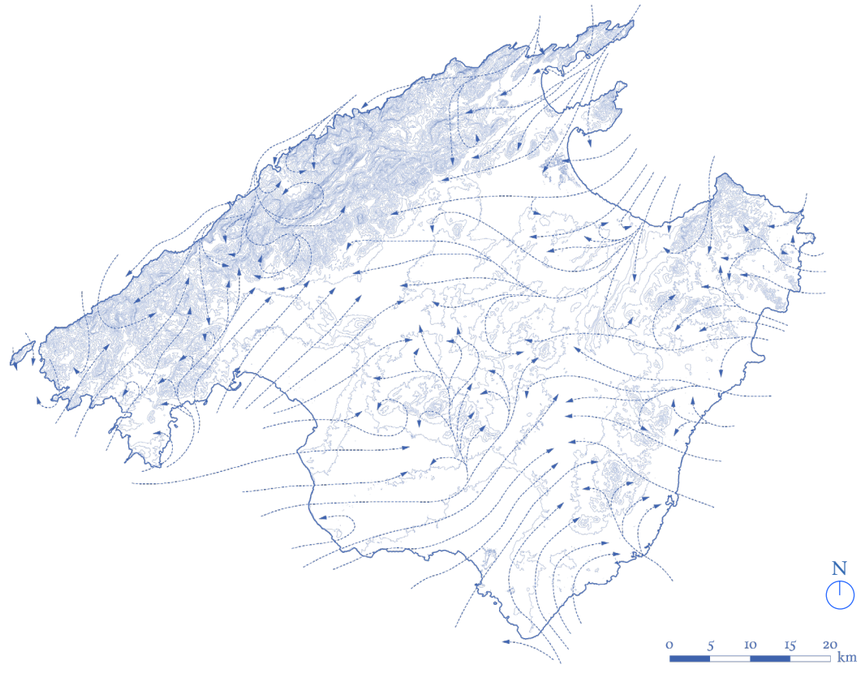


Figure 10: Strong wind lines of the sea breeze on the island of Mallorca (and typical areas of convergence) Own reworking from Chart I. Líneas de corriente (Jansà y Jaume, 1946).

Torrent

watercourse that flows intermittently or temporarily along a fixed channel

The annual precipitation of the island is about 400ml/year, being the heaviest in the Serra de Tramuntana.
The mountain range was and still is a vital resource for Mallorca's society, providing not only agricultural and forestry products but also essential water supplies that are crucial for the entire island (Dubon i Pretus, 2011).

Mallorca‘s underground water

Hidden from sight, the majority of the island’s water flows silently beneath the surface. Within the island’s limestone belly lie expansive caves and aquifers, often spectacular and inaccessible. These subterranean landscapes remain largely unknown, adding a mystical quality to the island’s water story

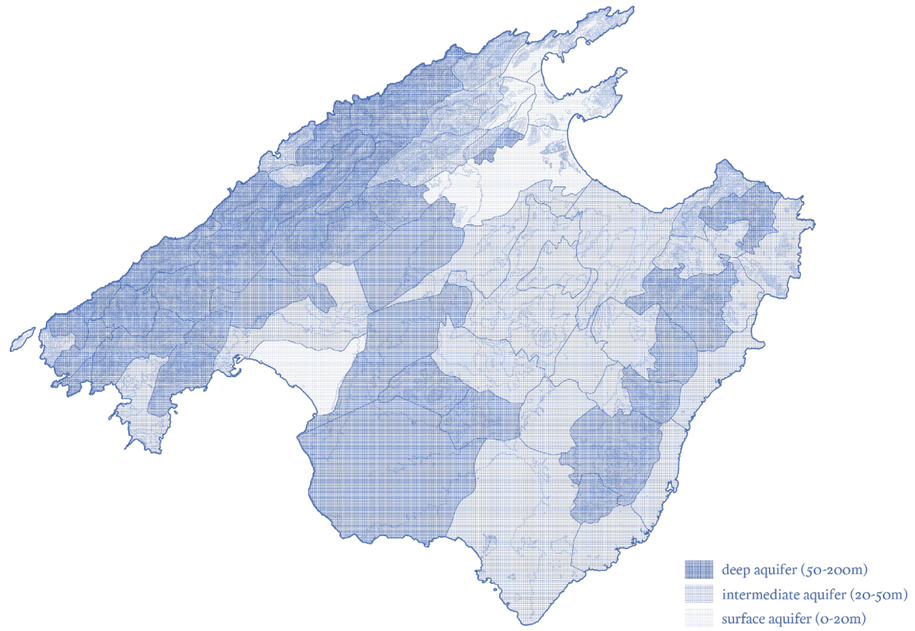


Figure 11: Location and depths of aquifers in Mallorca

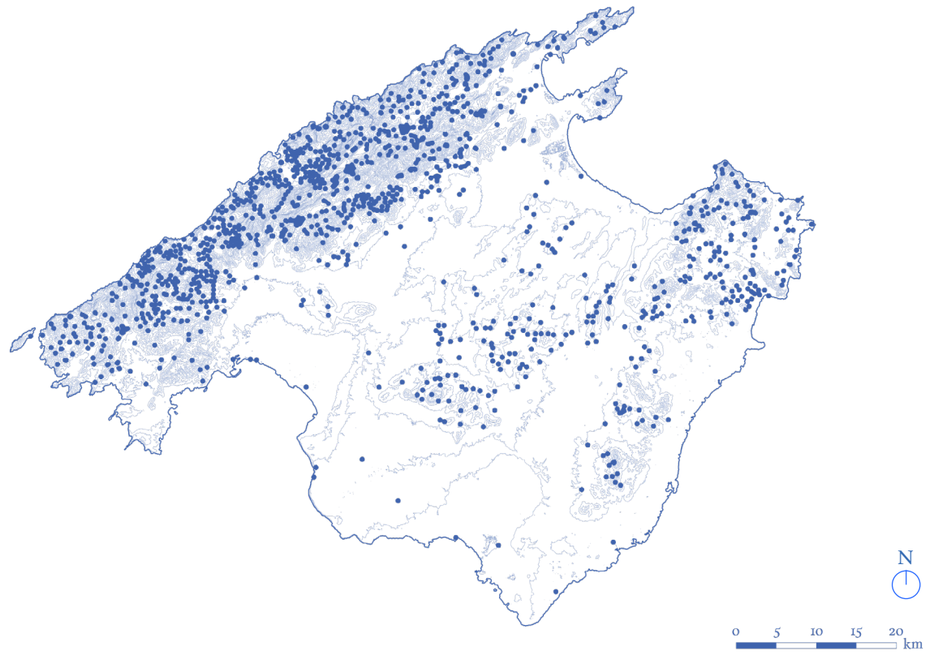


Figure 12: Natural water springs are isolated and scattered around the island but more abundant on the Tramuntana (counting nearly 800 natural sources)

Mallorca‘s water usage

For centuries, Mallorcans navigated a dual condition of hydrological extremes: abundance in winter, drought in summer. Their response was in adaptation, a knowledge system rooted in careful observation and layered infrastructure. Two complementary systems emerged: one for profiting from water, and one for draining it.

In the profit system the infrastructures where designed according to specific needs: minimal flows were reserved for human consumption, moderate flows for irrigation of crops and the most powerful and constant flows were used to drive water mills to use its energy. The destination of water was closely linked to the volume and consistency of flow it could provide. Additionally, the irrigated surface could vary annually depending on the availability of water, reflecting a flexible, adaptive approach to resource management (N. Cañellas i Serrano & Tortella i Araque, 1992). Overall, water use wisely and reduced to the bare minimum, guided by a deep understanding of environmental constraints.

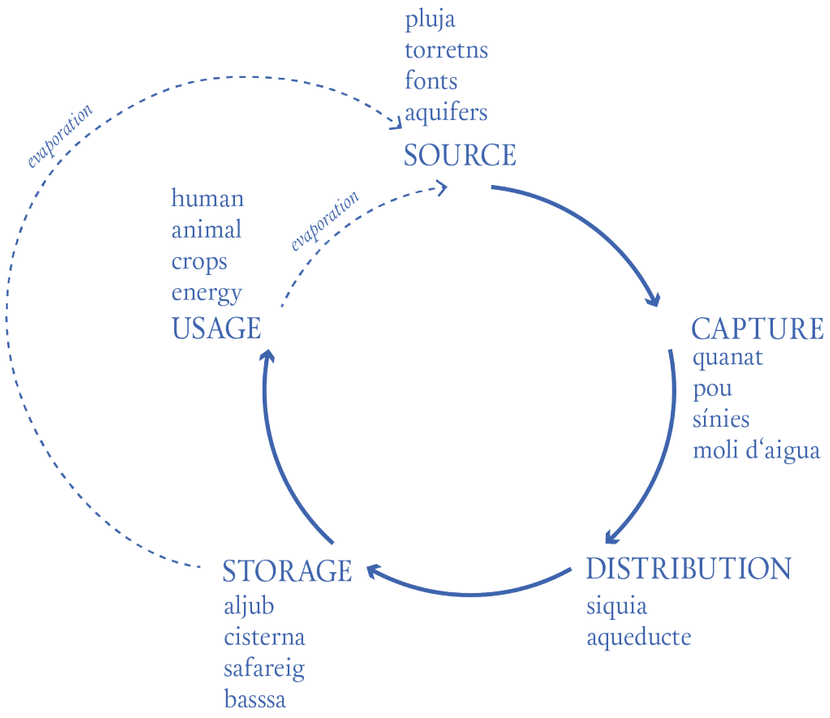


Figure 13: Schematic cycle of the profit system

Water usage, hierarchy, priority

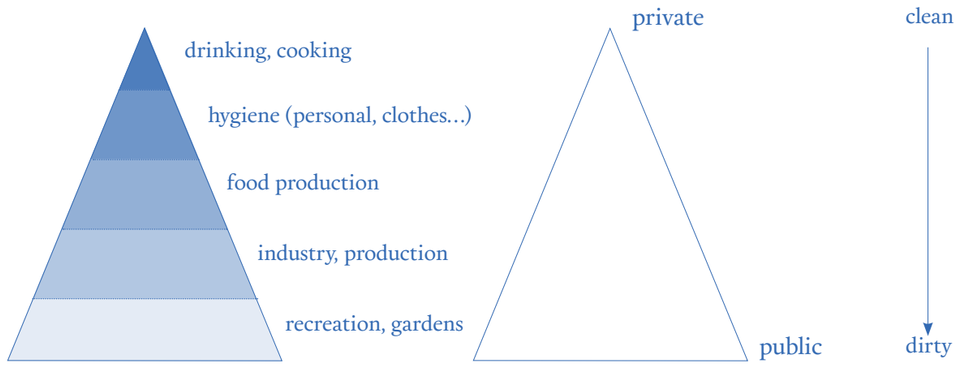


Figure 14: Schematic cycle of the profit system

Mallorca‘s water cosmologies
Yearly water calendar

Water shaped not only infrastructures but imaginations. In a landscape where water could not be taken for granted, anticipation became a form of survival. Over generations, Mallorcans developed a vernacular meteorology: reading rain in the curvature of clouds or the color of wind-swept mountains. A cloud shaped like an eyebrow or cape above a particular peak might be a sign (Cahner et al., n.d.). This intuitive climatology gave rise to oral traditions and proverbs, small poetic devices to carry seasonal wisdom. One such tradition dictated that rainwater should only be harvested during months containing the letter „R," echoing long-standing climatic rhythms.

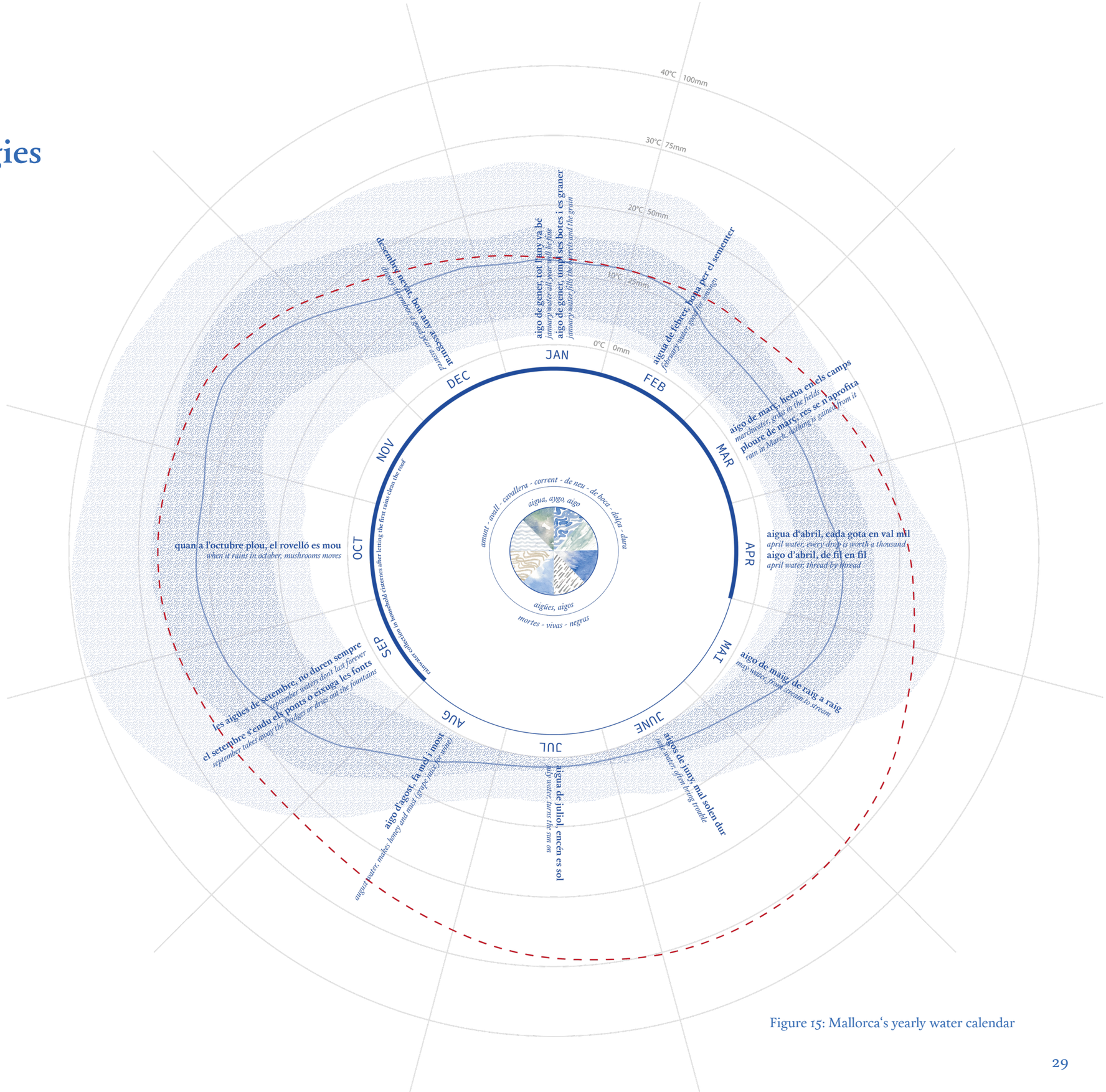
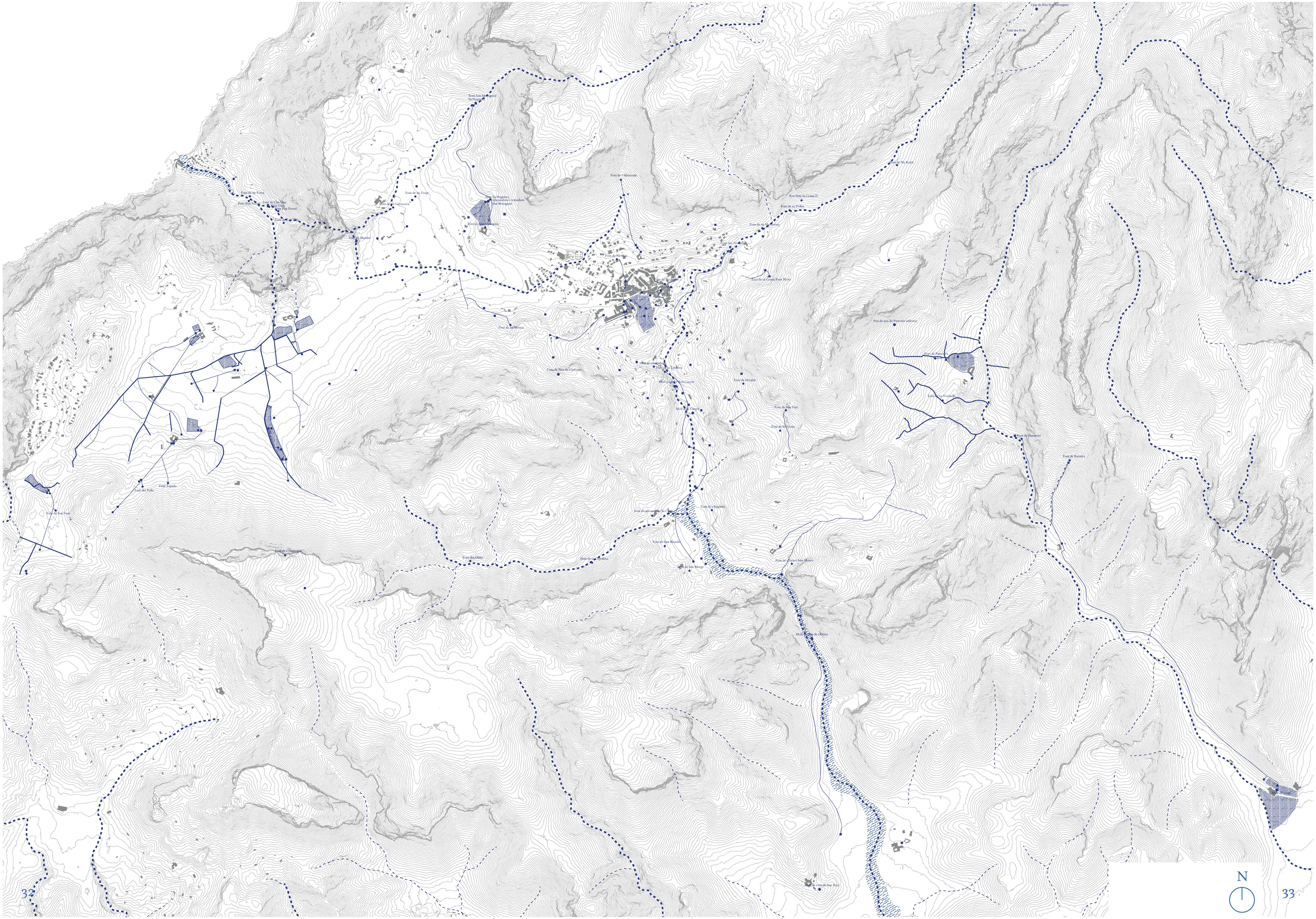


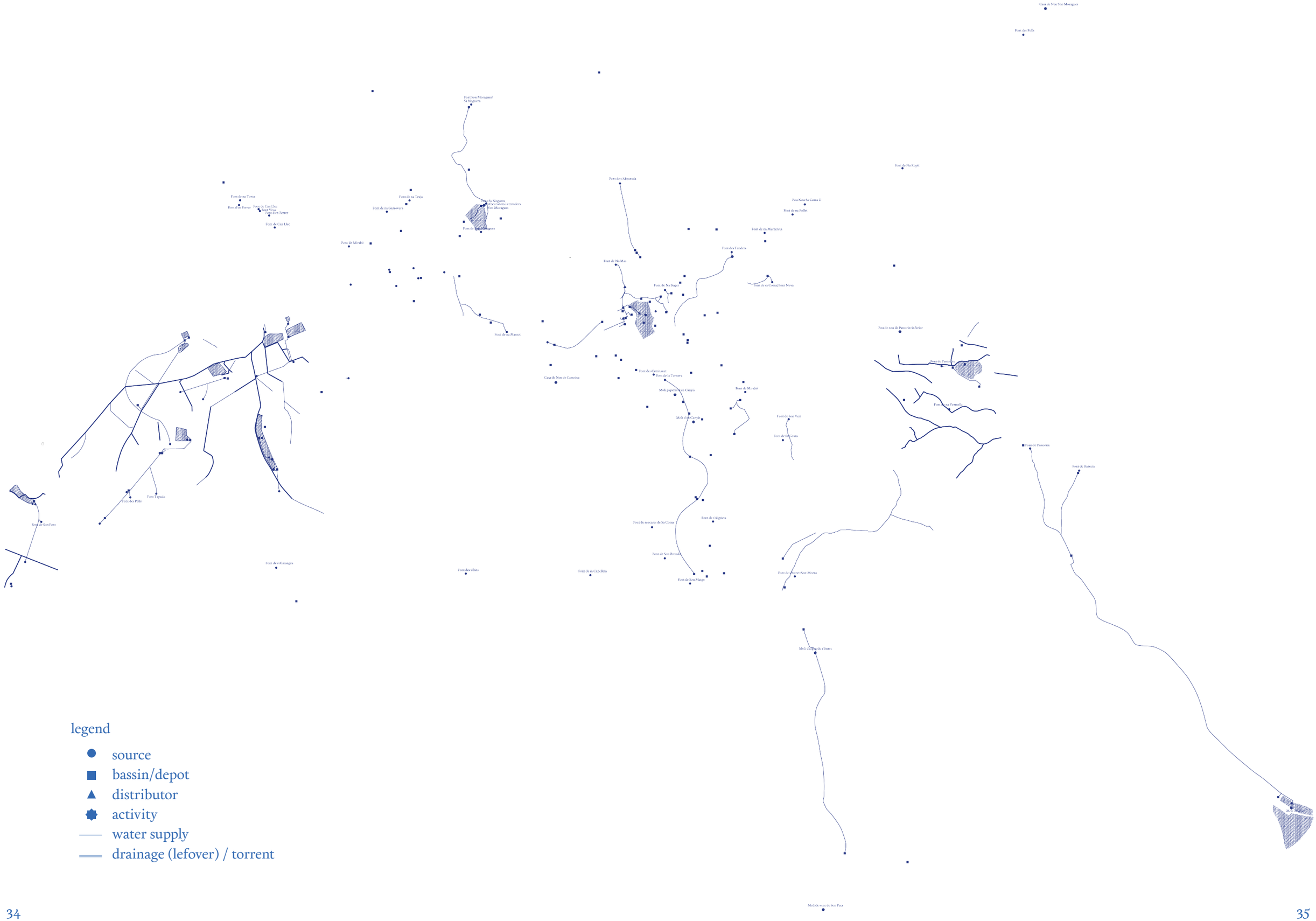
Figure 15: Mallorca‘s yearly water calendar

Valldemossa‘s regional hydrosocial cycle

Following Valldemossa‘s aigua



Casa de Neu Son Moragues
Font des Polls
Font de na Torta
Font d'en Ferrer
Font de Can Lluc
Font Viva
Font d'en Ferrer
Font de Can Lluc
Font de Mirabo
Font de na Truja
Font de na Garrovera
Font Son Moragues/
Sa Noguera
Font Sa Noguera
Abeuradors i rentadors
Son Moragues
Font de Son Moragues
Font de s'Abeurada
Font de Na Mas
Font de Na Bujer
Font de na Massot
Casa de Neu de Cartoixa
Font de s'Ermitana
Font de la Torrera
Molí paperer d'en Canyis
Molí d'en Canyis
Font de Mirabó
Font de Son Veri
Font de Sa Gruta
Pou Nou Sa Coma II
Font de na Pollet
Font de na Murterera
Font des Tenyers
Font de sa Coma/Font Nova
Font de Na Ropit
Pou de neu de Pastoritx-inferior
Font de Pastoritx
Font de na Vermella
Font de Pastoritx
Font de Raixeta
Font des Polls
Font Tapada
Font de Son Font
Font de s'Almangra
Font des Obits
Font de sa Capelleta
Font de ses cases de Sa Coma
Font de s'Aigüeta
Font de Son Brondo
Font de Son Matge
Font de s'Estret Son Morro
Molí de vent de Son Pacs
N

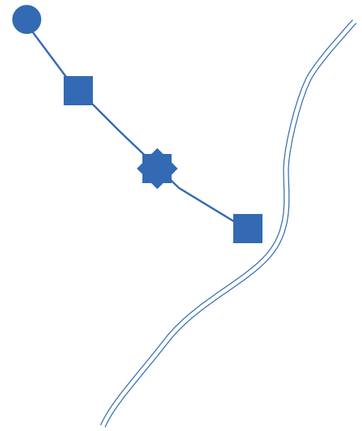


legend

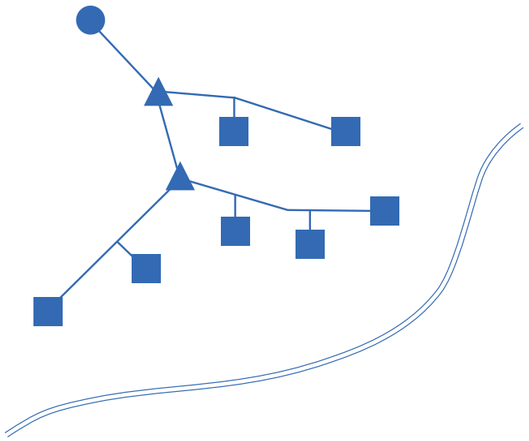
- source
- bassin/depot
- distributor
- activity
- water supply
- drainage (lefover) / torrent

Learning from the landscape the logic behind it

autonomous system



communal system



legend

- source
- bassin/depot
- distributor
- activity
- water supply
- drainage (lefover) / torrent

Water can be captured at different moments: when it rains, when it runs through the drainage network (runoff water but lack of continious stream on Mallorca) and underground, where it accumulates in aquifers. Groundwater can be collected in 2 ways: natural spring or wells natural sping: where in a naural way, the water table intersects with the topographic one wells: drillings that seek to find the water table (N. Cañellas i Serrano & Tortella i Araque, 1992).

A tactile map
an experiencable map

A hand-cut topographic model became a central tool in my exploration, not only as a representational device, but as a way of physically engaging with the landscape's depth and complexity. Layer by layer, the model revealed the island's hidden infrastructures, from carved terraces to the subterranean aquifers that lie like veins beneath the surface. This analogue process became an act of enchantment: a slow, tactile way of learning that invited me to feel the terrain. Through this crafted geography, I could trace the relationships between topography, natural water sources, and historic extraction methods, while uncovering how water flows through the island horizontally and vertically, in a truly three-dimensional system of life.

Mallorca‘s humanized landscape

Margades, margins

Over centuries, Mallorcans have profoundly shaped their mountainous terrain through the construction of marjades: stone terraces that transform steep, rocky slopes into cultivable land. Two main types are distinguished (Carbonero, 1984): small, discontinuous margins, typically found in stonier terrain, serve primarily to control erosion and support the cultivation of rainfed trees; and continuous terraces that follow the contour lines of the land, creating cultivable fields where the slope once made farming impossible. These are often planted with olives, almonds, cereals, or legumes.
Stone, both an obstacle and a resource, is ever-present in the landscape. When its abundance surpasses immediate structural needs, it is carefully arranged into „clapers“ or „caragols“, which themselves become part of the island‘s visual and ecological fabric. This intricate system of terraces and dry-stone walls is anchored around the „possessió“ (the traditional farm land) as the central unit of self-sufficient land management (Garcia, 1986; Forteza, 1955).
This transformation, rooted in dry-stone construction, has given rise to a landscape where human intervention and nature are deeply entwined. Over time, the natural environment begins to reclaim dry-stone constructions, and in doing so, they evolve into singular biotopes, enriched by species and plant communities of notable ecological interest (Centre, n.d.).

A system that shaped the landscape

Dutch engeneer, Paul Bouvij de Schorrenberg, used a windmill to pump the water from the below sea level swamps for the first time in Mallorca. The evolutionary process of successive improve- ments has many similarities with biological evolution, depending on needs, resources and environmental pressure: mutations and selection. Urban expansion: over 2.500 watermills Overexploitation of the groundwater.

Mallorca‘s water infrastructures

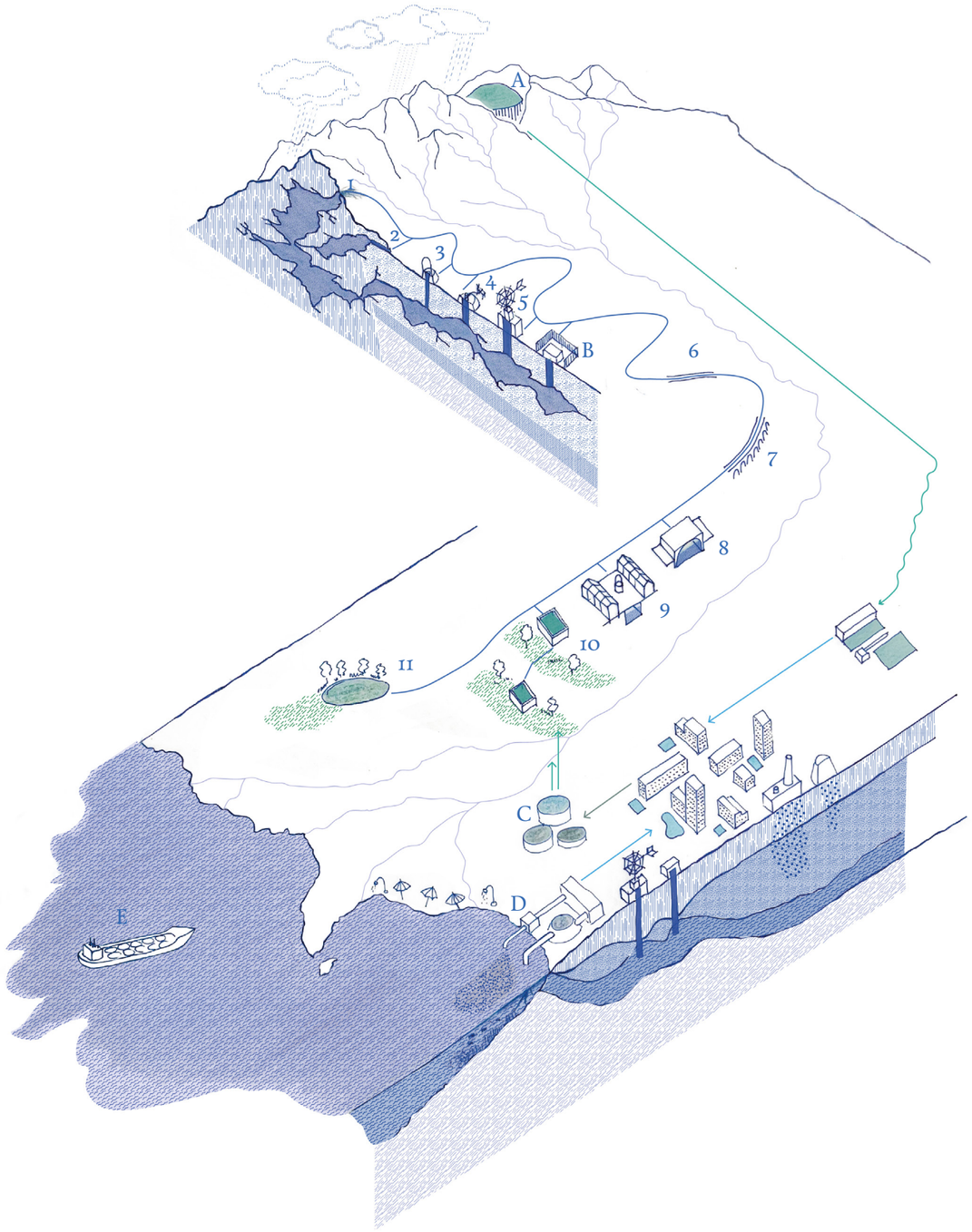


Figure 16: Axonometric drawing of Mallorca‘s past and present water network

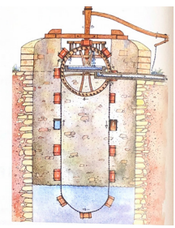
Past

sources/capture

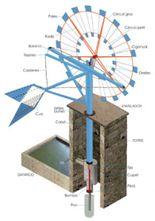
1. source

2. quanat

3. pou



4. sínies



5. moli d‘aigua

distribution

6. siquia

7. aqueducte

storage

8. aljub

9. cisterna

10. safareig

11. bassa

Present

A. water reservoir

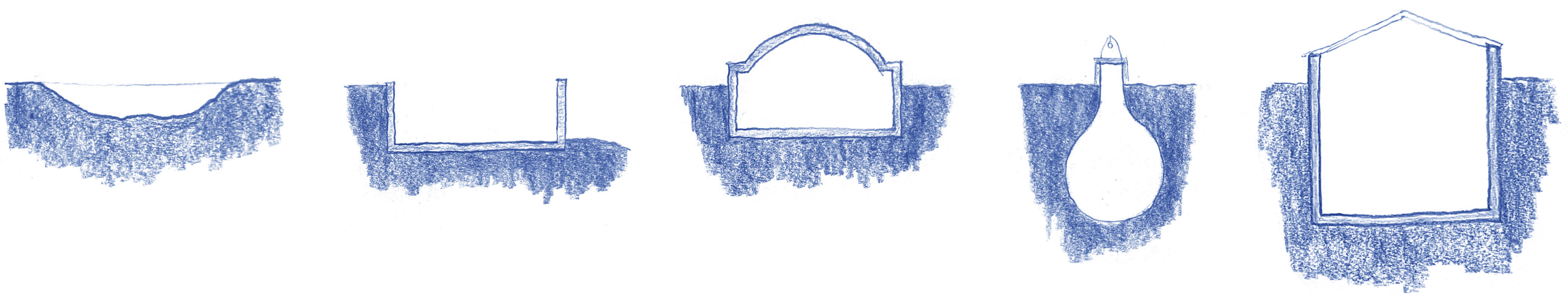
B. modern pou

C. depuradora

D. desalination

E. operacion barco 1995-1997

Water storage typologies



bassa

open basin, good for insects and animals

safareig

artificial water deposit, mainly used for irrigation

aljub

architectural structure, often half underground, intended for the collection and storage of drinking water

cisterna

underground reservoir for rainwater for human consumption

casa de neu

snow house, wells or cavity in the mountain where the snow is collected and stored for summer

Over time, distinct typologies of water storage emerged across the island, each shaped by the specific needs and constraints of its environment. These infrastructures are often buried or enclosed to not only preserve the coolness of the water and protect it from evaporation, but also to shield it from the sun, which the water green and undrinkable. In this concealed state, water becomes less a visual element and more a sensory presence. You do not see it, but you hear it echoing softly through stone channels or dripping within deep cisterns. It appears only in fragments, glimpsed through small openings or reflected in shaded corners. These storage systems reveal a culture of care, where water is guarded like a treasure.

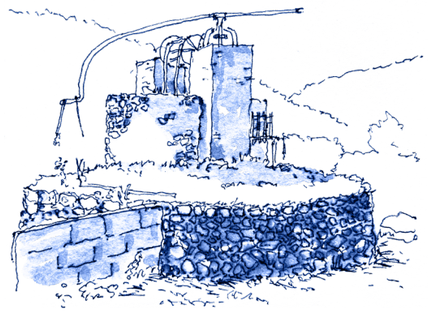
Water ruins,
the remains from the past

casa de neu

snow house

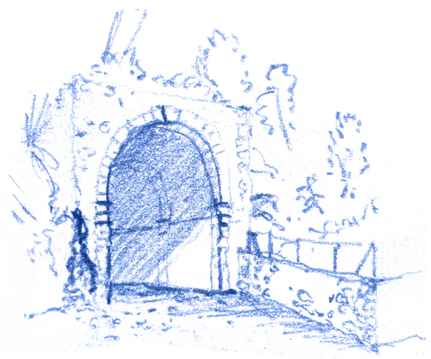
abeurador

drinking pond in the mountains



sinia

noria
from islamic
origin „saniya“,
infrastrucutre to
extract water



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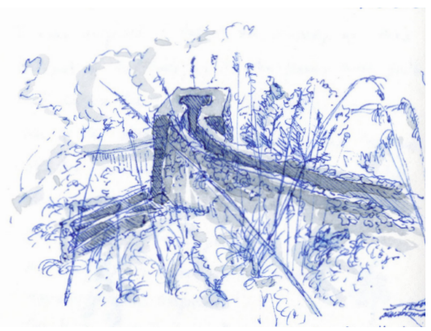


moli de coup

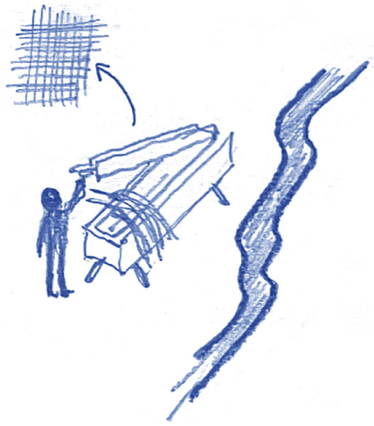
flouer grainding
uses the power of water to turn a
wheel and

Scattered across the Mallorcan landscape are the quiet remains of a water culture: the ruins of cisterns, aqueducts, mills, and channels that once where active and full of life. These structures have not vanished; they linger as monuments. Built from the very stone and earth they rest upon, they possess a tactile quality; weathered surfaces, moss-covered joints, and hand-shaped openings that invite touch and memory. Unlike many heritage sites, these water ruins remain accessible, woven seamlessly into footpaths, terraces, and everyday routines.

Water activites / production

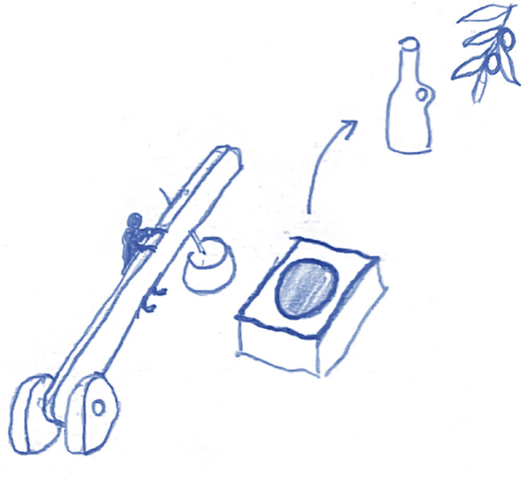
rentadors

cleaning the clothes, place of meeting



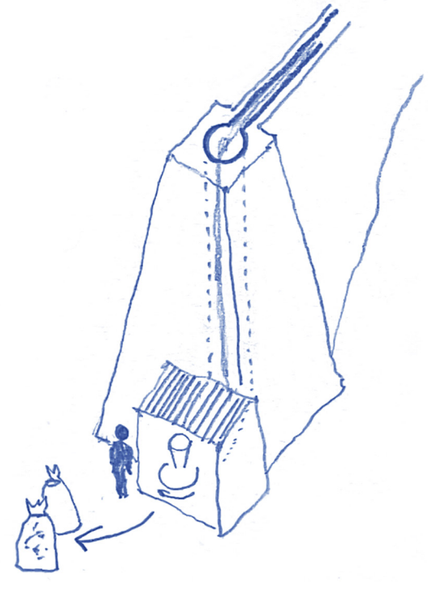
lli

production of linen
many productions required water



tafona

olive oil production



moli de coup

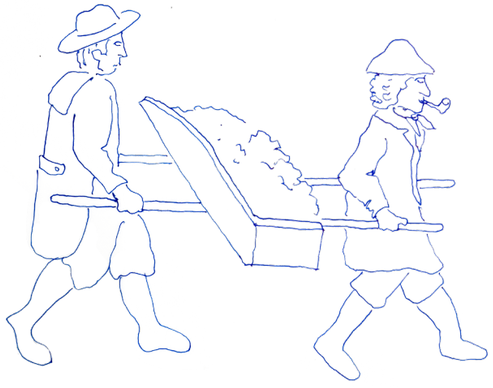
flouer grainding

Historical infrastructures reveal how water was intimately woven into daily labor: used to wash clothes in shared basins, to knead and mix in domestic spaces, or to generate motive power in water mills for grinding flour. These mills, placed strategically at sites of the most constant and forceful flows, embody a profound understanding of hydraulic potential. Water was engaged with, harnessed, and respected as an active participant in human sustenance and craft.

Beyong architecture and landscape water characters

sauri

Person with a special sensitivity to find groundwater and minerals using an ancestral technique that stimulates the awareness of the senses.
It is a real person but with more than human abilities



naveter

People used to collect snow and store it in winter to sell it again in summer as a cooling material and for health properties

aiguader

A waterman was a person whose job was to take care of the water in the ditches. I was also someone who was dedicated to carrying and selling water in the cities

esclau

Slave: To free themselved slaves had to find water (qupte book)
real person but legends aorund it evolved

maria enganxa

A whitch lives inside the wells which are all connected underground. If a child would get lean to forward to the well she would catch them.

dona d'aigua

Catalan mythodology of feminine beings of mesmerizing beauty hat live in places with abundant fresh water. (Fada que habita en fonts, en torrents o altres llocs on hi ha aigua.)

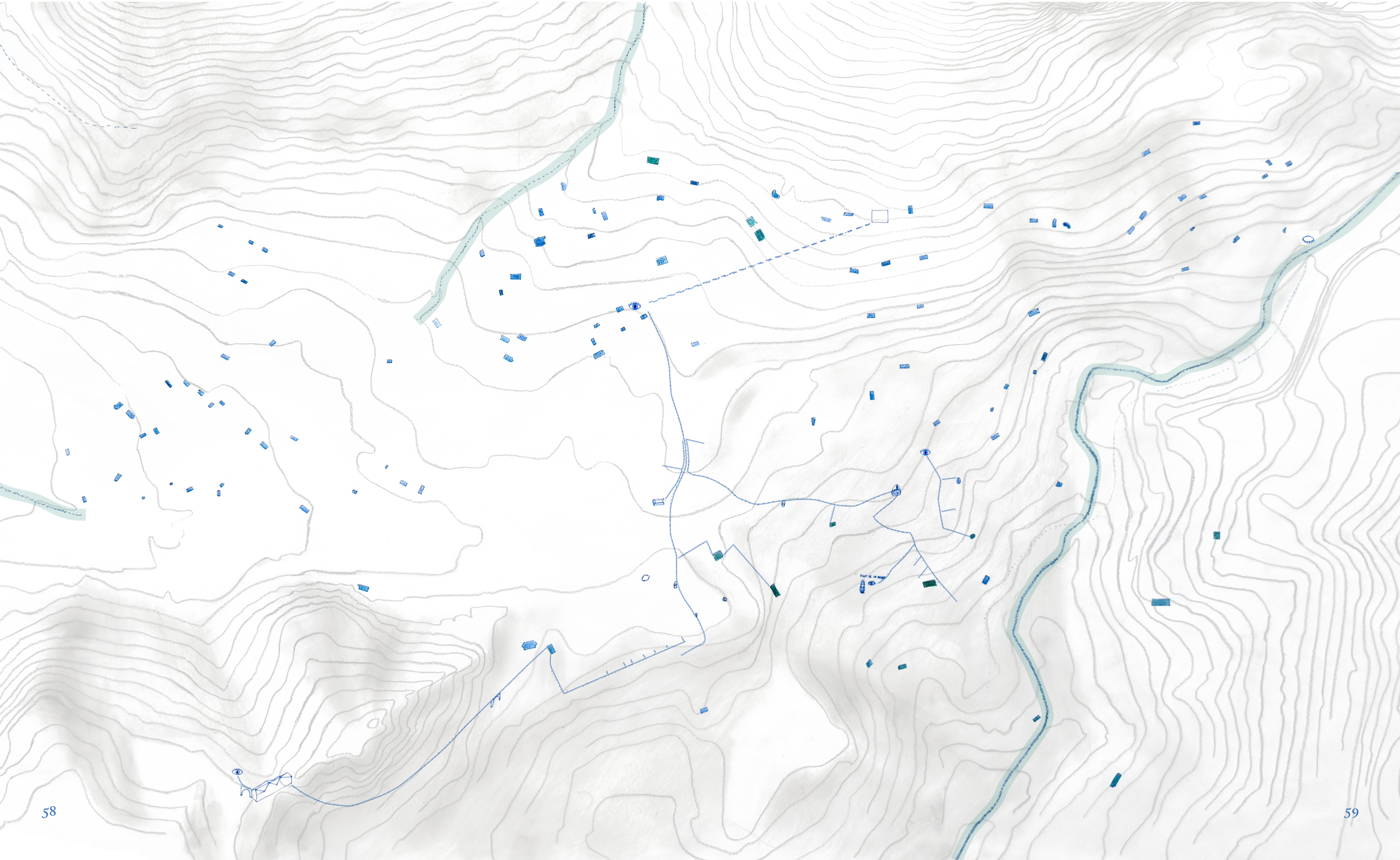
Across Mallorca's cultural memory, water appears through both real professions and imagined figures. Snowmens, watermans and others once held essential roles, forming a network of human caretakers attuned to water's presence and movement. Yet alongside these roles emerged mythical characters embedded in folk stories and oral traditions. These figures reflect a more-than-human relationship with water, one that acknowledges its agency, temperament, and unpredictability. In this interweaving of the material and the spiritual, water becomes a meaning-making force, shaping both landscape and human identity. As geographer Jessica Budds suggests, such relationships uncover alternative knowledges—intimate, experiential, and place-bound—challenging the purely technical view of water and offering instead a deeply felt cosmology. (Budds)

Valldemossa‘s hydrosocial cycle

An enchanted village

Valldemossa‘s water mapping

Valldemossa‘s water mapping



A community

Where there is water, there is life. The presence of water has long determined the origins of human communities. Yet before the age of instruments, people relied on their senses, traditions, and deep attunement to the environment to detect where water pulsed beneath the surface. This perceptual intimacy with the landscape, an ability to see what is not seen, bound human life to water not only out of necessity but through reverence. Water was was listened to, waited for, and respected. It shaped daily behavior and cultivated rituals of care and economy. Even today, wherever water reveals itself in the cool shade of a mountain spring or in the heart of a village square, it draws people in. Around water, communities form, linger, and celebrate. It is a magnetic presence, quietly enchanting the spaces it touches (Cahner et al., n.d.).

A shared system

Comunitat de Regants de la Font de Na Mas

The Font de Na Mas in the village of Valldemossa stands as a testament to a long-standing communal water-sharing system. Rooted in reciprocity and cooperation, the system was managed collectively by a group of tenants who distributed water according to time-based rights. These shared arrangements formed a delicate social contract, carefully negotiated and upheld through rhythms of trust, necessity and mutual care. The water was not owned by one person, it was passed, awaited, and received in cycles.

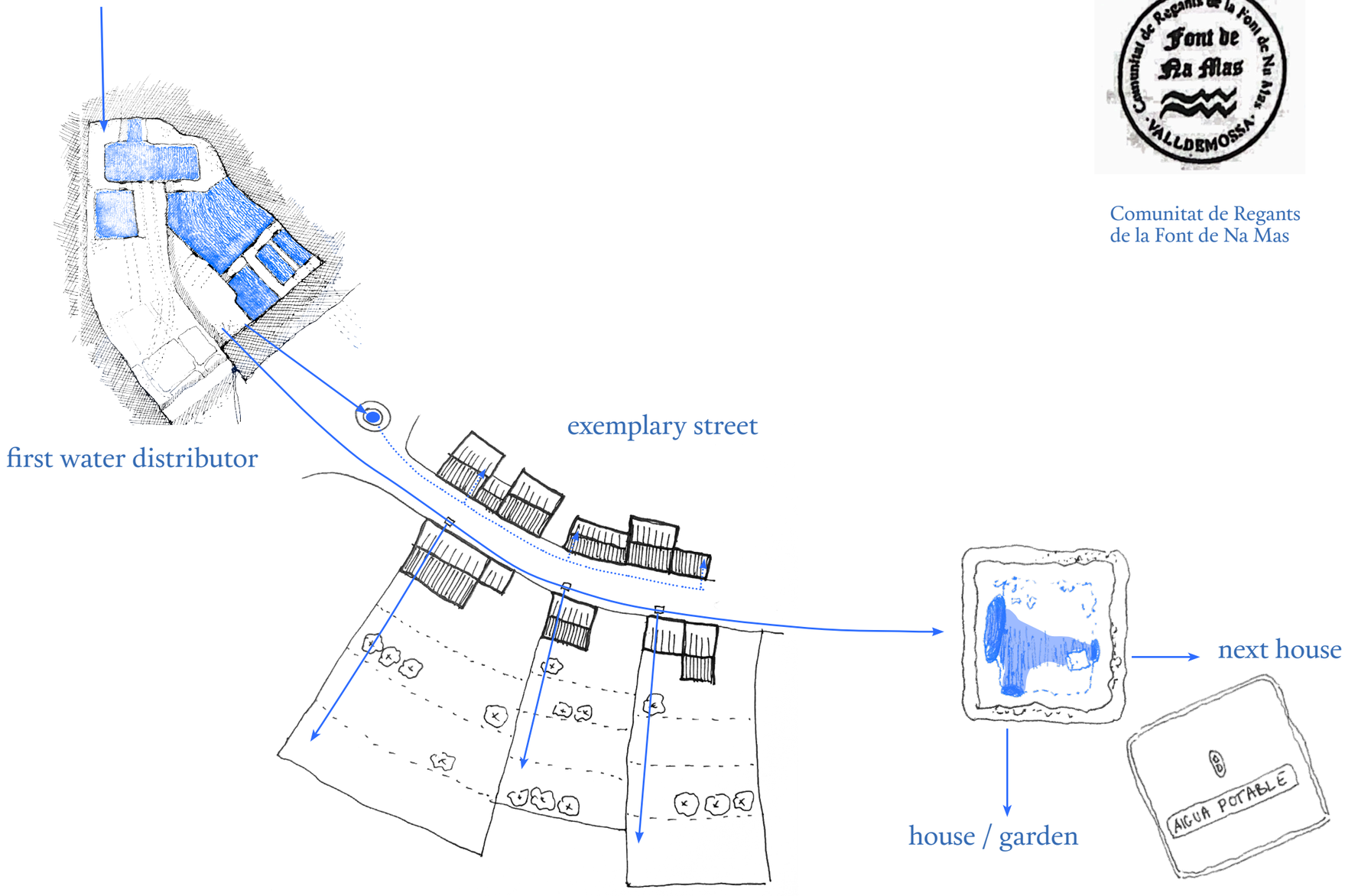


Figure 17: clay model reprodcuing the ditributor

A shared system the distributor

This presents the first distributor of the system. This simple device enables tenants to modulate water flow in multiple ways: a tab could be opened or closed entirely, a narrow passage could permit a constant flow known as the „diner de Cartoixa“ or the „dineret de s'Abeurador“, both named after local institutions, their names derived from the coin-sized holes through which water passed. The Cartoixa monastery and the village's washhouse received their supply through these small, continuous streams. In moments of excess, when water flow surpassed normal capacity, the system would redirect water toward those with the largest reservoirs, preventing overflow towards others and ensuring no drop was wasted.

Figure 18: clay model reprodcuing the ditributor

Water rights

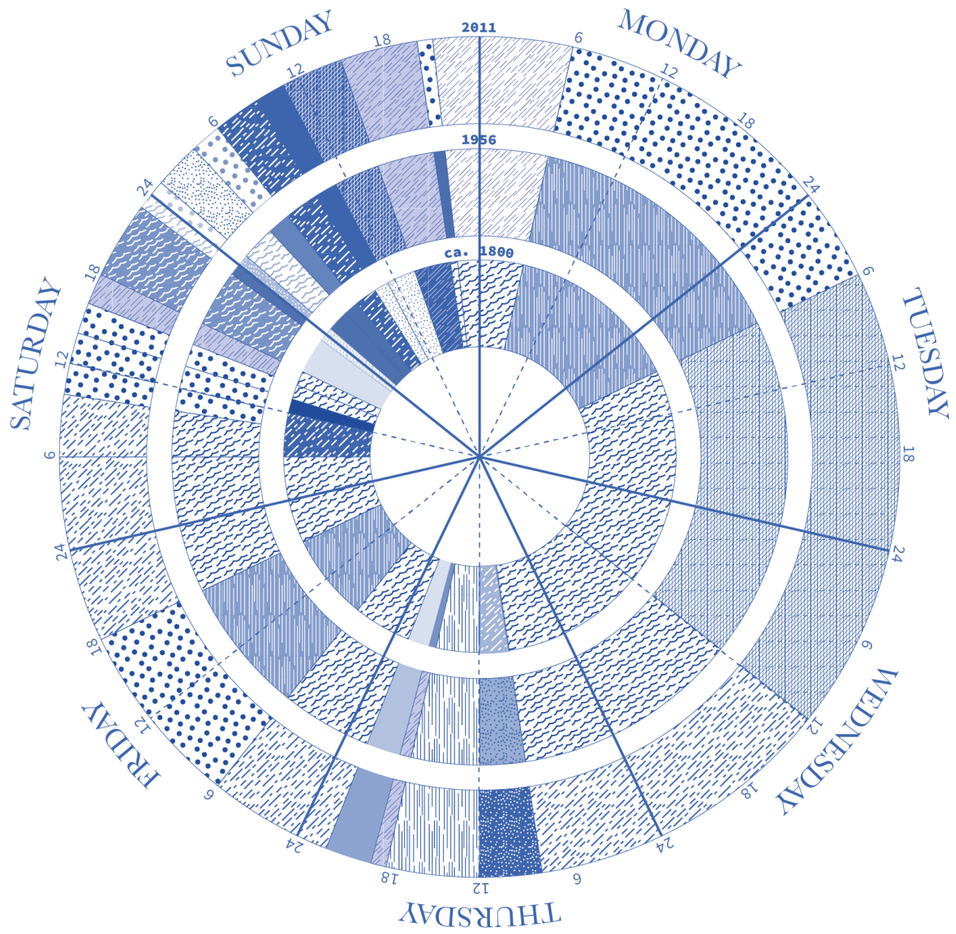
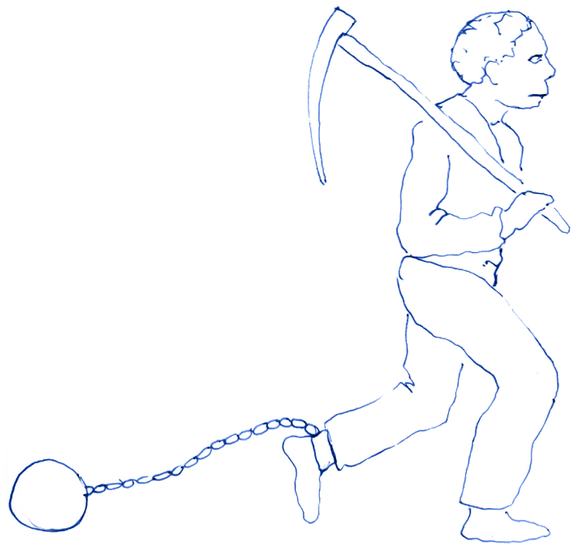


Figure 19: water distribution to the different tenants in Valldemossa in 1800, 1955, 2011

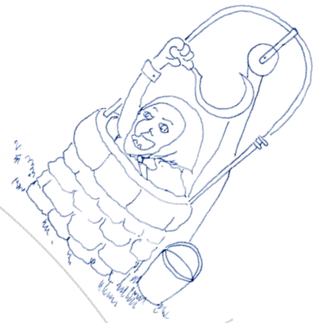
Perhaps most remarkable was the way in which water was measured, not by volume, but by time. The Font de Na Mas was allocated by the hour, with each tenant entitled to draw water for a specific duration, depending on their agreement. Flow was variable, contingent on the eye of the spring and the season's generosity, yet the rhythm of hourly rights remained largely unchanged over generations (1800 until today).

Legend, Ahmed de Pastorix

Once upon a time in the land of Pastoritx, near Valldemossa, the sun had burned the land for far too long. The grass was gone, the rivers silent. The master of the estate grew desperate, his sheep were dying. One day, he gathered his slaves and made a desperate offer: "To anyone who finds water and saves my flock, I will grant freedom."
A slave named Ahmed waited for a favorable moon, and one night he dug and dug with all his strength, thinking of his freedom. The next day, he returned to the master and announced: "A spring flows in Es Polls," he said. "I've found it. Will you keep your promise?"
The master asked Ahmed for seven days to verify the quality of the water. After seven days, Ahmed claimed his reward, which was postponed for another seven days to ensure the flow didn't stop. It didn't. Ahmed insisted again, but the master asked for seven more days to finish building a pond, then seven more to channel the water to the houses, and then seven more, and more, and the seven days never ended.
Ahmed made a decision. He took his spade and blocked the spring. The shepherd, who was nearby, heard the noise and came running. "Please, don't do this," he begged. "At least leave some water for the sheep. "Ahmed told him the sheep would have water, but it would be bad and bitter. For the shepherd, he left a small trickle of clear water to quench his thirst and to remind him of the revenge taken against the master.
And still to this day, people say, the spring at Sa Font d'es Polls flows on.
One stream, bad and bitter.
Another, just a trickle—pure as glass.
A reminder of revenge.



Water cosmologies



Mallorca‘s present water

Dictated by consumption

Arriving at Palma bus terminal

Behind a glass box, in plastic emballage
Hides a precious treasure, once shared by all.
From shared to bought, from need to earned,

The cycle shifts, the flow is turned.
What once was ours, now priced and sold,
The story of water, turned to gold

Water dis-enchantment

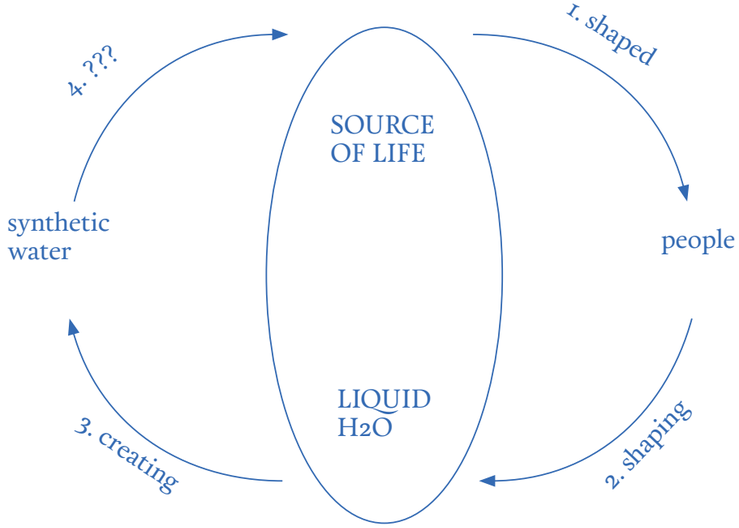
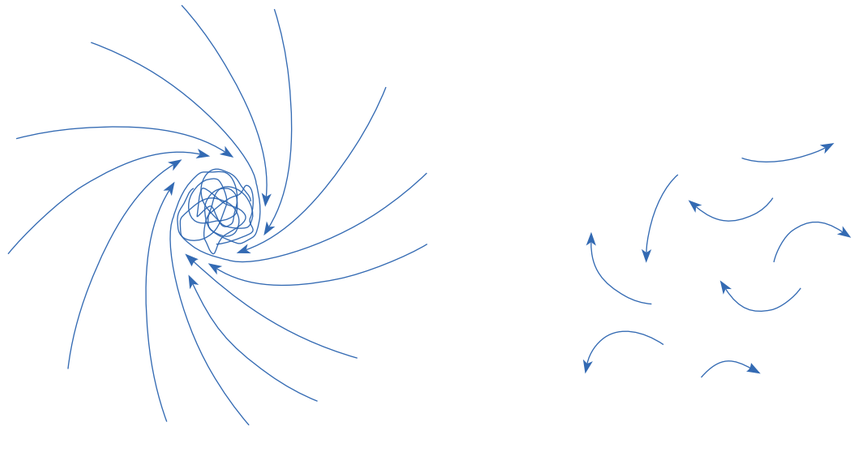


Figure 19: water problem

The current crisis facilitates the artificial creation of value from water, treating it as a commodity or financial product rather than a vital resource (Hof et al., 2014). However, due to water scarcity on the island, today's infrastructure attempts to reversely shape water, transforming saltwater into freshwater, a river into a water reservoir (Cruz-Pérez et al., 2023), effectively creating an engineered or even synthetic water: a resource removed from its ecological and cultural context, processed behind closed systems and hidden from public view.

This technological mediation contributes to a profound loss of relationship and meaning. Where water was once intimately linked to place, season, and community, it is now encountered in sealed plastic bottles, flowing from taps without history, brandished as luxury or convenience. It is no longer sacred, but strategic; no longer collective, but individualized. The spiritual and symbolic dimensions of water have been suppressed or forgotten. The rise of private ownership and profit-driven management systems fuels global movements for water justice, environmental protection, and the reclamation of public water infrastructure.



PROCESS OF ENCHANTMENT
POSSIBLE WORLDS
CAPTIVATED
entry gate to imagination

REPRESSIVE DESSUBLIMATION
DIS-ENCHANTMENT
DISORIENTATION
cannot get to the core

This transformation can be read through the lens of repressive desublimation, a concept developed by Herbert Marcuse in One-Dimensional Man (1964). Marcuse argues that in advanced industrial societies, even liberation becomes a form of control: instinctual desires and deeper imaginative potentials are not repressed outright, but are instead flattened and commodified. Subversive impulses are absorbed into mass culture, redirected into consumption, and emptied of their critical power. Desire, once a generative force that could give rise to new forms of consciousness, becomes domesticated.

Enchantment, in contrast, opens a space for possible worlds. As Jane Bennett suggests, enchantment is not naïve mystification, but a sharpened attentiveness, a state of being struck, affected, and attuned. It invites a pause, a recognition of something more, something not yet fully knowable. Enchantment does not bypass reason; it expands it. It makes room for awe, for moral and aesthetic reflection, for the imaginary. It does not simply restore beauty to the world, it reawakens agency and care.

If repressive desublimation leads to disorientation and disconnection, enchantment can re-orient us toward complexity, contingency, and interdependence. It is not about going backward to a romanticized past, but about recovering the capacity to feel water again, to recognize its sounds, its rhythms, its absences. .

Water usage

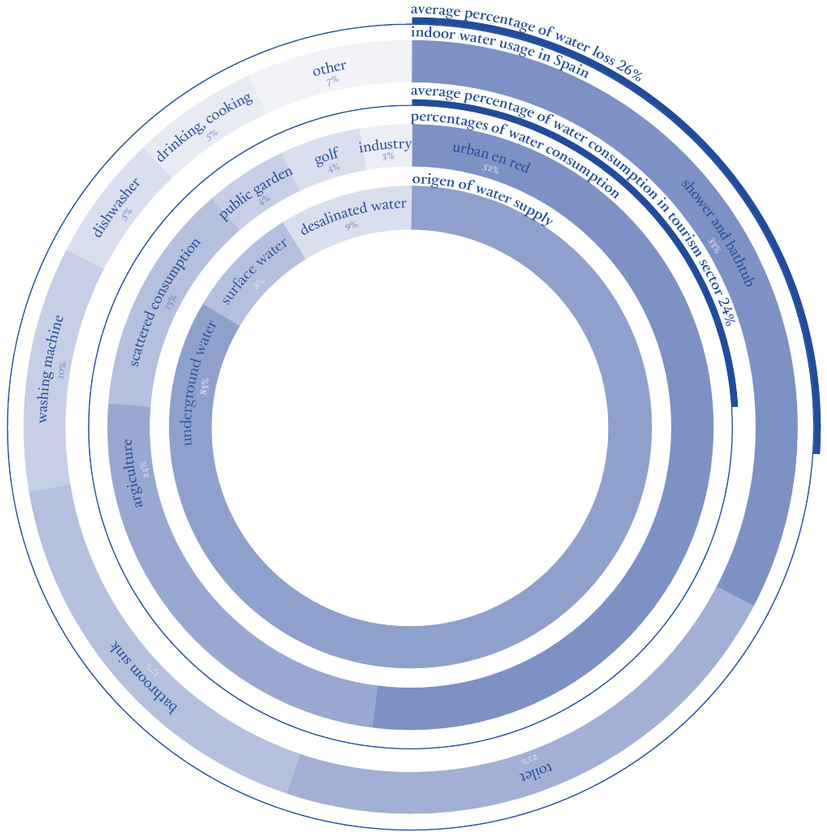


Figure 20: Water statistics

In facing contemporary water challenges, the response is frequently framed through increased restrictions or added pressure on aquifers, rather than through efforts to renew cultural and perceptual engagement. Meanwhile, water consumption has risen dramatically, increasing from an average of 100 to 400 liters per person per day in recent years, particularly during the (Garcia et al., 2023). This growing detachment underscores the urgency of restoring a visible, lived connection to water in the landscapes we inhabit.

Valldemossa‘s present water infrastructures

In contrast to the historically intimate relationship between people and water, today‘s modern water infrastructure often feels distant and unwelcoming. Defined by fences, barriers, and locked enclosures, it offers little visual or physical access. This disconnection contributes to a broader erosion of our relationship with water. When we no longer see or interact with it, its presence fades from our daily awareness, and with that, our sense of care and responsibility diminishes. Water becomes an invisible utility rather than a shared and valued resource. In facing contemporary water challenges, the response is frequently framed through increased restrictions or added pressure on aquifers, rather than through efforts to renew cultural and perceptual engagement. Meanwhile, water consumption has risen dramatically, increasing from an average of 100 to 400 liters per person per day in recent years, particularly during the (Garcia et al., 2023). This growing detachment underscores the urgency of restoring a visible, lived connection to water in the landscapes we inhabit.

Bibliography

Anderson, A., Bauer, B., Deller, S., Korth, R., Marcouiller, D., & Shepard, R. (n.d.). Water Issues in Wisconsin—Water as a Public Good: Property Rights.

Arellano, B., Zheng, Q., & Rica, J. (2024). Analysis of Climate Change Effects on Precipitation and Temperature Trends in Spain. ResearchGate. https://doi.org/10.20944/preprints202409.1764.v1

Bennett, J. (2001). The Enchantment of Modern Life: Attachments, Crossings, and Ethics. Princeton University Press. https://www.jstor.org/stable/j.ctt1ggjkxq

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health, 11(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Budds, J., Linton, J., & Mcdonnell, R. (2014). The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water. Geoforum, 57, 167–169.

Cahner, M., Pujol, J., & González Virós, I. (n.d.). La cultura de l'aigua. Enciclopedia.Cat. Retrieved 25 April 2025, from https://www.enciclopedia.cat/tradicionari/la-cultura-de-laigua

Cañellas i Serrano, N. S., & Manera, C. (1993). L'aigua, el vent, la sang: L'ús de les forces tradicionals a Mallorca (1. Aufl). Ed. Documenta Balear.

Cañellas i Serrano, N., & Tortella i Araque, J. (1992). La gestió tradicional de l'aigua a Valldemossa Son Ferrandell, Son Oleza, Vistamar. EMAYA.

Carter, H. (2024, July 3). Panic over Mallorca water cuts. Majorca Daily Bulletin. https://www.majorcadailybulletin.com/news/local/2024/07/03/125377/mallorca-tourism-panic-over-mallorca-water-cuts-balearic-restaurant-associations-demand-urgent-solutions-from-the-government.html

Centre, U. W. H. (n.d.). Cultural Landscape of the Serra de Tramuntana. UNESCO World Heritage Centre. Retrieved 16 October 2024, from https://whc.unesco.org/en/list/1371/

Climate Change Majorca. (n.d.). Meteoblue. Retrieved 19 January 2025, from https://www.meteoblue.com/en/climate-change/majorca_spain_2514239

Couling, N., d'Alençon, P. A., & Altiok, M. (2019). Narrative Cartography: Capturing a Holistic Perspective on Waterscapes. European Journal of Creative Practices in Cities and Landscapes, 2(1), Article 1. https://doi.org/10.6092/issn.2612-0496/8808

Cruz-Pérez, N., Rodríguez-Martín, J., García, C., Rodríguez-Lozano, P., Tirado, D., García-Gil, A., & Santamarta, J. C. (2023). A carbon footprint: The full water cycle in the Balearic Islands. Sustainable Water Resources Management, 9(4), 131. https://doi.org/10.1007/s40899-023-00901-7

Dubon i Pretus, M. L. (2011). Cultural Landscape of the Serra de Tramuntana; Proposal for inscription in the World Heritage List (UNESCO). Conseill de Mallorca. https://whc.unesco.org/uploads/nominations/1371.pdf

Fein, A. (2022, June 6). The Catalan Atlas. Smarthistory. https://smarthistory.org/catalan-atlas/

Garcia, C., Deyà-Tortella ,Bartolomé, Lorenzo-Lacruz ,Jorge, Morán-Tejeda ,Enrique, Rodríguez-Lozano ,Pablo, & and Tirado, D. (2023). Zero tourism due to COVID-19: An opportunity to assess water consumption associated to tourism. Journal of Sustainable Tourism, 31(8), 1869–1884. https://doi.org/10.1080/09669582.2022.2079652

Gell, A. (1992). The Technology of Enchantment and the Enchantment of Technology. In J. Coote (Ed.), Anthropology, Art, and Aesthetics. Clarendon Press.

Ginard Bauçà, R. (2020). Calendari Folklòric de Mallorca. Tardor.
Ginard Bauçà, R. (2021). Calendari Folklòric de Mallorca. Estiu.
Ginard Bauçà, R. (2022a). Calendari Folklòric de Mallorca. Hivern.
Ginard Bauçà, R. (2022b). Calendari Folklòric de Mallorca. Primavera.

Hof, A., Blázquez-Salom, M., Colom, M. C., & Périz, A. B. (2014). Challenges and Solutions for Urban-Tourist Water Supply on Mediterranean Tourist Islands: The Case of Majorca, Spain. In A. Bhaduri, J. Bogardi, J. Leentvaar, & S. Marx (Eds.), The Global Water System in the Anthropocene: Challenges for Science and Governance (pp. 125–142). Springer International Publishing. https://doi.org/10.1007/978-3-319-07548-8_9

Kent, M., Newnham, R., & Essex, S. (2002). Tourism and sustainable water supply in Mallorca: A geographical analysis. Applied Geography, 22(4), 351–374. https://doi.org/10.1016/S0143-6228(02)00050-4

Lovell, J., & Griffin, H. (2022). Unfamiliar light: The production of enchantment. Annals of Tourism Research, 92, 103328. https://doi.org/10.1016/j.annals.2021.103328

Ludwig Salvator, A. of A. (with Harvard University). (1897). Die Balearen ; geschildert in Wort und Bild. Würzburg und Leipzig, L. Woerl. http://archive.org/details/bub_gb_McoCAAAAYAAJ

Mateos Ruiz, R. M., & González Casasnovas, M. C. (2009). Els camins de l'aigua de les Illes Balears. Aqüífers i fonts.

Sahlins, M., & Henry, F. B. (2023). The new science of the enchanted universe an anthropology of most of humanity (First Paperback printing). Princeton University Press.

Sand, G. (1841). Un hiver à Majorque.

Serrano Darder, J. A. (2013). La síquia de Na Mas—Un patrimoni històric soterrat. Miramar, Plecs de Cultura Popular XXIII, 6–16.

Simulated historical climate & weather data for Majorca. (n.d.). Meteoblue. Retrieved 19 January 2025, from https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/majorca_spain_2514239

St John, F. A. V., Edwards-Jones, G., & Jones, J. P. G. (2010). Conservation and human behaviour: Lessons from social psychology. Wildlife Research, 37(8), 658. https://doi.org/10.1071/WR10032

Strang, V. (2004). The meaning of water. Berg.

Trias Mercant, S., Muntaner Marroig, J., & Lladó Vila, J. (1996). Valldemossa: Historia, mitos y tradiciones. J.J. de Olañeta.

Valero Martí, G. (1989). Elements de la societat pre-turística mallorquina. Govern Balear, Conselleria de Cultura, Educacio i Esports.