



CULTURAL LANDSCAPE OF THE SERRA DE TRAMUNTANA

Nomination for inscription on the World Heritage List (Unesco)
2010

This is the information that was presented in *Chapter 2 of the nomination proposal,* referring to the description of the property. It was posted on the Internet, for free consultation, and is now collected in its entirety in this document.



1. NATURAL LANDSCAPE

Physical and natural features

The geological substratum and reliefs

The climate

Flora

Fauna

PHYSICAL AND NATURAL FEATURES

The Tramuntana landscape is the outcome of the application of the cultural know-how of civilisations that succeeded one another there on its physical and natural environment. In the case of the Tramuntana area, this natural environment is basically marked by four main characteristics:

- Abrupt, rugged reliefs, with an altitude of up to 1,450 metres very close to the sea, consisting predominantly of extremely hard permeable limestone rock, resulting in a landscape with karstic formations. It is criss-crossed by a dense network of streams, dry torrent beds, old streambeds, gullies and torrents, as well as aquifers that supply the many springs, as part of what is a Mediterranean water system.
- A climate marked by Mediterranean characteristics, distinguished by dry hot summers and mild winters, and an irregular rainfall pattern with peaks in rainfall in autumn and spring and a pronounced rainfall gradient oscillating between a wetter central mountain area (between 800 and 1400 mm of rainfall per year) and progressively drier extreme areas.
- Mediterranean woodland vegetation with forests of evergreen Balearic holm-oaks (Cyclamini-Quercetum ilicis) that represent a climax plant community, replaced in areas that are less wet by wild olive macchia or scrub (Oleo-Ceratonion ass. Cneoro ceratonietum) of a thermophilic nature extremely common in the Mediterranean which colonizes places where holm-oak woods are in a significant state of degradation. This macchia is heavily colonized by the Aleppo pine (Pinus halepensis) species. In the Tramuntana area, there are also plant communities that make up high Balearic ground cover (Hypericion balearici), an extremely low plant formation featuring an outstanding abundance of endemic plants.
- Wild fauna, also abundant in the form of endemic species, marked to a large extent by the double insularity entailed by the presence of a mountain district, in itself already isolated from the rest of the region, within an island.

The environmental importance of the Tramuntana area is therefore especially well known in terms of the singularity of its reliefs â€" particularly the karstic landscape -, the originality of its plant communities, presence of endemic, rare and relict taxonomic groups of flora and fauna, and the environmental diversity of its habitats and fauna and flora. In the case of flora, the Tramuntana area contains 65 of the 97 native species described in the Balearic archipelago, and 65 of the 68 plants endemic to the island of Mallorca. Moreover, the Tramuntana area was and still is an important source of resources for Mallorca's society, supplying not only agricultural, forestry and livestock products, but also significant water supplies that are decisive for the rest of the island.

THE GEOLOGICAL SUBSTRATUM AND RELIEFS

The geological materials that compose the Tramuntana area cover a period spanning the end of the Palaeozoic Era (Carboniferous Period) and the lower Miocene, that is to say a period of time of between 240 and 15 million years. In general, the mountain range is made up of sedimentary rocks, predominantly Jurassic limestone (Secondary era), which give rise to the characteristic greyish colour of the range's summits and cliffs.



The large limestone packages from the Jurassic period are responsible for the grayish color of the peaks and cliffs of the Tramuntana mountain range.

These rocks are formed by sedimentation occurring at the bottom of former sea basins that were subsequently "around 15 million years ago "affected by what is known as the Alpine orogeny. This was a long mountain-formation process that took place as a result of the collision of the African and European continents, causing the slow folding of big marine sedimentary rock masses that now constitute the Mediterranean's most important mountain ranges, such as the Atlas Mountains, Baetic Mountains, Alps or Pyrenees.

The rocks that today compose the Tramuntana Mountains were therefore subjected to a process of compression in a north-westerly direction. This gave rise to the range's successive folds and thrusts, aligned in a north-easterly/south-westerly direction and stacked towards the northwest. Consequently the northern face of the range has more energetic reliefs, corresponding in general terms to the thrust fronts, whilst the southern face is gentler in relative terms, since it adapts to the general southeast inclination of its rocky materials.

Another characteristic of the reliefs of the Tramuntana Mountains is the alternation of large cliffs and summits with valleys and faces that are not so steep, due fundamentally to lithological differences: the cliffs and massifs are formed by the hardest limestone rocks, whilst much softer materials have settled at the base, such as clays or calcarenites "materials characteristic of mountain slopes and valley bottoms. This alternance of hard and clayish materials is also important because it explains the emergence of water in the form of numerous springs and sources.

This general north-easterly/south-westerly layout of its reliefs is interrupted by perpendicular cuts caused by faults that occurred during the aforementioned orogeny, but also as a consequence of the expansion process that took place after it had concluded. This is how the valleys of Valldemossa,



The pressures that the mountain range suffered during the alpine orogeny give it a very steep northern slope and a softer southern slope (in the image, the Formentor peninsula).

Puigpunyent or Sóller appeared. At other points, these fracture lines are places where large karstic canyons and gullies have formed, due to the physical disintegration and chemical dissolving of the limestone rocks.

On this mainly limestone lithological base, there is an immediate succession of erosive processes that give rise to a distinctive geomorphology, since they cause the rupture, transportation and sedimentation of rocks. In the Tramuntana Mountains four main modelling typologies can be observed: a fluvio-torrential system, associated with gullies and torrents, a facial system in the form of cliffs and slopes, a coastal system, typical of the coastal area, presenting morphologies such as coastal cliffs and coves, and a karstic modelling system, the result of the chemical action of water dissolving limestone rock: an essential factor in the landscape's singular features.

The fluvio-torrential system is extremely well represented in the Tramuntana area, through the presence of an extensive network of torrents, gullies, streams, torrent beds and streambeds. In Mallorca, the concept of a torrent is used to refer to a short watercourse where water flows intermittently or temporarily along a fixed channel. Its main characteristic is that it is episodic, and may dry out for part of the year. In general terms, the fluvio-torrential system makes use of soft materials found on the base of the limestone massifs to create broad longitudinal valleys through which the network of torrents is organized. Even so, it is frequent in headwater areas to find torrents carved out of limestone packets, taking advantage of structural fractures or weaknesses, creating deep cuts in the rock and turning into spectacularly-shaped karstic canyons.

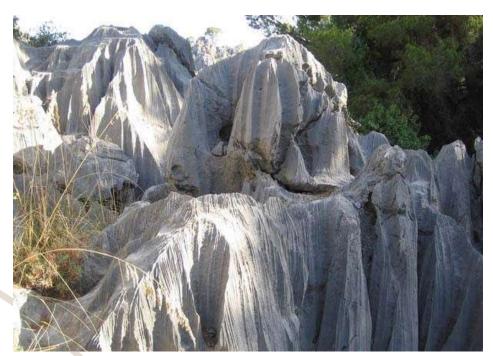
The watercourses in the Tramuntana Mountains "torrents, as they are called locally "are for the most part positioned longitudinally, following the direction of their geological structure, although they are also often positioned in short crosswise sections that carve out gullies and small canyons (so-called estrets), such as those of the Ternelles valley, Cúber plain, connection between the Orient valley and central plain of Mallorca via Es Freu and Coanegra, and the emblematic Valldemossa *strait*. The coastal face is made up of extremely steep, brief streams and torrents that descend almost directly from the line of summits down to the sea.

The modelling of the facial system encompasses a wide range of processes and forms caused by the action of meteorization processes on the slopes and peaks of rocky mountains. Modelling processes related to large falling boulders are well represented in the mountain range, as is the slow dismembering

of slopes, forming small or large areas of scree, due to the accumulation of boulders that have come loose from the sides of the mountains. Thirdly, the coast is a highly dynamic environment in which modelling takes place by means of mechanical processes (abrasion caused by wave movement) and bio-erosive processes caused by the organisms typical of these environments.

Nonetheless, the most interesting system and landscape in geomorphological terms in the Tramuntana area is the karstic system. It is an erosive system typical of carbonate rocks (as indeed limestone rocks are), composed for the most part of calcium carbonate. They are attacked chemically by water in the presence of carbon dioxide, in a process known as karstification. These rocks give rise to a wide variety of morphologies both on their exterior (exokarst) and on their interior (endokarst, which forms underground galleries, caves and chasms).

In the Tramuntana area, the exokarst is apparent in the form of external morphologies such as sink holes, karren fields and karstic canyons. The Torrente de Pareis, in the municipality of Escorca, is an excellent example of this latter morphology. Karren produces a landscape with a striated appearance, popularly known as *rellar* or *esquetjar*, words that appear repeatedly in the Tramuntana toponymy. The most spectacular shapes include those of the *Ses Monges* field or Es *Pixarells*, in the Lluc area (municipality of Escorca). Superficial karst modelling also gives rise to the presence of closed depressions "sink holes" which dissolving processes have helped form. Meanwhile, endokarstic signs are also extremely frequent in the mountain range. There is a remarkable abundance of vertical underground cavities (*chasms* or *avencs* according to popular Catalan terminology), which can reach depths of up to 100 m. You can also find typical caves, which form a complex series of cavities through which an underground water drainage system can be traced.



Exokarstic forms are frequent in the central zone of the mountain range.



Puig de Massanella, Escorca.

THE CLIMATE

The main characteristic of the Mediterranean climate is none other than its summer droughts, since the hot period of the year coincides with a very low minimum rainfall, so the growth of vegetation is limited to a large extent by the scarcity of water in the soil. Thus by definition the Mediterranean climate is characterized by a shortage of summer rains leading to dry summers, and, on the island of Mallorca, this dry period peaks during the months of July and August, also preceded by a low rainfall in late spring.

Climatic factors play a decisive role in the Tramuntana area. The influence of large systems of depressions or low pressure originating in the Atlantic is not very important in Mallorca, whereas the influence of locally created aggravated disturbances are extremely important. The unique conditions of the basin formed by the Western Mediterranean, surrounded by high reliefs, make this area particularly prone to cyclogenesis, with the formation or reactivation of disturbances. This means that the Western Mediterranean is, in fact, the region in the northern hemisphere with most cyclogenetic activity in the cold season. The points where the formation of the centre of a depression is most probable are, in this order: the gulf of the Liguria-Tyrrhenian Sea, the gulf of Leon, the Catalan-Balearic Sea, the Algerian coast and the Alboran Sea. Peak rainfall in the month of October reflects the effectiveness of these Mediterranean disturbances.

In spite of the similarity in the rainfall pattern recorded by the island's different meteorological observatories, the rainiest sectors can be identified as the central part of the Tramuntana Mountains, where there is a second peak in rainfall after the month of October, specifically, in December. In this case, it is assumed that orographic factors are influential during a period of the year when the general movement from the west reaches lower latitudes. Thus, occasionally there are moments of very heavy rainfall, with downpours producing over 300 mm in 24 hours. The recurrence of these downpours cannot be considered exceptional, so that within a period of 25 years one can expect maximums of over 250 mm in 24 hours in the central part of the mountain range.

In Mallorca, there is a big spatial variation in mean rainfall, with maximums situated around 1,200-1,400 mm a year in the central sector of the Tramuntana Mountains, whilst on the southern coast of the island it amounts to no more than 300-350 mm. This unsymmetrical pattern is basically due to orographic factors. Winds responsible for the heaviest precipitation (NE, N and to a lesser extent the SW winds) collide with the island's reliefs, increasing the rainfall's windward direction. Whilst the aforementioned orographic factor does determine the spatial distribution of rainfall, some studies of geographical rainfall distribution factors, using multivariate analysis techniques, point to the influence of factors such as the presence of mountain barriers in the direction of rainy winds, latitude, the concavity of the terrain, distance from the sea and irregularity of the reliefs. Thus latitude, for example, causes the coastal sector of Pollença "the northernmost part of the Tramuntana area" to be somewhat rainier (700-800 mm) than the southern section (500-600 mm). This is due, more than anything else, to the increase in summer rainfall in the north-eastern tip of the mountain range, and the fact that the Andratx area is sheltered from wet north-easterly winds.



Snow on the summit of Puig Mayor (1,445 m), February 2003.

Snowfall, on the other hand, is currently very unusual in the Balearic Islands, although the presence of snow on the summits of the Tramuntana Mountains once or several times a year is by no means strange to any islander. The highest number of recorded snowfalls corresponds to the central area of the mountain range, and at the observatory of the shrine at Lluc it is unusual for there to be none at all in any given year. This phenomenon occurs almost exclusively in the winter months, and the synoptic circumstances that lead to snow in Mallorca are the same ones that cause the coldest types of weather in the region, that is to say those usually linked to meridian advections with a northerly component, especially those from the NE, concentrated in the months of January, February and December, in order of frequency (highest to lowest).

As for temperatures, they follow the well-known pattern according to which annual minimums occur in the months of January and February, and maximums in July and August. Whilst most of the island of Mallorca has an annual average of 16° to 17°C, the Tramuntana area is singled out as the coldest area, with joint values below 16°C, and under 10°C at certain points in the central sector. This is determined by the uneven incidence of solar radiation and the orientation of its mountain slopes, meaning that its southern slopes enjoy a positive thermal anomaly with average annual temperatures of around 18°C. Thermal inversions and frosts are not infrequent in the Tramuntana area, above all in enclosed areas and the bottom of valley.

FLORA

Climatic factors as a whole and the predominantly limy nature of the island's soil condition the distribution of vegetation in the Tramuntana area and the altitude of plant communities. Their varied vegetation responds fundamentally to their climactic differences, since the higher parts are cold, windy and wet, whilst the lower parts are drier and warmer. In general terms the mountain range has four main plant communities:

Firstly Balearic holm-oak woods (*Cyclamini-Quercetum illicis*): This is the wooded climax community that would occupy the greater part of the area had there been no human intervention. In the Tramuntana area, the location of these woods has been drastically reduced, due not only to the historic creation of farmland reclaimed from the woods, but also to the continued action of tree-felling and other forestry activities. There are two sub-groups of holm-oak woods: mountain woodland (*Cyclamini-Quercetum illicis Pteridio rhamnesotum*), and lowland and coastal woods (*Cyclamini-Quercetum illicis tipicum*). Currently the presence of holm oaks in the mountain range is confined to areas where the trees were used instead of being ploughed up, and consequently a large number of traditional features used as infrastructure in forestry work have been preserved there. These include charcoal-burning pits, limekilns, paths, and huts for hunting, all of which evoke the anthropic pressure the forest must have been subject to until the second half of the 20th century. This is due mainly to the fact that it was the main source of fuel "in the form of firewood and charcoal "for the island's population.



In the areas where it can develop without problems, the Balearic oak forest achieves great density.

Apart from holm oaks themselves (*Quercus ilex*), the most representative species in holm-oak communities are the endemic *Cyclamen balearicum*, *Rhamnus ludovici-salvatoris*, *Smilax aspera var balearica* and *Rubia balearica*.

Wild-olive scrubland (Oleo-Ceratonion ass. Cneoro-ceratonietum) bears a high similarity to the Provençal macchia found on the European continent. This plant formation is typical of warm regions and it can mainly be found at lower altitudes of the Tramuntana area, where very dry conditions do not allow holm-oak woods to grow properly. These are areas with annual rainfall rates below 500 and 600 mm. Its capacity for colonization has enabled it to invade places formerly occupied by holm-oak woods after they were ploughed up. The wild olives (Olea europaea var. sylvestris) typical of this community are precisely those that have given rise to the expansion of genuine olive trees, that is their agricultural counterparts, the reproduction of which is achieved through grafting. The origins of

the olive-tree grafting technique on Mallorca have been related to contact between the local Talayotic population and Punic-Ibizan merchants. As well as the wild olive mentioned above, other flora in this community includes an abundance of mastic (*Pistacia lentiscus*), and other species such as *Cneorum tricoccon*, *Asparagus horridus*, *Asparagus albus*, *Clematis cirrhosa*, *Arisarum vulgare*, *Arum italicum*, *Rubia peregrina*, *Ephedra fragilis*, *Euphorbia dendroides* and *Calicotome spinosa*.

Calcicole shrubland (Rosmarino-Ericion) includes two characteristic shrubs: rosemary (Rosmarinus officinalis) and Mediterranean heather (Erica multiflora). Its geographical distribution is not as widespread as that of wild-olive scrubland, and it is found in both coastal and mountainous areas. The association Loto tetraphylli-Ericetum multiflorae is found precisely in mountainous areas, optimally at an altitude of around 500 m, where there is a high percentage of Mauritanian vine-reed (Ampelodesmos mauritanica) and heather. The interesting native species Lotus tetraphyllus is also present. On steeper slopes, where percolation due to heavy rain reduces the limy nature of the soil, species with silicicole affinities appear, such as the thorny broom Calicotome spinosa (argelaga). Both in the case of this scrubland and Oleo-Ceratonion, the presence of Aleppo pine (Pinus halepensis) cover has been recorded, a cosmopolitan Mediterranean species of no phytosociological significance. Whilst not considered an association per se, pine woods form their own entity on the Balearic Islands and are actually the most extensive tree formation found on them, due to their rapid growth rate and opportunism, since pine trees quickly colonize altered wooded areas. Both this community and that of wild-olive shrubland are the first to colonize abandoned olive groves in the Tramuntana Mountains, the most significant sign of which is precisely the advance of pine trees on mountain slopes that were formerly farmed.



The climatic conditions of the highest Balearic vegetation belt is reflected in the vegetation typical of these areas, which takes the form of woody plants with thorns and cushion shapes.

Communities in the highest Balearic vegetation belt are those found near summits and mountain crags, grouped under the alliance *Hypericion Balearici*, which grows particularly on terrain where the strength of the wind or absence of soil "often caused by anthropic pressure exercised by years of livestock grazing "prevents the growth of other communities. These determining factors can occur at any altitude of the Tramuntana Mountains, but the current presence of Hypericion Balearici occurs above all in the highest sections of the mountains. It consists of a very low formation of compact bushes and thorny plants with rounded forms "cushion-type plants" with a discontinuous incidence and reduced surface cover. The specific composition of this community is highly original due to the profusion of native species, which account for 35% of its composition and up to more than 60% of its cover. They include *Hypericum balearicum*, which gives its name to the plant community, and the aforementioned thorny cushion plants *Teucrium marum subsp. occidentale, Astragalus balearicus, Smilax aspera sups. Balearica* or species typical of rocky walls, such as the shrubby horseshoe vetch *Hippocrepis balearica*.

FAUNA

The Serra de Tramuntana mountain range is among the areas least impacted by the recent rise in human activity in Mallorca. This condition has enabled the survival of many highly endangered species elsewhere on the island. Its rugged relief and diversity of flora have yielded some rather peculiar phenomena of evolutionary radiation, ultimately bringing about a diversification of groups with numerous endemic species.

This is also owing to the double insularity of the Tramuntana, being a mountain range formed on an island, an aspect that makes for a relative abundance of endemicity. A notable example in this respect would be the cave-dwelling invertebrates, accounting for a total of 125 species in Mallorca, 94 of which are found in cavities of the Tramuntana mountain range, with 31 of these pertaining to endemic species.

Other important faunal groups inhabiting the Tramuntana range include the surface-dwelling endemic invertebrates, such as the flightless *Timarcha balearica* leaf beetle and the vertebrates whose best representatives rank among the most vulnerable and endangered of the Balearic fauna, such as the osprey (*Pandion haliaetus*), the black vulture (*Aegypius monachus*) and the Mallorcan midwife toad (*Alytes muletensis*), a small, endemic amphibian now highly endangered due to the fragility of its habitats, the small temporary accumulations of water at the center of the karstic canyons of the Tramuntana range.



Osprey, (Pandion haliateus).



2. CULTURAL LANDSCAPE

The evolution of the cultural landscape

From the first settlers to the fall of Rome (5000 BC – 454 AD)

The dark centuries and Moslem rule (454-1229)

The Christian conquest and modern era (13th to 18th centuries)

An end to autarky (19th and 20th centuries)

THE EVOLUTION OF THE CULTURAL LANDSCAPE

The Tramuntana cultural landscape has been and still is the result of the area's historical evolution, succession of cultures and ways in which the land has been used. Alternating periods of prosperity and shortages have left their mark on the landscape. Traditional agricultural and livestock farming has left a strong imprint on the area, through its irrigation systems, the dry-stone walls of hillside terraces, and olive trees, complemented by traditional uses of the woodland, coastal areas and peaks of the mountains.

The specific marks that each successive historical period and culture left on the Tramuntana area can still be seen. The period spanning man's arrival on Mallorca and the fall of the Roman empire represented the first human change to a landscape that had hitherto remained untouched, with the extinction of species and introduction of allocthonous ones, the introduction of agricultural and livestock activities and deforestation. In particular, the development of technically complicated irrigation systems, dating back to Moslem times and still surviving today, offer an image of fertility and prosperity that contrasts strongly with austere olive groves in very steep areas or others with bare rocks. Olives could be grown thanks to the design and construction of complex hillside terrace walls that evoke periods when it was necessary to extend crop-growing areas to a maximum due to the pressure of a growing population on an island with limited resources. In conjunction, this unique rich variety of archaeological, architectural, ethnological, artistic and intangible features highlight man's cultural response to the environment.



Old olive trees near Valldemossa.

FROM THE FIRST SETTLERS TO THE FALL OF ROME (5000 BC-454 AD)

The period between man's arrival on Mallorca and the fall of the Roman Empire represented the first changes of anthropic origin to a hitherto untouched landscape. The intensity with which man transformed the area during that period is clearly highlighted by the booming growth and decline of the Talayotic culture: a Megalithic culture that was also present in other Mediterranean islands, as is the case of Minorca. This culture expanded progressively in Mallorca, exhausting its natural resources and leaving behind as a scenic legacy its talayots (structures made of large blocks of stone), scattered throughout the entire Tramuntana area. In parallel, Mallorca's conquest by Quintus Caecilius Metellus in 123 BC represented the Balearic's incorporation into Roman and Western civilization. Romanization led to the coexistence of the heirs of the Talayotic culture and new settlers.

The oldest human remains known to date in the Balearics were found in the Tramuntana area. With these remains and numerous archaeological sites that extend along the mountain range, it can be affirmed that the first human presence in the area dates back to approximately 5000 BC. Archaeological sites and remains from this period have been found throughout most of the area, particularly in the form of caves or rock shelters that acted as a refuge for the first settlers. In some cavities in the rocks (Coval den Pep Rave, Cova de s'Alova and Cova de Ses Alfàbies) numerous ceramic and human remains have been found that span a chronological period from the pre-Talayotic period to the Middle Ages.

This group of humans subsisted by hunting and gathering food. The mountains offered a good environment for this kind of nomadic life, since it had good natural resources and numerous rock shelters that could be used as the first dwelling places. In the Son Matge site (Valldemossa), the remains of

Myotragus balearicus were found: an extinct native goat that stood barely 50 cm high, weighed 15 kilos, and fed on typical Mediterranean vegetation. Due to an absence of predators, their legs got shorter and they lost the capacity to run or jump. Their extinction in about 5000 BC coincided with the arrival of the first settlers in the Balearics, who hunted them for food and then tried to domesticate them.

In about 1700 BC the Bronze Age began, known in the Balearics as the pre-Talayotic period (1700-1350 BC). This was characterized by the appearance of a new type of construction, naviform structures, and by the use of bronze. In many parts of the Tramuntana Mountains, the existence of small settlements has been confirmed (Bóquer, Es Brutell, Galatzó, and Cals Reis, among others).

The Talayotic culture began about 3000 years ago in Mallorca, between 900 and 850 BC. At that point, the island started to fill with talayots: architectural structures that gradually replaced naviform ones, becoming the main scenic legacy of the period These structures are well represented in the Tramuntana area, with the talayots of Coma-Sema (in Bunyola), Son Ferrandell (Valldemossa) and Ses Casotes (Puigpunyent) standing out for their good state of conservation.

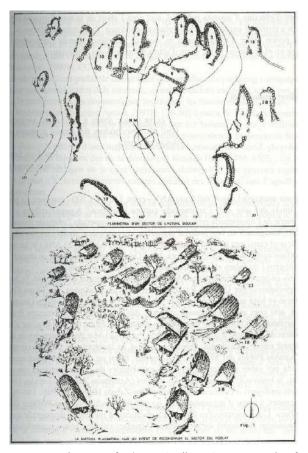


Illustration of the navetas settlement of Bóquer (Pollença), an example of colonization based on agriculture and livestock until the end of the pre-Talayotic period in Majorca. Source: Cerdà Juan, 1984.

During the late Bronze Age (1300-900 BC), there were new innovations in the technology used by island communities, with ceramics of new shapes, metalwork made of improved alloys, and new strategies in dealings with the outside world.

There was also an increase in the amount of contact with societies from outside the island and, very importantly, a rise in the population began that would finally lead to the deforestation of a large part of the island. Family links grew stronger and the population began to group together in settlements, building defensive walls round each territorial unit that was created. In the Tramuntana area, some 60 or 70 Talayotic settlements are calculated to have existed, in places close to safe fertile valleys, in other more hidden spots on the fringes, and in the mountains' most remote valleys.

Numerous shrines have also survived in the Tramuntana area, normally located close by settlements, where different types of religious ceremonies must have been held, some related to the seasons, climatic adversities, plagues that affected crops, and the fertility of the land. Some examples are the shrines of Son Mas (in Valldemossa), Almallutx (Escorca), Els Clapers (Formentor) and Es Fornets (Calvià). From a religious perspective, there is also a predominance of collective burial sites particularly in caves and rock shelters previously used as dwellings, such as Son Boronat (Calvià), La Cometa dels Morts (Escorca), La Punta (Pollença) or El Cementeri dels Moros (Capdellà). The Greeks and seafaring Phoenicians no doubt knew the Balearic Islands and used them as a base in trade with the mainland.

The Roman occupation, led by General Quintus Caecilius Metellus in 123 BC led to the creation of two Roman colonies in the Bays of Palma and Alcudia (Palma and Pollentia, Latin toponyms that mean victory and power), with the survival of existing Talayotic settlements. Romanization resulted in the coexistence of new settlers with the heirs of the Talayotic culture, who adopted Latin, urban customs and new forms of production. Although no urban settlement was created in the Tramuntana area, given its proximity to the two Roman colonies it was probably much frequented in search of supplies of its abundant well-assorted natural resources.

Roman domination of Mallorca led to the centuriation of the Mallorcan ager- a process that has been documented and analysed in the southeast of Mallorca - and the appearance of *villae* (basic units of agricultural land mainly devoted to growing basic produce like the Mediterranean trio " olives, vines and wheat), although imports of wine and oil have been documented, which might indicate a lack of local supplies. Pliny considered Balearic wines to be comparable to the finest Italian ones and Diodorus Siculus mentions the production and commercialization of wine in the Balearics. Documentary sources have revealed the existence of other rural activities, like livestock farming with oxen, sheep, pigs, mules, goats and fowl, as well as hunting fowl and rabbits.



Sanctuary of Son Mas (Valldemossa), whose floor plan is reminiscent of the Menorcan table sanctuaries, and in which pre-Talayotic vestiges have been found.

THE DARK CENTURIES AND MOSLEM RULE (454-1229)

The looting of Mallorca by Vandals in 454 represented the end of Roman domination of the island and the beginning of a long period of which little or nothing is known. The virtual disappearance of the island's two Roman cities and a notable drop in human pressure on the environment due to the declining population are the most significant features of this period.

The only thing that is known, in the pre-Islamic period, is the use of castles built in mountainous locations, used subsequently by Moors and Christians, as power centres. Their leaders managed to reach agreement with the Moslems from at least the year 711 to avoid domination. After two centuries, during which the island was sporadically frequented by the Moslems, in the year 903 Mallorca came under Islamic domination and the Balearic Islands became the eastern islands of Al-Andalus, dependent on other states.

During the long period of Islamic rule (902-1229), the island of Mallorca, which was called Mayurqa, was divided into 12 districts ($J\tilde{A}z$ in the singular and ajzd' in the plural), characterized by a tribal structure and the districts' links with livestock farming, because originally the term was used for communal grazing areas. In these rural districts ($J\tilde{A}z$), the population was fragmented, revolving around two types of settlements: an al-Garya and rahal.

In the Tramuntana area, there is still evidence of how important it was to take advantage of water resources and land during Moslem domination. Olive growing became more widespread, particularly in more mountainous areas. Hillside terraces were built there to prevent erosion and facilitate the cultivation of these non-irrigated trees. Although no systematic records have been found about irrigated crop farming in Islamic times, the presence of artificially watered fields, using irrigation systems, and the existence of mills point to the cultivation of irrigated crops of grain, fruit, vegetables, cotton, linen and vines (for grapes and raisins) and rice in wetlands. Indeed, it was at this time that the cultivation of rice, aubergines, artichokes and sugar cane was introduced to the mainland and Balearic Islands.

The marks of the Moslem period left on the makeup of the Tramuntana's rural landscape is evident in works by different authors, especially in the opinion given by Mallorcan geographer Bartomeu Barceló: "The formation of the [Balearic] Islands' rural landscapes can be traced back to Moslem rule (903-1229), which ended with Catalan occupation of the Balearics, when ownership of new lands were acquired by sharing out former Moslem farms and small farm holdings. [...] In this way, while the Moslem legacy was a scattered population with small farms playing a colonizing role, the policy of the new rulers [the Christians] tended to favour the concentration of the population in urban nuclei."

The Christian conquest of the city of Madina Mayurqa took place in 1229. Between 1230 and 1231, the rest of the island was gradually occupied, although a certain resistance to the new invaders was encountered in the mountains of the eastern range and Tramuntana Mountains, where the Moslems took refuge, particularly in two castles: Alaró Castle and Castillo del Rey in Pollença. The latter was the last place in Mallorca to surrender. Resistance there was not organized by members of the Almohad army but by the religious hierarchy, who had managed to flee the city. Thus the Tramuntana Mountains acted once again as a frontier between two worlds.



The water collection and canalization systems are the most outstanding landscape heritage of the Muslim period.

THE CHRISTIAN CONQUEST AND MODERN ERA (13TH TO 18TH CENTURIES)

The Christian conquest of Mallorca in 1229, with the arrival of King Jaime I of Aragon (the Conqueror), led to the introduction of a European feudal system in the Moslem countryside and an end to the fragmented possession of farm holdings. Instead agricultural land became concentrated in the hands of the aristocracy, with the creation of rural estates called possessions. Once the island had been conquered, its land and properties were shared out among all the participants in the conquest: King Jaime I, the Crown of Aragon's important feudal lords, more minor nobles or knights, and the Church, leading to new forms of spatial and social organization.



The set of King Sanç's huts has its origin in the medieval castle of Teix, built in 1309.

Because the island bordered Moslem territories, a network of fortifications had to be built in the form of watchtowers and castles along the mountain range. In this way the island's most important fortifications, which the Moslems had already transformed into major strongholds, were consolidated: Castillo del Rey (Pollença), Alaró Castle in the Tramuntana Mountains, and Santueri Castle (Felanitx) in the eastern mountains. Another medieval fortification in the Tramuntana Mountains that is now in ruins, with barely visible remains, is El Teix Castle, built in 1309, known as the casetes del rei Sanxo. These castles, perched on rocks, were used by followers of King Jaime III of Mallorca to defend themselves during the island's invasion by King Pedro IV of Aragon, which led to the reincorporation of the independent island kingdom (1271-1343) into the Catalan-Aragonese confederation.

The increasing commercial strength of the island's capital (called Ciutat de Mallorca up until 1715) generated increasing pressure on the rest of the island, which was divided into estates whose owners lived in the city and chose the main crops to be grown according to their potential commercial benefits. Compared with Moslem agriculture, which was mainly based on orchards, this feudal society and economy promoted the introduction of non-irrigated crops, primarily wheat, olives and vines. This move from a Moslem agricultural system of small tribes that each revolved around an irrigation network and self-sufficient supplies to a feudal one brought about big changes to the landscape of the Tramuntana area.

At the same time, from the Catalan conquest, olive growing became more widespread, especially in the northern and southern areas of the Tramuntana area, with the central focus being the municipalities of Esporles, Bunyola, Valldemossa, Deià and Sóller. Taking advantage of the extraordinary aptitude of these trees to grow on mountain slopes and the technique of hillside terraces shored up by dry-stone walls introduced in Moslem times to create irrigated land, a large amount of woodland was ploughed up to free new land. The old Moslem olives of some farms, like those of Biniatzar in Bunyola, acted as a core. With the passing of the centuries, olive-growing spread throughout the entire Tramuntana area and, in this way, new terraces of olive groves were added to existing ones and to Moslem irrigated hillside terraces.

Feudal lords and owners of big estates mainly levied taxes for peasants to pay on less easily perishable non-irrigated agricultural produce. This new system put peasants under the control of feudal lords in the city and thus favoured the city-based growth of the latter's power over the rest of the island's rural land, symbolized by its rural estates. Unlike the Islamic farms and small farm holdings, these estates grew, increasing their surfaces areas of cultivated land. Extensive livestock farming became decreasingly important and estates specialized more and more in crop-growing alone. From the 16th and 17th centuries, in parallel with different crises in subsistence caused by successive increases in the population, olive growing was extended, reaching higher altitudes and covering more and more land. Given how steep the land was, it might have seemed impossible to grow olives there, but for the use of hillside terraces.

The late medieval and modern ages represented a golden age for the local landowning nobility and estates, whose houses played a key role in the island's traditional agricultural and livestock farming economy. They underwent functional changes over the centuries to meet defensive needs or the desires of their owners to have a large rural mansion. This led to different types of buildings, some of a fortified nature, like Son Marroig (in Deià), while others were authentic baroque palaces, like Alfàbia (Bunyola) or La Granja (Esporles) or neo-classic ones, as is the case of Raixa (Bunyola).



Raixa estate, Bunyola.

In parallel, during the Modern Age, an organized, coordinated defensive system was introduced to deal with pirate raids, under which the island was divided into three parts: the mountains, plain and coastal section. Some towns in the Tramuntana area or close to it were expected to offer assistance to ones closer to the coast. For instance, the towns of Santa María, Bunyola and Alaró had to assist Sóller in the event of a pirate attack.

From the 16th century, this system was intensified with the construction of watchtowers in the mountains, combining to form a complex, effective network of coastal surveillance, covering the whole of Mallorca. The towers could communicate with one another by smoke signals, so that in just a few hours the whole island could be warned of an attack. Worthy of special mention are the defensive towers and watchtowers of Cala En Basset (in Andratx), la Trinitat (Valldemossa), la Pedrissa (Deià), la Torre Picada (Sóller), Na Seca (Escorca) and Aubercutx (Pollença). In the 16th and 17th centuries, during the reign of King Philip II (1558-1598), Mallorca was constantly besieged by pirates and the Turkish Empire with the intention of weakening the dominance of the Spanish monarchy over the Mediterranean areas. The inhabitants of the Tramuntana Mountains found it difficult to find reinforcements when they needed them, so some attacks were devastating, such as those of Banyalbufar and Estellencs in 1546. The inhabitants of Pollença defeated the fearsome pirate Dragut in 1550. a well-known battle, and They recorded numerous lootings in Alcúdia (1551), Valldemossa (1552) and Andratx (1553). The town of Sóller suffered one of the worst pirate attacks of the century. In May 1561, the town was attacked by a small Turkish-Algerian fleet. The sources speak of the landing of almost 1,700 pirates with the intention of plundering the town, but they encountered reinforcements from Alaró, Bunyola and Santa María, who confronted the invaders and forced them to retreat.

AN END TO AUTARKY (19TH AND 20TH CENTURIES)

The most noteworthy characteristic from the 18th century on was no doubt the end of Mallorca's traditional autarky, when the island began to form part of Spanish trade networks mainly to America. This led to technical improvements, the development of a manufacturing industry, and imports of food supplies. During a second phase, between the second half of the 19th century and first half of the 20th, there was the biggest boom in agricultural and industrial development. This was when the industrial economy first started to take over from the traditional agricultural sector. During a third phase, from the second half of the 20th century, tourism was introduced in a big way, the basis of the island's current growth, with the integration of the Balearics into the world economy.

In more contemporary times, the Tramuntana area has continued to have an essentially rural society. The seizure of Church property in the 19th century, with much of it passing to the State, brought about the emergence of owners of small-sized rural or urban properties. As a result mountain farming reached a peak in production, because changes in the system of ownership brought about an increase in production and a change in society, with a growth in small holdings that still exist in areas in the Sóller valley. Despite this, there were still big differences between different parts of the Tramuntana, and large estates" in the hands of the aristocracy" remained intact until the late 19th century. There continued to be a predominance of traditional crops. (That is, grain on the plain and olives in the mountains). At the same time, there was a growth in existing minority crops, like almonds, carob trees, figs, citrus fruit and vines, which gained in importance due to the intensification of trade with America.

In the 19th century, the number of island municipalities rose, following their emancipation brought about by the liberal laws of the 1930s. Fornalutx separated from Sóller and Deià separated from Valldemossa. In the same century, the traditional landscapes and features of Mallorca's mountains began to become known to outsiders, following visits by numerous Romantic travellers, attracted to Mallorca by its beauty and the conservation of its scenic and cultural values. One outstanding example is Archduke Ludwig Salvator of Austria. He first came to Mallorca in 1867 and, shortly afterwards, he settled on the island with homes in Deià and Valldemossa, buying ten different estates like Son Marroig, Miramar, Son Moragues and s'Estaca, many with superb views of the Mediterranean sea.

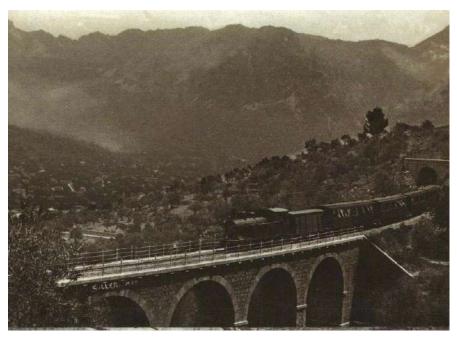
The Tramuntana area was visited by other travellers, artists and naturalists from Europe and the Iberian Peninsula, like Isidoro Antillon, George Sand, Frédéric Chopin, Joseph Tarongí, Santiago Rusiñol and Jerónimo de Berard, among many others. All of them highlighted the natural virtues of the landscapes they discovered and sometimes they portrayed a society and economic system anchored in tradition.



The estate of Son Marroig, in Deià, was acquired by Archduke Ludwig Salvator of Austria for its exceptional scenic beauty.

The 20th century also generated social, economic and spatial change in Mallorca, also noticeable in the Tramuntana area, although in this case the effects are not as clear as in other parts of the island. Tourism began in the early 20th century and mountain areas were one of the first main destinations. In the 1920s, combined with the promotion of tourism, hiking attracted tourists to the Tramuntana area. The Fomento de Turismo (Tourist Board) and Asociación para la Cultura de Mallorca (Association for Mallorcan Culture) were created, organizing outings to places like Lluc, Torrente de Pareis and Galatzó.

From 1960, there was a sudden emergence of mass tourism and very soon agriculture just came to occupy a marginal proportion of the economy compared with the service sector, with all the social and cultural changes that this entails. Even so, the towns and villages of the Tramuntana area at a distance from the sea and its beaches were not affected by the tourism phenomenon. This also had repercussions on the physical image of the Tramuntana area, which is generally well conserved, although there has been a growth in residential and recreational uses.



The construction of the railroad from Sóller to Palma (inaugurated in 1912) meant a great advance in the communications of the Serra de Tramuntana with the rest of the island.



3. BUILT LANDSCAPE

Dry stone features

The hydrological landscape

Rural estates (possessions)

Towns and villages

Religious heritage

Archaeological heritage

Maritime heritage

DRY STONE FEATURES

The most outstanding construction technique relating to the Tramuntana Cultural Landscape is dry-stone walling. It is characterized by the use of left-over stone from fields "meaning stone that does not come from quarries" worked using no mortar or cement of any kind, and used to build different types of walls and many other constructional items, such as paths, huts, bridges and buildings.

It is very widely used in the Mediterranean basin, from the east of the Iberian peninsula (Castellón, Tarragona), to the French region of the Mediterranean Alps (between Cannes and Menton), Liguria in Italy (Cinque Terre), Sicily (Pantelleria, Lipari), Greece (Crete, Andros, Patmos) and Cyprus. In Mallorca, and more particularly in the Tramuntana Mountains, this technique was historically used to construct agricultural systems, the greatest exponent of which are the fields of hillside terraces (called marjades on the island), which are a way of staggering the mountainsides. This is an indispensable way of preparing new agricultural land, using only the stones on hand.

Dry-stone constructions normally use materials from the immediate surroundings that blend perfectly into the natural surroundings, almost becoming a continuance of it.

Mallorcan dry-stone landscapes are mainly the result of the work of a group of artisans who specialize in this building technique, that is dry-stone wallers or hillside terrace builders (called margers): a trade that is documented on the island as far back as the 15th century. Whilst they did not manage to form an independent guild within the complex labour system of traditional Mallorcan society, dry-stone wallers were a group of workers with a well-defined range of tools, techniques and learning processes, differentiated from those of other building trades, such as stonemasons.

This trade, in decline since the 1960s, has been recovered thanks to the work of different institutions, including the Consell de Mallorca, through the creation in 1986 of a training school called the Escola de Margers or dry-stone wallers' school. This has forestalled the disappearance of the profession, by having the technique taught by the last margers who were still active.

The hundreds of kilometres of dry-stone walls that literally line the sides of the Tramuntana mountain range are one of the most notable, unique characteristics of its cultural landscape, since they are a symbol of the historic human imprint made on the region, as well as representing a highpoint in man's relationship with his environment. These terraced areas are linked to the water supply systems, and together they act as the framework for the productive areas of large farming estates (possessions) and small properties in areas close to villages. Villages like Banyalbufar and Estellencs are also built on a base of dry-stone terraces, without which settlement there would have been impossible.



Dry stone paths, Fornalutx.

Furthermore, a large part of the Tramuntana area has undergone significant modifications in its physiognomy due to human interest in preventing surface runoff from damaging farmland and eroding or flooding it.

The following are the main dry-stone features of the Tramuntana area:

- Hillside terraces and hillside terrace walls.
- Boundary walls of plots of land and properties.
- Mountain paths.
- Olive grove shelters.
- Farm shelters.
- Charcoal-making ovens and charcoal makers' huts.
- Limekilns.
- Other items of infrastructure: threshing floors, artificial piles of stone in the form of galeres and clapers, aixoplucs (shelters) or hunting systems called colls de tords.



Lime kiln, Bunyola.

THE HYDROLOGICAL LANDSCAPE

The utilization of water - a scarce, precious resource in the climatic and cultural context of the Mediterranean basin - has given rise in Mallorca and the Tramuntana area in particular to the construction of a complex network of traditional architecture related to water-harvesting techniques. The aim of these constructions is to collect and harvest underground or surface water and transport, distribute and store it. Throughout history important systems have been designed for the regulation and control of surplus water caused occasionally by torrential rainfall that gives rise to flooding and other effects related to soil erosion.

Throughout the Mediterranean region, water is a limited resource "its presence and absence is highly seasonal" and the island of Mallorca is no exception to this specific circumstance. The island, which covers 3,620 km², has no rivers but instead dry watercourses, gullies, streams and torrents. Mallorca also has springs. These are isolated and scattered about the island, albeit more abundant by far in the Tramuntana area, as opposed to the rest of the island, which contains a large number of wells. The volume of water in these springs is rather low.

Water from springs and torrents has traditionally been used for multiple purposes. As well as being used for human consumption on large rural estates (possessions) that have traditionally formed the base structure of the island and in towns and villages, water was used for livestock, as a driving force and for the irrigation of crops.



A mine fountain in La Trapa, Andratx.

Traditional water collection, regulation, distribution and storage systems that were in operation, generally speaking, until well into the 20th century (and still are in many cases) are the result of continuous developments that have been modified, extended and adapted since the Middle Ages, (more specifically since the 13th century), as is made clear by different documentary references.

The Tramuntana area is unique in that, in the same place, agricultural, water-supply and drainage systems all coexist, forming a system that can only be understood if we bear in mind the complex sum of its different parts and not only its individual elements. Moreover, on top of the natural network of dry watercourses and torrents which perform the natural function of draining surplus water, there is an overlapping anthropic water network. This anthropic network is integrated in and has been adapted to the physical and topographical characteristics of the terrain, forming a hydrological landscape whose virtue resides precisely in the balanced integration of human activity into the natural environment and in its component architecture, thus its heritage value.

The development of the aforementioned dual hydrological network was motivated by man's need to take advantage of the Tramuntana area's rich supplies of water, within the geographical context of a Mediterranean island characterized by an absence of regular water resources. In this way, given their high rainfall in comparison to the rest of the island, the Tramuntana Mountains have directly or indirectly acted as the main water provider for the island of Mallorca. But, paradoxically, the physical conditions that make the relative abundance of water in the Tramuntana Mountains possible also

constitute a threat to its fragile built heritage, as it is exposed to significant flooding on occasions and equally significant erosion as a result.

The resulting ethnological heritage is not only material, but includes intangible aspects, since the water supply systems and lands supplied with water are clearly reflected in the local toponymy and specific terminology, always expressed in the Mallorcan variant of the Catalan language. In this way, springs, mills, vegetable gardens and other rural spaces, however small they may be, take on a distinctive place name. From a geographical point of view, the spatial use of this rich, extensive toponymic vocabulary is extremely useful for identifying the exact location and delimitation of hydrological landscapes, since many place names refer to water supply systems and other hydrographical items (hydronyms).

In order to take advantage of the volume of water in the hydrographic basins in the Tramuntana Mountains and secure land for farming, the different human groups that occupied the area made substantial use of the dry-stone construction technique to delimit and establish the beds of torrents, streams and other secondary courses, and to build walls along certain stretches or watercourses. After this it was relatively easy to decide on the layout of irrigation channels and, in general, the built water supply system, made up of networks to collect and divert water in the form of weirs, distribution conduits, and storage systems comprising ponds, open-air cisterns, water tanks, and even the same widened irrigation channel.

The result is a complex, singular hydrological landscape and, all along it, water channelled from a spring, stream or torrent is used for different purposes. This landscape is characterized by the density and abundance of the different types of items it contains, which may be organized in six groups depending on their functions:

- Surface and underground water collection systems: natural springs and sources, dams associated with surface watercourses and reservoirs, underground water galleries, wells and noria-type waterwheels.
- Water collection and distribution systems: irrigation channels and other conduits.
- Water control systems: ralles, albellons, eixugadors, parats, marjades in traditional Mallorcan terminology.
- Storage systems: tanks, open-air cisterns, troughs.
- Elements driven by water: flour mills and paper mills.
- Elements to make use of snow: ice stores.



The Raixa cistern or washhouse is one of the largest in the Serra de Tramuntana.

RURAL ESTATES (POSSESSIONS)

In Mallorca the name possessió (literally 'possession') refers to a rural property or estate of agricultural characteristics, varying in size and including a small group of buildings called the cases de possession. This is the central core of an agricultural and livestock farm. The origin of the possessions can be traced back to the division of land amongst the nobles who took part in the Christian conquest of the island in the year 1229, a division that was made on the basis of existing Islamic farms and smallholdings. The owners of these estates are therefore usually genealogically related to the descendents of noble landowning families. The possessió functioned " and in certain cases, continues to function " like a production unit, around which a whole farming system developed, which included the participation of a large contingent of workers that could vary, depending on the size of the property, from ten to nearly one hundred labourers. On the pre-tourism island of Mallorca, prior to the first stages of the development of mass tourism in the 1950s, the whole region was organized, structured and divided into possessions, typically for agricultural and livestock farming both on the plain of Mallorca and in coastal areas and the mountains. This structure co-existed and still does co-exist with municipal administrative divisions.

Mallorca's large estates are grouped together in the form of these agricultural and livestock units. In fact, the 10 largest possessions occupy 31,200 hectares, which represents 38.2% of the surface of the Tramuntana area. These large properties were authentic economic hubs, and some of them still are today. They co-existed in the region alongside smaller properties, concentrated mainly around towns and villages in the form of gardens, irrigated land, and olive groves.

In the architectural ensemble formed by the estate houses, two buildings in particular stand out: the casa dels senyors (landowners' houses) and the casa dels amos (farm managers' house). They are completed by a series of rooms and areas devoted to chores typical of the life of a farmer and shepherd. In some cases, due to difficulty of access to the estate's houses or when the estate was of inferior category, the farm was left with no landowners' house. The absence of this building would be compensated for either by another large house on the outskirts destined to be used only as a residence for the landowners or by typical inns or large town houses from where the estate was governed, in this case inhabited and farmed by farm workers only.



The houses of the estate usually have an inner courtyard called *clastra*. In the image Raixa, Bunyola.

Normally estate houses have a square design with a large central working courtyard, called a clastra, around which all the outhouses stood, both for residential purposes and for animals and storage. These farm units were usually devoted not only to purely agricultural tasks but also to the processing of products, which is why nearly all of them had an oil press, a celler (wine cellar) and a mill for transforming agricultural produce. The most important agricultural building on Tramuntana estates is, without a shadow of a doubt, the oil mill or tafona, where the oil was produced that was for centuries the main Mallorcan mountain resource. Transported on the backs of donkeys, olives were brought down from the mountaintops and all terraced areas. Olive oil was one of the most sophisticated, expensive products that large estates produced. The oil mill or tafona is one of the most singular, characteristic features of large Tramuntana estates, and one of the symbols that most clearly define the importance of these houses in the local area.

Other highly-interesting examples of infrastructure present on Mallorcan estates and those in the mountains in particular are chapels, defensive towers (more typical of estates near the coast), charcoal stores (where the charcoal produced on the land was kept) and agricultural outbuildings such as livestock shelters, barns, pigsties, stables, chicken coops or pigeon lofts.

Some estates are still inhabited and in a semi-operational state, which helps them to be maintained in an acceptable state of conservation, but in general they are going through a period of considerable decline. There are also deserted or very dilapidated estates, whilst others have been restored to be converted into tourist facilities in the form of rural tourism establishments or as second homes for the well-off.



On the coastal slope of the Serra de Tramuntana, many farms have a defense tower, the construction of which dates back to the times of greatest danger of attacks by Turkish ships, in the sixteenth and seventeenth centuries. In the image, the Muleta Gran estate, in Sóller.

TOWNS AND VILLAGES

In the Tramuntana area there is a wide spectrum of towns and villages, ranging from larger ones such as Sóller, Andratx and Pollença to small hamlets like Orient, Ullaró, Biniaraix, Sa Calobra, Llucalcari, Biniarroi, Binibona or Binibassí, also including other villages that are extremely interesting in architectural terms, for example Fornalutx, Banyalbufar, Valldemossa, Estellencs or Deià. The latter two have recently been declared Items of Cultural Interest within the Historic Site category.

It is in these towns and villages that, logically enough, a large part of the architectural heritage of the Tramuntana area can be found, as well as many other items that define the urban landscape: public washing places, mills, public wells, and large houses. In them, buildings ranging from imposing inns to very simple rustic houses can be seen, whose location determines an urban grid made up of narrow alleyways, sometimes adapted to the mountainsides as in the cases of Bunyola, Estellencs or Banyalbufar.

The orography and network of roads, sloping steeply to adjust to the terrain, and the shape of building plots give rise to tortuous, winding streets that bestow an irregular, singular character on these towns and villages. This urban topography is partly due to their Islamic past, although we must point out that Islamic farms were much smaller and old quarters of towns and villages grew significantly in the 14th century. As streets were built in towns and villages, plots were divided up, and they are usually narrow and high at the front, which conditions the type of houses (as opposed to houses on the island's plain which usually have a broad, low façade).

Some towns and villages, such as Valldemossa, Estellencs, Banyalbufar or Fornalutx, still have a very well-preserved traditional urban landscape even today, thanks to the fact that limestone was used to construct the buildings, and due also to their cobbled paving, which in some cases was incorporated in the 20th century after burying the rainwater drainage system.

Although modern buildings, Baroque ones and others in the style of popular architecture prevail in towns, there are interesting Gothic, Renaissance and also Modernist examples. This latter style is concentrated basically in the town of Sóller, but also, to a lesser extent, in Bunyola. Together with contemporary buildings in historicist and regionalist style, the Modernist ones are a clear testimony to the prosperous economic situation and emergence of a moneyed bourgeois class in the town of Sóllerin the late 19th and early 20th century. They have all contributed to defining a new urban profile for the town.



View of a street in the village of Deià. Stone is omnipresent in the urban landscapes of the Serra de Tramuntana.

Over the centuries, the complex water supply systems have been organized into irrigational communities that still survive today and structure the periurban garden areas of most of the villages in the Tramuntana area. The villages' growth generally overlaps with this agricultural structure.

One interesting example of popular art in towns and villages are the painted tiles that adorn the cornices of some façades. Sóller and Fornalutx are two municipalities on the island with the largest number of inventoried houses (56 and 27 buildings, respectively). In spite of their being known as *teules de moro* (literally "Moor's tiles"), the tradition appears to date back to the 16th century. These ornamental features were made by placing the tiles in lime and subsequently painting them red using a mixture of linseed oil and red ochre. They bear geometric and vegetable motifs, features of everyday life, anthropomorphic and zoomorphic figures, religious themes and a large quantity of inscriptions. As well as their decorative value, they have a symbolic value associated with protection of the house and its inhabitants.

RELIGIOUS HERITAGE

When one is aware of the traditional religious dimension of Mallorcan society and the strong influence the Church has on it, it is easy to understand that the items of religious heritage preserved in the Tramuntana area are both numerous and diverse. The municipalities of the Tramuntana area feature many religious buildings, items and places of different architectural styles and chronologies that reflect the connection between the area and religious faith. Some examples are parish and rural churches, religious convents and monasteries, oratories and chapels, boundary crosses and via crucis shrines and crosses.

The shrine at Lluc, the main focus of pilgrimages in Mallorca, and the Miramar ensemble, founded by Ramon Llull, deserve a special mention due to their singular, exceptional nature.

The religious heritage of the Tramuntana area is basically associated with the Christian culture, which was introduced to the island in the year 1229, although some archaeological evidence has been found dating back to the Talayotic and Roman eras. Unfortunately no traces of the Paleo-Christian, Byzantine or Islamic eras have survived in the area.

In the very heart of the Tramuntana Mountains, more specifically at the Gorg Blau reservoir (Escorca), one can see some of the oldest religious remains on Mallorca: the Talayotic shrines of Almallutx. The two buildings have a square base and an apsidal wall. Inside one of them, some pieces of pottery with lids were found, containing numerous remains of sheep bones, and to a lesser extent pig, goat and oxen bones. Two burial sites corresponding to a man and a woman were also found. Much still remains to be learned about these shrines in terms of the religious practices and beliefs of the island's first settlers, but a visit to them is highly recommended given the splendid scenery that surrounds them.

Churches in the towns and villages united the population that had settled in the region following the Christian conquest and the division of the Mallorcan land amongst the new settlers. Most of the parish churches in the towns and villages of the Tramuntana area are in the Baroque architectural style typical of the 17th and 18th centuries, albeit with later features that are the result of subsequent alterations carried out in the 19th and 20th centuries.



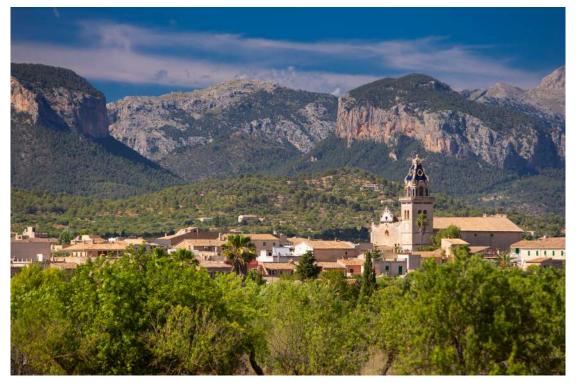
Santuary of Lluc, Escorca.

Throughout the Middle Ages and Modern Times many religious hermit communities settled in the Tramuntana area, until in the year 1567 the danger of attacks by pirates and bandits forced Bishop Diego de Arnedo to make an announcement calling on all these communities to return to towns and villages, which favoured the proliferation of convents and monasteries there. Places of worship and spirituality, convents and monasteries were also teaching centres, because we should point out that in many villages the primary school education of Mallorcan boys and girls depended on the work of priests and nuns until the late 19th or early 20th century. Tending to the sick and maintaining the parish church were other tasks habitually performed by them too.

Every village in the Tramuntana area usually has an oratory or shrine outside the urban perimeter where the parishioners go at certain times of year to ask for protection and support.

Boundary crosses and 'via crucis' are also important religious features of the Tramuntana landscape. Boundary crosses "known locally as creus de terme " are located at the entrance to urban municipalities, and traditionally they marked the boundaries of the municipalities they separated. These items of heritage are frequent in the Tramuntana area " an inventory of nearly 30 crosses has been drawn up " and they are protected by legislation as Items of Cultural Interest. Certain villages and towns in the Tramuntana area still have chapels with façades that fulfil the function of part of a via crucis. One outstanding example is the via crucis running through the Puig district of Deià, comprised of twelve small framed quadrangular chapels, built using a kind of local stone " marès " and containing ceramic tiles showing the corresponding season.

The parish churches, convents, oratories and other religious monuments of the Tramuntana area contain an important, often little-known source of heritage in the form of furnishings, particularly altarpieces and carvings. The Museum of Lluc deserves a special mention. It was founded in the year 1952 and, in it, you can see the Treasures of the Virgin, a set of objects made of gold, silver and precious stones, as well as adornments that have been donated to the Virgin of Lluc over the centuries. There are also chalices, ciboria, monstrances, a Lignum Crucis dating back to the first half of the 16th century, velvet tunics, ex-votos and other offerings. Some of these churches still have their antique organs. Indeed the island of Mallorca is one of the places in Europe with the highest density of this kind of musical instrument.



Church of Santa Maria del Camí.

ARCHAEOLOGICAL HERITAGE

As many as 750 archaeological sites have been found among the 20 municipalities comprising the Serra de Tramuntana mountain range, according to inventory records compiled by the Balearic Islands Government from 1990 to 1995. This figure may have risen following the discoveries made in recent years. Nevertheless, the limited accessibility and the scope of the area in question make it difficult to carry out an exhaustive cataloging, which would require complete, well-planned research.

Analysis of the specialized bibliography shows an abundance of archaeological research on particular sites or areas, such as the projects for Valldemossa - Deià - Sóller, and Pollença and Calvià. In municipalities such as Estellencs, Selva and Mancor de la Vall, few sites have been found with archaeological remains. When citing the points of greater interest, in chronological order, one should start with the Simó cave in Sóller, which, if the initial dating were confirmed, would pertain to an initial phase of settlement in Mallorca, with remains having been found there from the island's oldest settlement, which dates back to the late third millennium BC. Thus it would seem that the Serra de Tramuntana mountain range was one of the island's original settlement sites. This same period would also pertain to Abric de Son Matge, a site located in Valldemossa.

The population of the following period, known as the Copper Age, is found in small hamlets with huts such as that discovered in Son Olesa (Valldemossa), and in natural caves and rock shelters such as Morts de Son Gallard, located in Deià. From the Early Bronze Age, also known as Pretalayotic or Naviform (1700-1300 BC), we see new housing structures called naviform, navetiform or navetes, named for the inverted navicular or boat-shaped layout of the rooms. These appear isolated in Calvià and Fartàritx (Pollença), though are also seen grouped together in bona fide villages. This is the case of those in Bòquer (Pollença), Femenia, Cals Reis (Escorca) and Son Olesa (Valldemossa). Moreover, discoveries from this period have identified ritual practices associated with sepulchral caves that could be natural, such as that of Morts de Lluc (Escorca), or carved out of the rock, such as the ensemble of caves at Sant Vicenç (Pollença).

In the third stage, we have the sites from the Talayotic culture (1000-123 BC), so called for the appearance of a new architectural structure known as talayot, a megalithic monument with a round or quadrangular base, either isolated or in hamlets, though not always fortified. These are so numerous that only a few need mention, such as: the hamlets of Son Ferrandell, Son Brondo, Can Fortuny, Son Quijada and Son Rul·lan, or the talayots of Sa Coma, Sa Rota d'es Pou, Es Verger and Pastoritx. Also notable are the sanctuary of Almallutx, the hamlet and sanctuary of Son Mas, the defensive walls of Puig de ses Caves d'en Galileu and Castellot de s'Alqueria, and the tiered burial mounds of Son Pacs and Puig de sa Moneda. Finally, also worth mentioning are the archaeological artifacts from the Roman Period, remains that are in fact more dispersed and rather infrequent. Such is the case of the Roman village of Santa Ponça (Calvià), and numerous archaeological sites with surface ceramics, as is the case with Es Gall de Foc (Puigpunyent) or the gravestone of Es Fornassos (Caimari, Selva).

Cala Bóquer, Pollença.



MARITIME HERITAGE

The north coast of the Tramuntana area, which is extremely difficult to navigate, contains numerous examples of maritime heritage related to surveillance of the coast, sailing and the exploitation of its relatively scarce fishing resources. They include coastal towers, lighthouses, dry docks and heritage linked to smuggling. Quarries for the extraction of marès (sandstone) complete the list of coastal heritage of interest value.

Coastal watchtowers

The geographical isolation that Mallorca endured for centuries and incursions and attacks by pirates on numerous occasions led to the depopulation of the coast as a way of dealing with a danger that generally arrived by sea. This circumstance has meant that, historically, the area has acted as a last redoubt. As a result, there are two medieval castles "Alaró Castle and Castell del Rei, in Pollença- in this area, along with numerous watchtowers and defensive towers, organized around a complex system of signals and communications, designed to warn of the presence of enemy ships or provide protection from the attackers once they had disembarked.

The construction of the first defensive towers and watchtowers that line the coast of Mallorca began in the 16th century, although the presence of guards and lookouts is documented from the 14th century on. The insecurity of the period gave rise to the construction of an authentic network of towers that could communicate with each other in order to warn others of possible undesired or unforeseen landings. The signalling system and network were designed by mathematician and historian Joan Baptista Binimelis (1539-1616). The coastal towers are situated in places with good visibility of the coast, high up and in sight of neighbouring and adjoining towers.

Lighthouses

Mallorcan lighthouses are single-tower buildings located in clearly-visible places on the edge of the coast or set on cliff platforms or reefs. In fact they are situated in strategic points along the coastline, so that the lantern that projects long-range beams of light is visible to all sailors from a long distance.

The nine lighthouses on the coast of the Tramuntana area, like the rest of the lighthouses on the island, are relatively modern items of heritage, as most of them were built in the mid-19th century, following the directives of a General Plan for maritime lighting for the Spanish coast dating back to the year 1847. At the time, a series of improvements was



Castle tower of Alaró.

introduced, relating both to the architecture of the buildings themselves and the fuels and lighting systems that were used, and at the same time new optical apparatus was incorporated in order to increase the amount of light they projected.

Seashore dry docks

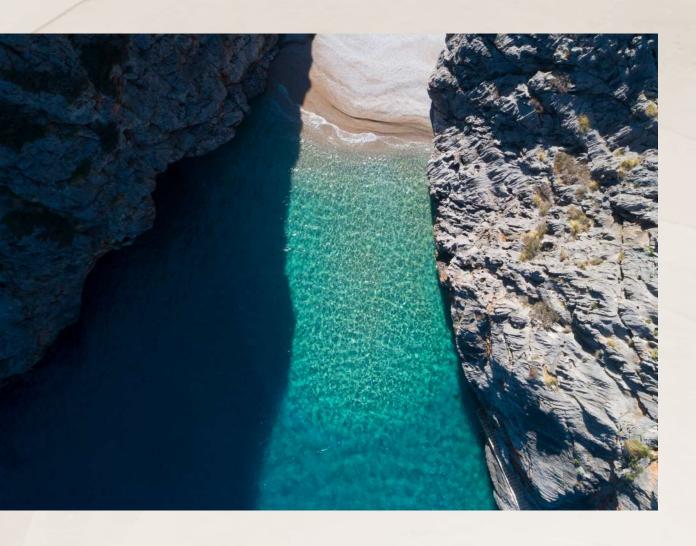
Although there are few of them, in places offering most shelter from storms one can find traditional dry docks, known as alcoves in the Tramuntana and escars in the rest of the island. Generally speaking they are sheltered spots where a ramp has been built for launching or removing fishing boats from the water. The presence of boathouses or shelters to house boats is very common, whilst the ramp used as a slipway for the boats is made of wooden planks nailed to the ground.

The landscape of smugglers

Pursuit of coastal smugglers gave rise to a number of very interesting buildings on Mallorca, such as the Cosconar police barracks in the municipality of Escorca, as well as paths for observation of the sea and hiding places used by smugglers, known on the island as secrets (secrets).



Dry docks at the port of Canonge, Banyalbufar.



4. LIVING LANDSCAPE

Traditional lifestyles

Traditional know-how and techniques

Ethnographic, scientific and technical knowledge

Religious ideas and beliefs

Artistic expression

Customs and traditions

Oral traditions

The way in which each society inhabits a region, works the land, recalls it, is familiar with it, represents it and narrates it offers an insight into that community's emotional perception of the landscape. The Tramuntana area is singularly rich in cultural expression, evoking an extensive, complex past. Likewise, it is also rich in contemporary artistic, pictorial and literary expression, reflecting its landscape values and defining the singularity of local lifestyles that are inseparable from the landscape. Also, the Tramuntana area's numerous legends and tales constitute a synthesis of popular wisdom as well as reflecting the character of its people: a highly valuable intangible source of heritage that offers the keys to deciphering a unique, ancient culture.

TRADITIONAL LIFESTYLES

Towns and villages are the community's main source of social life. The economic, political, educational, cultural and religious activities of different members of society find their expression in houses, public spaces, social and power relations, ideologies and beliefs, everyday life, diet, attire and tasks that are performed.

In the Tramuntana area, towns and villages have evolved from former settlements from Moslem times, and have been deeply influenced by the orography of the mountains themselves. Life in them has gradually changed as time has passed, but these changes were accentuated with the growth of the tourism sector in the 1960s. Until then, the town was the most important place in the municipality, and the square, with its cafés and barbers' shops, was the social centre, above all on Sundays, when people left church, and on public holidays and market days. It was a meeting place, a place for bargaining and the centre of social life.

Mallorca's countryside "that is, most of the island's territory "cannot be understood without taking a look at the social and interpersonal relations that took place in rural estates or possessions. They were hubs of rural life and the backbone of traditional conventions in the Mallorcan countryside. These large estates, the purpose of which was farming and livestock rearing, were administrated from a nucleus of buildings called the estate houses, consisting of the cases dels senyors (landowner's houses) and cases dels amos (farm manager's houses). In them, the farm manager and his wife (l'amo i la madona) frequently lived alongside the owner and his family (els senyors). The senyors were landowners and members of the nobility, belonging to what was called the braç noble (literally 'noble arm') or mà major rural, boasting a high level of independence in these rural areas. They controlled the abundant peasant labour force on the basis of a classist, clearly hierarchical social structure.

These estates constituted a unique system of production and system of social interaction, in which the landowners, l'amo (farm manager) and the madona (his wife) lived side by side with many other workers: amitger, majoral, missatge, jornaler, pareller, bover, oguer, hortolà, segadors, homes d'era, jornalers, and also the traginers (carters) and collidores d'oliva (olive gatherers), that is to say people from different places around the island who came on a temporary basis to work during the olive harvest. This meant there had to be enough space to accommodate these temporary workers.

The traditional lifestyles, agricultural and livestock-related know-how of the peasants, specific solutions adopted to meet subsistence requirements, and ways of seeing and understanding the region are expressed in the everyday universe of the estates.

Although the senyors barely lived on some estates, they usually alternated summer seasons in their townhouses with time spent at the estate. Particularly after the 17th century when social conflicts (the Revolta Forana, and Germanies) between landowners and peasants were over, large landowning families who had a townhouse sought a residence in the Tramuntana area, where we can observe a higher density of estate houses belonging to landowners than on the rest of the island, as well as greater complexity in the rooms, chapels, gardens etc. These more frequent visits to their mountain estates on the part of landowners is linked both to scenic questions and the fact that they had a larger water supply.

Forest areas also had workers who specialized in different activities related to forestry, notably the roters, sharecroppers who rented the most unproductive part of the estate lands; the marger, in charge of building and repairing the hillside terraces; the llenyater, who would cut down trees and bushes to supply wood; the carboner, who manufactured charcoal using wood from the surrounding area; the calciner, responsible for manufacturing lime; or the nevater, who manufactured ice.

Mountain activities were clearly different "harder and more solitary" to life in villages or towns or on estates, but people who could not work as agricultural labourers on an estate and did not have their own piece of land to subsist from were destined to work in these mountain activities. In addition to these activities, in the summer shepherds would also move the livestock from flatter areas of the island to the Tramuntana Mountains where they could find the necessary pasture land.

TRADITIONAL KNOW-HOW AND TECHNIQUES

Villages and towns, estates and paths in the Tramuntana were opportunities for communication and the interchange of products, ideas and knowledge.

One of the most valuable treasures of the Tramuntana areas is its dry-stone construction work. This building technique, used since time immemorial, is clearly linked to a group of local craftsmen, who over the centuries have passed on their techniques, materials, learning processes and specialist vocabulary to extend areas of farmland, improve harvests, prevent damage and utilize the water this area receives in such an irregular fashion.

The inhabitants of the Tramuntana area also benefited from an extensive cultural background - transmitted orally from generation to generation and enriched through experience and collaboration - relating to agricultural and livestock processes and techniques, as well as knowledge of how to use natural resources (wood, snow, charcoal, lime, game, fishing and sailing, gathering resources, minerals, and stone). Processing techniques (salting, drying, storage) were also transmitted in a fundamentally oral manner, as were agricultural processing methods in oil mills, other mills, and wineries, together with knowledge of the medicinal properties of plants.

Regrettably, the decline of farming and the disappearance of the last labourers who carried out these tasks threaten to relegate this extensive area of age-old knowledge to obscurity. It is essential that it be preserved and documented so that it can be made known to future generations.

ETHNOGRAPHIC, SCIENTIFIC AND TECHNICAL KNOWLEDGE

In 1869 Archduke Ludwig Salvator of Habsburg-Lorraine and Bourbon of Austria (Florence, 1847 - Prague, 1915) arrived in Mallorca, becoming known locally as s'Arxiduc. He was so captivated by the beauty of the north coast that in 1872 he purchased Miramar and gradually acquired most of the estates located between Valldemossa and Deià. He had the spirit of a traveller and a scientist, and was a great nature lover too, building paths and vantage points on these estates.

Over the following decades, Miramar became the centre of his possessions. It was there that he received all his visitors, who were drawn by the beauty of the landscape, and they can be considered Mallorca's first tourists. They include the French painter and writer Gastón Vuillier; the prehistorians Bartoli and Cartailhac; the Spanish naturalist Odón de Buen; the botanist and rector of the University of Geneva, Roberto H. Chorat; the writer Margherita D'Este; and the poets Rubén Darío and Jacinto Verdaguer.

He became integrated into the local population, learning the Catalan language and investigating traditional culture. As a result he published *Rondalles de Mallorca (Folktales of Mallorca,* 1895), among other works. But the Archduke's fundamental contribution was *Die Balearen geschildert in Wort und Bild (The Balearic Islands Described in Words and Pictures,* 1897), a complete radiography of the reality of the Balearic Islands in the second half of the 19th century in which he describes the habits, customs and scenery of the Balearic archipelago, populated and worked just by its inhabitants along with the occasional traveller. This extensive work would later achieve international recognition. In fact, Jules Verne based a part of his novel Clovis Dardentor (1896), set in Mallorca, on this book, since Verne himself never visited the island.

Aside from the contributions that Archduke Ludwig Salvator made to broadening knowledge of the ethnography and culture of the Tramuntana area, we must also stress those of other researchers and scientists, such as François Aragó, Dorothea Bate, Guillem Colom, Emil G. Racovitza and William Waldren. They contributed to a knowledge of the natural environment of the Tramuntana area and boosted work carried out subsequently by other researchers.



Miramar, Valldemossa.



Gorg Blau, Escorca.

RELIGIOUS IDEAS AND BELIEFS

Not only have the Mallorcan mountains been considered a place steeped in energy and spirituality by writers and artists, even in a context with an inclination towards introspection as can be seen in some neo-Classical and Romantic poems. The different cultures that settled on the island of Mallorca over the years have attributed a sacred character to certain places or inhabitants of the area, venerating the forces of nature and erecting buildings to perform their religious practices. Although we can recognise some religious and funerary structures from the Talayotic period, knowledge of the religious practices and beliefs of the first settlers on the island is scanty. Neither have any significant architectural or material remains relating to the religions of the Roman, Paleo-Christian, Byzantine and Moslem cultures survived. This is in sharp contrast to the profusion of remains relating to the Christian culture, which was introduced to the island last of all, yet more strongly and continuously, and it has made a significant mark on the region's popular and religious expression.

In the heart of the Tramuntana Mountains, especially in the municipality of Escorca, the oldest religious remains in Mallorca can be found: the Talayotic shrines of Almallutx and activity in the forests of Lluc, the name of which stems from the Latin Lucus, which means sacred wood or place. Nevertheless, there are still many unknown factors regarding the religious practices and beliefs of these first communities on the island, both Talayotic and Roman.

Nowadays the shrine at Lluc is one of the island's main spiritual centres, with an important tradition of pilgrimages and pilgrims coming from all over the island to prove their devotion to the Gothic statue of the Virgin of Lluc. This devotion dates back to 1273 and clearly remains alive today, as throughout the year Mallorca's different towns and villages organize group walks to the monastery.

The Tramuntana Mountains have also been frequented by monastic communities who sought the silent tranquillity and inspiring beauty needed for prayer, leading a life far away from the problems of towns. The most emblematic initiative was the Oriental language school that Ramon Llull founded in Miramar (1276), where Franciscan friars were trained to become missionaries and preach the gospel and the Ars luliana to the Moslems. As well as surroundings steeped in spirituality, the Tramuntana Mountains have different characters and events of a religious nature associated with them. One outstanding figure is that of Saint Catalina Thomas, known all over the island as La Beateta, who was born in the village of Valldemossa in 1531. She was beatified in 1792 thanks to the intermediation of Cardinal Antoni Despuig.

ARTISTIC EXPRESSION

The Tramuntana Mountains have acted and still act as a model and source of inspiration for many different artists "mainly painters and writers "since Valldemossa Monastery welcomed the musician Frédéric Chopin and writer George Sand from the winter of 1838 to 1839. They stayed in monastery cells that still conserve memories of their time there, like the Pleyel piano that the composer used and manuscripts and first editions of Sand's work *Un hiver à Majorque* (A Winter in Mallorca, 1855). This was a controversial work because as well as describing the beauty of the scenery of the Tramuntana Mountains, Sand also highlighted the lack of comfort, upsets and setbacks that the couple experienced living alongside the inhabitants of Valldemossa.

Despite all this, Sand acknowledged the merits of its cultural landscape, stating: "Everything the poet or painter might dream of has been created here by natur". Chopin also praised the north coast of Mallorca in a letter to Juli Fontana on November 15th 1838: "I will very probably go to live in a charming monastery set in the loveliest place in the world; the sea, mountains, palm trees, a cemetery, church dating back to the Crusades, ruined mosque, ancient olives. Now, dear friend, I enjoy life somewhat more; I am very close to what is most beautiful in the world; I am a better man."

They were not the first illustrious visitors to the monastery, because between 1801 and 1802 the famous writer and legal expert Gaspar Melchor de Jovellanos was confined there as a political prisoner on the orders of minister Godoy before being transferred to Bellver Castle in Palma. The old medieval palace of King Sancho, which in time came to form part of the monastery, has also housed figures as illustrious as Unamuno, Azorín and Rubén Darío (1906 and 1913).

Among Archduke Ludwig Salvator's prolific work, one authentic example of poetic prose stands out, inspired by contemplation of the landscape of Miramar and La Foradada. It is *Somnis d'estiu* ran de mar (Seaside Summer Dreams, 1912). In it, he says (p. 101): Nature's contemplation, done as it should be done, must be regarded as a prayer in which man bows submissively before the Creator of all these miracles.

The Tramuntana Mountains were visited by other travellers, artists and naturalists from Europe and the Iberian peninsula, like Isidoro Antillon, George Sand, Frédéric Chopin, Joseph Tarongí, Santiago Rusiñol and Jerónimo de Berard, among many others. All of them highlighted the landscape's natural virtues and sometimes they portrayed a society and economic system anchored in traditional ways.

The writer Josep Pla (in a note on Mallorca in Les Illes, 1921), Catalan Renaissance poets Joaquim Rubió d'Ors and Joan Cortada i Sala (Viaje a Mallorca en el estío de 1845) and Julio Cortázar (in El rayo verde) also described the landscape of the Tramuntana Mountains. Miguel de Unamuno visited Mallorca on different occasions and devoted three chapters to it (In Mallorca's Tranquillity, On the Golden Island, the Olives of Valldemossa) in Andanzas y visiones españolas (1922).



The Charterhouse, Valldemossa.

CUSTOMS AND TRADITIONS

The different municipalities that make up the Tramuntana Mountains have contributed to the creation of a wide range of festivities and cultural events of a religious, pagan and commemorative nature. As well as traditional festivities, a wide variety of regular cultural activities have been created and integrated into the local festive calendar, forming part of the complementary activities on which cultural tourism to the area by islanders and non "islanders is partly based.

FESTIVITIES

On the one hand, it is important to mention religious festivities, because with the Christian conquest of 1229 Catholicism was appointed the official religion, and so religious celebrations adhere to the Catholic festive calendar, with highpoints being:

Christmas:

All the towns and villages of the Tramuntana Mountains celebrate Christmas. Their streets are decorated with lights and other decorations and, from a religious point of view, on December 24th practically all Mallorca's churches celebrate Matines, the Christmas Eve midnight mass, to commemorate the birth of Jesus. One of the most emotional moments of this celebration is an ancient chant called the Sibil·la. Generally speaking, this chant, which augers the end of the world, is sung by a young girl with a pure voice, dressed in a tunic, skullcap or hat and cloak embroidered with silk, and she holds a big sword in her hands.

This ancient chant has only been conserved in Alguer (Sardinia) and Mallorca and it can be traced back to the tradition of medieval liturgical Christmas dramas, featuring a voice alternating with musical interludes. The protagonist, dressed in distinctive garments (the sword, tunic and cap) proclaims the arrival of the Day of Judgement. Likewise, at the religious shrine at Lluc, mention must be made of the Blauets, a children's choir named after the blue cassocks that they wear during services. This permanent choir of boys and girls sing the Salve Regina every day in public in front of the statue of the Virgin Mary. At the matins mass, a single blauet chants the Cant de la Sibil·la, making this one of the most emblematic events on the island.

Saint Anthony the Abbott:

One of Mallorca's most traditional events is the feast day of Saint Anthony on January 17th each year. It is a festivity that is deeply rooted in popular tradition, dating back to Mallorca's former agricultural society. Back then, people asked Saint Anthony, the patron saint of domestic animals, to protect animals used in agricultural work. Over the years, the saint has been venerated in different ways, slowly developing into the festivity that we know today, although it has never lost its essence: the adoration of the saint and protection for animals. People flock to church with their animals for them to be blessed (the Beneides) by the benevolent Saint Anthony. Two classic ceremonies are held in Mancor de la Vall and Alaró.

The night before, the Revetla de San Antoni is held, a popular festivity when big bonfires are lit in the main streets and squares of towns, which people dance round. Fire, the real core of the celebration, symbolizes the purification and renewal of life at this festivity; the triumph of good over evil.



Sibil·la chant.

Easter week:

Easter week is a religious celebration that commemorates the death and resurrection of Jesus. At the same time, it is also a popular festivity, whose processions can be traced back to medieval times. Different "brotherhoods of believers" process through the streets of different towns in the Balearics, recreating Christ's final days. In the Tramuntana area, one particularly spectacular procession is El Davallament in Pollença, which takes place on Easter Friday. This procession, when the body of Christ is carried down 365 stone steps flanked by cypress trees from a hillock called El Calvario, is the most important event that day on Mallorca.

Corpus Christi:

Corpus Christi, the festivity held 60 days after Easter Sunday, is celebrated almost all over Mallorca, but one prime example is in Pollença, where an ancient tradition has been conserved that is now only exclusive to Pollença: the Ball de les Àguiles and ritual dance known as Sant Joan Pelós.

San Joan (Saint John's Day):

In Mallorca, as in other places in the Mediterranean, the summer solstice is celebrated to the full, with festivities to welcome in the summer. On the eve of the solstice, traditional foguerons (bonfires) are lit beside the sea. The celebrations must continue until the sun rises, that is "el sol quan balla" (when the sun dances). Saint John's day is an annual festival in Calvià and Deià.

Sant Pere and La Verge del Carme (The Festivities of Saint Peter and Our Lady of Mount Carmel): June 29th is an important feast day for mariners, since Sant Pere (Saint Peter) is the patron saint of fishermen. It is celebrated with enthusiasm in almost all coastal municipalities, which have a fishermen's guild that organize processions by sea. The saint day is also celebrated inland in Alaró, Búger and Esporles. On July 16th, in coastal areas in Mallorca, including the ports of Sóller, Pollença and Andratx, a seagoing procession is held at which the Salve Marinera is sung, with the participation of numerous local boats, decked out to celebrate the occasion.

Other traditional festivities include:

The Valentes dones and Es Firó:

During the second week of May, the town of Sóller holds its most popular festivity, known as the Fires i Festes de Maig (May Fairs and Festivities). This commemorates the role of the Valentes dones (brave women) during an attack by Turkish pirates on May 11th 1561, when sisters Catalina and Francisca Casasnoves, far from being scared witless, took the bar used to close the front door and used it to kill some pirates, thus contributing to the town's victory.

Moors and Christians in Pollença:

On July 26th, festivities begin in Pollença in honour of the patron saint in a civil and religious celebration of ancient origins. The highpoint of these festivities is the Moors and Christians Simulation, which commemorates the battle by the people of Pollença against 1500 Moors led by the pirate Dragut on May 30th 1550. It was the worst pirate attack that the town had ever experienced. The battle was won largely thanks to Joan Mas, who rushed into the main street and warned people of the danger, heading the heroic fight against the pirates.



Festivities of the Patron Saint – Moors and Christians, Pollença.

La Beata Valldemossa:

Valldemossa, the place of birth of the pious Saint Catalina Thomás, is decorated every July 28th in tribute to its patron saint. A procession with the saint's triumphal float is held at which the saint, represented by a 6-year-old girl from Valldemossa, is paraded through the streets of the municipality with her court of angels. She is accompanied by numerous other floats decorated with coloured ribbons and other adornments, carrying villagers in traditional Mallorcan costume.

The Alaró Cossiers:

In this description of key popular expressions of the Tramuntana Mountains' culture and history, a popular event held in Alaró as part of its festivities to celebrate the village's patron saint Sant Roc or Saint Roch (August 16th) must not be missed. It features cossiers or horsemen as its protagonists. This event is particularly fascinating because each year it includes the dance of the cossiers. The dancers are usually made up of six men, each in traditional costume, and a Dama or Lady, accompanied by a man who represents both a Dimoni (devil) and musician playing a whistle and a drum. The male dancers dance round the Dama, who stands in the middle of the circle.



Dance of the *Cossiers* of Alaró, during the celebration of the patron saint's festivities of Sant Roc (August 16th).

Dance of Les Àguiles, Pollença:

The Dansa de les Àguiles (Dance of the Eagles) in Pollença shares the same religious background. Dating back to the 16th century, it consists of a parade in front of Christ during the Corpus Christi procession, accompanied by a statue of Sant Joan Pelós (Saint John). The dance is performed by two young women, who wear a cardboard crowned eagle round their waists with the head at the front as if they were riding on it.

TRADITIONAL DANCES

The traditional Mallorcan dance known as a Ball de Bot or Ball de Pagès is very matriarchal. The dances, led by a woman, have an erotic dimension and they are totally improvised. The woman makes her male partner imitate the different parts of her dance, drawing closer or moving away as she sees fit. In olden days, the dances formed part of town festivities to celebrate their patron saints and celebrations organized by the owners of possessions (rural estates) when there had been a good harvest of wheat, olives, figs etc.

GASTRONOMY

Traditional Mallorcan cuisine is based on fishing and agriculture, two activities from before the tourist boom. One simple dish, sopes mallorquines, reflects how hard it must have been to subsist in rural

Mallorca. To make it, whatever products were available in the vegetable garden were used (mainly cabbage, spring onions, leeks and garlic), to which dry bread was added, moistened in vegetable stock. In exceptional circumstances only, meat or wild mushrooms were added.

Despite its traditional self-sufficient economy, Mallorcan cuisine is very varied. The island's typical dishes and desserts point to a rich gastronomic tradition, reflecting the different cultures that succeeded one another in Mallorca. Pastries like robiols and crespells evoke the Jewish presence on the island during its Islamic domination and the first centuries after the Christian conquest, while cocarrois and panades are clear legacies of the Islamic period. The eating of suckling lamb during the Easter week and by-products from when pigs are slaughtered (sobrassada, botifarró, camaiot, varia) are a reflection of the Christian culture. The origin of the ensaimada (a spiral-shaped pastry) is still the subject of controversy. Its name stems from the word "saim", which means pork lard. However, some uphold its Arabic origins, given its shape evocative of turbans, while others believe it is derived from a "bulema" (a very similar roll that Jewish people used to make).



Sobrassades, in a traditional market.

Mallorca also has certain gastronomic traditions linked in with

the calendar. It is a custom to cook pork specialities following the slaughtering of a pig on bonfires at Saint Anthony celebrations (January 16th-17th), to roast suckling lamb during Easter week, or eat soup and chicken or turkey escaldums at Christmas. Likewise, on the night of October 20th, when the Revetla de les Verges (Virgin Festivities) are held, young girls give gifts of potato and/or sweet potato fritters and dessert wine to the boys who come to sing serenades to them.

The Carnival is also celebrated through Balearic Island cuisine, with different specialities that add a special flavour to the festivities. The ensaimada, one of the Balearic's most typical pastries, is adorned in red and green when Carnival arrives, because traditionally on the Thursday before Lent (one week before Ash Wednesday), ensaïmades de tallades are put on sale, with pieces of sobrasada and candied pumpkin.

The island's wines, one of Mallorca's oldest crops responsible for an important legacy in terms of viniculture and popular traditions, is an excellent accompaniment when sampling the island's cuisine and an unparalleled way of taking away the bottled aromas and flavours of the island.

CRAFTS

Roba de llengües are handcrafted, traditionally made fabrics from the Tramuntana area. To make them, the warp is prepared with white cotton, in accordance with traditional custom, and it is dyed in sections depending on the chosen pattern. This means that the fabric does not have a front or back, because both sides have the same pattern.

Other traditional crafts that can be found in the Tramuntana area, although they are also present in other parts of the island, are:

- Typical Mallorcan embroidery, using Mallorcan stitch, chain stitch, linking stitch and cross-stitch.
- Mallorcan espadrilles (espardenyes) are still made in traditional style, using only natural products.
- Artisan jewellers, capable of making impressive-looking typical gold chains
- Artisans who work with wrought iron.
- Luthiers who make traditional Mallorcan folkloric instruments (the whistle, bagpipe or drum).

ORAL TRADITIONS

The Tramuntana area has generated an extensive, exceptional intangible heritage. Despite its intangible nature, or precisely because of it, it is a prime exponent of the local culture, closely identified with the rich culture of the region.

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Toponyms

Place names combine to form a rich heritage that makes up a large part of popular and traditional culture. Given the intangible nature of this heritage, the task of safeguarding it is an important one. This mainly oral toponymic heritage encompasses many different aspects, particularly the geography, history and native language of Mallorca.

Legends

Due to their isolation and rural way of life, from the Middle Ages through to the Modern Age, the mountains were the source of numerous legends. Some of them very probably have an even older origin and are versions of myths believed by the island's first settlers. The mountains are a symbol of vigour and strength for men from all ages. Galatzó and El Teix, two of the island's most emblematic mountains, are a source of innumerable legends and popular tales, whose main protagonists are witches and ghosts. Some passages from history are also the source of this type of popular tradition, like the case of the divine aid received by the people of Sóller during the pirate attack of 1561 or the case of the legendary figures of Guillem Cabrit and Guillem Bassa, defendants of the independent Kingdom of Mallorca during the invasion of King Pedro IV. Among the most popular legends referring to this area, we must highlight two that are clearly linked to the area and its landscape: Cabrit and Bassa and El Salt de la Bella Dona.

Folk tales

The Tramuntana Mountains are often the setting for rondalles, tales or narrations in prose of oral origins by anonymous authors. The tales recount imaginary events featuring a series of characters, a plot, and a specific setting. Archduke Ludwig Salvator wrote *Rondalles de Mallorca* (Folk Tales of Mallorca, 1895) and, in a secondary way, in other works that he published about the Balearics he also compiled stories from the islands' extensive, rich oral heritage.

Aside from these legends, mention must be made of an imaginary character called Maria Enganxa (María Hook), present in Mallorcan oral narrations since time immemorial. Folk tales are full of frightening characters like María Enganxa, who, according to tradition, is an old woman that lives in all wells and water tanks. With the hook from which her name is derived, she traps children who dare look down into the well. Through this intelligent way of frightening children, grandmothers safeguarded children from the dangers that wells and water tanks represented.

Songs and gloses

At a time when culture was limited to an élite, oral traditions were the key to finding out news and remembering information.

One important expression of Mallorcan folklore are its gloses, popular oral rhymes that are normally improvised when they are declaimed. They are the equivalent of the Catalan corrandas or Valencian albadas. In the Balearic Islands' illiterate rural society, the figure of the glosador became sufficiently popular for some of them to do it professionally, travelling from town to town and testing their skills as challenged by the townspeople or other glosadors in what were known combats of gloses.