

# WORLD HERITAGE CULTURAL LANDSCAPES AS SPATIAL MANAGEMENT TOOLS. THE CASE OF THE SERRA DE TRAMUNTANA (MALLORCA)

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## I. INTRODUCTION

Only three sites in Spain are inscribed in the World Heritage List as Cultural Landscapes: the Aranjuez gardens, Monte Perdido in the Pyrenees and the Serra de Tramuntana in Mallorca. The Serra de Tramuntana, the main mountain range of the island of Mallorca, is shaped by an interesting example of a Mediterranean agricultural landscape, with a huge extension (30.745 ha) in its core area.

While the concept of cultural landscape and its consideration as heritage is being discussed, it seems interesting to analyse the use of the cultural landscape sites inscribed in the World Heritage List under the UNESCO definitions as tools for land management and conservation. From this point of view, this paper aims at reviewing the concept of cultural landscape and its use as a spatial management tool from the specific case of the Serra de Tramuntana in Mallorca. First, a review of the cultural landscape concept is done, from the theoretical visions to the UNESCO definitions. Secondly, the paper describes the case of the Serra de Tramuntana, from its landscape values to the management strategies defined during the process when the World Heritage List file and management plan was developed.

## II. CULTURAL LANDSCAPES: THEORETICAL FRAMEWORK

The definition of landscape has been controversial, encompassing a great range of visions and meanings, from morphological conceptions to aesthetic, symbolic and spir-

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itual visions. More specifically, the definition of «cultural landscape» has also been discussed and conceived from different points of view. They could be simplified in two basic positions: the morphologic vision as it was established by Carl Sauer; and the symbolic definition followed by cultural geographers like Denis Cosgrove or Stephen Daniels. In the definition by Carl Sauer cultural landscapes are understood as the «result» of the action of a community, through an agent, the culture, over the original «natural» landscape. That is, a natural landscape which is transformed by man through its cultural actions. In this sense, the cultural landscape is the mark of each civilization on the land readable as a book.

The symbolic vision of the cultural landscape is based in the fact that a landscape is a subjective perception of the land. As a subjective question, landscape cannot be reduced to physical elements, also subjective or immaterial aspects need to be taken into account. In this sense, a cultural landscape is the vision of the space produced by each person or by the dominant social group. This vision could not be neutral but very biased and linked to the interests of the powerful class. The cultural landscape is in fact a representation of the reality, a social construction, a cultural product.

Thus, the symbolic method in landscape analysis aims at revealing the power, identity or symbolic relationships and influences hidden under the material layer of a landscape as a representation of the reality. Postmodernity offers new dimensions on landscape visions from the symbolic point of view: virtuality, time and space compression and its relationship with information and communication technologies, standardization of territories due to the evolution of urban spaces, or multiculturalism. The conception of landscape as heritage could be a meeting point for both definitions. While land banalisation, loss of character or virtualizing processes over landscape are consequences of actual globalization dynamics, cultural landscapes could act as identity refuges, as singularities of great beauty and historical meaningful, as memory spaces where society could recover its relationship with the local environment in the global context.

### III. WORLD HERITAGE CULTURAL LANDSCAPES

From an institutional point of view, UNESCO has acknowledged heritage values of cultural landscapes considering its interest by including them in the World Heritage List. After some debates among experts at international level in 1992 cultural landscapes were recognized as examples of «combined works of nature and man» included in the Article 1 of the World Heritage Convention.

The vision of UNESCO on cultural landscape is based clearly on the definition established by Carl Sauer:

«Cultural landscapes are cultural properties and represent the «combined works of nature and of man» designated in Article 1 of the Convention. They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal».

Under this definition three categories are considered: designed landscapes (e.g. gardens), organically evolved landscapes (e.g. agricultural regions or industrial sites) and associative cultural landscapes, in which immaterial elements are the core heritage element to be protected. In 2011 the World Heritage List contained 85 sites inscribed as cultural landscapes. The sites included under this category are very diverse: from historic urban towns to ancient agricultural systems or sacred places in natural environments, mainly in Europe and North America. As far as UNESCO has recognised a great variety of cultural landscapes, new challenges and new problems have emerged. Tourism massification, urban-residential pressure, changes on local communities, or lack of good management tools and resources are some of the parallel effects of designating a site under the World Heritage label.

#### **IV. THE CASE OF THE SERRA DE TRAMUNTANA IN MALLORCA**

Located parallel to the north-western coast of Mallorca, the Serra de Tramuntana is a 90.000 hectares limestone range, with its highest peak, Puig Major, emerging 1.400 meters above sea level. Its geological characteristics define clear differences between its rugged and abrupt coastal side and the inland side softer slopes. As far as it has been an isolated place inside Mallorca the Serra de Tramuntana has been considered an «island into an island», a region with a different evolution comparing with the rest of the island due to its physical attributes. Its geomorphological, climatic and ecological values are also important: the presence of a great variety of endemic flora and fauna and its specific biodiversity values have supposed the protection of most of its natural areas under the Natura 2000 network.

Nevertheless, the Serra de Tramuntana is a highly anthropized space. Demographic evolution and economic pressure in several historic periods of Mallorca made necessary to take profit of the scarce resources available. In the Serra de Tramuntana this pressure boosted slope terracing to get new cultivation areas, and the building of complex hydraulic systems to make use of water resources available thanks to the carstic nature and higher rainfall of the area.

More recently, the territorial impact of mass tourism has been different in the Tramuntana area, due to its physical environment. Despite urban tourism resorts have been built since 1960 in the coastal zones of Andratx, Calvià, Pollença or Port de Sóller –all located in the peripheric zone- most of the coastline in Tramuntana has remained untouched. However, the evolution of the economy towards the third sector has carried processes of land abandonment, and spread of tourism uses linked to the natural or agricultural spaces. The spatio-temporal evolution in the European context has increased tourist and residential pressure over this space, due to the economic evolution towards third sector, specifically tourism and real estate. As a consequence there is a progressive abandonment of ancient cultivation systems, loss of cultural, ethnologic and heritage values and, therefore, increasing landscape degradation.

In any case, since 1972 Tramuntana natural and cultural values have been recognized and protected with several protection figures. In this context, the nomination process for the inscription of the area in the World Heritage List aimed at changing the way in which this area has been protected, from a «negative» protection in the sense of avoiding a great number of activities in the zone to conserve its natural values, to a positive one centered on recovering traditional agricultural activities as the main argument to restore the cultural landscape

that also has a great heritage value. This nomination process was also one of the actions included in the Mallorcan Landscape Strategy of the Consell de Mallorca, based in the European Landscape Convention and conceived as a set of basic guidelines for a landscape policy for the whole island of Mallorca, including public participation processes on landscape management. In this sense, the Serra de Tramuntana nomination process was planned as a joint proposal of two international conventions about landscape (European Landscape Convention and World Heritage Convention), although their visions of landscape are very different: one is based in its exceptionality -«outstanding universal value» as it is defined by the World Heritage Convention- and the other one is based in the fact that «everything is landscape», as long as defines landscape as any piece of land as it is perceived by people.

Thus, the process for the inscription of the Serra de Tramuntana in the World Heritage List was based in three main points: the identification and delimitation of landscape values; the development and implementation of a Management Plan through a public participation process and the deployment of actions to improve awareness of citizenship about landscape. This process led to the inscription of the Serra de Tramuntana in the UNESCO World Heritage List in June 2011.

The landscape of the Serra de Tramuntana fits clearly in the World Heritage Center definition as an organically evolved landscape. The landscape in Tramuntana has been built historically using two main elements: dry-stone walling terraces to obtain new cultivation areas and traditional systems for collecting, conducting and storing water from the carstic springs of the region, in a Mediterranean water scarcity context. Intensive use of dry-stone techniques to shape the land and the use of traditional hydraulic systems are the main driving elements of the great rural states -called *possessions*- that are the basic agrarian production units that form the tiles of the landscape mosaic. In general terms, the hydraulic sources are at the origin of the location of settlements. A huge traditional path network links rural states with towns and villages, cultivation areas, and other places of interest like religious sites or zones of forest-use. The landscape also reflects the landmarks of each historical period, from the Islamic times (10<sup>th</sup> to 13<sup>th</sup> centuries), the Medieval and Renaissance periods (13<sup>th</sup> to 18<sup>th</sup> centuries) and the Modern period (since 19<sup>th</sup> century).

Therefore, the definition of the World Heritage Convention «Outstanding Universal Value» in Tramuntana, as a World Heritage Site, was based in the historical evolution of the area and the specificallity of the dry-stone and traditional hydraulic systems described. In this sense, the cultural landscape in Tramuntana fits three of the ten criteria defined by UNESCO as requirements to include a site in the World Heritage List: criterion II («exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design»), criterion IV («be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history») and criterion V («be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change»).

A cartographic identification of the landscape values sustained the delimitation of the core area and the buffer zone of the nominated World Heritage Site. A GIS was developed,

in which 12 layers of geographic information were analyzed to find out which areas had a greater concentration of landscape values. This landscape values density map was crossed afterwards with the limits of the main legal protection figures of the area. Finally, the delimitation of the core area and the buffer zone was established manually, based in the GIS analysis results.

In this sense, the Management Plan of the Serra de Tramuntana as a World Heritage Site was conceived to face the possible threats of the landscape in the area: abandonment of traditional agricultural activity, loss of authenticity; recreational, tourist and urban pressure; and risk of becoming a «museum» landscape. The Plan acts as an strategic document with the main objective of protecting and promoting economic and social activities for landscape management. To achieve this objective the plan defined four basic action programs: local economic development; dissemination and education; heritage conservation and visitor management. The Plan also defines a public organ to be in charge of its implementation. The elaboration of the document was based in a public participation process with 46 stakeholders of the Tramuntana region, from public institutions to private sector and also environmental or heritage concerned NGOs.

## **CONCLUSIONS**

The case of the Serra de Tramuntana in Mallorca shows a new approach to landscape management in Mallorca. As long as it puts the anthropized landscape as the main issue to be protected, the inscription of the Tramuntana area in the World Heritage List offers a new scenario on its management and protection, that tries to go beyond the protection only based in the approval of legal figures related to thematical aspects (environmental issues, urban and spatial planning, tourism planning, recreational uses, etc.). Using public participation processes a global vision has been developed by considering key economic and social activities that are at the basis of the creation of the cultural landscape as the key issues to be promoted and protected. These key issues are understood as the main elements that can help managing the dynamic nature of the landscape without a critical loss of its values.