



# Concept, Evolution and Symbiosis of Landscape Microcosms - from Convent Fences to Suburban Villas

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## Abstract

*Landscape* has always played a fundamental role in shaping local, regional and national identity. They involve a combination of productive needs, cycles, and rhythms of growth that challenge morphologies, flows, and continuities. As an integral part of the landscape, human beings intervene and add utilitarian, symbolic and artistic dimensions, recording memories and defining identities. Sensations, experiences, sounds, aromas, flavors, and surroundings are associated, offering harmony and repositioning in the world. Experience and layout, regardless of place, time and cultural context, reveal spaces where aesthetic and spiritual satisfaction, production, and recreation are reconciled. Contextualized interpretations of the ways in which the landscape has been used and occupied give rise to unique places where landscape and architecture complement each other harmoniously. The multiplicity and spatial diversity stand out, in which buildings, gardens, productive areas and woodlands are organized to create versatile places where production and recreation share the same space, invading each other, and where nature is an object of pure contemplation. This results in a model for transforming the landscape, as it promotes the multifunctionality of the landscape: production, protection and recreation. Beyond the conception of a structure that organizes a space and sculpts the territory, giving it a certain character and partiality, conditions are generated for the character of the place to emerge - the creation of the ideal landscape. Considering the heterogeneity and multiplicity of variants that make up the landscape, we expanded the reflection by studying the structuring, compositional and program principles of the Convent Fences and Suburban Villas, their relationships and strategies of implantation and integration in and with the landscape. Universes that are a way of enriching and deepening contemporary culture.

**Keywords:** *Landscape Microcosms, Place, Convent Fences, Suburban Villas*

## 1. Introduction

Landscape has been transformed in line with the quest to represent an image of paradise, acquiring and absorbing principles dictated by the mental, cultural, social and political framework in which they are inserted. The attitude of the human being as an integral part and peer of nature has resulted in a field of experiments, because '(...) transforming the landscape is closely related to this appeal for the physicality of nature. There is a utilitarian aesthetic, a poetics of materiality, in the way we use, manipulate and transform natural elements' [1].

In recent decades, interest in landscape has led to an intensification of studies, debates, and research in a wide range of disciplinary areas. An apparently simple concept, it has been the subject of various interpretations and definitions. However, the way in which society has developed, following models based essentially on economic growth, with the aim of maximizing productivity, has compromised the balance of human beings in and with nature, leading to the emergence of serious environmental, ecological and landscape problems. Aspects that have led to the degradation of the Landscape and its respective qualitative impoverishment, with the deterioration of its scenic and visual qualities.

Landscape can no longer be understood as what is contemplated, but rather as a product of the relationship that human beings have established with natural systems, a '(...) manifestation of all times; varied times that, acting with the site and matter, define spatialities. 'Chronological' time and its conjuncture determine marks, formalization, identity signs, which biological time, through its natural order, shapes in an evolutionary construction.' [2]. [2]. It is therefore important to deepen our knowledge of the history of Portuguese culture, because all the ingredients of our culture determine the representation of the ideal of Landscape, which according to tradition and transformation represents the way we relate to nature, the diversity of relationships, constant evolution and demanding new balances.

The movements of animals, first, and of human beings, second, have always left their mark on the territory: 'The humanized landscape that we see today throughout Portuguese territory began to be shaped around 6,000 years ago (...), living by hunting, fishing and harvesting the products that Nature offered them free of charge (...)' [3]. Throughout history, the construction, and transformation of the Portuguese landscape has maintained an interdependence between cities and rural food production areas. The city has always depended on the supply of fresh food from the suburbs, fertile plains and vegetable gardens [4]. From this model of landscape organization and management, in which the city and the countryside become involved and constitute a spatially and socially harmonious and balanced whole, productive green spaces emerge, among which the Convent Fences and the Quintas [Suburban Villas] are of particular significance and importance

## 2. Landscape and Territory

There are many definitions of landscape, and due to its wealth of possible interpretations, different approaches have been indefinitely adapted or adjusted according to the most diverse cultural and disciplinary contexts and interests. Landscape is a concept that cuts across many areas of knowledge and is therefore a transdisciplinary concept [5], susceptible to countless definitions and approaches, as can be seen from the study of the Portuguese landscape, in which the methodology followed is assumed to be holistic and global, integrating the ecological dimension (physical and biological components of ecosystems), cultural (historical factors that help with the identity and narrative capacity of the landscape), socio-economic (social factors and human activities that permanently construct and alter the landscape) and sensory (how the landscape is appreciated by different people) [6].

The relevance of the concept, its interpretation, appropriation, and usefulness in the most diverse sectors of society led to it being officially instituted and regulated within the European Union - the European Landscape Convention [7]. It is the first international treaty dedicated exclusively to landscape in all its dimensions. According to the definition in this Convention, 'Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' [7]. In this way, and for the first time, it is seen as a public good, with relevance to individual and social well-being, in the physical, psychological and intellectual sense, regardless of the type of landscape being considered. It integrates people, considering that everyone has the right to a quality landscape, that they should be involved in actions about it, and brings the discussion about landscape quality into the lives of communities. It includes the concept of dynamism, recognizing that the landscape is constantly changing, and that it must be protected, managed and built upon.

Humans have always interpreted the space and environment they experience in terms of meaning. An emotional appreciation emanates from this relationship with the territory, while at the same time the landscape is a natural system. The landscape is the mirror of culture itself, because '(...) as a construction (mental or factual) it is a testimony, a narrative resulting from the analysis, interpretation, investigation, information, exploration, intimate knowledge of man as a natural being, with space, matter and matrix times, in perpetual becoming, with which he has built, and/or should build, an ethos: the place that comprises the totality of existence' [8].

Landscape thus expresses culture in its various aspects, appearing as an essential element in understanding the socio-cultural relationship that presupposes an environment belonging to a certain space-time context. The search for an identity is the translation of a cultural landscape, which expresses continuity between the past, the present, and the future. Conceiving the possibility of enriching and perpetuating the heritage of a given culture. The cultural image of a territory is the result of the actions of time in a given space, whose association results in the concept of Landscape. And as such, in order to understand a territory, we need to know the forms of the natural and cultural landscape [9].

The Portuguese territory has distinct natural characteristics leading to a diversity of landscapes, the result of a set of natural and cultural factors, which according to [6] stand out:

- geographical position and a conformation subject to three climatic influences - Atlantic, Mediterranean, and Continental;
- very strong relief with strong contrasts (between north and south, between the coast and the interior);
- diverse lithological composition;
- extensive coastline, marked by capes, estuaries and estuaries, nearby mountains, among others;
- ancient human occupation, influenced from the outside and conditioned by a succession of events with strong repercussions on the landscape.

The combination of these and other factors reinforces the contrasts, since 'North and South, Coast and Interior, Highlands and Lowlands, such are the threads that run through the rich fabric of our regions and landscapes (...) [10]. All the expressions of human action over time characterize a unique landscape, due to the relationship between natural and cultural factors, resulting in '(...) complex combinations that cannot be fully repeated elsewhere. Certain features of relief, a certain shade of climate, a certain physiognomy of vegetation, bring distant places closer together, remind us of landscapes already seen; but human evolution has altered everything, either by transposing agricultural structures and settlement styles (...) or by adding to these natural analogies an expression that disfigures them' [11].

These biophysical conditions also define a relationship between human beings and the land, made up of struggle and permanent vigilance, which translates into an irregular landscape design, the development of promiscuous agriculture and multifunctional cultivation systems. The result is a diverse, multiple, irregular landscape rich in contrasts.



Fig. 1. Sintra's cultural landscape - Quinta da Capela, Sintra.  
Source: 2nd author (2012).



Fig. 2. The composition of the Douro landscape pattern.  
Source: 1st author (2016).

### 3. Landscape, Place and Heritage

The idea of place is defined by the existential duality of the arrangement of physical objects and the perception of simply looking at the place. On the other hand, it is defined by the atmosphere of the place itself, understood as the character of the place, 'While space means the three-dimensional organisation of the elements that make up the place, character means the "general atmosphere of the place" and depends on the "way of doing things".' [12]. The 'spirit of the place' is felt by the characteristics of the place and at the same time by the feelings it conveys when travelling through the space [13].

Because each place has its own structure, its own formal properties of a system of relationships, which can be either artificial, created by human beings, or natural, created by nature. This combination allows for the construction of an image of the place, which in turn leads to human beings feeling a sense of belonging [12]. They are deeply related, because when humans move through spaces, they can relive emotions, apply models and feelings from places they have visited before.

Place thus becomes the basis for the concrete manifestation of the existence of human beings, and their identity is dependent on their connection and belonging to the place. Based on this notion, we can establish a direct relationship with the Convent Fences, due to the territorial understanding that seems to transcend merely physical aspects. Places are also chosen because of certain territorial configurations and all the dimensions they encompass (topography, vegetation, climate, geology, water resources, etc.), which also have very particular significance from a spiritual point of view.

The religious orders in Portugal were unique expressions of experiences and spiritualities that marked Portuguese society. With their establishment and rapid expansion, architectural models were defined that could respond to the spiritual and material demands of these very particular ways of life: Convents and Monasteries. In addition to being sacred spaces through which the members of religious orders would be closer to God, self-sustainability was a fundamental factor in the duration of religious institutions. It was therefore necessary to feed the members of the congregations while at the same time guaranteeing their privacy and seclusion. So the solution found was the fence.

Fences are contextualized interpretations of ways of using and occupying the landscape, creating unique places where landscape and architecture complement each other harmoniously. Occupying significant parts of medieval and modern towns and cities, they still have a marked presence in the landscape and in the structure of contemporary urbanization, even though many have disappeared over the last few centuries. They have a tranquil refuge effect, where the senses are exalted, awakening an elevation of spirit. Behind walls, hidden and silent spaces reflect the essence of a reserved culture. All these elements confer quality, protection, beauty and comfort, whether for production, organization or leisure, as well as concentrating compositions of great aesthetic quality. They are an integral part of an extremely rich symbolic narrative that praises the role of human beings in their relationship with natural systems.

With a strong presence in the territory, these architectural structures in the landscape are dominated by a religious community with strict precepts, which are felt in their organization and structure. An essential principle of monastic life, materialized in a walled enclosure, the Fence establishes the boundary between the outside (profane) and the inside (sacred) territory. It has a unique and important role 'in the dissemination of agricultural and horticultural practices, as well as the transformations they brought about in the Portuguese landscape (colonization and humanization of large areas of our country) and also their symbolic significance in a territory.' [14]. In the monasteries, the Fences guaranteed the monks an outdoor space for wandering, meditation and contemplation without disturbances or worldly interference. In Convents, which played a more active social role, their Fences ensured that although access to some parts of the convent was possible for people from outside the order in question, the agricultural production areas would always be reserved.

The church, the space of greatest importance and communion with God, was the spiritual center of the entire complex, but in addition to this role it was also the geographical center of this universe. The church, the cloister, and the most important program appear in the center, and the facilities of the rest of the monastic program gravitate around the main building. The Fence emerges from the building itself, enveloping all of its exterior space, breaking up into small, intimate and autonomous universes.

The forest imposes a mystical and symbolic meaning, where the state of the impenetrable natural environment is perpetuated. Simultaneously calm, dark, intimate and mysterious, the environment is the ideal setting for seclusion, materializing in the construction of chapels where people prayed and meditated. The structure of this space has an organic, spontaneous and simultaneously intentional composition, evident in the wandering layout of the paths and the natural arrangement of the vegetation. The Orchard and the Vegetable Garden are the productive spaces. Parallel to the productive interests, the play and recreational functions associated with the Orchard determined its location, preferably around the building, from where it could be contemplated.

The Formal Garden, ornamental or purely metaphorical garden was the place where flowers of great symbolic value were planted to adorn altars and chapels.

The vegetable gardens, orchards and woods are an integral part of these architectural spaces in the Carthusian universe and play a formal, functional and symbolic part in the whole, acquiring specific characteristics according to the center in which they are located. For theological reasons, they are all gardens. They are all places for contemplation and, by extension, spirituality, delight, and the pleasure of being in communion with nature.

The religious orders essentially fall into three main groups in terms of their way of life, their vision of the universe and, consequently, the way they interpret and determine their behavior in relation to the Christian religion. These groups are made up of the monastic, canonical and mendicant orders. This condition affects the way the fences belonging to the religious houses are structured. The Order of Discalced Carmelites, with the Convent of Santa Cruz do Bussaco in Aveiro, and the Order of St Benedict, with the Monastery of São Martinho de Tibães in Braga, will be highlighted in this study as having a major modelling effect on the landscape.)

In the 17th century, the Discalced Carmelites searched for a place in Portugal to set up their facilities, and were authorized to do so in the Sintra mountains, but later moved to the Buçaco mountains where they found '(...) dense forests populated with many trees, they walked through the green valleys, and climbed the valleys decorated with clear flowers. ) dense forests populated by plenty of trees, wandered through meadows clothed in green plants, strolled through meadows adorned with fragrant flowers, descended into valleys strewn with clear waters, and climbed the hills crowned with pleasant, expansive views (...) [3], thus deciding to found their monastery in the center of this forest. This religious order attached more importance to the forests than to agricultural production. With the monastery and the establishment of a community dedicated to cenobitic and eremitical life, a physical and symbolic transformation took place. The place ceased to be managed by the local population and became a space in which every action had a religious purpose and meaning.

The Buçaco fence occupies a unique place in the history of landscape art in Portugal. It contains a vast array of plant species, representing a significant florist diversity, with a predominance of exotic plants introduced, for the most part, from the 19th century

onwards. From here '(...) you can see a grandiose and splendid landscape, as the height of the mountain at this point is already very considerable in relation to the extensive territory that stretches down to the sea. Upwards, the mountain slopes steeply with huge masses of picturesquely overlapping rocks (...) [3].

The followers of St. Benedict, because of their way of living in harmony with nature, set up their monasteries in remote places or on the outskirts of population centers.

Inserted in the Minho landscape, the Monastery of São Martinho de Tibães is made up of a rich and diverse architectural and landscape heritage, where people live in harmony with nature. The buildings and the fence took ownership of the territory and formed an important hub in the landscape of northern Portugal until the 19th century, exerting a great influence on the surrounding rural communities, both in terms of social organization and agriculture.

The monastery functioned as an economic unit in the hands of the Benedictines, who prioritized isolation from the world and for this it was necessary to be self-sufficient, which was mainly in the territorial domain, where they lived off the resources that the land offered them and the rents from the land, in addition to the considerable agrarian domain [15]. Their farms (orchards, vegetable gardens, animals, among others) were cultivated by caretakers and directly managed by the monastery. There was also farming, shepherding, mills, water mills, olive oil presses, workshops, fishing grounds, among others [16]. In this way, the monks had everything they needed, so there was no need to go outside, because when monks moved, they were affecting the principles of Benedictine life [15].

The fence covers approximately 40 hectares, protected by a 3-metre-high wall. Inside is the typical Minho landscape, with fields, vegetable gardens, terraces, vineyards, olive groves and orchards, among other elements that maintain the beauty and fullness, while at the same time enhancing the whole complex. In addition to the chapels, there are areas of devotion, paths adorned with vegetation, gardens designed with geometric flowerbeds and water features such as fountains. It's an ensemble that still includes a cultural, historical and religious landscape of great heritage value.

The extinction of the religious orders resulted in a large reserve of free land and buildings. According to Jorge Gaspar [17], the convent spaces marked the urban planning of Portuguese cities, leaving very strong marks on the urban fabric well beyond their active life, even when they were demolished. Due to a variety of factors, many of the existing Fences in Portuguese territory are today in a generalized situation of abandonment, degradation or ruin, threatened by the ravages of time, condemned by human ignorance, forgetfulness, or ignorance. Since the extinction of the religious orders in 1834, there has been a progressive squandering and devaluation of this heritage, which has sometimes taken on an institutional form, such as the disappearance of convents.

With the dawn of the Renaissance movement, the 'natural world' was rediscovered and exalted the spirituality, beauty, tranquility and freedom of country life, conveying a philosophical attitude of 'celebration of man controlling nature and the world', and looking for a place to indulge in reflection and artistic creation [14]. This feeling is accompanied by an intense aesthetic experience of nature, which finds in the discovery of the landscape one of its most revealing elements, in the sense that the intended harmony between human beings and nature translates into a feeling of communion that is more intense than mere physical presence.

The land management units, the Quintas, evolved from the villae of the Roman colonization period and, later, from the direct and evident influence of the Italian Renaissance suburban villas. The way these Quintas are distributed, as well as their internal and external organization, is related to the natural characteristics of the landscape and those resulting from human action. They constitute a cultural paradox, an expression of the dialectic between nature and artifice

The Quintas de Recreio are living testimonies to many ancestral practices of the agrarian arts, they are strongholds of stretches of rural landscape that have long since disappeared, they are a mark of the history of the humanization of the Landscape, they are places with historical value, they are plastic elements considered alone or together as elements that enhance the Landscape. They have a simple expression, built from a spatially that is also simple, in which the areas of production go beyond the exclusive areas of pleasure. They reveal themselves in symbiosis and conciliation between the natural elements, understood as objects of pure contemplation. The Quintas de Recreio, according to Aurora Carapinha [14], '(...) are one of the most traditional and characteristic elements of our rural landscape, spread across the north and south of Portugal (...)', stand out in the universe of landscape heritage, both for their quantity, but above all for their geographical distribution and permanence over time.

Its location and boundaries are determined by the nature, exposure, slope of the land, presence of water and the plant species to be cultivated. The size depends above all on the water and human resources available. Assumptions that determine communion with the characteristics of the place and the complexity of the principles of composition. They are presented as an organised whole resulting from a set of sub-spaces: building, woodland, garden, orchard and vegetable garden; versatility being one of the Quinta de Recreio's spatial characteristics. Leisure and production share the same space, invading each other. The complex is sometimes organised independently of the building, the recreational areas are viewpoints over the production areas and where functional infrastructures are punctuated - the architectures of pleasure.

The owner's building, or house, is a central element of the Quinta and has its own functional and architectural program, within the historical and cultural context of which it is part [18]. With a very intimate relationship with the outside, through openings and the integration of balconies and loggias, it faces the landscape, favoring the visual relationship with nature. Very close to the house, the gardens extend with a strong sense of organization and spatial regularization. They are individualized and surrounded by walls or hedges, defined by paths following an orthogonal grid. They are polarized by water containment and flow elements (mostly ponds and fountains) [14]

The Orchard and Vegetable Garden occupy the elevations between the building and the lowest level of the Quinta, in an area surrounding the house and with good water availability [14]. With a dual function, they have a fundamentally productive character, sometimes organized according to vegetation in its natural form or in pergolas or trellises.

The woodland is mostly located on steep slopes, is autonomous and fundamental for wind protection, the climate amenity needed for agricultural production and recreation, and for water infiltration.

Water and its pathways are one of the bases for organizing the farm, the formal garden and the cultivation areas. It is an element that regulates the space, due to its use in the most rational way possible. It conditions the design, and it is from the hydraulic systems that the composition is born. Aqueducts, mines, wells, tanks, gutters, fountains, and water basins affect and run through the space, defining regularities and continuities in the plan, as well as irregularities, punctuations, and fragmentation in the design. Another fundamental element are architectures of pleasure, such as fresco houses, which can be built with both inert and living materials and represent a way of experiencing the natural environment [14]. They are associated with moments of contemplation and reflection on the landscape.

In the Portuguese landscape, the construction of Convent Fences and Quintas de Recreio [Suburban Villas] is a very specific form of physical and symbolic transformation of the landscape, through the design of structures that mark the physical space and fill it with symbolism.



Fig. 3. Monastery Of São Paulo De Alferrara, Setúbal.  
Source: 2nd Author (2012).



Fig. 4. Insertion Of Quinta Do Vesúvio In The Landscape. Vila Nova De Foz Côa. Source: 1st Author. (2017).

#### 4. Conclusion

In their multifunctionality, these architectural types are balanced, organized and intelligently programmed according to the ecological aptitude of the territory, where the balance between nature and culture, socio-economy, pleasure, utility, and beauty is clearly expressed. Their currents are strongly anchored in their interrelationships with the city, and even though they are mostly located in a rural context, they have an operative dimension of undeniable interest and applicability in the current urban and landscape planning process.

They are particular universes and determinants in the evolution and development of the territory's first generative lines, fundamental to understanding landscape design from a symbolic point of view and empathy with natural values. They present a landscape design based on a symbolic and affective dimension, realizing the productive, recreational (spiritual), celebratory, evocative dimension, praising the land, nature, God, the great creator.

The interpretation and recognition of these typologies, as particular universes and models, through the way in which they approach the terrain, how topographical modelling is carried out, how exposures to the climate are chosen and how they relate visually and spatially to the Landscape, ordering the territory, gives rise to highly qualified and recognized spatial types in architectural practice, which reveal the potential of these models to respond to current problems.

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