

THE CATALAN MASIES AS RURAL HOUSES OF WEALTHY FARMERS AND ITS POSSIBLE EQUIVALENT IN PORTUGAL

Dissertation for the Masters Degree in Architecture

EXTENDED ABSTRACT

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ABSTRACT

This work focuses on the study of rural architecture in Catalonia and in particular on the most representative rural buildings of this territory - the *masies*. The *masia*, that designates the rural isolated house, is associated with agriculture holding units and it therefore has fields in its surroundings. It is a 'building-symbol' of the entire property – the *mas* – and epitomises Catalan agricultural life, founded by family units from across the social spectrum, from the wealthy farmer to the nobleman.

The study of these objects aims to bring together evolutionary, geographical, typological and constructive perspectives, centered on places of residence, in relation to their utility, leisure, and areas of production. A brief comparison with the Portuguese rural architecture of Algarve, the only region with clearly Mediterranean characteristics, will also be established.

In order to consolidate knowledge about this heritage, we start from the systematic analysis of an inventory of case studies, based on a survey conducted in Catalan territory.

Keywords: Mediterranean; rural house; *masia*; *monte*.

INTRODUCTION

The present dissertation aims to contribute to the acquisition of knowledge of rural architecture in Catalonia and, in a wider sense, the appreciation of vernacular architecture, specific to each site, so that it is possible to register a past with no return.

At the center of this research is the Catalan *masia*, within the wider panorama of rural architecture of Catalonia. Firstly a general approach was taken to explore the aspects that led to its conception and distribution in the territory, with a geographical and socio-historical point of view, followed by a deeper study upon its architectural evolution since its origin to the consolidation of the architecture type. Therefore it begins with a global vision that will gradually focus on the object of study, the *masia*, without neglecting the relationships with its outbuildings, necessary for the functioning of the agriculture holding, and also the relationship with the territory where it is deployed. The range of studied exemplars has a typological diversity that goes from the small and modest rural house to the large manor house with elements of some erudition, including the isolated rural nucleus and also grouped rural settlements, and focusing mainly in the regions of Maresme and Garrotxa.

The primary objective is precisely to try to understand how these houses were scattered in Catalonia, in what way they were part of the landscape and their relationship with the rural world. The singularity of this heritage lies in its particular response to the environment in which it occurs, also influenced by social events, and in the construction of a canonical model along time that will spread through the territory and it may subsequently overlap some place constraints and local customs. Based on the extensive study of structural and constructive aspects, stylistic and erudite elements, it will try to unveil its origin, its typological evolution and the territorial distribution of these objects. In a sense, this dissertation aims to contribute to the acquist and consolidation of knowledge of vernacular architecture in general, and of the Catalan case in particular, revealing its roots in the Mediterranean architecture and establishing, as the ultimate purpose, a comparison with its possible equivalent in Portugal.

METHODS

Initially an extensive research work was done to thereby acquire the necessary theoretical knowledge of this heritage and its particularities within the rural architecture of Catalonia. The second phase consisted in the selection of the case studies, with the respective photographic record and survey undertaken specifically to this end, in order to complete the research and bridge any gap in the theoretical understanding of this architecture. These case studies can be found in the Annex with a formal description of the built nucleus, accompanied by photographs taken by the author and drawings worked from surveys made to the study *Les masies del Maresme: estudi de les masies, elements defensius, ermites i molins*. Some drawings, especially those relating to the region of the Garrotxa, were provided by Professor Joan Curòs i Vilá. The case studies are organized according to a classification used for this work to catalog all the different exemplars analyzed, in a perspective mainly formal. For the comparison with the Algarvian structures it was used the thesis *The Rural Architecture of the Old Regime in the Baixo Algarve* (in Portuguese *A Arquitectura Rural do Antigo Regime no Algarve*) as the only study of the *Baixo Algarve*, corresponding to a social range, from the small farmer to the nobleman, although the wealthy landowner is in the preferred domain. In short, the dissertation was structured in two complementary components: the research based on critical analysis of monographs, periodical articles and academic dissertations and the construction of an inventory of the studied *masies*.

DEFINITION AND ORIGIN

In architecture history, human geography and social history of Catalonia the terms *masia* and *mas* are concepts of primary importance to understand the nature, the idiosyncrasy, the historical evolution and the customs of this culture. One factor that distinguishes a territory of a neighboring territory is the very architecture of the place – the vernacular architecture – unlike the architecture that follows the trends of a specific time, in many cases imported. This vernacular architecture often uses local materials and construction techniques that have resulted from a secular transmission of knowledge and traditions closely related with the micro-reality of a certain territory, of a particular human group.

The most representative rural buildings of Catalonia are undoubtedly the *masies*. They all have a common denominator, but they also have an array of features that differentiate them and place them, naturally, in different groups. They reflect the Catalan agriculture life and are commonly family holdings.

In a general and simplified way there are two types of built nucleus: those comprising a single building which gathers housing, space for the animals and for other rural activities; another one in which stands out a building, of the owners, with greater investment in architecture, that has adjoining outbuildings to the different activities that nourish its economy. These are built after the *masia* and have a certain disposition in order to create the best possible connection between volumes and promote a functional fluidity of rural and domestic activities. The structure of the *masia* is divided into three floors: the ground floor, the upper floor and the attic (*goltes*). There are some singular cases where exists an extra floor, especially in mountainous areas, and there are rarely found *masies* with a single level. This arrangement is due to the intention of ordering the floors by its different functions. Generally, the ground floor was destined for animals (*quadres*), the second floor for housing and the attic to store and dry agricultural products.

In fact, it is believed that the architectural structure of the *masia* has its origin in the rural *villae* that populated largely Catalonia until the Visigoth invasion, that also adopted, throughout time, characteristics of other isolated rural buildings, in particular castles and *Salas* (Halls). Both are antecedents of the noble house and, in a way, without taking account specificities, they are a transversal construction throughout Europe, especially in the Middle Ages. The first known exemplars of the *masies* are dated from the XII century and they were the starting point for the creation of a paradigm of the rural architecture in Catalonia. Naturally, the changes or innovations in the agriculture holding and in the construction techniques caused some transformations on both the organization of space and, consequently, in the exterior image of the building, although it is possible to identify certain characteristics that remain largely identical until the formation of a type – the ‘classic structure’ – in the XVI century.

THE STRUCTURE OF THE CONSTRUCTION

The construction of the *masia* is based on a modular system formed by the junction of a series of elongated structural units which are named *crugies*. These modules with about 4-5 m wide, a frequent measure common to many primitive or vernacular architectures, are materialized through stone walls and surmounted by wooden beams perpendicular to the walls. Sometimes there may be a partial or total replacement of this system by a portico structure of stone pillars, while maintaining the idea of a compact volume – *crugia* – by constructing masonry walls of ceramic bricks or wooden walls with plaster. This width between walls allows to cover the volume with wooden beams of modest measures, usually according to the size of trees, allowing the module to extend itself along the length. The way the space of the *crugia* is covered is possibly the best feature that indicates the economic strength of the family and the period in which it was conceived. Initially, and also in more modest houses, we can find simple floor with wooden planks over the beams or, in other cases, barrel vaults especially on the lower floors. Usually, the upper floors and the attic are associated with a lighter composition, like a portico structure combined with a system of wooden beams, while the ground floor maintains its solid walls. Therefore, the coverage of the most noble space in the *masia* – the living room – can have wooden planks and exposed beams or, in cases of greater nobility, crafted wood surfaces. Naturally, there may be some cases where there is not a scheme based in the *crugia*, usually in older or modest houses. The modular system is a phenomenon that is established in the same period with the notion of ‘classic structure’ of the *masia*, as we can suppose. During the XVI and XVII centuries, many old rural structures (*masos rònecs*) situated in secluded areas, with strong slope or in the woods,

which had not yet been modified since its construction, will be recovered. However, its skeleton will not necessarily be this canonical structure that defines the *masia*, in contrast to what happens in the XVIII century, at the growth peak of the Catalan agriculture, in which is well distinguishable the 'classic structure', as by this time the houses were commonly built from scratch.

CLASSIFICATION PROPOSAL

The various proposals to classify the *masies* reveal the existence of a precise criteria system to categorize the different exemplars. On the one hand, there is a strict organization that sorts the different types according to a single principle, as is the classification of Danés, which raises two typological families based on the morphology of the roofing and in the existence of galleries. These two regulatory principles are only applied in *masies* with a 'classical structure'. On the other hand, Curòs i Vilá offers us a more wider view of each group of his classification, in the way that they often are organized according to their geographical location or share just one element in common, like a tower or a raised central body. However the idea of a sole model of classification is incorrect, because the *masies*, as almost all rural architecture, present many variations and exceptions, in fact, they are in constant transformation and they do not have a final form by nature.

The climate and the geography are undoubtedly two of the many factors that may have influenced the different formation and distribution of the *masies* in the territory. At least they had a great relevance in the first instance until the creation of a transversal architectural type. The climate is responsible for determining some constructive components as the slope of the roof, the covering materials, the dimensions of the openings, in other words, the exterior morphological features of the building. The topography and the region where it is located will also strongly influence the type of roof and, in turn, the entire building, as the coverage is the element that most transforms the *masia* in its two dimensions: on the outside aspect and consequently in its internal structure, which generates the internal spaces. There are three distinguishable main typological groups related to the geographic distribution in Catalonia: high mountain *masies*, middle mountain *masies* and plain *masies*, in which each one evolved in order to improve its conditions within a typological limit.

Having regard the exemplars studied in this work, which lie within a precise geographical boundary, namely the region of Maresme and Garrotxa, and existing in the present historical moment, it was necessary to propose a new classification that included the whole spectrum of samples obtained in the field work, from a morphological point of view.

TYPE I

It is a model of rural house that seems to have particular significance in areas of high mountain, dense forests and with abundant rainfall. The gradient of the roof, oriented to the main façade, is the main feature that defines this type. With an humble and unpretentious aspect, built in stone masonry and imbued with an obvious rusticity, the type I *masia* seems to reflect a primary model.

TYPE II

Generally organized into two floors, the type II is provided with a gable roof oriented to the side façades, creating a kind of fronton on the frontage. This is the type of house with greater representation in rural Catalonia.

TYPE III

Such as type II, is endowed with a gable roof with a perpendicular ridge to the main façade, with the difference that has another extra floor, usually to store crops. Naturally larger, this type appears to lose more and more the rough expression of the previous types, emerging certain ennobled elements that raise it to another status.

TYPE IV

A)

This type generally referred by other authors as the basilical *masia*, for its resemblance to the Roman basilica, is characterized by the existence of an elevated central body between two lateral bodies, based on the 'classic structure' of three parallel modules. This vertical growth enables the construction of an additional space dedicated to the deposition of various goods, in particular agricultural products, unlike the original function of the basilicas. The central body is provided with a gabled roof oriented to the side façades, maintaining the same gradient in a lower level in the lateral bodies.

B)

The type B is endowed with the same general characteristics of the previous type and specially preserves its higher central body. However, the ridge of the gable roof is parallel to the main facade, in contrast to type IV|A.

TYPE V

This model is characterized by its quadrangular outline and the existence of three full floors with multiple *crugies*, result of successive additions, which shows the family economic prosperity. It has a hipped roof and the façade tends to adopt an orderly composition with well pronounced axis and stone openings of the classicizing type.

TYPE VI

Variant of the previous type of a manor house with hipped roof and the ridge parallel to the main façade. Noted for its third floor, reserved to the attic, with a row of small openings with round arches and flanked by one or two towers, which bring out the built set. This construction of considerable size tries to create an image of power and economic ease, observable in the very scale of the building and in the architectural composition of the main façade, quite orderly and with a precise metric.

RURAL ARCHITECTURE OF WEALTHY FARMERS IN PORTUGAL

The only area in Portugal susceptible to be comparable with the Catalan territory is clearly the Algarve for its typical Mediterranean characteristics, although it is a smaller territory and does not have a zone of high mountain or great plains, as the Pyrenean Cordillera and the Catalan Central Depression, respectively. Therefore we start with this premise to establish a comparative analysis of homologous architectures between the two regions with a similar geographical and climatological basis, in order to make this study more equivalent.

Regarding the rural architecture of the Algarve, the *monte* is undoubtedly the only type capable of being compared with the *masies* of Maresme. This corresponds to an isolated rural nucleus, associated with a farm unit, which forms a scattered net in the territory - phenomenon visible especially in the Litoral and Barrocal, with a greater concentration around urban centers. The *monte* is the rural house of all farmers and all owners. 'From the small farmer who has a small propriety whose exploitation is insufficient for

the subsistence of the family, while having to work for a more wealthy landowner, to the farmer that explores the lands of a great absent owner, or multiple owners. From the urban craftsman, to the prominent nobleman who has a private chapel¹. This term, with some terminological ambiguity, in addition to naming the main building, it can also mean the entire property, like the word *mas*. In fact, both the *masia* and the *monte* establish an intimate relationship with the territory and, in a sense, their architectures are a response to the agricultural and landscape surrounding.

The *monte* has clearly a disperse implantation in the territory and rarely are located in the peaks, staying by the slopes or sometimes along the valleys, and exceptionally, occupy the summit of a small hill. In other hand, the *masies* of the region of Maresme are grouped in small clusters around a parish, without reaching the category of village, and were mainly located at lower and flatter areas between watercourses. While there may be different degrees of proximity between *masies*, this rural structure is without a doubt more compact than the distribution of the *montes* in Baixo Algarve.

THE STRUCTURE OF THE MONTE

Regarding the architectural solutions of these two rural nucleus, it is obvious the formal differences between the *masia*, with a compact appearance and an overlap of functions and floors, and the *monte* of one single level in the form of an elongated rectangular volume. In fact, the tendency to the concentration of functions in a single building is more evident in the *masia*, as we have seen, and in less obvious way in the *monte*. This Algarvian structure includes a main building with a rectangular perimeter and at least one housing, sometimes two (the owner's and the caretaker's), and the required outbuildings to the development of agricultural activity: 'the stables, the haystack and often a cellar, the warehouse and a shelter for the wagon or for the oxcart and different storage rooms'².

The *monte* has a layout and a generic composition, likely with some exceptions: the main body is arranged in two parallel rows of compartments, separated by a structural wall that follows the entire length of the building and where rests the ridge of a gable roof just slightly inclined with middle-cane tiles. The main façade is biased towards the south quadrant, as in the *masies*, and is the only one that consistently includes openings unlike the rear and lateral façades. The building has tendency to grow to the short sides by extending the length of the volume without losing the rectangular outline.

Another common type of roofing in the *monte* is the *telhado de tesouro*, a distinctive element of the Algarve, endowed by a hipped roof highly inclined forming a sharp bend at the bottom and making the eaves almost horizontal. Its origin dates back to the XVI century, in noble houses of some urban centers, and soon came to be constructed in the cottages of these noblemen. These roofs were seen as a distinguishing of nobility and therefore were adopted in the *montes* of some nobles, as well as in some wealthy farmers, although they do not cover all the compartments of the house, as was the case in urban houses and other houses of greater prestige. They only covered the most important compartments - the living room or the master bedroom.

The remaining outbuildings, such as the oven, the pigsty or pens, can be leaned against the rectangular volume or can be dispersed around the building, but generally they are grouped in a row in front of the main façade, forming a small interstitial space between the two groups of buildings, endowed with a functional complexity. It can be an access

1 João Vieira CALDAS, *A Arquitectura rural do Antigo Regime no Algarve*, p. 298.

2 Idem, p. 298.

and crossing path of the *monte* or a a leisure and work space, and is predominantly covered with a pavement which attests the special character of this outdoor area.

CONCLUSION

As a general rule, extracting a theory with precisely defined patterns in rural architecture is a difficult task, as this consists of numerous exceptions that do not always have the intention to follow canonical models. In the case of the Algarvian *monte* this work is even more difficult. Although these houses can be distinguished from other rural houses in Algarve by its origin, general organization and type of growth, there are no more rules governing its construction: the formal aspect of the *monte* is very varied, the internal distribution does not have a single formula, the compartments do not have standardized dimensions and there are not even uniformity in the constructive elements that could have been produced by the same master.

On the other hand, the *masia* presents a series of transversal features in the whole territory: the same volumetry, according to the type to which it belongs; the internal distribution preferably follows the organization of the 'classic structure' with three rectangular units, parallel and adjacent to each other, giving special importance to the central body, where is the living room; the dimensions of the compartments are defined by the span width ranging normally between 4 and 5 meters; the building elements assume, as a rule, the same uniformity as they are made by the same master.

Having regard all the aspects discussed in this work, one can conclude that despite the common Mediterranean background, strongly influenced by Roman and Islamic civilizations, the vernacular architecture of the Baixo Algarve and Catalonia differ on many points, giving them distinct identities, oftentimes with the same vocabulary.

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