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## From the Cloister to the City: Approaches to the Cistercian Land Management

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# From the Cloister to the City: Approaches to the Cistercian Land Management

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**Abstract.** The first Cistercian monasteries appeared in Portugal in the 12<sup>th</sup> century. The Portuguese Cistercian monasteries were set to the image of Clairvaux, the Cistercian branch which they mostly came from and which defined the typology of the place. Cistercian foundations were usually built in valleys, but many Portuguese Cistercian monasteries are the result of affiliations rather than foundations. There is a great concentration of monasteries in the north and centre of the country as opposed to all the territory to the south of the river Tagus. History and strong climatic contrasts had their repercussion in the implantation of the Cistercian monasteries in this territory. However, implantation errors happened and, for that reason, it was possible to change the site (as permitted by the Cistercian legislation) that is the change of a monastery from one place to another (as was the case of the Monastery of Santa Maria de Salzedas or the Monastery of S. Pedro das Águias). In a Cistercian monastery, water was an essential resource, not only essential to everyday life, regarding hygiene and energy needs, but it also had a very specific meaning and symbolism. 12<sup>th</sup>-century Cistercian hydraulic system was something extraordinarily new and water was always a constant element in the choice of Cistercian implantation sites. Some monasteries were the origin of settlements, thus reaching some important features and dimensions. This was the cases of Odivelas, which was settled alongside the Monastery of S. Dinis de Odivelas. and of the city of Alcobaça or Valado dos Frades (former farm of the "Coutos" of Alcobaça). The monastic space can be understood as a territorial organism in the way that it adapts itself to the territory, thus modelling and altering it according to its needs. In fact, this paper aims at discussing this process regarding not only the specificities of Portugal, as a country, but also the specificities of the Cistercian land management since the 12th century: this is from the cloister to the city.

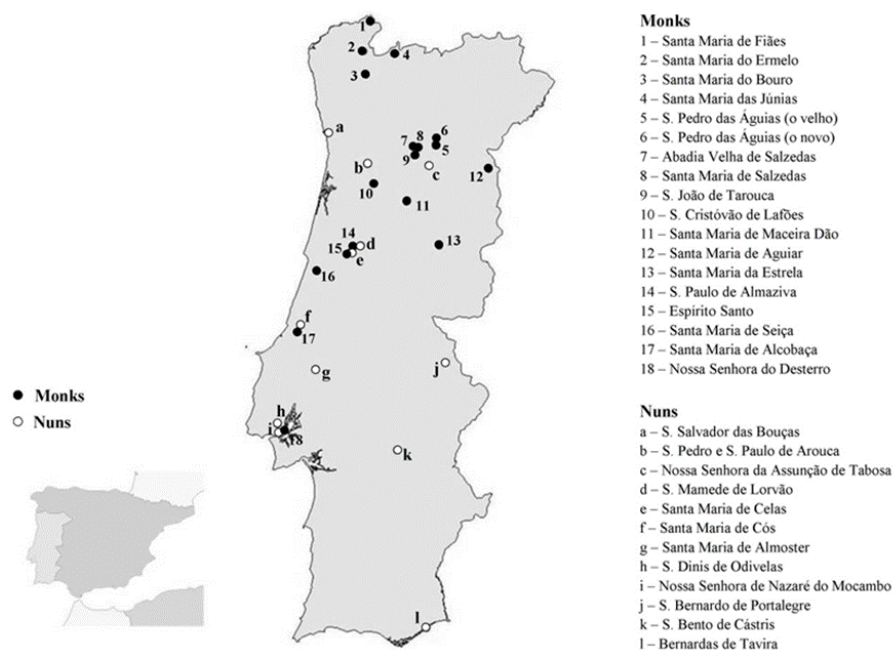
## 1. Introduction

The Cistercian Order was introduced in Portugal in the 12th century far from the urban context. The first monastery is traditionally appointed, as the Monastery of S. João de Tarouca (1143-1144) according to Cocheril [1] despite playing the primacy with the Monastery of Lafões [2]. The new monasteries were deployed to the image of Monastery of Clairvaux, from which branch they come from and defining a typology of the place. The last Cistercian monastery to be built in Portugal was the Monastery of Nossa Senhora de Tabosa (1692).



As Martins [3], [4]. as well as Martins and Carlos [5] argue, the foundations and affiliations of the Cistercian Order in Portugal were associated from the beginning, to the objectives of occupation and administration of the territory, mainly during the birth and creation of the Portuguese nationality (1143).

These objectives put together cohesion and interconnection, not only territorially but also cultural and civilizational, thus being the Cistercian monasteries, in the Portuguese context, also a mean of assertion and defence of the territory [3], [4]. This fact allows the understanding of the vast scale of territorial occupation, the extent of its domains and areas of influence (figure 1). It should be taken into consideration that the Cistercian monasteries in Portugal were mainly bound to Clairvaux, thereby defining a typology of insertion in the territory in all monasteries (either of nuns or monks) [3], [4], [5].



**Figure 1.** Insertion of the Cistercian monasteries in Portuguese territory according to Martins [4]

The foundations of the Cistercian order in this country, especially in the first centuries of its history, were associated with occupation and land management objectives [3], [5] as a strategic way to transform the context of territories under precedent Islamic rule [3], [4], [5]. In 1567 the Portuguese Cistercians separated from the obedience to Clairvaux when they were elevated to the category of Congregation, in short known as the 'Autonomous Congregation of Alcobaça' [3], [4]. After the disappearance of the Orders, in 1834, the country underwent numerous transformations and the Cistercians moved out of Portugal to never return [6].

The Cistercian legacy in Portugal was concisely discussed in Martins and Carlos [5] based in Martins [3]. We must not forget the vital importance, both temporal and spatial, of the monastic Orders in the development of the urban fabric of a city which, in turn, is included in a country [3], [4], [6].

## 2. Cistercian construction of the monastic space

Spiritual and material reasons exerted a decisive role in the choice of the place to build each Cistercian monastery. The determination of the medieval Cistercian site should stimulate and adapt to a life of spirituality, closure, recollection, asceticism, prayer and work of the monks. The mild valley areas play a key role in the organization and dynamics of the Cistercian life [3]. To make better use of their endogenous resources, the monks ordered the surrounding landscape to ensure the structure of the

productive system and their own livelihoods [3]. Regarding the Cistercian architecture, there is a mimesis with the surroundings, with the landscape with the location where it would be settled, that is, with the chosen site. The Cistercian monastery is symbol of the economic model of the Order of Cister based on the autarky and the divestiture of assets [3], [7],

A Cistercian monastery should be considered as an ideal city and endowed with all necessary elements for subsistence as the rule of St. Benedict says: "If it can be done, the monastery should be situated so that all the needs, such as water, the mill, the garden, are enclosed, and the various arts may be plied inside of the monastery, so that there may be no need for the monks to go about outside, because it is not good for their souls." [8]. Furthermore, "No monastery shall be erected in a burgh, city or village. A new abbot shall not be sent to make a new foundation without at least twelve monks, without having among the books, a Psalter, a Hymnal, an Antiphony, a Gradual, a Rule, a Missal, nor before, in that same place, were raised the buildings of the oratory, the refectory, the guest-house and the gatekeeper-house. This, so as to they can immediately serve God and lead a regular life. Outside the walls of the monastery should not be built any housing, other than that of animals. With the purpose of perpetuating the indissoluble unity among the abbeys, it was established the supreme norm that the Rule of St. Benedict will be interpreted in one way only (...)." [9]

Often the Cistercians implanted their monasteries in valleys, thus being necessary for this to carry out deep transformations in the territory in order to make them fertile and habitable [3]. The demand and preference of valleys for the implantation of monasteries are evident in the primitive legislation. These sites thus allow access to water, a precious commodity for subsistence, as well as the isolation of the hustle and bustle of urban life [3], [10]. But it was also in the valleys that were the raw materials needed for construction and lands for cultivation were [3], [7], [10].

The Cistercian monasteries were from the beginning complex architectural systems and presented a complete and coherent architectural complex of great formal balance, following a unique program [3]. The Cloister, according to Bernard of Clairvaux was the "Paradisum Claustralis". The life in the Cistercian cloister is not only an ideal of life, but also an image and a glimpse of paradise. St. Bernard mentioned this paradise, in his Epistle 64, referring to the Abbey of Clairvaux wishing for the monks that it would be the heavenly Jerusalem on Earth [3].

The innermost part of the monastic encircling walls was composed of buildings proper to the divine service and to the dwelling, arranged of "more nostrum" [11] following a rigid scheme, whereas the necessary but necessary spaces like warehouses, infirmary were placed in a freer mode [3], [4]. The farthest area of the main building of the monastery was the farms which were essentially agricultural workplaces, that is, farms no more than a day's journey from the monastery and run by the lay brothers [3], [4]. In the Cistercian farm, directed by the "magister grangii", there was the dormitory, the refectory, the calefactory and the chapel [3].

Once the site was chosen and if it did not reveal some type of insufficiency or impediment, its development was carried out in phases [3], [4]. For a monastery to thrive and develop, it was necessary to create a perfect rooting for which intelligent adaptation to the environment was necessary. The site transfer point to a concern by the Cistercian monks in relation to their territories regarding its development and prosperity. Site changes occurred whenever the first site revealed some insufficiency or difficulty, namely scarcity of space, proximity to lay inhabitants and insufficient water [3].

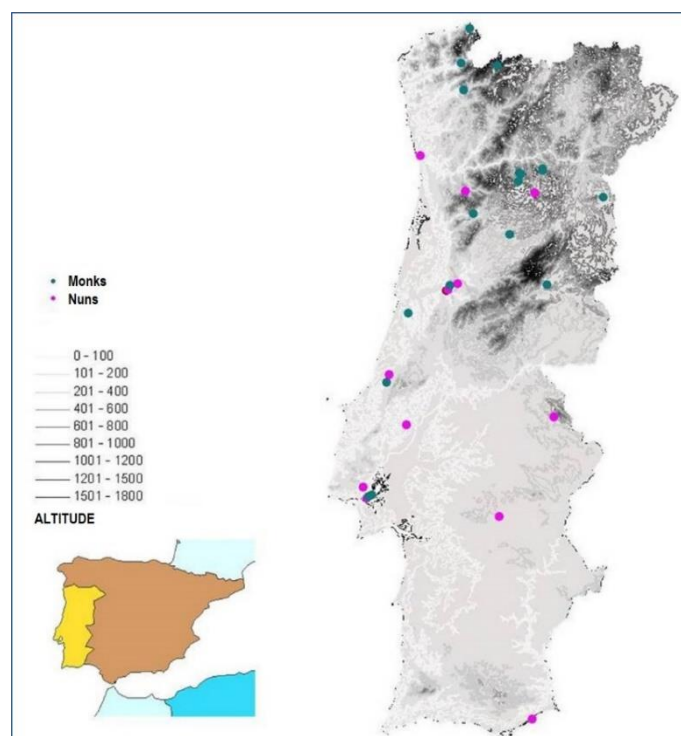
The water line has always been a constant element in the choice of Cistercian settlement sites. The Cistercian hydraulic system represents something extraordinarily new. Tobin [12] and Braunfels [13] point to Cistercian hydraulics as something exceptional in the context and at the time when the first Cistercian monasteries were founded.

The water was important for the hygiene of the monks (used in the lavabo and latrines) and for their spirituality (ablutions in the lavabo). It was also important for the economy (use in forges, mills, fisheries, watering) and above all for the subsistence of the monks through drinking potable water reserves. In this way the Cistercian monastery needed a double hydraulic infrastructure that was efficient, from the capture of water, to its transport and distribution inside the monastery and finally to the evacuation of the residual waters [14], [15]. That is, running water was a mandatory condition in choosing the location of the Abbey and should first go through the kitchen and dining rooms, then pouring into the latrines below the dormitories [3].

### 3. Cistercian geographic distribution in Portuguese territory

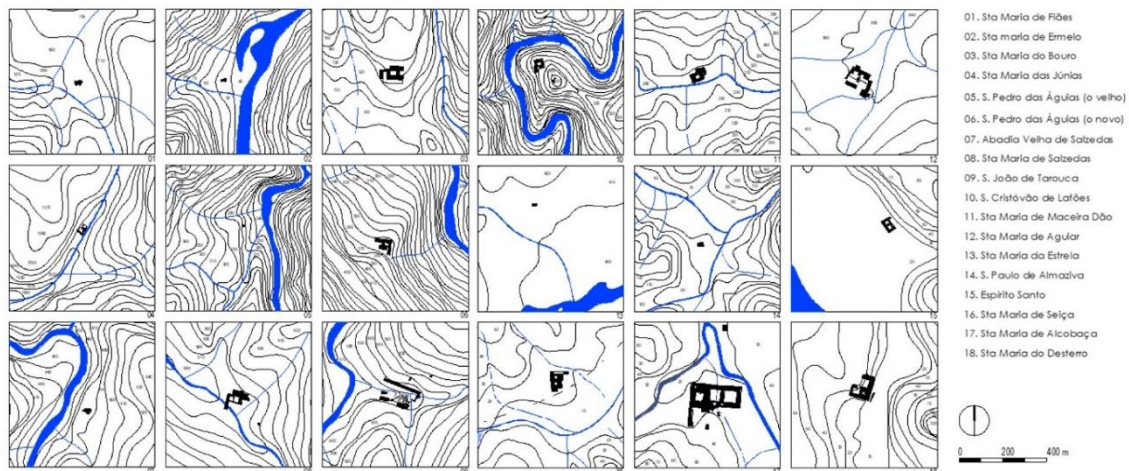
The Cistercians in Portugal sought out places out of large urban centers, preferably in fertile valleys and near a watercourse to implant their monasteries in accordance with the Cistercian ideal. The distribution of the Portuguese Cistercian monasteries, either of masculine communities or feminine communities, at the geographical level is quite asymmetric but always near to a water line.

In fact, a great concentration of elements appears in the north and center of Portugal unlike all the territory to the south of the river Tagus, where the implantations are very limited (figure 2) [3]. This is simply explained by historical reasons given the time and geographical region in question. For the Christian Reconquest of the Iberian Peninsula, to the Muslims, by the Christians, progressed from North to South. The North zone was during a few years in the hands of the Muslims whereas the South was submitted to them between the 9th and the 13th centuries [3].

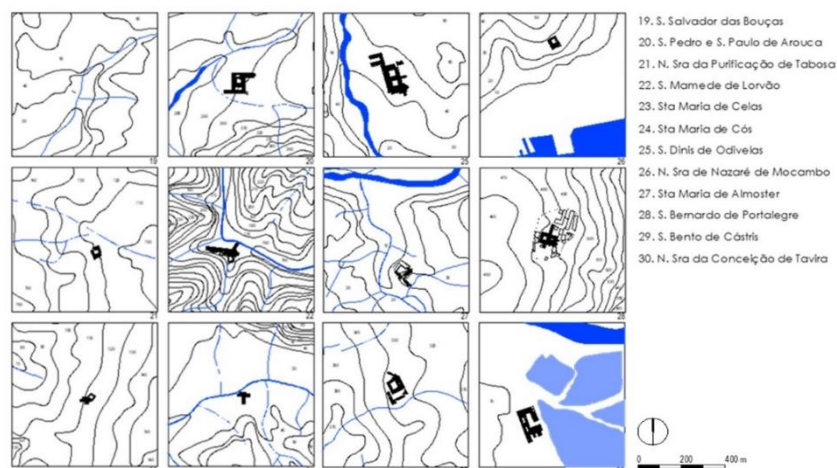


**Figure 2.** Altitude insertion of the Cistercian monasteries in Portuguese territory according to Martins [3]

The masculine Cistercian monasteries are found at an altitude generally higher than that of the feminine Cistercian monasteries (figure 3 and 4), which is explained by the fact that the first monasteries were masculine and dependent on the geographical organization of a nation in formation that was gaining ground as it forced Muslims to retreat ever further south, thus allowing the feminine monasteries that emerged from the 13<sup>th</sup> century on, to be implanted in less northern lands, at a lower altitude [3].



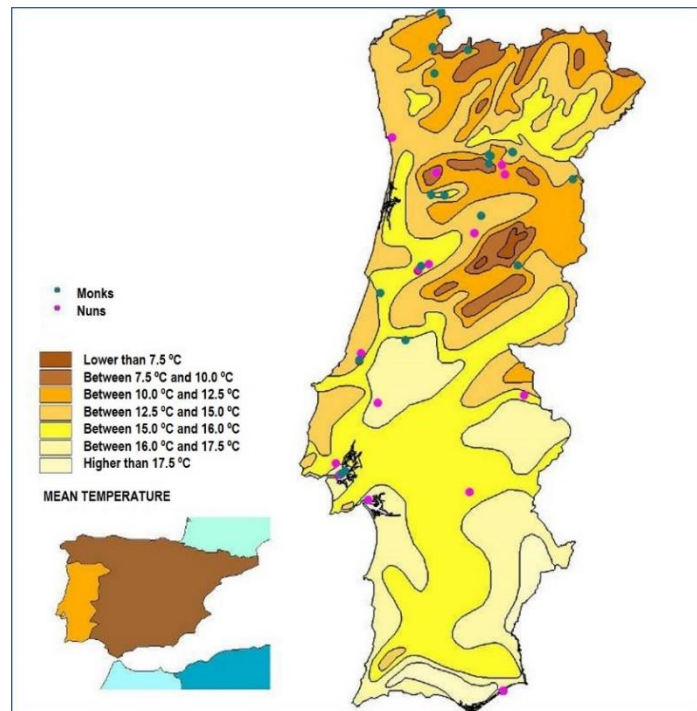
**Figure 3.** Masculine Cistercian Monasteries according to Martins [3]



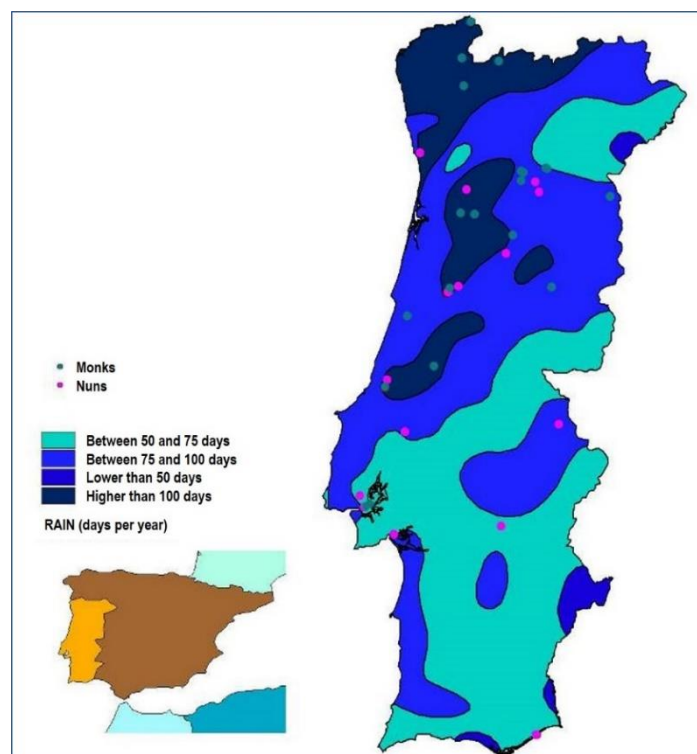
**Figure 4.** Feminine Cistercian Monasteries according to Martins [3]

The highest implantation of a Portuguese Cistercian Monastery is the Monastery of Santa Maria das Júnias, in the north of the country at 1020 metres of altitude, and the east elevation is that of the Monastery of Nossa Senhora da Piedade de Tavira, in the south of the Country, in the Algarve, 10 meters above sea level. Curiously, they are masculine and feminine Cistercian Monasteries, respectively. It is noteworthy that in the case of the feminine Cistercian monasteries, the maximum altitude of implantation reached is of 710 meters which correspond to the Monastery of Nossa Senhora da Assunção de Tabosa [3].

The geographical situation and the elongated form of the territory are associated with strong climatic contrasts. Two main causes determine the climate and consequently the "weather types": solar radiation and the movements of air masses that combine differently within each climate zone [3][16]. In Portugal, temperatures increase from north to south (Figure 5). The proximity of the Atlantic Ocean reduces the thermal amplitude compared to the interior, where there is a greater cooling of winter and a greater heating of summer. On the other hand, the distribution of precipitation (Figure 6) is well marked in the whole territory being complemented in winter, a rainy season par excellence, by an increase of contrasting rainfall with the summer practically free of it [3][16].



**Figure 5.** Indication of the mean temperature per year in Portugal and the insertion of the Cistercian monasteries in Portuguese territory according to Martins [3]

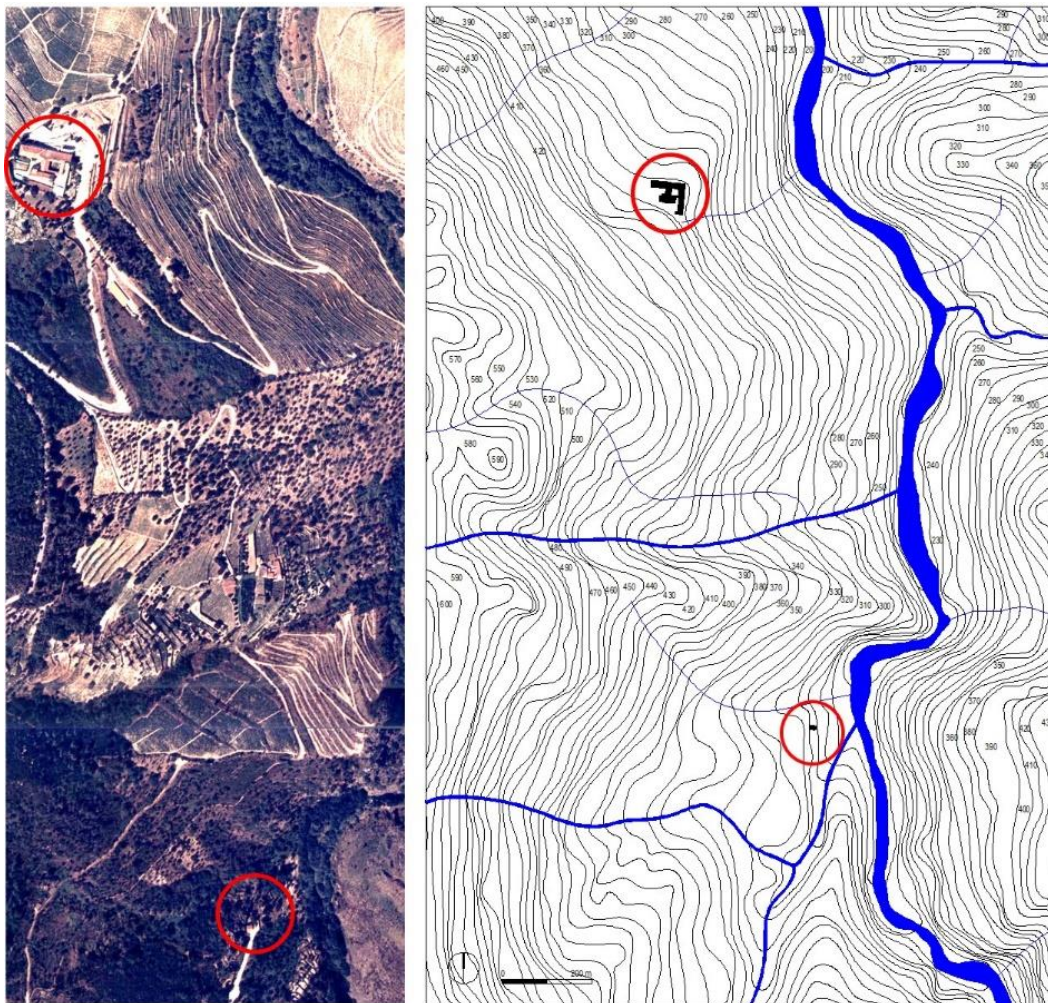


**Figure 6.** Indication of rainy days per year in Portugal and the insertion of the Cistercian monasteries in Portuguese territory according to Martins [3]

The strong climatic contrasts present in continental Portugal also had its impact on the implementation of the Cistercian monasteries in this territory because it was necessary to take care of agriculture, viticulture and the monks were not oblivious to this problem [3]. However, the harshness of the climate has always been felt, either in the north of the country (Monastery of Santa Maria das Júnias) or Center of the country (monastery of Santa Maria da Estrela) [3].

#### 4. Approaches to the Cistercian land management

In the Cistercian legislation it was included the change of site, that is, the change of a same monastery from one place to another (as it was the case of the Monastery of Santa Maria de Salzedas or the Monastery of S. Pedro das Águas, (figure 7), [3], [4].



**Figure 7.** Site transfer of the Monastery of São Pedro das Águas according to Martins [1]

The monasteries of Santa Maria de Salzedas and S. Pedro das Águas, inserted in the region of Beira, have improved the Cistercian action in the Country. They provided the development of vineyard cultures and the fomentation of the wine trade [7]. Both are examples of settlement transfer practices practice which sometimes happened with the Cistercian monasteries [3], [4], [7].

The Monastery of Santa Maria de Salzedas corresponded to an initial insertion in the Northwest, from which there are significant archaeological vestiges of the Old Abbey of Salzedas, in a private land (the 'Quinta da Abadia Velha' which literally means Old Abbey's Farm) [3], [4], [7]. The Monastery



of Salzedas is highlighted not only by its grandeur but also because it uncovered the original church during the restoration works, engaged by the Directorate General for National Buildings and Monuments [3], [4].

The Monastery of Sta Maria de Salzedas was transferred to a few kilometers because it was facing risk of being frequently flooded due to floods of the river Varosa given its proximity to this water line thus replacing the Old Abbey of Salzedas.

S. Pedro das Águias, the old one, was replaced by the Monastery of S. Pedro das Águias, the new one, due to the aridity of the place of the first implantation (figure 7). Both the first implantation of Salzedas and the first implantation of S. Pedro das Águias were not finished due to the transfer of site and both traces of the church remain incomplete in the Salzedas case and complete in the case of S. Pedro das Águias [7]. This way it can be verified that the oratory would always be the first building of the monastic set to be erected in stone.

The Cistercian monastic space can be understood as a territorial organism which is inserted in a territory in the way that it adapts to the territory, thus modelling and altering it according to its needs but also as an architectural space which is constructed according to the needs of the spirit and body [4], [17].

The Cistercian monasteries have always sought isolation and have often deployed themselves far from the ways of communication. However, wherever necessary, the Cistercians have created access routes to their domains. Some of these paths are at the origin of some of the current ways [15]. As it is the case of the national road No. 1 (EN 1) which is only the materialization of an old route created by the Cistercians [3].

Between the second half of the 12th century and the beginning of the 14th century, the Cistercians raised a vast domain which was called "Coutos de Alcobaça", i.e., lands given to the church (in this case, to the abbey) by the king [4], [15]. The abbot protected and assisted the settlers, who would farm the land, raise cattle, build bridges, open routes, and generally occupy and defend the territory during and after the Christian reconquest [3], [15]. The monks of Alcobaça owned three "Coutos" (Alcobaça, Beringel and Ota), as well as four harbours (Pederneira, S. Martinho, Alfazeirão and Paredes) [14]. Consequently, the proliferation of farms which had a preponderant role in the cultivation and settlement of the vast territories donated to the Abbey and desolated by the wars of the Christian reconquest (and in the beginning still under the menace of new Muslim invasions) were due to the Monastery of Alcobaça. Later, these farms became florescent villages such as Valado dos Frades which was initially a monastic farm, dependent of Alcobaça, and was later the first agricultural school (active until 1833) [3].

Some monasteries are in the origin of settlements, some reaching important characteristics and dimensions. This was the case of Odivelas that grew with the Monastery of S. Dinis de Odivelas, the city of Alcobaça itself or the case of Valado dos Frades, a former farm of the Coutos de Alcobaça [4], [5], [6].

However, others are so isolated that even in our days, it is difficult to access them as it is the case of Santa Maria das Júnias. The Monastery of Santa Maria de Alcobaça gave rise to a flourishing city and most of its farms originated small villages. Female monasteries such as Sta Maria de Almoester, S. Mamede de Lorvão, São Pedro and São Paulo de Arouca, are currently inserted in urban fabrics. S. João de Tarouca and Sta Maria de Salzedas, also created to two settlements: S. João de Tarouca and Salzedas respectively [3].

Although the Cistercians belong to an Order that required solitude and isolation, implanted outside the urban context, the transformation and development of the territory allowed that isolated settlements were gradually absorbed by the expansion of the urban fabric and interacted with it, as is the case of Sta Maria de Alcobaça [17] and the city where it is inserted in or even Nossa Senhora da Nazaré do Mocambo in Lisbon [3], [5], [18], [19], [20]. At present most of the remaining monasteries are found in both rural and urban areas, as cities rapidly grew, making monasteries formerly remote and integrated into the urban fabric [3].

The monasteries have provided the contemporary city, especially from the 19th and 20th centuries, with expectant spaces or new fields of experimentation as diverse as rehabilitation, reuse, renovation, conversion [21]. These are new spaces which adapt to new situations, new uses, in short, they update, include and integrate, in its history, the values of the present [5], [6].

The Cistercian monastery, that of St<sup>a</sup> Maria de Alcobaça is an example, started from an ideal of monastic life, thus being considered as an ideal city with a plan of unity and simplicity, a man's dwelling but also of God, and that creates a not planned city, thus becoming and being integral part of the urban fabric and assuming the characteristics of another reality very different from that for which it was planned. However, it will never cease to cause admiration and its ideal remains alive, in the present times, due to the whiteness of its stones, the grandeur of its configuration and the functionality of its spaces which still subsist today, having been even adapted the actual times, thus carrying out other functions but not preventing from affirming its almost minimal origins [17].

## 5. Conclusions

The Portuguese Cistercian Monasteries acquired a statute of landmarks of an emergent nation and of the development of a culture, above all while interlinked and is a coherent system, which it is ruled by the same group of values and ideals.

The urbanization is associated with some Cistercian monasteries and must always consider their deployment sites that exert a fundamental influence on the development of the monastic buildings. The agricultural and industrial resources of these places where the monasteries are located in the territory are still of primary importance. In this way, the problem of the implantation of Cistercian abbeys and monasteries is complex.

The monastic building must be considered not only as an integral part and of development of an urban environment, but also as an element of construction and management of the territory highlighting the specificities of Portugal, as a country, but also the specificities of the Cistercian land management since the 12<sup>th</sup> century: this is from the cloister to the city.

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