

Operational landscapes as culture generators: the case of Barros de Beja

MIGUEL ANGEL PALACIOS CARRASCO

<https://orcid.org/0009-0009-5832-9371>

Universidade de Coimbra / Coimbra, Portugal

CARRASCO, Miguel Angel Palacios. Operational landscapes as culture generators: the case of Barros de Beja. *Anais do Museu Paulista: História e Cultura Material*, São Paulo, v. 33, p. 1-41, 2025.

DOI: <https://doi.org/10.11606/1982-02672025v33e1>

ABSTRACT: Historically, the countryside has been seen as having a subordinate role to the development of cities. Its place in the understanding of the processes that shape the spatial and social organization of society has often been neglected. But if the countryside is thought of not only as a support to the city, but as a territory with autonomous characteristics, it acquires a radical potential for the transformation of urban development. Starting from this question the research aims to explore the confrontation between ancient and contemporary organization of the hinterlands territory, and examines it as an opportunity to establish alternative development processes. This investigation finds its specificity in the low fields of Alentejo, a region in the south of Portugal that can be understood as a mutating territory, where a wide range of traces of its historical landscape are dispersed within a highly operationalized agro landscape. The proposed research advocates for the view of the countryside as a cultural generator, and sees this characteristic as having the potential to mediate between infrastructural transformations and human settlements.

KEYWORDS: Archaeology. Urbanism. Regional planning.

INTRODUCTION

The countryside as an operational landscape

This investigation departs from an understanding about the necessity to reconcile the presence of archeology and the contemporary transformation processes, aiming to investigate its role in the development of society. Thus, this work proposes a wider investigation of the space where archaeology is displayed, looking to answer one main question: *What can be the role of archeology in the development processes that define the spatial and social organization of society today?*

The proposed question is the justification for the chosen space of experimentation. It is no longer possible to look into the contemporary ongoing transformations avoiding the phenomena that have been developed in the countryside space.¹

In the past decades, while architects and urban planners have focused their efforts on understanding, measuring and categorizing the processes that take place in the space of the city, the countryside has been the subject of most dramatic transformations, which have changed the social and spatial organization of this territory. The hinterland² space has become more and more a utilitarian territory, an operational landscape, where the forces of mechanization and increase of technology have led to a space conformation shaped mainly by dynamics aligned to global and capitalist processes (Figure 1).

In this manner, many erstwhile hinterlands, or parts thereof, are transformed into configurations of large-scale territorial ecological machinery: mechanized assemblages of human and nonhuman infrastructure oriented towards capital accumulation within a planet-encompassing profit-matrix.³

In 1970, Henry Lefebvre envisioned such process, coining the term *Urban Society*⁴ to describe the resulting process of global industrialization. Lefebvre established a critical point where the urban concentration, rural exodus, the indiscriminate extension of the urban fabric, and complete subordination of the agrarian to the urban would lead the society towards complete urbanization.⁵

“From this moment on, the city would no longer appear as an urban island in a rural ocean, it would no longer seem a paradox, a monster, a hell or heaven that contrasted sharply with village or country life in a natural environment”⁶. The global territory would then be ruled by “planetary social and environmental relations, imposing new constraints upon the use and transformation of the worldwide built environment, unleashing potentially catastrophic inequalities,

1. See “The countryside is where the radical changes are” by Koolhaas (2014).

2. The term ‘hinterland’ is here used to refer to “variegated non-city spaces that are swept into the maelstrom of urbanization, whether as supply zones, impact zones, sacrifice zones, logistics corridors or otherwise. Such spaces include diverse types of settlements (towns, villages, hamlets), land-use configurations (industrial, agrarian, extractive, energetic, logistical) and ecologies (terrestrial, oceanic, subterranean, atmospheric)”. See Brenner and Katsikis (2018).

3. *Ibid.*, p. 28.

4. Lefebvre (1970, p. 1-23).

5. *Ibid.*, p. 15.

6. *Ibid.*, p. 11.

7. Brenner (2014, p. 18).

8. See Domínguez (2011).

9. Anschuetz, Wilshusen and Scheick (2001, p. 173).

10. *Ibid.*, p. 157-211.

11. *Ibid.*

conflicts and dangers”⁷. The expansion of the urban, analogous to the erosion of the countryside, led to the dissolution of the city and its dematerialization, where “everything is spread out in the same way everywhere, from highways to luxury residential condominiums, shopping centers, or the small house you live in”⁸. This process overtook the global territory and finally led to the loss of identity of both city and countryside, the abandonment of the historical center and the environmental degradation of the hinterlands (Figure 1).

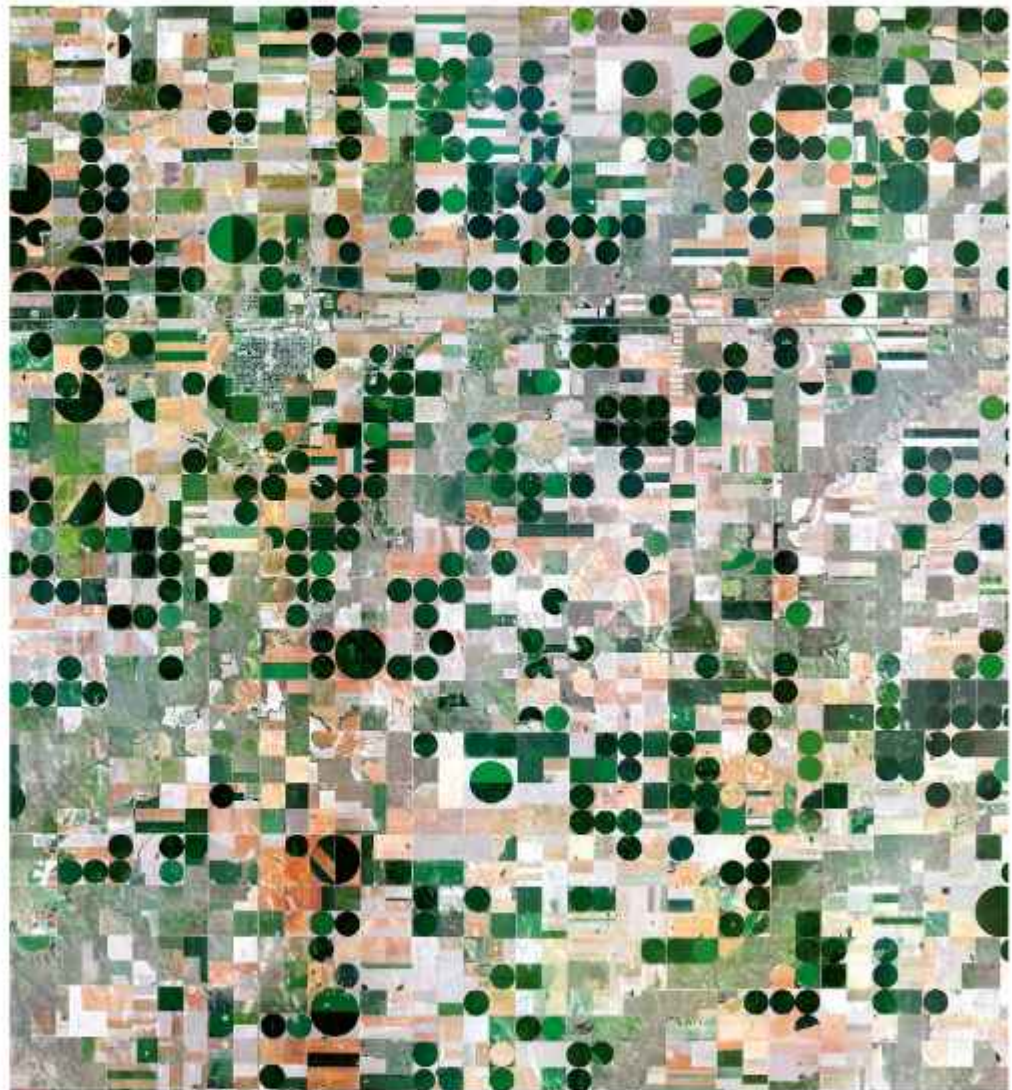


Figure 1 - Operational Landscape. Irrigated crops in Edson, Kansas © Daily Overview.

But historically the landscape exists “for reasons other than strictly practical and utilitarian”⁹. The landscape formation is also a cultural process¹⁰ and dynamic construction¹¹ “with cultural systems structuring and organizing

people's interactions with their natural environments"¹². Thus the landscape is strongly connected with the consolidation of culture, understood as the overlapping of time and spaces, resulting in an ever changing territory.¹³ Throughout all of history, communities have transformed:

[...] their physical surroundings into meaningful places on particular patterns of morphology and arrangement and through physical modifications, intimacies of experiences and sharing of memories, communities reshape the natural settings of their geographical spaces to legitimize the meanings they bestow upon the landscape.¹⁴

In Brazil, for instance,

[...] indigenous modes of inhabitation, both in the pre-colonial past and in the modern present, not only leave profound marks in the landscape but also play an essential role in shaping the forest ecology. Vast tracts of forests [...] that we perceive as natural are in fact cultural landscapes with a deep human past [...] In this way, the forest can be interpreted as a cultural artifact in itself and interpreted through the syntax of spatial designs.¹⁵

Through this perspective, "forests are the product of long-term and complex interactions between human collectives, environmental forces and the agency of other species, themselves actors in the historical process of "designing the forest"¹⁶. Thus any possible approach towards conciliation between operationalization and cultural heritage would have to consider these profound aspects involving both natural and cultural landscapes.

Under these constraints the role of archaeology is clear. Its enrichment can provide an important contribution to the consolidation of memories and meaning of places. But, does this apply to a territory that tends to be uninhabited and has been extensively operationalized? But, does this apply to a territory that tends to be uninhabited and has been extensively operationalized? *Would the function of the historical landscape then be to counter the operational dominance of the hinterlands? And if this is the case, is it possible to reconcile operationalization, nature and culture?*

In order to explore these issues we chose a territory of experimentation. The aforementioned picture, in many aspects very generic, finds its specificity in the fields of Alentejo, in the south of Portugal. A region that can be understood as a mutating territory, where roman villas, aqueducts, and a wide range of archaeological structures are encrusted in "a world formerly dictated by the seasons and the organization of agriculture"¹⁷, but completely detached of the contemporary forces that guide the current territory organization.¹⁸

12. *Ibid.*, p. 160.

13. See Dominguez (2011, p. 15).

14. Anschuetz, Wilshusen and Scheick (2001, p. 182).

15. See Tavares (2017).

16. See Tavares (2017).

17. Koolhaas (2014).

18. We can now understand this area as a mutating territory, where visible and invisible phenomena are developing in a way that challenges the current approach towards heritage management. These phenomena are partially related with the concept introduced by Álvaro Dominguez about the deruralization of Portugal. "The marks and memories of the Portugal countryside are decomposing with the deruralization and its trail of side effects: the depopulation, the abandonment of (traditional) agricultural production and the fields, the disappearance of certain lifestyles, knowledge and cultural practices [...], technological intensification and specialization". Dominguez (2011, p. 23 and 146).

19. This concept has been developed by Neil Brenner, who proposes to blur the dichotomy between the city, normally understood as 'urban', and the non-city space, mainly related to the idea of 'rural'. This differentiation might not translate in a proper way the globalized dynamics that rules the contemporary spatial and social transformations. As explained by Neil Brenner, "urban today represents a worldwide condition in which all political-economic and socio-environmental relations are enmeshed, regardless of terrestrial location or morphological configuration." Introducing the idea of planetary urbanization Brenner states that "Urbanization processes are being regionalized and reterritorialized [...] the urban can no longer be understood with reference to a particular "type" of settlement space, whether defined as a city [...] it is no longer plausible to characterize the differences between densely agglomerated zones and the less densely settled zones of a region, a national territory, a continent, or the globe through the inherited urban/rural (or urban/non-urban) distinction". This means that the countryside might be urban as well. See Brenner and Katsikis (2018).

Spread into this operational landscape, as islands incrustated into the sea of planetary urbanization,¹⁹ ancient structures are displayed without any kind of interconnection, completely detached from the ongoing transformations that are constantly reshaping its surrounding landscape. These remnants have left traces of their ancient organization, and represent some of the last structures that are not conditioned by the operational character of the territory. Their presence can be then interpreted as an opportunity to reimagine the countryside space, through the creation of a net of meaningful places that offer ways of breaking down the divisions between operational, natural and cultural landscapes (Figure 2).



Figure 2 – Alentejo's Landscape. © Author

A TERRITORY OF EXPERIMENTATION

Roman Agrarian Structure

It is not an exaggeration to divide Portugal in two main regions; the north and the south. Geographically defined by the Tejo, the dichotomy between those is not only supported by natural aspects (topography, vegetation, and climate), but also by its demographic and territorial organization. (Figure 3).

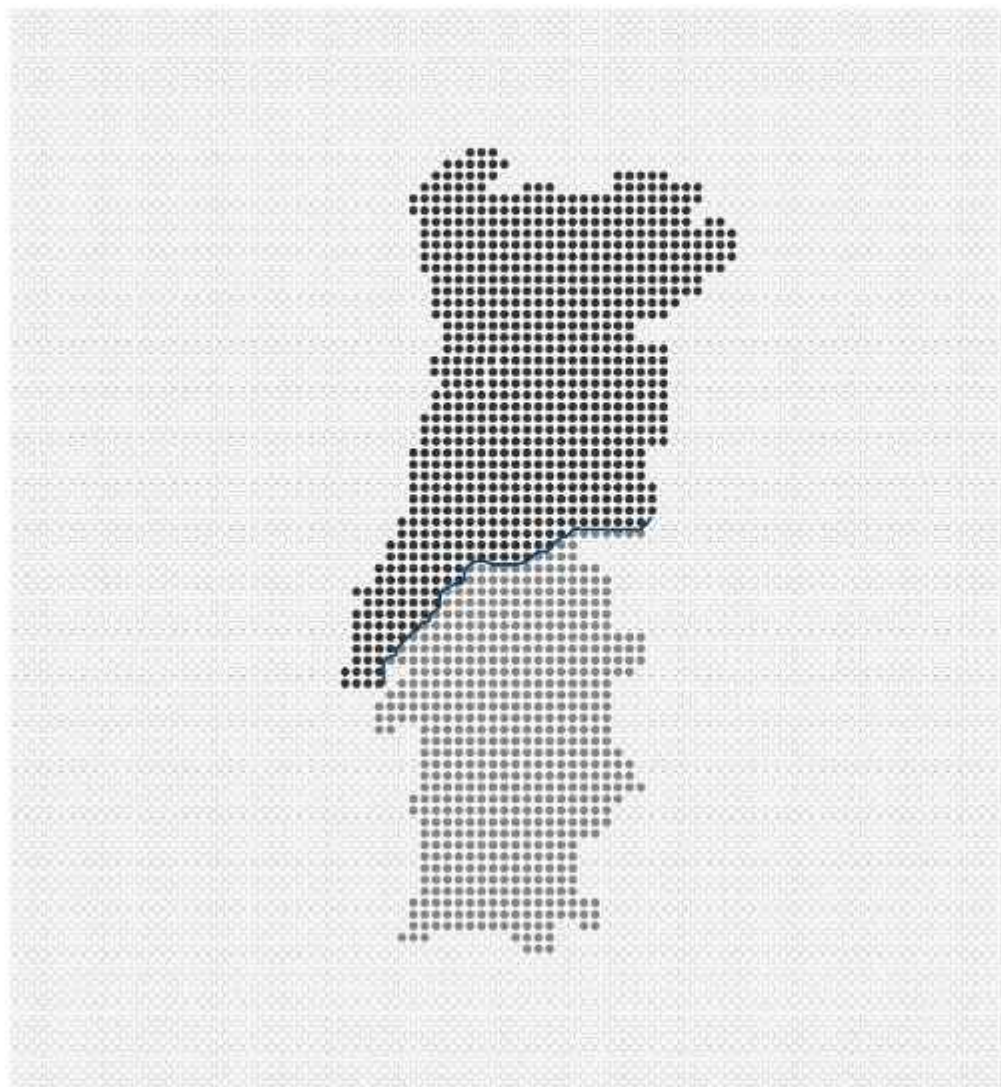


Figure 3 - The River Tejo. © Author.

20. Ribeiro (1945, p. 202).

21. Ribeiro (1945, p. 86).

22. *Ibid.*

23. Vasconcellos (1987).

24. Ribeiro (1945, p. 87).

25. The *Herdades* are the remains of the vast latifundios that were consolidated during the middle ages, which process of formation will be further explained (see the section *From Latifundium to Latifundio*). Each Herdade has each own *Mouie* like the *Corrijos* in Andalusia or the *villae* in the roman *campagna*. See Feio (1945, p. 145).

26. Lopes (2003, p. 204).

27. *Ibid.*

28. The *villae* used to be located in the best soils for cultivation and food production, close to the water courses and valleys. Instead, the *casais* used to be placed in higher lands, a little further away from the rivers and mainly linked to pastoral, artisanal activities or to the exploitation of forest resources. These structures could be either an independent structure or part of a bigger property, ruled by the villa. In those cases "The casais appear in the transition from soils with good agricultural aptitudes to poor soils, in areas where the relief becomes more undulating, occupying there, almost always, the top of bollards. With regard to the villae, they are positioned on their periphery, drawing something like a belt between the land occupied by them and the poor soil, empty of settlement in this period" (Lopes, 2003). The *Pequenos Sítios*, instead, were always linked to a *casal* or a *villa*, being also located in higher lands or

About this contrast, Orlando Ribeiro says:

The first, more Atlantic, rich in water, verdant, where the Nation became a State, dominated by its demographic density, the second more mediterranean, newly parched by long summers, sparsely populated, belatedly integrated into the national community.²⁰

This short description gives us a precise image of the inequalities that permeate the country. The north, densely populated, where inhabitants are concentrated in few cities, finds on its fragmented plots and slopes a support to an intensive agriculture production. Instead, on the contiguous fields of the south, the flat topography and lack of water historically favored grazing and extensive cultivation methods.

But if it is in the north where nowadays the population is concentrated, it was the south the entry door of all mediterranean cultures that influenced the development of this territory.²¹ "Phoenician and Greek colonization, a reflection of the brilliant Betic civilization of Tartessos, Roman and Arab occupation, which both moved from the South to the North and in the South left a deeper crease".²²

This does not mean that in the north of the country traces of roman occupation cannot be found. As described by Leite de Vasconcellos, in Portugal "the Roman occupation extended so far that we cannot walk one single league without showing any evidence of it - ruins, ceramics, coins [...]"²³. But, despite the Arabic domination, whose vestiges, being more recent, often overlapped previous roman traces, it is definitely in the southwest portion of the country, especially in the low fields of Alentejo, where the roman occupation found its apogee in Portugal. "There are the ruins of the main cities and Roman monuments and where the richest and most prestigious Moorish settlements were located".²⁴

At the beginning, the roman occupation established new limits to the agrarian units, giving rise to the roman *latifundia* that would later be translated into the *Aerdade Alentejana* and the *Monte*.²⁵ The cultivation of wheat, vine, olive, and fruit trees replaced the cereal crops of the slopes, mainly present in the north of Portugal. Finally new industries and mines were built, that combined with the agrarian system of villas, *Casais* and *Pequenos sítios*, established a new productive and operational landscape.

The implementation of a new agrarian structure led to profound changes in the dynamics of the countryside space, reorganizing its social, economic and political functioning.²⁶ This changing process cannot be situated before the first century D.C.²⁷ and do not only refer to the construction of the villas, but to the consolidation of a hierarchical system complemented by the *Casais* and *Pequenos Sítios*.²⁸ Those structures were displayed according to the fertility of the soil, the hydrography and topography. This explains the non-uniform occupation and distribution of these structures all over the territory (Figure 4), and opposes the ancient landscape to its current homogeneous organization.

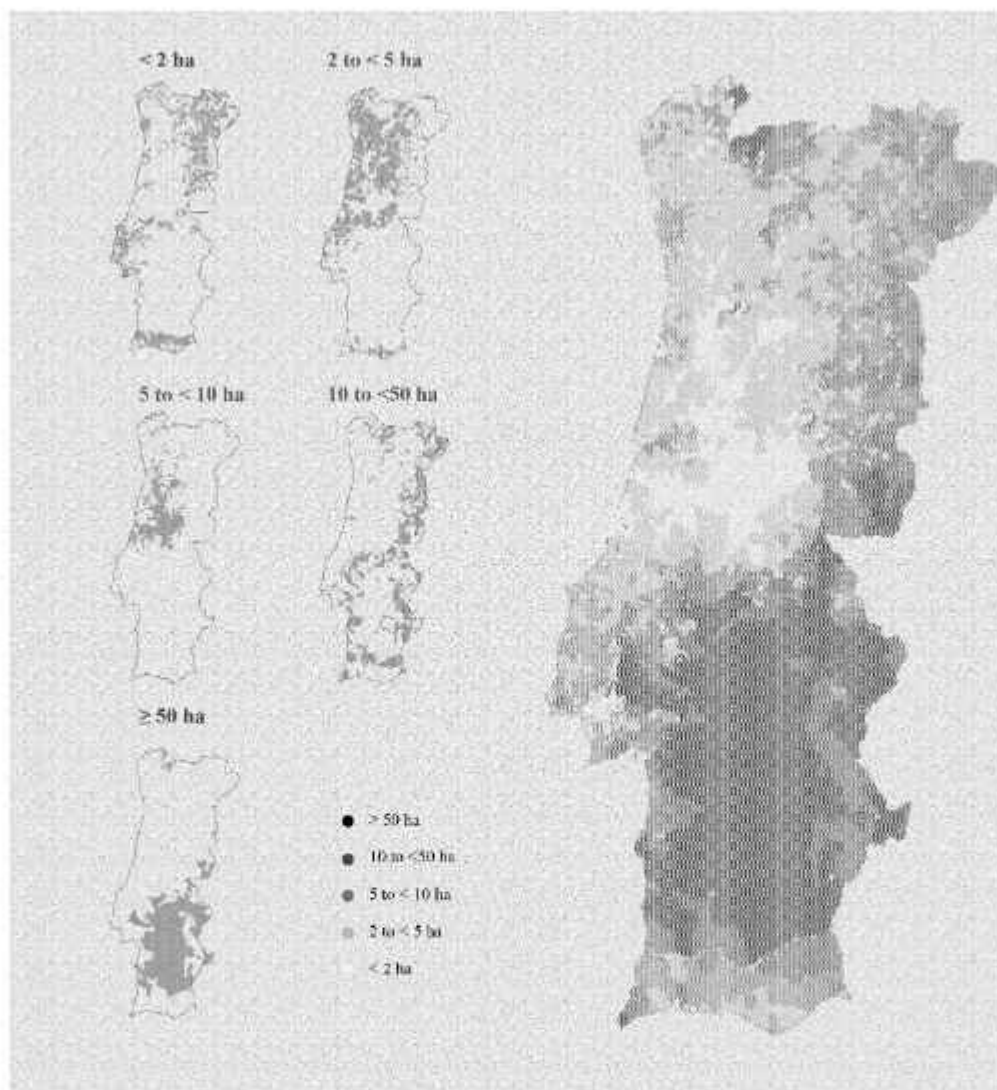


Figure 5 - Land Concentration in Portugal © Author.

But the land concentration and agglomeration around the urban settlements is mainly explained by the wars that ravaged this territory during the middle ages, and made it mandatory to search for safety and protection around the fortified villas and castles. Orlando Ribeiro writes about the territorial structure of Alentejo at this time: “Before the settlement, the limits of the property were fixed, immobilized in the hands of great lords, magnates, religious and military orders, nobles, holders of land and cattle”²⁰.

Due to the lack of people, the vast and uniform lands needed to be developed under an extensive regime, and until the XIX century, the cultivation of lands were restricted to the best soils around the urban settlements. It is also interesting to notice that the concerns about the *Latifundio Alentejano* dates back to the 17th century.

The flaws of the large estate, absenteeism, low income, routine, social inequalities, have preoccupied reflective spirits since the perspicacious economists of the 17th century. One thinks of subdivision, of the division of large agrarian units into small tracts of land where settlers would settle who would make them produce through intensive exploitation, creating wellbeing for them and wealth for the Nation.³¹

But despite the ownership structure, until the second half of the XIX century, the agricultural production in Alentejo was a complex and diversified system, focused on supplying local urban settlements. This diversity is clearly illustrated in the first Agriculture Chart of the Beja Council, developed by Gerardo A. Pery between 1882 and 1883. At that time, the productive matrix of Alentejo was not only composed of cereal crops and olive groves but also included the cultivation of grapes for consumption and production of wine, horticultural crops, vegetable gardens and orchards. Together, almond trees, fruit groves and vast plains covered with arable crops used to shape the landscape of the region (Figure 6).

It was only after the incentive to expand national wheat production in the XIX century that the virgin lands were finally explored. From this point forward, the traditional production was systematically replaced by intensive monoculture fields and the products were sent either to the south to supply the touristic coast of Algarve or to the north to be consumed by the most populated and developed regions. Those lands, where the water is scarce and the population sparse, saw its diversified agriculture matrix replaced by one that mainly follows global chains of production.³² As a consequence, the meridional region of Alentejo, where the Romans once chose to place its main cities and monuments, was then relegated to a secondary role, segregated from the Atlantic core of the country.



Figure 6 - Chart of the Beja Council. Source: Gerardo A. Pery (1883).

This logic could have been changed in 1930 when a railway connection between Sines and Moura was proposed: a major infrastructure project through which the agricultural products cultivated in the fertile soils of the so-called *Barros*

31. Ribeiro (1945, p. 122).

32. Álvaro Domínguez recognises that "Today, both the Common Agricultural Policy, PAC, imposed by the European Union, and the world trade agreements, have made commercial agriculture - which is not self-subsistence and/or family self-consumption - hostage to a market that is global". Thus "The agricultural economy is entangled in the webs of globalization and in the impotence of States and the European Union to regulate this market". Domínguez (2011, p. 77 and p. 114).

33. Cedric Lavigne (2006, p. 20).

34. *Pax Iulia* is the actual Beja, capital of Alentejo and the most important roman city in Portugal. See Lopes (2003).

de Beja would be distributed to the rest of the country (Figure 7). The plan, which has never been carried out due to the financial crisis that hit the national railway company in the 30s, would have restored a historical east-west connection that had structured this territory for centuries.

Through a detailed analysis of the ancient routes of this territory Cedric Lavigne recognized an important axis (V10) that dates probably from a period prior to the roman occupation³³ (Figure 8). Crossing the region of Barros de Beja, this road used to represent a fundamental connection to the *civitas of Pax Iulia*,³⁴ allowing agriculture products to reach the coast of the continent. Along this path, several roman villas and dams were displayed, giving support to the agriculture activity of the region.

The exact location of this path is a matter of discussion between scholars and researchers. Each one of those have drawn this route in a different way, but all of them converge towards the existence of a direct connection towards the sea, linking the roman operational landscape to the main trade routes of the country (Figure 9). This axis continued to be used until the last century, through which traditional products were moved to supply the region of Alentejo and bring them to the coast (Figure 10). The abandonment of the aforementioned plan kept Alentejo as a marginal territory to the country's main production chains.

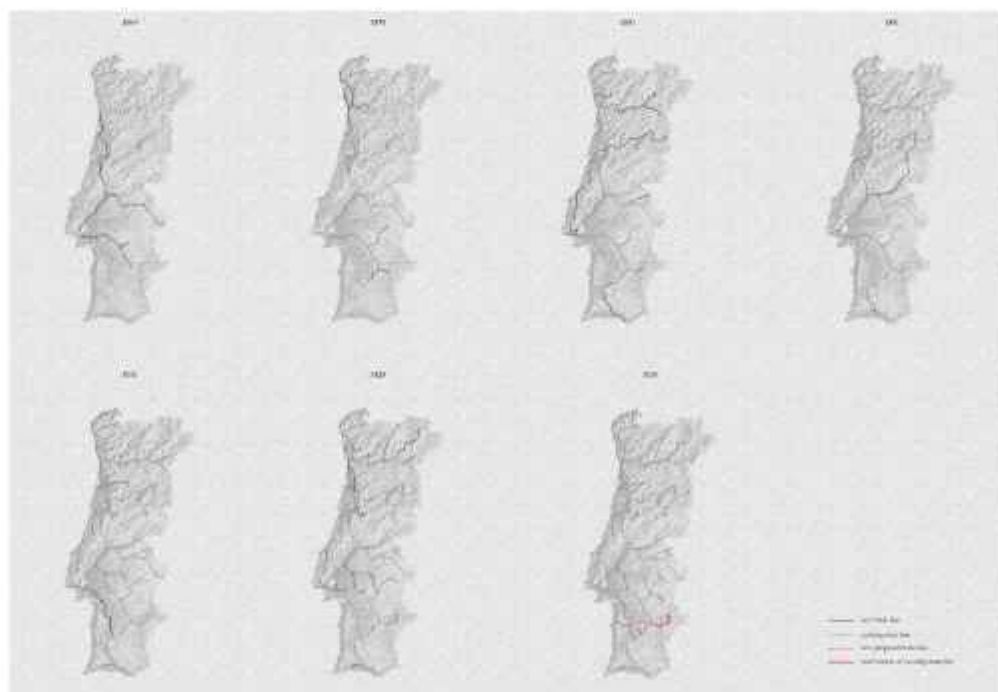


Figure 7 - Evolution of the Railway Net in Portugal. The map highlights the connection Sines – Moura, which were never finished. © Author.

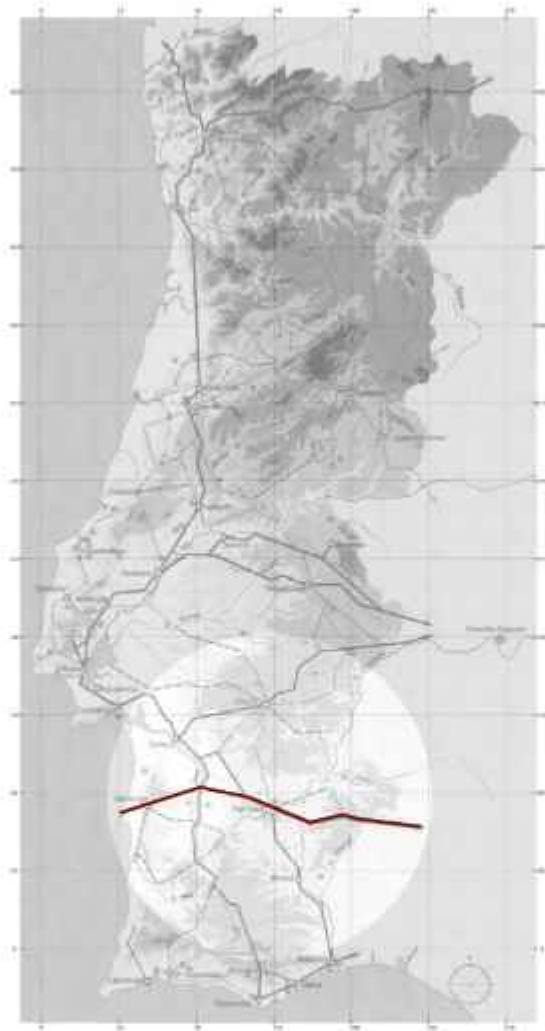


Figure 9 - Roman Roads in Portugal. See Mantas (2009).

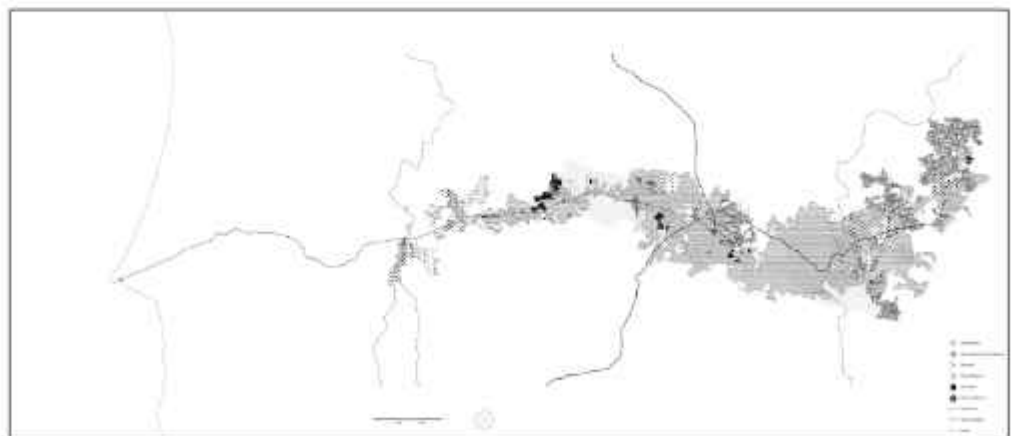


Figure 10 - Production matrix along the historical East-West axis in Alentejo during the XIX century. The information is retrieved from the Chart of the Beja Council, Gerardo A. Pery, 1883.

Risking its water resources, the contemporary *Latifundio Alentejano* strides towards the complete depletion of the lands, and subjugate its cultural palimpsest, buried under its fields, which today serve more to boost the national trade balance than to feed the hands of those who work them. The impossibility of implementing alternatives to the current ownership structure “prevented the formation of a meticulous agriculture, where man is attached to the land, for the love of what is his, for the interest of profit and for the hope of the just reward of work and toil”³⁵. Thus, the consolidation of the *Latifundio Alentejano* is a process which final consequence is the loss of identity of a territory ruled by its “large agrarian units, the distant hills and the rare villages full of people, involved in the latifundia network”³⁶.

The contrast between the ancient and current land use of the region is clear. The increase of wheat production led to the expansion of the agriculture frontier and the exploration of virgin fields (Figure 11). The development of intensive agriculture in the region has been supported by major infrastructures projects, such as the creation and interconnection of dams, that guarantee a proper irrigation system to the intensively cultivated lands, but risks the existence of the region's ancient hydrology (Figure 12). The dams, combined with the presence of wind turbines, solar panel fields and massive irrigation infrastructures creates a new net of landmarks, related exclusively to the operationalization of this territory (Figure 13). Those are our ‘contemporary castles’. These transformations have drastically misconfigured the region landscape, and the medieval and centralized territory organization has been slowly replaced by a decentralized matrix.³⁷ But if in one hand the fragmentation of the centrality of the city led to the weakening of urban occupations and the consequent loss of identity of the territory, it also “harbors new opportunities for the democratic appropriation and self-management of space at all scales”³⁸.

The backbone of the reconciliation of old and contemporary organizations could be the reactivation of the east/west axis, running from the Guadiana river to the Sado river. The recovery of this east/west connection intends to bring to life a historical axis and a meaningful order associated with it, while simultaneously fostering new sustainable productive policies.

35. Ribeiro (1945, p. 33).

36. Ribeiro (1945, p. 232).

37. The absence of centralities converges towards the fact that nowadays the hinterlands are conditioned by globalized processes instead of supporting local villages, cities or metropolises. Since the hinterlands “are embedded within global supply chains, hinterlands lose their articulation to specific zones of direct consumption, urban or otherwise”. The region of Alentejo could not escape to the aforementioned logic. See Brenner and Katsikis (2018).

38. Brenner (2014, p. 18).



Figure 11 - Burned Areas in Alentejo from 1975 to 2021. The information is retrieved from Instituto da Conservação da Natureza e das Florestas. © Author



Figure 12 - Deactivated water channels. The map illustrates the deactivated water channels whose presence could still be somehow identified. This analysis, developed through aerial interpretation methods, indicates that the traditional irrigation of the land has been slowly replaced by alternative irrigation systems. Those systems, supported by the dams, risk the water resources of the region and raises its risk of desertification. © Author

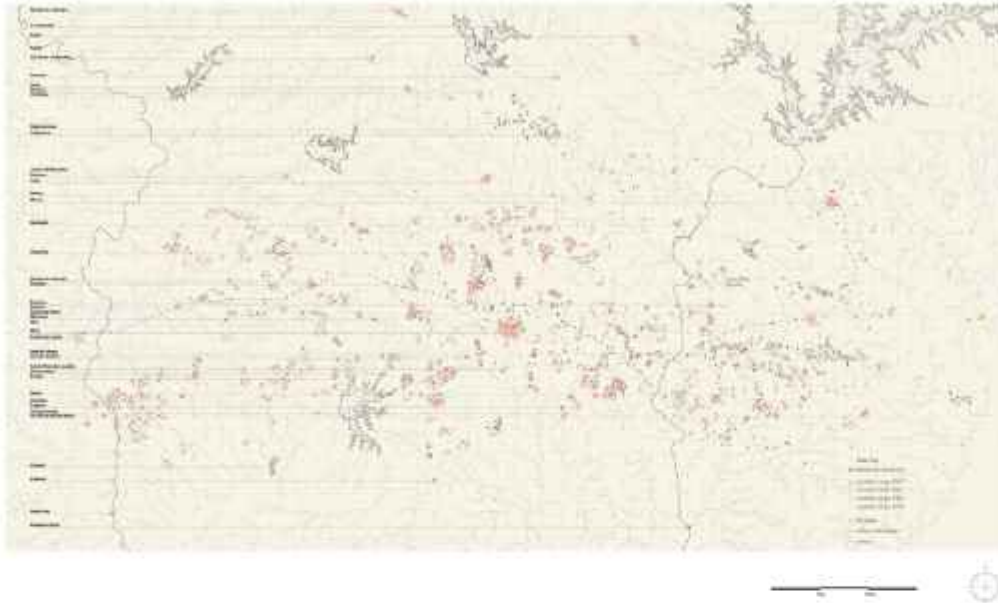


Figure 13 - Landscape Evolution. The map portrays the presence of some structures that shape the contemporary landscape, focusing on the prompts appearance of circular irrigation structures (in red). Those structures flag the change of irrigation methods in the agricultural production, and stress the conflict between the operationalization of the countryside and its heritage goods (black dots). © Author

CASE STUDIES

Projects such as the *Parco dell'Appia Antica* in Rome, the *Train Maya* in the peninsula of Yucatan, in Mexico, and the *Think Belt* in the coal fields of Staffordshire, England, can be seen as interesting case studies where territorial infrastructures are combined with enhancement of accessibility to monuments and archeological sites. Despite all criticisms that these projects might raise, they introduce an integrated approach towards cultural landscapes management, proposing large-scale design, based on the presence of heritage (Figure 14).

The project *Parco dell'Appia Antica*, developed under the supervision of Alessandra Capuano, introduces a reflection about contemporary ways of development, integrating leisure areas, agriculture fields and heritage goods through a transversal and interdisciplinary view.³⁹ In concordance with the envisioned strategy for our case of study, the project proposes a strong connection between the city and the territory, through the consolidation of a park along a historical axis that structures the spatial organization of the region.

Seeing the park as an infrastructure, the proposal articulates green public areas with farming and cultural zones, envisioning the coexistence between the cultural and operational character of the landscape (Figure 15). Tracing a parallel between the Appia

and the region of *Barros de Beja* in Alentejo, both cases can be seen as opportunities to restore the landscape through the implementation of a new infrastructure that aims to enhance its heritage and boost the development of the region.

The project introduces the concept of *SuperPark*, arguing in favor of the landscape as a culture generator. In this way, the enhancement of the city comes from the understanding of the importance of establishing continuities through space and time, integrating functions and overlapping meanings. In Alentejo this approach seems to be the one capable of facing the operational character of the countryside by increasing awareness of the historical landscape that lies under its agriculture fields. In a similar attempt to the Appia project, our proposal aims to create a new net of productive landscapes, based on the presence of heritage. Through it, we propose to restore its historical meaning and reconnect the countryside to the city.



Figure 14 - Scale comparison between the proposed case studies. © Author

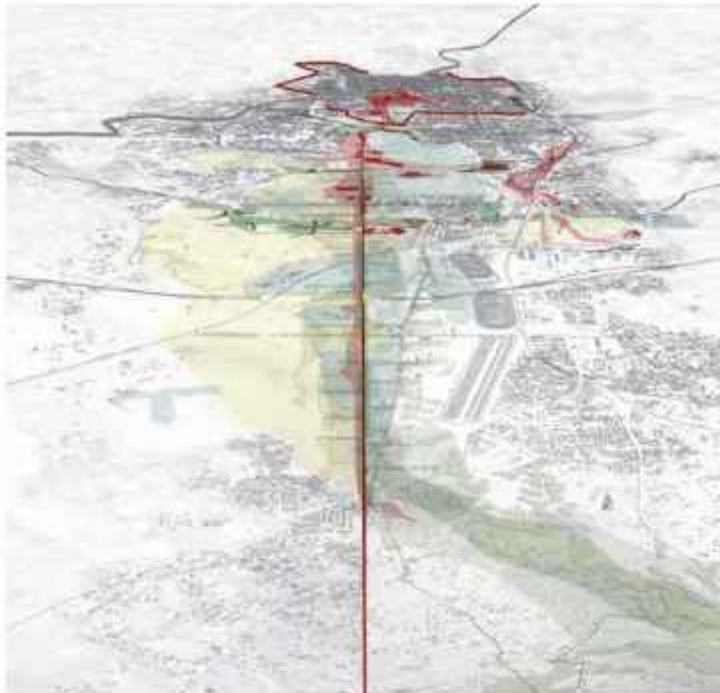


Figure 15 - Il Parco dell'Appia Antica dal Vulcano Laziale verso le Mura Aureliane. A. Capuano, F. Toppetti con D. Luca, A. Lanzetta e F. Morgia, E. Tomassini, 2013.

The connection between accessibility, development and protection is the base over which the Mexican project of the *Tren Maya* has been developed. Implemented in order to improve the accessibility to archeological sites (Figure 16) in the peninsula of Yucatan, this project has also the potential to boost Mexico's social and economic development.

The new proposed mobility infrastructure, in this case, the train line, was designed following twelve guidelines that takes into consideration environmental, social and economic constraints.⁴⁰ Those, established by ONU Habitat, aim to safeguard the local environment and communities of aggressive approaches that could inflict irreparable damages to the territory, from an ecological and social point of view.

In a similar way, the consolidation of a train line along the historical east-west axis in Alentejo opens the possibility not only to increase the accessibility to the region but also to consolidate the existing urban settlements around similar principles. Proposing special attention to the local communities, our proposal in Alentejo aims to ensure not only the respect for traditional uses of land, but also the increase of accessibility to adequate housing and to the consolidated urban land.

Other proposals developed by ONU Habitat, such as the implementation of land recovery mechanisms, aiming to increase its value and potentiate the best use of urban parcels or agriculture fields, could be also translated to our territory of experimentation. In this case we must take into consideration the maintenance of important ecological continuities, through an integrated approach that

According to Pier Vittorio Aureli (2013), Price envisioned the creation of:

[...] a learning apparatus that is flexible and mobile, with the capacity to continually adapt to technological advances [...]. By relying on the existing rail network, he proposed to go beyond the traditional campus typology, taking the territory and its transport connections as the new scale of the learning process.⁴²

Price anticipates the passage from the Fordism,⁴³ where the production was based on the manufacture of material goods, to the post-Fordist era, ruled by the production of immaterial goods, such as knowledge, ideas, images and social change.⁴⁴

In the case of Alentejo, we propose to build over the traces of the fordist urban model⁴⁵ an alternative for the current region development, based on the interconnection of material and immaterial cultural assets.

Price's proposal:

[...] questioned the strict separation of disciplines by calling for the development of interchangeable units that would allow the learning process to be constantly reshaped in response to demands posed by economic change. Price wanted to integrate knowledge, flexibility and territory into a single system that was not so much a new typology for learning as a new urban model.⁴⁶

In the same way, the reactivation of the transversal train line in Alentejo, that would link Moura to Sines and reintegrate the interior to the coast, aims to implement an integrated approach regarding the development of the territory, incorporating economic, social and spatial changes into a regional planning based on its cultural heritage. As an output we expect to establish alternative images for the countryside, understanding the landscape as capable of generating culture, more than just an asset to be exploited.



Figure 17 - Coal fields of Staffordshire, England. © Cedric Price Fondsrary. © Mexican Government.

42. Aureli (2013).

43. Aureli (2013, p. 22).

44. *Ibid.*

45. Urban here is not understood as a city, but a worldwide condition that has been overtaking the countryside.

46. Aureli (2013, p. 23).

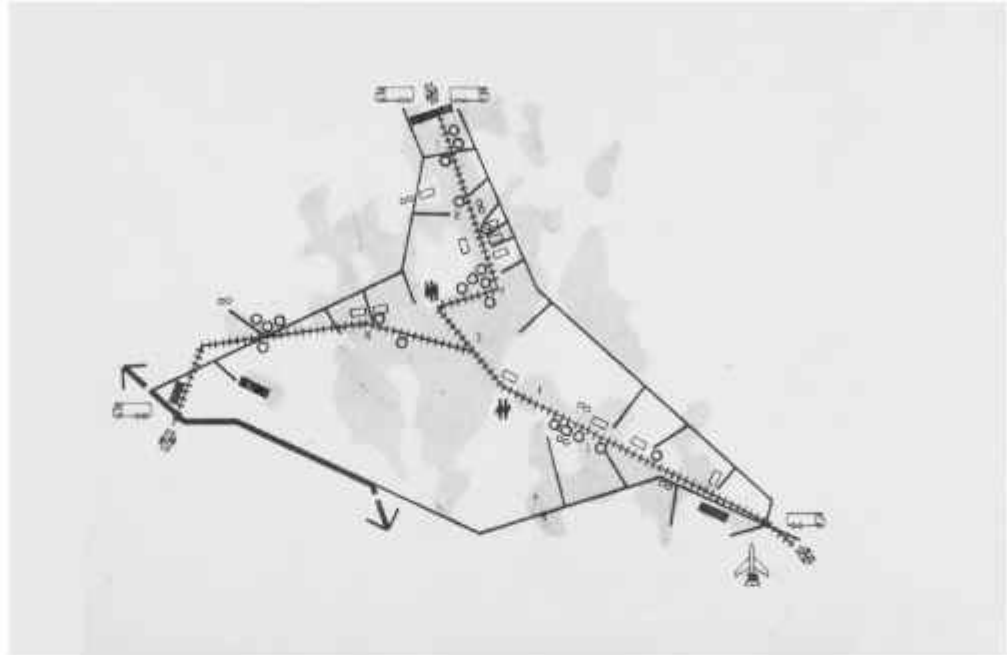


Figure 18 - ThinkBelt Mobility System. © Cedric Price Fonds.

THE PROJECT

An Alternative Image for the Countryside

Based on the analysis developed above, we propose a confrontation between ancient concepts of territorial formation and the current Alentejo's countryside organization.

In Roman times for instance, the idea of *civitas* was strongly connected with the idea of continuity between the city and the hinterlands that support its existence. As explained by Conceição Lopes:

The *civitas* is not a thing. Not even a space. The *civitas* is a body where various spaces are recognized—socio-political space, political-administrative space, socio-cultural space, economic space, cultivation space, etc.- each with its own temporal scale (that of time of its construction) and its operating rhythms.⁴⁷

This image radically counters the current relation between the city and the countryside in Alentejo, which disconnection has led to the urban center's emptying and reduced the countryside to a mere operational territory.

As an alternative to the current scenario we envision a system that anchors its structure on the natural resources of the land. On the understanding that the ancient agrarian system was based in the cultivation of the most fertile fields and linked to the hydrographic regional network, we propose the creation of an *agricultural reserve*, articulated along the aforementioned historical east-west axis. This new net of productive landscapes aims to feed the meridional region of Alentejo and present an alternative to the current production matrix, mainly conditioned by global chains of production.

In fact, we believe that the restoration of the east -west axis in Alentejo can represent an opportunity to agglomerate infrastructure features along a new proposed system of both operational and meaningful spaces. Agriculture fields of traditional products, areas for alternative energy sources production, leisure spaces, archaeological sites and the reactivation of territorial mobility infrastructures (such as the ancient roman road) can be combined in order to (re)establish territorial and ecological connections, increase accessibility, bring economic development to the area and (re)structure the spatial and social organization of the territory according to a “cultural landscape approach”⁴⁸ (Figure 19).

Aiming to ensure food self-sufficiency of the meridional region of Alentejo,⁴⁹ we propose the development of a new productive landscape, that not only diversifies the production matrix of the region, but safeguard its hydric resources. Taking as a base the above presented cartography, we envision the development of an autonomous net of spaces that present us an alternative for inhabiting the countryside.

Stressing the symbiosis between culture and nature, our proposal aims at consolidating a scenario for a contemporary landscape where the development of new management policies of heritage goods are combined with enhancement of mobility and implementation of green infrastructure systems.

Built over the traces of its ancient landscape, this new image for the countryside stands against the unrestricted extension of the urban and the fragmentation of the city, establishing nuclei of autonomous modes of inhabitation, which do not aim to replace the centrality of urban settlements, but actually to reinforce their existence. In this way, the non-urban landscape ceases to belong to a non-inhabited in-between space, and reconnects the city to the territory that has been historically structured by its presence.

Arguing in favor of a regional planning based on the presence of heritage, we further develop an analysis of the ancient landscape formation in Alentejo, over which we propose to integrate the historical palimpsest and contemporary infrastructure systems.

48. The aforementioned “integrated approach” can be translated as “landscape approach” or even a “cultural landscape approach”, and offers an opportunity to “better integrate natural and cultural heritage conservation”. Brown, S. (2007, p. 33-34).

49. We mean the implementation of an agricultural production matrix focused on supplying the local urban settlements.

Inhabiting the Countryside

The landscape formation is a process both continuous and disruptive. As a sample of this duality we must cite the roman's countryside consolidation process. As explained before, the Romans took advantage of existing agrarian structures to (re)organize their hinterlands. But there were also disruptive gestures; new limits to the agrarian structure were traced and the land ownership structure was reorganized. Later, the contemporary latifundia was consolidated around the presence of the previous roman agrarian units, namely the *villae* and the *casais*. But once again the properties were redefined, giving rise to the current ownership organization and land concentration. This indicates that the historical process through which the land structure in Alentejo has been reconfigured is based both on continuity and disruptiveness.

Taking in consideration the above mentioned environmental issues regarding the presence of the latifundia network, and considering the fact that the roman villas were displayed according to the availability of natural water sources, we propose the creation of an alternative agricultural reserve, composed by small properties and designed according to the presence of the *villae*. Through this we envision to keep the historical continuity in the territorial organization of the countryside and to consolidate a disruptive gesture towards the *Latifundio Alentejano*.

This alternative production matrix, irrigated through the natural hydric system of the region, and composed by vineyards, horticultural crops, vegetable gardens and orchards, counter the intensive agriculture activity that has misconfigured the landscape and risks its natural water sources.

By proposing an agrarian reconfiguration that fragments the ownership in Alentejo, the project prompts the appearance of autonomous modes of inhabitation that do not only aim to promote social and economic development for the region but to rescue its historical and identity values. Thus, the location of roman villas⁵⁰ become central points of a new meaningful and operational net of spaces, overlapped to the current territorial structure, and organized along the historical east-west axis of the meridional region of Alentejo.

51. Brown (2007, p. 35).

52. Fairclough (2006, p. 61).

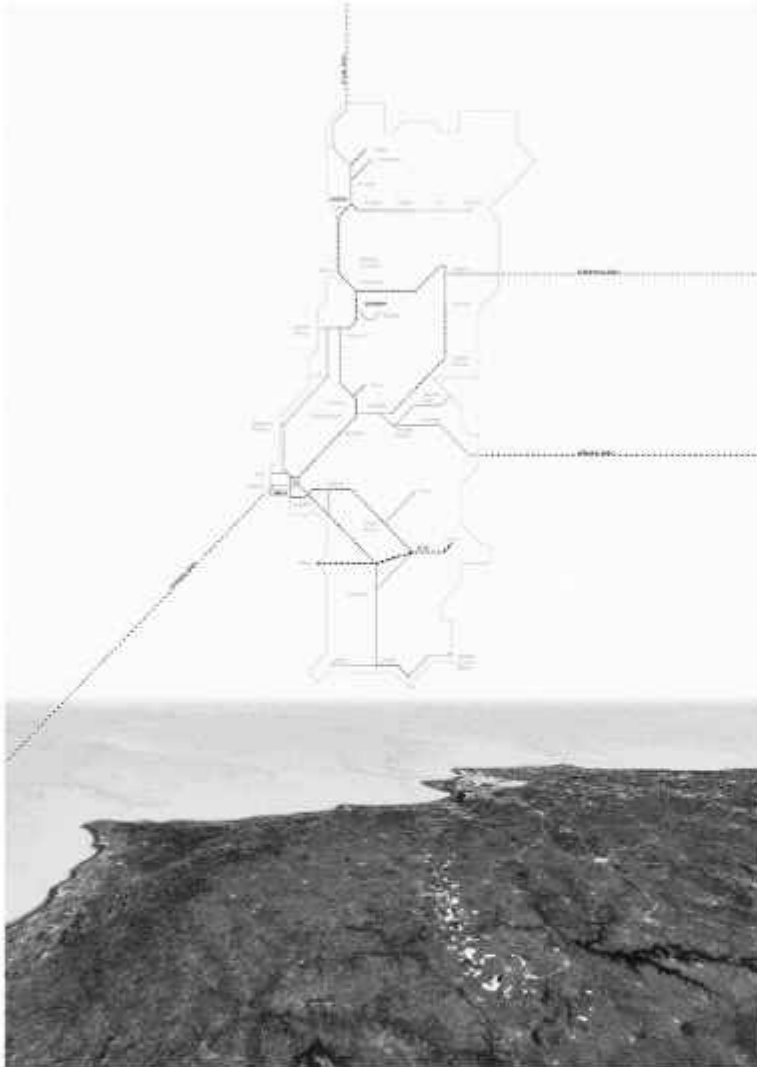


Figure 19 - An alternative image for the countryside. The image illustrates the new proposed net of spaces displayed along the historical east-west axis. It also highlights its connection with the national railway system. © Author.

From dots do Drawing

In order to establish a net of new agriculture fields, we faced the necessity of defining its extension and limits. Thus, a first question arose; how to reinterpret the roman territorial occupation based on the location of the *villae*?

A recurring issue regarding heritages structures, sites and areas has been their extent and boundaries.⁵¹ As stated by Graham Fairclough “[...] unlike monuments and sites, landscape has no edges or boundaries”⁵², and its multiple owners and stakeholders might increase the complexity of its definition. Regarding the cultural landscapes setting, the ICOMOS Xi’an Declaration (2005) establishes that it should include:

53. Since Cedric Lavigne concentrated their efforts on this area, it seemed reasonable not to expand the first analysis beyond the defined limits. This section is thus defined exclusively by operational reasons.

54. Lavigne (2004, p. 26).

55. Lavigne (2004, p. 23).

56. Cedric Lavigne (2006, p. 23).

[...] interaction with the natural environment; past and present social or spiritual practices, customs, traditional knowledge, use or activities and other forms of intangible cultural heritage aspects that create and form the space as well as the current and dynamic cultural, social and economic context.

From this understanding, the effort of defining such archaeological spaces, took as a starting point the work developed by Cedric Lavigne over the ancient agrarian structure of this territory, analyzing, through an aerial interpretation method, the traces of its ancient parcels. Thus, virtually defining what we will call in this work the “Lavigne universe”, an area that embraces a triangle formed by the cities of Beja (the current Pax Iulia and capital of Alentejo), Faro and Vidigueira, we established a field of experimentation where different methods of defining the limits of our proposal could be tested, and later expanded to the territory as whole.⁵³

Lavigne identifies several agrarian structures, which overlapping gave rise to the current state of the landscape. Among those structures Lavigne highlights the presence of an ancient parcels set (Figure 20), which morphogenesis seemed to be conditioned by long distance ancient routes. Even though the exact dating of those territorial structures cannot be precisely defined, Lavigne concludes that they might have been created between the Iron Age and the beginning of the Roman occupation. Despite the fact that most of those shapes are now fossils (not active), some reminiscences of its net can still be identified, and those shapes are the ones that apparently cross the centuries in a most determinant way.

Even possible traces of a Roman centuriation, whose layout or even existence could not yet be precisely defined, do not have the same transmissibility as the chosen set of shapes. The centuriation on this area (if it existed), did not appear to have established a dominant organization of the territory and “the forms of this network therefore appear as the product of a process of self-organized creation developing in time and space”⁵⁴. Thus, regarding the chosen network, Lavigne concludes that “the hypothesis of a Roman centuriation, a planned object traditionally mobilized to interpret all networks somewhat extended in space, therefore seems to us to have to be discarded”⁵⁵.

Thus, by establishing a genetic link between the linear and surface forms,⁵⁶ those ancient parcels reach a historical and territorial dimension, basing its morphogenesis in regional structuring elements. Its transpassivity across centuries and legibility today justify their use as a principle for the definition of new proposed plots.

From this understanding a decisive question emerges: *Could we use the boundaries of the roman agrarian properties to define the limits of the proposed intervention?*

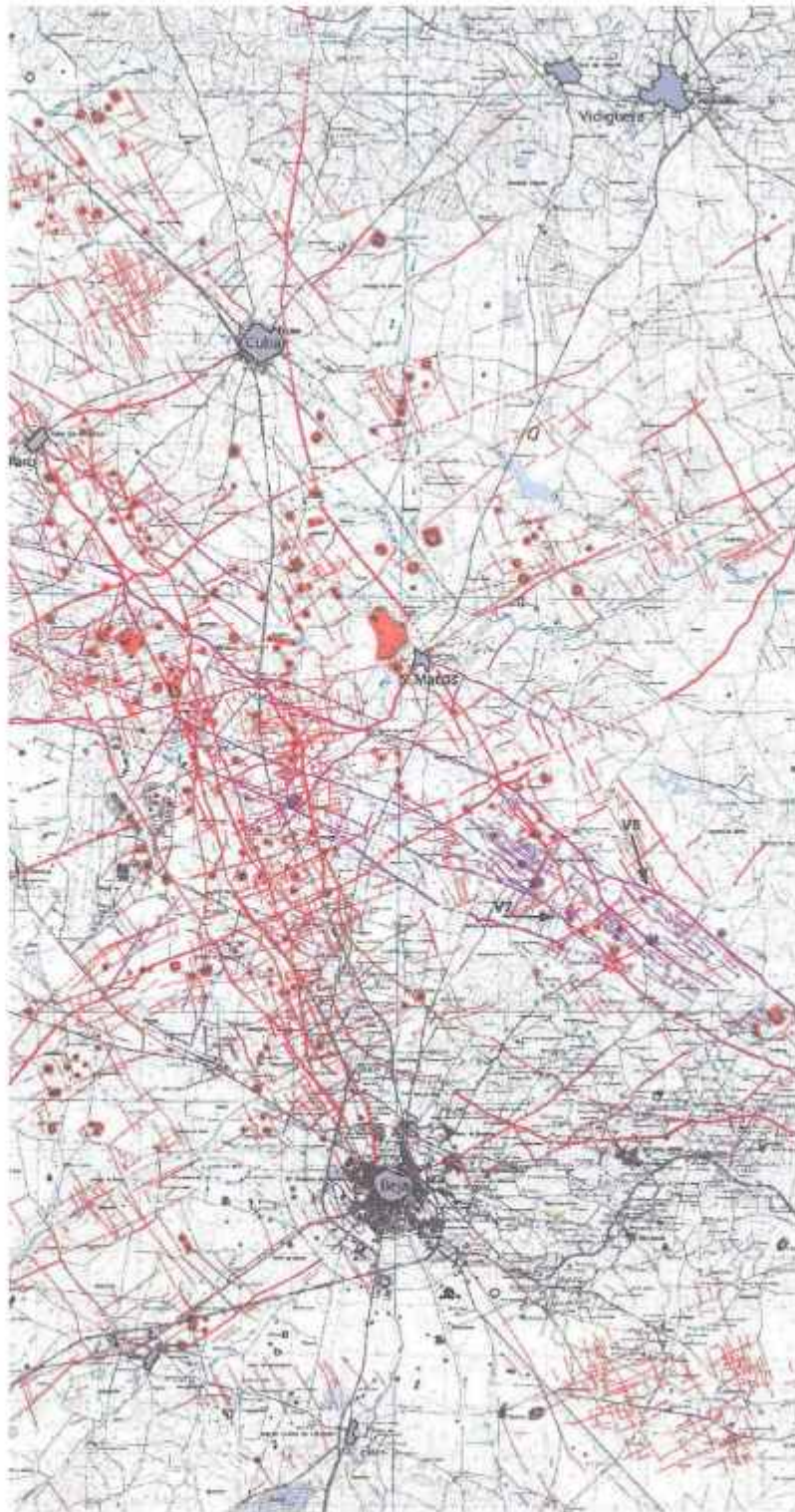


Figure 20 - Lavigne Ancient Parcels. Cedric Lavigne (2006).

57. "Among the methods traditionally used to determine the property limits of villae, the following stand out due to their adherence: Thiessen's polygons; that of the concordance of a natural area with the extension of a property; the calculation based on presumed properties centers and the calculation based on indicators provided by structures in the fruiting part of the villa storage capacity, production capacity of wine and/or oil mills" Lopes (2003, p. 240).

58. Lopes (2003, p. 239-262).

59. Lopes (2003, p. 248).

60. *Ibid.*, p. 263.

61. The existence of the villages was defined through a field research carried out by Professor Maria Lopes Conceição.

Even though many attempts towards the definition of the roman agrarian plots have been made,⁵⁷ and different scholars have already addressed this issue, most of them failed by considering that only the knowledge about the location of the ancient agrarian structures or its storage capacity is enough to define the boundaries of the plots.⁵⁸ About this, Maria Conceição Lopes writes: "The parcels that can be placed in relation to a group of buildings will never allow to reach the total extension of the property [...]" and:

Tracing property limits based only on the study of parcels presents some difficulties [...] The notion that a rural structure is not a static body, and that the land limits, as individual patrimony, are configured according to the dynamics of the society in which exchanges, sales, successions, usurpations of communal lands, the greater or lesser aggressiveness of the markets, the dynamics of the environment, are reflected in its internal organization, must closely inhibit any attempt at generalization. Even integrated into a general structure of organization of the rural space, such as the centuriation, the properties may, for the reasons indicated, assume over time characteristics and dimensions subject to a varied range of possibilities.

Therefore:

Delimiting the ownership of a villa means moving from archaeological fact to economic history; taking buildings and their supposed capacity to reproduce production yields as a reference may, therefore, be nothing more than an abstraction, naturally incompatible with a historical construction.⁵⁹

In the case of Beja we do not have enough information to define with any sort of precision the limits of the agrarian units that composed the *civitas* of Pax Iulia.⁶⁰ This would demand further archaeological research in order to address other kinds of constraints to the until now established. The existing data only allows us to define the infield, never the boundaries of the property. Taking this into consideration we felt the necessity to develop research through design to establish the limits of the proposed plots. This research was done overlapping the ancient organization of the territory,⁶¹ its hydric resources and its contemporary road network. The several attempts regarding this task are illustrated below. (Figures 21, 22, 23 and 24). The outputs of this preliminary analysis should not be seen as a precise reconstruction of the ancient parcels of the territory but as an attempt to shape the contemporary landscape through a historical continuity approach.

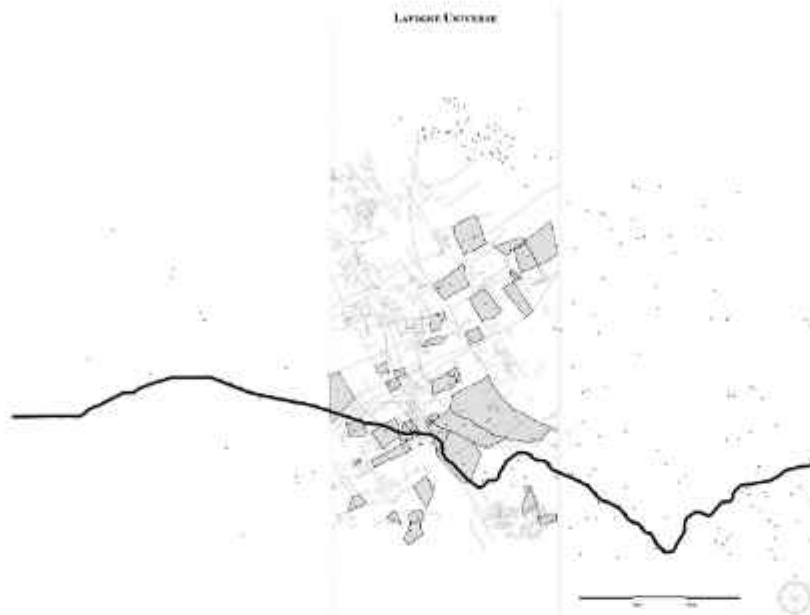


Figure 21 - Intent 1. Our first attempt was to draw polygons that could inscribe all roman villa's remains. The polygon formation should take into consideration the size of the area over which the remains of the Roman occupation were found.⁶² The delimitation of the polygons was done through the connection between fragments of the ancient parcels identified by Cedric Lavigne. © Author.

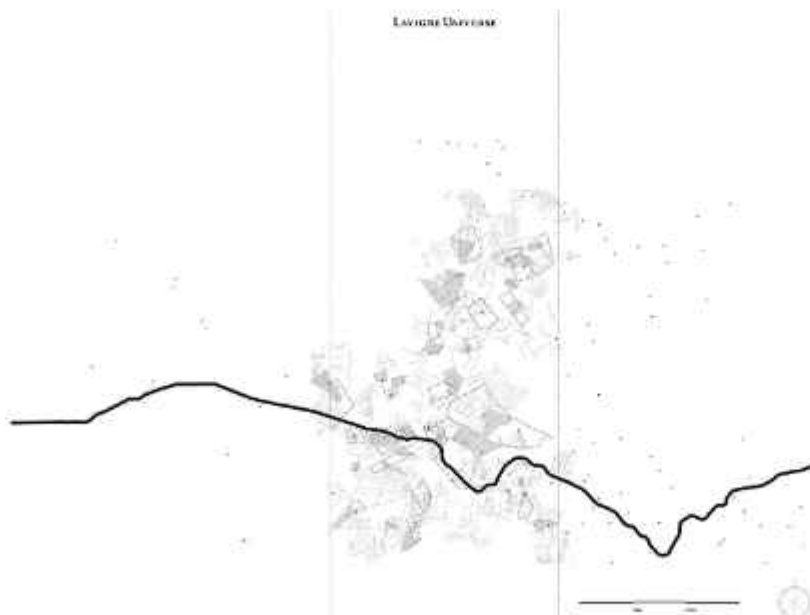


Figure 22 - Intent 2. Facing the difficulties regarding a complete re-organization of the land, on the second attempt the definition of the new plots was based on the current territory's parcels structure. Even though the resulting geometries embrace the archaeological finds on its totality, its morphogenesis seemed to be excessively determined by the current dynamics that shape the contemporary landscape. From the understanding that in this process the traces of the ancient agrarian structure are mostly lost, we decided to take a step back and look over again the ancient territory's traces.

62. As explained before, this work deliberately tends towards the fragmentation of the land ownership, establishing small cores, from which the territory organization as a whole could be transformed. But since this intent did not take into consideration any physical feature or constraint of the contemporary landscape, its output seemed to be excessively disconnected of the current land organization, and was therefore at first, discarded.

63. The intense agricultural activity that has been developed in the region made it impossible to identify the totality of the land's ancient structure. In our first attempt, the problem was solved through the indiscriminate connection between fragments of the ancient parcels. But for sure the resulting polygons could not illustrate the ancient organization of the land. In order to solve this issue, we propose the virtual extension of the ancient parcels drawn by Lavigne, assuming its continuity along the territory.

64. But still, there were problems about the results. The size of the plots, over 50 ha, which final design does not take in consideration the hydric system of the region nor the contemporary road network, made us look for an alternative that could establish a net of spaces both meaningful and operational

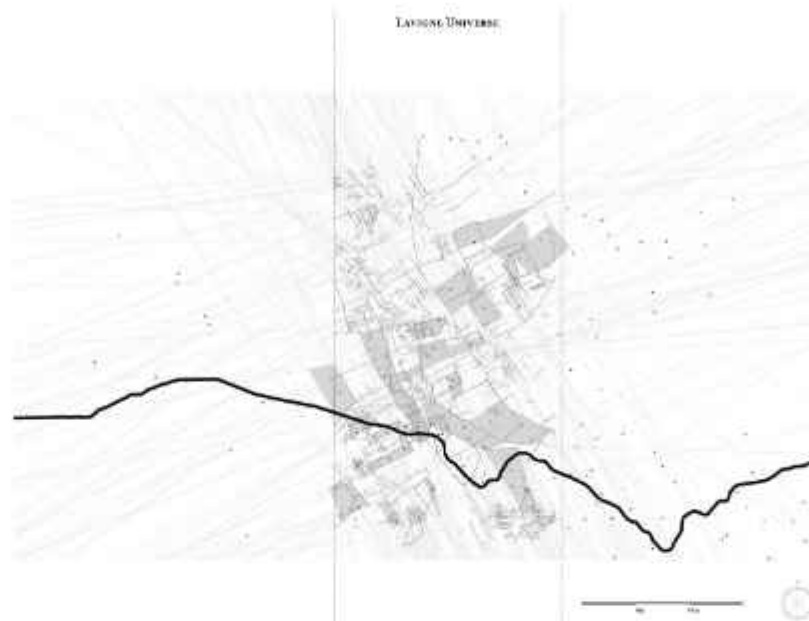


Figure 23 - Intent 3. The third intent was based on the definition of bigger ancient parcel systems, that somehow could still be identified in the territory.⁶³ The output of this methodology are bigger areas that shape the proposed geometries, and probably illustrate in a better way the ancient organization of Alentejo hinterlands.⁶⁴ © Author.

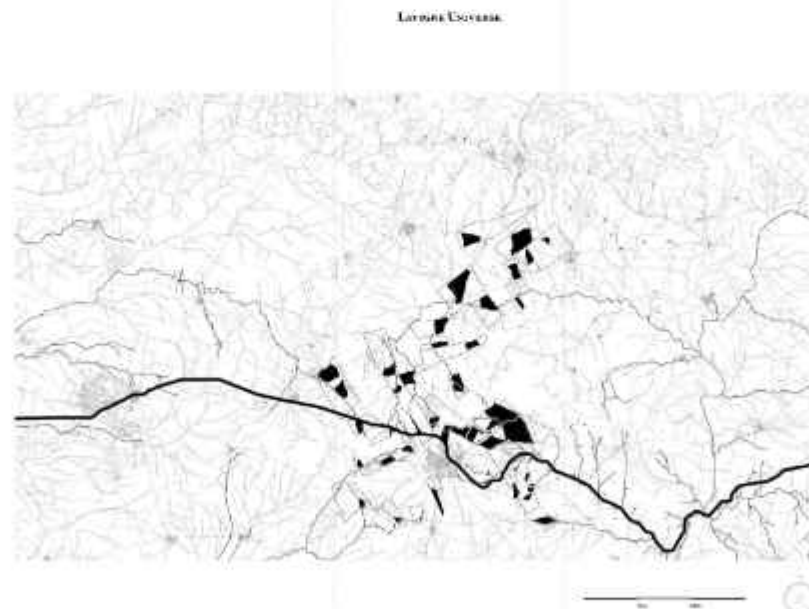


Figure 24 - Intent 4. Envisioning the formation of a productive network, we propose to overlap the previously designed areas with the contemporary road network and the ancient hydrology system of the region. Therefore, by ensuring a historical continuity in the land structure design we are able to establish a net of spaces based both on meaningful and operational constraints. In this way we propose a landscape formation based both on disruption and continuity. © Author.

The Principle of Fragmentation

Envisioning to work beyond the walls of the city, this work intends to present a territorial image opposed to its current spatial, economic and social organization, mainly based on the presence of the latifundia and its monoculture production. In this way, the apparent fragmentation of consolidated shapes gives us a tool to counter the homogenous space production in which the Alentejo territory has turned into.

The fragmentation itself presents us a way of reading the territory through a temporal perspective, recognizing the landscape as a “product of long-term and complex (inter)relationships between people and the environment”⁶⁵. Therefore we propose a simultaneous historical reading of the city and the countryside, understanding the landscape as “a product of change, of dynamic patterns and evolving inter-relationships between past ecosystems, history and cultures”⁶⁶.

In this way the drawing ceases to be an abstract representation of the historical landscape to somehow propose a reorganization of the territory based on its heritage. Those constellations of shapes, strongly linked with the hydrology of the region, represent an opportunity to safeguard the natural resources of the area.⁶⁷ In this way we envision the implementation of a historical landscape approach, offering:

[...] ways of breaking down the division between the natural and the cultural as a way of seeing, interpreting and understanding the world, seeking to replace these with more complex and holistic meanings.⁶⁸

Thus, this drawing aims to emphasize the indivisibility between culture and nature, stressing the “dynamic and evolving nature of human relationships and interactions with the environment, acting as a conceptual bridge between culture and nature, between tangible and intangible heritage, and across space and time”⁶⁹. In this process, as a reading and interpretation of the territory's archeological map, the drawing becomes a tool through which it is possible to develop new regional planning policies, where agriculture, housing and new infrastructure systems can be influenced by the cultural landscape and its historical formation.

ARCHAEOBELT

Even though this work recognizes the fragmentation as a tool for reading the historical formation of the landscape, the morphogenesis of the proposed system incorporates the necessity of ensuring certain spatial and ecological continuities, aligned to what Lavigne defined as a “paradoxical

65. Brown (2007, p. 34).

66. *Ibid.*

67. This is done through the change of the production matrix and the implementation of green infrastructures along the new proposed system. See more in chapter 4. *Archaeobelt*.

68. Brown (2007, p. 35).

69. Brown (2007, p. 34).

70. Lavigne (2004, p. 3).

71. Lavigne (2006, p. 17).

theory of associations and conflicts of forms based on taking into account all realities and their interactions, and this in the diversity of their local combinations⁷⁰. Thus, the virtual fragmentation gives place to a continuous net of spaces, where agriculture fields, green infrastructure areas and archeological remains are connected through the regional hydrology and its both contemporary and ancient road network. Those elements end up structuring the *ArchaeoBelt Alentejano*; a system designed to increase the flow of people and products, safeguard its food security and hydric resources, and enhance its cultural landscape (Figure 25).

Aiming to establish a net based on the landscape's historical continuity, we developed an analysis of the ancient routes that might have structured this territory (Figure 26). In order to achieve this goal, we first analyze the traces of ancient routes drawn by Lavigne,⁷¹ identifying among them the ones that still are somehow recognizably. The exact routes are extremely difficult to define, as their layout often depends on varying factors such as weather conditions, the season, or the nature of the goods being transported. This is the main reason why Cedric Lavigne identifies several ancient paths that partially overlap, with traces that differ slightly from one another, even though their main direction or final destinations remain the same. From this understanding, we propose a differentiation between active and semi-active paths, allowing us to establish a clearer picture of the evolving transpassivity of these routes over the centuries. Expanding this analysis to our territory of experimentation, we developed a drawing that serves as a tool to define a contemporary network of paths, providing a framework from which the system must be structured (Figure 27).

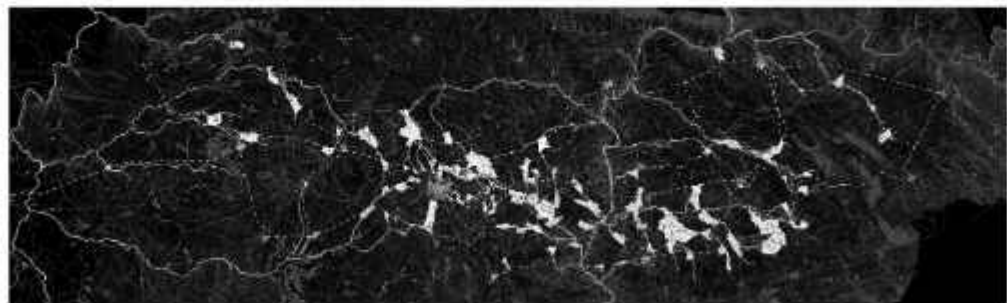


Figure 25 - Archaeobelt Alentejano. © Author.

Through the implementation of a bike line, those routes introduce a new mobility infrastructure through which it is possible to experience the territory from a different speed and perspective. The itinerary is complemented with the implementation of a train line responsible for schooling the region's agricultural

production and increasing accessibility to the contemporary urban settlements and existing archaeological sites (Figure 28). The intersections between the two proposed mobility systems are used to locate new train stations. Those structures are thus understood as intermodal points that enable the system to work on different territorial scales and address a wide range of facilities.

From the definition of the itineraries, we propose the reconfiguration of the borders in order to improve the interaction between the fields and the mobility system (Figure 29). As a result, the final mobility system (also linked to the national railway system and to the airport network) increases accessibility to the heritage goods, interconnects productive landscapes to urban settlements, and boosts the contemporary development of the region (Figure 30).

Confronting the resulting design with the hydric network a set of residual spaces emerges (Figure 31). On those spaces we propose the implementation of green infrastructure systems, that safeguard the water resources and enhance important ecological continuities. By proposing the implementation of rain gardens and wetlands the project not only ensures the quality of soil and its hydric resources but contributes to the development of self-sufficient cycles of energy production⁷² and waste treatment.⁷³ Those infrastructure are thus complemented by the regeneration of the riparian forest along the riversides and ensure important ecological continuities.

As explained before, on the alternative plots we propose the cultivation of traditional agriculture products. Taking into consideration the capacity of cultivation of each of these areas, we are able to envision in a preliminary way the production matrix that could emerge from this process (Figure 32). In opposition to the current production methods, the alternative crops rely its irrigation system of the natural hydric resources, reducing dependence on large dams built to enable intensive cereals and olive groves production. The cultivation of grapes, tomatoes and almond trees, among others, would be a turning point towards a diversified agriculture system.

In order to guarantee the proper irrigation of the plots we define a basic set of streams whose water flow must not be affected by the dam's functioning. In this way we establish an emergency strategy to safeguard the main water courses. Curiously, since the chosen streams are able to irrigate the crops around the *villae*, we can speculate about its use during ancient times, once more arguing in favor of a landscape formation as a historical and ecological continuity. Thus, through the implementation of alternative agriculture plots and green infrastructure systems we are able to push back some intensive agriculture borders that currently risk strategic natural resources existence.

72. In those areas we propose the implementation of rain gardens along the riversides, that recycle the ashes coming from the biomass energy production to correct the acidity of the water. As a result the project promotes the development of renewable energy sources that can be used in the production of green hydrogen (H2).

73. The wetlands guarantee the proper treatment of waste produced in the new proposed plots.



Figure 26 - Ancient Routes. The map portrays different roman routes identified by several scholars. It also flags the existence of ancient settlements and archaeological remains related to the roman mobility system. © Author

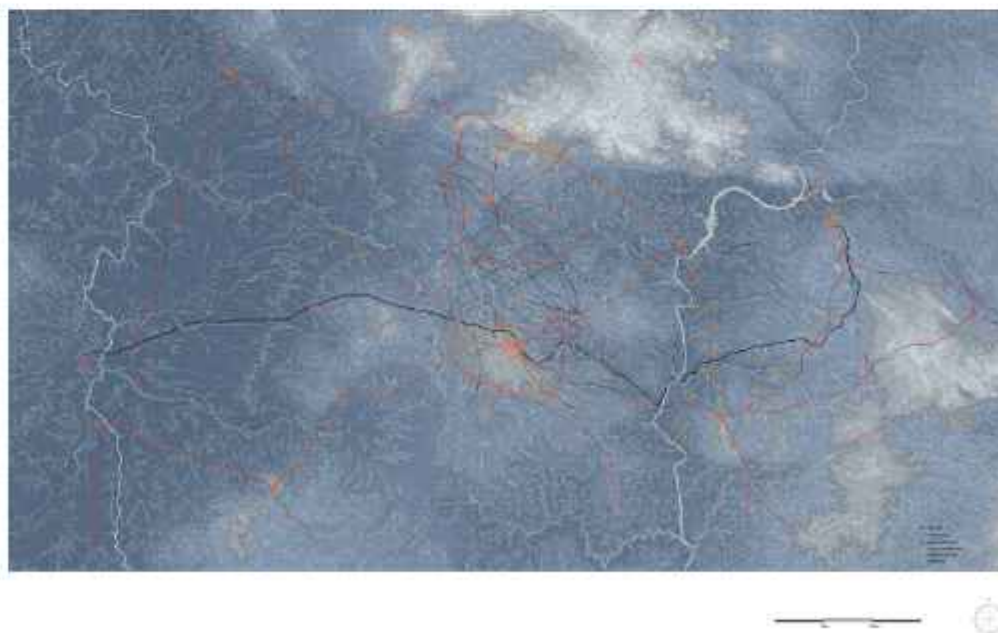


Figure 27 - Ancient routes analysis. The map presents an analysis of the ancient routes that are recurrently active (red) or semi active (black dot lines). It also illustrate all know traces of ancient occupation in the region (yellow), and the contemporary urban settlements (orange). © Author

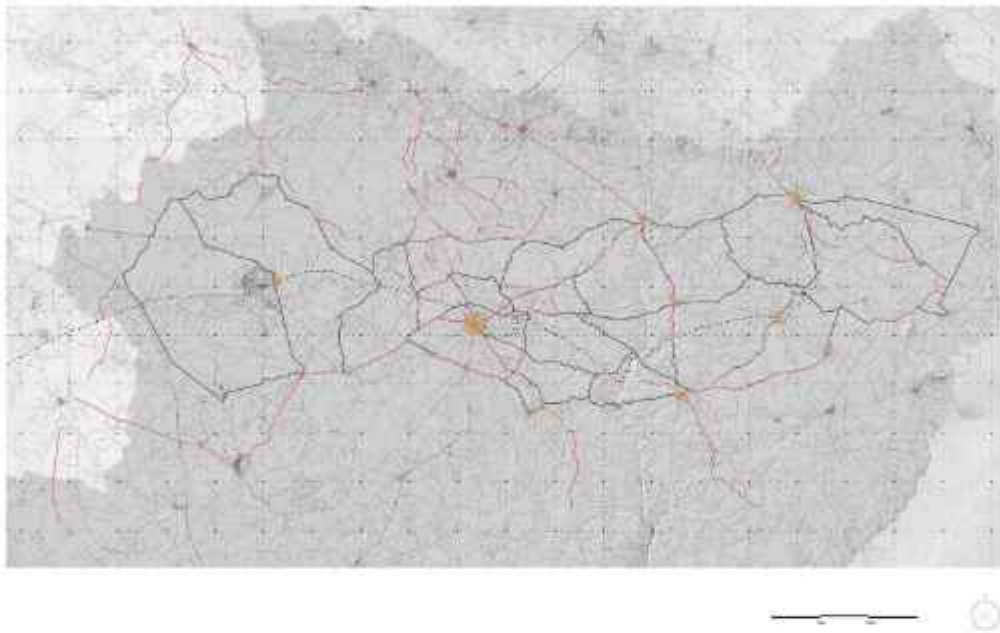


Figure 28 - Mobility System. The map overlaps the active ancient routes (red) with the current road network of the region (light gray). From this process the proposed itinerary emerges. It also takes into consideration the contemporary urban settlements along the historical east-west axis (yellow). © Author

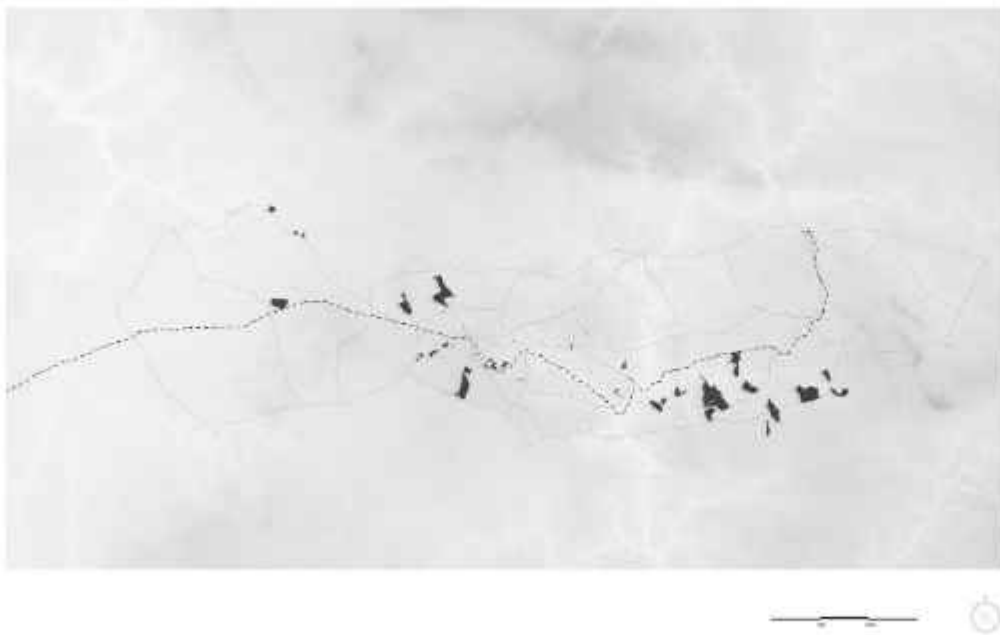


Figure 29 - Moving Borders. The map presents the spaces that were added to the original plots in order to improve its interconnection with the mobility system. © Author



Figure 30 - Mobility System. © Author

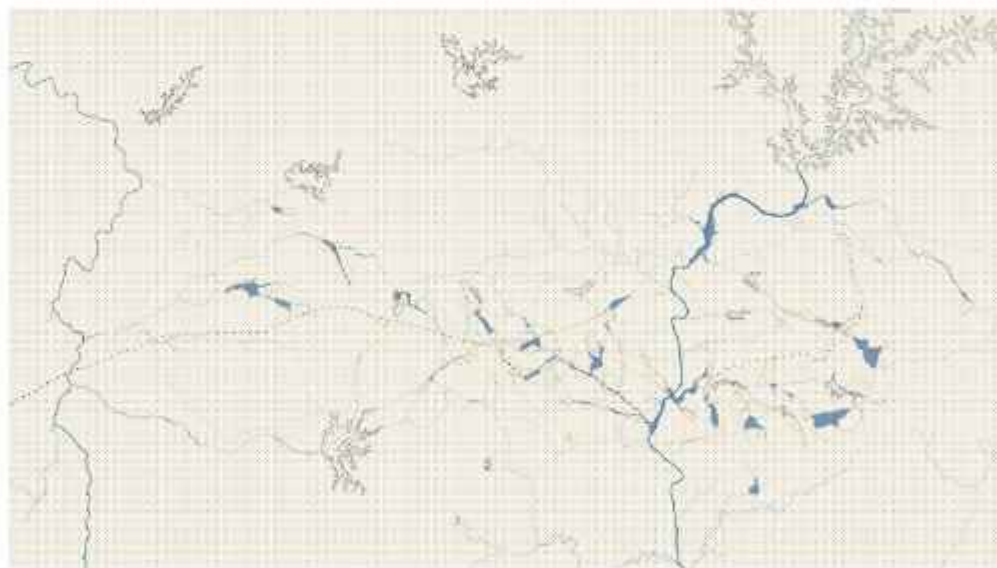


Figure 31 - Green Infrastructure areas. © Author

Finally, taking into consideration the worldwide condition of the planetary urbanization, whose ultimate consequence is the incriminated extension of the urban, the proposed set of plots stand against the complete urbanization that has overtaken the countryside landscape. They propose a limit for the extended urbanization and homogeneous production of space. A boundary to the urban,

understood not as a city or a densely populated region, but referring to a “totality of a global territory”⁷⁴ informed by the logic of its economic mastery⁷⁵.

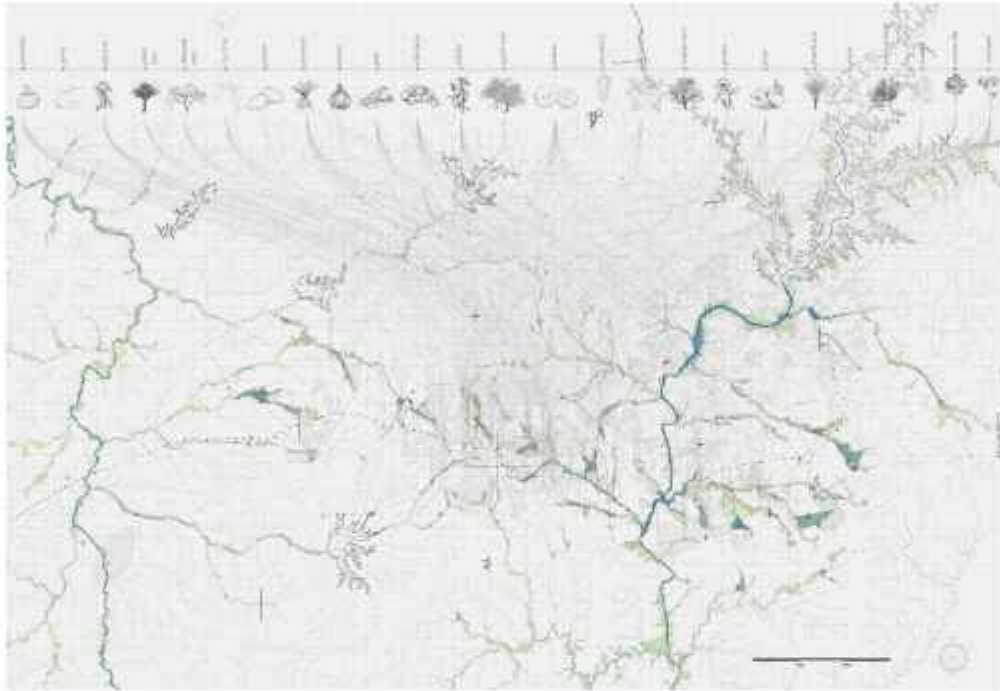


Figure 32 - Infrastructure Map. The map correlates the new proposed plots with the implementation of an alternative production matrix. It takes into consideration the regions suitable for the cultivation of each kind of crop. This information is extracted from the Anuario Agrícola Alqueva 2021. © Author

CONCLUSIONS

At the beginning of this work we have placed a very clear question: *What can be the role of archeology in the development processes that define the spatial and social organization of society today?*

From this question we developed a research through design that allowed us to investigate possibilities around the chosen territory of experimentation. The output of such an effort is a proposal that not only aims to answer the question raised but to illustrate a reflection about the influence of heritage in urban design and regional planning.

This process enabled us to define strategies that radically counter the homogenous production of space and the planetary urbanization that have been overtaking the countryside. Through a large-scale design we envision alternative ways of inhabitation, reconnecting the space of the city to the hinterlands that support its existence. Based on a disruptive process we proposed the

74. According to Aureli, the traditional divisions of the city, between public and private, between living and working, between culture and market, and in our case also between urban and rural, are no longer valid, and flag a space completely subsumed by production.

75. Aureli (2013, p. 45).

implementation of autonomous nuclei of human occupation and production, that challenges the current social and spatial organization of the countryside. Arguing in favor of a landscape shaped by its historical continuity we designed a completely new system from the presence of the regional heritage. With this we came up with a proposal which morphogenesis is based on operational and historical arguments, reconciling nature, culture, production and human occupation.

Thus, the proposed infrastructures are presented as an open and flexible system, capable of addressing possible changes in the economic, social and spatial organization of the territory in response to demands posed by our ever changing society.

In this way this work also envisioned the expansion of the proposed system, which total potential could not be fully explored yet. Through its flexibility it is possible to imagine a total reconfiguration of the territory, which back bound relays on the reactivation of a historical territorial axis. With this we flag the importance of integrating the historical landscape into the contemporary development of the society, ruled both by operational and meaningful constraints.

The project can also help to establish a critical understanding of the operationalization of the landscape in relation to broader political, economic and geographic contexts. Through the research we also intend to consolidate possible relationships between human environments and technology within the landscape design process. In the case of Alentejo, the development of the hinterlands has been predominantly operationalized, with disastrous results for both city and countryside. The research can also help to rethink alternative ways of development in face of climate change and global water crisis.

Lastly, the proposal portrays the countryside not only as a place of production and consumption but as a cradle of culture. If the countryside is the space where the most radical changes are now taking place, it is also the place where we must rethink the relation between urban development and production of culture. *The landscape as a culture generator.*

ACKNOWLEDGEMENTS

I express my gratitude to Maria Conceição Lopes and Armando Rabaça for the support to the development of this work.

ABOUT THE AUTHOR

Miguel Carrasco is a Brazilian architect graduated from the Federal University of Rio de Janeiro (FAU-UFRJ) in 2018. During his studies, between 2015 and 2016,

he completed an academic exchange at the Superior Technical School of Architecture of Barcelona (ETSAB), Spain. His graduation project focused on the urban cemeteries of Rio de Janeiro, exploring alternative scenarios for the city and reinterpreting cultural landscapes and pre-existing urban geographies. Titled Espaço Morto (Dead Space), the project was awarded the National Opera Prima Prize, which recognizes the best graduation theses in Brazil. Following his graduation, Carrasco worked in multifaceted practise, being awarded in several architecture competitions such as Parque Morro da Manteiga in Bahia and Reimagining Stations Architecture Competition supported by RIBA. In 2021, Miguel Carrasco returned to Europe to pursue a joint master's degree in Architecture, Landscape, and Archaeology, offered by Sapienza University in Rome, Technical University of Athens, Federico II University and Coimbra University. E-mail: miguel.carrasco.arquitetura@gmail.com.

REFERENCES

Books, articles and thesis

ANSCHUETZ, Kurt F.; WILSHUSEN, Richard H.; SCHEICK, Cherie L. An archaeology of landscapes: perspectives and directions. *Journal of Archaeological Research*, v. 9, n. 2, pp. 157-211, June 2001.

AURELI, Pier V.; MARTINO Tattara. *11 Projects*. London: AA Publications, 2013.

AURELI, Pier V.; MARTINO Tattara. *Platform: architecture and the use of ground*, 2019. Available at: www.mendeley.com/guides/apa-citation-guide/. Last seen: 2023.

BALAKRISHNAN, Sai. Recombinant urbanization: agrarian–urban landed property and uneven development in India. *International Journal of Urban and Regional Research*, 2019

BRENNER, Neil. Thesis on urbanization. In: *Implisions/explosions: towards a study of planetary urbanization*. [S. l.]: Jovis Verlag, 2014.

BRENNER, Neil. Urban theory without an outside. In: *Implisions/explosions: towards a study of planetary urbanization*. [S. l.]: Jovis Verlag, 2014.

BRENNER, Neil; KATSIKIS, Nikos. Operational landscape. In: *The landscapists: redefining landscape relations*. [S. l. : s. n.], 2018.

BRENNER, Neil; SCHMID, Christian. *Planetary urbanisation: urban constellations*. [S. l.]: Matthew Gandy, 2011.

BROWN, Steve. Landscaping heritage: toward an operational cultural landscape approach for protected areas in New South Wales. *Australasian Historical Archaeology*, 2007.

CAPUANO, Alessandra; CARPENZANO, Orazio; TOPETTI, Fabrizio. *Il Parco e la città: il territorio storico dell'Apia nel futuro di Roma*. [S. l.]: Sapienza Università di Roma, 2013.

CHOQUER, Gilles. L'analyse de morphologie urbaine: l'exemple de Beja. *Archeographis Collection of Coimbra University*, v. 2, 2012.

DOMINGUEZ, Álvaro. A paisagem revisitada. *Revista Finisterra*, Lisboa, v. XXXVI, n. 72., 2001.

DOMINGUEZ, Álvaro. *Vida no campo*. Porto: Dafne, 2011.

FAIRCLOUGH, Graham L. A new landscape for cultural heritage management: characterisation as a management tool. In: LOZNY, L. R. (ed.) *Landscapes under pressure: theory and practice of cultural heritage research and preservation*. USA: Springer Science+Business Media, 2006.

FEIO, Mariano. *A evolução da agricultura do alentejo meridional: as cartas agrícolas de G. Pery, as difíceis perspectivas actuais na comunidade europeia*. [S. l.]: Edições Colibri, 1998.

GHOSH, Swarnabh. Notes on rurality or the theoretical usefulness of the not-urban. *Avery Review*, n. 27, 2017.

KOOLHAAS, Rem. Koolhaas in the country. *Icon3*, Sept. 2014.

LAVIGNE, Cedric. *Espaço das sociedades antigas: dinâmica das paisagens da região de Pax Iulia (Beja)*. [S. l.]: Universidade de Coimbra, 2006.

LEFEBVRE, Henri. *The urban revolution*. [S. l.]: Minnesota Press, 1970.

LOPES, Conceição. *A cidade romana de Beja: percursos e debates acerca da "civitas" de PAX IVLIA*. [S. l.]: Universidade de Coimbra, 2003.

LOPES, Conceição. O busto de Julio César de Pax Iulia: percursos e debates em torno da fundação de Pax Iulia. *Arqueologia Medieval*, n. 14, 2018.

LOPES, Conceição. Pax Iulia. In: BESARRATE, Trinidad Nogales (ed.). *Cities of Roman Hispania*. [S. l.]: L'erna di Bretschneider, 2021.

MANTAS, Vasco G. *A rede romana viária em Portugal: estado da questão e perspectivas futuras*. [S. l.]: Coimbra University, 2009.

MARTIN, Daryl. *The ThinkBelt: the university that never was*. Discover Society, 2014. Available at: www.archive.discoverysociety.org/2014/07/01/the-thinkbelt-the-university-that-never-was/. Last seen: 2023.

ONU HABITAT. *Lineamientos de diseño y planificación urbana*. 2021.

RIBEIRO, Orlando. *Portugal, o mediterrâneo e o atlântico*. [S. l.]: Coimbra, 1945.

TAVARES, Paulo. In the forest ruins. In: COLOMINA, Beatriz; HIRSCH, Nikolaus; VIDOKLE, Anton; WIGLEY, Mark (org). *Superhumanity: design of the self*. Minneapolis: The University of Minnesota Press, 2017. v. 1, pp. 20-35.

Article presented on: 02/23/2024. Approved on: 08/13/2024.

Editores Responsáveis: Maria Aparecida de Menezes Borrego e David Ribeiro.



All the contents of this journal, except where otherwise noted, is licensed under a Creative Commons Attribution License



Available in:

<https://www.redalyc.org/articulo.oa?id=27383019001>

How to cite

Complete issue

More information about this article

Journal's webpage in redalyc.org

Scientific Information System Redalyc
Diamond Open Access scientific journal network
Non-commercial open infrastructure owned by academia

MIGUEL ANGEL PALACIOS CARRASCO

**Operational landscapes as culture generators: the case of
Barros de Beja**

Anais do Museu Paulista: História e Cultura Material

vol. 33, e1, 2025

Museu Paulista, Universidade de São Paulo,

ISSN: 0101-4714

ISSN-E: 1982-0267

DOI: <https://doi.org/10.11606/1982-02672025v33e1>