

# Criteria for Designing Cultural Itineraries as a Strategy for Restoring the Dynamics of Cultural Landscape Formation.

## Some research notes about the case study of Itálica

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### Abstract

*The historical concept of heritage, which mostly comprised a limited selection of structures and areas that were considered of cultural or natural interest, has been extended to the surrounding landscape in the last decades. This tendency has been corroborated by a series of International Charters and the European Landscape Convention.*

*Despite protection, management and planning proposed by ELC some structural aspects of the territory have been disregarded because of the frantic enlargement of cities throughout the Twentieth Century. In many cases, urban investments and planning associated to the expansion of the metropolitan areas have overlooked a territorial heritage that is necessary to ensure the cultural landscape regeneration. This is the case of cultural landscapes in the buffer zones of the archaeological sites, which are now part of a diffuse territorial heritage that requires to be valorised through some innovative approaches. Particularly, the archaeological site of Itálica (Santiponce) a Roman settlement located near the city of Sevilla in Andalusia (Spain) has been considered as a case study for the development of the iconographic repertory presented within the paper.*

*The article aims to lay down the criteria for designing cultural itineraries able to restore the dynamics of cultural landscape formation. This implies the design of a bottom-up methodology to be applied in those cases where there is neither a regulatory framework nor a territorial planning able to guarantee that the actions on landscape have a real impact on social welfare and local development. The conceptualisation and hypotheses formulated by some authors of the Territorialist Society are used as references to establish a conceptual framework and a two-stage methodological approach. The conceptual framework is based on three pillars: the translation of heritage and identity values from cultural landscape to territorial heritage, the definition of a time-based territorial paradigm and the analytical method towards an integrated plan for territory. A GIS-assisted analytical method to design cultural itineraries is then suggested, framed within a landscape project aimed to promote the enlargement of the territorial heritage as a prerequisite to guarantee the restitution of the dynamics of cultural landscape formation.*

### Keywords

*itineraries; cultural landscape formation; integrated plan for territory; buffer zones of archaeological sites, Itálica*

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In 2000 the European Landscape Convention inaugurated a new trend in Europe that extended the scope of the policies of heritage protection to the surrounding landscape.

Landscape acquired a renewed meaning by 1992. During the World Heritage Convention, UNESCO introduced the expression ‘cultural landscape’ to refer to that landscape which is “illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal” (UNESCO, 1992). UNESCO tried to clear up the existing argument stemmed from the historical distinction between natural and cultural heritage (Poli, 2015), by designing a concept capable to bring them together and blur their boundaries (Fernández Cacho, 2019). Most part of the *protection, management* and *planning* strategies adopted until then, which nowadays are considered disintegrative and inadequate, have been designed in accordance with this differentiation (Poli, 2020). Since the ratification and implementation of the European Landscape Convention, landscape has been legally recognised, and a series of guidelines have been issued to intervene at a landscape scale, particularly *Recommendations CM/Rec (2008)3*, ad-

opted by the Committee of Ministers of the Council of Europe. These guidelines would be applicable to all areas which have heritage values, even in the case of marginal or deprived areas, or when heritage values are not socially recognised.

The quality of cultural landscapes is subject to revision, as it is considered that it has a direct impact on human welfare (Andreeva et al., 2017; Manzini, Rizzo, 2011; Paba, 2012). This implies a landscape quality examination not only of those areas with a renowned aesthetic value, but also of those peri-urban or rural areas with heritage values that have been systematically disregarded or even destroyed because of frantic urbanisation. This is often the case of the buffer zones of peri-urban archaeological sites, which are now part of a scattered system of cultural assets.

Cultural itineraries are presented as instruments of restoration/revitalization of the dynamics of cultural landscape formation for the sustainable development of peri-urban and rural areas. Some of the questions that must be asked when undertaking actions of *protection, management* or *planning* of cultural landscapes are related to the nature of the object on which the intervention will be conducted, its detection and identification, or the sort of instrument or strategy to carry out these actions.

This scientific discussion is extended to the terri-

torial sphere and turns trans-disciplinary with the new paradigm after the ratification of the European Landscape Convention. Although this kind of approach guarantees a greater effectiveness, it also entangles a decision-making that is already difficult *per se* if we consider the social and economic implications that every landscape intervention entails. Due to the prevailing bibliographical dispersion, it is necessary to lay a solid theoretical foundation for the later design of consistent actions and strategies.

To face the aforementioned uncertainties, the bibliography produced by the Territorialist Society is revisited. Concretely, attention is given to the definition of the integrated plan for territory, an operational, action-oriented strategy to integrate the landscape dimension into territorial planning and governance. The integrated plan is based on the assumption that territory is an unfinished structure resulting from the coevolution of the natural environment and the human settlements. Thus, cultural landscape refers to that landscape which is illustrative of the construction of territory.

### **Planning Landscape from Heritage: A Conceptual Framework. From Cultural Landscape to Territorial Heritage, and Vice Versa**

Cultural landscape has acquired a central role in the European agenda and the latest regional and local planning policies, as it is considered to be the bearer of heritage and identity values. These values relate mainly<sup>1</sup> to those elements that have shaped and characterised the historical construction of the territory. Assuming that heritage and identity values of cultural landscape lie primarily in a structural, deep dimension of the territory, the elements which are believed to bear these values are such because they constitute themselves through/with the substantial evidences of territorial transformations over time.

Territorial heritage is defined as the set of knowledge and territorial assets that result from – and show evidence of – the coevolution of the human settlements and the environment. The substantial evidences that are part of this territorial heritage comprise both the constitutional structure of the territory and the anthropogenic elements that represent those ecological actions that have promoted a self-sustaining, local development over time. Since landscape heritage and identity values rest upon the territorial heritage, this becomes the centre of the actions on cultural landscape.

To achieve a restitution of the dynamics of cultural landscape formation through territorial heritage, the distinction between territorial heritage and territorial resources must be considered. Poli (2020) concludes that territorial heritage owns an inherent value of existence, which does not require to be discovered or valorised. Meanwhile, territorial resources and territorial capital have a value of use, i.e. they only exist insofar as a certain community or society has considered, in a certain moment, to give to a territorial asset a specific value and exploit it. Every asset that is part of the territorial heritage is a potential resource, as it carries genetic information about the construction of the territory, which is essential to undertake actions aimed at restoring cultural landscape, an information that is believed to be its actual value of existence. The Territorialist Society focuses on valorisation strategies as a previous step towards the enlargement of territorial heritage. When the valorisation of territorial heritage becomes the centre of planning actions, we are then talking about a territorialist approach to the design of settlements (Fanfani and Magnahi, 2010; Magnaghi, 2012; Magnaghi, 2014a; Magnaghi, 2014b; Poli, 2012). Self-sustainability of planning actions on landscape is guaranteed when the inherent laws governing the enlargement of the heritage mass are

extracted and used in the design of a strategic scenario (Magnaghi, 1998, p. 9).

Architects, landscape architects, town planners and other designers can mainly operate on the valorisation of the territorial heritage, i.e. the recognition of its value of existence. Its introduction into operational use encourages the emergence of the so-called 'territorial added values' (Dematteis and Magnaghi, 2018, p. 16).

This step requires the mobilization of all social actors to be effective<sup>2</sup>. The continuous generation of these added values – which adhere to the set of sediments at a certain point of time –, implies the steady increase in mass of the territorial heritage.

This enlargement is associated with the restitution of the dynamics of cultural landscape formation, insofar as the accumulation of added values should be triggered and encouraged by the inhabitants' proactive attitude towards the construction of the territory. The generation of these added values depends on the inhabitants' ability to interpret the substantial evidences, which requires a promotion of critical thinking (Settis, 2012, p. 84). When this knowledge becomes widespread and new uses are assumed, this information becomes part of the collective memory. In this way, the opposite process from territorial heritage to cultural landscape is noted. Enlargement of the territorial heritage can thus reactivate the processes of local identification by evocating and contributing to the collective memory (Tarpino, 2017, p. 55).

### **Definition of a Time-Based Territorial Paradigm**

In view of the current destruction of territorial heritage and, therefore, of those potential resources that can promote the regeneration of cultural landscapes, the Territorialist Society supports a transdisciplinary approach through the integrated plan for the territory. This plan is aimed to counteract the territorial heritage devastation by means

of different actions geared towards its valorisation and enlargement.

Because of the complex nature of the territorial heritage, it is essential to define a territorial paradigm that allows us to understand its sedimentary nature as the basis for undertaking future actions of restitution of the dynamics of cultural landscape formation. In the bibliography, it is observed how authors frequently refer to the TDR model in an attempt to explain the evolutionary nature of the territory (Magnaghi, 2001, p. 24; Poli, 2001, pp. 36-41; Gisotti, 2017, p. 111). It is Raffestin (1984) who first introduces this model in the scientific scene. The main strength of this model is that it makes the need to intervene in the natural process of constructing the territory more visible in view of the worrying imbalances incurred by the current relationship between human settlements and the environment. TDR model constitutes an epistemological method which pursues the scientific knowledge of the territory and which is built on three interlinked sub-processes governing the construction of the territory: territorialisation, de-territorialisation and re-territorialisation.

The scheme proposed by Magnaghi is built on Raffestin's model albeit it is centred on the analysis of the sedimentary nature of the territorial heritage. Some additional elements are included in an attempt to study the territorial heritage implication in the historical evolution of the territory based on the TDR sequence.

Magnaghi's scheme enables us to locate those cognitive and material sediments that are being challenged by a rationalist, exclusively economic-growth-oriented planning or the innovative and conflicting energies which are crucial to make progresses towards a new phase of re-territorialisation (Merino del Río, 2020). Both Raffestin's and Magnaghi's diagrams are based on the incorporation of the time factor to explain the construction

of the territory through complementary angles. From the TDR perspective, the integrated plan for territory is an impulse opposed to that of the de-territorialisation, which is aimed to re-establish the balance between human settlements and environment. This force involves the valorisation of the cognitive and substantial sediments that are still linked to the local identity, physically or in the collective memory.

Cultural landscape is subject to change as territory and territorial heritage – its deep substratum – are living, always-evolving structures. If actions on construction of the territory benefit from this spatial paradigm, it follows that actions on its perceptible dimension, cultural landscape, can also benefit from it.

This epistemological model allows us to uncover the dynamics of cultural landscape formation, i.e. the intensity of the territorialisation processes for each interval detected. The intensity is measured on the basis of the amount of sediments generated and their acceptance and durability over time. Within this conceptual framework, landscape architecture is a project on time itself, which is put into practice by means of an intensification, mitigation or redefinition of territorialisation processes.

Thus, territorialisation can be designed when operating on territorial heritage, which can entail the restoration of the dynamics of cultural landscape formation. From a substantial point of view, this restitution is achieved by promoting the introduction into operational use of those highly evocative and durable territorial assets, without overlooking the need for an overall valorisation of the territorial heritage.

### **Analytical Method towards an Integrated Plan for Territory**

Magnaghi's truly meritorious achievement is the configuration of an analytical method for the

identity design of the territory based on the three phases of the TDR process. This method is built on the analysis of the sedimentary nature of territorial heritage. The efficiency of the rest of the actions that lead to the integrated plan for territory relies on this analysis. This methodology puts forward some correlative targets, which stemmed from the territorial sediments and the innovative and conflicting energies. The systemic activation of these targets guarantees the return to the territory (Magnaghi, 2001). It is organised in two distinct parts. The first structural part refers to the primitive phases of territorialisation and the present phase of de-territorialisation, while the second strategic part aims to make progresses towards a phase of re-territorialisation and has an important utopian character (Choay, 2008, pp. 47-50; Magnaghi 2006 [2000], p. 150).

Because of the fundamental role acquired by territorial heritage in the production of an integrated plan for territory, whose main purpose is its enlargement, the starting point of any strategy, either integral or partial, will be its detection and identification. To detect and identify the territorial heritage, two actions are distinguished, which refer to past territorialisation (Pazzagli et al., 2017, p. 13). The first action consists in the elaboration of a history of the territory that helps us to understand the rhythm and intensity of the territorialisation intervals that have led to the current state of affairs (Poli, 2017, pp. 42-43). The second is the recognition and synthesis of the cognitive and material sediments that have been deposited during the different phases of territorialisation. This action facilitates the reconstruction of the sedimentation process that has led to the present state of the territorial heritage and the extraction of the heritage and identity values. These actions pave the way for the analytical description of the identity of the place and territorial heritage (Mag-

naghi, 2001, p. 15). Secondly, a statute of place should be elaborated, a constitutive document strongly linked to the disciplines of urbanism and territorial planning, which emerged within the territorialist research. It is organised in two sections: the description of the structural invariants and the unveiling of the rules for the transformation. The definition of the structural invariants intends to evidence those constitutive systems of the territory and the relations between them that have characterised the cultural landscape over time (Maggio, 2014). Meanwhile, the rules for the transformation manifest in which way civilizations have related to the environment and have evolved in view of their renewed interests or needs. The stability of those interconnected systems, as well as the promotion of those ecological relations guarantee the endurance of the territory, conceived here as a living structure restricted by its own nature (Marson, 2008). Finally, in the strategic part, the definition of a self-sustaining local model of development is pursued. Magnaghi presents the strategic scenario as the methodological stage in which 'the perspectives and content of re-territorialisation' are defined. This happens after having taken into account 'the territorial pathologies, the identity of the territorial heritage, the actors to activate for its valorisation and the rules for the transformation that form part of the statute of place' (Magnaghi, 2001, p. 46).

On the one hand, some strategic prospects for promoting the enlargement of the territorial heritage should be elaborated in line with the structural invariants and the rules defined in the statute of place. On the other hand, it is necessary to redefine the valorisation models, the instruments of planning and the government systems.

In this scenario, landscape planning becomes an innovative instrument with the potential to achieve an integration of cultural assets and ar-

eas of natural interest in the wider context giving them significance (Marson, 2019, p. 18) and to cater for landscape distinctive dimensions. Civil participation is fundamental to elaborate the statute of place, but also to define the future prospects and the renewed competences. The authors of the Territorialist Society defend a stronger civil involvement that would contribute to overcome the current system of government and move towards a new system of local governance (Poli, 2011a; Poli, 2013a, p. 21).

### **Methodological Approach to the Design of Cultural Itineraries in Territorialist Terms. A Landscape Architecture in the Framework of an Integrated Plan for Territory.**

Despite the numerous advances in the field of territorial and landscape planning, it is observed that there are serious difficulties to effectively implement *protection*, *management* and *planning* actions on cultural landscapes. Two important hurdles to a good practice are detected. On the one hand, the difficulty or the incapacity to design an innovative, regulatory framework<sup>3</sup>, able to integrate the various actors and assets involved in landscape formation. On the other, the lack of a range of design tools to intervene at a smaller scale, easier to manage, establishing the stages to follow to develop partial strategies that contribute to an integrated plan for territory. There are several reasons for promoting partial interventions in the framework of an integrated plan for territory. In first place, the alignment of the methodology with the territorialist assumptions enables us to refer to a physical, substantial reality when working on cultural landscapes. Secondly, the more extensive concept of territorial heritage facilitates the integration of those material sediments that constitute the diffuse archaeological and architectural remains. Finally, the valorisation and reactivation

of the territorial heritage, directed at enlarging its mass, have proved to be effective to restore the dynamics of cultural landscape formation. Taking the analytical methodology as the reference, an intermediate framework is established, which guarantees that landscape architecture contributes to the objectives pursued by the integrated plan for territory, although it is not developed within a territorial or landscape plan based on the territorialist approach. This intermediate framework is methodologically and geographically adjusted to the scope and scale of landscape architecture.

As compared with other methods that take scattered immovable assets as the starting point, landscape project begins with a phase of analysis aimed to detect the territorial heritage. To guarantee that landscape project is built on the same inclusive basis than the integrated plan for territory, prior to any partial operation, a synthetic structural description of the territorial heritage should be elaborated giving attention to the construction of the territory and landscape formation through inter- or multi-disciplinary research (Tress, Tress and Fry, 2004). The structural and historical study of the territorialisation processes is developed at this stage.

After a first phase that consists in an interpretative description, a phase of identity and statutory interpretation is carried out. The purpose is to identify the territorial heritage as a constituent part of the structural invariants. This identification allows us to recognise the heritage and identity values not only of the elements or areas already protected but also of those assets that have a value of existence, which have not been recognised as strategic or characteristic of a landscape. Both the structural invariants and the rules for the transformation constrain the action of design/project on the cultural landscape. Their unveiling highlights the elements upon which depends the survival of the settled community.

Despite the importance of civil participation in the elaboration of the statute of place (Magnaghi, 2006 [2000], p. 128), the incorporation of social actors into the decision-making is removed of this partial method in favour of greater operability. Thus, the responsibility lies on the experts, limited to the professional or the academic and research sphere. The definition of the strategical scenario should consist in the establishment of a lessened series of quality objectives consistent with a model of self-sustaining, local development. The detection of the territorial heritage, its identification as part of the structural invariants and the extraction of the rules for the transformation guarantee that landscape project is aimed at valorising this heritage and restoring the dynamics cultural landscape formation.

Another fundamental aspect to guarantee that landscape design/project contributes to the integrated plan for territory is the extraction of the landscape area or areas affected by the case study. Landscape area is the minimum geographical unit for any *protection, management or planning* action on cultural landscapes.

In the opinion of the territorialist authors, conventional delimitation of landscape areas leads to a disaggregation of zones historically linked to ensure the stability of the settlements. This relation is essential in order to characterise landscape and should be identified prior to proceed with any strategy on landscape dimension. This landscape areas have a connection to the so-called "territorial ecosystems" (Saragosa, 2001, p. 55). The landscape areas should be extracted in the identity and constitutional interpretation. Thus, it arises after a complex process of synthesis that has to take into account the following categories: the hydrogeomorphologic system, the ecosystem characteristics, the morphotypes of settlements and infrastructures, the features of rural areas, the main

horizons, the sense of belonging, local socio-economic systems or the dynamics of the settlements. Landscape areas delimitation has a propositional character, rather than simply descriptive. In the synthetical process for their extraction, the constitutional elements and characteristic relationships of a territorial ecosystem, which should be preserved for devising any sustainable action on landscape, are identified.

This intermediate framework guarantees the integration of landscape dimension in the design and planning processes and the contribution to the objectives of the integrated plan for territory. This certainty lies in the fact that the method is built on the conceptual and methodological basis used by the Territorialist Society for this integrated plan, to which disciplines linked to landscape project can contribute from the design stance.

For its definition, the conceptual background is methodologically and geographically adapted to the scope and scale of landscape architecture. The set of guidelines and elaborations of this intermediate framework exceeds the limits of design disciplines. They are based on synthetic studies that go beyond the purely architectural subject matters and require the consideration of different geographical scales and specific methods.

This proposal assumes the incapacity of plenty reaching the objectives of the integrated plan for territory, i.e. the advent of a self-sustaining, local development based on the enlargement of the territorial heritage, to which it partially contributes through a more ecological planning that restores the dynamics of cultural landscape formation.

### **A GIS-Assisted Analytical Method to Design Cultural Itineraries**

Following a greater concreteness, a specific method to design cultural itineraries in the framework of a territorialist landscape architecture is posed.

Based on the postulates of the Territorialist Society, the purpose of the design should not be only the materialisation of a touristic infrastructure, but to make an integrated plan for territory legible. In fact, the exclusively touristic exploitation is in contradiction with an introduction into effective use of the territorial assets. Territorial heritage is extensively conceived here as the catalyst of an alternative model of settlements that is grounded on the reinforcement of competences of the local community settled at a certain place (Dematteis and Magnaghi, 2018). Thus, the itinerary should contribute to an ecological planning by encouraging the introduction into operational use of that highly evocative and durable assets that have not been valorised yet.

In this way, the enlargement of the heritage mass can be achieved, and sustainability of the operations is ensured. Alternatively, the result can serve as a guide to design some mobility infrastructures in the framework of the so-called 'eco-museums' (Riva, 2015). Furthermore, this concreteness also affects the physical dimension.

In this research, the implementation of the method is limited to the buffer zones of an archaeological site, Itálica (fig.1-9), though it is meant to be exportable to multiple locations.

In this kind of landscape, it is usual to find numerous archaeological and architectural remains with heritage values dismantled or in a concerning state of abandonment (Matteini, 2017; Paolinelli, 2015). In accordance with our substantiation, these remains do not only possess value of use, to the extent that its fruition is linked to the production of durable, sustainable wealth, but they also have value of existence, as they convey genetic information on the historical construction of the territory. It is this value of existence that Volpe (2012) claims to be the subject of a new discipline, the archaeology of territoriality.



**Fig. 1** –Aerial view of Itálica from the north. Source: Archivo Conjunto Arqueológico de Itálica. The strategic value of the ancient Roman city of Itálica is currently subject to review. The archaeological site and scattered evidences emerging in the modern urban tissue are considered important resources to encourage the local development of Santiponce and its buffer zone.

The design of itineraries in territorialist terms involves that several geographical scales are taken into account, from region to landscape areas and buffer zones, and vice versa.

Our method takes as a starting point the analytical description of the identity of place and territorial heritage through synthetical structural descriptions at regional level. These descriptions are materialised in the following developments: [1] the study of the hydro-geomorphological structure, [2] the study of the ecosystem structures and [3] the study of the anthropogenic and the structural-historical structures. The third elaboration is made up in turn of the analysis of [3.1] the territorial morpho-types, which is mostly centred on the hierarchical rapports between settlements and mobility infrastructures, [3.2] rural landscapes and [3.3] the long-standing processes of territorialisation.

To analyse the territorialisation processes, the intervals and ruptures should be detected. The structural descriptions of landscape characteristic elements for all the intervals are developed afterwards, which together represent a view of cultural landscape historical evolution. The three actions are carried out through a comparative analysis of primary and secondary sources: texts, historical cartography, contemporary planning, drawings or computer viewfinders.

Because of the biased, multidisciplinary nature of this analytical description, the representation of the identity of place can be made through descriptive memories, plans, maps or drawings. GIS are incorporated in this first phase to develop advanced spatial analysis and to visualize georeferenced data (Howey and Brouwer Burg, 2017). On the one hand, the visualization of some territorial assets

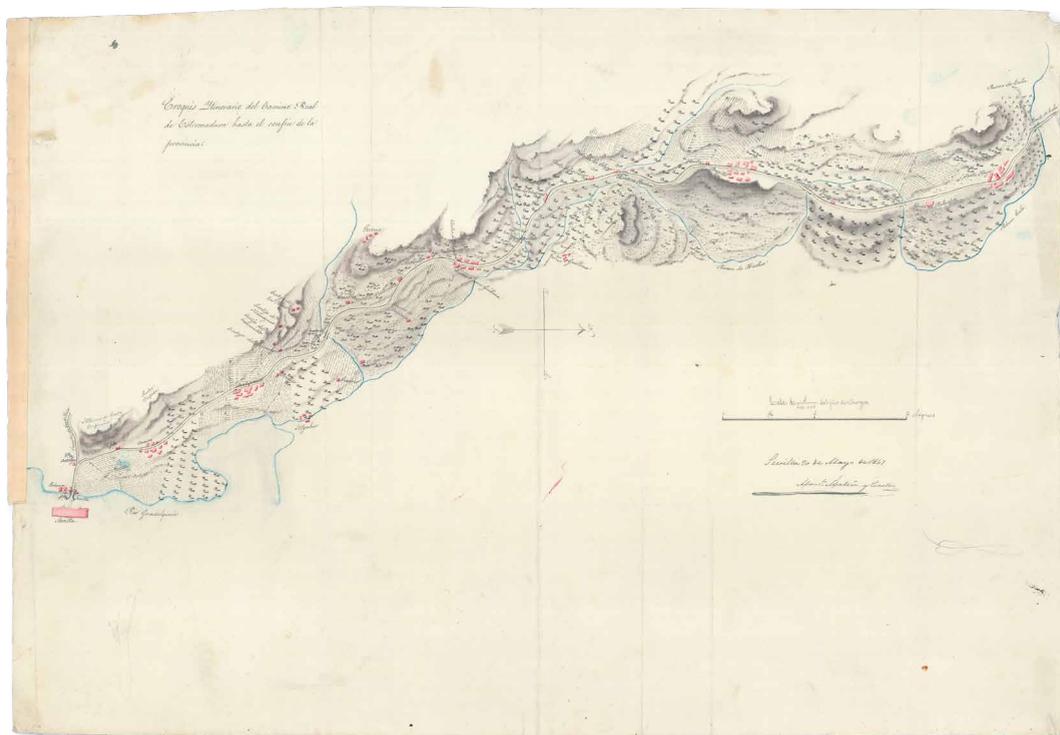


**Fig. 2** –Amphitheatre of Itálica, Seville (Spain), 2019. © Rebeca Merino del Río. Itálica's value of existence is linked to the assets of the territorial heritage and the set of relationships between them that led to its growth and constrained its subsequent evolution to this day.

currently considered heritage values and their cataloguing by date, allow us to outline some ancient settlement patterns that are not graphically recorded, or scientific literature fails to geo-reference. On the other hand, some GIS-based applications allow us to calculate the least cost paths, like *r.drain* of GRASS, or to make visibility analyses, like *.viewshed* of ArcGIS or *Visibility Analysis* of QGIS. These applications and plugins are commonly used by archaeologists to pose hypotheses about the primitive movement throughout the territory (Llobera et al., 2011; Verbrugge et al., 2017) or to verify the relationship between the settlement patterns and the visual control of the territory (Galmés Alba, 2015). In our case, GIS are useful to establish the phases of territorialisation and to define the characteristic morpho-types. The superimposition and sequential visualisation of the morpho-types

enable us to identify the material sediments from each phase of territorialisation and to analyse their acceptance or refusal in the consecutive phases. After that, information from the synthetical structural descriptions should be interpreted. Because of the itineraries' limited geographical scope, the extraction of the landscape area or areas affected by the design should be made prior to the description of the structural invariants and the rules for the transformation, which have in turn an essential role in establishing the strategic scenario. This statutory interpretation is followed by the synthetical interpretation of the territorial heritage, which possesses a long-standing structure that is meant to be extracted in this phase. After reviewing scientific literature and assessing the landscape plans of both Tuscany and Puglia, designed in the framework of an integrated plan for





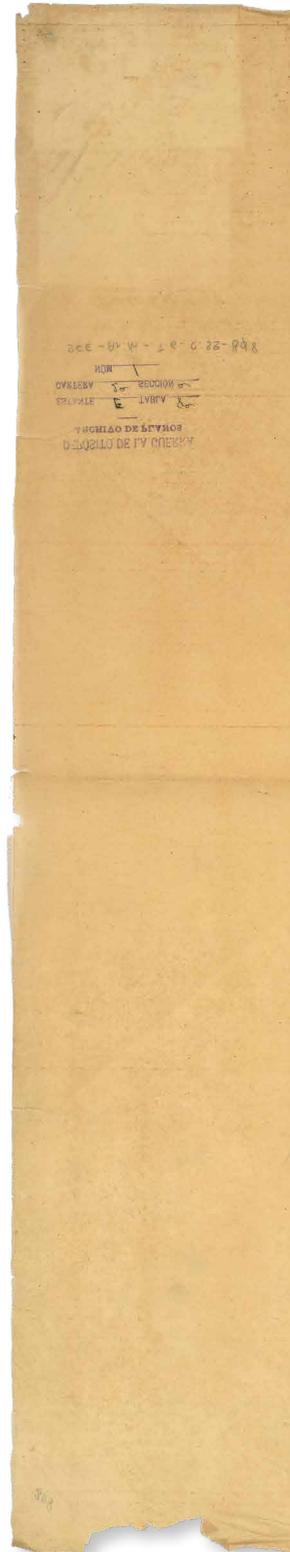
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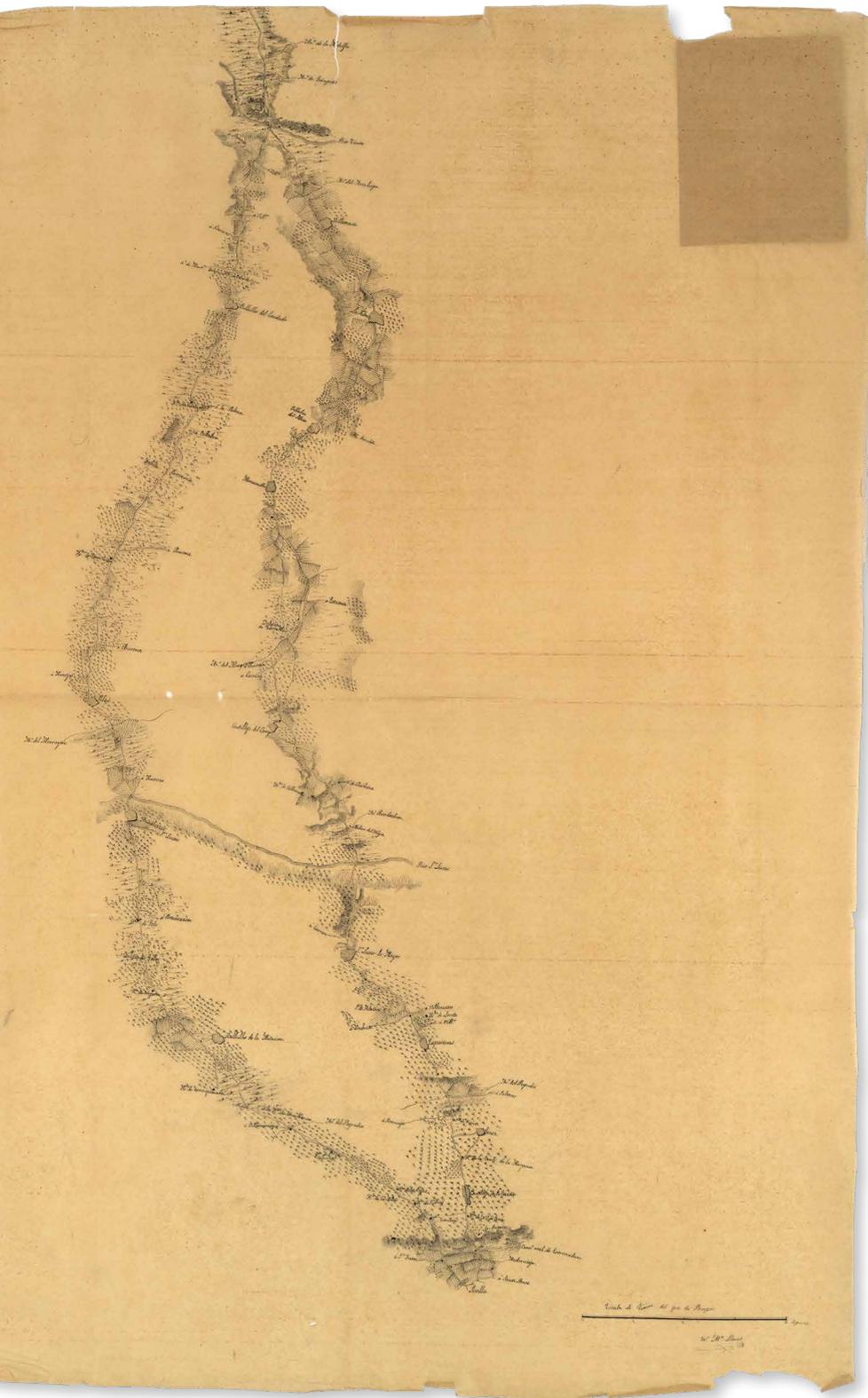
**Fig. 3** – Antonio Faona Ugante, *Ruta desde Cádiz a Mérida*, s. XIX. Source: Archivo Cartográfico de Estudios Geográficos del Centro Geográfico del Ejército, Ministerio de Defensa [Referencia: SGE.Ar.M.T.6-C.33-843]. If the itineraries are to restore the dynamics of cultural landscape formation, the method should be rooted in the analytical description of the identity of the place and the territorial heritage.

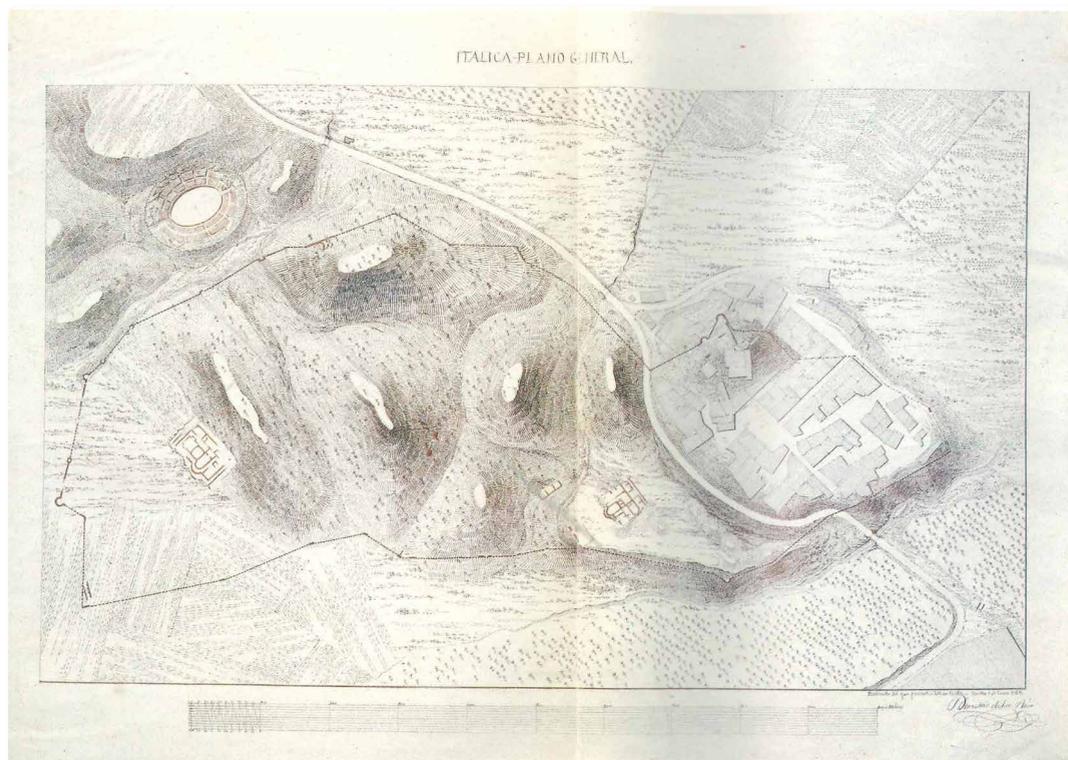
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**Fig. 4** – Manl. Mallén y Castro, *Croquis Ytinerario del Camino Real de Estremadura hasta el confín de la provincia*, 1847. Source: Archivo Cartográfico de Estudios Geográficos del Centro Geográfico del Ejército, Ministerio de Defensa [Referencia: Ar.M-T.6-C.33-810]. The revision of the historical cartography, though complicated because of the lack of graphical records, is fundamental to analyse the interrelationships between the hydro- geomorphological, ecosystem and anthropic structures.

**Fig. 5** – Nicolás María Llovet, *Itinerario de Sevilla á Ayamonte por Huelva*, 1847. Source: Archivo Cartográfico de Estudios Geográficos del Centro Geográfico del Ejército, Ministerio de Defensa [Reference: SGE - Ar.M-T.6-C.33-808]. The time spectrum of the sample extends from the late fourteenth century to this day. In this period, it is especially interesting the transition to the Contemporary Age because of the renewed interest in Santiponce after the French occupation prompted by the development of the road to Mérida along the imperial Roman itinerary.







**Fig. 6** – Demetrio de los Ríos, *Italica: plano general*, 1862. Source: Museo Arqueológico de Sevilla. This renewed interest had also an impact on the ruins, which became subject of scientific study and public preservation since the end of the eighteenth century. This topographic map aimed to locate the excavations and to study the relationships with the surrounding territorial assets.



**Fig. 7** – James Stephenson and David Roberts. *The Ruins of the Ancient City of Italica*, 1835. Source: Biblioteca Nacional de España [Reference: INVENT/19611]. Thus, the historiographical study unveils cultural landscape depth around Itálica's archaeological site, through the analysis of the relations between the characteristic territorial assets for each phase of territorialisation.

territory, three actions are suggested. First, [4] the identification of the landscape area or areas affected by the buffer zone of the archaeological site subject of study. Secondly, [5] the elaboration for each landscape area of several maps to identify the territorial heritage in accordance with the structural invariants<sup>4</sup>, constituted by the oro-hydrographical structure, the hierarchical organisation of the settlements and infrastructures, the land-use partitions and the main structures of organisation of territory. Finally, [6] the synthetical interpretation of the landscape area or areas, consisting in the elaboration of a map of the territorial heritage and the detection of the long-standing structure of the territorialisation processes (Poli, 2011b, p. 23).

The last elaboration sheds light on those territorial assets more stable in time, which are meant to have the highest social acceptance. The map of the long-standing structure, built on the temporal sequence of the territorial morpho-types, is suggested to be made by creating some kind of depth-map.

Eetvelde and Antrop (2009) use depth-map to conduct some case studies that allow them to identify the key elements to be considered in the restitution of the dynamics of cultural landscape formation. After the elaboration of a depth-map, data are re-classified through some GIS-based applications, like *r.reclass*, and some indicators are defined to latterly use this information in the strategic scenario.

In the third stage, a mitigated strategic scenario should be established to contribute to an integrated plan for territory. For this purpose, it is necessary [7.1] to define some quality objectives for each landscape area or areas affected by the buffer zones to promote a more sustainable local development.

The overriding aim must be the valorisation of the territorial heritage and the introduction into operational use of those highly evocative and durable assets.

In addition to establishing these objectives, [7.2] a map of the cultural and natural assets to be protected and of those areas that might consti-

tute the “territorial contexts”<sup>5</sup> (Volpe, 2017, p. 27) should be conducted.

Eventually, it should be developed a [8] synthetical map that focuses on those infrastructures and areas not only suited to place the cultural itinerary, but also to made investments that foster an ecological planning. The promotion of those highly evocative assets and ‘contexts’, which concentrate a large number of heritage and identity values, intends to encourage inhabitants to take part in the construction of cultural landscape and, so, the restitution of its dynamics is guaranteed.

To accomplish this action, a locational model can be generated, i.e. a model in which the optimal areas to develop different activities are indicated (Díaz et al., 2018). The map of the territorial heritage is used as the basis, while data from the map of the long-standing structure become the cornerstone of the operations, as they represent the more stable territorial heritage, that with the highest social acceptance.

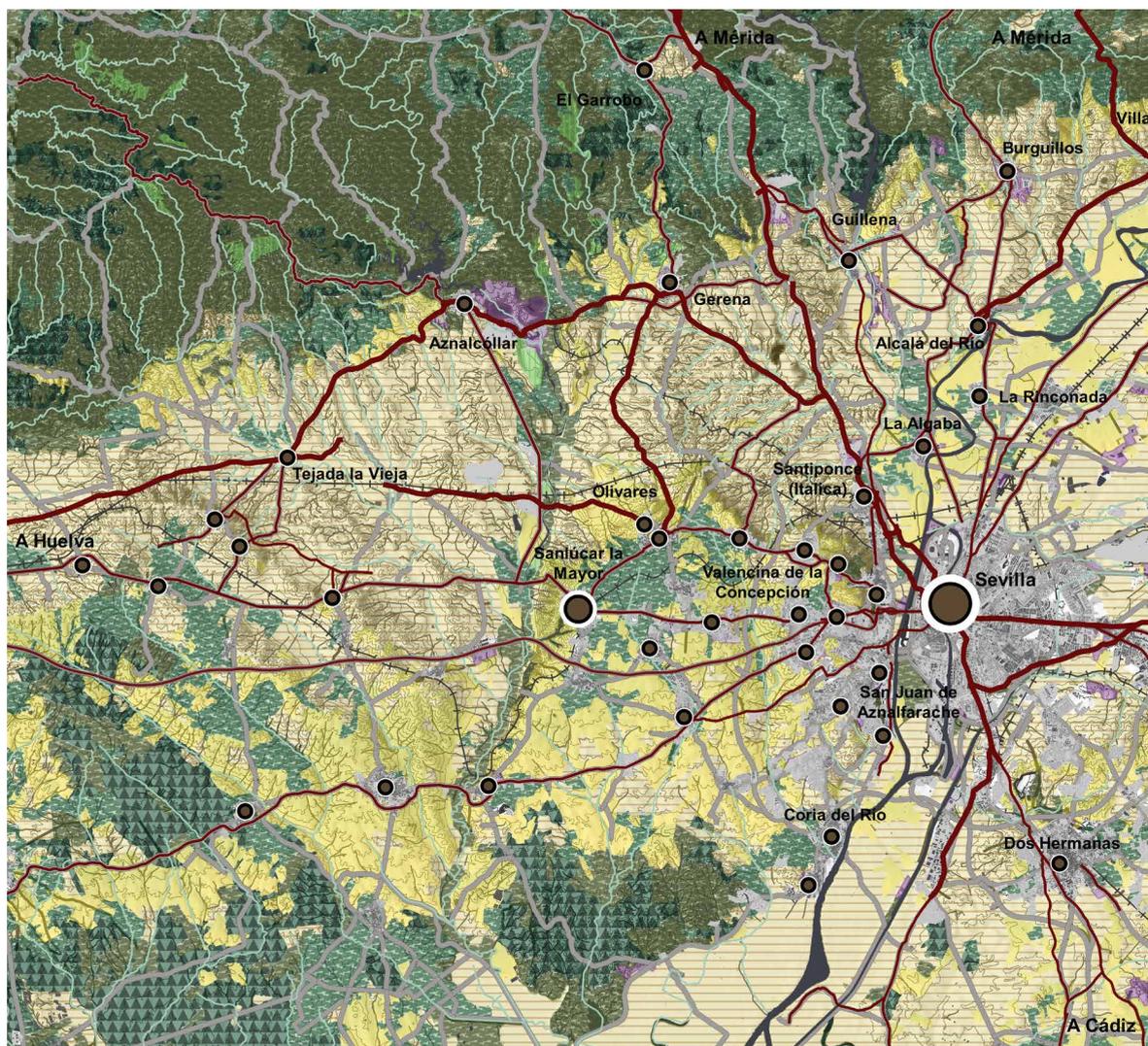
To obtain the locational model, it is necessary to define a series of restrictions and areas of compatibility that will guide the operations with spatial data. In this sense, the rules for the transformation retain useful information on the elements and reports that have contributed to the increasing of the territorial heritage mass, as well as on those decisions that have provoked its destruction. To use this data, the rules for the transformation should be converted into some exclusion and compatibility criteria. This way, the final document will provide indications on those areas where the well-oriented investments in the development will contribute to an ecological planning.

### **Future lines of research.**

Cultural landscape has become the cornerstone of European policies oriented to the reinforcement of local identity through heritage. However, the complex nature of the concept of landscape (to which



**Fig. 8** – Immovable cultural heritage in *Itálica*'s buffer zone catalogued by IAPH, Seville (Spain), 2020. Elaborated by Rebeca Merino del Río with the support of GEOMALANDAR S.L., through QGIS.



**Fig. 9** –Characteristic assets of the territorial heritage in the lower Guadalquivir landscape area, Seville (Spain), 2020. Elaborated by Rebeca Merino del Río with the support of GEOMALANDAR S.L., through QGIS. This map comprises an implicit project, in that it is representative of an alternative territorial scheme on which the design of itineraries is based. Thus, cultural itineraries become not only a touristic infrastructure but mainly a planning strategy aimed to restore the dynamics of cultural landscape formation.



### Contextual structure and elements

- Urban constructions
- Urban blocks
- Main road system
- Urban and periurban road system
- Railway

### Contextual structure and elements with heritage values Centres

- Historical centres and villages
- Historical medium urban centres
- Historical urban centres
- Primary historical roads with heritage values
- Secondary historical roads with heritage values
- Hydrogeological system: sheets of water
- Hydrogeological system: river course

### Agroforestry

- Low-mountain forests
- Rainfed and irrigated crop patchworks
- Low-mountain shrub and herbs vegetation
- Low-mountain and basins meadows
- Agricultural lands: herbaceous and woody cultivations
- Heterogeneous agricultural lands
- Mining areas, landfills and building sites

a high degree of subjectivity is associated, as a different dimension for each disciplinary ambit), hampers the effective operations on this dimension of the territory.

For this reason, but also because of the pressing need of intervening in some landscapes with heritage values that are threatened by the lack of well-oriented guidelines and of an integrated management, it is necessary to design some intervention criteria to ease the work of experts and the administration.

At a scientific level, an excessive spreading and some basic deficiencies are observed. Hence, it is necessary to make a re-conceptualisation prior to suggest any methodological approach. This research is built on the same postulates used by the authors of the Territorialist Society for the integrated plan for territory, which lies behind some of the most outstanding landscape plans of Italy. Despite the suitability and the proven efficiency of their assumptions, it is observed that the scale and scope of the integrated plan for territory are far from those of landscape architecture, oriented at place-making and intended to plan and/or design open spaces at different scales of space and time. It is supported that it is possible to partly contribute to the integrated plan for territory through bottom-up strategies, such as landscape project.

To do this, an intermediate framework that reduces the scope and scale of the integrated plan and lays the foundation for designing cultural itineraries is established. This research is useful not only to propose a method for designing itineraries, but also to the extent that it reflects on the possible reduction of the territorialist scheme to achieve greater effectiveness when operating on cultural landscapes.

The efficiency of the method depends on a careful balance between the designer's interpretation and the scope of application of the information technologies, that varies from one phase to another. It is maintained that information technologies cannot substitute the architect's interpretative work when it comes to restoring the dynamics of cultural landscape formation.

Thus, this research moves away from those predictive models grounded on the application of algorithms. Landscape project understood as an operation of *restauro* requires an interpretative revision of the past, which is always subjective and entails uncertainty (Co, 1987, p. 15), an inherent ambiguity when dealing with time-based phenomena. The precise definition of the actions for each phase of the methodology guides and restricts the use of information technology. The design of the itineraries is thus prevented from relying entirely on

information technology at the same time that it benefits from the territorialist progresses.

As a certain degree of uncertainty is admitted since its inception, both during the interpretative phases of the design and their introduction into operational use, cultural itinerary is an open-ended strategy.

Meanwhile, the alignment with the territorialist assumptions allows us to establish some common criteria to guarantee that actions focus on the restitution of the dynamics of cultural landscape formation. This restitution is not only an operation on the territory, but it is essentially a restoration of the collective memory, a memory which has been dismantled in the present phase of de-territorialisation which should be reactivated if operations on landscape are to last over time.

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## Endnotes

<sup>1</sup>This decision means foregoing the inclusion of the representative dimension of landscape (Quani, 2001, p. 6; Martínez de Pisón, 2009, p. 7) in the translation of the heritage and identity values. However, this allows us not only to strictly align the proposal with the guidelines of the European Landscape Convention, but also to ensure greater operability of the actions.

<sup>2</sup>This is why in many initiatives of the Territorialist Society, the authors explore the possible implementation of civil participation in the uncovering and valorisation of the territorial heritage, as well as in the restitution of the dynamics of cultural landscape formation (Allegretti and Frascaroli, 2006; Poli, 2015, p. 134; Poli, 2018).

<sup>3</sup>It emerges that, even in cases where innovative landscape plans come into force, difficulties arise, such as establishing common criteria or achieving the goals originally set (Gisotti, 2016; Marson, 2019).

<sup>4</sup>Poli (2013b, p. 52) suggests the need for generating three maps: the first one about territorial and landscape heritage in accordance with the four structural invariants, the second one about the elements and heritage values, which synthesizes the description of the dynamics of transformation that have got a negative impact on the territory, and, finally, the third one dealing with landscape quality objectives that summarises and integrates the policy oriented goals.

<sup>5</sup>Volpe defines the "territorial context", or "stratigraphic topographic context", as "an intricated system of relationships created over time by a dynamic flow of constructive and destructive processes, which represents the dialectical bond between man and environment" (Volpe, 2017, p. 27).

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