

# Cultural Landscapes Inventories. Theories, Methods and Techniques

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## Abstract

Academic and administrative interest in cultural landscapes has increased in recent decades due to globalization (and the consequent loss of distinctiveness of different territories) and accelerated process of environmental change. As occurred earlier with tangible and intangible heritage items, this has given rise to inventories of cultural landscapes as a first step towards understanding, recognizing and preserving them in the face potential threats that endanger their cultural and natural values. The various theories, methods and techniques which guide the construction of these inventories can be identified in the answers given to the following questions: What is to be inventoried? For what purpose and for whom is the inventory to be produced? Who will direct its production? How will the work be realized? What information is necessary? How will this information be generated and managed? We use a bibliographic analysis to compare the principal criteria, methods and techniques used in the development of a set cultural landscape inventories from Europe and North America, and others of world-wide reach. We conclude that, even though cultural landscapes are an increasingly established category in the theory and practice of heritage research and management, the definition of commonly accepted criteria for its recording and documentation remains necessary.

**Keywords:** Cultural landscapes; documentation; cultural heritage management; territory management

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# Inventarios de Paisajes Culturales. Teorías, métodos y técnicas

## Resumen

El interés por los paisajes culturales desde ámbitos académicos y administrativos se ha incrementado en los últimos decenios debido a la globalización, con la consecuente pérdida del carácter distintivo de los territorios, y a la aceleración de los procesos de transformación del medio. Esta situación ha propiciado, como ocurrió en el pasado con el patrimonio mueble e inmueble, la elaboración de inventarios de paisajes culturales como primer paso para su conocimiento, reconocimiento y preservación ante los potenciales impactos que ponen en riesgo sus valores culturales y naturales. Las diferentes teorías, métodos y técnicas sobre las que se construyen estos inventarios pueden identificarse a través de las respuestas a los siguientes interrogantes ¿Qué se va a inventariar?, ¿Para qué y para quién se va a realizar el inventario?, ¿Quién va a liderar su elaboración? ¿Cuál va a ser el proceso de trabajo? ¿Qué información es necesaria? ¿Cómo se va a producir y gestionar esta información? A partir de un análisis bibliográfico se compararán los principales criterios, métodos y técnicas aplicados en la elaboración de un conjunto de inventarios de paisajes culturales de Europa y Norteamérica, y otros de alcance mundial, para concluir que, aunque el paisaje cultural constituye una categoría patrimonial cada vez más asentada en la teoría y en la práctica de la investigación y gestión del patrimonio cultural, aún necesita de la definición de criterios comúnmente aceptados para su registro y documentación.

**Palabras clave:** Paisaje cultural; documentación; gestión del patrimonio cultural; gestión del territorio

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## 1. Introduction

Over the last thirty years, there has been an acceleration of the processes that are transforming our surroundings, both in urban and rural environments, as a result of the rural depopulation, development of tourism, climate change, technological innovation, socio-economic and geopolitical imbalance and global population growth. This transformation affects cultural heritage with different degrees of intensity and the traditional protection of movable and unmovable heritage has proved insufficient. In this context, new instruments have begun to be developed to preserve large urban and rural areas with intangible and tangible cultural values.

Since the inclusion of Cultural Landscapes in the World Heritage Convention in 1992 (Unesco, 1992), the knowledge and publication of theories, methods and techniques for the management, protection and conservation of cultural landscapes has increased, in both the academic and administrative fields. This increase in knowledge has also taken place in the standardization of their documentation, although contributions linked to specific projects are not as yet extensively shared amongst the scientific-technical community as a whole. Public administrations charged with heritage management have a long tradition of developing inventories, registers or catalogues (hereafter all of these will be termed inventories<sup>1</sup>) of movable and unmovable cultural heritage properties. Immaterial heritage and cultural landscapes have only begun to be inventoried more recently, however, and not as yet with standards that are widely accepted.

## 2. Goals and methodology

The purpose of this paper is to analyse different proposals for the registration and documentation of cultural landscapes for their knowledge, protection, research and/or conservation, in order to identify both the common and distinguishing elements in addition to the underlying conceptual base of each one. We will review a group of inventories of cultural landscapes that have been developed by institutions with different profiles in several geographic areas of Europe and North America, together with two more of international scope, so as to analyse (among other things) the differences and similarities of the landscapes recorded in each inventory, the scale at which these landscapes are approached, the information that is recorded, and the goal for which it was produced. Initially it is important to note that there are two clearly differentiated approaches to the concept of an inventory, catalogue or atlas of landscapes:

- a) An extensive approach is oriented towards the delimitation and characterization of large geographical areas (often subdivided into smaller units) where landscapes present homogeneous characteristics due to geographic variables (topography, land use, vegetation, etc.). These instruments always incorporate information about the landscapes and provide the diagnostics, quality objectives and/or landscape guidelines that are necessary to manage the evolving dynamics of the territory as a whole, as is provided by the Council of Europe Landscape Convention, hereafter Landscape Convention. (Council of Europe, 2000). These are normally generated by the administrative units responsible for town and country planning, although there are notable examples where the guidelines are set forth by institutions responsible for historical and cultural heritage, such as the *Historic Landscape Characterisation* (hereafter HLC), a methodology for evaluating the historical character of landscapes developed by the United Kingdom's *Historic England*<sup>2</sup> (Clark, Darlington, Fairclough, 2004).

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<sup>1</sup> The notion of inventory used in this study will include various types of registers, censuses, catalogues and lists developed on the basis of defined technical criteria and with information that is structured and standardized in its documentation.

<sup>2</sup> <https://historicengland.org.uk/research/methods/characterisation/historic-landscape-characterisation/>

- b) A selective approach involving clearly landscapes that possess a special interest because of their natural and/or cultural attributes. Such landscapes have received different names (as we shall see further on), but they are identified and managed differently from other territories because of their heritage value. This approach was institutionalized when cultural landscapes were incorporated as a new category in Unesco World Heritage in 1993 (Unesco, 1992) and, under different names, has percolated into heritage norms at all levels of responsibility (national, regional and local).

In this work we will analyse the theories, methods and techniques used in the development of landscape inventories that follow the second of these approaches when they include landscapes with recognized cultural values<sup>3</sup>. In addition, we will not examine inventories dedicated to designed landscapes (basically parks and gardens) and concentrate on those that also involve developing landscapes, as these are defined by Unesco (2021), the management of which is more complicated, as we shall see further on. The methodology of this work had three phases:

1. Information search with respect to the recording and documentation of cultural landscapes.
2. Comparative analysis of the criteria used in the preparation of the selected inventories.
3. Discussion and evaluation of the results.

Based on the initial search we identified and analysed a group of inventories (Table 1) of very different scope, ranging from those that register the cultural landscapes of a municipality or an urban area to those that reach international coverage. These inventories are the following:

- a) Cultural Landscape Inventory<sup>4</sup> (CLI\_USA): In 1994, after realizing the difficulty of preserving the cultural landscapes of the national parks of the United States, the National Park Service (NPS) undertook a project of creating an inventory of cultural landscapes. The information system that controls this inventory also includes the processes required to manage them, from the evaluation of initial proposals to their inclusion in the National Register of Historic Places, the instrument of heritage protection at the national level. As of June 2022, 892 landscapes had been inventoried, not all of them at the same level of precision (Wyatt, 2018).
- b) Historic American Landscape Survey<sup>5</sup> (HALS\_USA): In 2001 the American Society of Landscape Architects (ASLA) signed a Memorandum of Understanding with NPS and the U.S. Library of Congress and in 2010 the three organizations signed a Tripartite Agreement that made HALS a permanent federal program. In this Agreement the NPS took on the development of the procedures, guidelines and schedule of activities, the ASLA offered technical advices, and the Library took charge of preserving the graphic and written documentation and making it available to the public. As of June 2022, there were 959 HALS\_USA entries in the Library of Congress.
- c) *Les Atlas de Paysages*<sup>6</sup> of France (AP\_France) (Atlas of Landscapes) of France are an example of mixed (extensive and selective) approaches to knowledge of French landscapes and developing an instrument for making decisions at the local level. We use as an example the *Atlas de Paysages de l'Aisne*<sup>7</sup> (AP\_Aisne): in addition to characterizing the landscape of the entire *department*, it identifies 11 individual landscapes in the south and another 15 in the north of that district.
- d) Registro Nazionale dei Paesaggi Rurali Storici<sup>8</sup> (INPRH\_Italia) (National Register of historical Rural Landscapes): In 2012 the Italian Ministry of Agriculture, Food and Forestry Policies and

<sup>3</sup> We will use the concept of cultural landscape when we refer to all of them as a whole.

<sup>4</sup> <https://www.nps.gov/subjects/culturallandscapes/index.htm>

<sup>5</sup> <https://www.nps.gov/hdp/hals/> and <https://www.asla.org/HALS.aspx>

<sup>6</sup> <https://objectif-paysages.developpement-durable.gouv.fr/les-atlas-de-paysages-20>

<sup>7</sup> <https://objectif-paysages.developpement-durable.gouv.fr/atlas-des-paysages-de-laisne-88>

<sup>8</sup> <https://www.reterurale.it/registropaesaggi>

the University of Florence created the National Observatory of Rural Landscape, Agricultural Practices and Traditional Knowledge. Its functions include taking a census of rural landscapes of particular value and establishing a National Register of Historical Landscapes that will form the foundation for concrete proposals to assure their conservation, protection and valorization. It is an open-access register to which 31 rural landscapes have been added up to now.

- e) Catálogo de paisajes singulares y sobresalientes de Álava (CPSS\_Álava) (Catalogue of Unique and Outstanding Landscapes of Álava): This inventory was created as part of the *Programa Marco Ambiental de la comunidad autónoma del País Vasco* (2002–2006) (Environmental Program of the Basque Autonomous Community) and would be linked to the commitments of the Landscape Convention. It responds to the result of a poll of Álava’s population in which the deterioration of landscapes was listed as the second most important environmental concern. So far, a total of 62 landscapes have been listed, of which six are considered unique and the rest outstanding (Gómez, 2005).
- f) Registro de Paisajes de Interés Cultural de Andalucía<sup>9</sup> (Register of Landscapes of Cultural Interest in Andalusia) (RPIC\_Andalucía) is an inventory developed by the Instituto Andaluz del Patrimonio Histórico (IAPH) (Andalusian Institute for Historical Heritage) in collaboration with the University of Seville and Pablo Olavide University. It originated in a study of the heritage values of Andalusian landscapes that led to the identification of 117 cultural landscapes representative of those values (Fernández *et al.*, 2018).
- g) Cultural Heritage Landscape Inventories in Ontario (CHLI\_Ontario). According to the *Ontario Heritage Act* (Ontario Heritage Trust, 2021) cultural heritage landscapes constitute legal districts and include landscapes that have heritage resources that are special or historically significant. They contribute to the understanding or appreciation of the cultural identity of a local, regional, provincial or national community (Ministry of Culture, 2006). We analyse the examples that have been developed for the cities of Waterloo (CHLI\_Waterloo) (City of Waterloo, 2019), Mississagua (CLI\_Mississagua) (City of Mississagua, 2005, 2022) and Thorold (CHLI\_Thorold) (Heritage Thorold, 2011).
- h) Register of Historic Landscapes of Wales<sup>10</sup> (RHL\_Wales). This was developed by the heritage service of the Government of Wales (Cadw) in collaboration with the Countryside Council for Wales and the International Committee for Monuments and Sites (ICOMOS) in the United Kingdom. It seeks to recognize the value of historical landscapes and promote understanding of their importance. It was created between 1998 and 2001 and includes 58 landscapes of which 36 are considered “outstanding” and 22 of “special interest” (Cadw, 1998; 2001; s.f.). Once listed, landscapes are characterized using HLC methodology. A guide of best practices has been developed for use in regional planning (Cadw, 2007).
- i) Kulturlandschaftsprojekt Ostthüringen (KLP\_Thüringen) (East Thuringia Cultural Landscape Project) was instituted by the regional government with goal of developing a basis for understanding the region’s landscapes together with proposals for land use planning. Subsequent to a regional analysis, 53 cultural landscapes were selected as being of special importance (Meyer & Schmidt, 2004; Schmidt, 2006).
- j) Cultural Landscape Inventory<sup>11</sup> (CLI\_IFLA) is an initiative of ICOMOS in collaboration with the International Federation of Landscape Architects (IFLA) (Berjman, Luengo, 2009; IFLA, 2017b). Each entry in the proposed inventory can be filled in completely or partially and constitutes the first step in a long process of management (ICOMOS, IFLA, ISC, 2006).

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<sup>9</sup> <https://guiadigital.iaph.es/busqueda/tematica/Registro%20de%20Paisajes%20de%20Inter%C3%A9s%20Cultural%20de%20Andaluc%C3%ADa>

<sup>10</sup> <https://cadw.gov.wales/advice-support/historic-assets/conservation-areas-and-other-historic-assets/other-historic-assets-0>

<sup>11</sup> <http://www.iflalc.org/inventory/index.html>

Its web page lists of landscapes from 11 countries as a first step in making an inventory, but the contents have not changed in the past four years and no progress seems to have been made in the documentation<sup>12</sup>.

- k) The World Heritage List<sup>13</sup> (WHL\_Unesco) has been included as a representative example of an inventory of the diverse types of cultural landscapes of exceptional universal value. Also included is Unesco's tentative list of candidacies for the WHL that are being prepared at the national level. The applications are standardized and can serve as examples of a schema that can be applied to different national, regional or local contexts for the purpose of understanding and protecting cultural landscapes. As of May 2022, 121 landscapes from across the world had been registered in WHL\_Unesco.

Table 1. Selection of cultural landscape inventories

Inventory	Scope	Concept	Definition
CLI_USA (United States of America)	National	Cultural landscape	A geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values (Wyatt, 2018, pp. 4-5).
HALS_USA (United States of America)	National	Historic landscape	In the absence of a definition that of CLI_USA I assumed (Robinson, Vernon, Lavoie (2005)
IP_Aisne (France)	Subregional	Recognized landscape	Landscapes identifiable by their shared values in terms of social recognition or regional identity (Gherrak <i>et al.</i> 2004, p. 22)
INPRS_Italia (Italy)	National	Rural historic landscape	A portion of a territory and/or linear and point elements that, even after having undergone change, conserves clear evidence of its origin and history, maintaining a role in society and the economy (MPAAF, 2012: art. 2; Emanuelli, 2016, p. 4)
CPSS_Álava (Spain)	Provincial	Outstanding landscape	A landscape that clearly exhibits quality and beauty, but normally requires conservation by measures that are passive (preventative) or active (management or rehabilitation) (Gómez, 2005)
		Unique landscape	A landscape that is unique or exceptional, but not necessarily beautiful, that has been shaped by human action and has significance for historical heritage. Usually needs intervention because it has gone out of use (Gómez, 2005, p. 2).
RPIC_Andalucía (Spain)	Regional	Landscape of cultural interest	Formal expression of the ways of life of those who once called them home, travelled across them or used them in some way or indeed continue to do so, maintaining a set of cultural and natural values that allow us to understand them over time (Fernández Cacho <i>et al.</i> , 2022, p.16).
CHLI_Ontario (Canada)	Regional/ Municipal	Cultural heritage landscape	A geographic area with an important heritage That has been modified by human activities and is valued by a community. It involves a group of individual heritage elements – structures, spaces, archaeological sites and natura features– that together form a specific type of heritage that is distinctive in its elements or constituent parts (Heritage Thorold, 2011, p. 4)
RHL_Wales (United Kingdom)	Regional	Historic landscape	Significant place in its own right, where archaeological and historic sites, when considered together in relation to their settings, provide a much fuller understanding of the process which created and sustained then than would be possible from the study of an individual site (Cadw, 2001, p. 25).

<sup>12</sup> The same organizations have subsequently proposed a new initiative, World Rural Landscape, that would classify landscapes and conduct studies of particular cases, but the proposed inventory has not been created (<http://www.worldrurallandscapes.org/>).

<sup>13</sup> <https://whc.unesco.org/en/list/>

KLP_Thüringen (Germany)	Regional	Cultural landscape	Any landscape influenced by human activity (Meyer & Schmidt, 2004, p. 6).
		Cultural landscape with special character	Landscapes that merit protection because of their cultural, natural or associational values (Meyer & Schmidt, 2004, p. 6).
ICL_IFLA	International	Cultural landscape	The product of the combination of interaction between humans and nature. This adopts Unesco's definition (IFLA, 2017a)
WHL_Unesco	International	Cultural landscape	These are cultural properties that are the Product of combined work of humans and nature and illustrate the development of human society over time, as these are conditioned by the limitations and/or opportunities presented by the natural environment and by the successive social, economic and cultural forces, both external and internal (Unesco, 2021: art. 47).

Source: Produced by author

Based on the information published in these inventories, all of them created with different goals and ranges, we assess the structure and attributes of the registered information of each inventory and how these were elaborated and disseminated, so as to proceed to a comparative analysis.<sup>14</sup>

### 3. Results of the comparative analysis

#### 3.1. Inventoried landscapes and purpose of inventories

The concept of cultural landscape became a part of heritage management in 1992 when Unesco included it as a new category of cultural property in its *Operational Guidelines for the implementation of the World Heritage Convention* (Unesco, 1992). As a result of this inclusion, laws and administrative procedures began to integrate this new “heritage object” into their operation (including the creation of inventories). At the same, academic research developed new methods and techniques for studying landscapes. As we can see in Table 1, apart from WHL\_Unesco, of the inventories selected for study only two, CLI\_USA and ICL\_IFLA, adopt the term “cultural landscape” as the name for what the inventory includes, and only the latter uses Unesco’s definition.

The concept used by RPIC\_Andalucía, “landscape of cultural interest”, makes clear the landscapes included in the inventory have cultural values that are of particular interest compared to others (Rodrigo *et al.*, 2012, pp. 67-68). KLP\_Thüringen merits special mention for distinguishing between “cultural landscape”, any landscape influenced by human activity, and “cultural landscape with a special character”, those that have significant values that deserve preservation.

CLI\_USA’s definition of cultural landscape stresses their historical character. HALS\_USA, INPRS\_Italia and RHL\_Wales also note the historical value of the landscapes in their inventories to the extent of saying that historical landscapes are the object of their inventories. In the Italian case the landscapes are rural, while in Wales there is a distinction between those termed “exceptional” and those of “special interest”, although in the inventory they are not treated differently. CHLI\_Ontario uses of the concept “cultural heritage landscape” to denote the object of the inventory is slightly different in that it gives a central place to the existence to the material elements of the history of a place, elements that considered as a whole transcend the significance of each one individually considered.

<sup>14</sup> The information has been included in tables published as research data in the IAPH institutional repository <https://repositorio.iaph.es/handle/11532/362963>

IP\_Aisne and CPSS\_Álava register landscapes in more generic terms so as to include both those in which natural values dominate and those in which cultural values dominate. In the first case these are landscapes that have received some sort of recognition and that in the Landscape Atlas of France as a whole are termed “remarkable landscapes”<sup>15</sup> (Raymond *et al.*, 2015). CPSS\_Álava distinguishes landscapes that are “sobresaliente” (outstanding) and those that are “singular” (unique), notions that are linked to their beauty and to the degree of human intervention (Gómez, 2005).

As far as their goals are concerned, all of the analysed inventories record more less structured descriptive information that may be used to make decisions about the protection, management and planning of cultural landscapes or, as in the case of HALS\_USA, to create documentary corpus for research and study. Only CLI\_USA, CHLI\_Ontario and WHL\_Unesco have any jurisdiction over the landscapes they register.

The first two can select landscapes of sufficient value to be protected as “Landmarks”, “Sites” or “Districts” and have them incorporated in the National Register of Historic Places in the U.S.A.<sup>16</sup> (Page, 2009, p. 5; Wyatt, 2018) or the Ontario Heritage Act Register<sup>17</sup> (Ministry of Culture, 2006, p. 5). CHLI\_Ontario provides the additional protection of requiring one to give 60 days to notice of any activity that might alter a registered landscape; upon notification the matter may be studied for up to a year during which time no alterations are permitted (Ministry of Culture, 2006.).

For its part, when WHL Unesco lists a cultural property, it explicitly requires that its nation promise to take responsibility for its conservation. Unesco (2021), has no coercive power to punish failures to fulfill such a promise, apart from first placing the good on its list of endangered heritage and ultimately revoking its inclusion in the World Heritage List to the discredit of the government institutions responsible for its management.

### 3.2. Criteria for identification

The criteria for identifying landscapes of interest in the various inventories are not always explicit. Allusion is made to their antiquity, as in HALS\_USA<sup>18</sup>, to their historical significance, as in CLI\_USA (Page, 2009), or to a series of other values, as in CHLI\_Ontario (Ministry of Culture, 2006), RHL\_Wales (Cadw, 1998; 2001) or CPSS\_Alava (Gómez, 2005). INPRS\_Italia, WHL\_Unesco, IP\_Aisne, RPIC\_Andalucía and KLP\_Thüringen have defined their criteria with greater clarity, however.

The basic criteria of INPRS\_Italia are significance, persistence and uniqueness. A landscape is significant at the national level if there are continuities of traditional land-use practices, stability or gradual change over time, authenticity or integrity, harmony of culture, production and environment, the existence of elements of traditional hydraulic systems, etc. (Tredici 2016b).

Its historical character is based on the analysis of various sources (literary, techno-scientific, cartographic, iconographic, photographic) directly derived from local memory and traditions. Most important is the application of a method of historical and environmental evaluation (VASA)<sup>19</sup> that seeks to understand the processes of territorial stability and change using GIS tools to compare historical and modern maps (Emanuelli, 2016).

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<sup>15</sup> These are landscapes that a population considers to have heritage value as result of which they receive protection at the local, regional or national level (Raymond, 2015, pp. 66).

<sup>16</sup> <https://nationalregisterofhistoricplaces.com/>

<sup>17</sup> <https://www.heritagetrust.on.ca/en/pages/tools/ontario-heritage-act-register>

<sup>18</sup> <https://asla-ncc.org/hals/faq.htm>

<sup>19</sup> Documents and explanatory annexes about the VASA methodology can be consulted at <https://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/13826>

WHL\_Unesco has six criteria for identifying world heritage properties, all of which can be applied to cultural landscapes, sometimes in combination with criteria applicable to natural heritage items (Unesco, 2021:30; Rössler, 2003: 11). To these one should add the criteria of authenticity, integrity and, above all, the exceptional universal value of the candidate landscapes. These criteria are explained in detail in documents that Unesco updates periodically and makes available on its web page<sup>20</sup>.

IP\_Aisne's criteria are more general than the previous cases. There are four conditions for including a landscape in the inventory; that it be emblematic, be represented in literature and art, be historical or legendary and be protected or of local interest (Gherrak *et al.*, 2004). The organizers of RPIC\_Andalucía began their analysis of the cultural values of the landscape by looking at Andalusia's subdivision into 32 landscape demarcations. This permitted the identification of those areas that potentially represented the most significant values of each demarcation, i.e., that best represented its character because of the preservation of its tangible or intangible heritage, its legibility and its social recognition (Rodrigo, 2012, pp. 64–65). KLP\_Thüringen is a similar case: first the landscape of the entire region was analysed and subsequently areas were selected that merited conservation because of their special character (Meyer & Schmidt, 2004.).

In all cases the decision to include a particular landscape in one of the inventories is taken by experts in the sponsoring organization or by external consultants selected by them. This process can be organized in three ways: all of the work is done by experts of the sponsoring organization candidacies are suggested by outside parties or some combination of these two. Of the inventories developed by outside experts, the procedure organized by RHL\_Wales is the most original. Coordinated by the heritage service, 100 experts had to unify their criteria for inclusion (Cadw, 2001).

WHL, HALS\_USA and RPRH\_Italia accept candidacies by external parties. They review documentation developed by external specialists, usually from the area being evaluated. HALS\_USA, for example, receives candidacies developed by experts in response to a theme or challenge developed by the sponsoring institutions<sup>21</sup>. Candidacies presented to RPRH\_Italia are developed at the local level using a synthetic proposal that only is completed once the landscape is approved for inclusion, a procedure very similar to that of WHL Unesco. Some inventories are developed by mixed options where candidacies are developed by the combination of outside team with participation by local communities. This was the option chosen for RPIC\_Andalucía: an initial inventory of representative Andalusian landscapes was created and new ones were added based on the initiatives of local agents (Fernández *et al.*, 2015, pp. 170). Other inventories at the local level are produced by teams of experts that consult local communities: CHLI\_Ontario (Region of Waterloo, 2013; DeGeer & Drescher, 2018) and the KLP\_Thüringen (Meyer & Schmidt, 2004) are examples.

### 3.3. *Delimitation and scale*

The scale of the landscapes included in the inventories we have analyzed is very variable and the criteria for setting their boundaries often are not presented in detail. This may be due as much to the lack of legal force as to the inherent complexity of applying common standards to landscapes with very different characteristics. The sizes of the registered landscapes can be very different, ranging from a small garden attached to a building to natural parks covering hundreds of hectares.

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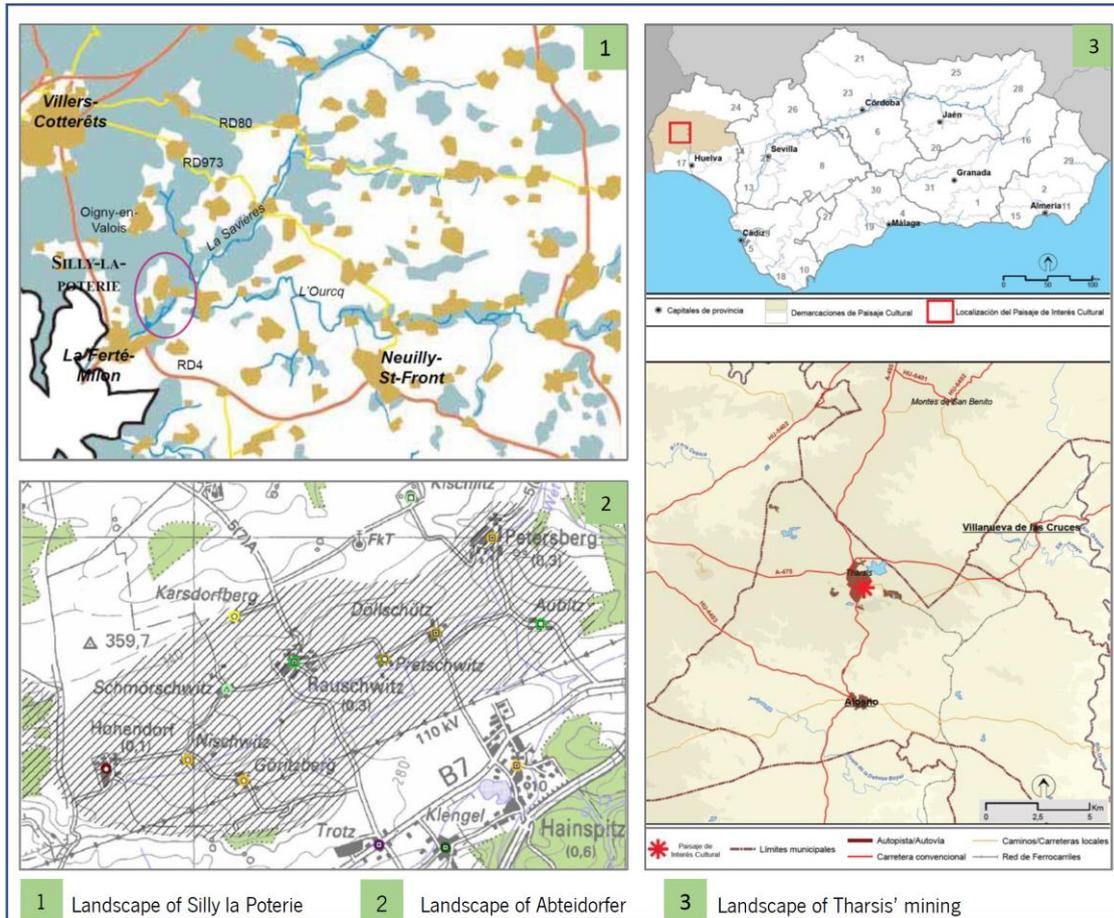
<sup>20</sup> <https://whc.unesco.org/en/guidelines/>

<sup>21</sup> The subjects and results of the challenges proposed from 2010 to 2022 can be consulted at <https://thefield.asia.org/2022/01/06/the-2022-hals-challenge-olmsted-landscapes/>

The criteria applied in setting boundaries almost always depend on judgement of the persons who prepared the documentation, but in the cases of CLI\_USA, CPSS\_Álava, RNPRS\_Italia and RHL\_Wales they are explicit:

1. CLI\_USA: Because the information is part of a computerized system, the application of clearly defined standards is required. In this inventory a cultural landscape can integrate various components (landscapes within landscapes) that are governed by the same criteria as the overall inventory in a parent-child relation. The boundaries take into account barriers or visual changes, historical delimitations or the various functional patterns that have been identified (Page, 2009).
2. CPSS\_Álava: In defining boundaries priority is given to the limits of pre-existing protection figures, to viewsheds and to the distribution of heritage properties. The scale of the work is 1:25,000 but the surfaces covered range in size from 1 to 10,000 ha (Gómez, 2005).
3. RNPRS\_Italia defines the minimum size of rural landscapes based on whether its agricultural production is intensive (100-200 ha), semi-intensive (250-500 ha) or extensive (500-1000 ha) (Agnolletti, Tempesta, 2016).
4. RHL\_Wales: The historical landscapes initially identified ranged in size from 3 to 400 km<sup>2</sup>. These disparities had to be reconciled in terms of natural and topographic variation, differences in land use and the visual and functional relations of the places of interest (CADW, 2001).

Figure 1. Approximative boundaries of landscapes in IP\_Aisne, RPIC\_Andalucía and KLP\_Thüringen



Source: Produced by the author from Gherrak, 2004, p. 223; Meyer & Schmidt, 2004, p. 365; IAPH, 2016, p. 3

In conclusion it is important once again to emphasize that the examples of inventories in which cultural landscapes are contextualized within larger landscape settings. In the case of IP\_Aisne three approximations are required to reach the level of “recognized landscapes” (Gherrak *et al.*, 2004). RPIC\_Andalucía registered cultural landscapes at the local level only after completing an analysis of the cultural values of the region as a whole (Rodrigo, *et al.* 2012). In these cases, one only establishes approximate boundaries for the landscapes (Figure 1).

### 3.4. Taxonomies, contents and data management

In building an inventory of cultural landscapes, as with other heritage properties, an effort is made to classify them, although the criteria for defining types (functional, spatial, chronological, etc.) may not be the same. Because of Unesco’s global scope and influence, WHL\_Unesco’s classification serves as a benchmark for most landscape inventories (as it does for other studies and legal texts). It is a basic classification, applicable to any territorial context, that distinguishes between landscapes that are designed, organically developed (fossil or continuing landscape) and associative (Fowler, 2001; Unesco, 2021). ICL\_IFLA, CPSS\_Álava and CHLI\_Ontario follows this classification. It also inspires that of CLI\_USA, which distinguishes between designed, vernacular and ethnographic landscapes and historic sites.

RPIC\_Andalucía uses a more precise taxonomy that permits landscapes to be classified both functionally and spatially. The functional classification distinguishes five landscape categories that open out into 12 types and 41 subtypes. The five categories refer to how humans have inhabited the landscape (settlement systems), defended it (systems of security and defense), moved within it (systems of communication and transport), exploited it (systems for obtaining and transforming resources) and related to it symbolically (ideological and associative systems).

Each registered landscape has a principal classification and as many complementary classifications as may be necessary that are associated with the elements of tangible and intangible cultural heritage that are preserved in each (Fernández *et al.*, 2018). The categories and types can be applied to very diverse geographic contexts while the subtypes are adjusted to a greater degree to each locality. Furthermore, in order to give a graphic representation of the relation between each landscape and its surroundings, landscapes are associated with a series of choremas that symbolize areas (enclosed or open), lines (for transit, succession or interrelation) or networks and points (for location, reference or both of these) (Fernández *et al.*, 2018).

As far as the content and structure of the information is concerned, one can conclude that each inventory has developed its own data model, ranging from the simplest (such as IP\_Aisne, CPSS\_Álava or RHL\_Wales) to the most complex (such as CLI\_USA and WHL\_Unesco). In general, they all compile data common to other types of heritage property (relating to identifying features, location, history, conservation, management, source material, graphic and cartographic documentation). In a few cases the inventories include data on perceptual aspects, but in no cases are formalized ontologies applied.<sup>22</sup> The criteria for the production of graphic documentation are not explicitly specified, although these are available for CLI\_USA (Page, Gilber, Dolan, 1998), HALS\_USA (HALS, 2005; 2011), RNPRH\_Italia (Agnoletti, Tempesta, 2016; Santoro, 2016; Tredici, 2016) and, to some extent WHL\_Unesco (Unesco, 2021). As a result, the many teams that develop these inventories have at their disposal technical guidelines for standardizing the documentation they contain.

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<sup>22</sup> The conceptual models CIDOC-ICOM (<https://www.cidoc-crm.org/>), MIDAS Heritage (<http://www.heritage-standards.org.uk/midas-heritage/>), CHARM (<http://www.charm.info.org/Resources/Publications.aspx>), and the INSPIRE protocols for the production of maps of protected places (<https://inspire.ec.europa.eu/id/document/tg/ps>) were all specifically designed to be applied to cultural heritage

Although the analysed inventories can be consulted using on-line documents, very few have structured the data for standardized management in totally or partially open information systems. With respect to structure and public dissemination, the leading inventories are CLI\_USA, HALS\_USA, RHL Wales and RPIC Andalucía.

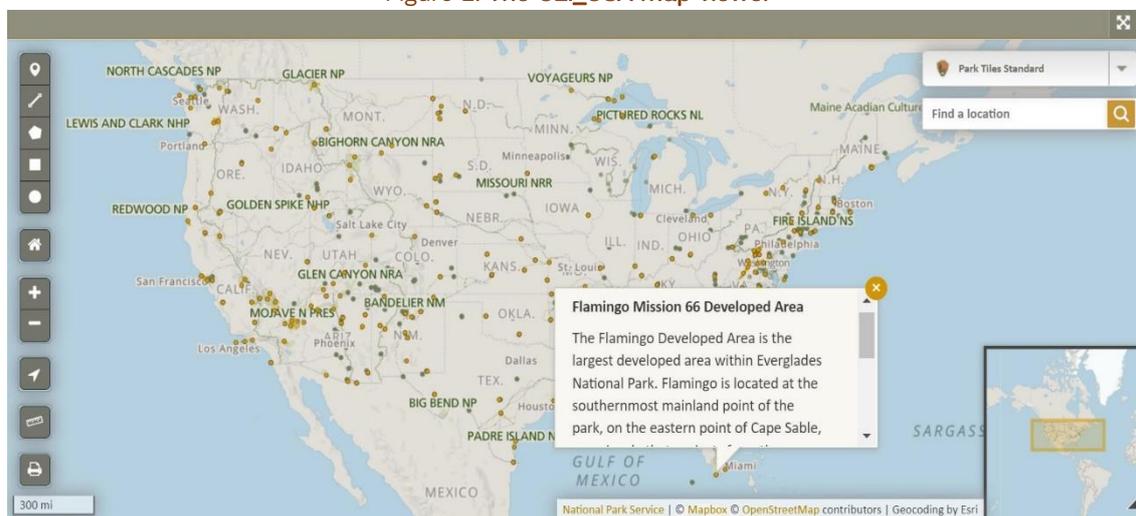
CLI\_USA has the richest and most complex data structure of all the analysed inventories (224 information fields, many of the of administrative character. Once inventoried, some cultural landscapes are studied in greater detail using the *Cultural Landscape Report*<sup>23</sup> program (Chalana, 2010).

This has a flexible format that permits in depth discussion of the history of research and current state of preservation of the landscape. Guidelines are available to define criteria for the preparation of these documents<sup>24</sup>. CLI\_USA also establishes the mechanisms required to communicate with other data bases and with the National Register of Historic Places. It incorporates much information about the process of creation and management of each register included in its data base. Its *Professional Procedures Guide* offers detailed instructions about how to register information and the technical and conceptual criteria that support that process.

The data bases incorporate lists of standardized terms (25% of the fields) and requires another set of fields to be filled in for each landscape in the inventory (41% of the fields). All this implies a high degree of standardization.

Furthermore, CLI\_USA can be consulted on the internet using a map viewer<sup>25</sup>. The information cannot be filtered but the viewer is linked to a document management platform that gives access to the complete report on each cultural landscape. These are shown on the map as points or polygons depending on the scale of visualization (Figure 2).

Figure 2. The CLI\_USA map viewer



Source: National Park Service <https://www.nps.gov/subjects/culturallandscapes/find.htm#4/34.45/-98.48>

<sup>23</sup> <https://mylearning.nps.gov/library-resources/guide-to-cultural-landscape-reports/#:~:text=The%20Cultural%20Landscape%20Report%20is,and%20anticipated%20challenges%20to%20preservation>

<sup>24</sup> <https://irma.nps.gov/DataStore/Collection/Profile/3873>

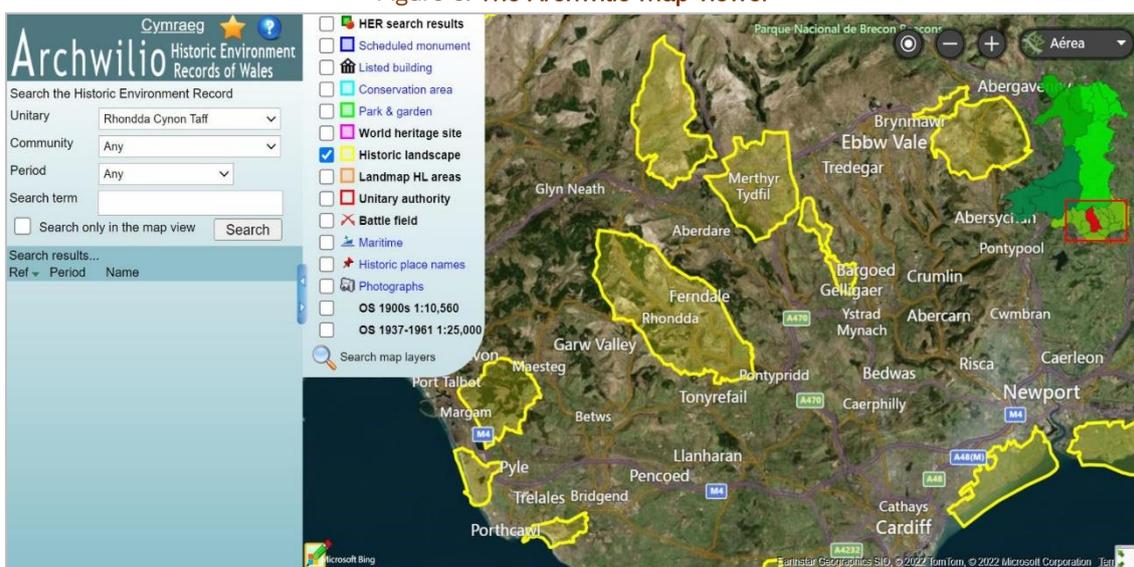
<sup>25</sup> <https://www.nps.gov/subjects/culturallandscapes/find.htm#5/42.747/-93.428>

For its part, HALS\_USA prioritizes the graphic documentation for each landscape over other information and includes less about administrative matters than CLI\_USA, although the National Park Service also is responsible for setting up the file and developing the norms for filling it in. The data structure is organized into 6 fields of information: identifying data, historical information, physical information, source material and project information.

The four governing principles for HALS\_USA are explaining the value of the place clearly and concisely and reliable documentary content that is reproducible, long-lasting and standardized as to format. Also, when there are insufficient resources and information about a landscape to complete the entry, an abridged form can be submitted (Robinson, Vernon, Lavoie, 2005). This information can also be accessed on the internet via a map viewer<sup>26</sup>, which in this case connects with the information held by the Library of Congress. As with CLI\_USA, advanced searches are not possible.

At first, the information registered in RHL\_Wales for “outstanding” and “special interest” landscapes was basic, but subsequently each of these was studied applying the HLC criteria. This is a process substantially different from that used by Historic England, which applies HLC to the territory as a whole and does not select landscapes of special value (Foard & Rippon, 1998). The overall results are also presented by a map viewer, Archwilio<sup>27</sup> (Figure 3), that connects with various web pages that give the complete descriptive information in a format structured neither as .html or .pdf.

Figure 3. The Archwilio map viewer



Source: Welsh Archaeological Trust <https://archwilio.org.uk/arch/>

Lastly, RPIC\_Andalucía is an atypical case. First, it has two kinds of record, one informative, the other technical, both presented with abundant illustrations (Fernández, 2015). Both are available in .pdf format through an open access data platform, the only possible filter being the province in which the landscape is located, given that the information has not been structured in the data base<sup>28</sup>. In addition, every record has been stored in an institutional repository that permits searches based on the contents of the stored documents.

<sup>26</sup> <https://www.asla.org/ContentDetail.aspx?id=37489>

<sup>27</sup> <https://archwilio.org.uk/arch/index.html>

<sup>28</sup> <https://guiadigital.iaph.es/inicio>

### 3.5. *Perceptual aspects and social participation*

In spite of the importance given to perception in the analysis of cultural landscapes, perceptual aspects are ignored or relegated to residual presence in the analysed inventories.

Although information about the perception of landscapes is anecdotal, some of it is developed with the participation of the local population (e.g., in CLI\_Mississagua and IP\_Aisne). This permits the valuations of the local community to be included. In the first case, the opportunity to participate in the Public Open House served to share and review the contents of the inventory with the community and, subsequently, to evaluate the landscape's state of preservation and the proposals for its management (City of Mississagua, 2005; 2022)<sup>29</sup>.

IP\_Aisne presents several approaches to assess the social perception of the landscape (closely linked in this case to the concept of cultural identity: literary sources, public polls and the analysis of perception from highways (Gherrak *et al.*, 2004). Cultural identity manifests itself in two ways, that represented by the managers and experts, who establish a conscious relation with landscape they analyse, and that of the local community, which relates to the landscape naturally, without any need for conscious analysis (Gherrak *et al.*, 2004). In any case, these analyses are applied to the larger landscape and to the landscapes that receive specific recognition.

Finally, other inventories are more measured in their incorporation of information about perception. In CPSS\_Álava, the results of a survey of public perception of Atlantic Basque landscapes were extrapolated so as to conclude that the landscapes in the inventory were those that were most valued socially. RPIC\_Andalucía centred its approach more on the sensory aspects of the landscape (topography, textures, colours, etc.), as these were seen by experts. In KLP\_Thüringen mention is made, without going into detail) of consultations of both experts and public associations (Meyer & Schmidt, 2004).

## 4. Discussion

The comparative analysis presented above permits one to evaluate the principal criteria that underlie the preparation of inventories of cultural landscapes. Likewise, one can detect what aspects present the greatest difficulties in defining the methods and techniques that may be involved in that preparation. Inventories differ to the extent that reasons for creating them are different.

In general, they are all intended to serve as bodies of knowledge that can support academic research and decision-making in public affairs. Some have, in addition, legal force. This is a characteristic that undoubtedly makes an inventory more useful, but it also constitutes an added difficulty because of the administrative complexity involved legal enforcement. A decision to protect a landscape involves additional procedures to protect the legitimate interests of those affected by that action. This can favour the creation less extensive inventories and, consequently, a failure to remember many cultural properties that might be recognized as such in the future and a loss of information that might enrich new research.

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<sup>29</sup> According to the Ontario Heritage Act, during the process of developing the documentation required for the protection of a cultural landscape as an historic district, at least one publicly announced meeting is required with the community at which the pertinent information will be made available (<https://www.ontario.ca/laws/statute/90o18>). These participative actions also are carried out in the preparation of the inventories.

Conceptual discrepancies between inventories arise when one chooses the name that one gives to the landscapes they include. Neither the concept of a cultural landscape nor its Unesco definition are generally accepted in the managerial instruments (inventories included) of public administrations. On many occasions the adjective “cultural” has been considered redundant, it being understood that a cultural factor is always to some degree in any landscape. This is commonly accepted for spaces in the Americas, Asia or Australia traditionally linked to the idea of nature in the wild in which the symbolic and subsistence relations of local communities have played an important role in their preservation (Phillips, 2003; Buggery & Mitchell, 2003; Taylor, 2012; Shinha, 2017).

Here the differing notions of “culture” are involved as well: the elitist view that associates it with refined social groups and passing fashions vs, the anthropological view that links it to traditional bodies knowledge gestated and maintained over long time spans (Fowler, 2001; 2003; Álvarez, 2010; Taylor, Clair, Mitchell, 2015; Mamyev, 2015). At the same time, landscapes strongly affected by human activity, and therefore clearly cultural, have not preserved qualities that would identify them as cultural properties needing special management.

This conceptual ambiguity has on occasion led to assigning different meanings to the term, “cultural landscape”, or to using alternatives that depart from its original signification and reflect the importance given to other aspects in its identification and valuation (Jones, 2003; Lisitzin & Stovel, 2003; Prieur, 2003)<sup>30</sup>. For instance, in the academic and administrative circles related to culture and cultural heritage (normally separate from those related to the environment and natural heritage) concepts closer to their object of study and management, such as cultural heritage landscape, cultural landscape of special character, landscape of cultural interest, historical landscape, etc.

On other occasions, the terms do not reflect any connection with natural or cultural values, but rather reflect the inherent of the locality: e.g., unique landscape, protected landscape, heritage landscape, recognized landscape, extraordinary or outstanding landscape. Such terms are mostly used in those inventories that are oriented to landscapes in which natural values predominate (but have some cultural elements) or those that include all landscapes with significant values, be they natural, cultural or both.

The latter option seems to be the best adapted to the necessary blurring of the boundary between natural and cultural heritage, especially when the delimitation cannot draw clearly and coordination is essential between various administrative and academic spheres with diverse competencies (environment, culture, town and country planning, etc.), scales (national, regional, local governments, etc.) and disciplinary affinities (natural sciences, social sciences, humanities, etc.). As long as such integration (or at least coordination) is inefficient, it will remain necessary to use those terms that permit clear delimitation of each sphere of activity as well as the cultural properties that must be managed (Fry, 2003; Melnick, 2000; Aalen, 2004).

Likewise, the Unesco classification has been adopted by some inventories, but others propose alternatives or dispense with classifying their landscapes. This is a matter that may be addressed in the future using criteria already discussed in the comparative analysis: the way in which a cultural landscape is “constructed” (as a premeditated design, a spontaneous evolutionary process or an intellectual construct), its functional aspects and spatial characteristics, or even the manner in which it is preserved (Francaviglia, 2000), the kinds of heritage elements it possesses (Jelen, Šantru\_ková & Komárek, 2021), etc.

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<sup>30</sup> It also seems to be a concept that is accepted by the population as a whole, as can be inferred from the debate within the Wikivoyages community when routes were included in the cultural landscapes inventoried by RPIC\_Andalucía ([https://en.wikivoyage.org/wiki/Talk:Culturally\\_significant\\_landscapes\\_in\\_Almer%C3%ADa](https://en.wikivoyage.org/wiki/Talk:Culturally_significant_landscapes_in_Almer%C3%ADa))

The sizes of the landscapes also vary a great deal, both within and between inventories. Normally these results because parks and gardens, sometimes very small, are included, as are cultural heritage properties that may have a prominent presence in the territory but should not be considered cultural landscapes unless one can establish a contextual framework of relations to their surroundings. M.R. de la O, N. Marine y D. Escudero (2020) defend this thesis as a result of their study of the size of 100 representative cultural landscapes in Spain that clearly shows that the various regions lack common criteria as to how these should be identified and delimited.

One reason that many of the cultural landscapes identified in the inventories do not have precise boundaries is that they do not receive legal protection. It is much more difficult to delimit a landscape than properties that have clear distinctions between what is constructed and what is not, but this must be done if specific protective measures are necessary. Protecting a landscape is not simply a question of conserving unchanged a building or a garden and maintaining its material features (although in the second case the vegetation must be renewed over the course of its life cycle). One must, rather, guide the changes that are required to better the life of people who live in spaces with significant cultural value by applying measures agreed upon in consultation with local populations. This type of protection or “managed change” is closer to town and country planning than to the methods of protection and conservation characteristic of traditional heritage policy (Lisitzin & Stovel, 2003; Aalen, 2004; Bloemers, 2010).

The selection of the scale of work is also related to the size of the cultural landscapes that are inventoried. In this matter a combination of scales can be a valid option for characterizing, evaluating and planning with an extensive approach to landscape analysis that, among other goals, may help identify those landscapes that best represent their values at a local scale (Foard & Rippon, 1998; Aalen, 2004, pp 15).

In this way one can combine the vision of the Landscape Convention (Council of Europe, 2000), which seeks to analyse and manage any part of a territory, with that of Unesco, which proposes the delimitation of parts of it as cultural landscapes. This contextual analysis can be carried (especially when the inventory is developed by a single team of experts) by applying either some of the methodologies cited above: the Historic Landscape Characterisation (Clark, Darlington, Fairclough, 2004) or the Heritage Character of the Landscape (Rodrigo *et al.*, 2012; Fernández *et al.*, 2018), or one of the more traditional geographical approaches (Gherrak *et al.*, 2004; Meyer & Schmidt, 2004). A mapping scale of 1:25.000 y 1:50.000 may be appropriate, but more precise boundaries should be drawn at larger scales (De la O, Meriné, Escudero, 2020).

The size covered by the inventories also influences the degree to which it is possible to incorporate local agents in the construction of knowledge and management of cultural landscapes. Inventories covering larger areas restrict the participation of local communities and, therefore, impede the analysis of how society perceives those landscapes. The cost of the methods (focus groups, in-depth interviews, workshops...) needed to find out what communities think and the lack of experts in such consultation on the teams that draw up the inventories are one of the main deficiencies of cultural landscape management and particularly of the construction of those inventories.

Costs are smaller when the inventory keeps to a local setting or, if the reach of the inventory is regional, national or international in scope, it is developed through candidacies presented by local agents. When an entity above the municipal level is in charge of the work, the difficulties are greater and perceptual matters tend to be left out. Furthermore, because the field of cultural heritage has until now focused on objects, buildings and sites, a consolidated tradition for designing and applying innovative management procedures that include participatory governance (as is recommended in international guidelines) (Council of Europe, 2000; 2005; Unesco, 2021) does not exist.

Is it viable to incorporate social participation in making an inventory of cultural landscapes or should this only be done when interventions are proposed? Knowing how persons relate to their surroundings and why they do so one way and not another is necessary for a realistic diagnosis on the basis of which decisions may be made. Just as one gathers information about the history and conservation of a landscape, so too it should be possible to document how persons perceive their environment and how that perception influences (or will influence) the identification of its heritage and its preservation. As mentioned, this type of analysis requires resources that are not always available for making regional or national inventories. In this context, information and communication technologies are making tools available that greatly help cultural heritage managers interact with the population as a whole (Liew, Goulding, Nichol, 2020).

Using them it has been possible to construct alternative, participatory inventories without the cooperation of public administrations<sup>31</sup>. Studies of the landscape and intangible heritage are also developing methods of analysing social perception by studying postings on the internet or new tools associated with virtual ethnography<sup>32</sup>. One can expect further progress along these lines in the next few years.

It is also important to describe the quantity and structure of the information to be included in the inventories, as well as the most appropriate graphic information. Most cultural heritage inventories include facts about identification, location, description, history, and state conservation (including authenticity and integrity), as well as more or less abundant maps and illustrations. The inventories examined here follow a similar structure, implemented with *ad hoc* adjustments made in each case in views of its goals and needs.

No criteria have been developed for the production of graphic documentation specifically adapted to a cultural landscape as an object of study (participatory mapping, 360° panoramic images, immersive videos, drawings, etc.). Finally, only some of the inventories (namely those that are managed as a data base, sometimes accessible on the Internet) standardize the content of their fields of information using glossaries or thesauruses.

Computerization facilitates the up-dating and analysis of information, its open access and reuse, and the provision of advanced public services. It also promotes the dissemination of information, not just to specialists, but for the general public, thereby affecting the appreciation of the population for their heritage and making their institutions more transparent (Visser, 2010; McKeague & Thomas, 2016; Fernández, Carrera, Ortiz, 2017; López *et al.*, 2021).

Notwithstanding, the design, development and maintenance of these information systems, and of the inventories they manage, can only be maintained over the long-term if they are directed by organizations that have the economic and human resources permanently dedicated to this task and committed to it over the long term (Myers, 2016) with the methodological and instrumental support of some international organizations (ICOMOS, 1996; Council of Europe, 1999, 2007; CIDOC, 2021)<sup>33</sup>

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<sup>31</sup> See, for example, Historypin ([www.historypin.org](http://www.historypin.org)), Wiki-Inventory for Living Heritage (<https://wiki.aineetonkulttuuriperinto.fi/>), CITIZAN (<https://www.citizen.org.uk/>), Património Galego (<http://patrimoniogalego.net/>), Hent Gwechal (<https://hent.omeka.net/>), PERICLES (<https://mapyourheritage.eu/>), PCI\_Lab (<https://www.pci-lab.fr/>), among others.

<sup>32</sup> One example, linked to RPIC\_Andalucía, is the PAYSOC project (<https://www.iaph.es/web/sites/paysoc-percepcion-social-del-paisaje-y-etnografia-virtual/index.html?lang=en>). There are also some trials at the local level, such as Xiakou (<http://www.sichuanvillage.org/>).

<sup>33</sup> Other bodies like the Getty Conservation Institute and the World Monument Fund have given institutions all over the world free access to the ARCHES system (<https://www.archesproject.org/>) for managing cultural heritage inventories.

## 5. Conclusions

Inventories of historical or cultural heritage have always been the first step towards actions for their management of cultural properties. Knowing what needs to be managed, what it's like, where it is and what state it's in is the first towards decisions about studying, conserving and evaluating it. But heritage is a concept that changes depending on its social, historical and geographic context. The earliest heritage inventories dealt with movable objects at the beginning of the 19<sup>th</sup> century, as concern grew about the illicit traffic in works of art. Subsequently immovable heritage properties were included because of the effects of urban renewal in historical cities. In the 1990s landscapes and intangible heritage entered the same process due to cultural globalization and accelerated environmental change.

Nevertheless, although heritage inventories have a long history, the complexity and diversity of cultural landscapes as objects of study have impeded the development of common standards. On the one hand, these landscapes combine items cultural and natural value, tangible and intangible, and so require interdisciplinary work between scientific and administrative entities that may not be easily coordinated. On the other hand, they are "lived-in" landscapes, places where local populations carry out their daily lives and defend their legitimate interests. Creating an inventory of a cultural landscape goes beyond recording more or less descriptive facts about an object one wants to conserve; it involves identifying the system of spatial, historical and cultural relations that connect its constituent elements and arriving at solutions about what needs to be conserved and how to do it without damaging the quality of life of its inhabitants.

The best features of the cases that have been analysed permit one to propose a series of recommendations for future cultural landscape inventories:

1. The inventories are, above all else, instruments of knowledge and recognition. An inventory opens to the public permits one to know in general terms what elements are of value and, at the very least, preserve their memory, whether or not they are legally protected. An inventory without legal force can include properties that are not protected but are worthy of documentation, as a first step towards selecting them for conservation should future conditions require it. All the same, depending on the legal system of each case, with respect to any heritage property in general, and cultural landscapes in particular, one should apply a basic principle of precaution: one must anticipate the study in depth that may be required to preserve heritage values that may be affected by future actions such as changes in land use, the construction of new infrastructure, urban expansion, and so on.
2. Cultural landscapes are best managed at the local level, where concerned population can interact directly with the public heritage officials in charge. Landscape inventories at the local level are recommended, but should not be the same as those for buildings and monuments that have their own, established formulas for documentation and management.
3. Although the diversity of cultural landscapes across the world makes it difficult to classify them as wholes, it should be establishing a common framework in which they may be placed.
4. From the point of view of technical heritage work, it is best that the identification of cultural landscapes take place after the exploratory analysis of the whole territory. This combines extensive and selective approaches to the study of the landscape and ensures the selection of all those that have conserved their principal natural and cultural values.
5. Social participation in the development of cultural landscape inventories should constitute a desirable goal. The difficulty of incorporating the public at levels above the municipality suggests that, at the regional, national or international levels, new methods and techniques be applied, beginning with information technology and going on to combined work that includes the identification of representative landscapes by interdisciplinary teams of experts together with processes that permit local agents to propose candidacies.

6. When multiple teams are engaged in preparing an inventory, it is essential that they share explicit criteria for the production of the textual, graphic and cartographic information as well as for the identification and delimitation of the landscapes.
7. An inventoried cultural landscape should be connected hierarchically (i.e., as parent to child) with other heritage properties, tangible and intangible, that are located within its boundaries and can be related to the various human activities that have shaped it over time and formed its present character.
8. The information in the inventories should be public, easily accessible, open and managed by information systems that have, where possible, common standards of documentation, stable over time, that permit their integration and interchange with other similar systems.

From a methodological point of view, cultural heritage inventories should be integrative; that is, they should include all cultural heritage properties and connect them in a single language of documentation and conceptual model. This is not incompatible with the desire to document and study new heritage categories, like intangible heritage and the cultural landscape, that have yet to develop their own conceptual, taxonomic, terminological and documentational framework.

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