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How to Create a Cultural Landscape Guide

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Junta de Andalucía

Consejería de Turismo, Cultura y Deporte

Instituto Andaluz del Patrimonio Histórico

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COUNCIL OF EUROPE LANDSCAPE CONVENTION
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How To Create a Cultural Landscape Guide

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Silvia Fernández Cacho

Introduction

From the very beginning, the Andalusian Institute of Historical Heritage (IAPH) has promoted cultural heritage as an integral and extremely important part of places and, as such, as something that has been shaped by both the past and present. Instead of being considered as a collection of isolated objects, cultural heritage is now seen within the context of its physical and social environment.

These principles, which are at the heart of its work, explain why since 2000, the year in which the European Landscape Convention was signed in Florence, the institute has organised a series of cultural landscape projects and initiatives of great methodological and technical importance, undertaken by the Cultural Landscape Laboratory, a permanent part of the IAPH.

Through the laboratory, the institute has sat on monitoring and technical committees as part of the Andalusian Landscape Strategy and the National Plan for Cultural Landscape; has been invited to various scientific and technical events by national and international organisations; has organised numerous training initiatives in the form of courses and individual mentoring schemes in Spain and abroad; and is responsible for multiple research and outreach publications.

It is as part of our efforts to further the transfer of knowledge, one of the cornerstones of our work at the IAPH, that we publish this guide, the purpose of which is to bring together in one place much of the expertise and experience in the field of cultural landscapes that we have accumulated over the past 20 years. We hope it comes in useful for those interested in and responsible for preserving the cultural and natural values of landscapes, as well as helps them ensure that changes affecting them are managed following an approach based on sustainability and participatory governance.

Juan José Primo Jurado
Director of the IAPH

Prologues

How to Create a Cultural Landscape Guide, published by the Regional Department for Culture and Historical Heritage in Andalusia and created by the Andalusian Institute of Historical Heritage, represents a major step forward in terms of developing an effective approach to cultural landscapes.

We would like to congratulate the Director of the institute, Juan José Primo Jurado, the technical coordinator of the publication, Silvia Fernández Cacho, and the authors: José María Rodrigo Cámara, Víctor Fernández Salinas, Isabel Durán Salado, José Manuel Díaz Iglesias, Jesús Cuevas García, Pedro Salmerón Escobar and Isabel Santana Falcón.

The exceptional experience of the institute acquired over the years across a territory of great beauty and incomparable richness has led it to undertake in-depth work as well as develop tools in the area of cultural landscape management.

The geographical and temporal scope involved as well as the range of themes covered in How to Create a Cultural Landscape Guide are thus of great use to public authorities and other actors looking to protect, manage and enhance their landscape.

More than a source of inspiration, they are an invitation to action.

Maguelonne Déjeant-Pons
Executive Secretary of the Council of Europe Landscape Convention

Upon ratifying the Council of Europe Landscape Convention at the dawn of the new millennium, Spain undertook to establish a series of strategies that would link public authorities, institutions and civil society, in other words the entire country, to landscape in the broadest sense of the word.

In order to implement the Convention, a number of lines of work were laid out, including the creation of the National Cultural Landscape Plan. This instrument was drafted by the most distinguished experts in landscape from all over Spain, and Andalusia played a key role in the process.

According to the National Cultural Landscape Plan, the study of landscape 'may be an end in itself, as a source of knowledge in addition to a valuable tool for public authorities and bodies responsible for a territory, as it provides the knowledge that needs to be taken into account when planning any action that affects the territory, be it related to the environment, town planning, public works, etc.'.

This publication brings together the knowledge and experience of experts who have worked tirelessly since the signature of the European Landscape Convention, drawing on their extensive and very innovative research into Spain's complex and extremely varied landscapes. As such, it is undoubtedly a useful tool for professionals and anyone else involved in creating a landscape guide.

Carmen Caro
Coordinator, National Cultural Heritage Plans,
Spanish Cultural Heritage Institute

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01

Please read
before using

Deconstructing concepts

What is a criteria document?

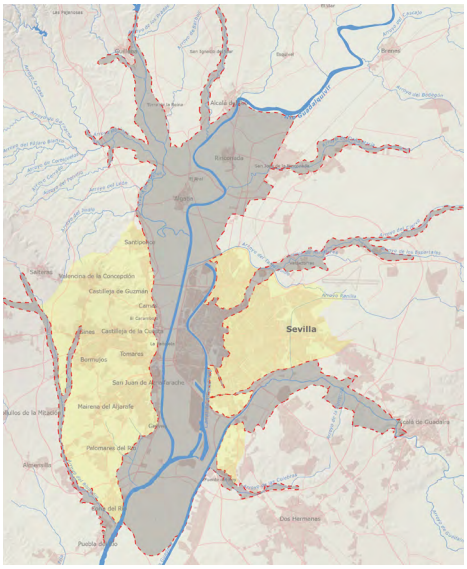
Within the context of this publication, a criteria document is taken to refer to set of principles, methods and recommendations designed to allow an objective to be attained. These documents are generally created by public institutions for the purpose of providing guidance to those directly or indirectly responsible for implementing their policies.

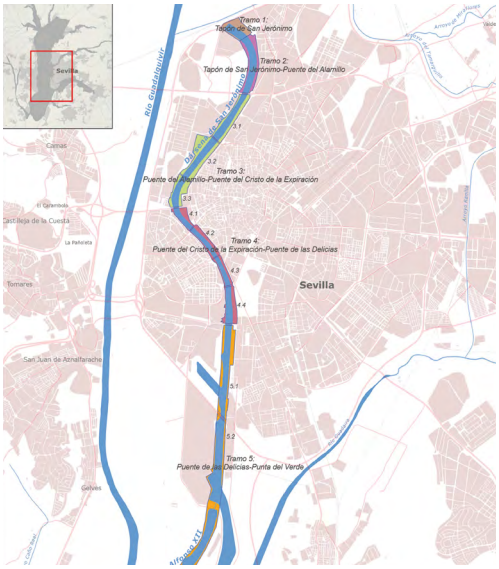
Criteria documents do not tend to be binding. As such, through an informative rather than a prescriptive approach, they aim to help ensure specific tasks are carried out as effectively as possible.

Over the past ten years, the Andalusian Institute of Historical Heritage ⟀ (hereinafter the IAPH) has created a series of technical methodologies and recommendations (including one on cultural landscape documentation), based on the experience it has gained through numerous projects and initiatives. These have all been updated and published in the manual An Introduction to Cultural Heritage Documentation ⟀.

This publication draws upon the process used in the two landscape guides produced by the IAPH, namely A Guide to the Cultural Landscape of Bolonia Bay ⟀ and A Guide to Seville's Historic Urban Landscape ⟀, expanding upon and clarifying certain aspects in order to allow them to be better applied in various geographical, institutional and legal contexts. Other landscape projects and initiatives carried out by the IAPH will also be used as illustrative examples throughout this guide. Our ultimate aim is to share the knowledge we have acquired over the decades and help all those responsible for managing cultural

Images from *A Guide to Seville's Historic Urban Landscape*





heritage create and implement new approaches to protection, management and planning. As such, it should come as no surprise that a large number of the examples given are based on the IAPH's own experience.

What is a landscape guide?

Landscape guides are informative planning documents based on consensus which put forward and prioritise projects and measures necessary for maintaining and improving the quality of landscapes.

As such, they help public authorities take effective decisions in this area.

Despite differences in content, the following applies consistently to these documents:

- Although they may be developed by any individual or organisation involved in managing a specific place, it is helpful if they are overseen by the public authorities responsible for implementing them.
- It is essential a multidisciplinary team be created for dealing with all aspects relating to characterisation, assessment, objectives and measures.
- The more consensus there is concerning a landscape guide, the more effective it will be. As such, it is recommended that processes based on participation and dialogue be established for the purpose of deciding upon their objectives and how to achieve them.

Objectives and measures resulting from landscape guides (as well as charters, guidelines, etc.) may have legal consequences if they are included in or represent legal instruments. However, generally speaking, they are not created with this purpose in mind. Instead, they are intended to offer an al-

Landscape guides are informative planning documents based on consensus, which put forward and prioritise projects and measures necessary for maintaining and improving the quality of landscapes. As such, they help public authorities take effective decisions in this area.

ternative way of managing landscapes based on the engagement of those involved. As such, they reflect the principles of participatory governance as opposed to the traditional approach to landscape protection, which is more concerned with protection and conservation than with providing guidance or managing change.

What is a cultural landscape?

Many different definitions have been put forward by institutions and researchers in various areas. The United Nations Educational, Scientific and Cultural Organization ⩗ (hereinafter UNESCO) recognised the importance of properly managing these landscapes by making them a specific category of cultural heritage in 1992, something which has since been included in numerous national, regional and local legal instruments.

As they are considered cultural assets, to be included on the World Heritage List ⩗ cultural landscapes must have cultural or cultural and natural features, as well as represent a unique or particularly representative interaction between humankind and its natural environment.

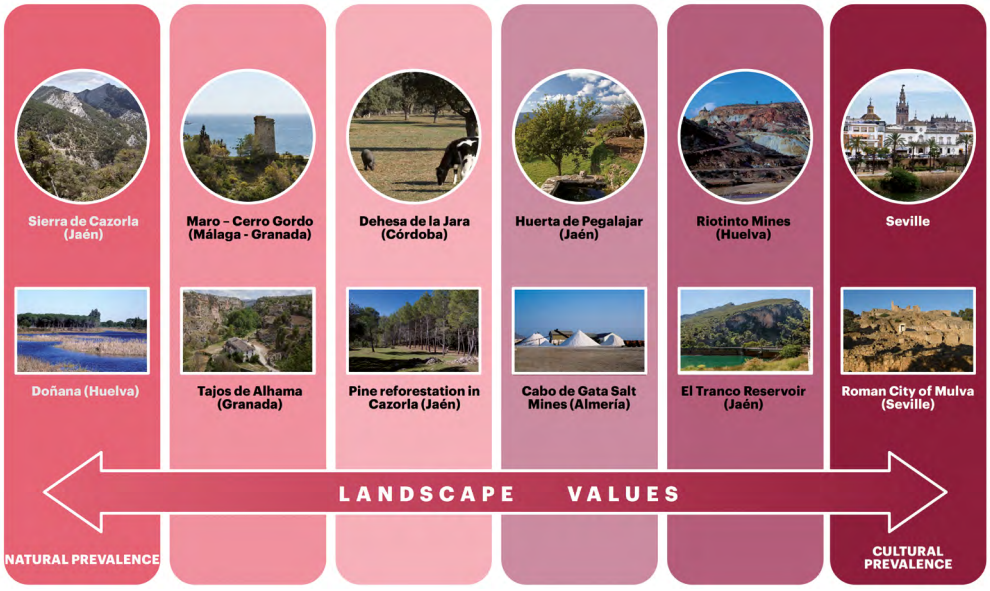
Regardless of whether they are on the World Heritage List, cultural landscapes recognised as such in cultural heritage management instruments tend to be geographically well-defined areas where tangible and intangible cultural heritage plays a particularly important role. As such, in order to avoid confusion stemming from the reasonable argument that all landscapes may be considered cultural to a certain degree, other designations are often used, such as heritage landscapes, landscapes of cultural interest, unique landscapes, outstanding landscapes, landscape of local interest and cultural heritage landscapes.

- Landscapes of cultural interest: this is a term coined in Andalusia and first officially used in the Register of Landscapes of Cultural Interest ↙, created by the IAPH. It was then used to refer to cultural landscapes in Asturias ↙ and in Spain's National Plan for Cultural Landscape ↙. These landscapes are a 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. As such, they maintain a set of cultural and natural values that allow us to understand them over time.
- Heritage landscapes: this is a concept widely used by researchers to refer to predominantly natural or cultural landscapes that need protecting due to their natural and/or cultural values as a result of processes involving social appropriation and the attachment of values to their heritage components.
- Unique landscapes: in A Catalogue of Unique and Outstanding Landscapes of the Basque Country (CAPV) ↙, specifically in the catalogue created for the province of Álava, in order to be considered unique, landscapes must be exceptional (although

not necessarily of outstanding beauty), have been shaped to a large extent by humans and include elements of historical heritage.

- Outstanding landscapes: in An Inventory and Characterisation of Unique and Outstanding Landscapes in La Rioja ⟀, landscapes that stand out amongst other similar ones for their quality are considered to be 'outstanding'.
- Landscapes of local interest: this is a term used in France's landscape atlases ⟀ to refer to landscapes that are an important part of local culture as a result of their symbolic, emotional, aesthetic or economic value.
- Cultural heritage landscapes: this term has been used in various UNESCO documents as an alternative to 'cultural landscapes'. In Canada, the Ontario Provincial Policy Statement and Planning Act ⟀ defines these landscapes as geographical areas that may have been modified by human activity and are identified as having cultural heritage value or interest by a community. The area may include features such as buildings, structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. According to the Region of Waterloo's Regional Implementation Guideline for Cultural Heritage Landscape Conservation ⟀, a cultural heritage landscape (CHL) is a location where the influence of humans on the natural landscape has resulted in a place with distinctive character and cultural importance. These historically significant landscapes are valued for the important contribution they make to our understanding of the history of a place, an event, an individual and/or a community. CHLs are typically characterised by:

– a concentration of cultural heritage resources, such as buildings, structures and landforms;



Dominant values in a selection of landscapes in Andalusia

– a concentration of supporting structural elements such as vegetation, fences or roads/paths;
– a sense of visual coherence; and
– a distinctiveness which enables the area to be recognised from neighbouring areas.

All the concepts above essentially refer to the same thing, namely landscapes with tangible and intangible natural and cultural values, which are significant, recognised by people, preferably limited to a local area, and easily managed as part of a participatory process involving all relevant stakeholders.

Aims and appropriateness

The right time for this publication

As mentioned above, in 1992 UNESCO included cultural landscapes as a category of cultural heritage ⟀ and mixed cultural and natural heritage

eligible to be inscribed on the World Heritage List. This saw the concept gradually included in national instruments designed to protect cultural heritage. Between 1992 and June 2020, 114 cultural landscapes were added to the World Heritage List ⟀ and one was removed in Germany. In terms of those added, the distribution according to the different UNESCO regions is as follows: Africa (15), Arab States (4), Asia and the Pacific (25), Europe and North America (60), and Latin America and the Caribbean (10). In terms of the criteria, they were required to fulfil to be included, III, IV and V stand out, with more than 50 landscapes meeting one of these.

Numerous other recommendations, declarations and charters have since been published, although those by the Council of Europe are particularly noteworthy. In 1995, it provided a definition for landscape related to cultural values in Recommendation No. R (95) 9 on the Integrated Conservation of Cultural Landscape Areas as Part of Landscape Policies ⟀. According to this document, landscape is the 'formal expression of the numerous relationships existing in a given period between the individual or a society and a topographically defined territory, the appearance of which is the result of the action, over time, of natural and human factors and of a combination of both'. Furthermore, it takes landscape as having a threefold cultural dimension. This takes into account the perception of humans ('it is defined and characterised by the way in which a given territory is perceived by an individual or community'); the concept of time ('it testifies to the past and present relationships between individuals and their environment'); and identity ('it helps to mould local cultures, sensitivities, practices, beliefs and traditions').

Distribution of World Heritage cultural landscapes according to criteria for selection (June 2020)

Criteria	Landscapes
(I) To represent a masterpiece of human creative genius.	6
(II) To exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.	37
(III) To bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.	64
(IV) To be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.	61
(V) To be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.	57
(VI) To be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance.	35
(VII) To contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance.	6
(VIII) To be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features.	5
(IX) To be outstanding examples representing significant on-going ecological and biological processes in the evolution of ecosystems.	5
(X) To contain the most important and significant natural habitats for conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.	4

Subsequently, in 2000, the Council of Europe adopted the European Landscape Convention ↙, which expanded the definition of landscape to mean 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'.

As such, whilst UNESCO has focused on protecting heritage landscapes or those of cultural interest with outstanding universal value, and national and regional legal instruments have included the category of cultural landscape in their provisions, something which also encompasses those recognised for the quality of their heritage values, the Council of Europe has expanded its scope to include all landscapes and scales. The latter has undoubtedly led to significant progress being made in terms of theoretical aspects as well as the methods and techniques used in their protection, management and planning from all the relevant perspectives, including agriculture, tourism, culture, the environment, regional/spatial planning and cultural heritage management.

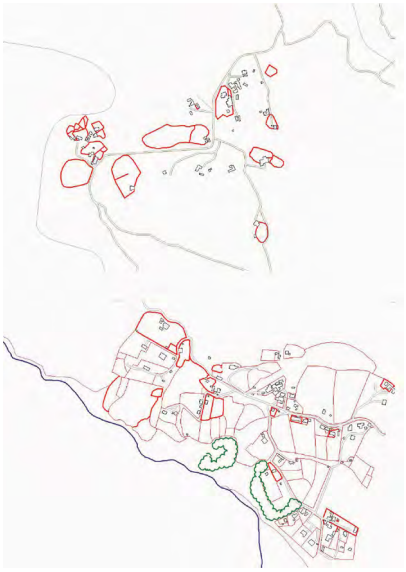
This publication is aimed particularly at those involved in managing landscapes as well as at professional bodies and citizens associations in need of guidelines for ensuring their projects and initiatives help maintain and enhance the natural and cultural values of a particular landscape.

At the same time and since its creation in 1989, the IAPH has run projects and initiatives with a strong territorial focus. Between 1992 and 1994, the Pilot Project for the Development of a Comprehensive Spatial, Cultural and Environmental Protection Instrument ⟀ was run. This was the first attempt by the institute to undertake multidisciplinary research into how public authorities might work together in a coordinated manner to include cultural heritage in regional/spatial planning instruments. During this time, the foundations were also laid for the creation of an IT system to manage electronic data in the form of text, images and maps. For the first time ever, the topological relationship between recorded cultural assets and other local variables (such as aspects relating to hydrography, land use, geology and infrastructure) could be clearly seen.

However, it was not until 2000 that, thanks to the project Alianzas para la Conservación [Partnerships for Conservation] ⟀, the concept of cultural landscapes was placed at the heart of an integrated planning strategy for territorial cultural heritage. This project came to an end in 2004 with the publication of A Guide to the Cultural Landscape of Bolonia Bay and the creation of the Cultural Landscape Laboratory, which became a permanent part of the IAPH in 2008, specifically the Documentation and Study Centre ⟀.

The Cultural Landscape Laboratory has undertaken numerous projects for the purpose of identifying and characterising landscapes in urban and rural areas at various scales. Drawing on the experience it has gained through these projects and its ever-increasing number of specialist contributions to the field of landscape in Spain and internationally, this guide is part of a series of methodology documents

A selection of images from *A Guide to the Cultural Landscape of Bolonia Bay* (Tarifa, Cádiz)



covering a wide range of subjects published by the Landscape Laboratory.

Focus and audience

This publication is aimed particularly at those involved in managing landscapes as well as at professional bodies and citizens associations in need of guidelines for ensuring their projects and initiatives help maintain and enhance the natural and cultural values of a particular landscape. Having a set of guidelines designed to help draft a landscape guide from the very outset helps effectively organise and structure the tasks involved, create an effective timeline and establish a budget in line with its objectives and scope.

Generally speaking, both landscape guides and charters are documents based on dialogue with society which focus on the conservation, use and management of an area from a landscape perspective. As such, they are normally produced by public authorities, although they are used by all stakeholders involved in their implementation.

Although this publication primarily focuses on landscapes with significant cultural values, it is applicable to any type of landscape. Nevertheless, it should be noted that it does prioritise actions aimed at understanding, assessing and safeguarding their cultural values.

How to use this guide

As outlined above, the purpose of this publication is to offer guidance to those responsible for creating landscape guides in general, and cultural landscape guides in particular. It is particularly useful in the sense that it provides insights into the methods

tried and tested by the IAPH to a greater or lesser extent, presented in a well-structured format. Certain sources the reader may wish to consult whilst reading this guide are underlined and at the end a diagram summarising the entire process is included.

Structure and content

This guide is structured in a way which reflects the process followed by landscape guides, namely planning, landscape characterisation, definition of landscape quality objectives and management.

a) Planning

Creating a landscape guide almost always requires a significant investment in terms of time and technical resources. As such, properly planning the process from the outset is particularly important. This involves clearly establishing its scope based on the resources available in order to minimise the risk of work having to be stopped late on in the process due to a lack of economic resources or time. Creating a timeline and setting a budget which are as accurate as possible is the best way of beginning the process and one which will ensure its success.

This planning phase is dealt with in detail in chapter two. Here, general aspects on which decisions must be made, agreed upon and established by those involved in producing a landscape guide (i.e. the production team) are also discussed. As such, this chapter is mainly reserved for issues relating to method and procedure. Each landscape guide deals with a set of diverse and practically unique circumstances. As such, the decision has been made to make this guide general in nature, with a focus on common, basic aspects which should be

taken into account when creating any landscape guide. These include:

- Participation: a decision must be made as to how and when the public will participate in the creation and management of the landscape guide.
- Documentation: relevant sources of information (text, visual material and maps) must be chosen, and the kinds of accompanying visual content to be used established.
- Communication: a communication strategy for disseminating the results of the work undertaken throughout the process must be established, based on the resources available.

b) Characterisation

The first step in landscape action, and something which is reflected in the main national and international reference texts, is identification and characterisation.

- The European Landscape Convention states that each party must identify its own landscapes throughout its territory; analyse their characteristics and the forces and pressures transforming them;

Cultural landscapes recognised as such in national, regional and local instruments tend to be geographically well-defined areas where tangible and intangible cultural heritage plays a particularly important role.

take note of changes; and assess the landscapes thus identified, taking into account the particular values assigned to them by the interested parties and the population concerned.

- In the area of heritage management, the UNESCO Operational Guidelines for the Implementation of the World Heritage Convention ⟀ take a similar approach by stating that identification and the delineation of boundaries are the first tasks that must be completed for the purpose of understanding cultural assets.
- In Spain, the National Cultural Landscape Plan ⟀ (2015) establishes identification, characterisation and safeguarding as one of its specific objectives, and highlights the need to agree upon a more uniform system for the identification and characterisation of landscapes of cultural interest throughout the country.

Thus, we might say that when we talk about identification and characterisation within the context of a landscape guide, what we are referring to is a method of revealing its characteristics, values and what makes it unique. Taking into account the above, a cultural landscape guide must cover the following aspects: the identification and location of the landscape (chapter three), an analysis of the natural environment (chapter four), the historical construction of the area (chapter five), its exploitation and use as seen through socio-economic activities (chapter six), and past and present human perceptions of it (chapter seven). These should focus on the most relevant aspects for explaining and allowing the area in question to be understood. They should also help put things from the past into context and foresee changes that may positively or negatively affect its values in the future.

Natural environment

- Geographical features (mountains, capes, straits, rivers, waterfalls, caves, defiles, lagoons, glaciers, etc.)
- Meteorological phenomena and environmental conditions (rain, wind, cold, snow, etc.)
- Vegetation (forests, flowers, trees, shrubs, etc.)
- Animals (mammals, birds, fish, reptiles, etc.)

Human activities

- Built elements (related to farming, utilities, public services, urban infrastructure, industry, religion, housing, etc.)
- Techniques (food production, agriculture, hunting, mining, traditional practices, etc.)
- Festive events
- Traditions and customs

The historical construction of areas

- Regional built elements (transport infrastructure, hydraulic infrastructure, mining complexes, *dehesas*, settlements, open spaces, etc.)
- Buildings that form regional systems or networks (defensive systems, watchtowers, etc.)

Perceptions

- Buildings and geographical features (viewpoints and landmarks)
- Regional infrastructure (roads)
- Attributes (smells, flavours, sounds, etc.)
- Expressions of art (literature, paintings, engravings, drawings, etc.)
- Documents (audiovisual, photographs, posters, maps, postcards, publications, etc.)

Types of resources associated with landscape characterisation, taken from *A Thesaurus of Andalusia's Historical Heritage*

It is important to note that all the chapters mentioned above relating to the characterisation process in a landscape guide should include a section on associated heritage resources. This should explain the type of resource related to the natural environment, the historical construction of the territory, socio-economic activities and human perceptions, the aim being to present the information in a well-organised manner. It is recommended resources be grouped in accordance with these concepts, as this allows them to be looked at as a whole rather than individually.

c) Definition of landscape quality objectives

Chapter eight offers guidance on how to establish landscape quality objectives based on the strengths and weaknesses identified through a general assessment. These should be underpinned by a series of specific measures designed to foster a coordinated approach by public authorities and all those involved in managing the landscape in question.

d) Monitoring and managing landscape guides

Once a landscape guide has been produced, ways of assessing its degree of implementation and the effects of the measures contained in it must be created. As such, the monitoring tasks described in chapter nine are essential for evaluating its results and taking the appropriate action based on these.

In order to ensure and maximise its success, a solid system based on a participatory approach which takes note of changes in the landscape is also essential. This should be done by creating consultation bodies appropriate for the specific situation

This publication, the content of which can be applied to practically any geographical area or legal instrument, and by almost any institution, is based on the working process developed by the Andalusian Institute of Historical Heritage in landscape guides covering Bolonia Bay (Cádiz) and Seville's historic urban landscape.

which ensure the participation of the population and institutions concerned.

Concepts and terminology

In order to avoid confusion, the term 'landscape' will only be used when what is being discussed may be applied to any landscape, whereas the term 'cultural landscape' will be used within the context of aspects that apply specifically to landscapes with heritage values or those of cultural interest. Likewise, the expression 'landscape guide' will be used in the broadest possible sense, as the general concepts discussed in this publication may be applied to any context, although always with a view of safeguarding the cultural values of landscapes.

As this guide is highly technical in nature and intended to be used as a reference manual, the decision has been made not to include in-text references in order to make reading it easier. Nevertheless, great care has been taken to provide the reader with enough information to allow them to easily identify the resources used to create this guide.

With this in mind, references as well as suggestions for further reading are organised by chapter at the end of this publication. Furthermore, throughout the digital version of this guide, hyperlinks have been included to the technical documents, websites and publications mentioned, meaning readers are able to easily go into specific aspects in more depth if they so wish. Resources for which a link is provided are underlined.

Unless stated otherwise, the visual content included in this publication has been created by its authors, using images taken from the IAPH image bank ↙. Where they are based on other publications, sufficient information is provided to allow the reader to identify these.

02

Laying the foundations: design and planning

Objectives, resources and scope of a landscape guide

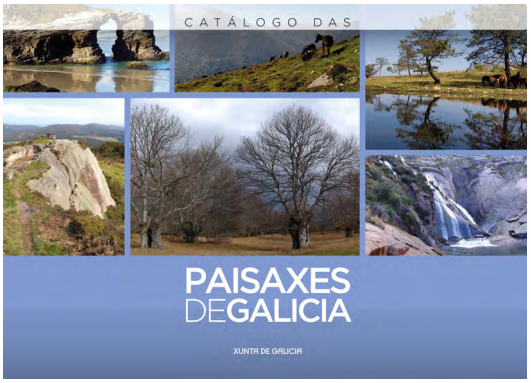
When creating a landscape guide, it is extremely useful to begin the process by deciding how the project is going to be organised, the method to be used and its scope (the latter being based on its objectives and the resources available).

Landscape guides: different starting points, similar end points

The reasons for creating landscape guides can be just as varied and unique as the areas they cover. In chapter one, the features of landscape guides were outlined, including their holistic, objective-oriented and participatory focus, in addition to those generally responsible for leading the most common types of action in this area, i.e. public authorities. In Spain, for example, landscape catalogues, which resemble landscape guides in certain respects, are instruments created by regional institutions, either because they are provided for by law, such as in Catalonia (Law 8/2005 of 8 June on Landscape Protection, Management and Planning in Catalonia) ⟀ and Galicia (Law 7/2008 of 7 July on Landscape Protection in Galicia) ⟀, or because they are included in coordination instruments, an example being the Andalusian Landscape Strategy ⟀.

As such, being aware of exactly how the project has arisen is a key part of designing and planning a landscape guide. For example, it may be a local or regional public initiative brought about by a number of different reasons, such as:

- bringing together in one place aspects relating to protection and conservation found in town and regional/spatial planning policies;



Andalusian Landscape Strategy.
O Catálogo das Paisaxes de Galicia

- its usefulness as a means of implementing or driving socio-economic development policies aimed at areas of particular interest from a heritage and landscape perspective; or
- a decision by territorial stakeholders from the public sector, private sector or both with a connection to the landscape in question for reasons similar to the ones outlined above.

For example, A Guide to the Cultural Landscape of Bolonia Bay ⟀ was part of the European Union programme Culture 2000 ⟀, through which the project Alianzas para la Conservación [Partnerships for Conservation] ⟀ (2000-2004), in which Spain, Portugal, Greece and Italy participated, was funded. The mission of the IAPH to foster territorial and landscape studies led to the decision being made to create a landscape guide as a way of concluding the project. The scope of the guide was a reflection of the commitments taken on by the IAPH as part of the project as well as its leading role in it. Although the institute does not have executive powers to implement its guides, it is responsible for providing guidance in terms of new methods and techniques for managing cultural heritage.

For its part, A Guide to Seville's Historic Urban Landscape ⟀ was the result of close collaboration between the UNESCO World Heritage Centre and the IAPH, which began at a meeting in Colonia del Sacramento in 1998. This relationship has since been strengthened at meetings in Seville, Mexico City and La Habana as well as through the project Historic Urban Landscape in World Heritage Cities: Indicators for Conservation and Management ⟀. The significant impact of certain actions in these cities, within and beyond their protected areas, meant developing an instrument for their conservation and monitoring was desirable. After considering various approaches to these problems, the decision was taken to focus on Seville, the aim being to create a methodology which could be applied in such urban contexts.

Landscape guides are created for a number of different reasons, something which affects their end result. Nevertheless, whatever these reasons may be, they must aim to:

· further understanding of the landscape in question through an interdisciplinary team. Properly presenting this understanding, ensuring it is informative in nature and effectively disseminating it has the benefit of raising public awareness of the landscape in question.
· foster a sense of commitment amongst stakeholders at various levels through a participatory approach over its life cycle, including during the creation, implementation and monitoring phases.
· create (or lay the foundations for) a system designed to effectively manage the landscape as it evolves as well as any territorial and socio-economic changes that may occur in the future, and ensure objectives relating to landscape quality, heritage

Meetings with local stakeholders (Mexico City, 2010) as part of the project *Historic Urban Landscape in World Heritage Cities*

protection, conservation and sustainability (to name but a few examples) are attained.

This initial design phase of a landscape guide is extremely important. As such, it is recommended that at this stage the team responsible for creating the guide has sufficient time to read and listen as well as identify needs, frustrations, hopes, ideas and future projects relating to the landscape in question. During this initial phase, it is often useful for the team responsible to analyse press articles and content produced by media outlets, the opinions of associations and groups, social media content and local agendas. Thus, it may be stated that openness, awareness and a critical approach in response to calls from society and institutions regarding the landscape in question are all key aspects when designing and planning a landscape guide.

Geographic scope

A landscape guide will always begin with a wide geographic scope. This may be imposed, for example as a result of the regional nature of the entity backing the project, be it a public authority or citizens association working in a particular area. In order to effectively organise the creation of a

The reasons for creating a landscape guide can be just as varied and unique as the areas they cover. Whatever the case may be, the final document must deal with a number of aspects relating to knowledge, participation and management.

landscape guide by experts from various fields, those responsible for leading the process should have a good idea of its geographic scope as well as the difficulties to be expected, basing the latter on how easily the necessary information may be obtained and the amount of pre-existing knowledge on the landscape. This involves answering questions such as: Is the area well known or not very well known? What aspects (physical environment, history, economic resources, society, etc.) are well understood or not very well understood? Is it suffering from depopulation? What are the socio-economic conditions like for residents? Who are the main stakeholders that must be involved in the process?

During this initial phase, it is important to undertake preliminary research into the landscape's values as well as its visual and cultural references, the aim being to gain a preliminary, general overview of the geographic scope of the guide. Maps, information on physical and human geographical features and databases for the cultural and natural heritage present will all prove useful for gaining this initial understanding of the landscape.

In terms of *A Guide to the Cultural Landscape of Bolonia Bay* and *A Guide to Seville's Historic Urban Landscape*, before establishing the landscape's geographical boundaries, it was decided that a multilevel analysis of the landscape needed to be carried out. As far as the first guide goes, although the boundaries of the bay were very clear, their consistency with other cultural criteria was analysed. The scope of this analysis went beyond Bolonia Bay to encompass the area made up of Barbate, Baelo Claudia and Tarifa (Cádiz). As such, the project began by analysing three levels, namely the supra-municipal level, which included the area detailed above as well as El Estrecho Natural Park ⇙ and Campo de Gibraltar ⇙; the local level, which included the landscape of the bay; and the object level, which focused on the archaeological site Baelo Claudia ⇙. In terms of the second guide, it was also shown from the outset that the area of study went beyond the boundaries of the historic city to encompass a larger area. As above, a multilevel analysis was undertaken in a landscape that went well beyond the historic city and the old course of the Guadalquivir through Seville.

It follows on from the above that the initial analysis and understanding of the area must be one of the first tasks to be undertaken when creating a landscape guide. The aim of this is not to establish the precise boundaries of the landscape in question, something which is dealt with in more detail in chapter three, but instead to simply estimate the physical area it encompasses, the amount of information available and how easily it can be accessed, and the resources available for creating the guide.

Material and human resources

When beginning the process of creating a landscape guide, it is important to do an initial assessment of the resources currently available (or which will be available) to the production team. The minimum resources necessary to form a team appropriate for the area in question should be established, and questions such as 'who has expertise on the area?, and 'who can lead and coordinate each of the main aspects involved in creating the guide?' should be considered.

In *A Guide to the Cultural Landscape of Bolonia Bay*, the economic resources available allowed a landscape laboratory to be created, a goal established at the outset of this project. The laboratory was run by members of staff hired specifically to create the guide, alongside technical staff from the IAPH and other external experts. The result was a very multidisciplinary team made up of architects, archaeologists, geographers, anthropologists, (art) historians, economists and communication experts. The Landscape Laboratory subsequently became a permanent part of the IAPH.

The strategy used for *A Guide to Seville's Historic Urban Landscape* was somewhat different. As such, the multidisciplinary production team worked alongside experts on various aspects of the city following a methodology previously agreed upon in order to bring together information to be subsequently filtered and included in the final document. This was made possible thanks to the funding secured for the project, which meant it could be carried out with all the necessary resources.

This information, in addition to the analyses outlined above, is useful for estimating how much a

landscape guide will cost and how long it will take to create. Depending on the specific circumstances, the funding and time needed to produce a landscape guide may be known from the outset, or a proposal may be formulated once its scope has been assessed.

The scope of a landscape guide

By assessing the aspects mentioned above, the scope of a landscape guide may be established. This is an aspect that plays a major role in determining how its content will be structured. Once a clear scope has been established, specific content can be established, the various tasks scheduled and the teams involved effectively coordinated. In other words, the aim is to strike a balance between what is ideal and what is possible in order to achieve a set of realistic cultural landscape quality and management objectives within a framework made up of a particular territory, an interdisciplinary team, a set of economic resources and a deadline.

Returning to the examples of Bolonia Bay and Seville, the scope of their landscape guides was conditioned by the fact that the IAPH lacks the executive powers to implement them. Given this limitation, their strategies were based firstly on developing a methodology for understanding and managing cultural landscapes, and secondly on promoting ways of protecting cultural heritage that went beyond existing ones and were in line with the new territorial, landscape and participatory governance guidelines contained in various international reference texts relating to cultural heritage management.

Organising the work involved

Having established the above, i.e. the aims pursued by those behind the project, the general scope of work and the human and material resources available, we will now offer some guidelines for beginning to organise the tasks to be carried out and provide some basic information on the methodology any landscape guide should follow. In the following chapters, the methodology used for characterisation, assessment, the formulation of landscape quality objectives and the monitoring and continuity of a landscape guide will be dealt with in more detail.

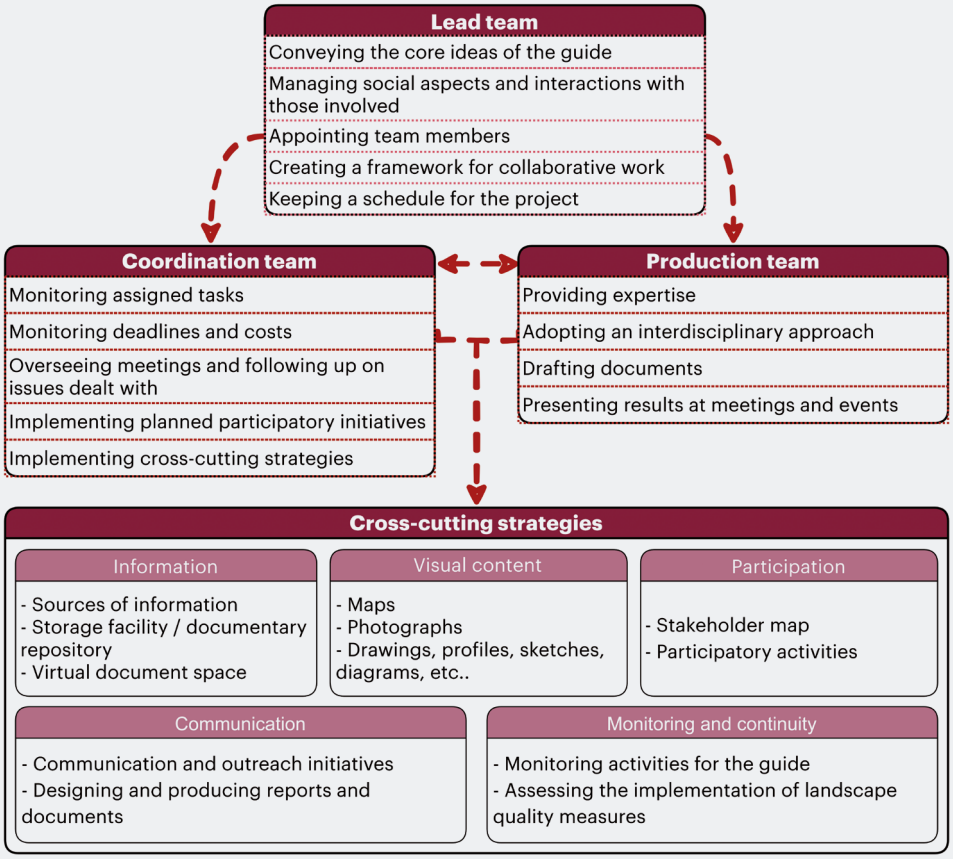
Leadership: overseeing a landscape guide

Generally speaking, the team responsible for leading a landscape guide is made up of members from the entity, association or stakeholder behind it.

Without going into each case in detail, such as the specific institutions to which members of the lead team may belong, their expertise or even their psychosocial skills, it should be noted that the tasks they are responsible for range from conveying the core ideas upon which the project is to be based, creating and keeping a work schedule, and fostering collaboration, through to appointing those in charge and forming the coordination team as well as the teams responsible for production, monitoring and evaluation. A key part of the leadership provided by the lead team is organising meetings with those involved in the various levels of coordination throughout the course of the project.

Furthermore, in order to ensure its leadership is effective, its members should have extensive expertise and be in constant contact with the vari-

How to structure a landscape guide by roles and tasks



ous stakeholders relevant to the landscape guide, making their involvement, collaboration and commitment to the project possible.

Content and tasks: coordination

Once the members of the lead, coordination and production teams have been identified and the scope of the landscape guide established, initial meetings may take place in order to organise the content and tasks related to identification, characterisation, assessment, the formulation of landscape quality objectives and the formulation of measures. It is at this stage that a strategy for monitoring the process involved in producing the landscape guide should be established.

Even where expert studies are carried out, the work of the coordination team is key to ensuring the various experts involved remain focused on the core ideas underpinning the landscape guide. Although each case is different, these ideas tend to go beyond the specific work carried out in each field, and may include establishing cause-and-effect relationships concerning the evolution and present state of a landscape, identifying factors that have the greatest impact (positive or negative) on the preservation of its cultural values and identifying the perceptions of the population regarding the various aspects dealt with by experts during the landscape characterisation process.

The coordination team oversees the production team, the latter being organised according to the various specialised tasks involved and the final structure established for the content. The production team should be made up of individuals with sufficient expertise and experience in their respective fields, and they should aim to adopt an

Within the context of a landscape guide, the lead team should communicate the core ideas of the project, keep a schedule for the work involved, create a framework for collaborative work, and select the members of the team responsible for its coordination, production, monitoring and evaluation.

interdisciplinary approach at all times in order to allow knowledge to be effectively pooled together.

To sum up, the approach taken by the lead and coordination team, which the production team must be made aware of through the planning of content and tasks, is key to ensuring the focus of a landscape guide is unfailingly on generating a critical, interdisciplinary and comprehensive understanding of the landscape in question, as well as establishing an assessment and agreeing upon a series of measures designed to allow landscape quality objectives to be attained. These objectives should pay particular attention to the preservation and sustainable management of cultural heritage.

General strategies

During the creation of a landscape guide, having a series of cross-cutting strategies which transcend the boundaries of each discipline and help guide the various tasks carried out by the production team is important if the project is to be a success

The team involved in creating *A Guide to the Cultural Landscape of Bolonia Bay*

Scope	The area encompassing Barbate, Baelo Claudia and Tarifa (Cádiz, Spain)	
Resources	As defined by the European project 'Partnerships for Conservation'	
Involvement	Lead team	IAPH – Regional Department for Culture and Historical Heritage (Regional Government of Andalusia)
	Coordination team	Andalusian Institute of Historical Heritage (IAPH) Historical Heritage Protection Service Cádiz Provincial Department for Culture Baelo Claudia archaeological site Regional Department for the Environment Estrecho Natural Park
	Production team	Technical staff at the IAPH External contract staff (research staff from the University of Seville and Pablo de Olavide University as well as independent professionals)
	Collaborations	Local public authorities (Association of Municipalities of Campo de Gibraltar, Tarifa City Hall and the hamlets of El Lentiscal and Facinas) Associations and organisations (neighbourhood associations, farmers, traders, informal leadership, visitors, etc.)

in terms of organisation and method. In this section, strategies designed to manage knowledge and integrate the social dimension of a landscape in a landscape guide are discussed.

Information: sources and approach

Landscape characterisation involves a series of methodological strategies, which will be outlined in the following chapters. However, it is important to note that in order to allow experts from each field involved to effectively gather and analyse the large amount of information required for a landscape guide, a cross-cutting information management strategy is crucial.

Due to their holistic nature, landscape studies, regardless of whether the term 'landscape' is taken to refer to a formal area, an idealised concept or a social construction, can be approached from various fields, something which inevitably leads to an extremely wide range of sources of information being used. For example, in landscapes where the night sky influenced how megalithic structures central to their character were designed and built, information from the field of astronomy would be essential. This would need to cover constellations, stars and planets, as well as how they relate to each other and were/are seen from the landscape in question. However, if it is an insect or variety of alga that holds the key to understanding the past and present character of a landscape, information would have to come from the field of biology.

Although these examples may be considered extreme in terms of the macro and micro scale of the source involved and how commonly they are seen, it should be noted that each landscape guide requires its own specific sources of information.

This section should offer an overview of the sources of information for the landscape in question, and cover aspects such as their order of importance or classification, suitability and accessibility. Later on, in the sections devoted to characterisation, this may be expanded upon based on the work undertaken in the various fields involved for the purpose of selecting, validating, critically analysing and establishing causal factors (to name but a few examples) for the various aspects dealt with.

Once it has been decided if each one is primary/direct or secondary/indirect, a general breakdown of sources may be carried out. It should be noted that sometimes this distinction is not clear-cut, with their exact definition being the subject of a long-standing debate within the research community. There are sources that may be classed as being primary in the purest sense of the word, such as those that come directly from the natural environment or are obtained directly from people, communities or social groups. However, maps and sets of documents in archives, which are generally considered to be primary sources, might not be a completely faithful depiction of direct source(s) in the sense that they may reflect intent, ideology or a selective process, amongst other things. Ultimately, the production team should make an individual decision as to the exact nature of each source. Nevertheless, for clarity, this distinction is followed in this section.

The origin of primary sources may serve to classify them according to their accessibility or proximity to the area in question. Such origins include:

- Tangible elements relating to the physical or sociocultural environment that can be directly observed:

these form the first level and include lithology, climate, water and the resulting geomorphology, living beings (flora and fauna), and a wide range of human relics ranging from archaeological ruins to current buildings and infrastructure.

· People: these form another level of direct sources and include individuals, communities, associations and social networks. They are considered to be more 'direct' if they are obtained from living people and relate to the present, and less 'direct' if they are obtained via a third party and relate to the past. This category includes discursive sources involving one or more individuals as well as content created by media outlets or published on social media. Within this context, these terms should be understood in the broadest possible sense.
· Images, maps, statistics and legal or institutional documents: this third level includes sources which may or may not be considered primary depending on a variety of factors, such as when the information was collected, who created them etc., aspects that may impact upon their credibility and impartiality.

Secondary sources, on the other hand, refer to those where the author (generally an expert in a particular field) has taken the information from some other source and processed it in some way. They generally come in the form of general or specialist monographs, summaries and studies. For practical purposes, a broad distinction has been made two types of secondary sources.

The first type includes general reference works relating to the history, ethnography, art, geography, economics, town planning, etc. of the area being studied. The second refers to sources which can

Gathering and analysing the wide range of sources of information and data necessary for understanding cultural landscapes requires a single transdisciplinary approach to managing information, which must be established at the outset.

be classified into one of two groups depending on their subject. The first includes those related to the physical environment, and the second covers those which have a sociocultural focus. The latter can be further classified according to a series of functional aspects covering the full extent of human interaction with the landscape in question, namely systems of settlement, communications and transport, security and defence, obtaining and processing resources, and ideas and aspects relating to the associations of people and the landscape.

A separate group has been created for databases containing information processed by people, groups or institutions for the purpose of understanding or management. As such, they are distinguished from statistical sources in that they represent a set of stored data relating to measurable attributes (i.e. aspects of a landscape that can be recorded) that can only be subject to quantitative processing.

In the work carried by the IAPH on landscapes, a wide range of sources of information is used, these depending on the specific objectives pursued and the type of work in question. However, one source which comes up again and again is A Digital Guide to Andalusia's Cultural Heritage ⟀, a

Primary / Direct

Physical environment
Observation, classification or measurement of:
Climate, lithology, hydrology, geology, geomorphology, biology and ecosystems (flora and fauna).

Tangible elements
Archaeological ruins, built elements of different scales (from the territorial level to the building level) and moveable components.

Statistics
Sets of environmental variables and inventories of species of flora and fauna.
Gazetteers, censuses, electoral rolls (demography) and land registries (property).
Economic activity: farming/fishing (production), mining (concessions and production) and industry (production).
Official routes (times and places).

Cartography
Drawings, sketches and prints of maps.
Atlases and sets of general and thematic maps. Urban and rural property maps.
Orthophotos. Toponymy. Land use and exploitation maps. Locations of livestock routes. Maps of mines. Maps of communications, such as roads, railways, waterways, the sea, etc.

Imagery
Prints, drawings, and urban and rural scenes.
Sets of photographs. Video recordings.

Institutional and legal
Historical institutional archives (civil, parish, professional bodies; notary records, etc.).
Studies of legal sources (laws, bylaws, plans and other legal instruments).
Analyses of programmes, master plans and sectoral reports by the public authorities.

Discursive (individual and group)
Interviews, public participation workshops, memoirs, letters, collections and private archives. Oral literature, epic poetry, lyric poetry and plays. Historical memory.

Media and social media
Press, radio and television.
The internet: blogs, social media, discussion groups, online forums and virtual communities.

Secondary / Indirect

Áreas of knowledge
(Geography, historiography, anthropology, art, architecture, etc.)

1. General analyses: archaeology/history, art/imagery, anthropology/ethnography, economics and town planning, spanning the entire timeline of the landscape or part of it, and involving areas that are local, sub-regional, regional, etc.
General reports covering geography, geology, ecology, etc.

2. Thematic (physical and natural aspects):
- Monographs on the environment (geology, climate and nature).
- Local or sub-regional studies on the physical environment.

3. Thematic (social and cultural aspects):
- Settlements.
  Chorography or descriptions of the territory.
  Archaeological/historical, ethnographical, geographical and construction related/architectural overviews on the distribution, patterns and forms of human occupation.
- Communications and transport.
  Geographical, archaeological/historical, ethnographical and engineering studies on routes (paths, roads, railways, sea, waterways etc.), transport and communications.
  Travel guides and descriptions of territories.
- Security and defence.
  Archaeological/historical, diplomatic, anthropological and ethnographic studies on territorial defence systems, political relations, conflicts, etc.
  Memoirs and chronicles of a military nature.
- Exploitation of resources.
  Studies of an archaeological/historical, anthropological/ethnographical and economic nature (amongst others) concerning economic aspects involved in exploitation or processing (from hunting and harvesting through to industrial production, sales and services).
  History, geography and ethnography as they relate to farming, fishing, mining, industry, business, etc.
- Aspects relating to associations.
  Studies on works of art: literature, paintings, sculptures, films, etc.
  Archaeological, historical, artistic and ethnographical studies on aspects relating to religion, funeral traditions, etc.
  Studies on myths and places with particular meanings.
  Studies on traditions and knowledge, religiosity, sociability and creativity, from an institutional and popular perspective.

Databases
- Institutional, open access or proprietary.
- For research and knowledge, or outreach purposes.
- Related to cultural and natural landscape management.

Examples of groups that may be used for classifying sources of information as part of a landscape guide (on previous page)

large database of knowledge created by the IAPH in 1989 (the year the institute was founded), and constantly maintained and expanded by it even since. The vast amount of information it contains provides an overview of Andalusia's cultural assets for those interested or involved in understanding and studying the history of landscapes in the region, regardless of whether they are considered heritage landscapes.

Within the context of *A Guide to Seville's Historic Urban Landscape*, we may also draw attention to the important documents relating to imagery that were analysed for the purpose of gaining an understanding of the various components that make up the image of the city projected through art, in addition to institutional and legal documents (particularly those linked to regional/spatial and town planning), and maps concerning the physical environment, biodiversity, urban structure and infrastructure, services and cultural heritage, to name but a few examples.

These sources, together with all the technical documents produced during the creation of a landscape guide, must be systematically recorded from the outset so that the production team is able to easily consult them whenever they need to. Subsequently or at the same time, an open-access data repository containing these sources may be created for use by the general public. This will result in the reach of the project going beyond the landscape guide itself. In order to systematically record documents and standardise terminology during the creation of a guide, it is extremely helpful to use glossaries, lists of vocabulary, dictionaries and thesauri. Examples include those produced by the Getty Research Institute ⟀, the UK's Forum on Information Standards in

Heritage (FISH) ⩗ and the Spanish Ministry of Culture and Sport ⩗. The IAPH has also created *A Thesaurus of Andalusia's Historical Heritage* ⩗, which was published in 1998 and can be accessed online. This resource, which contains more than 16,000 terms, covers all aspects of heritage and is the work of an interdisciplinary team made up of experts in archaeology, architecture, art history, fine art, documentation, geology, anthropology and history.

Stakeholder map

a) What is a stakeholder map?

A stakeholder map may be defined as the result of the analysis and evaluation of any aspect of the real world undertaken by stakeholders, which may be individuals or groups. It is a tool that is related to social intervention and widely used in business settings, international relations, policy development, participatory research and action, ecology and natural resource management, and social, economic and environmental development projects, to name but a few examples. The concept has been developed within fields such as anthropology, sociology, political science, economics and mathematics (through game theory), as well as in the area of organisational management within the context of situation analysis, strategic planning, social network analysis, etc.

Its use by the fields mentioned above as well as by businesses and the public sector explains the wide range of terms used when talking about the concept (which may take any one of several forms). These include 'stakeholder analysis', 'key actors', 'key actor mapping', 'participatory mapping', 'network analysis', 'stakeholder analysis', 'social map-

ping', and 'sociogram'. What all these terms have in common is that they are linked to the assessment and management phases of projects (research projects, development projects, intervention projects, etc.) in both the public and private sectors. Given that it can be used in such a wide range of contexts, it is a method that is held in high regard. In terms of the history of the term 'stakeholder', it dates back to the 1980s, when it began to be used to refer to those with an interest or involvement in something.

b) Who are included on stakeholder maps and what are their interests?

A stakeholder map should include all persons, groups and organisations with an interest in and related to a particular social initiative, in this case a landscape guide. This interest may be overt or dormant, acknowledged or present at a subconscious level. Whatever the case may be, what all stakeholders have in common is a connection to the landscape in question as well as to its past, present and/or future dynamics, based on their place in the society in question as well as their particular interests, conflicts, intentions, influence, relations and interactions concerning it.

This interest will also be affected (both positively and negatively) by the planning, creation and implementation of the guide, regardless of whether the actions agreed upon are aligned with the initial positions of all the stakeholders. Those who participate in the process as well as those who do not must be taken into account and included in the decision-making process over the life cycle of the guide. Thus, as stated by the United Nations ↙ in its guidance on the implementation of partici-

patory governance processes, a stakeholder map should include:

- those who are affected by the measures adopted by a landscape guide;
- those who possess information, resources and expertise needed for their formulation and implementation; and
- those who control implementation instruments.

A stakeholder map is a good starting point but does not mean or guarantee that social perception will be correctly analysed or that participatory strategies will be developed as part of a landscape guide, as these are independent processes. Those included on a stakeholder map for a particular landscape are not necessarily relevant stakeholders directly involved in an aspect of its management. As such, other strategies are sometimes needed to encourage those who are to become interested, involved and engaged.

Nor should the identification and mapping of stakeholders generate a series of unrealistic expectations, as it does not guarantee that solutions will be found to all problems or that every point of view will be represented. A stakeholder map is ultimately an approximate overview of the reality on the ground, often accompanied by matrix diagrams and graphs, and should be combined with other tools, such as methodological triangulation as well as quantitative, qualitative and participatory analysis. Furthermore, it must be remembered that it reflects a particular moment in time and, as such, must be updated throughout the project. This includes adding and removing stakeholders, and ensuring it reflects any changes in the positions of stakeholders.

c) Why is a stakeholder map created?

Within the context of this publication, a stakeholder map is considered to be a strategy combining qualitative, participatory and quantitative methodologies designed to pool together the knowledge and experience held by individuals and groups who are directly or indirectly involved in the management of a landscape. With this purpose in mind, it is a process which should begin straight away when a landscape guide is being created in order to identify those who may have an interest in it as well as establish those involved in its production, implementation, monitoring and evaluation.

An understanding of all individuals and organisations with a (potential) direct or indirect interest in how a landscape is managed allows us to undertake an accurate social assessment of the social, political and economic processes affecting it, their relationship with each other and the impact of their actions and ideas on the landscape. This not only provides a snapshot in time of the stakeholders and their relations with one another; it also allows us to identify differences, weaknesses and opportunities within society, as well as the impact of economic development models (including dominant and secondary or marginal ones) on a landscape both at the time of the analysis and in the medium and long term.

As such, a stakeholder map is a tool and not an end in itself, although its versatility often leads to it also being considered a management and research method and tool, depending on its purpose(s), which may include:

- classifying stakeholders, establishing types of stakeholders and identifying groups for the pur-

A stakeholder map must include all individuals, groups and organisations with an interest in the guide as well as those directly or indirectly involved in the participatory management of the landscape in question. Qualitative and quantitative methodologies should be used to create it.

pose of analysing their intentions and relations with one another;
- identifying the actions and relations of stakeholders in terms of their aspirations, power, position and strategies for interacting when it comes to a specific aspect; and
- analysing the profiles of stakeholders (individuals and groups), based on aspects such as their resources, actions, aspirations and influence in terms of the issue in question, in order to identify tensions and dynamics involving cooperation and disagreement.

d) How is a stakeholder map for a landscape guide created?

Although there is a wide range of methodologies, strategies and models available for mapping stakeholders, there are certain key elements, methods and formats that it is generally agreed should be used. These allow a series of clearly defined criteria to be established and thus the process standardised. As such, the following general points should be taken into account when it comes to stakeholder maps:

- There are principles and steps which provide the flexibility needed to allow stakeholder maps to be tailored to each context. However, there are no standard rules for creating a stakeholder map.
- A qualitative approach must be taken in order to assess the nature of the power held by the various stakeholders.
- Creating a stakeholder map is not an easy task. The diagrams, tables and graphs used for the social analysis process merely offer a snapshot in time and, as mentioned above, do not reflect the changing nature of the reality upon which it is based.
- Stakeholder maps have been carried out in a broad range of contexts, meaning we have a large number of experiences to draw on.
- The versatility and flexibility of stakeholder maps allow models to be established for specific contexts. As such, the fact that the process is not fully standardised should be seen as a strength, not a weakness.

The steps considered necessary for creating a stakeholder map have been developed over the past twenty-five years. Initially, they were the work of experts and were limited in scope, designed for use by international organisations, such as the United Nations and World Bank. However, over the years a series of clear and simple guidelines have been developed, which allow them to be used within the context of any social study where stakeholders (individuals and groups) need to be identified and included. These guidelines, the result of work carried out within a wide range of fields and organisations, are based on the following approach.

- Preparation: this involves establishing why certain stakeholders are relevant for the creation, implementation, monitoring and evaluation of a landscape guide.

· Identification of relevant individuals, groups and organisations: depending on their relevance, leadership and capacity to assert influence, they can initially be classed as being key, primary or secondary stakeholders. This task may involve organising participatory workshops for the purpose of gathering information, based on a brainstorm. Alternatively, information may initially be gathered from other sources. The greater the level of participation, the more representative the resulting stakeholder map will be and the more internal and external validity it will have. Lastly, a list (which should be as thorough as possible) should be drawn up of all those who may meet one of the following criteria:

– They are relevant in terms of the creation of the landscape guide, from its design through to its evaluation.
– They have information, experience or resources needed to formulate and implement it.
– They believe they are entitled to be involved in all the stages of its creation and implementation.
– They may be affected by or benefit from the measures put forward in it.
– They may have some kind of interest in the landscape guide, despite not being directly affected by it or directly benefiting from it.

· The interests of each stakeholder must be established. In order to analyse interests that are explicit, implicit, hidden or contrary to the objectives of the landscape guide, it may be useful to establish how each stakeholder relates to each aspect to be covered in it (if the project is in its early stages) or the established landscape quality objectives (if the landscape guide is already being implemented). Interests can be identified by asking each stakeholder about their expectations, benefits they expect to

Photographs showing the participatory workshop organised by the IAPH in Porto Alegre (Brazil) to identify stakeholders for the Parque Histórico Nacional das Missões (National Historic Park of Missões)

obtain, resources they would commit (or not commit), interests of theirs which may be incompatible with aspects of the landscape guide, their opinion of other stakeholders, etc.

The relationship between the interests identified and the objectives of the landscape guide, as well as the priority given to each measure put forward, must be agreed upon by all stakeholders involved in each aspect.

· Gaining a deeper understanding of each stakeholder: this involves establishing all relevant details for the various stakeholders. To do this, the first step is to establish the following for each stakeholder: field of work, official name (where applicable), name and surname, address (home or work address, or the place designated for meetings), telephone number and email address. The second step is then to identify their most important characteristics, such as whether they are local or from another area; are part of the public sector, private sector or the general public; are a permanent or temporary resident; are in a position to make decisions, etc. In order to ensure the internal and external validity of this analysis, it is recommended it be carried out by means of a brainstorm or through participatory workshops.

To ensure the identification of stakeholders is thorough, the following questions should be asked.

– Have all key stakeholders (primary and secondary) been included?
– Have all those potentially in favour of the guide, with a neutral opinion of it, or critical of it been identified?
– Has gender been considered when identifying primary and secondary stakeholders?

– Have the primary stakeholders been classified according to their occupation or level of income?
– Is it possible that primary and secondary stakeholders will be identified as a result of the project?
– Have stakeholders in vulnerable groups been identified?

· Analysis of power, position and influence: 'power' is understood to be the capacity to assert influence within the context of the initiatives put forward in a landscape guide. This is effectively the degree of control each stakeholder has over the creation, implementation and evaluation of a landscape guide, and therefore the extent to which they are able to facilitate or hinder the process. 'Position' refers to how each stakeholder views the various aspects covered in a landscape guide. Being aware of this is key to getting the right stakeholders to work together as well as fostering synergy and avoiding tension amongst them. 'Influence' means the ability of a stakeholder to facilitate or hinder the creation, implementation, monitoring or evaluation of a landscape guide.

Carefully looking at the various levels of power and influence held by stakeholders is a complex task and one which must take into account a number of basic aspects (detailed below), although of course these may be added to depending on the specific situation and where the guide is at in terms of its life cycle.

– In terms of official organisations, these aspects are related to their leadership (formal or informal, popular, political, familiar or based on connections), the control they have over the strategic resources of a landscape guide, the existence of experts, their negotiating position, etc.

– For informal stakeholders, the following must be established: their standing (social, economic and political); the degree of organisation, consensus and influence of the group; and connections to and degree of dependency on other stakeholders, amongst other things.

· Mapping of relations: the purpose of this stage is to attempt to identify and analyse the type of relations that exist amongst all the stakeholders. These relations may be based on collaboration, be sporadic in nature or be defined by conflict. Power, legitimacy (which is desirable, proper or appropriate), and the urgency and relevance of the requirements put forward by each stakeholder may also be included. Based on these variables, stakeholders may be classified as being dormant, discretionary, demanding, dominant, dangerous, dependent or definitive. All stakeholders must fit into this classification in order to be included on the stakeholder map.
· Identifying social networks based on the mapping of relations: the geographic scope covered by a landscape guide may or may not have established networks. However, there may be opportunities to create them, back them or discourage them. Likewise, it is useful to identify social networks which need strengthening as well as those which may lead to conflict.
· Reviewing the analysis: this is an essential step and one which allows us to ensure the internal and external validity of the process. As such, after reviewing the process used to create the stakeholder map as well as its results, it is advisable to launch a consultation process designed to establish whether any stakeholders have been left off the stakeholder map and whether any stakeholders previously identified have changed their position over the course of the project.

· Identification of strategies (for collaboration, involvement, defence or monitoring purposes) designed to bring about the participation of all stakeholders throughout each phase of the life cycle of the landscape guide: it should also be noted that identifying important stakeholders does not guarantee they will become key stakeholders. As such, specific, well-thought-out measures must be developed in order to generate interest and sustain commitment over time. The above allows us to gain certain insights into how stakeholders might support or jeopardise the project, enabling potential risks this may entail to be identified.

In order to easily store and manage information gathered when creating a stakeholder map, the use of databases is recommended. This will also make other tasks carried out over the life cycle of the guide easier, such as:

– updating the map during the creation and implementation phases of the landscape guide (stakeholders may be added, removed or repositioned in accordance with the classifications outlined above, paying particular attention to their interests); and
– making adjustments to the types of participation and specific initiatives that need to be developed at each stage of the project by all those involved, including those relating to the analysis of social perception of the landscape and the introduction of participatory processes throughout.

Public participation

Another aspect which must be present in the work undertaken in all the fields involved as well as the processes implemented as part of a landscape guide is public participation. This allows different management formulas to be tested in order to

ensure the preservation of the landscape's values without hindering its progress. Participating in something means being part of it and playing a role in decisions affecting it. Here, the aim is to generate processes of social change, building and agreeing upon them collectively. As such, citizen participation is always going to be linked to processes involving the sustainable management of landscapes.

Within the field of heritage management, the introduction of participation as a social right able to influence decisions is recent. The same applies to its recognition and inclusion in statutory documents adopted by public authorities in Spain and around the world. This is undoubtedly a reflection of just how important it has become, the result of an increasing eagerness within society to be involved in heritage management. This trend has picked up considerable pace since the beginning of the 21st century through emerging social movements centred around the right to be heard and be involved in decision-making processes as stakeholders by public authorities.

Participation means shared decision-making for the purpose of bringing about processes of social change, building and agreeing upon them collectively. It follows on from this that citizen participation is always linked to processes of sustainable landscape management.

Citizen participation opens up a wide range of possibilities when it comes to action centred around transforming, reflecting, involving, coordinating, building, understanding, learning, communicating, interacting, empowering, satisfying and demanding. This comes in various types and shapes, including partnership, delegated power and citizen control. However, how it is used, the possibilities it offers and the types seen are linked to the various management models that exist and their relationship to differing degrees of participation. This gives rise to forms very frequently seen in cultural heritage management that may not be considered participation at all, i.e. manipulation, therapy, informing, consultation and placation.

The basic points to be taken into account when including citizen participation in a landscape guide are the following:

- Think carefully about its purpose and significance whilst being acutely aware of its dangers.
- Establish a time and place for implementing it. The scope here is normally local.
- Provide information on how the results of the process are going to be used, i.e. how they are going to be included in the content of the landscape guide.
- Look at which resources are needed and which are available (venues for organising activities, economic resources, human resources and time).

Although it is true that the first step to including citizen participation in the production, implementation and monitoring of a landscape guide is the creation of a stakeholder map, these two areas of social assessment should not be confused, nor should participation be deemed to have been included based merely on the fact that a stakeholder

map exists. The identification of stakeholders is an important task, as it allows connections to be quickly established. Having said that, there is a big difference between having a list of potential participants for this process and having a group of actual participants engaged in a process of citizen participation. The latter involves establishing what the process aims to achieve, the stage or stages of the landscape guide during which it is going to be included, how its results are going to be used and the resources which will be mobilised.

Broadly speaking, there are two ways citizen participation can be included in a landscape guide: either throughout the entire process or during specific stages or phases. In each case, it must be ensured that real participation (i.e. partnership, delegated power or citizen control) is made possible through the various management models that exist, namely participation by invitation, shared decision-making, shared government and self-government. The criteria for using one model or another vary and are not always within the control of those responsible for creating the landscape guide. This is due to the fact that they include everything from ideological positions to limitations relating to organisation and the availability of resources (venues, time, people and funding).

Either one of the three types of social participation may be included throughout all the stages of a landscape guide, i.e. partnership, delegated power and/or citizen control, this depending on the degree to which those involved are to be allowed to participate in decisions affecting its final content. The presence of citizen participation during the landscape characterisation stage is related to the participatory creation of a stakeholder map and

the analysis of the interests of stakeholders, in addition to including their contributions in its various sections (see chapters three, four, five, six and seven). During the assessment phase, participation allows expert knowledge to be combined with non-expert knowledge as well as ensures the validity of the assessment undertaken. Lastly, when establishing landscape quality objectives and action to be carried out, participation is key to generating commitment and a sense of responsibility when it comes to their implementation and evaluation. Furthermore, throughout the life cycle of a landscape guide, it allows problems, difficulties and common ground to be easily identified, thereby providing tools more likely to succeed in resolving differences in a constructive manner.

For its part, the model linked to partnership is largely associated with institutional management instruments. Here, citizen participation tends to be included during a specific phase or is used to validate the content of a landscape guide once it has been created. This model includes two options. The first involves subjecting the entire document to a process which, regardless of its purpose, must end with all proposals agreed upon being included in the content of the guide, as failing to do so would mean participation being merely symbolic in nature or 'for show'. The second involves limiting partnership to the formulation of landscape quality objectives through dialogue. This strategy has produced very good results in certain cases, particularly when all the stakeholders involved come to the process aware of the importance of their participation in ensuring the sustainable management of the landscape they call home, work in, research, etc.

Broadly speaking, there are two ways citizen participation can be included in a landscape guide: throughout the entire process or during specific stages or phases. In both cases, real citizen participation must be ensured.

The options discussed can be applied to contexts where management instruments allow for dynamic and practical ways of bringing about citizen participation or where the parties concerned are familiar with strategies involving applying pressure through channels such as social media and the media to ensure their involvement in any stage of a landscape guide.

It should be noted that where citizen participation is absent from a landscape guide, it is likely to be biased. This is because it will be based entirely on the criteria of the production team, meaning its assessments and proposals will not have been checked with the individuals and entities included on the stakeholder map. The absence of participation or the presence of a nonparticipation model is entirely inconsistent with the very concept of landscape, given how closely it is linked to the concept of social perception. As such, it is extremely important that any landscape guide ensures participation using one of the options discussed above.

Visual content

A strategy used by the various disciplines involved in landscape guides is the creation of a wide range of

meaningful visual material, designed to help clearly describe and convey what is being discussed in the text. Such material may take a number of forms, such as maps, artistic representations, photographs, drawings and sketches.

a) Maps

Given that a landscape guide is a document that involves analysing a specific geographical area from multiple perspectives, the use of maps is essential. Maps have long since been used as simplified (yet highly informative) representations of reality and offer numerous possibilities for showing the distribution and details of geographical features as well as ideas relating to the values and dynamics of landscapes. They may also incorporate the analysis of geographic information through geographic information technology (GIT), a procedure used by various fields and a multidisciplinary strategy which sees geographic information (as a simplified model of reality) become a lingua franca capable of allowing the various aspects dealt with by each field to be interpreted in an integrated manner.

Having gathered the various sources of geographic information, a series of descriptive and analytical maps can be created. In order to make interpreting these easier for the reader, it is useful to develop a standard design, although one which can be adapted to represent the various aspects of the landscape in question. To do this, it can be helpful to create various designs involving different scales in order to represent aspects of the landscape in a general and detailed manner.

Here, maps most commonly cover the regional context of the landscape as well as its location and

boundaries, the physical environment, the most important heritage resources, the density of heritage assets for the purpose of showing the distribution of certain values, regional infrastructure and socio-economic activities, amongst other aspects. It is also useful to include maps providing information on viewsheds, visual impact and intervisibility, particularly using heritage landmarks in the landscape as a reference. These include viewpoints and other elements of heritage that allow the landscape to be watched over, defended or simply appreciated, or offer views of other related elements.

This kind of analysis was carried out for the Maro-Cerro Gordo coastal defence landscape ↙, included in the Register of Landscapes of Cultural Interest in Andalusia ↙. This landscape, a protected natural area, has a series of interconnected watchtowers along the coast, offering far-reaching views. The IAPH carried out a study of the natural and cultural values of this landscape for the purpose of creating a route designed to offer the very best views of it. This involved: 1) selecting the paths from which the towers could be seen; and 2) recommending the creation of viewpoints in those offering the most far-reaching and best-quality views of this defence system that shaped the Andalusian coastline in the Middle Ages and Early Modern period.

Where possible during the creation of a landscape guide, it is recommended maps with information on the perception of the population be developed. These should include collaborative maps created by the public or maps featuring symbolic, intangible or ethno-landscape related elements, based on qualitative methodological procedures (see chapter three).

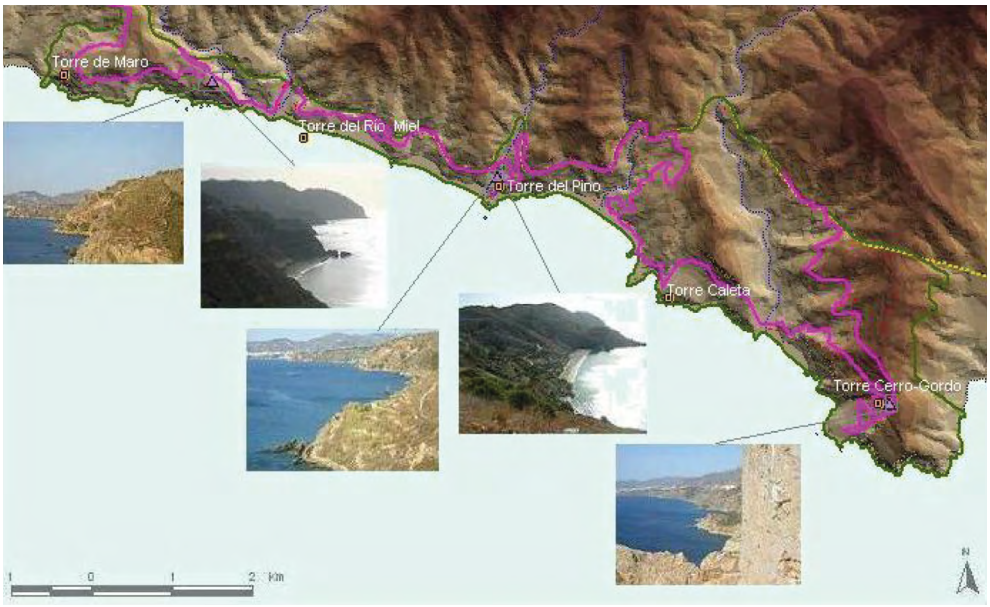
b) Photographs

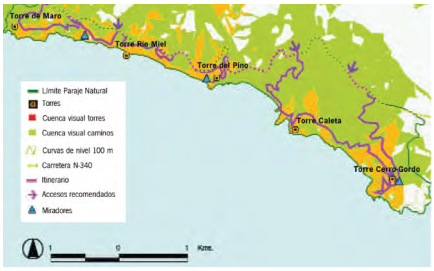
Photographs are a classic visual resource and one that is essential for showing landscapes. In a landscape guide, they are extremely important for illustrating the elements that characterise the landscape as well as its main values. Furthermore, photographs provide information about the state of a landscape at a particular moment in time, and are very useful for analysing changes that occur throughout the year (with the changing seasons) and day as well as changes to land use and the effect of action taken in a territory. They also provide different perspectives of a landscape. In this regard, in addition to taking photographs of a landscape, it is useful to gather past photographs from collections and archives. This allows processes and changes over a specific period of time to be analysed.

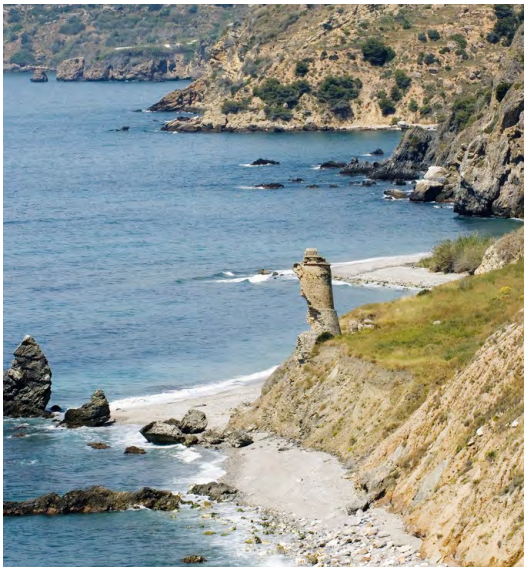
Photographs can also help us analyse aspects important to society through public perception, in addition to helping visually represent the assessment, landscape quality objectives and measures put forward as part of a guide. In terms of the latter, it may be useful to include photomontages showing the results that are expected to be achieved.

Whatever the case may be, traditional formats may be combined with panoramic ones, as appropriate. In the case of electronic documents which allow all kinds of digital resources to be included, conventional videos, 360-degree photographs and immersive videos may be included to provide a more sensory experience of the landscape.

In any case, given the vast number of photographs generated during the creation of a landscape guide,







Images from the study carried out by the IAPH on the Maro-Cerro Gordo landscape in Málaga and Granada

A cultural landscape guide should create and include a wide range of meaningful visual material, including maps, artistic representations, photographs and drawings (to name but a few examples), designed to help clearly describe and convey what is being discussed in the text.

a series of rules should be established in order to ensure they are of sufficient quality. A management system which ensures that each image has enough metadata to be identified should also be used. Such metadata should include the individual who took it, when and where it was taken, a basic description, etc.

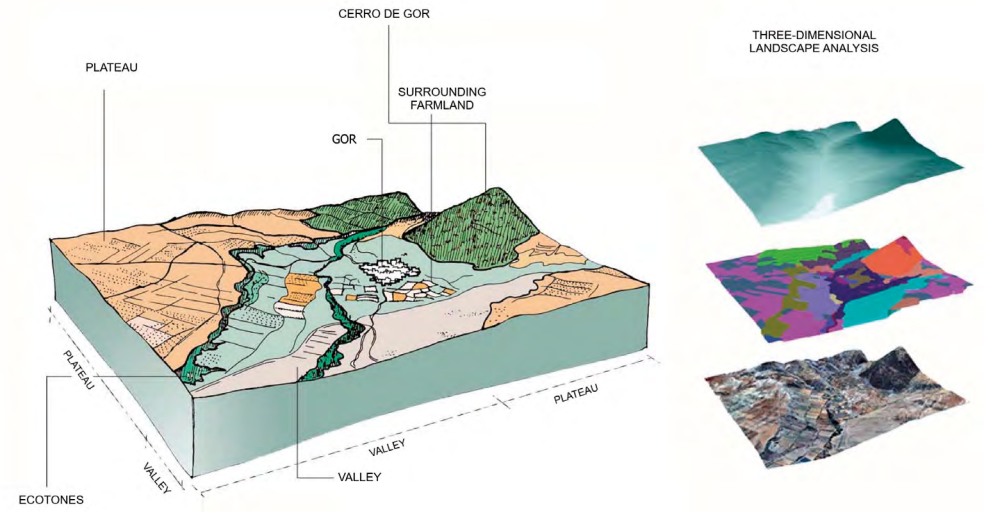
Photomontage of a measure included in *A Guide to the Cultural Landscape of Bolonia Bay*

c) Sketches, profiles, charts, diagrams, drawings, etc.

In addition to the visual resources mentioned above, landscape studies use various types of visual content in order to provide an overview of aspects that characterise the landscape in question. One noteworthy example are landscape block diagrams. These sketches or drawings are a representation of a landscape in a perspective projection, and offer a simplified view of its basic topography as well as its most relevant features. They are widely used in France's landscape atlases ⟀. By including various types of information (or labels), a general description of the area can be provided, and particular elements or dynamics of the landscape highlighted. Aerial photographs of the area selected may be also overlaid on three-dimensional representations or be included in a separate document.

There are other visual resources where drawings are combined with traditional graphs, an example being longitudinal topographic profiles. Here, the aim is to provide a clear representation of the predominant orography of the landscape as well as the main uses given to the land (settlements, farming, communication infrastructure, etc.). This kind of resource tends to be combined with an aerial photograph showing the profile line used (see chapter four).

Lastly, chorems may be used to represent the basic elements that make up a geographical area, whilst drawings, prints and artistic representations allow the historical evolution of a landscape to be illustrated, particularly aspects relating to images of the landscape projected and perceived over time (see chapter seven).

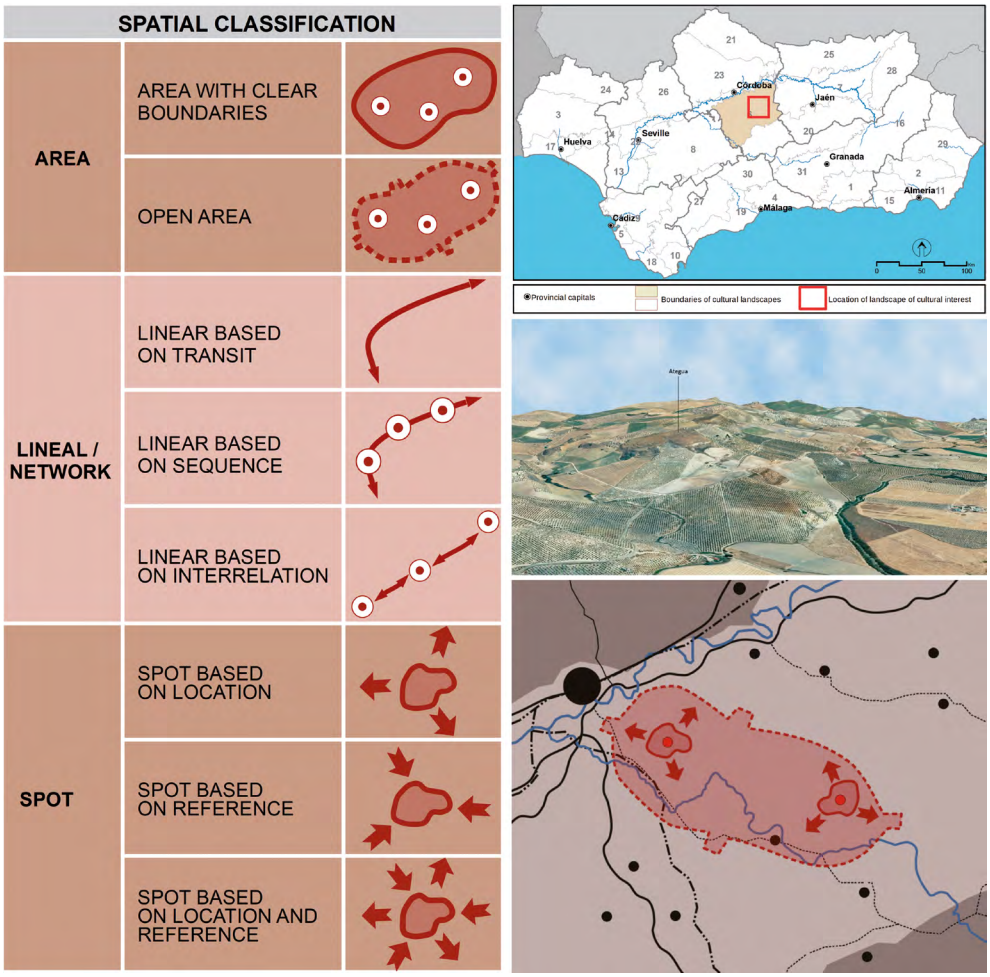


A block diagram of the megalithic landscape of the Gor valley, from An Assessment of the Physical and Natural Environment of the Gor Valley

Communication

We are seeing a progressive increase in the implementation of communication plans and strategies by public authorities, companies and associations as well as within the context of programmes linked to research projects, commercial products, political initiatives, transnational nominations, etc. Within the context of a landscape guide, these actions are wholly justified due to internal requirements, i.e. the large multidisciplinary team involved needing an efficient system which fosters effective internal communication, as well as external requirements, i.e. the need to keep an extensive network of territorial stakeholders informed. Effective communication ultimately helps the production team undertake their work and ensures stakeholders are in the loop, motivated and engaged throughout the creation and implementation process.

Within the context of a landscape guide, these aspects of communication can be approached from various angles:



A selection of images from the *Register of Landscapes of Cultural Interest in Andalusia*

- Frequency or intensity: it is useful to plan regular activities over time, designed not simply to convey the end result, i.e. an edited product, but to provide information on the creation process, ideas put forward, progress made, opinions and debates, etc.
- Those involved: it is helpful to draw a distinction between internal communication amongst the production team, where the aim is to make the workflow as smooth as possible, and external communication aimed at members of the general public, regardless of whether they are directly or indirectly involved in the project.
- Type of discourse used: the focus may be on outreach, raising awareness, education, technical or scientific dissemination, or the institutionalisation of agreements in the sense of implementing their content.
- Format: taking into account the range of digital/print and written/audiovisual resources used to communicate, it can be a very good idea to create an image to give the project a recognisable, representative, uniform, powerful and unique identity.

All the aspects outlined above can be used in different contexts, including the following:

- Internal and external technical meetings and seminars: these should be held at milestones during the creation of a landscape guide for the purpose of presenting the main developments and providing information relating to the requirements of the work being carried out.
- Workshops and presentations: these can be used to strengthen relations with territorial stakeholders and the public.
- Press conferences, media interviews and even reports and promotional videos: these can be useful for ensuring the reach of a project's communication strategy is broad, where this is necessary.

A multi-purpose design created for the project Landscape and Society: An Analysis of Social Perception in Cultural Landscapes

- Internet: the possibilities offered by the internet must be made use of if a project is to maintain a global presence. This involves creating a website, and making use of forums, blogs and social media, where appropriate.
- Publications: these represent a key part of any project and may be digital or printed. They may be published throughout a project or at the end. Depending on the project in question, it may be a good idea to send out regular content using a standard format, such as a newsletter or bulletin. This allows relevant information on territorial, technical and social aspects to be effectively communicated. In terms of a final report or publication, this requires a significant investment in terms of the project's resources. Here, well-written, well-organised content and effective visual material are all key to ensuring the success of the communication strategy pursued.

For example, in *A Guide to Seville's Historic Urban Landscape*, in addition to regular meetings of the production team and constant communication with the lead team, various meetings were held for deciding on conceptual and methodological aspects of the project. Particularly noteworthy in this regard were those organised with the UNESCO World Heritage Centre. As a result of these meetings, two volumes of contributions were published as well as numerous documents. These can be found in the collection for the project Historic Urban Landscape in World Heritage Cities: Indicators for Conservation and Management ⟀, on the IAPH Digital Resource Repository. This was in addition to numerous presentations given at academic and outreach events in Spain and around the world.

The continuity of a landscape guide

The lifespan of a landscape guide is made up of the time it takes to create and the period during which it is implemented. These two phases span a number of years, the exact number depending on the individuals or institutions responsible for the process. As such, another particularly important aspect involved in the planning and organisation of a landscape guide is its continuity, and the monitoring this involves throughout what might be called its life cycle. In chapter nine, how to approach these aspects and ensure the continuity of a project will be covered in more detail.

Another aspect to bear in mind is the fact that, as a management instrument, a landscape guide is similar to other familiar documents, such as plans laying out key principles, criteria and strategies, and master plans covering a similar or smaller spatial scope, although in terms of the latter, social perception and citizen participation do not play such an

The lifespan of a landscape guide is made up of the time it takes to create and the period during which it is implemented. These two phases span a number of years, the exact number depending on the individuals or institutions responsible for the process.

important role. As part of such instruments, proper monitoring for the purpose of control, evaluation and improvement of performance and results is both common and necessary.

Since the mid-twentieth century, theoretical and practical planning has become standard practice for policies, programmes and projects (amongst others) across virtually all areas of the public and private sectors, including business and government. In terms of heritage management, efforts by organisations such as the International Union for Conservation of Nature ↙ (hereinafter the IUCN), the International Council on Monuments and Sites ↙ (hereinafter ICOMOS) and UNESCO ↙ to work in a coordinated manner and share experiences in planning, management and evaluation have been particularly important. As a result, monitoring and evaluation are deemed to be key to ensuring effective management at various levels, i.e. from a broad general strategy to a specific initiative or measure resulting from a master plan, to give just two examples at either end of the spectrum.

In short, these stages may be divided up into three main processes, which together form a system of

heritage management compatible with landscape guides. These are: 1) planning and creation of the document; 2) implementation, which includes taking specific action as well as commitment and agreement in terms of measures; and 3) monitoring, which should be carried out throughout stages one and two, and will be dealt with in more detail later on.

The stages in the cultural landscape management process, according to UNESCO

03

Where to take action: identifying and establishing the scope of study

The spatial manifestation of landscape

Conceptual and methodological foundations for identifying cultural landscapes

The many studies on landscapes carried out over numerous decades use a wide range of methodological strategies for identifying them, these being based on contributions from multiple fields and various research paradigms. However, despite the different approaches, criteria and principles seen, there are a number of procedures commonly accepted and used for this task. These include but are not limited to those outlined below.

- Landscapes occupy a continuous geographical area. The delimitation of spatial units which share a common feature is a way of identifying specific areas, i.e. of establishing their physical boundaries.
- Given that the formal expression of landscape is complex and constantly changing, when analysing and interpreting it, it is common to look at the territory involved through a number of different lenses (i.e. levels of recognition). The scale of observation used is the main factor that differentiates these from one another, in addition to playing a central role in allowing us to organise the various components of a landscape, and thus contemplate, represent and analyse them using a common set of criteria. This mechanism does not only allow us to analyse and identify the elements that make up a landscape, these appearing and being perceived in a different way depending on the scale of observation used, it also enables us to put them into groups and subgroups as well as subsequently manage them. Landscapes can be identified and recognised at a supra-regional, regional, sub-regional or county and local level, these last two being the most common.

· The degree to which the perceived character of landscapes identified at each level is influenced by the physiographical, biophysical and cultural components that make up, interact and shape them varies according to the scale used. As such, where the scale is small (i.e. a large area is covered, such as the Earth, continents or countries), the first two components mentioned above will be most present and the last (i.e. those related to the footprint of humans) least present. Conversely, the larger the scale (i.e. the more local the area covered), the bigger the role humans play in the characterisation of the landscape. The same applies to changes to a landscape in the sense that the smaller the scale, the more stable and gradual changes will appear, whereas the larger the scale, the more fleeting they will seem.
· The widespread use of geographic information technology (GIT) to help identify landscapes has seen it become a key tool in this area. This is because it does not just allow us to select and structure information on the various components of a landscape as spatial variables, it also means these tasks can be carried out in a uniform, integrated and transdisciplinary manner. However, its main disadvantage is the fact that it is not suitable for use with components that need to be handled using qualitative methods, particularly those relating to perception.
· It follows on from the above that both quantitative and qualitative research methods are required. This is particularly true when we consider the wide range of components that shape the character of a landscape. As such, certain landscape variables are analysed using quantitative procedures that study how they are associated with and relate to one another, whereas others are increasingly studied using methods based on interaction with

groups within society. The latter seek to analyse and understand how such variables are perceived and judged within their spatial and social context using tools such as surveys, interviews and group techniques designed to build discourse.

Although the majority of concepts and procedures discussed above are applied in largely the same way when it comes to identifying cultural landscapes or landscapes of cultural interest, there are certain differences. Before going any further, it is important to note that in the field of heritage management, landscapes are considered a category of cultural asset. It follows on from this that when creating a landscape guide, the purpose of identification and characterisation is to determine that a part of a territory represents a shared asset due to its (natural and cultural) heritage values, which are recognised by the population. In other words, the identification and characterisation of cultural landscapes mark the beginning of a process of heritagisation, which involves various stakeholders, be they institutional (technical staff who provide an interdisciplinary assessment) or social groups involved or with an interest in it (i.e. those who call the landscape home, shape it and value it). Whatever the case may be, the aim is to bring about the recognition of an asset which is perceived as representing shared heritage.

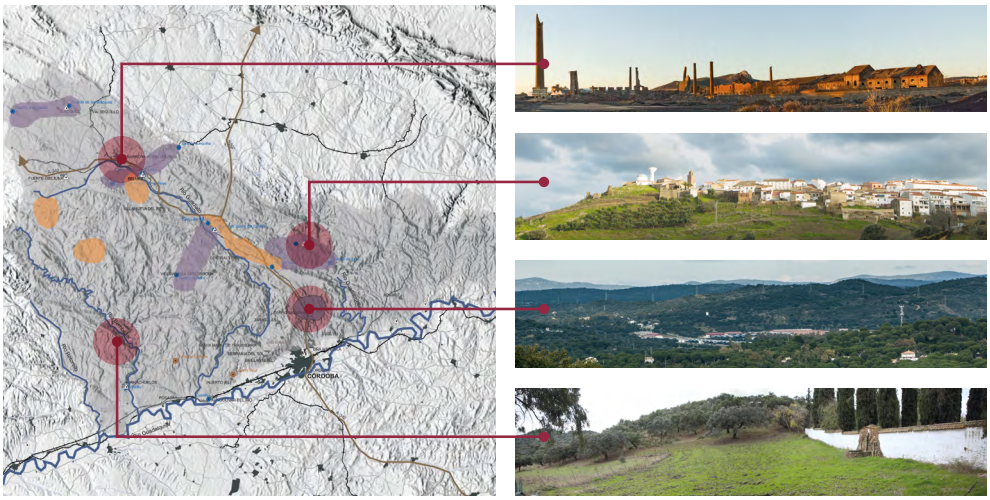
Scales of a landscape

This twofold approach to the identification and recognition of cultural landscapes differs in each case. Whilst the perception of a landscape by its population focuses mainly on their immediate surroundings (although on occasions this may this reach a county level), the approach adopted by experts is based on a more sophisticated meth-

odological perspective which may require a prior understanding of the territory using various scales of observation.

The cultural qualities and attributes of a landscape begin to become sufficiently visible and consistent at a sub-regional (county) scale. This may be through their models of territorial structure and human occupation, by analysing complex heritage systems formed by grouping together different assets, or through images projected and symbols attached to certain territories. Whatever the case may be, it is at this scale that the footprint of humans on the physical environment becomes apparent, and the characterisation of the cultural values present within the territory's entire landscape may be carried out in order to subsequently identify, at a more local level, specific cultural landscapes which best reflect these values.

It follows on from the above that cultural landscapes, as defined in previous chapters, become particularly meaningful at a local level (i.e. at large scales). Their character and identity are the result of the characteristics passed down to them by their wider surroundings. However, they also have a particular uniqueness shaped by two fundamental aspects. The first is the importance of their cultural attributes and values, which may take the form of manifestations of tangible or intangible heritage (socio-economic practices, ideology, etc.), the details of which (substance, functionality, importance, and impact in terms of form and space) can only be discerned at this scale. The second is social perception, as it is within the context of local society that landscapes are valued and clearly seen as a symbol of identity and collective belonging.



Cultural landscape values (sub-regional scale) and landscapes of cultural interest (local scale) of the Sierra Morena in Córdoba. Project: *Heritage Characterisation for Andalusia's Landscape Map*

At a local scale, cultural landscapes are units with separate, not continuous values. Their fundamental characteristics, which make them unique and different from one another, are not present and seen over the entire territory. Instead, they are specific to particular areas and are highly valued by a significant portion of the population as well as institutions. As such, although methodological procedures commonly used for classifying landscapes involving the hierarchical and continuous interpretation of a territory may be used for the heritage characterisation of a landscape at a county level, below this they must be replaced with tailored processes based on specific criteria for recognising them and designed to safeguard their values.

There is also a third scale, where the focus is on objects. Here, attention is placed on the landscape dimension of a specific cultural asset which, regardless of whether it is part of a cultural landscape, has the ability to bring significant value to its environment, even becoming a heritage landmark in

the landscape. Certain elements of the physical environment with cultural meaning may also fall into this category.

Identifying the values of cultural landscapes

Navigating the objective and subjective

The values of a cultural landscape refer to attributes which are considered to be inherent to its place in space and time, and give it a unique significance as an area shaped by humans. Whether they are natural or cultural, the values of a landscape should contribute to it being considered of special cultural interest and, where necessary, justify the introduction of a series of measures to safeguard them.

Certain institutions have attempted to define these values and establish guidelines for identifying them, an example being UNESCO in the Operational Guidelines for the Implementation of the World Heritage Convention ⟀. This document states that in order to be considered of 'outstanding universal value', all properties nominated for inscription on the World

When assessing a cultural landscape, one of the biggest challenges is deciding what importance to give to subjective aspects and what importance to give to objective ones. Clearly, both are present when it comes to assets of this kind, which can be interpreted individually or collectively.

Heritage List ⩗ must satisfy certain conditions of authenticity and integrity. In terms of identifying the values that allow a physical area to be nominated for inscription on this list as a cultural landscape, these guidelines may certainly be useful, as they have merged the criteria for assessing the natural environment with those related to the importance of human activity in it.

In cultural landscapes, there must be a clear interaction between natural and cultural values, and the result of this interaction must be perceived and valued by society. Cultural landscapes are the result of evolutionary processes which have brought about changes to an environment. These processes and changes must be taken into account in order to identify elements that have survived through to the present day and bear witness to them.

These basic concepts, contained in various national and international reference texts, may be taken as a theoretical framework through which to enhance our knowledge of landscapes, identify landscapes of interest, and produce specific documents as well as design initiatives to safeguard their values (plans, strategies, maps, landscape catalogues, etc.).

As such, it is important to bear in mind that a cultural landscape guide is the best tool we have for gaining an in-depth understanding of the values of a landscape, which, once identified, bring to the foreground its uniqueness and significance. It should be remembered that in most cases, the decision to create a landscape guide stems from the fact that a series of values have already been acknowledged in the landscape in question, and that, during the production phase, the analysis undertaken (based on expert knowledge and social

perception) takes these values as a starting point, strengthening them, challenging them and discovering new ones.

When assessing a cultural landscape, one of the biggest challenges is deciding what importance to give to subjective aspects and what importance to give to objective ones. Clearly, both are present when it comes to assets of this kind, which can be interpreted individually or collectively, and the concept of value is always subjective to a large degree.

The way a landscape is perceived by visitors can differ greatly from how it is perceived by those who experience it on a daily basis. When it comes to visitors, sensory and aesthetic aspects often play an important role, whereas for locals, life experiences, emotions and economic aspects are often what shape their perceptions. Furthermore, how a landscape is collectively seen is also influenced by the image attached to values that have become a permanent part of the collective imaginary. Such values tend to be the most traditional and historical ones, passed down from one generation to the next or learnt at school. These values are generally recognised by the majority of local people and serve to bring about a certain degree of social cohesiveness based on the landscape.

Institutions, on the other hand, tend to take a less subjective approach to the matter and seek to objectively establish the values that give a landscape its meaning and character, basing their work on scientific and technical criteria. This approach is more aimed at management and must cover all past and present natural and cultural values. Here, values are compared with one another in order to establish their importance, the ultimate aim being

to generate interest in the landscape in question at an international, national, region or local level, and thus ensure an appropriate management strategy.

Basic criteria

When identifying the cultural and natural values of a landscape, all the approaches discussed above should be taken into account and, regardless of the precise criteria needed in accordance with the specifics of the landscape in question, their characteristics may be identified by asking the questions below:

- How authentic are they? Establishing how authentic the natural and cultural values of a landscape are is an important part of correctly assessing it. This must be done using a multidisciplinary scientific research methodology appropriate for the landscape in question. It must bring together all information contained in relevant past and present sources for the purpose of maximising knowledge on and contributing to a proper understanding of the attributes that give the landscape its character. Ensuring the credibility of sources and comparing the information they offer against initial assessments helps gauge the authenticity of the values attached to the landscape as well as place them on a scale based on criteria such as conservation, alteration and loss.
- Where are they found? The way these values are spatially distributed must be taken into account when assessing the landscape. In this regard, aspects such as their state of conservation and the extent to which they come together (i.e. their cohesion) to shape the value of the landscape as a whole must be considered. The degree of integrity of each attribute and their harmonious relationship to one another are directly related to the overall

value of the landscape, bearing in mind that the proportion of dominant values must be sufficient so as to allow their meaning to be properly interpreted.
- What values does the cultural landscape convey and how do they contribute to its character? The answer to this question is found by looking at all the values that come together in the landscape, taking into account the fact that all natural areas to some extent involve contact with people, meaning the interaction of natural and cultural values is complex in the majority of cases. Broadly establishing the values of the landscape is equally complex, although here, identifying those which may be considered dominant represents significant progress. In short, the values that play the biggest role in shaping the image we have of the landscape as well as its character must be brought to the forefront. Based on this, the value that allows the landscape to be considered representative may also be considered. For this purpose, it is useful to include a brief comparative analysis that demonstrates its unique and exemplary nature, and allows

What is their degree of authenticity? Where are they found? What values does the cultural landscape convey? How are these values reflected in the territory and population? How is the landscape represented at a socio-institutional level? These are some of the key questions that should be asked when identifying the cultural and natural values of a landscape.

it to be used as a benchmark for assessing others with similar basic characteristics, even if they have evolved in a different way.

· How do they contribute to the value of the landscape as a whole? Considering the fact that safeguarding the natural and cultural values of a cultural landscape should be the primary objective of any management strategy, establishing how these values have affected or currently affect the geographical area and the population is of great importance. Having a precise understanding of the influence these values have, for example, on social perception, means of appropriation, economic growth and how the landscape's meaning and image are projected (to name but a few examples) is essential when formulating landscape quality objectives and establishing specific measures. To do this, the most important values must be identified, an analysis of which will help determine both their influence on the landscape and the existence of forces that may have a positive or negative effect on them.

· How do we establish how representative a landscape is? Where the landscape covered by a landscape is protected at a local, regional, national or global level (for example, by being on the World Heritage List or in a catalogue of assets of cultural interest), this is an indication of the interest it attracts and thus, to a large extent, how representative it is. In such cases, the assessment is socio-institutional in nature and it is the opinion of the public authorities responsible for cultural landscapes as well as that of any stakeholder involved in recognising these values that have the greatest influence when it comes to determining the representativeness of the landscape at the scale in question. This representativeness is determined by the uniqueness of its values and how it relates to other examples. Based on this, a landscape may

Examples of criteria used to identify cultural landscapes

Designation	Área	Criteria
Landscapes of cultural interest	Andalusia	Representativeness, local perception, integrity, conservation, authenticity and contemplation.
Unique and outstanding landscapes	Basque Country	Have one or more landmarks or unique aspects in the landscape, whether natural or created by humans; be representative of one or more types of landscapes of significant quality and/or value; make an important contribution to the identity of the place within their sphere of influence; or present outstanding qualities in terms of perception and aesthetics.
Cultural heritage landscapes	Canada (Waterloo)	Cultural heritage value or interest; historical integrity; and community value of the landscape.
Landscapes of local interest	France (landscape atlases)	Symbolic, emotional, aesthetic or even economic values.
Area of special landscape interest	Galicia	Natural or ecological values; heritage or cultural values; aesthetic or panoramic values; and use or production- related values.
Special landscape areas	United Kingdom	High scenic quality; elements of historical, natural or architectural interest; and the existence of consensus in terms of professional and public opinion.

be considered to be outstanding and of maximum significance when recognised at a global level, or of interest when recognised at a local level.

The National Plan for Cultural Landscape ⟀, developed by Spain's Ministry of Culture and Sport alongside the country's autonomous communities, establishes a series of criteria for deciding which landscapes are to be deemed of special cultural interest. These are: intrinsic values; heritage values; and potential values and viability (described below).

- Intrinsic values: these include typological representativeness, exemplary nature, territorial significance, authenticity, integrity and uniqueness.
- Heritage values: these are related to historical, social, environmental and process-related significance (economic activities, customs, popular culture, etc.).
- Potential values and viability: these cover their legal protection, fragility and vulnerability, and their social viability and benefits.

In addition to the aforementioned criteria, for the purpose of identifying cultural landscapes, other informative texts and management instruments in the area of landscape offer similar criteria. Although the landscapes they address are known by different names, they are largely similar in nature to cultural landscapes.

Defining the scope

Methodological considerations

Delimitation of cultural landscapes is part of a methodological procedure, a construct created on the basis of criteria agreed upon by experts and local groups, the aim of which is to establish the boundaries of the geographical area where the

attributes and values that make up and reveal the present character of the cultural landscape are concentrated. Although delimitation is a subjective and artificial exercise in the sense that the boundaries it establishes are not inherent to the landscape in question, it is an essential task and one which should be based on collective interpretations and assessments as part of a process involving abstraction and a simplification of reality. However, as stated in the Guidelines for the Implementation of the European Landscape Convention ↙, published in 2008, it is a necessary task and a useful resource when it comes to managing landscapes through sectoral policies or town and country planning and development instruments.

Within the context of a landscape guide, this task has another objective, which is to determinate the specific geographical area to be singled out for the purpose of studying it and putting forward a series of landscape quality objectives and measures in order to safeguard its characteristics and values, based on a sustainable development approach. However, it is important to allow for a certain degree of flexibility due to the complexity and uncertainty involved in setting spatial boundaries, which are essentially open-ended and blurred by their very nature. This means that, depending on the criteria used and the purposes pursued, different boundaries may be drawn. Ultimately though, the appropriateness of the boundaries proposed for a particular landscape will depend on how well they fit in with the objectives involved and on how well they correlate with the results obtained during the characterisation phase. Whatever the case may be, they must reflect the tangible components of the landscape, in addition to symbolic and identity-related aspects that are attributed to it and shared by local inhabitants.

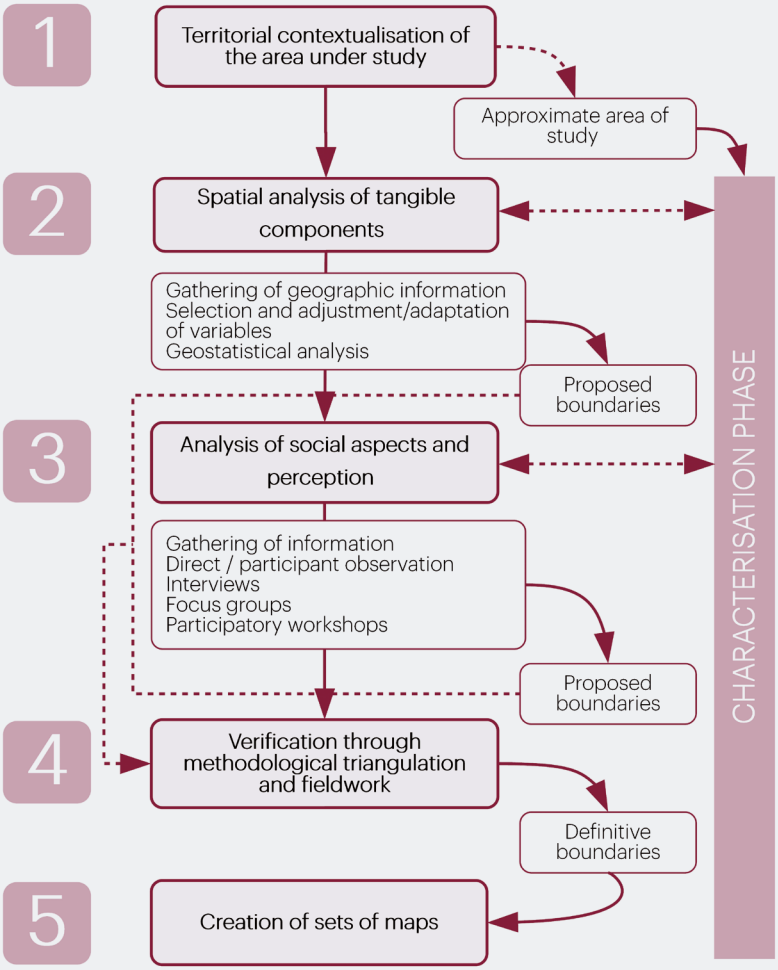
That is why, although logically this task should begin following the end of the characterisation process, once the attributes and values which give the landscape its character are understood, we recommend it begin as part of an ongoing and cross-cutting process.

As such, the team of experts involved in characterisation should actively participate in the delimitation of the landscape in question, based on a transdisciplinary approach. It is essential this team includes individuals with expertise in GIT as well as members with specialist knowledge on techniques for analysing and interpreting individual and group judgements and perceptions. Both groups of experts, who should work together throughout, are important, although the degree to which their expertise is called upon will vary depending on the phase of the project. In addition to the team of experts, a selection of the most representative local stakeholders and social groups (identified through the stakeholder map) should be involved.

The tasks that need to be carried out may be included on a chart detailing the various stages. These should include a preliminary phase during which general information on the landscape in question

Once the attributes and values that give the cultural landscape its character are understood, spatial delimitation may begin as part of a cross-cutting and ongoing process, and one that allows for change.

Phases involved in landscape identification



(i.e. its context) is gathered; a spatial analysis phase in which the physical and environmental components of the landscape are analysed, followed by an analysis of social aspects and perception; a fieldwork phase for the purpose of comparing/contrasting and adding further details to the results obtained; and lastly, a phase during which various sets of maps are created, these being accompanied by a description of the characteristics involved and basic information on the geographical area in question.

Territorial context

During the initial phase, once the landscape to be studied has been identified, whether at an insti-

Information associated with the various territorial scales used in *A Guide to Seville's Historic Urban Landscape*

tutional level or by the local community, it is useful for the team of experts involved to establish a wide geographical area that encompasses it (i.e. a spatial framework within which to place it). This helps us put it in its wider context and allows us to draw parallels with other landscape classifications involving a similar or greater scale. However, above all, it acts as an initial spatial reference for characterisation tasks.

Based on this general approach, we can then establish the boundaries of our landscape. This should be done by combining two different ways of understanding a geographical area, namely one centred on the analysis of its tangible components and another focused on social aspects and perception. It should be remembered that these two facets are compatible with and complement one another. To sum up, it is essential to take into account both the tangible aspects of landscapes and the local people who interact with them and give the places they call home meaning, significance and value, based on their perceptions, experiences, emotions and practices (to name but a few examples).

Analysis of tangible components

Studying and interpreting the distribution and influence of the tangible elements of physical, environmental and cultural components is the most common way of establishing the boundaries of landscapes. Here, a quantitative methodological approach is often used. This is most commonly done using geographic information technology, specifically geographic information systems, as they allow different geographical features to be modelled, which can then be interpreted as relevant landscape variables. This approach is necessary in order to assess the extent to which each one

shapes the character of a landscape in an integrated manner and one which takes into account how they interact with one another.

Selecting and gathering available sources of geographic information appropriate for undertaking an analysis at a local level is an essential part of this process and normally the one which entails the greatest limitations. Given that each landscape has its own specific features, appropriate geographic information will vary from one landscape to another. Whatever the case may be, during characterisation, the variables with the greatest influence on the landscape under study must be identified in addition to available sources of information. Taking this into account, below is an overview of the various categories of information or variables:

· Physiographical variables: these allow morphological aspects and identifying features of the landscape's physiognomy to be analysed. The main source of information here are digital elevation models, from which information on relief, slope, aspect and roughness can be obtained. Digital elevation models are also the basic source of information used for analysing visibility and interpreting landscapes by means of topographic profiles. In addition to the above, geomorphological information is also important for understanding landforms and the processes that gave rise to them (known as 'morphogenesis'). This should be combined with information on the distribution of surface water, which conditions the evolution and features of the relief. This should take into account river courses and basins, source water bodies and springs. The main challenge here tends to be a lack of detailed information.
· Biophysical variables: this refers to geographic information that gives us an understanding of the

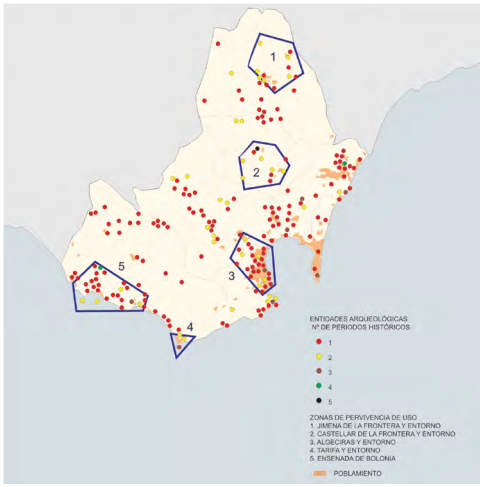
biodiversity and spatial distribution of vegetation cover, forests, unique tree formations and habitats of plant communities. These variables must be combined with information on the characteristic wildlife associated with these habitats.

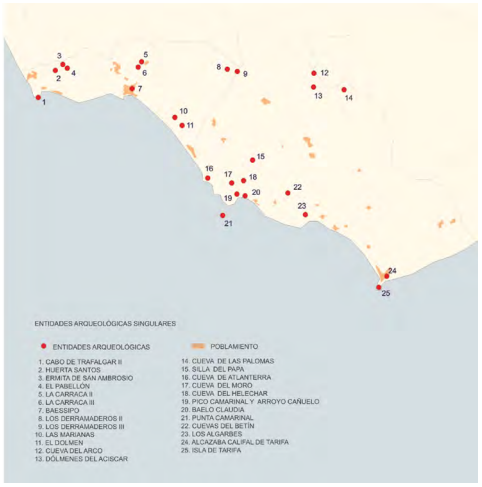
- Historical and cultural reference variables: these include information on the various marks left by humans on the territory. They involve information on settlement systems, land use, land division and boundaries, hydraulic infrastructure, communication infrastructure, livestock routes, historical paths and routes/roads, energy infrastructure, mining complexes, protected territorial heritage, cultural and natural heritage, unique buildings, toponymy, etc. In cultural landscapes, due to their very nature, heritage plays an important role when it comes to their characterisation. Their spatial distribution can be analysed by looking at their various tangible manifestations. These are not limited to built heritage; they also include the footprint of socio-economic activities that have shaped the landscape over time. In this regard, knowledge on the inherent characteristics that allow a landscape to be categorised according to a specific system will determine how information on land use is studied.
- Visual perception variables: this includes a number of variables obtained through a series of analytical procedures (viewsheds, analysis of intervisibility, etc.) in order to determine visible areas or visual range from the most common observation points (natural or man-made viewpoints, heritage landmarks, trails and routes, etc.). Geomorphology is another aspect that plays a major role in shaping the appearance of a landscape and everything in it. As such, discontinuities and significant changes in its makeup are key to establishing spatial limits, particularly when combined with various types of visibility analysis.

Whatever the case may be, in order to understand the continuity and discontinuity of thematic components, the density and distribution of elements, and the dominance of variables, how they interact with one another must be taken into account. Through trial and error, different proposals for boundaries may be established, these being shaped by how clear the spatial limits of certain attributes are, the existence of areas of transition and the size of the area that needs to be covered in order to prevent possible impacts to the existing visual range. As such, it is possible to establish an initial set of spatial boundaries for the landscape in question and then adjust these based on the analysis of social aspects and perception, and subsequently the results of a field survey. Here, sets of orthoimages and aerial photographs taken over time may be useful, as they allow us to monitor recent processes and changes in the landscape.

As discussed in chapter two, the physical makeup of the Bolonia Bay area results in a closed viewshed, the limits of which surround the Baelo Claudia archaeological site ⟀. However, in its landscape guide, the decision was taken to add another dimension to these natural boundaries by analysing their correlation with a series of cultural variables. To do this, the density and significance of its heritage elements were analysed and certain aspects relating to the perception of visitors were taken into account. The latter will be discussed in the next section. All these analyses pointed to the particular uniqueness of the bay area, the boundaries of which are clearly marked by the sea, Sierra de la Plata and Sierra de San Bartolomé.

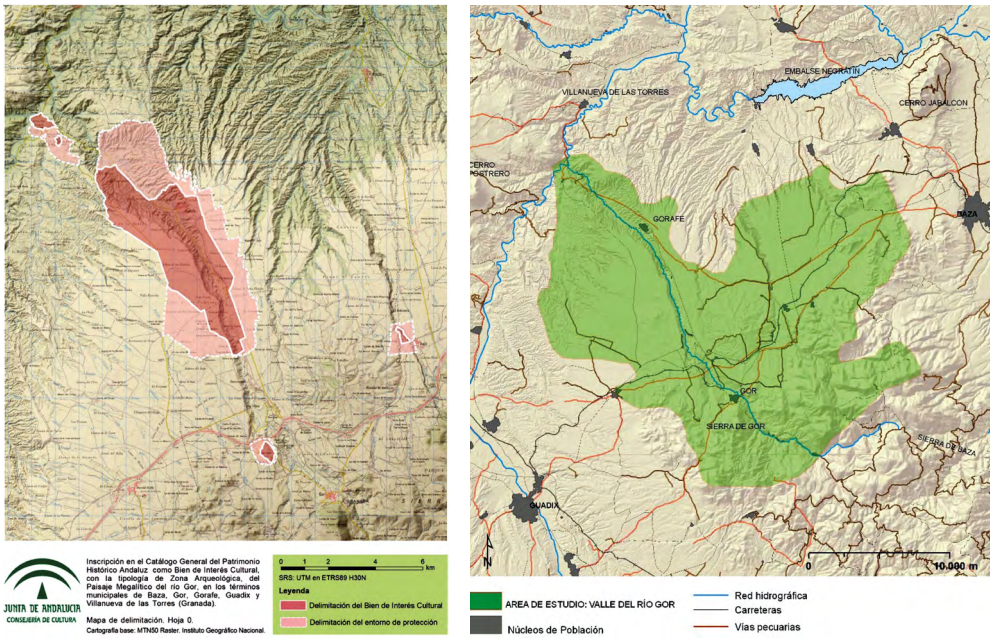
In the case of the megalithic landscape of the Gor valley ⟀, it was checked whether the boundaries





established by archaeologists would be similar if environmental and visibility-related criteria were included in the delimitation process. This saw a team made up of experts in this local cultural heritage produce an Expert Opinion on the Cultural Landscape of Gorafe ⟀, which included a proposed set of boundaries based mainly on the distribution of archaeological sites. An Assessment of the Physical and Natural Environment of the Gor Valley ⟀

Maps showing the scope used in *A Guide to the Cultural Landscape of Bolonia Bay*



The boundaries used in the legal document affording protection to the megalithic landscape of the Gor valley (Granada) and its landscape boundaries

was then undertaken, and an alternative set of boundaries which included environmental and visibility-related criteria was created. Depending on the criteria used, the resulting boundaries for the cultural landscape were very different, as were those finally used in the legal document establishing the protection of the landscape ⟀ as an asset of cultural interest (these being more similar to the former than the latter).

Analysis of social aspects and perceptions

In the vast majority of landscape studies, the analysis of tangible components is the main procedure used for delimitation, with the relationships and experiences of individuals with their landscape being relegated to a residual position or not being taken into account at all. Nevertheless, there are studies that show how, by taking into account the

experiences, spatial conceptions and perceptions of local inhabitants relating to their landscape as well as the symbols they attach to it, we are able to identify intangible aspects that are equally important for understanding the spatial scope of a landscape and the importance of certain areas.

Unlike tangible aspects, the analysis of intangible aspects requires social research methods involving interaction with local inhabitants. Here, fieldwork is essential and the qualitative research techniques used in anthropology are particularly appropriate for the type of research and scale involved. The results obtained using such techniques should be used to complement those yielded by other fields. The aim is not to analyse the tangible (physical environment) and intangible (social aspects and perceptions) as two separate dimensions but to approach them in an integrated manner.

A series of guidelines and procedures may be created, which, as in the first case, may be adapted and added to in accordance with the specificities of each landscape. The first step in this process is to establish and create a timeline for the various phases of action, from initial planning to fieldwork. During the planning phase, general information should be gathered and examined relating to various aspects, which include but are not limited to the physical area, sociocultural practices, the main socio-economic activities and unique heritage. Furthermore, the responsibilities and features of the main local organisations, bodies, institutions and groups should be established, something that should be done when the stakeholder map (discussed above) is created.

Fieldwork per se is based on a series of techniques, which, depending on how immersed and involved

the team is at a local level, include observation and records (photographs, audio recordings, etc.), participant observation, interviewing (in its various forms), focus groups and participatory workshops, the result being methodological triangulation. Each one of these may be sufficient in order to achieve the objectives being pursued, in accordance with the circumstances and needs in question, and it is the responsibility of the production team to select and use the appropriate ones.

Given the significant work, complexity and requirements these tasks involve, they should be coordinated and combined with an analysis of the perception of other landscape components carried out during the characterisation phase, with the different objectives and purposes being clearly differentiated in each case. For example, in the case of A Guide to the Cultural Landscape of Bolonia Bay ⟀, the fieldwork carried out by the expert anthropology team established, by means of interviews, that the local population felt a stronger sense of belonging to the specific area of the bay itself than to the municipality of Tarifa, where it is located. In order

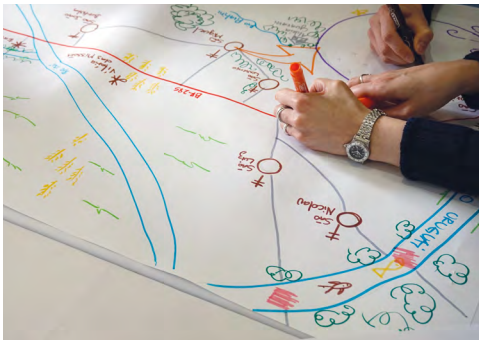
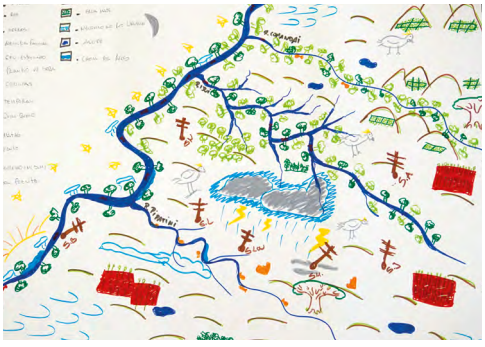
By taking into account the experiences, spatial conceptions and perceptions of local inhabitants relating to their landscape as well as the symbols they attach to it, we are able to identify intangible aspects that are equally important for understanding its spatial scope and importance.

to justify the spatial scope established for the area, in addition to the criteria mentioned in the previous section, a survey was conducted amongst visitors to the Baelo Claudia archaeological site. This provided relevant information on the landmarks in the landscape that supported said spatial scope.

Information gathered through the various techniques available may either be spoken or written, and in certain cases may be accompanied by visual content (collaborative maps). Its analysis and interpretation should provide new insights, or help revise, refine or assess quantitative information previously obtained. Whatever the case may be, it is the collaborative work of the team involved in the characterisation process that, through consensus, helps establish the most suitable boundaries.

This collaborative way of working was put into practice by the IAPH during a participatory workshop organised in Brazil as part of a cultural landscape training course on the management of the ruins of Jesuit missions in the country, aimed at technical staff from public authorities at various levels (federal, state, regional and local). As part of the training process, a participatory workshop on creating cultural landscape guides ⟀ was organised. This involved creating collaborative maps of the Parque Histórico Nacional das Missões (in Rio Grande do Sul, Brazil), which is home to the remains of Jesuit missions built in the land of the Guaranis ⟀, declared a UNESCO World Heritage Site.

Another example of a collaborative process is the identification and delimitation of inhabited, emblematic landscapes promoted by the Chair for Citizen Participation and Valencian Landscapes ⟀ at the University of Valencia. Its aim is to record

Photographs showing the process used to create collaborative maps of the Parque Histórico Nacional das Missões (Rio Grande do Sul, Brazil)

The analysis and interpretation of information gathered using various social research techniques, based on interaction with local inhabitants, should be used to help revise, refine and assess quantitative information in a collaborative manner until the most suitable boundaries are established.

landscapes which people have a special link to as well as any other landscapes in the Valencian Community considered representative or unique. Each landscape included is assigned a type (vineyard, woodland, urban sprawl, industrial, etc.) and described in a succinct manner, with aspects such as environmental quality, cultural and heritage wealth, visibility and symbolism being covered.

This stage ends with a twofold process involving methodological triangulation and data triangulation in order to verify and compare patterns identified in the results obtained during both phases, check the interpretation of the production team and strengthen the validity of the conclusions drawn. The final step is then to check the boundaries proposed on the ground and make any necessary adjustments.

Creating maps

In addition to the delimitation of the landscape being studied, based on the analytical procedures discussed, a set of spatial data is generated, which, together with the geographic information from the variables considered, allows us to create various

thematic maps. These should provide information on the local and regional territorial context of the landscape, the distribution of its main components (represented individually or in groups), heritage resources (natural and cultural), viewsheds, etc.

In addition to commonly used types of maps, collaborative maps may also be used as well as schematic maps which help understand the territorial structure by identifying the makeup and main spatial references of the landscape. Likewise, the creation of topographic profiles can be useful for helping us understand the distribution of certain components of the landscape (see chapter four). In addition to this, three-dimensional models of relevant sections of the landscape may be used for illustrating and supporting descriptive content in the final document (see chapter four).

04

Nature: biotic and abiotic factors

Nature and culture

Nowhere is the relationship between nature and culture better seen than in landscapes. When it comes to cultural landscapes, their essence and their character in terms of heritage may revolve around natural elements, with well-known examples being Sugarloaf Mountain in Rio de Janeiro and Mount Fuji in Japan as well as Mount Timanfaya in Lanzarote and Mount Parnassus in central Greece. However, they may also provide a scenic component without which the heritage values of a landscape would be incomplete or difficult to define. For example, it would be difficult to imagine the Vega de Granada without the backdrop of the Sierra Nevada, or the valley where Anguiano and the Monastery of Nuestra Señora de Valvanera are found without the Sierra de la Demanda. Regardless of whether such natural elements represent the defining feature of a landscape or provide it with a prominent backdrop, they must be recorded in an orderly manner following a logical sequence in order for us to subsequently establish how they interact with those created or imagined by humans. Furthermore, the cyclical changes of the natural environment mean the way a landscape is perceived is marked by great contrasts, something which is not always properly dealt with in landscape analyses. Examples include the difference between day and night (and everything in between) as well as the seasons and the transitions between them.

The purpose of analysing the natural components of a cultural landscape is (apart from identifying those that have taken on values as part of its heritagisation process) to produce an overview that outlines to what extent these components and their interaction with others have shaped the character of the

landscape in question, and lays out how to best protect them, manage them and monitor changes to them. The purpose of this is to ensure their heritage value is not diminished or jeopardised in any way.

We suggest the natural components of a landscape be studied in the following order:

- Landforms (geomorphology or analysis of relief)
- The presence (or absence) of water (whether running or standing)
- Climatic conditions
- Biodiversity (or lack of, which is not a bad thing), this including flora and fauna

Before looking at each of these points in detail, it is important to note that not all rocks, trees, species of animal and other physical components present in an area necessarily have to be considered natural elements. Stones arranged by humans, planted trees (such as in botanic gardens or commercial forests), and animals used for commercial purposes or in captivity (i.e. in farms, zoos, wildlife parks, etc.) should not be considered natural elements but additions to the landscape made by humans. Nevertheless, there is often considerable debate regarding what should or may be considered a natural element, issues which must be addressed during the characterisation phase. For example, although *Opuntia ficus-indica* was brought from Hispanic America and introduced to Spain's Mediterranean landscapes by humans, it now grows wild here and is commonly considered to be a natural feature of the region.

In terms of the main sources for analysing the natural environment, we may distinguish between four main types:

- Basic maps, which include topographic maps showing the basic aspects of the territory, such as relief, hydrology, infrastructure and population centres; and thematic maps covering aspects such as geology, rainfall and forests.
- Physical geography manuals and specific monographs on the natural environment.
- Area and town development plans, which are often available on the internet.
- Works of various kinds (books, paintings, films, etc.) which provide information on the various perceptions of the physical elements in a landscape.

As with other aspects involved in landscape characterisation, the natural environment should not be studied by simply gathering geographic information. Instead, the aim should be to identify the most relevant aspects of each natural component within the landscape and its role in shaping it. This was the approach used in The Landscape of the Gor Valley's Megaliths ⟀, found in the Register of Landscapes of Cultural Interest in Andalusia ⟀. Here, the main aspects of the physical environment are briefly described (including climate, geology, hydrology, biology, etc.) for the purpose of subsequently explaining their specific influence on the character of the landscape.

Geomorphology

Geomorphological features (or orography) are one of the most basic and visible aspects of a landscape. Flat, open areas with a wide viewshed and few landmarks to offset the background scenery result in landscapes with poorly defined boundaries, gradual transitions and areas that cannot be easily distinguished. Conversely, in mountainous regions, the boundaries of areas with different char-

acteristics are naturally defined for us, something which often results in sharp contrasts between one side of a mountain range and another. These regions frequently have landforms that stand out and naturally become symbolic landmarks in the landscape (examples being Moncayo, Monte Hacho, Montserrat, etc.).

When working with landforms, certain basic information involves quantitative values used in the analysis of landscapes in general, not just cultural landscapes. As such, a series of basic concepts should be considered to begin with, namely:

· Elevation: this is represented by dots (spot heights) indicating the height of a feature that stands out in a landscape (generally summits and elevated areas). However, where there are depressions with no evident outflow to an external body of water (i.e. endorheic areas, which tend to have lagoons, sinks or pit caves), the spot height given is the lowest point of the basin.
· Contours: these are lines used on topographic maps which connect points of equal elevation. Maps with a scale of 1:50,000 (where the contour interval is twenty metres) and maps with a scale of 1:25,000 (where the contour interval is ten metres) are the most common.
· The average height of the landscape being studied: this is the mean of the highest and lowest points.
· The main slopes (which tend to be given as a percentage) and their distribution: i.e. whether they are generally uniform in nature or whether there are different types in the various areas that make up the landscape. Slopes can be steep or gentle. Steep slopes (such as escarpments) have a percentage of above 40%, whereas that of moderate

slopes ranges from 10% to 40% and that of gentle slopes is below 10%.

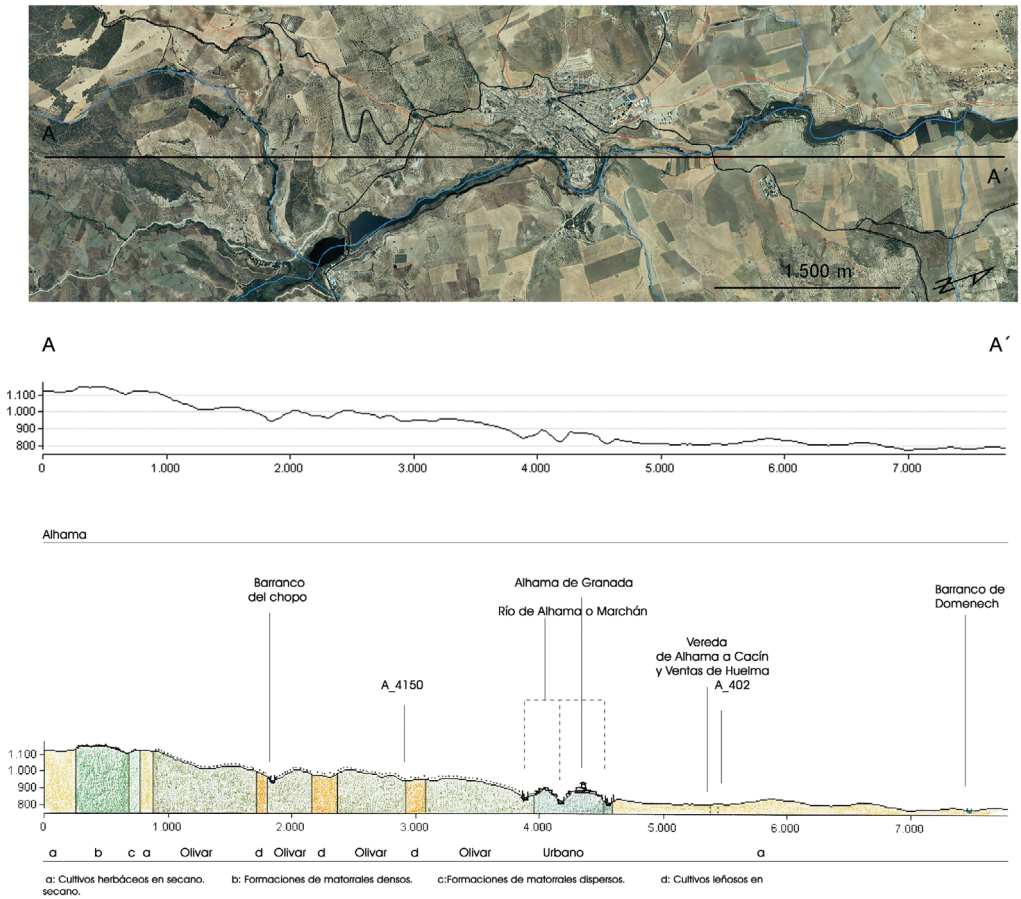
There are a series of other aspects relating to orography, which, despite not lending themselves quite so less well to being measured quantitatively, contribute to shaping cultural landscapes. These include the following:

- The main landforms (hills, rugged mountains, endorheic basins or areas, crests, etc.). Peaks may be represented by front profiles as seen from a given point in the landscape.
- Aspect: the direction a slope faces can significantly influence its climate (see below).

Valleys: shaped by rivers, these are made up of two opposing walls and a floor where they meet. They are generally U or V shaped, although they are often very wide or very narrow (as is the case with canyons, which are deep clefts between escarpments or cliffs). Surrounding the lower course of a river are the largest floodplains it passes through. These plains are often very fertile due to the deposition of alluvium.

- Open areas with flat landforms: these are sometimes due to a build-up of river-borne sediment, this being the case for most of the Ebro and Baetic depressions in Spain, the Po Valley in Italy, the Nile Delta in Egypt and the Mississippi Delta in the USA. On other occasions, they may have belonged to sedimentary basins that once formed part of the seabed and rose up due to isostatic movements (either because of tectonic uplift or changes to sea levels). This is the case with plateaus and, despite being smaller and more local in nature, moors.

Coastal geomorphology is a branch of geomorphology in which the focus is on the areas where the



Topographic profile of the milling landscape of Tajos de Alhama (Granada)

world's two most opposing ecosystems, i.e. marine and terrestrial, meet in a clear and distinguishable manner (although with certain transitions). They have their own features, which involve not only their landforms but also their rate of formation and particular physical characteristics (climate, biology, etc.). Here, we may distinguish between two types of coastline. The first is high coastlines, where cliffs and sharp relief by the sea are predominant. Examples include the Costa Brava in Spain, the White Cliffs of Dover in the UK, the French Riviera, most of Japan's coastline and the Amalfi Coast in Italy.

The second is low coastlines, which are made up of extensive sand formations on long beaches, each connected to one another. Examples include the coastline of Mauritania, Aquitaine in the South of France and the province of Huelva in Spain. Coastlines also offer a whole range of intermediate areas, which are difficult to define and where the transition between land and sea presents in a number of different ways. As such, processes such as tides (more visible in some areas of the world than others) and the presence of marshes, with their own physical processes and amphibian lifeforms, give rise to extremely rich regional diversity.

Rias and estuaries are coastal areas with their own specific features (they are not rivers, as they are visibly affected by the tides). Essentially, a ria is a long narrow area of water formed when a river valley floods and an estuary is the wide part of a river where it flows into the sea. Another related coastal area are deltas. Formed by sediments and river-borne material, these are where a river splits into several smaller rivers (branches) before entering the sea or ocean. These types of areas tend to give rise to marshes and complex ecosys-

Analysing the natural components of a cultural landscape allows us to establish to what extent they shape its character and decide on how best to protect them, manage them and monitor changes to them so that their heritage value is not diminished or jeopardised in any way.

tems. As such, it is not surprising that areas with such varied features have led to a wide range of processes of physical appropriation and identity formation amongst humans, who have turned them into cultural landscapes with profound meaning. These areas are also amongst those most at risk from the effects of climate change, something that threatens their values and in particular their heritage values (see chapter eight).

Water

Water is one of the most important forces that shapes a landscape. Its presence (which may be abundant, scarce or practically non-existent), movement (or lack of) and state (liquid, snow, ice, etc.) help explain landforms and the existence of certain species of flora and fauna, in addition to changing perceptions of landscape. As such, water (hydrology) plays a key role in physically shaping landscapes and often leads to them becoming cultural landscapes. For the purposes of our work, where water in a landscape is shaped more by climate than by hydrology, the criteria offered in the following subsection should be followed.

The elements of a landscape relating to water may be analysed in the following order:

- Springs: these represent ἀρχή (*arche*) or the origin of everything in the philosophical language of ancient Greece, given that water is essential for animal (including human) and plant life. Few things, natural or man-made, are so intrinsically linked to the idea of source and eternity as springs, which are held in particularly high regard in areas where water is a scarce resource. All mythologies and religions have created motifs, allegories and rituals based

on springs, these giving areas meaning and often resulting in them becoming cultural landscapes.

- Rivers: these are one of the biggest forces that shape the land, sequestering, carrying and depositing material (mainly sediment and pebbles) through erosion. They enlarge valleys, cut through mountains, and fill and form floodplains. As such, they must be thoroughly analysed in order to understand the morphology of any landscape. On occasions, in alpine and high-latitude climates, glaciers are mainly responsible for shaping the relief. In fact, in many places where these frozen rivers disappeared thousands of years ago, their mark can be seen in the region's orography (moraines, basins, rounded mountains, etc.). There are various types of fluvial systems, ranging from those which only flow for a few months or short periods over the year (i.e. ephemeral or intermittent streams) to those that have a constant flow (notwithstanding any seasonal variations due to climate).
- Lakes: in contrast to the constant movement of rivers (something that, according to classical sources, led Heraclitus to conclude that it is not possible to step into the same river twice), lakes and lagoons project an image of serenity and calmness. Although they are often formed by glacial activity, as described above, this is not always the case, as seen with endorheic basins (which have no outflow to other external bodies of water) and oases, to give just two examples. Lakes vary greatly in size, ranging from ponds to the Great Lakes of Canada and the USA, the latter having more in common with small seas than lakes. Having said that, where cultural landscapes are related to lakes, they tend to be medium or small in size.
- Wetlands and fens: these are areas where the presence of water (although not necessarily continuous in nature) gives rise to poorly defined areas

Images taken from the analysis of the course of the Guadalquivir river in *A Guide to Seville's Historic Urban Landscape*

that do not lend themselves well to human settlement due to the fact that they are generally not compatible with farming and provide the perfect breeding ground for endemic diseases. Despite being extremely important places for biological processes (which is why the Ramsar Sites international network ⟀ was set up to protect them), due to the reasons explained above, in many countries they have undergone mass drainage over the past two centuries and particularly over the last century. Marshland, mentioned in the previous subsection, is very similar in nature to these kinds of areas. However, their unstable nature, which makes them unsuitable for human activity, has not stopped them from often becoming cultural landscapes.

An analysis of water resources must be combined with an impact and threat assessment due to the

fact that, as in the previous case, various processes, and particularly climate change, may have a direct impact on the values they bring to cultural landscapes.

Climate

Before continuing with this section, it is important to note that the term 'climate' should not be confused with the term 'weather'. Climate refers to the atmospheric conditions that characterise an area, and involve averages and other statistical measurements based on data collected over a significant period of time. Based on this, conclusions such as 'it rains a lot in the North of England' or 'Rome has long, hot summers' can be drawn. Weather, however, can be defined as the atmospheric conditions present or expected at a specific time and place. Remarks such as 'it was icy in Madrid last night' or 'it is going to rain in Buenos Aires tomorrow' would be referring to the weather. When working with landscapes, our focus should be on climate.

Climate is a fundamental aspect of landscapes, shaping their characteristics and giving rise to a range of different perceptions, particularly depending on the time of day and year (i.e. season). Within the context of landscapes, particularly when it comes to their characterisation, the importance of climate stems more from the effects it has on their physical components (morphological, botanical, etc.) than the climate itself as a stand-alone phenomenon. It should be pointed out that the very definition of landscape, which implies a certain degree of stability, does not appear to go particularly well with the changing climatic conditions that affect them, even less so when we are dealing with the differences between summer and winter, or night

and day. That is why, as part of the characterisation process, we recommend identifying and focusing on more stable aspects of the climate that affect the landscape in question. Here, indicators that provide information covering at least a full year should be used (precipitation in cubic millimetres, average temperatures in degrees Celsius, humidity as a percentage, etc.). Based on the above, and particularly due to the important role they play in terms of the heritagisation of certain landscapes, changing climatic conditions that add variety, wealth and meaning to the cultural dimension of a territory must not be overlooked, even if they are not present all the time (for example, the rain in Santiago de Compostela, the wind in Chicago or the snow in Saint Petersburg).

In terms of climatic aspects that may be relevant to a cultural landscape, the following stand out: temperature, precipitation, humidity, wind and light conditions. Each one is briefly described below:

· Temperature has a direct impact on how a landscape is perceived, particularly where this involves extreme cold or extreme heat. However, above all it has an indirect impact on the speed and rhythm of certain processes, such as erosion and plant life cycles. Here, data can be obtained fairly easily. Average temperatures are relevant for most cultural landscapes, although monthly temperatures given on climographs are even more useful, as these combine data on temperature and precipitation. This allows us to build a much more detailed picture of the role climate plays in terms of the presence of water in a particular landscape as well as the flora and fauna present at different times of the year (given that many species migrate). For example, the intense heat in Seville from June to September

has resulted in a particular style of architecture and conditioned the flora present in its numerous parks. These were looked at in a specific study ⟀ carried out as part of the publication A Guide to Seville's Historic Urban Landscape ⟀.

· The amount of precipitation does not only impact upon light conditions (see below), it also gives rise to a particular kind of environment and has a clear effect on mood. For example, those that live in locations where it rains a lot (which include many well-known places) are more prone to be introspective and melancholic. Nevertheless, it should be noted that the effect of precipitation is different depending on its type. As such, a landscape where it drizzles a lot is not the same as a landscape where snow, hail and electrical storms are common. An objective piece of data when analysing a landscape is the number of millimetres of precipitation it receives (one millimetre corresponds to one litre per square metre of water on the surface), as well as its annual distribution, for which climographs are used.

· Humidity refers to the amount of water vapour present in the air. Although this may lead to the formation of fog, mist and other low-lying clouds, it does not cause precipitation. As such, it is closely linked to visibility conditions, which are often affected not just by water vapour but also by other particles suspended in the air, such as dust and sand (lithometeors), these causing haze. Humidity is also closely related to air temperature. As such, chilling air can cause the water vapour to condense and warming air can cause it to evaporate. It is no surprise that a landscape's climate and thus the type of clouds it tends to get play an important role in shaping it. In fact, in certain landscapes, these represent some of their defining features. This is because not only do they affect the mood of local people, they also limit and establish the boundaries

of viewsheds, and result in certain elements being given more importance and different meanings than in sunny, less obstructed landscapes. For the purpose of landscape analysis, average monthly humidity levels as well as the average number of days of fog per month are both useful pieces of data.

· Wind also has a direct and extremely varied impact on how a landscape is perceived. For example, it shapes landforms, plays an important role in erosion and affects how humid or dry a region is, in addition to influencing its agrological conditions and economic activities. In fact, wind plays such an important role in how certain landscapes are perceived that the term 'wind landscapes' has been coined. The majority of such landscapes have significant cultural associations, examples being Emporda, Menorca and the Strait of Gibraltar. Information on wind can be easily obtained from weather stations, although, as with the data discussed above, it is important to look at seasonal and monthly variations. This aspect was evident in the study of the heritage and socio-economic context of Bolonia Bay, a coastal area in the province of Cádiz whose character has been and continues to be shaped to a significant degree by the levant. Here, the intensity of this easterly wind that blows in the western Mediterranean conditions tourism in the area and makes it an ideal place for water sports that depend on the wind.

· Light conditions (sunshine) can present slight or extreme differences due to location as well as differences between day and night, the effect of mountain ranges and the influence of air masses of various kinds. Broadly speaking, changes can be seen gradually over large areas. It is pretty evident that light conditions vary greatly in different parts of the world, mainly as a result of the dominant

Climate is a fundamental aspect of landscapes, shaping their characteristics and giving rise to a range of different perceptions, particularly depending on the time of day and year.

climate. As such, the Mediterranean or subtropical climate is characterised by its abundant and intense light whilst oceanic climates, such as those seen in Atlantic Europe and the Pacific coast of a large part of the USA and Canada, are characterised by an abundance of clouds as well as dark autumn and winter days. A useful, objective piece of data related to this is yearly sunshine duration (or sunshine hours). Also relevant due to its direct impact on a climate is how the duration of days and nights varies over the year. In the middle latitudes, where the majority of European countries lie, this aspect plays a particularly important role in how landscapes are perceived, especially when combined with other climate variables (rain, fog, etc.).

Whatever the case may be, it is important to establish impacts and threats relating to these variables as well as their potential effect on the heritage values of the landscape being analysed. Here, it goes without saying that the foreseen effects of climate change as well as its potential and varying impact on the variables analysed must be thoroughly considered.

In terms of cultural landscapes, it is also useful to study past climate conditions. In *The Landscape of the Gor Valley's Megaliths*, found in the *Register*

Photographs relating to wind, from
A Guide to the Cultural Landscape of Bolonia Bay

of Landscapes of Cultural Interest in Andalusia, this aspect was analysed and an understanding of the area's climate when its dolmens were built was gained. As well as looking at its past climate, the assessment also looked at its current climate for the purpose of explaining the impact it has on how the landscape is perceived nowadays.

Biogeography

Living things are a uniquely important part of landscapes. As such, the presence, scarcity or absence of vegetation is a defining feature when it comes to the physical makeup of a landscape. By contrast, animal wildlife, despite having different meanings in different landscapes, generally plays a less defining role given that its presence is more fleeting in nature (sometimes being hidden altogether) and it tends to change over space and time. However, that does not mean that in certain cases one of the most defining aspects of a landscape may be a certain species of animal, examples being the giant tortoise in the Galápagos Islands and the monarch butterfly in Michoacán and other parts of Mexico.

a) Flora

When analysing the importance of flora in a landscape, the following aspects should be covered:

- Size: from small to big, we may differentiate between herbaceous plants, shrubs and trees. In certain landscapes, all three types may be interspersed or overlap (the Mediterranean *dehesas* and forests, broadly speaking), whereas in others some are more common than others (meadows, maquis, forests, etc.).

· Plant density: where the density of vegetation is high, this means that cover is continuous and dense, an example being trees with large crowns that together form a canopy. Conversely, low-density vegetation is typically associated with landscapes where the land is mostly barren and where, when vegetation does appear, it is smaller, sparse and has less leaves. Clearly, many landscapes fall somewhere in between these two extremes. When analysing a landscape, it is important to establish the overall density of its vegetation as well as areas that are outliers, such as clearings in forests and gallery forests by rivers.
· Variety of species: no less landscape value should be given to areas with little variety in terms of plant formations. Conversely, no greater landscape value should be apportioned to areas with plenty of variety in this regard. Nevertheless, the number of species present, the percentage each one accounts for and their distribution should be established for the purpose of establishing the extent to which they contribute to the character of the landscape in question.
· Plant species which, due to their intrinsic characteristics, shape the colours and textures of the landscape (which should also be recorded): many of these appear during certain times of the year, this particularly being the case for deciduous and herbaceous species that dry out in the summer. This is an extremely important fact to bear in mind during the landscape characterisation process given that forests with various deciduous species offer their most impressive range of colours in autumn, these changing on a weekly basis.
· Other aspects: other very important aspects, not just for characterisation but also for landscape assessment, include the health of the various species present (are they suffering from diseases caused by

fungi, insects or other parasites?) as well as threats and other circumstances that may jeopardise the value brought by the vegetation to the landscape in question (in particular climate change but also wildfire, invasive species, urban development, the replacement of native species, etc.).

b) In terms of fauna, the following should be done:

- A list of all the species present in the landscape should be created, organised by order, family and species (as a bare minimum).
- The degree of visibility of the landscape's fauna should be established. This involves establishing if its presence is seasonal or linked to migratory or hibernatory processes.
- As with the previous point, other aspects that influence the characterisation and assessment of the landscape should be identified. These include the health of the various species identified as well as any threats to and impacts on them.

Heritage resources associated with the natural environment

Once the natural processes that have given rise to the physical environment of the landscape are known, the heritage resources associated with these processes should be identified. These resources should be approached from two angles, namely as elements that physically make up the landscape and as elements that give it meaning in an intangible sense. It is important to note that, despite being natural components of a landscape, these kinds of heritage resources are considered as such because they have taken on significant and symbolic values. To illustrate this point, think of a mountain landscape. It will often have numer-

Examples of resources associated with the natural environment in cultural landscapes

	Resources	Examples
General geomorphology	Mountains	Mount Ararat (Turkey)*
	Caves	Batu Caves (Malaysia)
	Fossil tracks/ Ichnites	Dinosaur tracks in Walmadany (Australia)
Coastal geomorphology	Capes	Cape Finisterre (Spain)
	Bays	Hạ Long Bay (Vietnam)
	Beaches and low-lying coastlines	Navagio Beach in Zante (Greece)
	Cliffs	Costa da Morte (Spain)
	Rivers and estuaries	Mar da Palha, Tagus estuary (Portugal)
	Deltas	Nile Delta (Egypt)
	Marshes	Camargue (France)
Hydrology	River sources and springs	Source of the Yellow River in Tibet (China)
	Rivers and streams	The Ganges (India and Bangladesh)
	Lakes	Lake Titicaca (Bolivia and Peru)
	Wetlands	Iberá Wetlands (Argentina)
Climate	Temperature	Moscow (Russia)
	Precipitation	Belém (Brazil)
	Humidity	San Antonio de Ureca (Equatorial Guinea)
	Wind	Punta Arenas (Chile)
	Light conditions	Aswan (Egypt)
Biogeography	Flora	Horsh Arz el-Rab / Forest of the Cedars of God (Lebanon)
	Fauna	Wildlife Reserve in Al Wusta (Oman)

(*) Although Mount Ararat is in Turkey, it has a deep symbolic meaning for the people of the neighbouring country of Armenia, which has always claimed it as its own.

ous mountains but not all of them will be heritage resources, even if they are closely related to one another in terms of the makeup of the landscape. This is the case, for example, of Huayna Picchu, a mountain rising above Machu Picchu in the Cusco region of Peru.

Information on such resources may also be organised using a system of classification or standardised terminology (see chapter two).

05

Time:
the historical construction of a place

Landscape and the historical construction of a place

Article 1 of the European Landscape Convention, which provides a definition for the term 'landscape', clearly recognises its diachronic, temporal and historical nature as being an inherent part of its character, where the latter is understood as being the result of action and interaction of natural and/or human factors. Based on this perspective, it is understood that such action and interaction takes place over a long period of time and is manifested through historical events and processes, which, when properly described and understood, make up the history of a landscape.

In line with the interpretation of the European Landscape Convention, the character of a landscape (a 'result') is constantly being shaped, with such action and interaction providing it with a permanent degree of change and modernity as well as a historical dimension. The latter is true provided the passing of time can indeed be observed and historical research methods and techniques may be used for the purpose of explaining the evolution of the landscape in question. This includes looking at aspects such as the individuals and forces that have shaped the territory, the mark these have left on it, what has remained the same through to the present day and what has changed (as well as how to bring these to light).

This approach to the historical facet of a landscape and history as the careful and analytical observation of change and transformation within societies and territories over time is particularly appropriate for use in a landscape guide. Based on the above, gaining an understanding of the territory in question

and its historical construction must form part of the objectives pursued by the team responsible for producing an overview of the history of the landscape in question. This should involve looking at issues such as the suitability of a theoretical framework, how sources should be handled and adapted to the scale used to study the landscape, how to identify and differentiate between the various processes that have contributed to shaping its character, and what tangible and intangible heritage resources related to historical processes identified may be observed.

History and historiography: a modern perspective

Since at least the 1980s, history has been undergoing a postmodern revision, the result of the big historiographical movements of the 20th century which had led to the discipline being considered a science based on a set of specific research methods and techniques being called into question. However, this revisionism has begun to threaten the scientific nature of history by doing away with the big explanatory paradigms in favour of microhistory. The result is a narrower perspective and a polarisation of the role of narration or language, something that has led to excessive narrative.

Leaving behind these extremes, any historical approach to landscape must be based on a critical historical awareness, one which does not focus excessively on small units of research but instead aims to educate and disseminate historical knowledge as well as build general explanatory models.

The ultimate aim here is to effectively join the dots in terms of past events and processes and the mark they have left on the landscape, as well as produce a clear and coherent overview of them based on a broad historical reading (regional, national or con-

Any historical approach to landscape must be based on a critical awareness, one which does not focus excessively on small units of research but instead aims to educate and disseminate historical knowledge as well as build general explanatory models.

tinental). This should be the primary objective of historians working on a landscape guide. Without limiting ourselves to any one of the approaches currently used in historiography, when looking at the history of a landscape, it is generally useful to adopt an open and critical stance that helps advance or even revise established paradigms.

The historical research method as applied to landscape

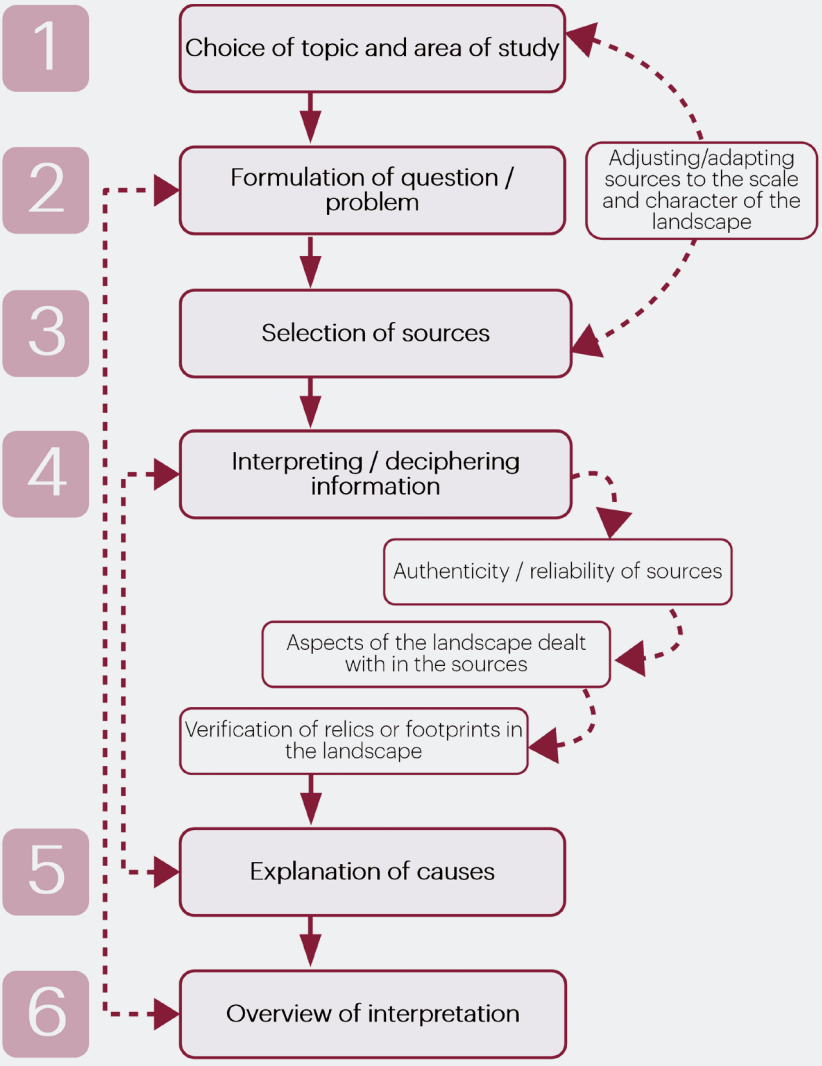
The tasks that commonly form part of the scientific method used in historical research are well established in the field. We will not describe and analyse them here, although we do encourage those interested in finding out more about them to go to the list of further readings. Nevertheless, establishing a model for studying the historical dimension of a landscape which includes the basic aspects of this method as part of a series of stages may be useful. This should cover the following tasks: choosing a topic and establishing its scope; formulating a research question/problem; working with historical sources (including their selection and critical analysis); correlating information provided by the source(s) with aspects of the landscape, and then

establishing and explaining causality; and lastly, formulating a historical interpretation or answering the question/problem put forward.

The approach taken to the first and second stages must be clear and simple, and the process as a whole must be able to be applied to virtually any landscape study within the context of this publication. Thus, the stages are as follows:

- During the first stage, the topic is chosen. This is the landscape as a complex object of study, with forces causing certain features to remain the same and others to change over time. Subsequently, a specific scope of study should be established. The scale should ideally be local for a landscape guide (see chapter three).
- During the second stage, the research question/problem should be formulated. This is what should guide all the historical research carried out into the landscape in question. As discussed above, this may take the form of a question, such as 'what is the sequence of past events and/or processes that have shaped the evolution of the landscape?', or a problem, such as establishing and describing past events and/or processes that have moulded the landscape.
- The third stage involves the selection of sources and is an essential part of historical research. There is an extensive body of literature available covering aspects such as their conceptual definition, handling and classification. As such, later on in this chapter a series of brief pointers will be given in order to add to what was discussed in chapter two. For now, it should be noted that the object of study, i.e. a cultural landscape, brings together many facets of human action and/or expression, and is 'multiscale' in nature. Taking into account

A research process for the historical study of landscapes



the above, when describing past processes, great care should be taken to properly adapt the sources used to each case.

- The fourth stage involves working with the sources selected and adapted to the topic and scale in question. A three-stage approach may be used here. Firstly, as always with the scientific method, the authenticity and reliability of the sources must be determined, this being essential in order to ensure the historical events are correctly interpreted. Secondly, the aspect(s) of the landscape each source provides information on must be established. Thirdly, it is must be checked that the information provided by the sources consulted is supported by a mark or relic in the landscape.
- The fifth stage involves establishing causality and explaining it, this being one of the cornerstones of history as a science. Once the correlation between a series of information and aspects of the landscape has been established, the information provided by the sources should be included in an explanatory cause-and-effect model, which will bring coherency to the interpretation.
- During the sixth stage, an overview of the historical interpretation should be formulated. This should respond to the initial research question/problem. It may be accompanied by an analysis of the historical territorial structure of the area studied. This stage involves a number of extremely important aspects, an example being the criteria used for historical periodisation, something that will determine how the past events and/or processes selected are presented, as well as the level of detail used to describe and explain them when formulating the overview of the historical interpretation.

As can be seen, this stage-based model treats a landscape the same as any other object of historical

research. Something else worth noting is the fact that, in the majority of cases, the content produced during the sixth stage (i.e. a diachronic presentation of the territorial structure and an overview of the interpretation of the historical evolution and contemporary features/nature of the landscape) is the only visible output for readers in terms of the historical research carried out.

The third and fourth stages, which address the issue of working with historical sources, and the inherent complexity of tasks involved in the sixth stage, which are fundamental in terms of sequence and interpretation, warrant further discussion.

Sources: selection and analysis as part of historical research into a landscape

The individual or team responsible for undertaking historical research should provide a solid, well-documented overview or account of how the landscape in question has evolved over time. This should be based on the analysis of a wide selection of primary and secondary sources, which may have been produced at different times and reflect different ideologies (see chapter two).

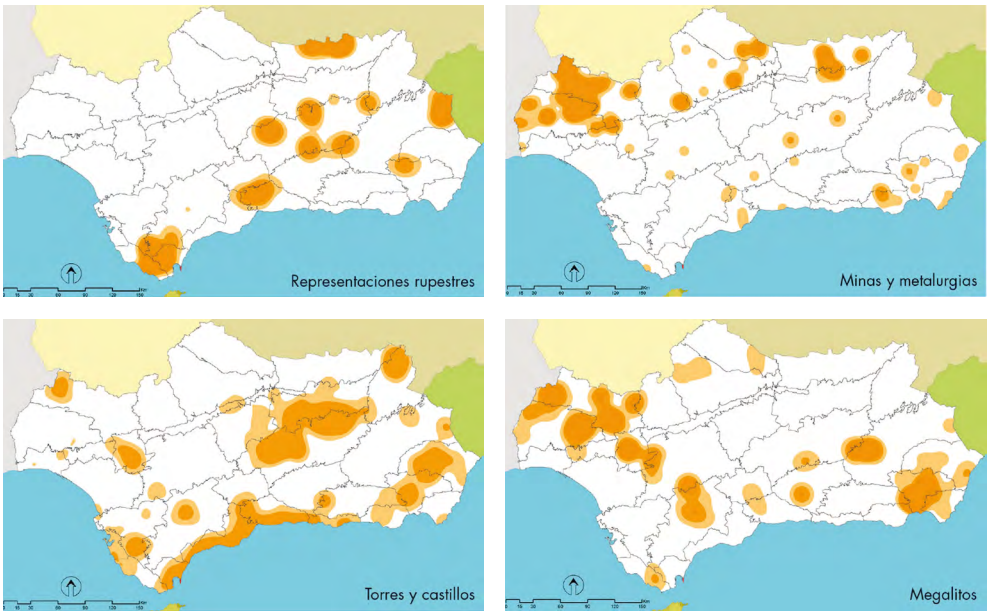
In addition to the criteria of authenticity and reliability, and depending on the research being carried out, others may be used, such as relevance and intent. For example, when studying the history of a landscape, the testimony of an individual involved in the partition of plots of land in the 18th century and an official census covering the same event may present diverging opinions when it comes to their classification, not in terms of whether they are a primary or secondary source but in terms of their intent. As such, nowadays we are more likely to avoid the classic dichotomy and use classifica-

tions more fitting to each context. These include suitability, quality and intent, to name but a few.

Depending on the context in which a landscape guide is created, historical research may require access to a particular type of source with greater or lesser frequency. For example, in the majority of cases, a solid overview of the historical interpretation of the landscape can be achieved by critically looking at secondary sources, such as publications resulting from historical research carried out into the territory in question. In such cases, it is necessary to carry out a thorough analysis of all relevant documents following the historical method for the purpose of avoiding any inaccuracies. Here, the period during which each source consulted was produced and/or its ideological stance should be taken into account.

Such historiographical sources may be either general or thematic:

- General: these include historical studies and overviews that aim to provide a general understanding of the territory. They may cover its entire chronology or part of it. They focus on regional and local history, and are often the first port of call for researchers, providing them with initial insights into historical trends and constants, which they can subsequently expand upon using other sources.
- Thematic sources: these focus on more specific aspects relating to the evolution of a landscape over time, and are extremely varied. They provide detailed information on forces that have resulted in certain features of a landscape remaining the same or changing. They offer information on the evolution of a landscape across various dimensions, including agriculture, funeral traditions, human settlement,



Maps showing the density of heritage, in *A Digital Guide to Andalusia's Cultural Heritage*. Project: *Heritage Characterisation for Andalusia's Landscape Map*

territorial communication and transport, territorial defence and security, and mountain irrigation systems, to name but a few examples.

In addition to these secondary sources, databases may also be used. These can prove very useful when studying a landscape, as they contain well-structured and standardised information. They often include an extensive collection of datasets (documents, images, movable heritage, buildings, archaeological sites, etc.), these being associated in the majority of cases with a wealth of chronological information and useful spatial references that can be used for the purpose of historical interpretation. For example, such data would allow us to analyse the location (concentration, dispersion, density, etc.) of infrastructure and human activities (settlements, mines, fortifications, etc.) and their relationship to the character of the landscape over time.

In other cases, where it is established that information on the history of a territory is non-existent or scarce, new knowledge may need to be generated through direct sources, such as statistics, censuses, images or any other primary source. When looking at the evolution of a landscape, it may be useful to use archaeological information; content produced by media outlets, including the written press, radio and television; sets of statistics and maps; legal sources; images of the territory, such as drawings or photographs; or even information from direct oral sources, such as interviews, public participation workshops, biographies and memoirs.

a) Adaptation to the scale used

In order to move from the general perspective discussed above to a more detailed one, sources must be adapted to the scale of the landscape being studied as well as its character and main identifying features. It should be noted that within this context, the term 'adapt' is used to refer to everything that is done when handling a source in order to allow us to extract the maximum amount of information from it for our landscape study.

For the purpose of adapting sources to a local scale, it may be useful to begin with a smaller scale in order to gain a broader overview of the territory. This will allow us to identify sequences of events that will help us contextualise those studied at a larger (i.e. more detailed) scale. It will also enable us to bring to light relevant aspects relating to the landscape at each scale, taking into account the main themes present at each level of historical research.

The outcome of this process should be a set of information that can be used during the fourth stage

of the research process, the purpose of which is to read and decipher the sources.

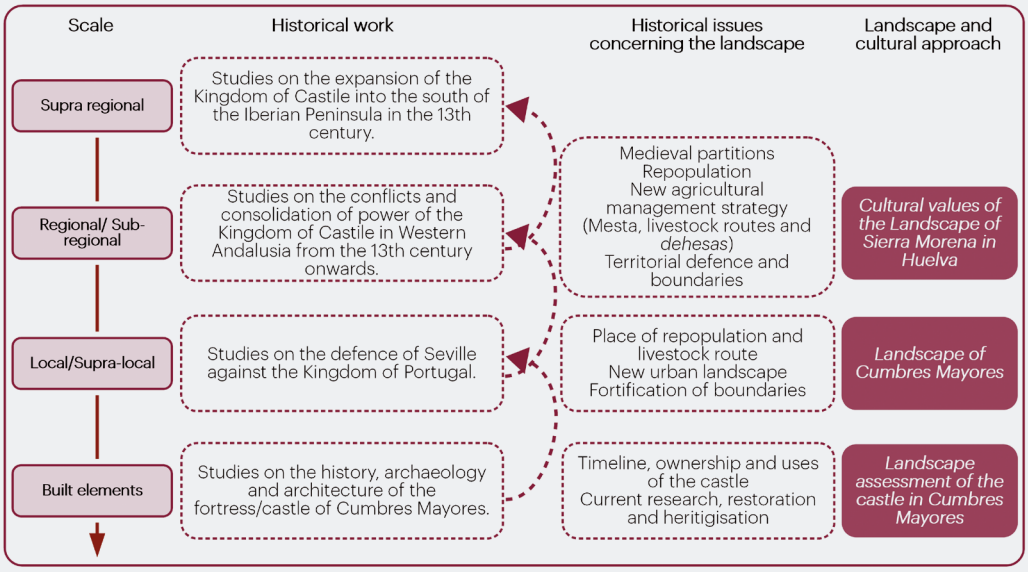
b) Analysis and critique of sources

Generally speaking, during this phase the sources are subjected to a process of interpretation. This involves firstly looking at their content and the meaning of their text or message (in the case of non-written sources), and secondly establishing or relating them to the various tangible and intangible aspects of the landscape. Here, the aim is to ensure past events and processes that have had an impact on the landscape in question are identified correctly and accurately.

This critical exercise allows us to establish with certainty that the marks of change and continuity observed in the landscape match the events described in the sources, and therefore relate them to a specific moment in time and put them in their historical context. A number of well-known examples from the field of historiography have shown

The individual or team responsible for undertaking historical research should provide a solid, well-documented overview or account of how the landscape in question has evolved over time. This should be based on the analysis of a wide range of primary and secondary sources, produced at different times and reflecting different ideologies.

An example of how historiographical sources can be used with different scales to study the evolution of landscapes in an area of Western Andalusia in the Middle Ages



that the rigorous handling of historical sources can result in disputes relating to processes within a landscape being settled on the basis of the fact that what is observed in the landscape matches what is described in the source in question. Here, we may cite the debate on whether the form of certain landscapes in Spain is due to the Roman system of centuriation used in some parts of Hispania or the partition of uniform plots of land as part of the settlement programme *Nuevas poblaciones de Andalucía y Sierra Morena* (New Populations of Andalusia and Sierra Morena) under the reign of Charles III.

The explanatory model: from events to processes

Once a solid set of sources has been established, an overview or description of the interpretation and timeline of the history of the landscape must be produced (the fifth and sixth stages of the process).

Firstly, causes-and-effect relationships must be established for the events previously confirmed using the sources. This necessary step has an important outcome: it moves the focus of the research away from isolated or largely insignificant events which cannot be linked to more well-established explanatory models for the history of the area. For example, where the context is nineteenth-century Spain, it may be interesting to establish whether the transformation of a peri-urban landscape arising from a change in the use and exploitation of the land is the result of an individual decision (inheritance, sale, etc.) or, where the change is widely seen in other nearby properties during the same period, the result of the process of confiscation of property from municipalities and the Catholic Church by the state. Whatever the case may be, unique events which are isolated in nature may

be taken into account where they have played a significant role in shaping the landscape in question (for example, a natural disaster, an event with far-reaching consequences, etc.).

Secondly, once a fairly extensive list of landscape aspects that have changed and remained the same in the local area in question has been created, we are in a position to establish the sequence or historical periodisation that will allow us to interpret the evolution of the landscape in question. This is an extremely important step. Although historical periodisation has traditionally been a key part of the study of history, within the context of a landscape guide it is important we adopt an approach that adds a strong explanatory component to this temporal sequence. This must provide a solid understanding of how and why the sequence has helped shape the current makeup of the landscape.

a) Keys to historical periodisation

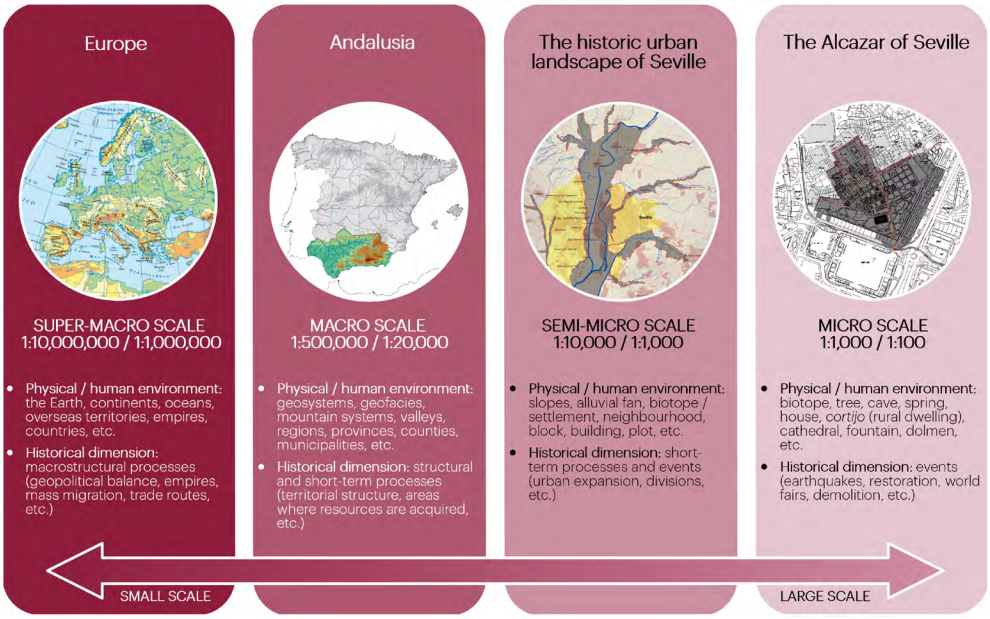
Once we have an understanding of the history of the landscape in question, we are able to establish moments during which changes took place or continuity was interrupted at a local level. Here, it is generally of little use to structure an interpretation around the classical division of history into ages, an approach that is generally regarded as bringing clear educational and standardisation-related advantages where the scale used is small.

Indeed, establishing how an age, epoch, era or period well established within the field of historiography applies at a local level is not an easy task. For example, in a landscape where mountain irrigation has remained practically unaltered since the Middle Ages, and which presents both formal

and functional continuity through to the current day, it may be stated that the forces of change/continuity acting on the territory did not bring about a new structure in this specific landscape during the Early or Late Modern periods. Here, the use of these extremely extensive standard blocks of time would result in a rather meaningless and superficial description of the historical processes relevant at the local level.

The most appropriate spatial scales for gaining effective insights into the past have been identified in a number of studies on territorial and landscape analysis. These range from the micro-spatial scale, where the focus is on events, to the macro-spatial scale, which centres on structural and short-term processes, to name the most appropriate ones for landscapes. At a micro level, the scale is limited to the built level, whereas at a macro level the scale is regional. The middle ground is occupied by a semi-micro level (amongst others), where events and short-term processes come together, these being particularly suitable for studying a local area (i.e. a city or municipality). This model is useful for helping us approach the chronological and spatial components of a territory from different angles.

What is particularly useful about this is the fact that it allows us to look at the history of a landscape through the processes that have shaped its character rather than through a purely chronological lens. This allows us to see landscapes as multi-dimensional and resilient, as unique settings where change and continuity over time reveal themselves with varying degrees of clarity. It follows on from this that the historical periodisation for a particular landscape (and the events and circumstances that have shaped it) will also be unique, largely



Spatial-temporal scales of analysis developed for historic World Heritage Cities

determined by the specific region or geographic location where it is found.

In addition to the above, in order to establish the historical periodisation for a landscape at a local level, the start and end of each block of time in its timeline must be established. Here, establishing a set of stable, meaningful and well-defined forms or types of functional organisation for the cultural landscape in question can be helpful. This exercise is theoretical in nature but is a good starting point. For example, by taking the landscape's main identifying features or predominant functional type (mountain irrigation, mining, etc.), we may reasonably conclude that these are what have cemented and shaped its character as part of considerably stable and continuous historical periods or processes, and that it would be their alteration (due to either internal and/or external factors) that would

cause the landscape to evolve and change. Based on this, we may establish points of change when a new type of landscape appears, doing this until we reach the present day.

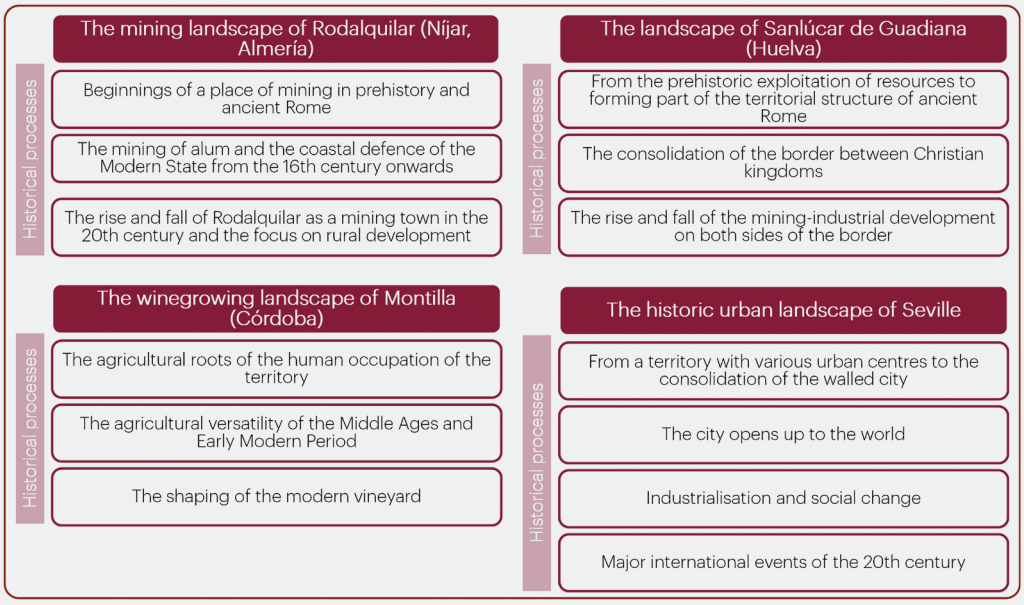
Whatever the case may be, something that any sound approach to periodisation achieves is that it helps us produce an overview of the historical territorial structure of the area being studied. Within this context, the term 'territorial structure' is used to refer to the means and strategies used by societies over time to inhabit and move around the area they call home, which have resulted in a specific makeup of nodes and networks, i.e. a pattern of settlement and a system of communications in constant dialogue with the physical conditions of the territory and the process of anthropisation.

b) Overview of the historical interpretation of the landscape

If it is held that a landscape is more than just its physical features and morphology, and reflects a particular social, economic, political and even mental or ideological world created by humans in a particular territory, then when explaining its history the focus should not be on creating a list of events, individuals or groups. Rather, when formulating the historical interpretation of a landscape, the following aspects should be taken into account/ covered:

- The contextualisation of stakeholders and events that have helped shape the landscape: this involves establishing and explaining the role each one has played in its history.
- The integration of all the elements that have been identified as being factors and variables in terms

Historical processes identified in three landscapes of cultural interest in Andalusia and in Seville's historic urban landscape

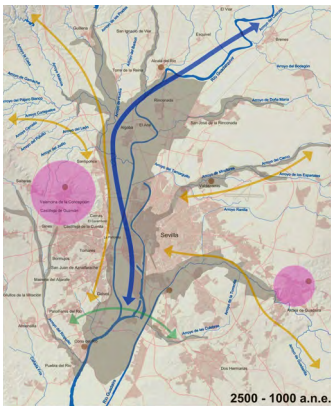


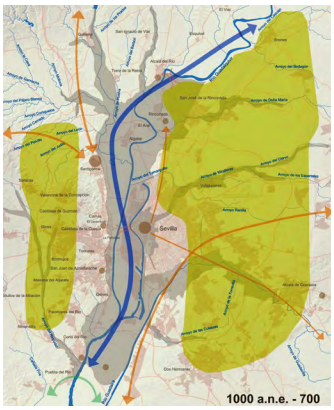
of the forces of continuity and change in the landscape: these may be understood, for example, as being the dialectical result of the interaction of said elements in the landscape.

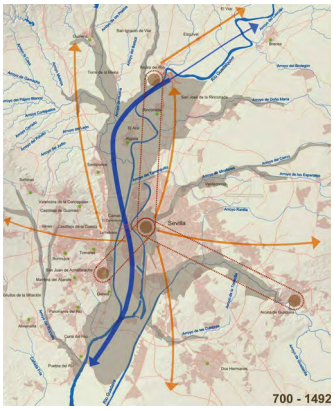
- The formulation of the historical interpretation: this is something that has played a key role in history becoming an academic discipline (a 'science') in its own right. Written language is the most common tool used for explaining history, and can take various shapes and forms, from the language of mathematics or statistics (with the help of graphs, charts and tables) to descriptive and argumentative language, to name but a few examples.
- The creation of a diachronic overview of the territorial structure of the landscape: this should incorporate and be consistent with the various levels used for its historical interpretation. It may be adapted to each particular case and scale used, making use of elements such as descriptive texts or diagrams/visual content with geographic information or chorems, or both.

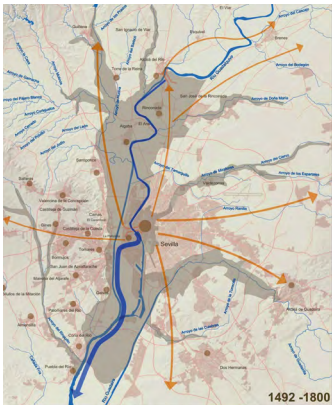
As such, based on the above, within the context of landscape analysis, the periodisation of historical processes involves creating a series (sequence) of blocks of time characterised by the stability and continuity of a set of environmental, social, economic, political and ideological aspects in the landscape. Interruptions to this stability or continuity resulting from events or processes should mark the end of each block of time in the evolution of the landscape.

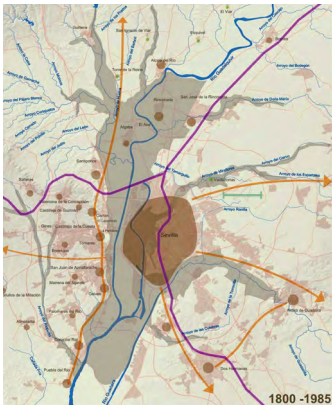
Lastly, when deciding on the communication strategy to be used in a landscape guide, the audience it is intended for should be taken into account. This may be the general public, academics, the public sector or a wide range of territorial stakeholders. Although in-depth knowledge may be developed

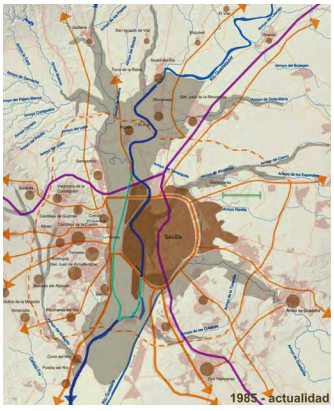












Images showing historical territorial structure, in *A Guide to Seville's Historic Urban Landscape*

The periodisation of historical processes involves creating a series (sequence) of blocks of time characterised by the stability and continuity of a set of environmental, social, economic, political and ideological aspects in the landscape. Interruptions to this stability and continuity mark the end of each period in the evolution of the landscape.

where necessary, landscape guides should provide an accessible and carefully constructed overview of a landscape's most important aspects.

Heritage resources associated with the history of a territory

Heritage resources associated with the history of a territory refer to immovable (built), movable, intangible or tangible relics that bear witness to the patterns of occupation and exploitation of the land seen during each of the processes that have marked its most significant changes. These resources provide us with information about these changes and represent a legacy we are responsible for passing down to future generations. As such, it is important a landscape guide clearly shows these relationships in order to ensure it meets its dual purpose of: 1) educating and adding to what is known about the history of the landscape; and 2) raising awareness and even providing guidance in terms of heritage management.

TERRITORIAL STUDIES

- Geomorphology and the city: looking at landscape through the physical makeup of the territory
- The relationship between urban landscape and regional/spatial and town planning
- The river and the city: an environmental perspective

HERITAGE STUDIES

- The hidden city: Seville's archaeology and historical urban landscape
- Historic production landscapes in Seville
- Planted vegetation in the makeup of Seville's historic urban landscape
- The construction of urban landscape: street furniture and facilities
- Seville's historic landscape: festive events and religious celebrations
- Seville's new architecture and its relationship to landscape

PERCEPTION AND IMPACT STUDIES

- Seville: perceptions and admiration. The construction of landscape over time
- Perceptions of Seville's historic urban landscape through the media
- Seville's new architecture and its relationship to landscape

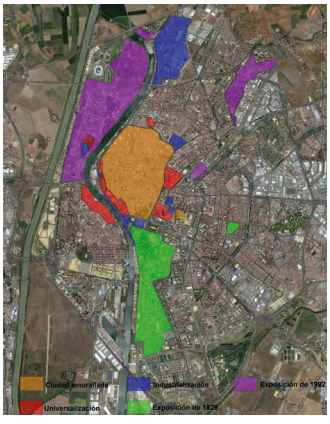
Thematic studies carried out as part of *A Guide to Seville's Historic Urban Landscape*, accessible through the *IAPH Digital Resource Repository*

The objects, ideas and symbols that may be associated with a landscape are potentially immense. When creating a landscape guide, it is a good idea to establish what kinds of elements it would be best to identify in order to illustrate each historical process as accurately as possible. Following this schematic and practical approach, we recommend firstly consulting resources that deal with elements in a systematic and standardised manner, such as thesauri, glossaries and established lists. Following this, depending on the particular focus of the landscape guide in question, the group of elements to be used for building an understanding of the history of the landscape should be chosen.

Those which best represent the processes in the historical evolution of a landscape may well be

built elements of a territorial nature. This refers to infrastructure seen throughout a territory which shares common features. For example, in order to illustrate a historical process of industrialisation based on mining, or the consolidation of an agricultural area, it may be best to use elements such as roads or open-pit mining sites, or rural divisions based on land use (for example, olive groves or vineyards).

Certain built elements (namely large buildings), such as castles and fortified towers, may also be considered to have a territorial scope where they are studied as part of complex networks or lines



Urban spaces associated with historical processes and events in the city of Seville

Heritage resources associated with the history of a territory refer to immovable, movable, intangible or tangible relics that bear witness to the patterns of occupation and exploitation of the land seen during each of the processes that have marked its most significant changes.

of defence, i.e. beyond the level of each constituent building.

In urban contexts, new roads, open spaces and urban expansion, to name just a few examples, may also represent built elements of a territorial scope. Ultimately, this approach allows us to link a series of elements to each historical process or event, which, when taken as a whole, acquire greater value than when studied individually.

06

Uses:
human activities

Cultural landscape as a social construction: dynamism and human-driven change

Within the context of the characterisation of cultural landscapes, activities carried out by humans are considered part of their process of social construction and provide valuable information on their heritagisation. As a socially constructed reality, in each landscape a dialectic develops over time between what has already been constructed, what is being constructed and the understanding of this reality amongst those responsible for constructing it. The social construction of reality thus involves agreement, disagreement and constant changes in terms of what exists, with certain practices being discarded in favour of others, changes being made to them when they are no longer supported by society, or them being kept in place. This process leaves a mark on both the tangible and intangible facets of cultural landscapes, as it influences all human practices as well as the conceptions of such landscapes.

The field of anthropology allows us to study the uses (social, economic and symbolic) given to cultural landscapes by humans, as well as the changes and transformations these have given rise to. This is based on a widely accepted approach within the field that involves looking at the ways in which society relates to its environment from the perspective of its protagonists. It also provides us with information on how physical, social, political and economic circumstances have given rise to many different responses throughout history.

Thus, despite the fact a thorough description of human activity should include input from numerous fields, such as sociology, human geography, archae-

ology and economics, the anthropological approach is always valuable, as it allows for it to be analysed based on a combination of information obtained at a macro level and information obtained at a micro (i.e. local) level, both of which are dealt with in this section. Furthermore, it places the question of how people perceive and interpret their surroundings at the heart of the analysis, something which we will look at in the next chapter.

Analysing human activities as part of landscape characterisation

Analysing human activity as part of the characterisation of a cultural landscape involves identifying and describing changes that have taken place as a result of the action and interaction of natural and human factors (i.e. people with their natural environment), this being reflected in the definition of the term 'landscape' given in the European Landscape Convention.

The dynamic and dialectical nature of this is highlighted by UNESCO in Article 1 of the Convention Concerning the Protection of the World Cultural and Natural Heritage ↙, which includes cultural sites (i.e. cultural landscapes) as part of 'cultural heritage' and defines them as 'the combined works of nature and man'. In fact, the dynamism of landscapes is explained by the various strategies developed by humans for exploiting and using the resources available to them based on the limitations and/or advantages offered by their natural environment, in addition to the successive internal and external social, economic and cultural forces present. As such, the ways in which this interaction has manifested itself and may continue to manifest itself in cultural landscapes provide us with a particularly

The social construction of reality involves agreement, disagreement and constant changes, with certain practices being discarded in favour of others. This process leaves a distinct mark on the tangible and intangible facets of cultural landscapes.

useful opportunity for identifying and analysing many of the unique aspects and values that play a significant role in their characterisation and interpretation.

Human action and activity help make cultural landscapes stand out from one another and contribute to their uniqueness, shaping them and their collective memory. As such, it should come as no surprise that it is regarded as one of the aspects with the greatest influence on the makeup of a landscape and key to turning a natural landscape into a cultural one.

Looking at landscapes from the perspective of human activities shows us just how closely they are related to the intangible dimension of a society, which includes its values, goals, needs, expectations, wishes and ideologies, to give just a few examples. This approach allows us to incorporate in our analysis the cultural values attached to a landscape by society at a given moment in time as well as identify its inherent qualities. Furthermore, it reveals their complex nature, as their analysis involves looking at a variety of factors, circumstances, stakehold-

ers, and contexts (social, political and economic) relating to their development and adaptation over time, as well as their continuity or disappearance.

Analysing human activities also allows us to identify and establish how they relate to heritage resources, in the same way as with historical processes (see chapter five). This enables us to see cultural heritage as a group of tangible and intangible manifestations connected to one another on the basis of their function, history and/or territorial context, as opposed to a series of isolated elements. Even in contexts that initially appear to be less influenced by humans, their analysis will often reveal that humans have had a significant impact on the environment as well as provide valuable information on cultural strategies of settlement and land exploitation and/or use.

Identifying and selecting activities

When identifying and selecting activities undertaken by humans in a landscape over time, the following guidance should generally be followed: select those that have had the greatest impact on its makeup; work with an extensive time frame, the mark of which can be seen in the current landscape; and differentiate between historical activities and current ones.

When selecting activities based on the impact they have had on the makeup of the landscape, a brief assessment of each one should be produced, rather than a thorough description. This assessment should provide relevant guidance and keys for identifying the characteristics and unique features of the physical environment, historical processes and existing heritage resources. Part of this task

involves establishing the location and boundaries of the geographical areas of the activities, highlighting the connections between these, and taking into account how social perception has influenced the resources produced and/or exploited, and/or the transformation of the environment.

The time frame used for the identification of activities must be based on how long humans have been present in the landscape in question. It must be approached from a diachronic perspective and be based on the mark they have left behind in the form of heritage.

The fact that a human activity was/has been undertaken continuously over time does not necessarily mean it has had a major impact (i.e. left a significant mark) on the territory in question. As such, it is essential to establish which existing heritage resources may be associated with each activity, in addition to the period (time frame) during which it was/has been present. In other words, the existence of an activity over long periods of time must not be automatically taken as meaning it has played a substantial role in shaping the makeup of the landscape. The existence of an activity over time may be continuous or discontinuous, and involve periods of varying intensity. The latter may involve an activity going from playing an important role in a landscape to its practice and impact declining or disappearing altogether before once again having a significant or constant presence. Such trends largely depend on how each activity fits in with the economic, social and political features of each historical and cultural context. As such, it is necessary to distinguish between activities that have been developed and survived through the centuries, continuing through to the present day, from those

A selection of human activities included in *A Thesaurus of Andalusia's Historical Heritage*

that have disappeared. It must be remembered that the presence of a particular activity during a short period of time may have left a considerable mark on a territory, as seen through the heritage resources associated with it and/or evidence showing changes to the environment. This is the case, for example, of mining, reforestation and intensive

The fact that a human activity was undertaken continuously over time does not necessarily mean it had a significant impact on the territory in question. Its mark on the landscape is more about its economic, social and political importance at the time and the evidence we have to show this.

farming, the impact of which will also depend on the technology available at each moment in time. Likewise, it should not be assumed that an activity no longer seen has not played a key role in shaping the makeup of the landscape. In such cases, heritage resources that have survived through to the present day will bear testimony to its existence and provide insights into its impact on the current makeup of the landscape.

To sum up, the impact of an activity on a landscape is related to the economic, social and political importance it had at a given time in history, and the evidence present in the landscape that proves this. This may either be tangible or intangible (settlements, specific installations, infrastructure, demographic expansion, unique architecture, rituals, festive events, professions, knowledge, forms of expression, etc.). As such, the extent to which a particular socio-economic activity influences a landscape does not necessarily correlate to how long it survived or whether its presence was continuous or discontinuous in time.

In order to look at the mark or impact an activity has left on a landscape, its importance in the landscape must be analysed, and the heritage assets that reveal its historical significance as well as the cultural values of the landscape identified. These heritage assets may be all those that are known or, at the very least, the most representative, the aim being to approach them not as isolated elements but as a group of objects that bears witness to, represents the mark left by and serves as a reminder of the presence of humans, as well as their varied and complex relationship with the environment and other human beings.

Describing human activities

Analysing human activities helps us understand how cultural landscapes are shaped over time by people in addition to allowing us to track past and present changes. When describing them, they should be listed in order of the impact they have had on the current makeup of the landscape (from big to small), rather than chronologically. This approach allows us to map the course of each activity, regardless of when or for how long it was present.

The extent to which ecological factors and the physical environment have resulted in certain activities gaining strength or prevailing should also be established. This should also be established for the technology and knowledge available at each moment in time, and the political and socio-economic context.

Human activities analysed in *A Guide to the Cultural Landscape of Bolonia Bay* and *A Guide to Seville's Historic Urban Landscape*

A Guide to the Cultural Landscape of Bolonia Bay

Activities related to the sea
Activities related to the land
Activities related to trade
Activities related to worship and death
Activities related to defence

A Guide to Seville's Historic Urban Landscape

Activities related to trade/business
Activities related to the port
Activities related to festive events and religious celebrations
Activities related to military logistics
Activities related to everyday life and religious worship

As part of the process described, it is important to identify stakeholders and protagonists involved in the various activities as well as their interests, and establish how they fit in with or diverge from established models of socio-economic development (dominant, alternative or emerging). Likewise, it is important to look at adaptations, transformations, continuity and/or losses caused by the contextual framework within which the activities were carried out changing or vanishing altogether. This framework may be ecological, economic, political or social.

As mentioned above, the dynamic nature of cultural landscapes means that an analysis of their activities should not be limited to historical ones but continue through to the present day. This also applies where their impact on the landscape in question cannot be clearly established due to them having appeared recently or having developed in a haphazard manner, but future heritage resources can be envisaged. As such, in addition to listing the activities that are currently most important in the landscape as well as their mark on it, possible connections between recent activities identified and existing historical activities, including their heritage assets, must be established. As part of this approach, it is essential to look at changes to the nature of historical activities (which may include them gaining strength, being altered, being forbidden or being given new meanings) and considering whether these changes have contributed to maintaining the landscape's cultural values. These tend to be more common when it comes to practices seen within the tertiary sector, where cultural heritage plays a particularly important role, although they are also seen in the primary and secondary sectors.

Photographs showing festive events and religious celebrations in *A Guide to Seville's Historic Urban Landscape*

When describing activities, those related to intangible expressions of culture are also of great importance. Here, particularly noteworthy examples include key festive and religious events as well as culinary traditions. Not only do these bear testimony to historical activities which have survived through to the present day, they also show how these can exist alongside more recent ones. In such cases, as with other activities, the aim is to identify the historical components of cultural heritage which continue to exist and integrate these into the local identity and image that the various social groups attach to it.

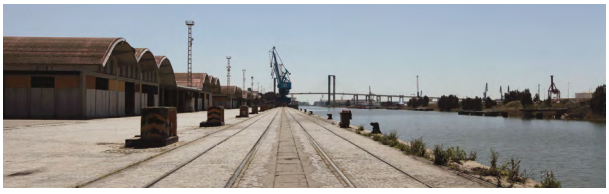
To sum up, the description of activities, as with historical processes, must be presented in a succinct manner, with the focus being on those that have played a particularly significant role in shaping the landscape, and a specific explanation of how they have done this and the result being provided. The level of detail will be different depending on the study being undertaken and the spatial scale used (ranging from activities that have the greatest impact at a sub-regional level to those that are most influential at a local level).

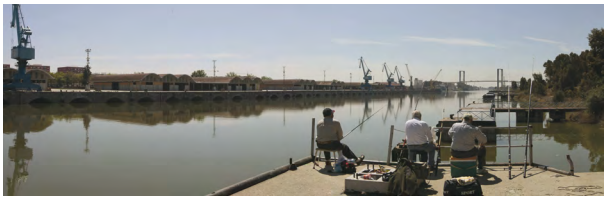
Heritage resources associated with human activities

Heritage resources associated with human activity bear testimony to the dynamics of a landscape, and, as such, are a legacy that must be preserved and treasured by current generations in order to be passed down to future ones. Such resources allow us to see the relationship between activities that were once present and those that are currently present in a landscape, in addition to which of these have given rise to elements of cultural heritage and to what extent.

Images of resources associated with Seville's port, taken from *A Guide to Seville's Historic Urban Landscape*

Type	Name of the resource
Quays / Wharfs	Muelle del Arenal Muelle de Nueva York Muelle de las Delicias Muelle de Tablada Muelle de los Camaroneros Muelle de las Mulas Muelle de las Muelas Muelle del Centenario
Industrial buildings	Reales Atarazanas de Sevilla [Royal Seville Shipyards] Warehouses on Avenida de las Razas Freight warehouses Astilleros de Sevilla [Seville Shipyards]
Bridges	Puente de Isabel II Puente de San Telmo Puente de Alfonso XII Puente de Los Remedios
Heavy machinery	Fairbairn crane Gantry cranes Fixed cranes
Hydraulic infrastructure	Dársena del Batán dock Old lock to access Canal de Alfonso XIII
Other	Port Authority visitor centre





Heritage resources associated with human activity bear testimony to the dynamics of a landscape, and, as such, are a legacy that must be preserved and treasured by current generations in order to be passed down to future ones.

As discussed in chapter one, and for the purpose of organising our information, heritage resources associated with human activities can be linked particularly to built elements, certain movable assets with a clear landscape component (such as cranes in ports and heavy machinery in open-pit mines) and expressions of intangible heritage (for example, techniques, festive events and traditions).

As with resources associated with other aspects of landscape characterisation, the use of thesauri, glossaries and other tools that allow for standardisation are helpful when identifying related resources (i.e. elements of both tangible and intangible cultural heritage). Rather than creating a list of unconnected elements, the focus should be on identifying a group of assets that can be linked to each activity and putting them into context, again from a perspective that views them as a whole rather than isolated objects.

For example, if the activity in question is the milling of wheat, winemaking or a *romería* (a type of Roman Catholic religious pilgrimage), it would be perfectly reasonable to link them to built elements such as a windmill, a *lagar* (a shallow stone or ce-

ment trough system in which grapes are trodden by foot), a winery or a shrine. However, it order to fully identify them, we must go one step further. Continuing with the examples above, this would involve providing insights into the knowledge and practices related to the harvesting and/or processing of flour and grapes, and the collective culinary traditions associated with the *romería* and harvests. We would also have to include information on farming songs, clothes, the folk songs and dances that accompany a *romería*, or the annual calendar of religious events of which the *romería* is the pinnacle.

07

Constructing images: perceptions of landscapes

Social perception of landscapes

In this chapter, we will look at the concept of social perception within the context of cultural landscape characterisation from the qualitative perspective of anthropology. Looking at a landscape at the micro level, where the focus is on those who observe it, allows us to gain insights into what drives processes of social appropriation and identification involving different stakeholders and their landscape, as well as bring to light the different perspectives and actions relating to them. This approach is based on the firm belief that a landscape does not exist unless someone observes it, something which means it does not have an identity beyond people's perception of it. Landscape is like all other cultural heritage in the sense that it is a social construction. As such, it is only by recognising it and attributing values to it that it becomes heritage, hence the importance of understanding this recognition as well as its social significance. In order to achieve this, an analysis of the landscape's subjective dimension must be undertaken.

Constructivism and phenomenological ideas have been key in shaping the current approach taken to analysing social perception. Whilst the first framed perception as a two-phase process, i.e. firstly an individual receives stimulation and then forms representations, the second led to perception being regarded as action involving constant adjustments and shifts. Based on the above, an analysis of perceptions should go beyond seeing them as mere interpretations of reality to also consider them as the skills needed to function in said reality, these being based on the selection of certain elements in favour of others in accordance with a series of interests that justify this.

As discussed in previous sections, the study of social perceptions also allows us to add to the information obtained on historical processes and human activities, providing us with insights into the understanding of local inhabitants in terms of what has shaped their landscape, and helping us identify the different stages involved in its social construction. This analysis plays a key role in ensuring success when it comes to landscape quality objectives, as effective compliance, commitment and monitoring cannot be guaranteed if all stakeholders are not part of the process. By involving all stakeholders, strategies can be developed that capitalise on and maximise the strengths and/or overcome the weaknesses identified by different stakeholders in the landscape, something that ensures it is managed in a sustainable manner.

The relationship between landscape and social perception: key considerations

Social perception is inextricably linked to landscape, forms part of its definition (as given in the European Landscape Convention) and provides us with insights into the process through which humans interact with an area to the point of regarding it as a landscape. Based on this, it may be stated that without social perception, a landscape would not exist.

A landscape is constructed based on the selective observation and action of those who call it home, manage it, work in it, visit it, paint it, describe it, carry out research into it, etc., as well as all everything resulting from this. Its analysis should take into account all its stakeholders, including those who have an active interest in its sustainable management, those who may have an indirect or passive interest, and those who hold views that may block or impede

Landscape is like all other cultural heritage in the sense that it is a social construction. As such, it is only by recognising it and attributing values to it that it becomes heritage, hence the importance of understanding this recognition as well as its social significance.

it from being effectively managed. Details should be included on the interests and action taken by all such stakeholders.

When analysing the variety of perceptions that exist in a landscape, it should be remembered that they are subjective and reflect the perspectives of its stakeholders. This analysis should include the ideas, opinions, judgements and symbolic representations of all stakeholders, regardless of the social, political or economic weight they carry. This experience and knowledge represent points of view that must be taken into account when creating a landscape guide due to:

- the fact that the very definition of the term 'landscape' includes perception;
- the diversity of stakeholders in a landscape and the consequences of the interrelations between perceptions and actions in it;
- the fact that perceptions help us understand the landscape's heritagisation process;
- their importance when formulating landscape quality objectives; and

· the fact that analysing their strengths and weaknesses can potentially provide us with valuable information to ensure the landscape in question is managed in a sustainable manner.

Social perceptions of any kind, including those relating to landscapes, are characterised by their dynamic nature as well as their related actions, the fact that they may be individual or collective, their support by different social groups, their completely subjective nature, and the fact that they can reflect the same social reality in different and even opposing ways.

The political, social and economic lenses through which each individual or group observes their reality, in this case their landscape, explain why social perceptions drive actions and decisions. These two levels of perception (i.e. individual perceptions and the collective imaginary they are part of) are intertwined and often correlate with one another. Indeed, the social imaginary in which each individual perception exists is the result of consensus amongst members of its social group. This means that perceptions can only be constructed and understood within the context of the successive sociocultural frameworks that have shaped the landscape in question.

The diverse interests and actions of stakeholders present in landscapes (see the discussion on stakeholder maps in chapter two) clearly shows that perceptions are not neutral and belong to a particular time and place. This, coupled with the inherent physical dynamics of landscapes, means that the analysis of social perceptions provides us with the ideal tool through which to bring to light different social constructions and their constant

process of change, adaptation, construction and reconstruction over time, relating this to their social, political and economic context, and impact on the territory in question.

It is common for different types of social perceptions to coexist within a single context. These may involve groups with varying degrees of public support, relate to different aspects, have a bigger or smaller impact in different contexts, etc. Whatever the case may be, the social realities they reflect are what help us to interpret and classify them. These differences, which often lead to conflict, provide us with rich insights into the different perspectives that coexist within the social reality of a landscape.

Broadly speaking, in addition to the perspectives mentioned above, we may distinguish between four main areas where significant divergence tends to occur. These allow us to reveal the hierarchical relationships that tend to be established and the resulting differences in terms of landscape actions. These are:

- The differences between expert and non-expert knowledge.
- The questioning of discourse surrounding heritage, made possible by a participatory paradigm.
- The exercise of social, political and economic power by different stakeholders in landscapes.
- The prevailing models of development in cultural landscapes and their relationship to cultural heritage.

The analysis of social perception may draw on expert (scientific) knowledge or on non-expert knowledge, the latter often (and sometimes mistakenly) being associated with the local area. However, the

results will vary significantly. The first approach is linked to insights generated by academic disciplines, whereas the second focuses on personal knowledge and experiences of the landscape in question. The two approaches may complement one another if the expert knowledge forms part of a participatory process, or remain completely separate and different from one another if an authoritarian style of discourse is used in relation to the heritage in question. Whilst the latter is dominated by academia and based on deciding what is or is not heritage from the top down, the former ensures all stakeholders involved are part of these decisions from the bottom up.

Expert and non-expert approaches serve different purposes and may be called for at different times. As such, they are both equally valid for describing the perceptions of cultural landscapes. It is worth noting that this is separate from the necessary task of designing the process by which the local population is given a voice in the sustainable management of their landscape. To do this, participatory processes should be used, these being the most constructive for this purpose and an essential tool when creating and implementing a landscape guide.

The range of interests amongst those identified on the stakeholder map due to their position in the social, political or economic structure in place sheds light on those who hold power (and how effectively they do so), those who do not hold it and those who want to hold it. These processes tend to represent sources of conflict and provide a very useful context for clearly identifying positions and resulting actions. The latter is related to the fourth area of conflict mentioned above, namely the prevailing models of development in

the landscape in question. These also represent an area where conflict may be present and where the analysis of social perception provides us with basic insights into their impact on the landscape in question. Identifying the ideology underpinning the prevailing model of development in a landscape as well as its implications (which may be positive or negative) in terms of its sustainable management is essential for understanding and monitoring its evolution. Here, the identification of alternative and emerging economic models allows us to identify everything from aspects of the dominant model that generate tension in the landscape to new and different formulas based on other existing ideological conceptions, and everything in between.

Analytical approaches to the study of social perceptions

According to Josep Roca i Balasch, social perception refers to 'the way an individual sees a certain social situation, and their role or possibilities in it', an observation that is based on the belief that social perception is built 'on the unique story of each individual' and their network of social relations. As such, in order to understand the diverse perceptions that exist in a landscape as well as their impact on it, a critical analysis must be undertaken which identifies each underlying interest (social, political and economic) and the actions arising from these, the aim here being to explain the way in which they have been constructed and projected on to the landscape.

As has been mentioned on various occasions, within the context of a landscape guide the purpose of this analysis is to be able to explain the way in which judgements, ideas and social representations have been constructed, developed and projected on to

Expert (scientific) and non-expert approaches to social perceptions in landscapes may complement one another if the expert knowledge forms part of a participatory process, or remain completely separate and different from one another if an authoritarian style of discourse is used in relation to the heritage in question.

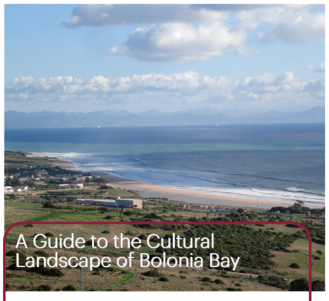
the landscape in question. This inevitably involves choosing certain aspects to focus on over others. At its most basic level, this involves identifying and describing the stakeholders present in the cultural landscape in question, including their interests and opinions as well as the extent of the impact (positive, negative or neutral) of their actions on it.

An analysis of social perception should be carried out for all aspects involved in landscape characterisation. Here, discourse, positions and judgements identified must always be linked to a specific time frame, which may be extremely long or short. In terms of the latter, this should always be included and the time frame as well as those involved stated. It should be noted here that an analysis of social perception does have certain limitations, such as the fact that it is generally impossible to have access to all the information needed to establish a comprehensive picture of past perceptions regarding a landscape. In terms of cultural landscapes that are recognised as such, it is important to analyse all aspects directly and

indirectly linked to their heritagisation process, regardless of how big or small a role they have played in this process (influence, interests and actions undertaken).

It is impossible to establish levels of landscape perceptions, although what we can do is classify them based on various criteria given that they are linked to the particular aspects of each landscape as well as those who experience them, including their interests, feelings and positions. In addition to classifying them (something we will discuss in the next section), it is also useful to take into account the analytical approaches most commonly seen in the relevant scientific literature and in policies governing the sustainable management of cultural landscapes where applicable. These refer to the different methodological strategies that provide us with insights into social perceptions and the way in which the results of an analysis involving this subjective dimension of a landscape are presented. Here, a number of different formulas are possible, depending on the nature of the landscape guide and the resources available (in terms of time, people and funding).

Broadly speaking, social perceptions can be analysed using a qualitative (and participatory) or quantitative approach. When analysing perceptions through a quantitative lens, they may be presented using graphs which show their various attributes and allow them to be turned into measurable variables that can be compared with one another. Here, the focus is less on establishing the relationship between perceptions and the social construction of the landscape in question, but rather on analysing the opinions of current stakeholders as well as statistics.



A Guide to the Cultural Landscape of Bolonia Bay

Local perceptions
- Definition of anchor places at a local level
- The area of Bolonia as a place of resources
- Perceptions of institutional actions
- Local appropriation of public spaces
- Landscapes experienced and landscapes imagined
- Perceptions of boundaries

Perceptions of visitors

Institutional perceptions

Artistic perceptions

Commercial and stereotypical images

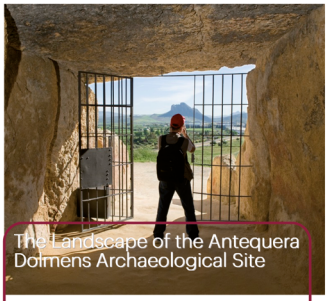
Landscape through the senses

A Guide to Seville's Historic Urban Landscape

Projected images
- The image of Seville through the arts
- The image of Seville projected through its commemorative monuments
- The role of municipal tourist policy in shaping the image of Seville
- The influence of contemporary architecture on the image of Seville

Discourse and judgments
- The assessment of heritage as part of heritage protection policies
- Discourse used by the press
- Social perceptions of landscape resources

Visual perspectives



The Landscape of the Antequera Dolmens Archaeological Site

The dolmens of Antequera in the past: context and meanings
- An overview of the landscape of Antequera
- Recent prehistory and protohistory: the formation of a monumental landscape
- From the Romans to the Castilian conquest: continuity and change in the monumental landscape over time
- From the Castilian conquest to the 1980s

The dolmens of Antequera and their surroundings in local discourse

Visual landmarks and prominent places in Antequera and the surrounding area

Examples of particularly important aspects considered when analysing social perception in three landscapes in Andalusia

In terms of the qualitative analysis of social perception, the focus is on interpreting and understanding the relationships between a cultural landscape and people as well as analysing information on the landscape and its process of social construction through discourse and meaning. As we will see later on, the majority of analytical approaches used in landscape studies are qualitative in nature and are characterised by their use of individual or group interview techniques, participatory methods and indirect sources (art, literature, websites, content created by media outlets, etc.).

Classification of social perceptions in cultural landscapes

The system of classification outlined in this section is based on the most common ways of analysing

social perceptions seen in scientific research into landscapes, and takes into account the diversity that exists in terms of stakeholders as well as the analytical strategies used to present them. We have opted for this approach, as it is important all relevant stakeholders are identified and effectively studied (including their features and needs) as part of a landscape guide. It also aims to recognise the difficulty their classification poses, as many of these approaches overlap with one another, something which, far from invalidating them, helps with our analysis and provides us with a greater level of detail.

a) The involvement of people in the environment

The degree to which people are involved in an environment (and thus its landscape) has a significant impact on how they perceive it. Those who have greater involvement (as tends to be the case with those who live and work in it) generally have more in-depth knowledge on the environment and a greater understanding of it. They also tend to attach emotional and symbolic values to it. Although this perspective usually only covers aspects that directly affect the individual, it does tend to be extremely accurate and detailed.

Where involvement is less extensive, perceptions are more general and sweeping. In such cases, the individual's knowledge of the environment is based on less detailed information, leading to distorted images of it or images that are only based on a small part of reality, such as a travel website or the opinion of others also loosely tied to the environment, and seen through the filter of their own personal experience and baggage.

b) Chronological perceptive

Analysing past and current perceptions is another angle from which this topic may be approached. This is based on the sources of information that are available and, unlike the cases above, does not necessarily involve any specific types. Here, a timeline during which the perceptions were/are present is established and they are then studied based on the availability and variety of sources. As part of this, the categories outlined above may be analysed, although many more may be added. Here, there should be a particular focus on the age of the population and how long they have lived in the landscape, as well as if the area in question has always been regarded as a cultural landscape.

The current perceptions observed as part of a landscape study are a reflection of the experiences and actions of the stakeholders present at the time when it is created. Past perceptions, on the other hand, refer to those we can only gain access to through secondary sources (texts, images, maps or audio-visual content). These provide us with insights into the actions, perspectives, positions and activities of people relating to the landscape, or establish a direct connection between these individuals and events in the landscape. It may also be the case that certain current perceptions are built on past ones, using them as a form of 'justification'. In such cases, what happens is that historical perceptions are reinterpreted, with aspects providing the best support for current discourse being maintained and those which do not fit in with it being discarded.

Analytical approaches: social perceptions in cultural landscapes

Parameter	Classification
The involvement of people in the environment	Detailed General Local Creative and artistic Standardised
Chronological perceptive	Past Present
Validity of knowledge	External expert knowledge Local/vernacular knowledge
Degree of influence	Dominant/hegemonic Alternative Minority
Sources of information	Direct perceptions Projected images
Sensory dimension	Visual Auditory Olfactory Gustatory Tactile

c) The validity of knowledge

It is very useful to analyse the differences between social perceptions derived from expert (and often external) knowledge and those derived from non-expert knowledge (often, and sometimes mistakenly, linked to the local area). Establishing how these two kinds of perceptions differ from one another as well as how they are similar at this stage in the process will help avoid any potential tension and incompatibilities further down the line. Ultimately, what sets them apart is how they are viewed by society. Whatever the case may be, both provide us with insights into the landscape and should be put in their relevant context. In the case of perceptions derived from expert knowledge, this involves considering the scientific schools of thought related to the historical developments of the field in question, and in the case of those resulting from non-expert (local/vernacular) knowledge, the processes that gave rise to them and led to them acquiring a purpose.

d) Degree of influence

Given the ability of certain groups and individuals to influence individual and collective social perceptions, by understanding their economic, social and political importance, we are able to establish whether certain perceptions represent or would have represented majority, minority, alternative, secondary or marginal currents (to name but a few of the adjectives we may use to describe them). We must distinguish between perceptions that have been become/became dominant and those which have/did not, in addition to analysing the consequences of this. In other words, an analysis of perceptions should not be limited to those that have remained/remained and become/became dominant over time.

e) Sources of information

All the approaches discussed thus far may be applied at different levels, not just the local level. In these cases, it may be necessary to look at what could be called projected images. This is possible thanks to remote access to bibliographical resources, quotations, oral traditions, paintings, photographs and websites, to name but a few examples. The conclusions drawn here regarding social perceptions are a hypothesis and must be confirmed at a local level where possible. As here we are dealing with historical and current documentary sources, it is necessary to look at who produced them and why, hence the need to establish their level of recognition and the extent to which they form part of local collective imaginaries.

This approach may also be useful where participatory methods are not practical and thus cannot be used, something which tends to be the result of a lack of resources (people, funding or time). In such cases, projected images may also be analysed in local contexts as a way of gaining insights into the preferences of the various stakeholders present. Here, content produced by media outlets, memorials, street names, tourist slogans and blogs, to name but a few examples, may be analysed.

f) Sensory dimension

Another extremely useful strategy for analysing perceptions is through the stimuli provided by landscapes. Such stimuli (and thus the resulting perceptions) may be visual, auditory, olfactory, gustatory or tactile. Whatever the case may be, this kind of analysis draws on both historical and current sources, quantitative and qualitative techniques, and

Given the ability of certain groups and individuals to influence individual and collective social perceptions, by understanding their economic, social and political importance, we are able to establish whether certain perceptions represent or would have represented majority, minority, alternative, secondary or marginal currents. However, an analysis of perceptions should not be limited to those that have remained/remained and have become/became dominant over time.

participatory methods. Below is a description of each type of sensory perception and how it should be approached:

- Visual perception is based on our sense of sight and may be captured through photographs, prints, paintings, drawings or maps, to give just a few examples. These may represent historical sources or be produced when a landscape study is being carried out with input from the various stakeholders present by means of surveys, discourse analysis and participatory methods.
- Auditory perception is based on the sounds of a landscape. Here, a list of all the historical sounds associated with the landscape in question may be produced (musical compositions, literature, poetry,

historical texts, etc.), or a list of its current sounds (everyday sounds, special sounds, etc.). Another option is to select sounds by means of surveys, discourse analysis and participatory methods. Particularly noteworthy here are studies that focus on soundscapes from the perspective of anthropology, art or technology.

- Olfactory perception is derived from all the smells of a landscape. As with visual and auditory perception, a comprehensive analysis of all the historical smells associated with the landscape in question (based on economic activities, literature, poetry, historical texts, etc.), or current ones, may be undertaken. Surveys, discourse analysis and participatory methods may also be used to select smells present in the landscape in question.
- Gustatory perception is based on the flavours of local products and specialities linked to a landscape. The ingredients used for these do not necessarily have to come from the landscape, although they may well do. The primary and secondary sectors involved tend to provide significant clues for identifying these, and, as with visual, auditory and olfactory perceptions, they may be identified and described using quantitative analysis, qualitative analysis and participatory methods. Looking at the protected geographical indications involving the landscape in question and the surrounding area is often a good way to begin this analysis. Here, it is also important to take into account personal memories and experiences as well as consider how they fit in with the social, political and economic context.
- Tactile perception is based on a range of physical stimuli felt by individuals linked to a cultural landscape, and covers everything from what someone feels as a result of a breeze or the wind on their face or body, to the temperature of the water in a

stream, the roughness of the land or the texture of vegetation. Their analysis (i.e. identification and assessment) should draw on both historical and current sources, qualitative and quantitative techniques, and participatory methods.

Approaches to visual perception in landscapes

In this section, we will focus on one particular type of perception in landscapes: visual perception. This is one of the most direct ways in which the natural and cultural components of a landscape are captured and interpreted, and meaning is given to them. An analysis of visual perception may take many forms and be based on methods and techniques used in fields such as geography, architecture, art and design.

The features of landscapes

In order to gain an initial insight into the features of a landscape, they must be viewed. When Anton van den Wyngaerde was commissioned by Philip II to visit Spain's main cities, what he produced were not merely drawings but reference works of reality. His creations are truly exemplary when it comes to depicting urban landscapes, architecture that blends in and stands out, infrastructure, topography, defining features such as rivers and the sea, and even empty spaces.

Representing the physical features that make up an area in the way van den Wyngaerde did requires extensive training, but it may also be done using traditional and semi-traditional techniques (drawings, descriptions, sketches, photographs, etc.) as well as modern technology (geographic information systems, augmented reality, etc.).

Representing the features of an area in the way van den Wyngaerde did requires extensive training, but it may also be done using traditional techniques (drawings, descriptions, sketches, photographs, etc.) as well as modern technology (geographic information systems, 3D reconstructions, augmented reality, etc.) to capture reality.

When beginning to look at the features of a landscape, a distinction should be made between those that are natural and those that are man-made. Natural features tend to be irregular, asymmetrical and meandering, whereas those that are man-made are generally regular and square or rectangular shaped, and have straight lines. That is why, whenever looking at the physical makeup of a landscape, this distinction (which is also seen in the features associated with natural and socio-economic components discussed in chapters four and six) should be maintained. However, deciding whether a feature belongs to one category or the other is no easy task, as there are fewer and fewer natural areas completely untouched by humans, (even if only by climate change), and as even in the most human of environments (i.e. big cities), features are largely shaped by nature.

Thus, based on the features of a landscape, we must distinguish between predominantly natural

and predominantly human landscapes, as discussed below:

a) In order to analyse the features of predominantly natural landscapes, generally speaking, medium-sized viewsheds which approach or reach the horizon are necessary. In terms of features, it is useful to distinguish between three scenarios in accordance with the type that prevails in the landscape in question:

- Prevalence of features relating to geomorphology (steep relief, flat and barren land, etc.)
- Prevalence of features relating to vegetation (forests, meadows, scrubland, etc.)
- Prevalence of features relating to water (lakes, rivers, coastline, etc.)

These features tend to be large and involve extensive viewsheds, except where they involve valleys or enclosed basins. The irregular and asymmetrical nature of these features does not by any means result in landscapes that lack equilibrium or harmony. The natural environment is the result of thousands and even millions of years of evolution, resulting in perfectly balanced landscapes, whether characterised by bareness (as is the case with deserts) or lush variegation and stratification (as seen in rainforests). As such, a visual analysis of the morphology of a predominantly natural landscape involves identifying its prevalent features (flat, steep, sloped, enclosed, etc.) and the elements that result in these (mountainsides, volcanic cones, marshes, Atlantic forests, etc.). Landscapes may or may not be uniform in nature. For example, some present little variation over vast areas, such as savannas, taigas and deserts covered by sand, whereas others have extreme contrasts, such as gallery forests along rivers.

b) Predominantly human landscapes are natural landscapes that have been transformed to a greater or lesser degree by humans. Land use, infrastructure, installations and buildings (to name but a few examples) all leave a mark on the landscape, which will be in greater or lesser harmony with nature and shape its static and dynamic views (see the following section). These features, introduced by humans, are more complex and often involve working at a smaller scale than with predominantly natural landscapes in order to fully understand them.

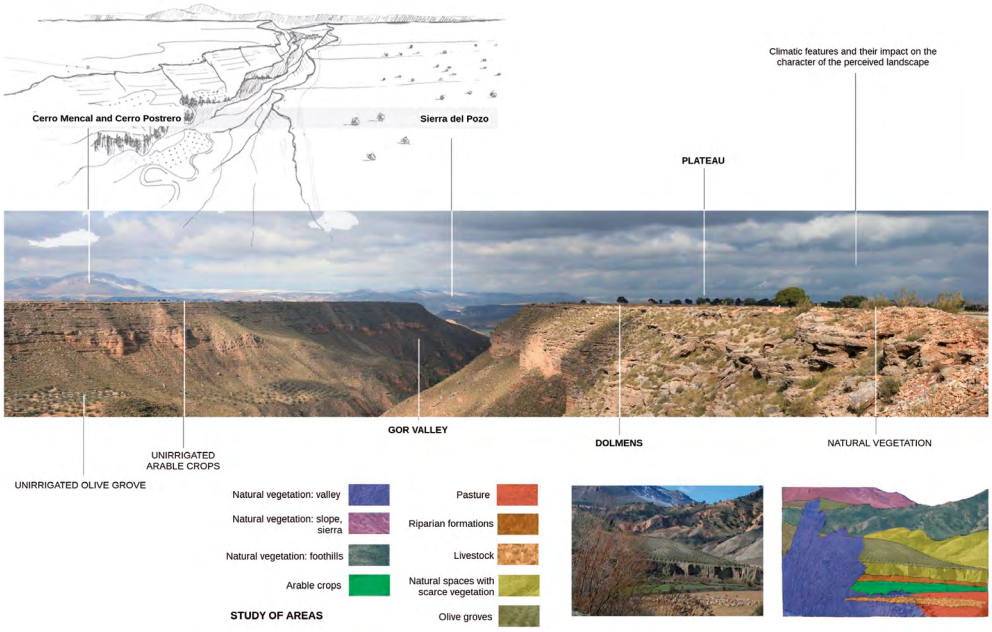
In terms of predominantly human landscapes, a distinction should be drawn between those of a rural nature and those of an urban nature. Those of a rural nature frequently involve large viewsheds, similar to those seen in predominantly natural landscapes, although much more variation is seen here in this regard. Examples of such landscapes include those occupying vast plains in the central states of the USA, where enormous fields of grain and cotton disappear over the horizon, as well as (and more commonly) rural landscapes where divisions are much smaller and more irregular, such as allotments near built-up areas and terraces. Whatever the case may be, the features of such landscapes are shaped by both their size and other basic elements needed for agriculture (paths/roads, irrigation systems, storage facilities, wine presses, etc.) or everyday life in these environments (towns, villages, shrines, etc.). Based on the above, we may establish three groups that a predominantly human rural landscape may fall into, based on its features:

- A predominance of features typical of flat areas (open or closed fields, a network of generally geometric paths/roads, etc.)
- A predominance of features typical of sloped areas

(open or closed fields, a network of paths/roads adapted to slopes, a significant amount of infrastructure associated with agriculture, etc.)
· A predominance of features typical of mountainous areas (meadows, forests used for commercial logging, networks of paths/roads and routes with specific characteristics, etc.)

When analysing the features of urban landscapes, the level of detail should be greater, as the concentration of cultural values and meanings is much greater than in other kinds of landscapes. For example, although Mount Fuji undoubtedly holds great symbolic value, it extends across a vast area, meaning its values are much more spread out when compared to those of smaller features. A particularly good example of the latter are squares, which are rich and varied treasure troves of cultural meanings, with particularly illustrative examples including Saint Peter's Square in Vatican City, Plaza de Mayo in Buenos Aires and Alexanderplatz in Berlin. Thus, in urban environments, we may establish at least two levels or scales at which to study their features:

· Skylines and vast panoramic views of urban areas as seen from large open spaces such as beaches and parks, or elevated viewpoints, such as towers, skyscrapers or nearby hills: here, the geometric shapes (often cubic or prismatic) of their roofs contrast with high-rise buildings (which serve a twofold purpose as both landmarks and viewpoints), large monuments and urban infrastructure (stations, telecommunications installations, large theatres, etc.), and their vast, straight contemporary roads, which in turn contrast with their narrow, winding old roads. At this scale, it is important to consider how nature (in particular, relief, rivers and coastlines) have shaped the urban landscape. This is



Formal analysis in *An Assessment of the Physical and Natural Environment of the Gor Valley*

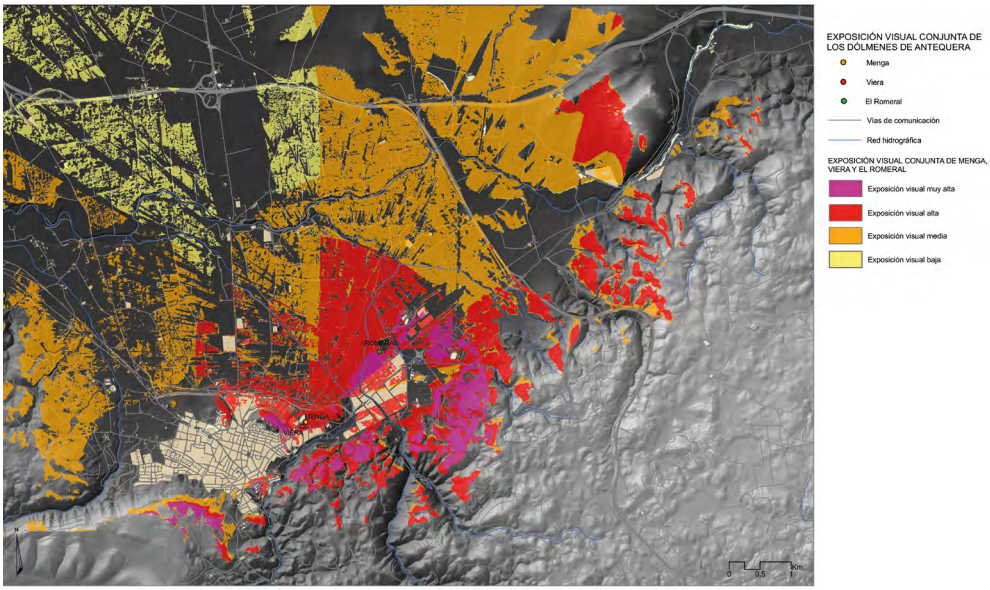
particularly relevant in cities such as Lisbon, Rio de Janeiro, Istanbul and San Francisco. It is worth remembering that in predominantly human landscapes, not only does nature shape the landscape, humans also shape nature. As such, the Seine in Paris, the Arno in Florence and the Guadalquivir in Seville are not simply natural features which shape their landscape but extremely important cultural elements. Of course, not all rivers running through cities have been tamed by humans, examples being the Nile in Cairo and the Mississippi in New Orleans.

· The urban environment: this is smaller in scale and includes squares (as mentioned above) as well as practically all built elements that can be seen at street level. It is often here that we find the quintessence of an urban cultural landscape. At this level, we find built elements and other features (such as parks, car parks, etc.) which make up

spaces with much smaller viewsheds than those seen above. However, this does not mean that their role in shaping the landscape in question is any less significant. Whilst the views seen when observing a city from a distance (vertical and/or horizontal) often offer insights into its social and religious nature, those seen at street level in the urban environment reveal a process of zealous beautification and 'social pedagogy', as seen through sculptural monuments, streetlights and vegetation, to name just three examples. In this regard, trees and shrubs planted in cities should never be considered naturally occurring parts of the landscape, as they have simply been introduced by humans for the purpose of making them more habitable. Their appearance (particularly trees) in public spaces began in the Late Modern period (with the exception of certain boulevards) and, as such, they do not form part of the historical makeup of urban landscapes.

Static and dynamic views

Amongst the first steps to be undertaken as part of this interpretative method is to travel around the area being studied on foot and in a vehicle using the various roads and paths available. In each instance, the landscape will be perceived in a different way. From each observation point, whether it be static or dynamic, information can be obtained on its views (which may be close or distant) and characteristics, these being related to how it is designed, how it blends in with the landscape and its infrastructure, to mention just a few examples. Nowadays, perceptions tend to combine both static and dynamic perspectives. The various ways a landscape is seen and understood will also depend on subsequent representations and analyses of it.



Analysis of how visible the dolmens in Antequera are from various locations, based on viewshed

a) Static viewpoints

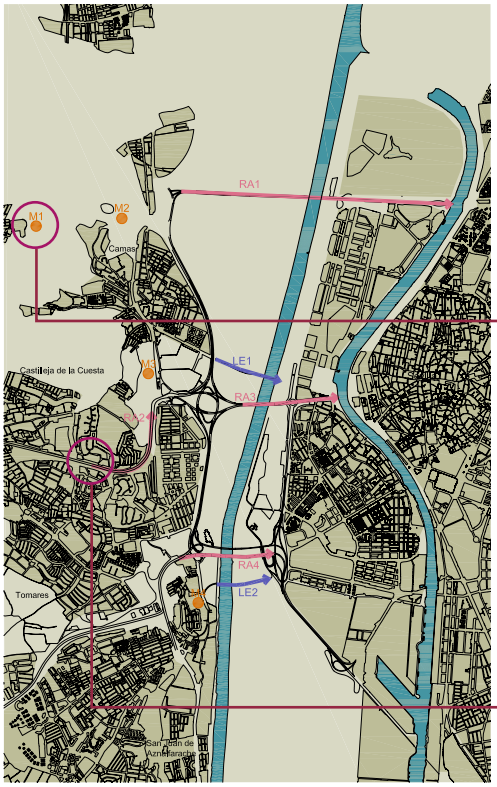
A static viewpoint gives rise to views of places that are fixed and immobile yet precise. These views are gained from conventional viewpoints and other points of observation formed over time by orography or human intervention. It is from here that the main formal features of a place are established.

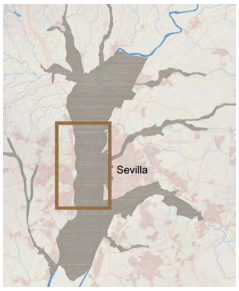
When observation points represent prominent, important places in the landscape, they tend to be places of heritage, the original purpose of which was to offer views of an area. These were sometimes designed more to see than to be seen, as is the case with defensive structures, elevated settlements and places clearly created to admire the surroundings. Analysing the views from these points of observation is essential for documenting change. It is also extremely useful to take into ac-

count views not only from places that stand out within the area covered by the landscape guide, but also from external points of observation. This allows us to better understand the territory being studied and make decisions as well as predictions and recommendations regarding possible impacts.

In terms of closer views, particularly in urban contexts, it is more useful to analyse the difficulties posed by the urban fabric at street level, and identify issues (such as problems relating to pedestrians and traffic), unique monuments and vegetation, roads and routes, vanishing points, etc. On occasions, simply representing the road surface

Images used to analyse distant views, in *A Guide to Seville's Historic Urban Landscape*





STATIC VIEWS

Viewpoints:
M1 Gardens of Colegio del Buen Aire
M2 Cerro de Santa Brígida
M3 El Carambolo
M4 El Monumento neighbourhood

DYNAMIC VIEWS

Rapid network:
RA1 SE-30 (in the direction of Alamillo Bridge)
RA2 A-49 (descent and bend before La Pañoleta)
RA3 A-49 (in the direction of Patrocinio Bridge)
RA4 SE-30 (Juan Carlos I Bridge)
Slow network:
LE1 Pedestrian and bicycle access from Camas
LE2 Pedestrian and bicycle access from San Juan de Aznalfarache

Identification	Name Location Description Type
Landscape quality	Potential views Content Obstacles
User-related aspects	Ease of access Capacity Feasibility
Facilities	Infrastructure Information
Representativeness	Importance, local significance, etc.

and pavements, vegetation and backgrounds with perspective provides invaluable insights for understanding the compact environments of cities.

b) Dynamic viewpoints

Dynamic viewpoints involve a vision associated with movement around a space, something which is very important to take into account in the modern world. These add another facet to the static model and involve sequences of views experienced when moving. Here, it is necessary to identify access roads and those which pass through the landscape's most frequented areas or by its most important sights. These trips may be short, involve a major road and use motor or non-motor vehicles. The latter refers to trips by bicycle and on foot where the roads or paths in question allow for this.

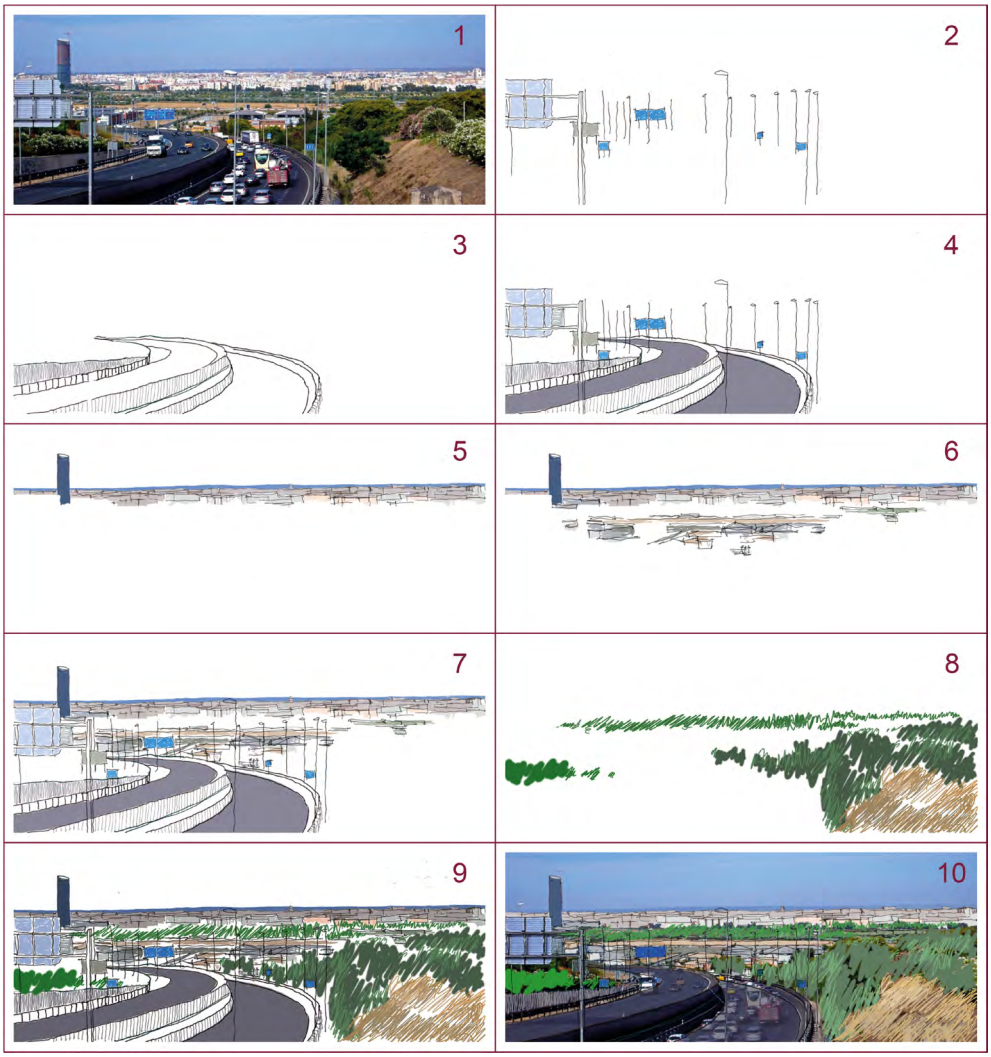
Beginning last century, non-static approaches to the vision of space have been greatly influenced by the impact of cinematography as well as the introduction of aerial photography, and more recently small devices quipped with cameras, such as drones. In terms of the latter, these are providing us with new viewpoints not possible up until now. Although, strictly speaking, satellites do not provide images of landscapes, the images they do provide may help in analysing them.

Moving perceptions represent a vision that is more fleeting in nature, but one which is highly selective based on the immediacy of the views captured from a road or path, or even from a vehicle using photography. From a vehicle, objects may be observed (which may be numerous or sparse, and poorly or well organised) against the orography and road infrastructure.

c) The use of photographs when analysing views

A particularly insightful task that may be carried out when analysing visual perception, particularly where it is dynamic, is to study the various layers or levels that come together to form this kind of complex perception. This analysis has a clearly subjective component, although this does not stop us from gaining insights into the numerous frames produced at high speed when the observer is moving. Here, photography is key for capturing perceptions. By identifying the viewpoint of the moving observer, as has been done with many drawings and paintings over time, the resulting 'snapshot' can become a valuable tool for subsequent work. At no point in history has the use of scientific knowledge for the interpretation or representation of the visual arts been rejected.

Essentially, moving perceptions represent a vision that is more fleeting in nature, but one which is highly selective based on the immediacy of the views captured from a road or path, or even from a vehicle using photography. In order to illustrate this point, we have chosen to focus on the A49 motorway, which connects the cities of Huelva and Seville. Its approach into Seville, where it is flanked by embankments, can be seen in the images on the next page. Here, the city provides a continuous and compact frontal view, preceded by a large stretch of vegetation along the Guadalquivir. The latter represents a 'green Seville', the result of the city's location on the river, and is something that is discussed in A Guide to Seville's Historic Urban Landscape ⇙. Torre Sevilla (Seville Tower) rises in the background and is an important symbol of the modern city. The observer also sees signs, street lights and other elements that signal they are ap-



Layers of perception involving the vision
of an urban landscape whilst moving

proaching a major city, in addition to an abundance of moving vehicles that form another unsettling landscape for the senses: the soundscape.

We will now follow the path laid out by the work of Gordon Cullen on urban landscapes (townscapes). As such, we will focus on how sketched sequences of perceptions can be selectively used to gain insights into the formation of a landscape, as well as assess and take real action in terms of colours, textures and volumes (aspects that will be addressed in the following sections). Such aspects shape how people perceive the features of a city, and form part of a very interesting movement in the English-speaking world which focuses on the details of things as well as their materiality and important role in constructing urban environments. In the case of the view from the A49, we will look at various aspects related to the image of the city. These are general in nature but by no means any less interesting.

Our sequence, which is presented in two columns, begins with a photograph, followed by a sketch of the signs and street lights. These elements provide extremely noticeable boundaries to the most immediate views offered, and are synonymous with movement. The following sketch is of the road infrastructure itself, which is represented using lines. The observer clearly does not see it in this way; they simply represent the outlines of the tarmac surface, which is a very significant part of what they do perceive. The fourth sketch then brings together the signs, edges of the road and the linear, curved tarmac surface. These four sketches provide us with a clear understanding of the various layers that come together to form the scene perceived by the observer.

Often, impacts in a landscape are the result of a failure to properly consider and understand the volume, colour and texture of its inherent natural or built elements, or effectively integrate new infrastructure in its surroundings.

In sketches five and six, the focus changes from the road to the close and distant background, made up of the buildings in the Guadalquivir valley. This offers a clear view of the how Seville has developed around the river. Torre Sevilla (Seville Tower) has also been purposefully made to stand out. It is almost in the foreground and conditions how the city's other buildings are perceived. Sketch seven brings together all the sketches that come before it and sketch eight depicts the vegetation present. This vegetation (particularly that seen in the background) is a defining feature of the city. Here, we also see vegetation flanking the road, the result of its design cutting through the land. Sketch nine combines sketches seven and eight, and in turn all the other sketches that come before them. The purpose of this division is to clearly show the role each layer plays in shaping the dynamic perceptions of the observer.

Graphic design programs allow us to establish these kinds of sequences as well as highlight aspects that may be analysed and discussed when considering the impact a particular course of action may have on an area. This is especially important for effectively addressing the concerns of a community with close ties to an urban or rural landscape. To

complete this exercise, sketch ten overlays all the layers (sketches) on the initial photograph.

Texture, colour and volume

The forms, colours and textures of both natural and built elements play an important role in shaping visual perceptions of landscapes. Often, impacts in a landscape are the result of a failure to properly consider and understand its inherent visual makeup or effectively integrate new infrastructure in its surroundings.

a) Texture

A formal analysis of a landscape must include the textures that contribute to the sensory experience offered by it. Texture is ultimately about how visual information is structured. Artists are fully aware that texture adds an extra layer of expression to their work, this being something contemporary abstract and figurative art has used with particular success. All we need to do is think of Tàpies or Barceló to see this trend towards richly textured canvases. However, texture in art may also be very subtle, as seen in the Flemish paintings found in the Royal Chapel of Granada.

In the case of landscapes, an analysis of texture should obviously be approached from a slightly different angle. As such, it should involve explicitly identifying the materials present and their ability to enrich the sensory experience offered. One example is found in open landscapes where nature has been modified to some extent by humans. For example, an area of olive groves in Jaén (Spain) represents the sum of values brought by trees being planted in lines on barren hills covered with natural and artificial elements, resulting in an extreme richness

in terms of texture, despite there actually being very little variety. In such areas, this extends as far as one can see and is undoubtedly an integral quality of such landscapes, one which may prove almost overwhelming for the observer. Although other elements may be added to these vast landscapes, perception operates across various dimensions and even the subtlest of alterations will often result in major changes to their image.

In the Andarax valley in Almería, changes to the cultivation of grapevines (traditionally grown on terraces), brought about by efforts to regulate competition within the wine-producing sector at an EU level, have not only resulted in economic and social damage but also degradation in terms of perceptions. As such, the removal of vines in Beires, Almócita, Padules, Canjáyar, Rágol, Instinción and Ohanes, amongst other municipalities, has meant the degradation of the terraces' stone walls and a radical change to the textures present, i.e. from lush green and the strong contrasts between light and dark of the valley to stone and barren land. This is not a matter of aesthetics (although it could be), but of the very fabric of the landscape, a kind of tapestry full of roughness and nuances that jump out at the observer. As such, when a landscape is being analysed within the context of an instrument such as a guide, in-depth studies must be undertaken using new and historical sketches and photographs in order to identify endangered values. When depth is added to the common shallow perspective, the observer is guaranteed to be treated to a whole host of surprises.

In urban landscapes, the study of texture is related to architecture and infrastructure, obviously artificial in nature. Depending on the closeness of the

view involved in the analysis, the relationship between form and content may be seen, something that is essential when looking at texture. Up close, textures become particularly apparent, with aspects such as the finish of a facade becoming extremely important. The use of lime mortar and limewash is just as important when it comes to the perception of texture as the different types of bricks and stones used, alterations to which are enough to reshape an urban landscape at street level. Here, there is often no going back from the damage caused by poor decisions. Thus, within the context of a landscape guide dealing with an urban landscape, an analysis of texture, coupled with an analysis of colour, are both essential for ensuring effective conservation as well as for creating new areas that are appropriate for the landscape in question.

If the relationship between form and content is very loose, texture should be seen as a source of perceptual information that provides us with insights into significant changes. The High Line ↙ is an elevated park which opened in New York in 2009. Created on a former New York Central Railroad spur, it is an excellent example of how an unused space can be given a new lease of life and made available for the enjoyment of the general public (although not without its detractors). It has certainly enriched the texture of the New York skyline and changed how this former transport infrastructure is perceived. Here, art is created in the city for the city, bringing with it richness and contradictions, which are not necessarily out of place.

b) Colour

In the majority of landscapes with historical built-up areas, the rich colours and materials used for

Natural and human elements involved in landscape intervention in Bolonia Bay

facades are aspects that are synonymous with environmental quality and are not always found in more modern areas. Cities such as Granada and Seville have an old town full of colourful elements, and others such as Málaga offer an iconic and stylish array of high-quality painted facades. During the 20th century, there was a noticeable loss of such colours. However, in certain cases where the original work was not destroyed, particularly where stucco and high-quality materials were used, the original layer has been exposed and the colours brought back to life. Contemporary work that has been particularly sensitive when it comes to colour

as a result of the participation of professionals with expertise in the field is easily identifiable and should serve as an example in this area.

A landscape guide may draw on this approach, providing guidance on the colour of facades which goes beyond simply resorting to industrial colours. Having a custom colour chart may help us understand the weaknesses that many urban and rural landscapes display, the result of a failure to properly take this crucial aspect into account. The loss of such a fragile balance and the associated aesthetic richness is not trivial, and should be analysed in all landscapes that have built heritage with natural finishes involving lime and render that are easily lost, resulting in their heritage values significantly deteriorating. This also applies to settings that are rural in nature, those whose buildings are spread out and those with vernacular heritage (in the broadest meaning of the word).

Although it is a monument, when considering colour, we may take the Alhambra as an example applicable to a landscape guide, due to its size and extraordinary influence on the historic urban landscape of Granada. To do this, we should turn our attention to the colour chart included in its Master Plan ⟀. Despite the vast amount of research carried out into this monument, little attention has been paid to its exterior colour. As such, approaching the landscape known as *Territorio Alhambra* (Alhambra Territory) from this extremely important angle is rather novel.

This document explains how little is known about the original colours used on the outside of the fortress, and notes how changes to its colours are the result of restoration work over time, as well as the gradual migration of pigment from the inside of

the large stones, resulting in the predominantly red exterior we see today. As in any landscape, human action has brought about a series of interesting changes that locals and outsiders have been able to appropriate as their own.

The Alhambra Master Plan 2007/2020 ⌞ is very similar to a landscape guide in the sense that it establishes a process for studying a particular area and bringing together knowledge from different fields, without losing sight of the role played by vegetation and the land. Given the importance of ensuring the public is able to fully appreciate the monument, one of the measures of the Master Plan was the creation of the Alhambra Territory Landscape Guide ⌞. To conclude this section, we may confidently state that colour is key when it comes to understanding and preserving landscapes as well as correcting negative impacts.

c) Volume

The volume of objects, regardless of their size, is a key consideration when analysing perceptions. The concept of three-dimensional space is an important concept and a central part of art, design, cinema, scenography and the visual arts in general. The historical tendency to work with two dimensions means images have traditionally lacked information about the depth of the object being depicted. Three-dimensional (3D) representations are now common practice in areas such as architecture, the audiovisual industry, video games and simulations. It should come as little surprise that cinematography, the art of motion picture, has led the way in terms of capitalising on this transformation, which, at the extreme end of the spectrum, has been used to create alternative realities and science fiction. It

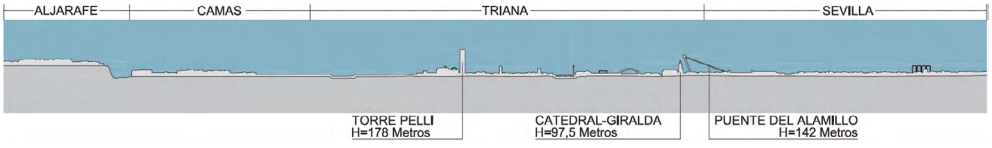
may be argued that the contemporary world is essentially a framework made up of visions in space, given that modern digital tools allow for three-dimensional constructions that require vast input in terms of data but also provide great malleability and versatility once the basic information has been established. This would have been literally unimaginable when perspective paintings were the closest people would come to a lifelike depiction of reality.

However, here our attention should not just be on the tools used for representing volume, but on its perception and role in helping us understand a landscape and foresee visual and non-visual impacts. It follows on from this that volume cannot be studied in an abstract manner given that the focus should be on establishing how physical forms relate to their environment. This is particularly relevant when looking at architecture and landscape.

In the case of urban contexts, it should be remembered that the evolution of a city in terms of its density will not be uniform. For example, historic centres tend to have buildings with around four floors and strike a very interesting balance when it comes to volume, this being something that has clear advantages from the perspective of town planning and quality of life in cities. As such, when viewing cities with a large historic centre, such as Seville, from a rooftop, what we see is a jigsaw puzzle of homogeneous pieces that fit together, albeit with subtle variations arising from the range of environments present at street level. Using modern instruments that allow for 3D analysis, we are able to view the layout of a city in terms of volumes, create a series of patterns based on this, and subsequently use these to effectively develop landscapes in evolving areas of the city as well foresee impacts.

Certain issues that have arisen relating to urban heritage management and its study at a landscape level have been the result of a failure to properly consider the three variables discussed in this section: volume, colour and texture. By properly addressing all three aspects in impact studies, we are more likely to be able to foresee and resolve such issues. This is something that is particularly relevant when it comes to the inevitable evolution of cities, a challenge those responsible for managing them must accept and one which involves effectively creating new environments as well as designing buildings which fit in with their surroundings whilst being creative and unique. In certain academic studies, an approach based on analysing degrees of density for the purpose of managing land-use variables, and subsequently comparing this information with data on quality of life has been put forward. Here, the study of volume is not merely an exercise for analysing the visual makeup of an urban environment, but also an instrument that allows us to determine environmental quality.

Generally speaking, in an urban landscape guide, the study of volumetric balance does not play such a significant role. However, that does not mean it is any less important or difficult. Here, all we have to do is think of the constant challenges related to town planning in the Albaicín in Granada ⟀, declared a World Heritage Site along with the Alhambra. Great care is taken in this quarter of the city when it comes to maintaining the size of its buildings and the views it offers, with residents themselves overseeing its evolution. Through such experiences, it becomes clear that urban culture must be strengthened through a collective approach involving studies of perception. These may draw on



Images providing information on the volume of new infrastructure, in *A Guide to Seville's Historic Urban Landscape*

the considerations outlined in this publication but may take many different forms.

Studies on the integration of infrastructure in the countryside are more recent and began to appear at the same time we saw an increase in public- and private-sector initiatives in rural areas. Such initiatives sometimes involve large, poor-quality buildings for farming (such as storage facilities), whereas others are designed to be unique additions to the landscape, such as the new wineries we are seeing appear in well-known vineyard landscapes.

Two other types of infrastructure we now often see in rural settings are wind and solar farms. Despite having a more streamlined design, these are also considerable in size and significantly impact upon landscapes due to the fact that they involve not one but numerous structures being installed at a single location. The volumetric perception of these spaces means they become important features of the countryside, where their impact is evident. Despite this, efforts have been made to increase the extent to which they fit in with their surroundings.

Heritage resources associated with perceptions of landscapes

These kinds of resources may be divided into two groups: direct or indirect, both of which are very different but must be taken into account in a landscape guide. The first allow individuals (residents or visitors) to directly perceive a landscape using their senses, whereas the second provide depictions of a landscape.

We mainly use our sight when it comes to perceiving landscapes, although we do use other senses.

As such, we will begin by discussing the main direct heritage resource associated with the senses: views. As discussed in previous sectors of this chapter, certain locations offer particularly good views of a landscape and thus become basic resources for observing and enjoying it. These include viewpoints and roads. Those responsible for creating a landscape guide should be aware of the fact that landscapes are not observed from random locations, but in the majority of cases from one of these places. Viewpoints, regardless of whether they have been designed as such, tend to be places that offer static views, despite the fact that when looking at a landscape there will always be some kind of movement, such as the observer turning their body or head, scanning the surrounding area or moving slightly to avoid something blocking their view, to name just a few possibilities. Certain details may be given for these kinds of resources so that possible opportunities for maintaining and improving them can be identified. These include information that allows them to be identified (name, location, a brief description, their type [watchtower, castle, a purpose-built viewpoint, etc.); the quality of the views offered (including the range, visual obstacles, etc.); user-related factors relating to the viewpoint (ease of access, capacity, etc.); facilities (a funicular which takes visitors to the viewpoint, bars and restaurants, signs, etc.); and how representative they are (the importance of the viewpoint due to it featuring in travel guides, on social media, etc.).

Apart from the static or still views offered by viewpoints, the other way of visually perceiving a landscape is whilst moving. Although less studied and documented than viewpoints, roads and paths of various kinds and involving different speeds are the main locations from which people see landscapes.

These may be divided into two groups. The first includes roads and paths leading to the landscape, which offer sweeping views of the area (be it rural or urban). Their analysis is based on the visibility and identification of landmarks (watchtowers, hills, etc.) and other key elements of the landscape (such as certain types of roofs or an abundance of trees/woodland), in addition to considering the distinctiveness of the features present (clearly identifying the main monuments, the oldest areas, parks and gardens, crops, etc.), and the experience of the individual moving as well as what they are doing in the vehicle (passenger, driver, etc.). The second includes main roads (motorways, dual carriageways, etc.). Here, particular emphasis should be placed on their design, which, in addition to having a functional purpose, may clearly respect and fit it with their surroundings. In doing this, attention should be paid to the cultural and natural aspects of the landscape in question.

Other direct heritage resources associated with the senses are: smells, an example being that of orange blossom in spring in Seville; colours, such as those offered by the cherry trees of Valle del Jerte, Cádiz's immaculate white villages, or the black volcanic soil of La Geria in Lanzarote; sounds, such as the hissing of the wind on La Gomera; and flavours, a particularly illustrative example being virgin olive oil, synonymous with the olive grove landscapes of Jaén.

Social perceptions of a landscape are also related to a series of elements which interact with and reinforce the symbolic, transcendent and identity-related dimensions that give a landscape meaning beyond its physical reality. A landscape guide must identify the heritage resources which underpin the

The attributes of resources affording direct visual perceptions in *A Guide to Seville's Historic Urban Landscape*

Resources	**Attributes**	
Viewpoints (static views)	Identification	Name Location Description Type
	Visual quality	Potential views Content Obstacles
	Capacity	Ease of access Capacity Feasibility
	Facilities	Infrastructure Signs and information
	Representativeness	Based on sources of information
Roads (dynamic views)	Urban landscape from roads providing access	Visibility Content and meanings (landmarks and keys) Comprehensibility (scenes) Experience (position in the vehicle, route, speed, etc.)
	Roads and landscape	Design Integration (heritage and natural aspects)

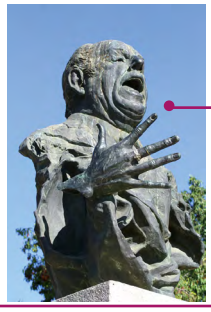
shared social perceptions of the landscape in question. This may be a rather challenging task when these perceptions involve very different groups. For example, it is easy to imagine just how difficult it would be to analyse these resources in a cultural landscape such as Jerusalem, a city where perspectives are not only different but on occasions diametrically opposed.

Here, indirect heritage resources involve extremely varied artistic and documentary sources, although not all of these will be available for all cultural landscapes. The majority of these are intellectual and institutional in nature, and deal with images resulting from works that have been attributed a significant degree of prestige within their field, whereas others draw on oral traditions (already included in other studies or identified as part of the landscape guide) and contain stories specifically relating to the landscape in question.

In terms of artistic sources, these include literature, legends, paintings, prints, drawings and motion picture, to name but a few examples, which take their inspiration from the landscape. Such creations may use the landscape as a setting or context for their work, or place it at its centre. Examples include the

Heritage resources that underpin social perceptions, such as those of an artistic and documentary nature, involve a particular way of seeing the landscape at a given moment in time, and often intentionally project a certain image.

The images projected by public monuments and associated heritage resources in Seville, from *A Guide to Seville's Historic Urban Landscape*



Projected image	Name of the resource
Seville and the Americas	Monument to Christopher Columbus (Cartuja) Monument to Christopher Columbus (Paseo Catalina de Ribera) Birth of a New Man Monument to friar Bartolomé de las Casas Monument to Simón Bolívar Monument to José de San Martín Monument to José Martí Monument to Juan Pablo Duarte Díez Monument to Rodrigo de Triana Monument to the sailors of Christopher Columbus
Disasters and tragedies	Cross Calvary Triunfo de Nuestra Señora del Patrocinio Monument to those who were shot
Literature	Monument to Miguel de Cervantes Monument to Bécquer (María Luisa Park) Monument to Bécquer (Las Golondrinas) Monument to Bécquer (Instituto Bécquer) Monument to Dante Alighieri Monument to don Juan Tenorio Monument to Carmen
The arts	Monument to Bartolomé Esteban Murillo Monument to Diego Velázquez Monument to Francisco de Zurbarán Monument to Juan de Mesa Monument to Martínez Montañés Monument to Joaquín Sorolla Monument to Juan Manuel Rodríguez Ojeda
Music, song and dance	Monument to La 'Niña de los Peines' Monument to Antonio Mairena Monument to Manolo Caracol Monument to 'Niño Ricardo' Monument to 'Naranjito de Triana' Triana al arte flamenco Monument to the potters of Triana and soleá Monument to Antonio Machín Monument to Pastora Imperio Monument to Mozart
Bullfighting	Monument to Pepe Luis Vázquez Monument to Manolo Vázquez Monument to Juan Belmonte Monument to 'Chicuelo' Monument to Curro Romero
Religion	Monument to King Ferdinand III Triunfo de la Inmaculada Concepción Monument to friar Serafín Madrid Monument to Miguel de Mañara Monument to Saint Ángela de la Cruz Ceramic reredos of Cristo del Amor

landscape of Vetusta in La Regenta by Leopoldo García-Alas y Ureña (also known as Clarín), the legend of the Peña de los Enamorados (Lovers' Rock) in Antequera, Impression, Sunrise by Claude Monet, Starry Night Over the Rhône by Vincent van Gogh, Journey to the Alcarria by Camilo José Cela, films shot in the Tabernas Desert, such as Lawrence of Arabia, and the prints produced by David Roberts when travelling around Spain in 1832 and 1833.

Audio recordings, photographs, posters, brochures, maps, postcards, publications and websites, to give just a few examples, all form part of documentary heritage resources. Many of these reveal a certain way of perceiving a landscape at a given moment in time and often intentionally project a certain image. This is certainly the case of travel brochures, postcards and images used in advertising as well as the press. They may also show a scene shaped by the time of day, the season of the year or the weather, an example being photographs; or reflect the feelings, memories and ideas relating to the landscape of those who have experienced it in some way.

08

Managing change: assessment, objectives and measures

Starting point: assessment

The assessment of a landscape is an essential part of creating a landscape guide, as it marks the end of the characterisation phases and the starting point on which to base proposals for action, which should involve specific measures designed to ensure the landscape quality objectives are attained.

Its purpose is to identify and assess the main aspects that make up the character of the landscape under study, gain an understanding of its current situation and pinpoint the risks and impacts likely to shape it in the short, medium and (where possible) long term.

It should begin with an overview of the results of the characterisation process, followed by an analysis of the territory's demographic and economic dynamics, and a study/assessment of the provisions contained in all documents (including those related to planning) created by the relevant public authorities for the purpose of incorporating the landscape in territorial and sectoral policies. Based on the assessment and the aspirations of local inhabitants, landscape quality objectives should be formulated and measures put forward.

Overview of characterisation

When summarising the results of a characterisation process involving a landscape, the aspects that best convey its character to the observer and help them understand it should be given. Here, the physical features of the area in question and its territorial values (these giving rise to a unique set of sensory perceptions) must be presented in a clear and simple manner, as this section serves as an introduction to the landscape and provides

Images from the overview and assessment found in *A Guide to Seville's Historic Urban Landscape*

insights into why it may be considered to be of cultural interest, deserves to be studied as such, and requires actions and measures to safeguard its values.

Rather than giving a summary of each individual aspect covered during the characterisation process, the aim should be to offer an overview of the cultural landscape as a whole, including the natural system that supports it and plays a central role in shaping its character, and the effects of human action on it. This section of a landscape guide should be clear and coherent, and be written in a way which combines description and assessment.

Demographic and economic dynamics

a) Demographic dynamics

The demographic dynamics of a territory is an important, if not the most important, aspect to look at when analysing it. Here, it is important we bear two things in mind: 1) if a landscape is all about perception, obtaining meaningful insights into a territory where nobody lives any more will be extremely difficult; and 2) land use is closely linked to human presence, particularly in terms of small-scale scenarios, such as allotments. As such, when analysing a landscape from a socio-demographic point of view, both quantitative and qualitative aspects must be taken into account.

Obtaining quantitative data for basic administrative divisions such as municipalities is relatively easy, although for smaller areas it may prove more challenging. For example, in Spain such data is widely available for certain city districts as well as a number of parishes in the North of Spain, but more difficult for the rest of the country, particularly large municipalities with several cultural landscapes (Cáceres, Lorca, Jerez de la Frontera, etc.). In such cases, the most common source of information is Spain's National Institute of Statistics ⩗ (INE), although the country's autonomous communities also have their own public statistics offices responsible for municipalities or sometimes smaller areas. Key aspects that should be looked at when considering the socio-demographic dynamics of a territory from a quantitative perspective include the following:

- The total population and its evolution: there is no perfect scenario when it comes to changes to the size of a population in a cultural landscape,

as both rapid increases and decreases can cause problems, such as widespread and poorly regulated construction as well as overcultivation.

- Population density: this measures the number of inhabitants per square kilometre in a particular area. There is no universal standard for deciding whether a given area is overpopulated (for example, a particular increase might cause problems in India but not in the Netherlands). However, it is widely accepted that less than ten inhabitants per square kilometre represents a very low population density and anything above 100 high population density.
- Age distribution: this provides us with information on how old or young a population is. Older populations see a stagnation or decline in their size, something which often results in relict (or fossil) landscapes as well as landscapes that experience less change and show signs of abandonment. Younger populations, however, are more linked to intense population growth, something which can lead to landscapes suffering from population pressure. Furthermore, perceptions of landscapes vary depending on the age distribution of the population. A landscape perceived mainly by younger people is not the same as one perceived predominantly by older people. The most common ways of representing the age distribution of a population is through a population pyramid or by dividing the population into three broad age groups (under 15 years of age, between 15 and 65 years of age, and above 65 years of age).
- Demographic changes: it is also important to look at how the demographics of an area evolve. Generally speaking, these are either organic (natural) or caused by migration. In terms of the first, which is closely related to how young or old a population is (aspects discussed above), the crude birth rate (i.e. the number of births over a certain period,

multiplied by 1000 and divided by the total population) and the crude death rate (i.e. the number of deaths, multiplied by 1000 and divided by the total population) must be considered. Low birth rates (below ten births per thousand inhabitants) and moderate death rates (around 12 deaths per thousand inhabitants, although slightly on the increase) are common in Spain and have led to population stagnation. Migration often influences these trends, meaning it is important to look at net migration (the difference between immigration and emigration). For example, the stagnation and decline of Spain's population would have been much greater without immigration. However, it should be noted that the areas in which cultural landscapes are located often have their own demographic dynamics, which diverge from the general trends seen in the country or region in which they are found.

- Other socio-demographic aspects which tend to be less important when analysing cultural landscapes, but may be relevant in certain contexts (such as areas with mines in the process of being decommissioned): these include level of education, rate of employment and rate of unemployment.

Qualitative aspects are more complex and difficult to approach using conventional statistics, instead requiring monographs and local studies. In a considerable number of cases and where the character of the landscape calls for it, it is necessary to run surveys amongst large, diverse groups of the population, as well as conduct structured, semi-structured or unstructured interviews involving very specific local groups or individuals for the purpose of identifying and understanding events and processes. Below are some of the diverse aspects and areas where these methods of analysis may be required:

When summarising the results of the characterisation process involving a landscape, the aspects that best convey the character of the cultural landscape to the observer and help them understand it should be given.

- The rural or urban nature of the population: this is commonly related to different yet equally valid mindsets that affect the way landscapes are perceived.
- How inhabitants view socio-economic change (or a lack thereof) affecting their territory and thus their landscapes.
- Information on visitors (tourists and day trippers): this may combine quantitative and qualitative aspects, although the latter are particularly relevant and include information such as where they are from, their age, their level of education, what they enjoy doing in their free time and their expectations regarding the area in question.
- Other qualitative socio-demographic information related to specific sociocultural groups in certain cultural landscapes: these include but are not limited to native peoples, those involved in activities in danger of becoming extinct, and elderly people with knowledge on techniques and know-how that have disappeared.

b) Economic dynamics

It is important to describe the economic dynamics present in a landscape, as they may be behind

many of its problems as well as threats to it. As is the case with other aspects mentioned, economic data often covers larger areas, such as a country, region, province or (although with less detail) municipality, meaning that obtaining data pertaining specifically to the landscape being analysed can often prove a challenge. As such, sometimes it may be necessary to conduct interviews with individuals or representatives from institutions able to provide reliable insights into the economic features of the territory where the landscape in question is found.

When looking at the economic dynamics of a territory, a difference must be drawn between the following:

- Economic decline: this is seen particularly in areas with poor communications such as those in mountainous regions, those that are isolated and those close to borders lacking permeability. Many areas combine all three scenarios. This makes it difficult for them to access markets in order to purchase goods and, above all, export their own products, resulting in landscapes which lack progress and experience decline.
- Economic stagnation: this refers to situations involving little or no growth (as opposed to decline) and tends to be seen in territories which, despite being part of distribution and export markets, depend on old, declining industries unable to keep up with the rapid changes caused by globalisation. Although they are not in economic decline, progress is either extremely limited or non-existent.
- Economic growth: this occurs in territories that have successfully adapted to the rules and standards of domestic and international markets, and are able to effectively keep up with the rapid changes that often characterise them. They specialise in

high-quality, unique and/or very high-demand products, these being the most competitive, and they tend to be one step ahead of change. Urban areas tend to adapt best in this regard, although not all.

Economic decline, stagnation and growth may be general in nature, or may involve certain industries, with some experiencing a prolonged crisis with no return and others able to better weather storms or reinvent themselves by effectively adapting to their changing environment. As such, bearing in mind that many of these economic activities have directly or indirectly shaped cultural landscapes, it is important to identify industries that are particularly important in the landscape under study (mining, livestock farming, agriculture, etc.) as well as assess their situation. This section is extremely important, as the guidelines established in the final stages of a landscape guide will largely depend on the economic situation of the landscape in question.

Analysis of institutional action

As has been mentioned in other sections, cultural landscapes are built through the physical action and sensory experiences of people. Without their work and, above all, perceptions, landscapes would not exist. Landscapes are highly subjective social constructions in so far as how they are perceived depends on people, but it is also human action that changes the natural environment, actively shapes the landscape and gives it one of it defining features: dynamism.

These changes, which are not necessarily negative in themselves, alter the natural environment in order to accommodate humans, allow for economic development and growth, and meet the sociocultural needs of local people. This is something that

Cultural landscapes, whose character is shaped by their intangible and tangible facets, are areas that have undergone a process of heritagisation, which has seen them become synonymous with spatial development. Here, the focus moves beyond the mere protection of cultural assets.

has occurred since the first civilisations emerged, and can be seen through the large infrastructure they built to improve communications, defence, and the supply of food and water (paths/roads, forts, aqueducts, etc.). It can also be seen in complex ceremonial sites, such as Stonehenge ↙ (Wiltshire, UK), the Sacred City of Caral-Supe ↙ (Barranca, Peru) and the Luxor Temple ↙ (Egypt).

As a result, a significant part of the collective memory of a people is made up of its material achievements as well as the emotional ties that its members forge with certain aspects of their territory. This is what we are referring to when we talk about a community's cultural heritage. It follows on from this that cultural landscapes, whose character is shaped by their intangible and tangible facets, are areas that have undergone a process of heritagisation, which has seen them become synonymous with spatial development. Here, the focus moves beyond the mere protection of cultural assets, although this should undoubtedly be the starting point for any action undertaken in such landscapes.

a) Landscapes in regional/spatial planning

Area development plans are instruments that vary in nature and have an extensive geographic scope, which tends to be regional or sub-regional but may also be national. They establish broad measures and actions to be subsequently implemented through town planning (the scope of which is small and municipal) and, where appropriate, sectoral planning (infrastructure, energy, the environment, culture, etc.). Examples of these plans include the following:

- Master plans for the management of public services, including water and sewage, roads, railways and mining; and master plans for the management of large areas, an example being the Partial Regional/Spatial Development Plan for the Balmaseda-Zalla Area ⟀ (Enkarterri, Basque Country).
- Supra-municipal and metropolitan development plans, such as the Development Programme for the Metropolitan Area of the Valley of Mexico ⟀ and the Partial Regional/Spatial Development Plan for Greater Bilbao ⟀.
- Development plans that cover specific aspects, examples being the Special Development and Protection Plan for Ruta de Piedra Seca (Majorca, Spain) ⟀ and the Territorial Protection Action Plan for L'Horta de València ⟀.
- Sub-regional natural resource plans, the provisions of which are then expanded upon in master plans covering use and management. These represent key instruments for managing protected natural areas, such as those forming part of the EU's Natura 2000 network ⟀. Representing a further step at this level of planning are sustainable development plans for protected areas. These lay out strategies for the socio-economic revitalisation of the territory in question as well as its area of influence,

which tends to go beyond the boundaries of the protected area.

The catalogue or list of assets and areas of territorial interest that accompanies these plans is helpful for undertaking the cultural characterisation of the landscape, and provides an initial overview of its heritage assets. Although the information on cultural heritage provided by these instruments is not always fully comprehensive, it does include the most significant, including protected heritage.

Institutional action in the area of regional/spatial planning involves all types of contexts, including natural environments, rural areas, rural hinterland, peri-urban areas and urban areas. Its purpose is to establish appropriate models for the planning and management of supra-regional, regional and sub-regional areas, the main aim being to ensure the protection and responsible management of natural resources and the environment, paying special attention to areas of natural beauty and to cultural and architectural heritage, as stated in The European Regional/Spatial Planning Charter ↙.

To sum up, as a scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach directed towards balanced regional development and the physical organisation of space according to an overall strategy, regional/spatial planning directly contributes to the preservation of cultural landscapes.

b) Landscapes in town planning

Town planning refers to instruments aimed at the development and design of land use at a local level

(municipality, district, etc.). Town/city development plans in Spain (or the equivalent elsewhere in the world) are documents that lay out the spatial structure of the area in question as well its general features (communications, facilities and open spaces), and include a series of measures based on the land use(s) established.

General town/city development plans in Spain are implemented through detailed town planning instruments covering specific urban areas. They do not change the structure of the area or the land use, although they may have a positive or negative impact on cultural landscapes. There are also other specific plans which are generally used for protecting and improving a physical or rural environment or a historic centre, for establishing the detailed planning of degraded or outdated urban areas, and for building infrastructure. Although their scope of implementation varies and they do not change basic aspects in terms of regional/spatial planning, they may have a significant impact on a landscape.

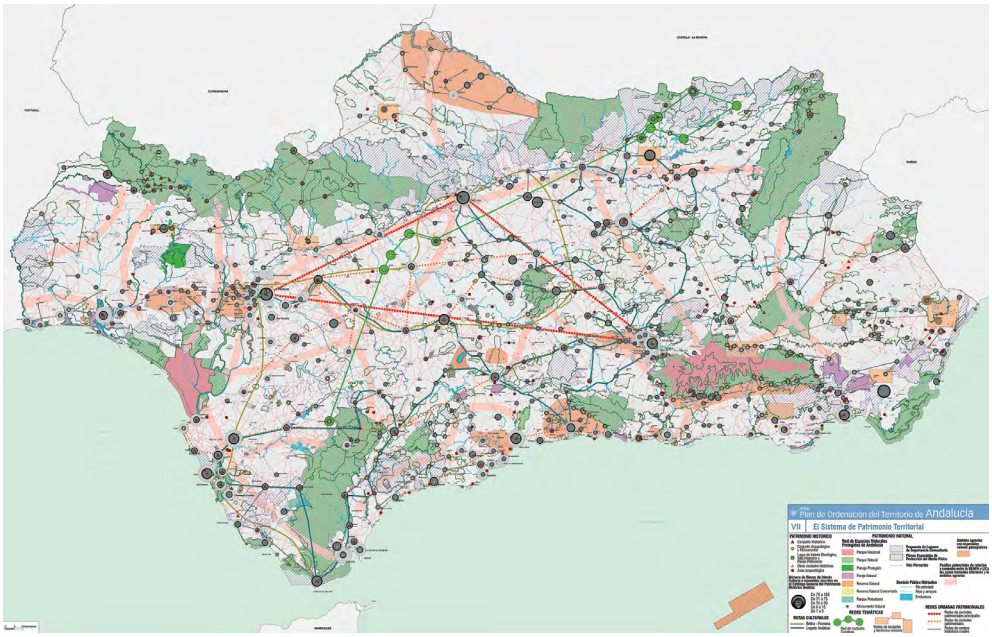
Returning to general town/city development plans, given that these involve putting land into a category related to specific (permitted, permissible and prohibited) uses, they play an important role in preserving landscapes, particularly those of local interest and those that are not protected by environmental or cultural legislation. As such, town planning provides us with extremely useful information for creating a guide to manage such landscapes.

An urban spatial plan generally includes the following elements:

- Informative report: this is based on a comprehensive spatial analysis of the municipality and describes

its current situation, based on an analysis of its physical and socio-economic features. The reliability of its information will depend on when the town planning document was created. Where it is recent, the information provided in this report may be extremely useful for landscape characterisation.

- Planning report: this expands upon the town planning scheme through a variety of different measures to be implemented over the course of the plan. It includes measures directly related to the landscape and territorial heritage in question, where these are foreseen.
- Town planning requirements: these shape the content of the planning report and govern the implementation of the plan, meaning any measure included in the landscape guide must be designed in accordance with them. Where requirements or a specific measure may threaten the landscape in question in any way, specific measures for preserving it should be sought from the appropriate public authorities and these should be included in the landscape guide.
- Maps: maps providing general information and those covering aspects relating to planning enhance and make it easier to understand town planning reports and requirements. Their use is not just appropriate but essential if effective strategies for managing a specific area are to be formulated, this being something a landscape guide should strive to achieve.
- Town planning catalogue: this refers to a register of urban assets (built elements and spaces) with heritage values, as well as measures for conserving or protecting them. It provides a valuable source of information when it comes to these assets and plays an important role in their management.



A map showing territorial heritage in Andalusia, from the *Regional/Spatial Plan of Andalusia*

c) Landscape in sectoral policies: territorial heritage

Landscape has become a central part of a wide range of work carried out by public authorities, the policies of which are used to plan measures relating to natural, cultural, landscape and territorial heritage. As such, plans for areas such as transport, industry, rural development, tourism and regional/spatial planning, to name but a few examples, often include guidelines and provisions relating to landscape aimed at ensuring the implementation of the various policies in place is compatible with their upkeep, protection and improvement.

However, it is environmental and cultural policies that are specifically responsible for establishing models for managing territorial heritage. These provide the necessary regulatory framework for

the protection and conservation of natural areas and cultural heritage assets, and, although their scopes do tend to be clearly differentiated from an administrative perspective, it should be noted that in many cases environmental legislation adopts a cultural approach to preserving landscapes with heritage values.

From the perspective of natural heritage, landscape plays a central role when establishing, setting the boundaries of and managing both protected natural areas and areas which are not afforded specific environmental protection, but which need protecting from spatial and urban development. This may be due to their suitability to be used for farming (rural land); green spaces (urban land); or, at a national, regional or sub-regional level, green infrastructure, as explained by the European Commission in Building a Green Infrastructure for Europe ↙ (to give just a few examples).

Also within the context of natural heritage management, a number of specific designations have been created, such as that of 'protected landscape', which EUROPARC Spain ↙ defines as 'part of a territory which the competent authorities have decided warrants special protection through relevant planning instruments because of its natural, aesthetic and cultural values, and in accordance with the CoE European Landscape Convention'. A protected landscape statement includes amongst its objectives the creation of protection plans and the corresponding requirements governing use and activities, in addition to the preservation of cultural resources, whatever form these may take.

In recent years, the management of cultural heritage has been driven by the principles of sustainable

development, which govern how natural heritage is managed. This has particularly been the case ever since cultural assets, found wherever humans have settled, started to be seen as an important economic resource. As such, cultural elements (regardless of their nature and features) have begun to be seen as a whole as well as in relation to the place where they are found, with their geographic scope widening to include cultural parks, cultural landscapes, heritage areas, etc.

Therefore, when laying the foundations for establishing the boundaries of and managing a cultural landscape, it is essential to carefully look at the information provided by the documents designed to protect it (underpinned by relevant cultural heritage requirements), particularly where the designations involved are legal in nature, meaning they must be respected. In fact, areas that are afforded this kind of protection provide an interesting starting point when creating a landscape guide, particularly where the statement includes specific requirements or guidelines for managing the area, or where a town planning instrument has been created for its management.

Within the context of regional/spatial planning, territorial heritage, taken to mean an integrated system of natural, cultural and landscape heritage, has been widely included in the planning instruments of different sectoral policies. As such, plans for areas such as transport, industry, rural development, tourism and regional/spatial planning, to name but a few examples, often include guidelines and provisions relating to landscape, aimed at ensuring the implementation of the various policies in place is compatible with their upkeep, protection and improvement.

d) How to address aspects relating to regional/spatial and town planning in a landscape guide

Any requirements arising from regional/spatial planning and town planning instruments must be adhered to once they have received final approval. However, documents at any point in their approval process should merely be used as guidelines regarding the policies involved. Taking these instruments into account is essential when designing measures to be included in a landscape guide in order to ensure they are not already included in said instruments or fail to comply with the relevant provisions. Similarly, as has been mentioned, sometimes they provide a wealth of valuable information for the landscape characterisation process through their catalogue of protected assets and/or the information contained in their planning report.

Lastly, it is important to consider including measures in a landscape guide that involve making changes to the regulatory/legal instruments mentioned, where

Territorial heritage has been widely included in the planning instruments of different sectoral policies, including those covering transport, industry and tourism. These plans often contain guidelines aimed at ensuring the implementation of the various policies is compatible with the upkeep, protection and improvement of cultural landscapes.

this is deemed necessary in order to preserve the landscape's natural and cultural values, and make it easier for the public to interpret, understand, appreciate and enjoy it. Furthermore, the protection of natural elements in cultural landscapes, particularly those that are not heritage assets themselves but have a close connection to those that are and shape the character of the landscape, will depend on the approach taken to the environmental planning of the territory in question. In this regard, it should be noted that cultural planning and environmental planning in cultural landscapes must be in tune with one another, something that is not always the case.

Identifying risks and impacts in landscapes

A basic part of carrying out an assessment of any cultural landscape is, once its values have been established, identifying (potential) risks and (actual) impacts which it is exposed to. Although they are dealt with together in this section, they are very different, as risks encompass a wide range of possible threats, whereas impacts are real and, as such, require corrective measures.

a) Identifying and managing risks

The threat of an event or process affecting the heritage values of a landscape is a wide area of study and one which should be approached at a supra-local and local (or landscape) level at the very least. Regarding the supra-local level, which should always be included in any project or scheme involving a landscape, this generally covers broad environmental and social processes that effect not only the landscape under study but also much larger areas, the boundaries of which are not always easy to establish. In 2000, ICOMOS ⟀ published a report on heritage in danger, which, without draw-

ing a fine distinction between risks and impacts, outlines a series of threats faced by all heritage, not just cultural landscapes (although it does include them amongst the most threatened types of cultural heritage). These threats are:

- the changing role of the state towards divesting itself of its responsibilities;
- the changing balance between public values and private interests;
- a lack of human, financial and professional resources;
- the domination of global economic interests;
- a global trend involving the standardisation of culture, the construction industry, professional practices, etc.;
- an increase in the rate and scale of destruction caused by conflict; and
- an increase in population and poverty.

It is important we add climate change to this list. This global threat was not included in the report, as it simply did not receive the same attention at the end of the last century, when it was written. However, ICOMOS has since launched numerous initiatives designed to tackle or mitigate the problem. Any assessment of a landscape must consider the issues outlined above in a broad manner, as well as include a detailed analysis on the effects of climate change.

At a local level, which is the most comparable to the scope of a landscape guide, it goes without saying that the risk assessment must focus on the events and processes specific to the area in question.

The types of risks outlined above should be listed according to their likelihood of becoming an ac-

The main risks present at a local level in cultural landscapes

Cause	Type	Examples
Natural	Climate-related risks	Droughts, hurricanes, floods, wildfires, etc.
	Seismic and geological risks	Earthquakes, tsunamis, volcanic eruptions, etc.
	Biological risks	Naturally occurring plagues and diseases affecting flora and fauna.
Human	Environmental risks caused by human activities	Invasive species, pollution (air, river, groundwater, soil, light, mining related, etc.), overdrafting, deforestation and poor reforestation, etc.
	Social risks	Social and cultural change, population pressure, war, internal conflict (ethnic, social, religious, etc.), disappearance of traditional ways of life, rural flight (particularly involving young people), sharp demographic decline, arrival of refugees, etc.
	Economic risks	Outdated and non-competitive traditional activities, a failure by agricultural policies to take into account their impact on the landscape, economic crises, overtourism, etc.
	Risks arising from territorial issues	Urban development, infrastructure policy (roads, hydraulic installations, high-speed railways, airports, etc.), etc.
	Other human risks	A failure to properly preserve landscape values, criminal activity (intentional fires, illegal trafficking of wildlife and other goods, poaching, corruption, lack of security, etc.), etc.

tual impact (from most likely to least likely). The nature of the impact (tangible or intangible) should also be given in each case, despite the latter being particularly difficult to establish. It is also useful to establish risk groups, as individual risks will often overlap with one another (for example, the threat of an earthquake is linked to the risk of a tsunami in coastal regions) and result in impacts that are more complex and difficult to address.

Once the threats have been determined, given that these do not always affect an entire landscape, it is important to use maps to show precisely which parts of the landscape are affected by each risk, in addition to indicating areas in the landscape which are particularly vulnerable and thus require reinforced risk monitoring.

Once the overall risk assessment for the landscape in question has been completed, an overview of how the threats are going to be dealt with should be given. Risk management forms part of general landscape management (see chapter nine) and must foresee possible threats. Some of these will be more probable than others and affect the values of the landscape in different ways. It is important to bear in mind that, even where the occurrence of a disaster or the degradation of values is circumstantial, the associated risk management strategy must approach it as an ongoing risk (i.e. being able to occur at any time), as well as reflect the changing conditions of the landscape and the processes that affect it at all times. For this purpose, it is important to establish how often the threat has become an impact, basing this on data taken from the landscape in question or a similar one. This may be uncommon (more than half a century between each occurrence), fairly common (half

a century between each occurrence, an example being devastating earthquakes in areas with medium or low levels of seismic activity), or common (less than half a century between each occurrence and where current inhabitants have experienced it). Examples of the latter include major floods and storms in the Mediterranean, hurricanes in Central and North America, and typhoons in Southeast Asia.

In order to effectively manage risks, it is also important to identify those associated with each one. This may include:

- stakeholders that are able to bring about risks in the landscape;
- stakeholders responsible for directly or indirectly preserving the landscape; or
- stakeholders with ties to the landscape, be these emotional, socio-economic, identity related, etc.

These individuals, groups or institutions may be part of the public or private sphere, and having a solid understanding of their behaviour is key to effectively managing threats to a landscape.

Risk maps, a concept created and first introduced in Italy ↙ and then implemented in other countries in the 1980s and 1990s, have become a key tool for systematically representing threats to heritage in general and landscapes in particular. These maps include risks caused by nature and humans, and serve to identify areas where heritage assets are exposed to a significant level of risk. A number of countries and international organisations have created specific cultural heritage risk programmes, examples being the UK, ICOMOS ↙ and Europa Nostra. In terms of the latter, ICOMOS has developed the Heritage@Risk programme ↙, which sees

it produce regular reports, and Europa Nostra, a pan-European federation and citizens' movement which protects Europe's heritage, produces its own list of endangered heritage sites.

b) Assessing and correcting impacts

Impacts occur when threats become a reality, and an event or process has already changed the character and value of a landscape, meaning action must be taken. We should first draw a distinction between the extent of the impact and its complexity (tangible and intangible aspects affected).

Although threats and impacts are directly related, this does not mean that unforeseen impacts not included in risk management plans do not occur. These require specific measures and strategies to mitigate both the impact itself and other indirect effects in the landscape in question.

Just as when dealing with risks, the stakeholders associated with each impact should be identified. Here, it is essential to draw a distinction between those that have brought about the impact (in the case of human impacts), those responsible for minimising its effects and those affected by it. The purpose of this is not simply to identify responsibilities (for which it is essential to take into account the legal/regulatory framework in place), but also to establish the nature of the impact in question and seek out possible solutions. This affects the level of priority (extreme, high, medium or low) given to each measure designed to restore the values of the landscape.

Once the map of impacts that have occurred has been produced and the extent to which they have affected the heritage values of the landscape in

In cultural landscapes, there is a direct link between (potential) threats and (actual) impacts. However, impacts not foreseen in risk management plans may occur.

question established, strategies should be created in order to eliminate or lessen their effects. These strategies should be accompanied by timelines, which should be as specific as possible, for the purpose of linking the successive strategies to one another in an intelligent and precise manner. In parallel to this, a monitoring programme should be created (see chapter nine), involving quantitative and qualitative indicators able to provide insights into the extent and nature of the progress made in terms of restoring affected values.

What next? Objectives and measures

Landscape quality objectives in the European Landscape Convention

Chapter II of the European Landscape Convention establishes the general and specific measures that must be implemented by each country. Specific measures include awareness-raising, training and education, identification and assessment, landscape quality objectives and implementation.

The European Landscape Convention ⟀ defines landscape quality objectives as 'the formulation by the competent public authorities of the aspirations of the public with regard to the landscape features of their surroundings'. Based on this definition, each signatory state is required to formulate landscape

quality objectives through processes of public participation. Establishing these objectives is an essential part of creating a landscape guide, as they form a negotiated reference framework for planning actions in a landscape. Using this framework ensures that such actions both reflect the aspirations of the public and preserve the values of the landscape. When it comes to landscape quality objectives, these also form the basis of landscape policies, as reflected in Recommendation CM/Rec(2008)3 of the Committee of Ministers to Member States on the Guidelines for the Implementation of the European Landscape Convention ⟀:

- Action taken at a technical and operational level must promote protection, management and planning according to landscape quality objectives.
- Specific and/or sectoral landscape strategies at a national, regional and local level must be linked by landscape quality objectives.
- Members of the public and stakeholders affected by landscape policies must be actively involved in the formulation, implementation and monitoring of landscape quality objectives.
- Planning actions and projects must comply with landscape quality objectives.

Landscape quality objectives must be established following the characterisation and assessment of the landscape in question so that, using the information available, the various stakeholders responsible for its management, use and/or exploitation are able to put forward a series of general and specific objectives. These may include the various measures necessary for ensuring they are met in the short, medium and long term, taking into account the fact that stakeholders will not always share the same opinion.

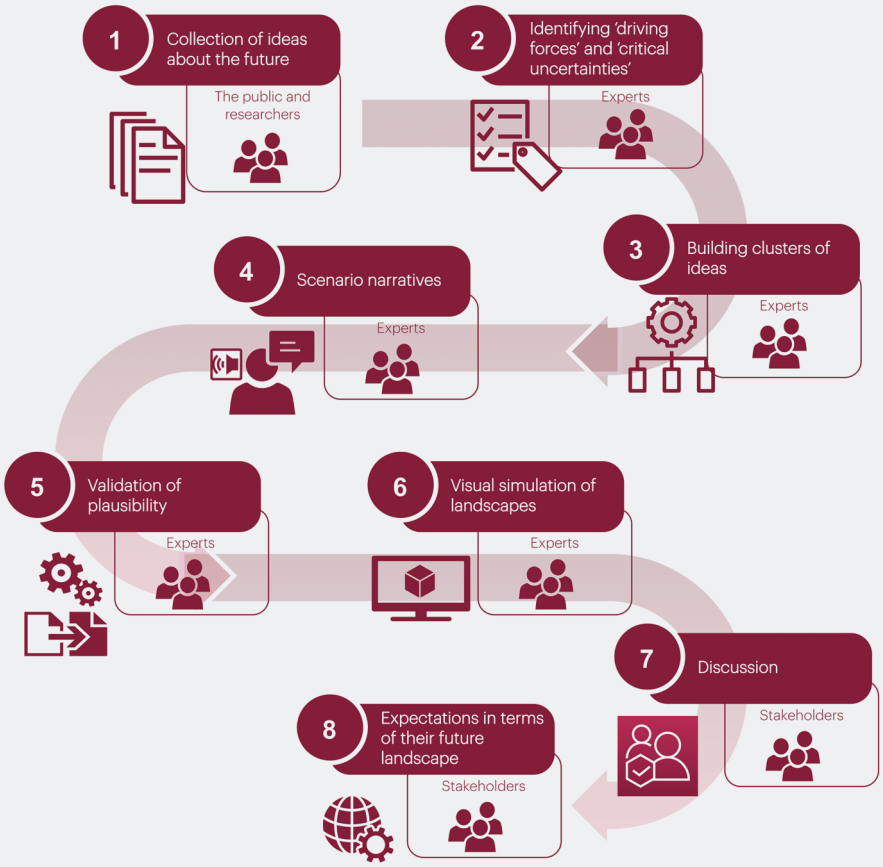
An example of a place where landscape quality objectives were established following a participatory approach is Mértola in Portugal ↙. Here, a series of landscape scenarios were created for the municipality to aim towards over the next 25 years. This methodology is particularly useful for scarcely populated rural landscapes where agriculture does not play an important role and the socio-economic dynamics are leading to stagnation or decline. One of the most striking things observed when applying it in Mértola were the different preferences between the experts consulted and non-expert local people.

How to define landscape quality objectives

As stated in the previous section, landscape quality objectives are established following the characterisation and assessment of the landscape in question, and although public participation should be present throughout the entire process of creating a landscape guide, it is when these objectives are being established that it becomes absolutely necessary. Dialogue and consensus regarding aspirations for the landscape, i.e. the environment in which economic, social and cultural life unfolds, is the cornerstone of any truly successful landscape policy. When the public is aware of the landscape quality objectives established and committed to achieving them together, this increases the likelihood that the measures implemented for this purpose will be a success.

It follows on from this that processes used for creating operational documents relating to landscapes should take place at a local level. This is because it is much easier to plan and implement participatory procedures than in large areas, where the number of stakeholders is significantly greater and administrative responsibilities less centralised.

Definition of landscape quality objectives through landscape scenarios in Mértola

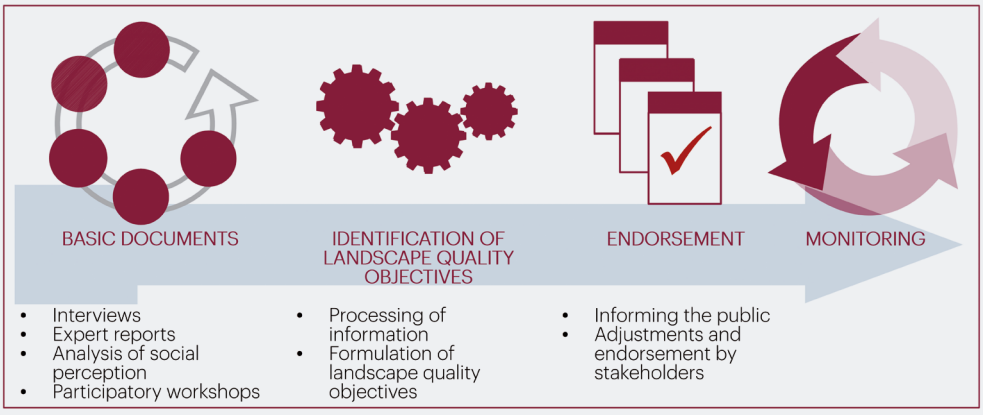


In order to ensure the public is involved in the definition of landscape quality objectives, various strategies may be used, each one leading to a varying degree of public participation, a different level of commitment and ultimately a more or less satisfactory outcome. Below are some ways of ensuring public participation is part of the process used to establish landscape quality objectives. These may be combined with one another.

- An analysis of social participation may be undertaken through technical studies without the direct involvement of the public. This provides an initial insight into the projected image of the territory, i.e. the image conveyed by those who live in it, visit it or manage it, or have done in the past. These kinds of studies are useful for identifying aspects that have been or are particularly important in the landscape, and have played or continue to play a significant role in defining it (see chapter seven). Here, visual sources, academic and research material, documents, and content published by media outlets, including on the internet, may be used. This analysis may focus on the image projected by art, literature, institutions, blogs, the press and cinema, to name but a few examples.
- Interviewing individuals who represent the opinions of the groups identified on the stakeholder map (see chapter two) provides a deeper understanding of the local area as well as initial insights into the aspirations of the public. As such, it is important these individuals are selected following a set of well-thought-out and clear criteria.
- Open participatory processes allow for the greatest level of involvement of the parties involved (or stakeholders), and must follow the protocols in place for these kinds of processes so as to ensure their engagement. In order to maximise their

chances of success, we recommend such processes be coordinated by professionals, these being responsible for designing and running workshops.
· Once the objectives have been established (with or without prior public participation), public hearings and other consultation activities can be organised, the aim of these being to allow for new contributions. Although this procedure tends to be the only one offered to the population concerned within the context of administrative cultural protection instruments (as well as other territorial actions), when we are dealing with landscape, it is clearly not enough unless accompanied by the above.

Formulation of landscape quality objectives



In order to ensure the public is involved in the definition of landscape quality objectives, various strategies may be used, each one leading to a different level of commitment and ultimately a more or less satisfactory outcome.

A comparative analysis of the various public participation procedures used for the definition of landscape quality objectives in Belgium, found in the Landscape Atlas of Flanders ↙, reveals that when the parties concerned are involved from the beginning of the procedure and provided with comprehensive information, the results achieved by participatory processes and their effectiveness improve. This is the conclusion drawn from the results of two case studies looked at as part of this analysis. In the first, anchor places were identified as the first phase in defining heritage landscapes. In this case, only the public authorities were bound by the decisions made in 29 places after inviting the public to participate in them through public information procedures. In the second, the protection of significant landscape elements was analysed. Landowners were involved in decision-making from the beginning of the administrative process, which included 97 objects.

Once landscape quality objectives have been agreed upon, one way of including them in a landscape guide is to decide on which are general and, based on this, which are more specific. Subsequently, measures for achieving them must be included.

Landscape quality objectives need not be directly limited to cultural heritage. Indeed, cultural landscapes are much more complex in terms of their management, and much greater than the sum of their parts. As such, they should also have objectives related to the protection and improvement of the environment, the image of their built elements, the preservation of their biodiversity, the promotion of economic activities and sustainable means of transport, etc.

Measures for conserving, preserving, maintaining and improving

As stated above, both the European Landscape Convention and the guidelines for its implementation give the fundamental stages in the process leading to landscape action as being: the definition of landscape quality objectives and their attainment through actions and measures focused on protection, management and planning.

Article 1, paragraph d of the European Landscape Convention defines 'landscape protection' as 'actions to conserve and maintain the significant or characteristic features of a landscape, justified by its heritage value derived from its natural configuration and/or from human activity'. Article 1, paragraph e of the Convention defines 'landscape management' as 'action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes'. Article 1, paragraph f defines 'landscape planning' as 'strong forward-looking action to enhance, restore or create landscapes'. However, in addition to actions related to the three aforementioned concepts, the European Landscape Convention also lays out spe-

Objective no. 1, in *A Guide to Seville's Historic Urban Landscape*

OBJECTIVE 1 [OBJ. 1]: to regenerate the urban and peri-urban environment

Seville preserves a series of natural values that allow it to be considered a 'green city'. This objective focuses on this aspect of Seville without compromising on its urban essence. In order to achieve it, a series of actions are proposed, such as regenerating its riverbanks, creating green spaces, reducing the impact of sound and light pollution, and promoting biodiversity, in particular that of its birds and trees, which represent powerful aspects of a landscape marked by a significant natural component.

Specific objectives	Measures
OBJ. 1.1 To promote biodiversity	Regeneration of riverbeds and riverbanks Naturalisation of artificial riverbanks Ornitópolis: the city and birds Trees in the city
OBJ. 1.2 To create green spaces and agricultural areas for the city	Riverside parks Agricultural parks Unique green spaces Green spaces near rivers
OBJ. 1.3 To reduce impacts	Protection against light pollution Protection against sound pollution Integration of urban infrastructure Promotion of clean energy Byelaws governing the installation of street furniture The integration of new buildings into the landscape

cific measures, such as awareness-raising, training and education, which may form part of action taken in landscapes.

For their part, the Guidelines for the Implementation of the European Landscape Convention ⟀ expand upon these three areas through their general principles. As such, they establish that, assuming landscapes are subject to change, protective measures should be designed to guide such changes in order to ensure their specific features are passed on to future generations. They also state that the management of landscape is a continuing action aimed at influencing activities liable to modify the character of a landscape, and that planning measures should focus on action designed to change a landscape in accordance with social needs. Furthermore, they talk about the need to formulate strategies and integrate them in both territorial and sectoral policies.

Based on the above, we may conclude that both documents broadly establish three key aspects that must be taken into account when formulating strategies and measures within the context of a landscape guide. These are their purpose (to conserve, maintain, improve, raise awareness, etc.); scope (social, economic, environmental, etc.); and priority instruments (territorial policies, sectoral policies, etc.). Based on this, we will now provide a series of recommendations relating to the organisational structure and features of measures, as well as the formal structure of their presentation.

Organisational structure and features of measures

The formulation of measures designed to attain landscape quality objectives is a procedure similar to that seen in various instruments used in the pub-

lic and private sector. This is an area where there is an abundance of experience, based on which we are able to draw a series of general conclusions regarding the main features that measures must have as well as how to successfully structure and organise them.

'Organisational structure' refers to their formal relationship to the objectives in question. As such, this section should form a coherent system in which the proposed actions are linked to the objectives, both from an organisational (hierarchical) point of view and a functional one (each measure being specifically designed for the objective with which it is associated). If a distinction is made between general and specific objectives, measures must be associated with the latter. For each objective, as many measures as is deemed necessary to attain it should be formulated. However, it should be noted that where the attainment of objectives depends on an excessive number of actions, this tends to hinder success, as do insufficient measures that are complex and difficult to implement. Ideally, each objective should be associated with a manageable number of actions which ensure its core aims can be achieved.

It should be remembered that whilst objectives establish aspirations with regard to a landscape, measures include the specific steps to be undertaken to attain them. As such, properly structuring and formulating them is essential. This is because, as mentioned, measures allow us to specify and attain our objectives, as well as design landscape action around the three cornerstones mentioned and, above all, facilitate decision-making by those responsible for managing them.

The formulation of measures designed to attain landscape quality objectives is a procedure similar to that seen in various instruments used in the public and private sector. Whilst objectives establish aspirations with regard to a landscape, measures include the specific steps required to attain them.

In order to ensure proposed measures are effective, they must meet a series of basic requirements and be appropriate for the specific landscape in question. Amongst such requirements, the following are particularly noteworthy:

- First and foremost, measures must be agreed upon by everyone involved in the creation of a landscape guide. It is recommended that actions be designed and implemented alongside relevant stakeholders (groups, institutions and individuals). If this is not possible, the production team must at least ensure they are aware of them and accept, approve or confirm them. This approach ensures they are feasible from the outset. When doing this, the information gathered as part of the stakeholder map will prove very useful.
- They must be appropriate and necessary for attaining the objective with which they are associated. Proposed measures must be relevantly and significantly related to their associated objective and contribute to ensuring it is attained. Similar measures or those with a common thread may

be created for various objectives, but these must be unique and specific enough to be clearly distinguished from one another. As such, the need for each measure must be carefully considered, and initial screening must take place for the purpose of selecting those that make a relevant contribution to the attainment of the objective in question. Once a series of definitive measures have been chosen, they must be ranked in accordance with how important they are for attaining the objective in question.

- Measures must be precisely formulated and be unambiguous in nature. As such, they must state what they aim to achieve as well as how they will be implemented in an orderly, clear and precise manner. However, this does not mean that their implementation cannot be somewhat flexible so as to ensure they can be adapted to changes that occur in the landscape.
- They must be able to be measured and therefore evaluated. Being aware of the progress made by actions allows us to analyse their evolution during implementation and, where necessary, make adjustments to them in order to ensure they fulfil their specific purpose. However, above all, measuring the overall level of progress made by measures allows us to evaluate and estimate the degree to which their objective has been attained. To do this, a system of indicators should be used (see chapter nine).
- They must be feasible. The implementation of measures must be possible from an economic, environmental and social point of view as well as taking into account the time available. In terms of their feasibility from a social point of view, this largely depends on the degree of participation and dialogue involving all local stakeholders directly or indirectly involved in their management. In order to

ensure measures are economically feasible, their cost and the economic resources available must be carefully considered. Based on this, it is perfectly reasonable to rule out or make changes to measures for which there are insufficient resources. Furthermore, in order to ensure measures are feasible in terms of the time available (and agreed upon) for implementing them, they must be adapted accordingly. Lastly, care must be taken to ensure actions are compatible with environmental values and they must be formulated in accordance with the principles of sustainable development.

- They must have a specific geographic scope. This does not mean that general measures that apply to an entire landscape or cover intangible aspects or values spread out over a wider geographical area are not possible. However, most measures tend to focus on a specific (and ideally local) geographical area, which should be represented using maps.
- Measures should be original, innovative and, where appropriate, put forward an alternative approach compared to other similar proposals. To do this, they must be formulated in a comprehensive manner, taking into account initiatives found in other related instruments covering the territorial scope of the landscape in question, be these strategies or actions that have been proposed, are foreseen, are being implemented or have been concluded. Similarly, the various authorities with relevant competences must be considered, their initiatives analysed and the need to integrate them, supplement them, or add further nuances to them established.
- Where possible, measures must keep with the principle of subsidiarity and, therefore, be based on instruments created by the relevant public authorities, which, given the local nature of cultural landscapes, will often be municipal in nature.

Presenting measures

In addition to having a series of basic features and being structured coherently in a hierarchical manner in relation to their objectives, we also recommend measures in a landscape guide be presented in a uniform manner. Following a standard structure will help readers understand them more easily. Furthermore, given the wide-ranging and public nature of this document, it is important it is accessible and easily understandable for all those who read it. To ensure this is the case, simple, clear and non-technical language should be used. Below are a series of basic sections which may be included. These should feature relevant visual material, such as photographs, drawings and maps.

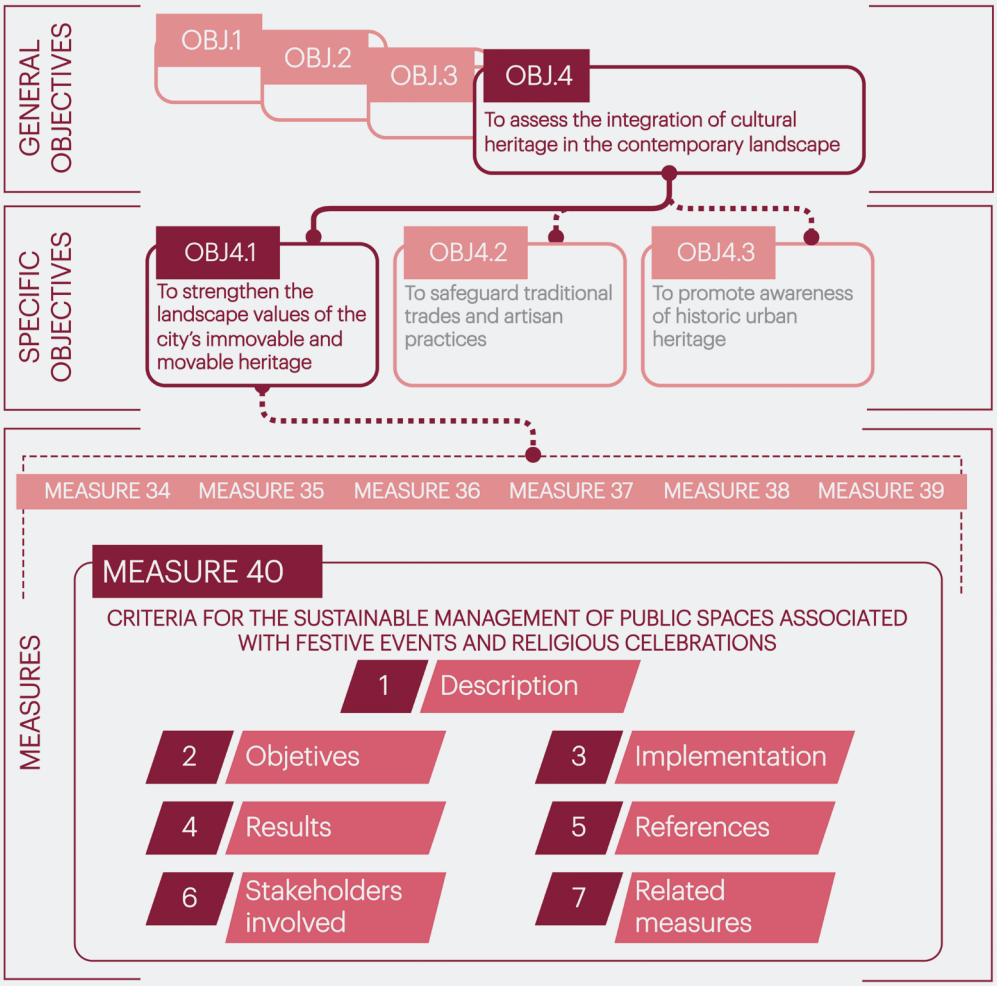
- Identifier and title: each measure must be assigned an identifier made up of numbers or text as well as a title that allows it to be clearly identified. In terms of the title, this should be short and to the point. It should summarise the activity in question and its geographic scope. Although ideally it should clearly describe the measure, where the objective in question clearly states the action, the name may simply include the geographic scope. This applies in particular to measures linked to specific objectives. Nevertheless, sometimes it can be useful to opt for titles that do not meet the criteria above but which are easy to understand. For example, place names used colloquially at a local level instead of official ones may be used.
- Description: this section should include a brief explanation of the need or appropriateness of the measure and its geographic scope, as well as references to initiatives, plans, strategies, laws and regulations related to it. This should finish with an overview of the proposed measure and the results it is expected to achieve.

- Objectives of the measure: this section should succinctly describe what the measure hopes to achieve. It should not be confused with the objective with which it is associated, despite the two being closely related.
- Priority: as mentioned above, not all measures are equally important in helping bring about the attainment of their associated objective. We recommend creating a set of criteria and assigning a weight to each one in order to establish the priority to be given to each measure. Here, the focus should be on how important it is for attaining the objective with which it is associated, although other aspects may be taken into account, such as the deadline for implementation and the economic resources required. This approach becomes more complex if a similar strategy is used for the objectives. Whatever the case may be, this section should result in a qualitative or quantitative value that may be used for managing actions.
- Implementation period: the approximate amount of time needed for implementing a measure must be calculated, basing this on whatever information is available. This is an important aspect to be taken into account when considering the priority to be given to the implementation of a measure, and is also useful when it comes to ensuring effective planning.
- Implementation: this section should include a description of all action involved in implementing the measure in question, presented in a sequential manner. This should explain what needs to be done as well as how and why it is going to be done. Precision is important here, although the description of each aspect does not have to be detailed. A measure is a well-defined and solid proposal but not a project in itself.

- Relevant stakeholders: all measures require the collaboration of a series of stakeholders, from promotion through to implementation and analysis. Those with greater involvement essentially have greater representation.
- Background: here, information should be given on similar experiences that may be drawn upon due to their approach or their results, as well as legislative documents, projects and initiatives that are related to or justify the measure.
- Comments: this section allows the production team to reflect or expand upon any aspect related to the measure, including its approach, implementation, expected results, and possible deviations or difficulties during execution. It should only be used to include new information on the measure.
- Related measures: this section should list the other measures in the landscape guide which the measure has a significant and relevant connection to in terms of its implementation. This refers mainly to measures it depends on or those it is similar to. The objective each related measure is associated with should also be given.
- Visual content: we recommend all measures be accompanied by visual material that helps describe them, adds further information and shows what

In addition to having a series of basic features and being structured coherently in a hierarchical manner in relation to their objectives, we also recommend measures in a landscape guide be presented in a uniform manner.

Measure no. 40, in *A Guide to Seville's Historic Urban Landscape*



they involve. This may include maps, photographs, drawings, digital representations and diagrams, to give but a few examples.

- Bibliographic references: lastly, all measures should be accompanied by the relevant references to documents, laws, projects, etc. that have been used when creating them or are mentioned in them. As well as giving credibility to the guide, this enables readers to find out more about the topic by consulting the resources used.

In the UK, landscape conservation action plans analyse all the aspects that shape the character of a landscape at a local or county level. They include the involvement of local people and lay out a wide range of specific measures, which are normally part of broad objectives. In certain cases, measures are accompanied by information on their cost, their relationship to other measures and visual content. They also include indicators for monitoring and evaluating the implementation and effects of measures. One of many possible examples is the Elan Valley Landscape Conservation Action Plan ↙. Here, the objectives are centred around two strategic aims: to safeguard Elan's heritage and to increase benefits for people from Elan. Projects are associated with each objective, and the threats they would mitigate as well as the opportunities created are described.

09

Managing a landscape guide over its lifespan

Monitoring: concept and tasks

Changing landscapes and the life cycle of a landscape guide

Due to their very nature, landscapes represent a dynamic system. As is outlined in the European Landscape Convention, each society in time interacts with their landscape and accompanies it on a constant journey of change. As such, each landscape guide provides a snapshot of a particular cultural landscape at a given moment in time. As part of this, an assessment is carried out of the landscape, which looks at both its actual and potential values as well as the threats and imbalances identified.

From a planning perspective, monitoring should be regarded as an ongoing process present throughout the lifespan of a landscape guide, from its design and creation through to the implementation and evaluation of its measures. As such, monitoring involves overseeing the creation of the guide and subsequently establishing to what extent the heritage values of the landscape in question are being preserved, what results have been achieved based on the objectives established, how successful the management strategies employed have been, and how the processes implemented may be improved.

Measuring the adequacy of the processes and procedures implemented as well as progress made in terms of results as part of the monitoring of the landscape guide lays the foundations for evaluation. This should be seen as part of the management process and a task that can be undertaken at various points or milestones over the life cycle of a landscape guide. Further on in this chapter, we will look at the need to design a system of indicators in

order to ensure ongoing, objective and methodical data collection throughout, going into this topic in some depth.

So, to sum up, the following should be taken into account when discussing monitoring within the context of a landscape guide:

- It should aim to identify the progress made and results achieved by the landscape guide, thereby providing us with information on how successful it is proving.
- It should be ongoing and not a one-off task, as is the case with evaluation.
- Generally speaking, it should be something that is carried out internally by those responsible for managing the project.
- It is informative in nature and less holistic than evaluation.
- It provides insights of a descriptive nature, but does not involve value judgements necessary for evaluation.

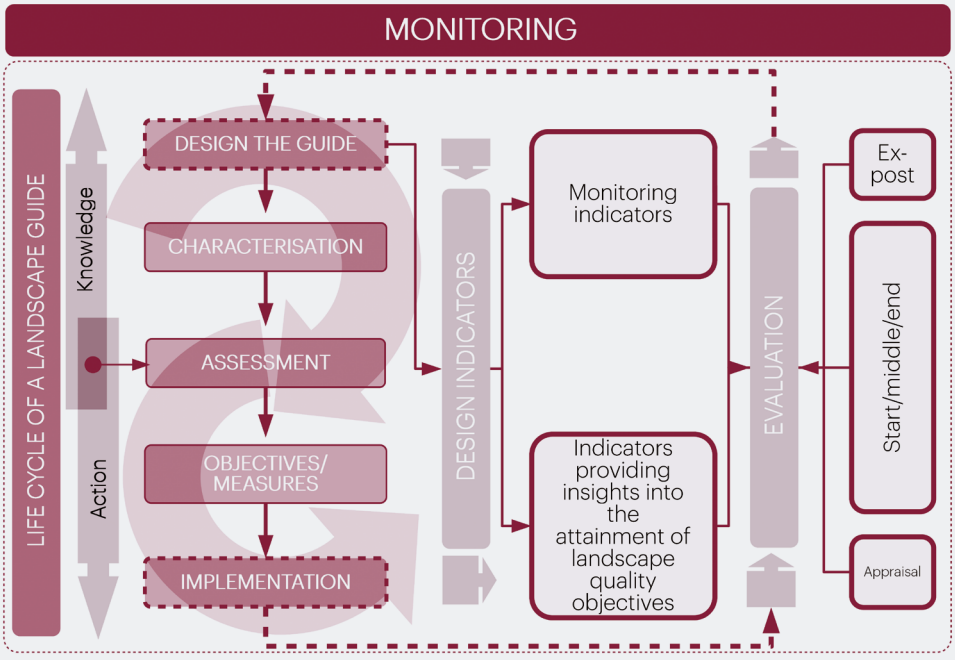
Organising tasks

Based on the above, monitoring represents a sub-system within the management framework of a landscape guide. Bearing in mind that it is something that takes place alongside the other processes involved in a landscape guide, below is a list of tasks which should be carried out, one after the other, over its life cycle.

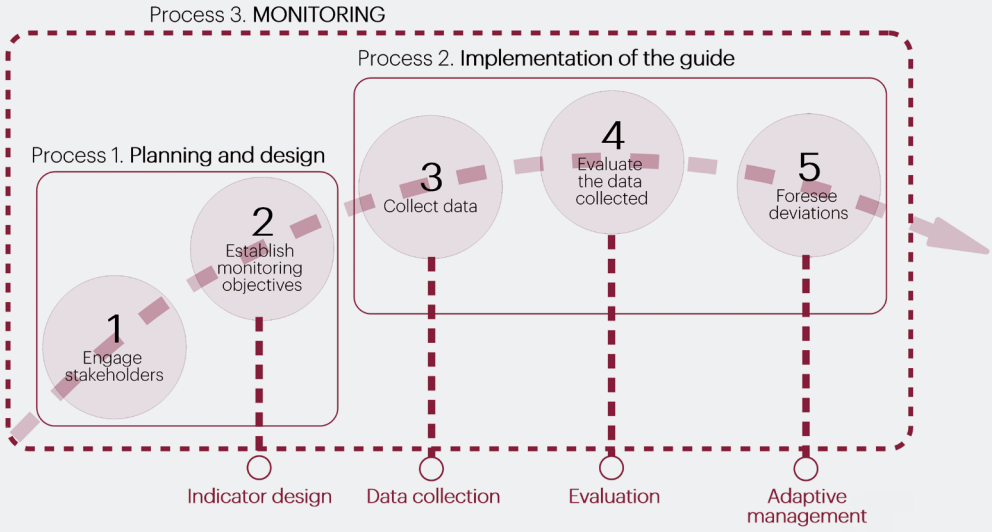
a) Task 1: generating commitment and organising stakeholders

Within the context of a landscape guide, two groups of stakeholders are involved in monitoring, namely:

The monitoring process over the standard life cycle of a landscape guide



Basic monitoring tasks for the main processes involved in heritage management



Within the context of a landscape guide, monitoring should be seen as an ongoing process throughout its life cycle, the purpose of which is to establish how successfully landscape values are being preserved and how effective its management strategies are proving.

· The monitoring commission: this body typically undertakes the necessary monitoring tasks over the entire life cycle of a landscape guide. It is responsible for designing data collection objectives, creating indicators and ensuring data collection tasks are regularly undertaken as planned. The commission may include members of the production team, individuals and institutions involved in the landscape guide and/or external and independent entities, professionals and companies. It may be divided into as many working groups as necessary.
· Stakeholders that provide monitoring data: all the stakeholders identified as part of the landscape guide should be taken into consideration when selecting the members of this group. They should include primary stakeholders and be selected (in terms of number and nature) based on the data required as well as their contribution to enabling the success of the landscape guide. As such, they may include public authorities, associations of various kinds, service users and inhabitants (as participants in surveys or any other initiatives designed to collect data), to name just a few examples. These stakeholders play an extremely important role in terms of providing the input required for each indicator, in line with the nature of each objective established.

b) Task 2: establishing monitoring objectives

Although each landscape guide is different, its landscape quality objectives must be perfectly aligned with its monitoring objectives. In terms of the latter, it may be useful to create groups of objectives, bearing in mind that they should be measured using a set of quantitative and qualitative indicators, these providing the basis for the value judgements formulated as part of the various evaluations planned. These groups of objectives may be:

· related to the internal workings of the landscape guide's management model, which should be monitored. This includes aspects such as how solid it is in terms of commitments to monitoring and updating. This group of monitoring objectives provides insights into intensity, strength, awareness, involvement, etc.;
· related to the level of commitment amongst those who have been identified as key stakeholders with

Possible groups of monitoring objectives

Internal workings

- Organise a quarterly monitoring meeting with the working teams.
- Adhere to the delivery schedule for documents, limiting delays to a maximum of one month.
- Create a channel to allow issues with the guide to be flagged and areas for improvement identified.

External engagement

- Involve primary stakeholders identified on the stakeholder map (data collection for indicators and evaluation).
- Organise annual workshops for stakeholders involved in monitoring in order to assess their engagement.

Attainment of landscape quality objectives (monitoring of the guide)

- Agree upon a schedule for implementing measures.
- Organise at least two annual meetings with stakeholders involved in implementation in order to assess progress made in terms of the implementation schedule.

Social perception of the guide (from the formulation through to the impact assessment of measures)

- Organise public events before, during and after each phase of the guide.
- Gain insights into the level of support for actions and measures implemented during the production and implementation phases.
- Identify areas of conflict in terms of the implementation of measures and collect proposals for improvement.

Effective monitoring involves clearly establishing what will be measured and who will be doing the measuring. As shown by numerous reports by international heritage organisations, the absence of this groundwork tends to lead to management initiatives failing or being poorly managed.

interests in aspects such as continuity, level of involvement and awareness, which must be looked at in relation to their level of power, influence and interest;
- related to the level of attainment or implementation of the landscape quality objects, allowing the effectiveness and efficiency of the work to be established; and
- related to the many ways the public may perceive the measures or actions proposed in the landscape guide for the landscape in question. This is particularly useful for analysing their social impact.

Based on the groups of monitoring objectives created for the landscape guide, a series of indicators should be designed, a topic that will be discussed in more detail later on in this chapter.

c) Task 3: data collection (measuring)

Provided the two previous tasks have gone well, in terms of the level of commitment achieved amongst the various stakeholders and the agreement reached in terms of the monitoring objec-

tives, this task should be straightforward. Once the above has been clearly established, i.e. what will be measured and who will be doing the measuring, the bulk of the work has already been done. Indeed, numerous monitoring reports published by international heritage organisations show that the absence of this groundwork tends to lead to management initiatives failing or being poorly managed.

This task takes place during the implementation phase of a landscape guide. The monitoring commission is responsible for receiving and correctly recording the quantitative and qualitative information provided by the various stakeholders involved in data collection.

d) Task 4: providing the monitoring commission with data or measurements

Data (measurements) must be submitted to the monitoring commission in line with the milestones established for the evaluation process of the landscape guide. This information should be up to date and follow (amongst other things) a clear schedule for data collection so that the evolution of the indicator can be seen. In section 9.2 of this chapter, we discuss what evaluation involves, how often it should be carried out, its purpose and its benefits in more detail.

In order to ensure data is correctly submitted to the commission, in addition to guaranteeing its reliability and structure, commonly used database systems may be used.

e) Task 5: foreseeing deviations

In addition to the progressive incorporation of the results of evaluations into ongoing monitoring pro-

cesses, the concept of adaptive management is seen in heritage management. This refers to the capacity of a management system to be able to quickly incorporate data (almost in real time), so that we are able to see how far we are from attaining our initial objectives at any given moment.

Broadly speaking, any deviations from the process laid out in the landscape guide should be taken into account so that the appropriate decisions can be made, which may include discontinuing certain actions or measures or keeping them in place, based on thresholds previously agreed upon. These decisions may be based on issues relating to its internal workings, such as the collaboration of stakeholders or the availability of sufficient economic resources, or the likelihood of certain landscape quality objectives being attained. Foreseeing deviations in order to allow for reactive decision-making means taking a highly critical stance when it comes to the evolution and functioning of the landscape guide as a project. Ultimately, this approach enables us to recognise shortcomings in order to keep the guide on track.

Evaluation framework

Preliminary considerations

Since the 1970s, evaluation methodologies have been developed and used to evaluate public policy, particularly development aid and cooperation projects, where effectiveness, financial monitoring and the participation of numerous stakeholders are particularly important. During this period, methodologies and techniques such as the Delphi Method ⟀ and the Logical Framework Approach ⟀ began to be employed, and proved so successful that they continue to be used (with certain variations) to plan and evaluate all kinds of projects, programmes

and strategies in the public and private spheres, including at companies and NGOs. Within the context of cultural heritage, they are also used at all levels, from work undertaken by UNESCO through to local initiatives designed to develop and promote cultural heritage.

Evaluation is a part of the management and therefore monitoring process. Its purpose is to analyse, through a series of indicators, the method and results of a programme or policy based on a set of parameters for the purpose of improving it. This concept is applicable to a landscape guide, from its creation through to its implementation.

When approaching the issue of evaluation within the context of a landscape guide, the first thing to consider is the alignment of the landscape quality objectives with a series of monitoring objectives. Certain techniques designed to evaluate plans are based on the use of evaluation questions, which tend to focus on how things have been done and what difference has been made.

When deciding what to evaluate in our work, the following criteria or performance areas may guide our choices (these forming the basis of evaluation questions):

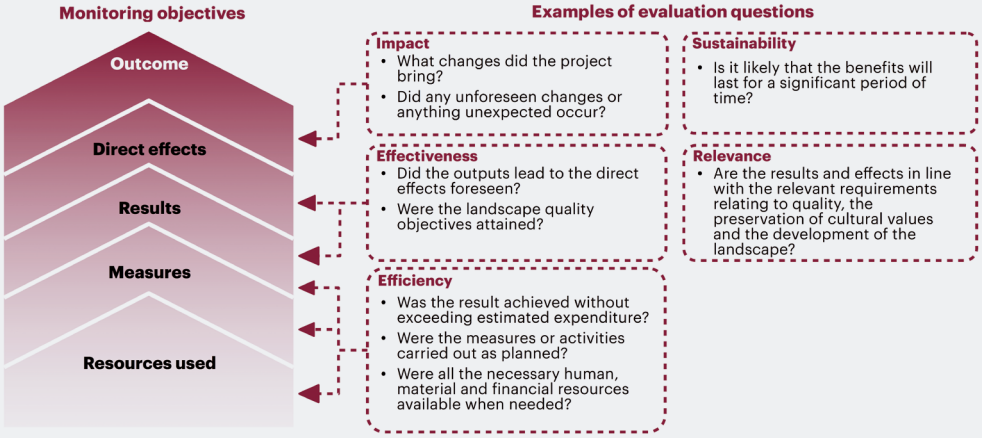
- The landscape guide's overreaching framework (legal, strategic, etc.): the extent to which the guide upholds this framework.
- Relevance and appropriateness: the extent to which the landscape quality objectives are suited to the needs and priorities of the population, and the cultural landscape itself.
- Efficiency: the relationship between the landscape quality objectives and the effort they require in

terms of time, human and economic resources, etc. This is about cost-effectiveness and timeliness.
- Effectiveness: the extent to which the landscape quality objectives have achieved or are likely to achieve their results.
- Coverage: the extent to which the landscape quality objectives include (or exclude) the population and landscape.
- Effects and impacts: the extent of positive and negative changes on stakeholders and the territory of the cultural landscape in question.
- Coherence: the extent to which the landscape guide is consistent with relevant policies, including those covering regional/spatial planning, the environment, agriculture, town planning, etc.
- Sustainability: how long the achievements brought about the landscape guide are likely to last and their cost in the long term.

This initial list of criteria should guide the monitoring commission in terms of designing and establishing measurement indicators. Furthermore, how we evaluate our work should be guided by a series of standards, namely:

- Utility: evaluations must serve a purpose (such as improving the landscape and gaining insights into successes and failures).
- Feasibility: evaluations must be realistic and possible to carry out.
- Ethics and legality: evaluations must be conducted in an ethical and legal manner, meaning they must respect all applicable rights and obligations (such as those relating to image, privacy, intellectual property and all other relevant legal requirements).
- Transparency: evaluation activities should be underpinned by an attitude of transparency and openness.

Formulating evaluation questions



· Accuracy: evaluations should be technically accurate, providing sufficient information about the data collection, analysis and interpretation methods so that their worth or merit can be determined.
· Participation: evaluations should be open to and include all relevant stakeholders.
· Collaboration: evaluations should involve constructive and creative collaboration with as many stakeholders as possible, either directly or indirectly.

One of the organisations that best uses and explains this monitoring methodology is the Interna-

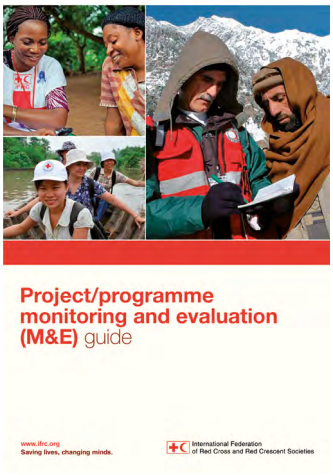
tional Federation of Red Cross and Red Crescent Societies (IFRC), doing so in its Project/Programme Monitoring and Evaluation (M&E) Guide ⟀. This methodology has been widely drawn upon in this chapter and is also used by organisations involved in heritage conservation, such as the IUCN. A particularly relevant publication by the latter in this area is Managing Evaluations: A Guide for IUCN Programme and Project Managers ⟀.

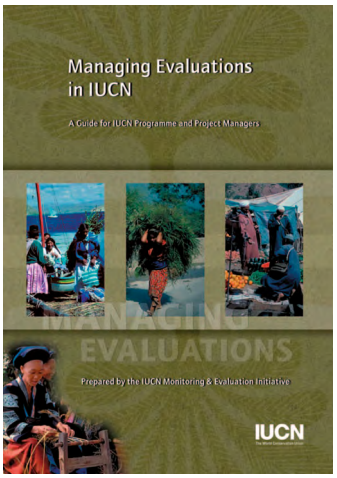
Towards an evaluation plan

Based on the above, we will now be in a position to plan our evaluations, something which involves three main groups of tasks: data, sampling and management.

a) The first group involves creating a framework for the data to be used for evaluation. Here, the aim is to establish what data will be used to measure each monitoring objective, although this procedure can be extended to encompass each landscape quality objective. This may be done in the following manner:

- Creating an evaluation plan table: this provides information on where we are up to with each task. It summarises key indicator (measurement) information in a single table, including a definition of the data, its sources, the methods and timing of its collection, the people responsible, and the intended audience and use of the data. The main benefits of this exercise include ensuring maximum efficiency in terms of data collection and reporting; making the planning and implementation of projects as effective and reliable as possible; allowing for data to be verified (cross-checked) through triangulation; and improving the transfer of critical knowledge to key stakeholders.





Monitoring and evaluation (M&E) guides for programmes and projects by the IFRC and IUCN

· Assessing the availability of secondary data: an important consideration when it comes to data sources is the availability of reliable secondary data. This refers to data not directly collected for the project or by its team, but which can nevertheless meet the informational needs of the landscape guide by providing information on relevant aspects whilst maintaining a certain distance from the system, or being used to help triangulate data sources and verify (prove) primary data collected directly as part of the landscape guide. The criteria relating

The evaluation process of a landscape guide, which encompasses both its creation and implementation, involves analysing its method and results based on a set of parameters for the purpose of improving them.

to reliability and relevance applied to primary data must also be applied to secondary data.

- Determining the balance between quantitative and qualitative data: the pros and cons of each type of data should be considered, these depending on the nature and objectives of the monitoring process. Sometimes, qualitative methods will reveal aspects or issues in the initial stages of implementation of a landscape guide that can subsequently be explored in more detail using quantitative methods. Conversely, quantitative methods may bring to light certain situations which can be looked at in more depth through qualitative methods.
- Triangulating data collection sources and methods: triangulation is the process of using different sources and methods for data collection. This helps ensure that the data collected is valid, reliable and complete.

b) The second group involves tasks relating to sampling. In certain cases, collecting data on all relevant individuals (inhabitants, visitors, etc.) or on all occurrences of a particular feature (for example, all land used for growing grain, all country paths/roads or all infrastructure representing rural heritage) is simply not possible. In such cases, sampling is used, something which involves collecting data from a subgroup to make generalisations about the larger population. The sample population must be representative of the larger population. This group involves the following:

- Establishing requirements for sampling: this includes four steps. Firstly, deciding on which indicators in the evaluation table require sampling; secondly, determining the appropriate sampling method (random sample, purposeful sample, or a mixed-methods approach); thirdly, establishing the

Example of an evaluation plan table, based on the template provided by the IFRC

[**Monitoring objective**]

Goal:	To represent the effect or achievement of the objective.
Calculation 1:	This refers to how the objective is monitored. It may involve establishing one or more related indicators further on in this plan table. If multiple values are involved, here the weight given to each one in order to calculate the indicators may be given, in accordance with what has been agreed upon in the landscape guide.
Assumption 1:	This is the basic argument used to explain how the goal given and the use of the associated indicators will lead to the objective in question being attained.

Indicator 1. Name of the indicator	
Definition and unit of measurement	· A textual explanation of the indicator (what it involves, what it measures, etc.). · A description of all the aspects involved in calculating the indicator, and the values or attributes of the variable. · In the case of a qualitative value, the range of possible values and their conversion into a numerical value. · In the case of a quantitative value, the unit of measurement.
Data collection	Sources: own data, data provided by institutions or stakeholders, etc.
Responsibility	The individual appointed by the coordination team to monitor the indicator.
Information use/audience	The audience and subsequent use of the indicator: partial or final reports, external and internal monitoring reports, etc.
Frequency and schedule	When and how often data will be collected for the indicator. This should include collection dates as well as other key dates.
Indicator nº.	
….	….

sample frame or type of variable (for example, rural heritage linked to water or commercial unirrigated olive groves); and fourthly, determining the size of the sample. In terms of the latter, equations involving key design variables, such as significance (also known as confidence level) and the margin of sampling error, may be used.

- Preparing for any surveys needed for indicators in the evaluation table: these generally use interview techniques (questions or statements that people respond to) or measurement techniques. Surveys can be classified in a number of ways and involve specific requirements when it comes to calculating the size of the sample, this being based on the specific method used (in person, by telephone, email, etc.), the manner in which the survey questions are asked (semi-structured or structured surveys), and the function of the survey (descriptive survey, comparative survey, etc.).
- Preparing specific data collection tools and methods: this essentially involves preparing guidelines to ensure standardisation, consistency and reliability in the data collection process. It may include creating internal requirements to be followed during the various data collection tasks; training data collectors; creating mechanisms to gather feedback from stakeholders at all levels and turning this into information that can be evaluated; designing self-monitoring or internal review mechanisms for the monitoring commission; and using time resourcing sheets.

c) The third group relates to data management. Data management refers to all the processes and systems used to systematically and reliably store, process and provide access to evaluation data. As such, it involves the following:

· Planning for data management based on a series of key considerations, such as:

– the format in which data is recorded, stored and reported, ensuring compatibility through standardised formats and templates;
– the organisation of data into logical categories in order to increase its access and use, be it chronologically, by location, by content, etc.;
– the availability of data, ensuring it is available to the monitoring commission or intended users and taking into account key considerations such as access, how easily it can be searched and found, archiving and dissemination;
– the security of data, taking into account legal requirements regarding privacy and confidentiality;
– information technology;
– the quality control of data, something which involves establishing procedures for checking and cleaning data as well as treating missing data; and
– the responsibility of the team or individuals charged with data management.

· Using an indicator tracking table for recording and monitoring indicator performance: this is a tool for recording and monitoring indicator performance for specific reporting periods (monthly, quarterly, etc.). As a minimum, it should contain basic information for the measure included in the landscape guide and the information for the indicators linked to the landscape quality objectives.
· Using a risk log (table): this can prove very useful when it comes to managing evaluation data, as it allows us to establish thresholds beyond which it would be too costly or impossible to continue implementing measures designed to attain a certain landscape quality objective. This log records and rates risks as well as allows strategies for handling them to be established.

When planning for evaluation, three big areas need to be considered: the data fed into the evaluation system; population sampling; and evaluation data storage, processing and access.

An introduction to working with indicators

Definition and requirements

Earlier on in this chapter, we mentioned the role of indicators in planning for monitoring and evaluation within the context of a landscape guide. The purpose of this section is to look at the concept and implementation of this important tool for analysis, which is extremely useful for evaluating policies, plans and projects, and may be used in landscape guides.

Areas such as political economy, human geography, development cooperation, the study of ecosystems and the analysis of sustainability, to name but a few, have their own definitions for the term 'indicator', all similar but with certain nuances resulting from the context in which they are used. Furthermore, definitions vary significantly within a single language and across different languages. For example, in certain Romance languages, an 'indicator' is a term used in semiotics (more commonly known as an 'index' in English) to refer to a type of sign, i.e. anything that refers to something else. Other working definitions, however, regard an 'indicator' to be a variable or representation of one or more attributes or values (quality, feature, ownership, etc.) belonging to a system.

Evaluation plan from *A Guide to the Cultural Landscape of Bolonia Bay*

Evaluation objectives	**Strategies**	**Goals**	**Aspects to evaluate**	**Indicators / evaluation techniques**
Effectiveness of implementation	Evaluating strategic objectives	To evaluate the evolution of the landscape based on the strategic objectives	Overall situation (landscape uses, activities and resources)	Landscape evolution indicators
	Evaluating specific actions	To evaluate the effects of the measures	Degree of attainment and effects of the measures	Indicators for the measures and their effects
	Evaluating the degree of satisfaction	To gain insights into stakeholder opinion	Levels of engagement, conflict and perception	Interviews and workshops
Degree of implementation	Evaluating agreements and available resources	To put forward improvements to the multiannual programme	Adjustments in terms of resources Degree of collaboration from stakeholders	List of planning instruments and sources of funding

Whatever the case may be, indicators must fulfil a range of functions for them to effectively convey a model of reality, an abstract construction created by humans of an aspect of their physical or metaphysical environment that they wish to monitor, measure, study, analyse, etc. Within this context, indicators must allow us to identify, evaluate and foresee conditions and trends, as well as compare different places and situations.

Within the area of cultural heritage, in the 1980s international organisations such as ICOMOS and UNESCO became aware of the need for new management instruments to evaluate the state of conservation of protected areas. Traditionally associated with ecological and environmental management initiatives in places of natural heritage, indicators of all kinds are now used within the context of monuments and sites as well as groups of territorial heritage assets in cultural landscapes.

Within the context of cultural heritage, broadly speaking, indicators should be used to assess the state of its values, including 'outstanding universal value' or OUV, a concept crystallised by UNESCO for World Heritage properties, in addition to any others that are established. As such, it is important these be taken into account by those involved in heritage management planning. In order to make sure they are effective, when establishing indicators, every effort should be made to ensure they:

- are limited yet adequate in number;
- are sensitive to change and thus able to show whether management actions are making an impact;
- have a clear and measurable relationship to the phenomenon being monitored;

Indicators should meet a series of criteria to ensure they are effective at conveying a particular model of reality. They must allow us to identify, evaluate and foresee conditions and trends, as well as compare different places and situations.

- are able to reflect long- and medium-term changes, rather than short-term small or local variations;
- incorporate as much data as possible (including in terms of geographic scope) for a particular phenomenon;
- detect new pressures;
- require procedures that are as simple and cost-effective as possible;
- are associated with clear thresholds; and
- are identified, designed and monitored in a participatory manner.

It follows on from the above that indicators should also be:

- Relevant: each indicator should provide important and significant insights into the system in question, i.e. a landscape in this case.
- Credible: the information provided on the landscape must be accurate and reliable.
- Feasible: their cost must not be disproportionate in terms of their relevance or the resources used for the plan, project or landscape guide.
- Legitimate: they must not reflect the interests of any particular stakeholder.

As a tool used to represent a particular situation, indicators may be used for four main purposes:

- Generating a model of reality: a system of indicators allows us to shed light on the complexity of the parts and interrelations involved in a system such as landscape.
- Carrying out simulations: indicators may be used to simulate the effects brought about by reasonable changes to certain parameters. This allows us to visualise and foresee new scenarios or behaviours in a landscape.
- Monitoring: this is what most people associate indicators with. Here, they are used to track and evaluate plans and programmes (to give just two examples), and may be applied to landscape guides.
- Predicting the future: by using historical data, indicators allow us to make predictions and estimations relating to the future.

Design and use

Indicators provide a wealth of information on various aspects of a particular situation and should be tailored to each specific case.

- As indicators are a reflection of the real world, before they are designed, the complexity of the interrelations that exist inside and outside of the system they relate to must be thoroughly researched and understood in order to ensure they reflect their nature (hierarchical, functional, etc.). Likewise, the attributes that define each system must be identified if we are to design indicators that are relevant. To achieve this, basic research may initially need to be carried out.
- The complexity of real-world systems, of which landscapes are an example, means different sources and types of data are required in each case.

As such, indicators may be quantitative as well as qualitative. Where the purpose of an indicator is to quantify a phenomenon, a qualitative variable may be used and associated with a quantitative value, for example, as part of an ordinal scale.

· Based on the aggregation of attributes of a real-world system, what are termed 'scalar' indicators may be obtained. This is where the variable is formed by a single value calculated using two or more values or attributes forming part of said system. Examples include the number of hectares covered by a forest, the area of land used to grow fruit or the number of inhabitants under 18 years of age. Vector indicators, for their part, are where independent indicators can be presented simultaneously and interpreted as a representation, for example, of the state of a system. Examples include the annual rate of loss of woodland in order to grow fruit or population decline in places at 1500 m or more above sea level.

· Indicators may be used with various scales. It is important these are analysed in order to establish which one allows them to best fulfil their ultimate purpose, i.e. to represent reality. Here, it is useful to design indicators that do not just show changes over time (i.e. processes), brought about by successive measures, but also indicators able to show more short-term variations or fluctuations, for example in the physical environment (i.e. territory) or population (i.e. society), to name just two examples.

· Indicators may involve value judgements (either direct or indirect). This is particularly useful when using them as a decision-making tool, this being one of their core purposes. Being aware of this allows us to design indicators which involve value judgements, either directly during the measurement or observation process when an opinion, preference or aesthetic judgement is required; as a comple-

ment to what is observed through measurements and upper and lower thresholds, between which the variable must fall; or in a weighted manner through the use of weighting coefficients previously established to produce a total.

This methodology allows us to design indicators tailored to the reality of each landscape guide. Based on this, we could talk about an indicator development cycle that sees the participation of experts from each academic field involved (using the scientific method), the relevant institutions and social groups (essentially local inhabitants). This cycle should be based on a number of basic premises, namely:

- Participation: as many stakeholders as possible should be included in the indicator design process, including those involved in the creation and implementation of the landscape guide. Depending on the specific situation, it may be useful to group teams together based on what each indicator involves or aims to achieve. The techniques that may be used for generating insights/knowledge and bringing about agreement in a participatory manner are wide ranging, and include workshops organised around the Delphi Method or Visualisation in Participatory Programmes technique (known by its Spanish acronym VIPP), as well as the use of forms and questionnaires aimed at individuals or communities.
- Deconstruction: when seeking to understand a landscape in order to create indicators that are suitable for its landscape quality objectives, the system in question must be divided up and structured in a logical manner. The indicators used for the monitoring and implementation of a landscape guide should not be considered to be a mere set of values, but should have a real utility for the landscape guide.

For example, they may be grouped according to the environment or area involved (town planning, physical environment, built heritage, etc.), causality (the effects of a landscape guide on socio-economic development, landscape quality, etc.), the landscape quality objectives previously established, or geography (by uniform geographical areas, etc.).

- Filtering: once indicators have been grouped as described above, it is important to check they meet at least the four criteria mentioned earlier on in this chapter, i.e. that they are relevant, credible, feasible and legitimate. In many cases, based on this exercise, the initial list of indicators will be optimally reduced in number, something which helps ensure effectiveness and efficiency, core objectives of the monitoring plan.
- Implementation: lastly, the monitoring commission must define and describe each indicator selected. Their relationship to the landscape quality objectives or any other relevant thematic aspect must also be explained. For the purposes of standardisation, each indicator must be defined in detail, with information on the following being provided (to give just a few examples): how it is calculated, the type and format of units of measurement used, and the thresholds or ranges of values involved. Information on data collection for each indicator should also be provided, this including the team or individual responsible, the frequency of data collection, etc. This information should be included in the evaluation plan table and indicator tracking table mentioned earlier on in this chapter.

To conclude this section, it is worth noting that the IFRC, in its Project/Programme Monitoring and Evaluation (M&E) Guide, stresses the importance of including monitoring and evaluation as an integral part of the implementation of projects.

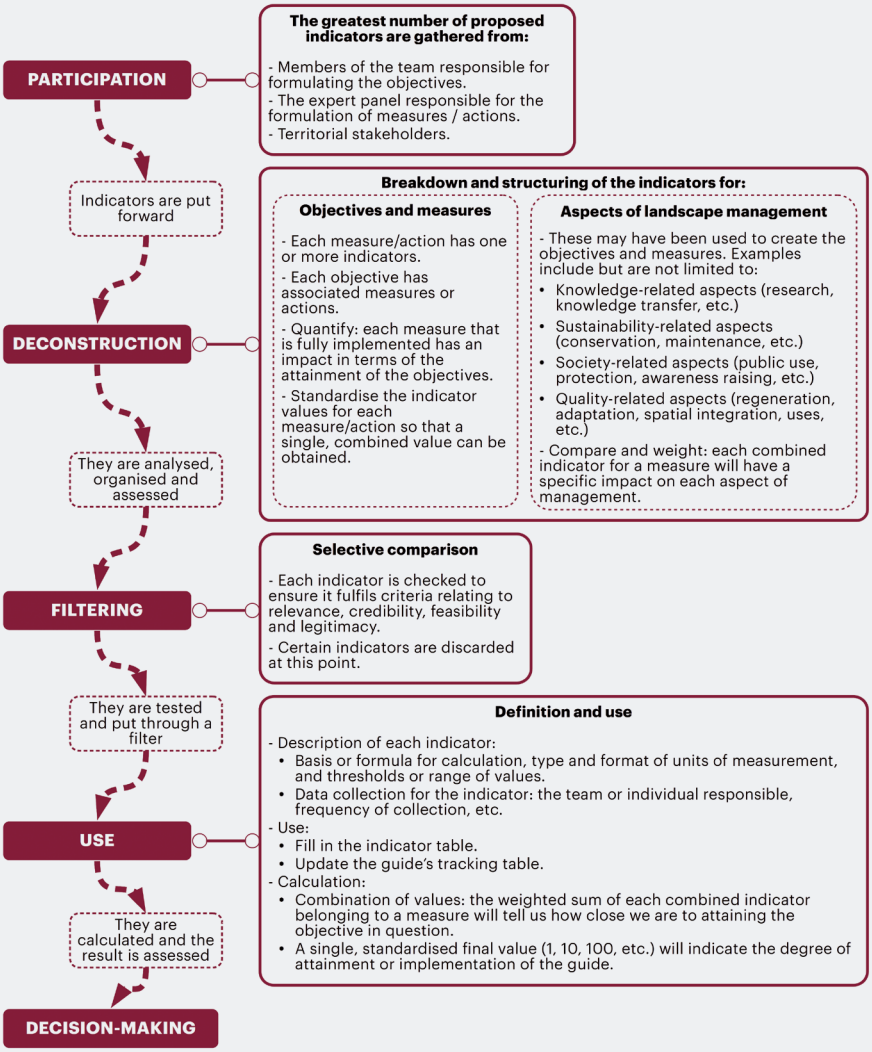
A reactive guide based on adaptive management

The insights obtained as part of the monitoring process of a landscape guide should not just result in changes being made to the actions and measures implemented, and therefore their impact at a territorial, cultural or socio-economic level (to give just three examples), but also to changes to the internal workings of the guide itself. It may be argued that the first achievement of a landscape guide is creating a reactive working environment which allows for the consolidation of a cultural landscape management model that is adaptable, resilient, responsible and sustainable, and results in the landscape becoming stronger and more resilient in the face of pressures or trends threatening its preservation or development.

A particularly useful publication in this area is World Heritage Cultural Landscapes: A Handbook for Conservation and Management ⟀ by UNESCO, which can be used in many different contexts. When it comes to managing landscapes on the World Heritage List, the concept of Reactive Monitoring is important where an indicator shows that the state of conservation of a landscape is under threat. Here, management is adaptive and involves a systematic and ongoing decision-making process designed to improve the management, organisation and implementation system of a guide. This management model requires all stakeholders to react in order to change or do away with specific actions or approaches, or create new ones, where they consider this necessary.

Ensuring the results of evaluations relating to the internal workings and effects of a landscape guide are taken into account in practice (i.e. not just in

The standard process involved in creating and implementing indicators for a landscape guide



writing) is at the heart of adaptive management. This allows us to effectively correct any aspect of the guide over its life cycle.

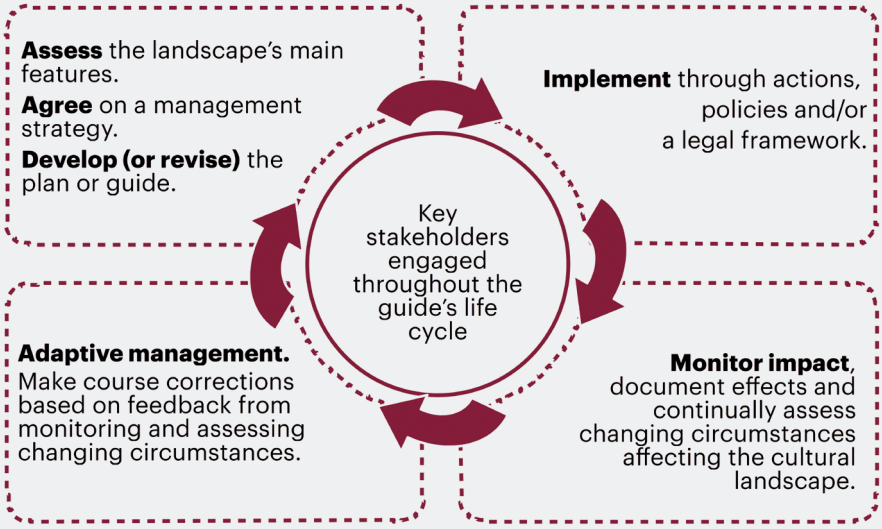
Within this context of adaptive management, the following points should be put into practice, as a minimum:

- Thresholds should be set for the indicators regarded as being key to the process.
- As with other well-known areas of project management, insights gained into deficiencies, mistakes or failures in terms of any action, measure or procedure implemented must be taken on board.
- Based on thresholds being reached as well as insights into deficiencies, mistakes and failures, a series of corrective (i.e. reactive) measures should be put into place, these representing adaptive changes to the guide.
- This strategy may involve forming a team to monitor the risk thresholds, planning for different scenarios and introducing measures that faithfully reflect changes in the landscape.

A landscape guide over time: commitment and governance

A solid and long-lasting commitment based on trust and joint responsibility amongst stakeholders is key when it comes to the survival of a landscape guide over time. These issues (including their formalisation and procedures as part of the broad concept of governance) are commonly seen in the planning, programming and implementation of public and public-private policies. Particularly relevant here is the EU report Participatory Governance of Cultural Heritage ↙, which includes a selection of best practices based on participa-

The management cycle involved in an adaptive model applied to cultural landscapes (UNESCO)



tory governance and compares them to traditional forms of governance.

Once again, development and cooperation policies in the 1970s and environmental policies in the 1990s were the first to establish, experiment with and consolidate new approaches to shared responsibility in governance. These processes became more and more widespread, being used at an international

level by governments and communities to manage development aid programmes; and at a European level to manage extensive public funds for environmental programmes aimed at agriculture and protection, where an extremely important role continues to be played by owners. Experiences in this area have played a major role in shaping the very standardised and well-tested solutions to governance we currently see, which are compatible with any geographic scale and institutional model for stakeholder relations.

Article 11 of the Council of Europe Framework Convention on the Value of Cultural Heritage for Society ⟀, signed in Faro in 2005, lays out a series of requirements for governance. This article relates to the organisation of public responsibilities for cultural heritage, and involves the parties undertaking to: promote an integrated approach by public authorities in all sectors; develop the frameworks which make possible joint action by public authorities, owners, experts, businesses, etc.; develop innovative ways for public authorities to co-operate with other actors; respect and encourage voluntary initiatives which complement the roles of public authorities; and encourage non-governmental organisations concerned with heritage conservation to act in the public interest.

A series of documents recently published by the EU focusing on governance within the context of cultural heritage may also be highlighted. One example is the 2018 report Participatory Governance of Cultural Heritage (mentioned above), published as part of the Work Plan for Culture 2015-2018 ⟀. This publication focuses on how participation can be put to practical use in the ordinary and everyday governance of cultural heritage. Chapter three

analyses the nature of practices in participatory governance of cultural heritage from a set of current national best practice examples, which it looks at in the light of the following factors:

- The initiator
- Motivation
- Obstacles encountered
- Impact or change observed
- Lessons learned

In terms of lessons learned, these include: the governance process is part of the result; bottom-up and bottom-down approaches are necessary and complementary; transparency is key to the process; and connecting (i.e. generating close interaction between) all kinds of heritage is essential.

Lastly, section II.3 (Methods of Implementation) of the Guidelines for the Implementation of the European Landscape Convention ↙ states that the means of implementing landscape policies (an example of which is a landscape guide) may be either regulatory or voluntary. According to these guidelines, voluntary implementation includes agreements, charters, quality labels and contracts between the authorities and relevant stakeholders.

Given that heritage and landscape management policies are more likely to succeed where the competent public authorities are able to generate willingness and commitment amongst the entire population (including the owners of assets they wish to preserve and maintain), the references above are particularly relevant, and represent a recent interest in bringing new experiences in governance to the field of heritage management in general and cultural landscape management in particular. This

Differences between models of government and governance (EU)

	Government	Governance
Main actors	State (central, regional, local government, etc.)	Different constellations of actors (state, civil society, market, etc.)
Pattern of interaction	'Command and control'	Cooperative systems of negotiation and collaboration
Role of the state	Authority	Collaboration
Overall responsibility	State	Decentralised
Planning, implementation and evaluation	State	Different actors, multiple arenas

is something that may be done by drawing on a wide range of practices tried and tested in other areas (particularly in agriculture, the environment and ecology, as mentioned above), adapting these to the needs of the landscape guide in question.

In Spain, examples of such governance practices being used in officially recognised cultural landscapes are few and far between. One such example (despite differences in terms of continuity, stakeholders involved in management, and scale) is the territorial governance structure established in the Management Plan for the Serra de Tramuntana ⟀ (Mallorca), mentioned in its nomination file for in-

A solid and long-lasting commitment based on trust and joint responsibility amongst stakeholders is key when it comes to the survival of a landscape guide over time. These issues, part of the broad concept of governance, are commonly seen in public and public-private management strategies.

scription on the World Heritage List as a cultural landscape.

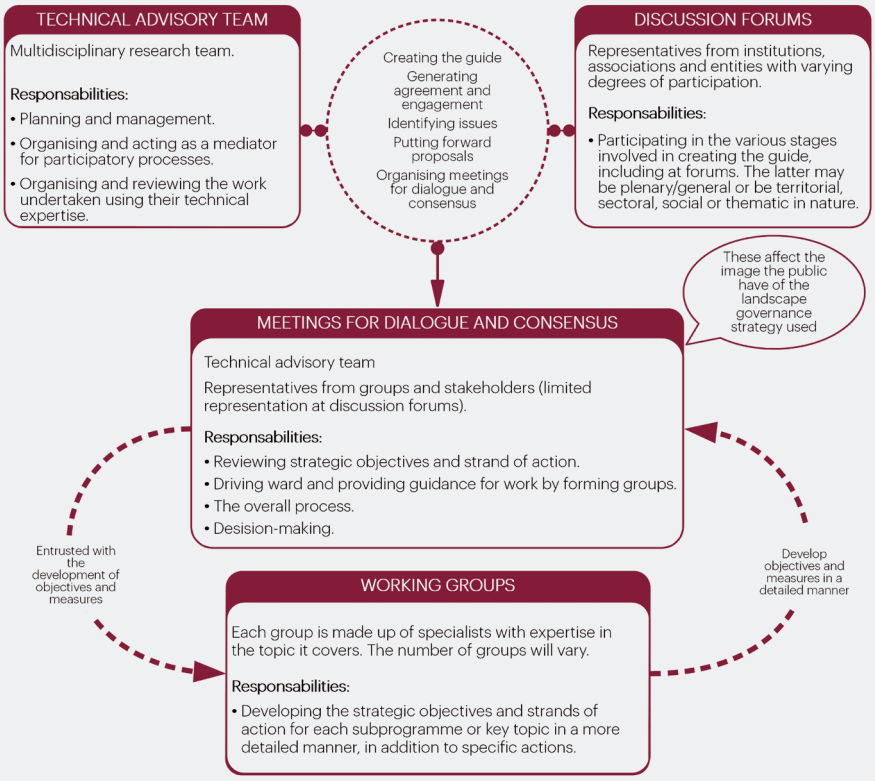
This area, which allows for countless possibilities and in the future will likely become standard practice at an institutional level, with established and even regulated procedures, has given rise to very sophisticated approaches to governance, particularly at a territorial and landscape level. Collectively, these are included under the concept of land stewardship. A particularly relevant publication in this area is the manual ↙ published by the Catalonian Land Stewardship Network ↙, a resource used by other such organisations.

This strategy may complement or help with the implementation of other conservation instruments and policies covering a particular area. Unlike other more conventional forms of governance, stewardship involves two or more stakeholders with an interest in the preservation of the values of a particular area.

The stewardship organisation (which promotes or channels action); owners and stakeholders of various kinds (the local/societal actors affected by the action); and the stewardship agreement (the formalisation of the commitment undertaken) are the three pillars of stewardship. The following should be taken into account in this area:

- The stewardship organisation should be created in line with the objective put forward by those leading the initiative. It should be made up of the body or institution responsible for promoting the action as well as other relevant stakeholders, organisations and individuals. It may be set up as a non-profit public or private organisation and work in collaboration or partnership with a private association or foundation involved in natural heritage, cultural heritage or landscape conservation; government, such as a city hall; a consortium; or other institutions, to name but a few examples. These organisations complement action taken by the public sector, and are particularly useful and efficient due to their expertise and independence. This allows them to effectively engage and maintain regular contact with individual and group landowners. They provide support, advice, material resources and funding for stewardship initiatives, and indirectly create a sound, long-term framework by creating and implementing a management plan.
- Individual and group owners include those who own or use the land under stewardship. They may be private citizens, their number depending on the asset(s) in question, although they often include one or more public stakeholders, such as the state, regional authorities or local authorities. In the broadest meaning of the term, they may also include all those involved in the exploitation or management of the land (agriculture, livestock

Model of governance put forward in *A Guide to the Cultural Landscape of Bolonia Bay*



farming, fishing, etc.); those with an interest in its conservation (volunteers, associations, etc.); and businesses, driven by issues relating to their operations or corporate social responsibility, to give just two examples.

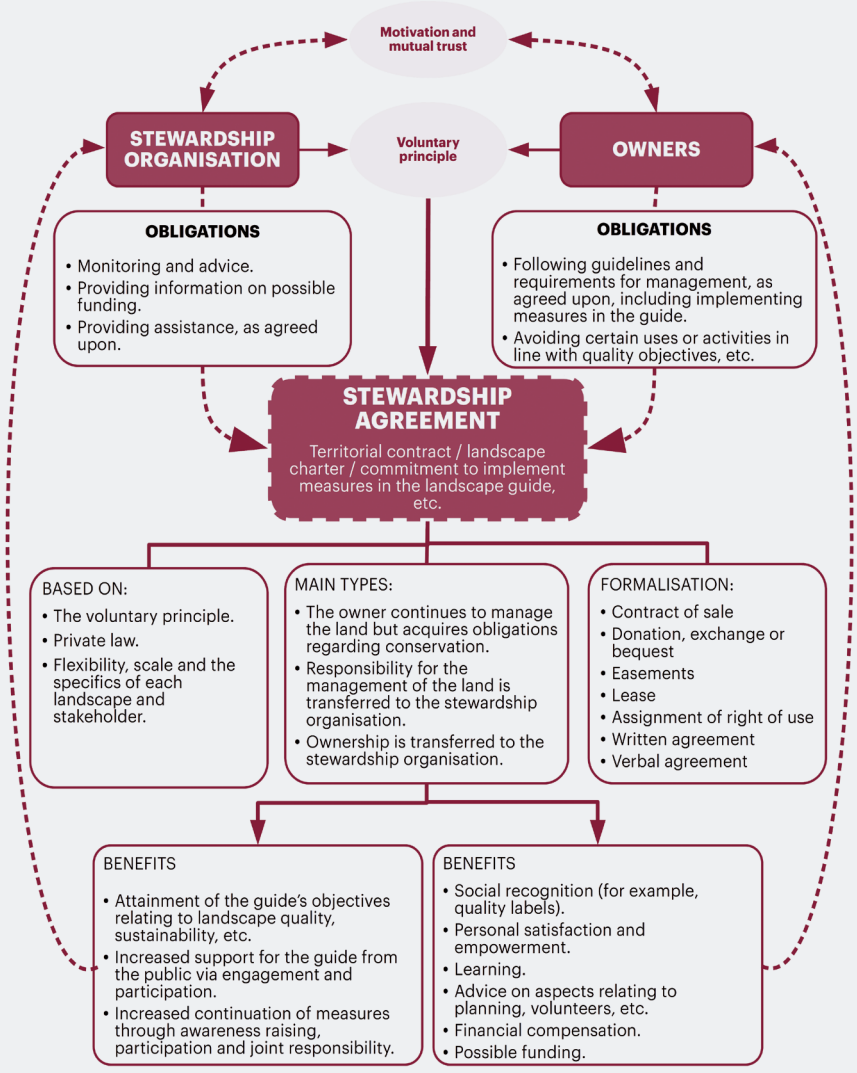
- The stewardship agreement represents the formal expression of the synergy that led to the creation of the stewardship organisation. It is based on a participative and multidisciplinary model of management, and addresses the obligations and benefits of all those involved. Various stakeholder agreements may exist (with each stakeholder) and each one may differ in terms of content. Whatever the case may be, they should be flexible and be designed in line with the objectives established for the area relating to landscape quality, the integration of heritage, awareness-raising and public use, etc.

Overview and experiences of participatory governance

Participatory governance projects, which include land stewardship initiatives, are particularly common in forest, agricultural and environmental management. As such, we find the greatest number of examples in the area of natural heritage management.

Generally speaking, the number of stewardship projects varies significantly throughout the world. This is due to sociocultural reasons and history, with some countries having a particularly long tradition when it comes to land stewardship, such as the USA and UK, where it has been used since the end of the 19th century. Over time, the concept has come to encompass other equally interesting areas, such as cultural heritage and landscape.

The management cycle involved in an adaptive model applied to cultural landscapes (UNESCO)



Initiatives in this area are commonly brought together and promoted by private (or sometimes semi-public) non-profit organisations, which are independent from politics and government. These organisations provide a forum where a wide range of groups, interests and types of stewardship are able to converge. The following particularly stand out:

USA:
- Land Trust Alliance ⟀: founded in 1982, it represents over 1000 land trust members and their more than 4 million supporters.
- The Alliance of Historic Landscape Preservation ⟀: founded in 1978, it has members from more than 30 U.S. states and several Canadian provinces.
- The Cultural Landscape Foundation ⟀: established in 1998, its main focus is raising awareness (through education and awards) and drawing attention to threats.

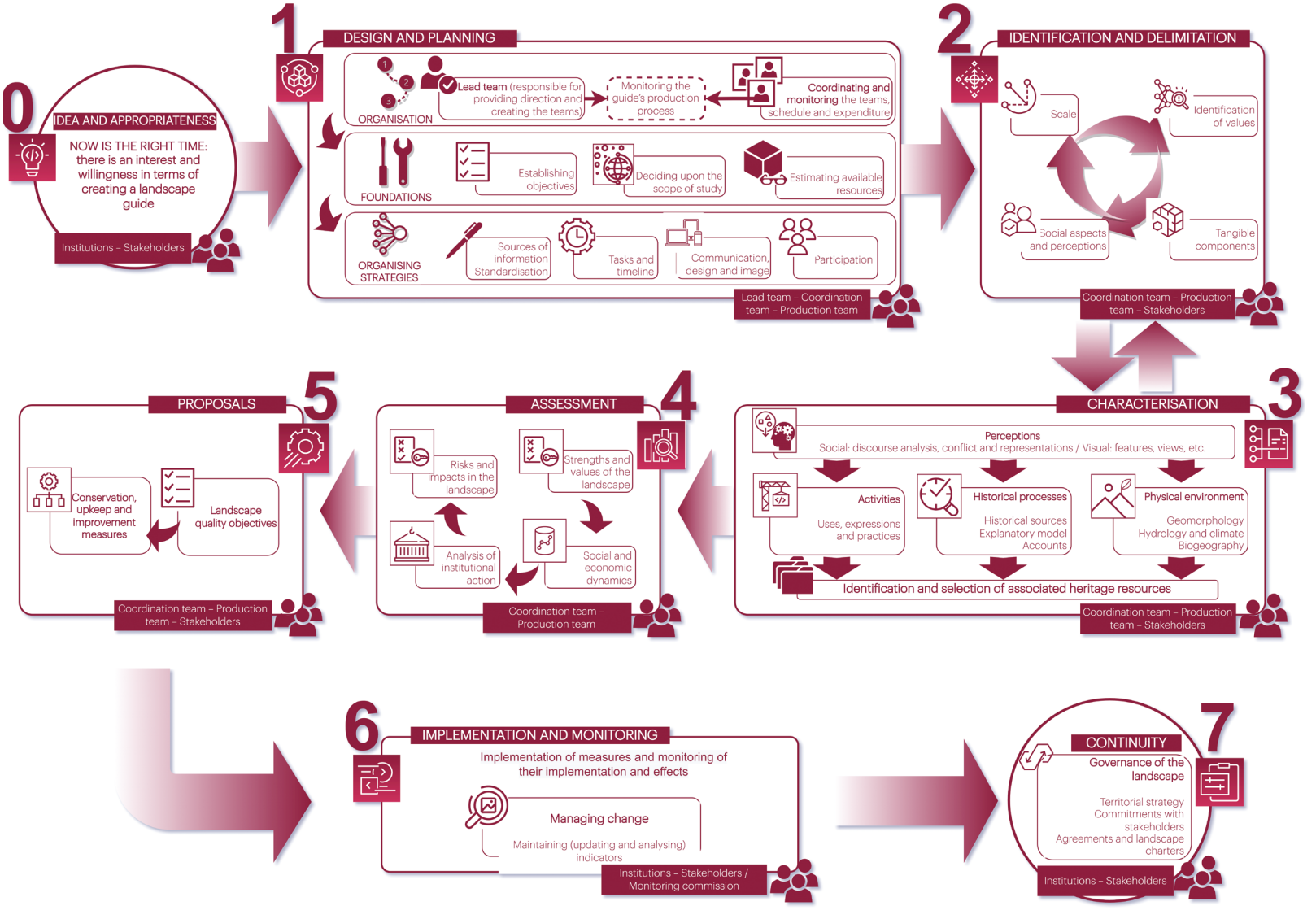
UK:
- National Trust ⟀: founded more than 125 years ago, its mission is to look after nature, beauty and history across England, Wales and Northern Ireland through an extensive network of members and volunteers.
- National Trust for Scotland ⟀: founded in 1931, this organisation currently has more than 350,000 members. It has a general focus on history, archaeology, nature and landscapes.

Portugal:
- Quercus ⟀ – Associação Nacional de Conservação da Natureza (National Association for Nature Conservation): established in the 1980s, this organisation focuses on agricultural, environmental and ecological issues.

Spain:
- Xarxa per a la Conservació de la Natura ⩗ (Network for the Conservation of Nature): this network serves as a focal point for stewardship initiatives in Catalonia.
- ADENEX ⩗ – Association for the Defence of Nature and Resources in Extremadura: the work of this organisation focuses on agriculture and the environment.

A number of specific examples of participatory management in World Heritage cultural landscapes may also be highlighted, such as the Blaenavon Industrial Landscape ⩗ (UK), through the Forgotten Landscapes Project ⩗; and the Vineyard Landscape of Piedmont ⩗, through the Association for the Heritage of the Vineyard Landscapes of Langhe-Roero and Monferrato.

Summary diagram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IDEA AND APPROPRIATENESS
NOW IS THE RIGHT TIME: there is an interest and willingness in terms of creating a landscape guide
Institutions – Stakeholders
1
DESIGN AND PLANNING
ORGANISATION
Lead team (responsible for providing direction and creating the teams)
Monitoring the guide's production process
Coordinating and monitoring the teams, schedule and expenditure
FOUNDATIONS
Establishing objectives
Deciding upon the scope of study
Estimating available resources
ORGANISING STRATEGIES
Sources of information Standardisation
Tasks and timeline
Communication, design and image
Participation
Lead team – Coordination team – Production team
2
IDENTIFICATION AND DELIMITATION
Scale
Identification of values
Social aspects and perceptions
Tangible components
Coordination team – Production team – Stakeholders
3
CHARACTERISATION
Perceptions
Social: discourse analysis, conflict and representations / Visual: features, views, etc.
Activities
Uses, expressions and practices
Historical processes
Historical sources
Explanatory model
Accounts
Physical environment
Geomorphology
Hydrology and climate
Biogeography
Identification and selection of associated heritage resources
Coordination team – Production team – Stakeholders
4
ASSESSMENT
Risks and impacts in the landscape
Strengths and values of the landscape
Analysis of institutional action
Social and economic dynamics
Coordination team – Production team
5
PROPOSALS
Conservation, upkeep and improvement measures
Landscape quality objectives
Coordination team – Production team – Stakeholders
6
IMPLEMENTATION AND MONITORING
Implementation of measures and monitoring of their implementation and effects
Managing change
Maintaining (updating and analysing) indicators
Institutions – Stakeholders / Monitoring commission
7
CONTINUITY
Governance of the landscape
Territorial strategy
Commitments with stakeholders
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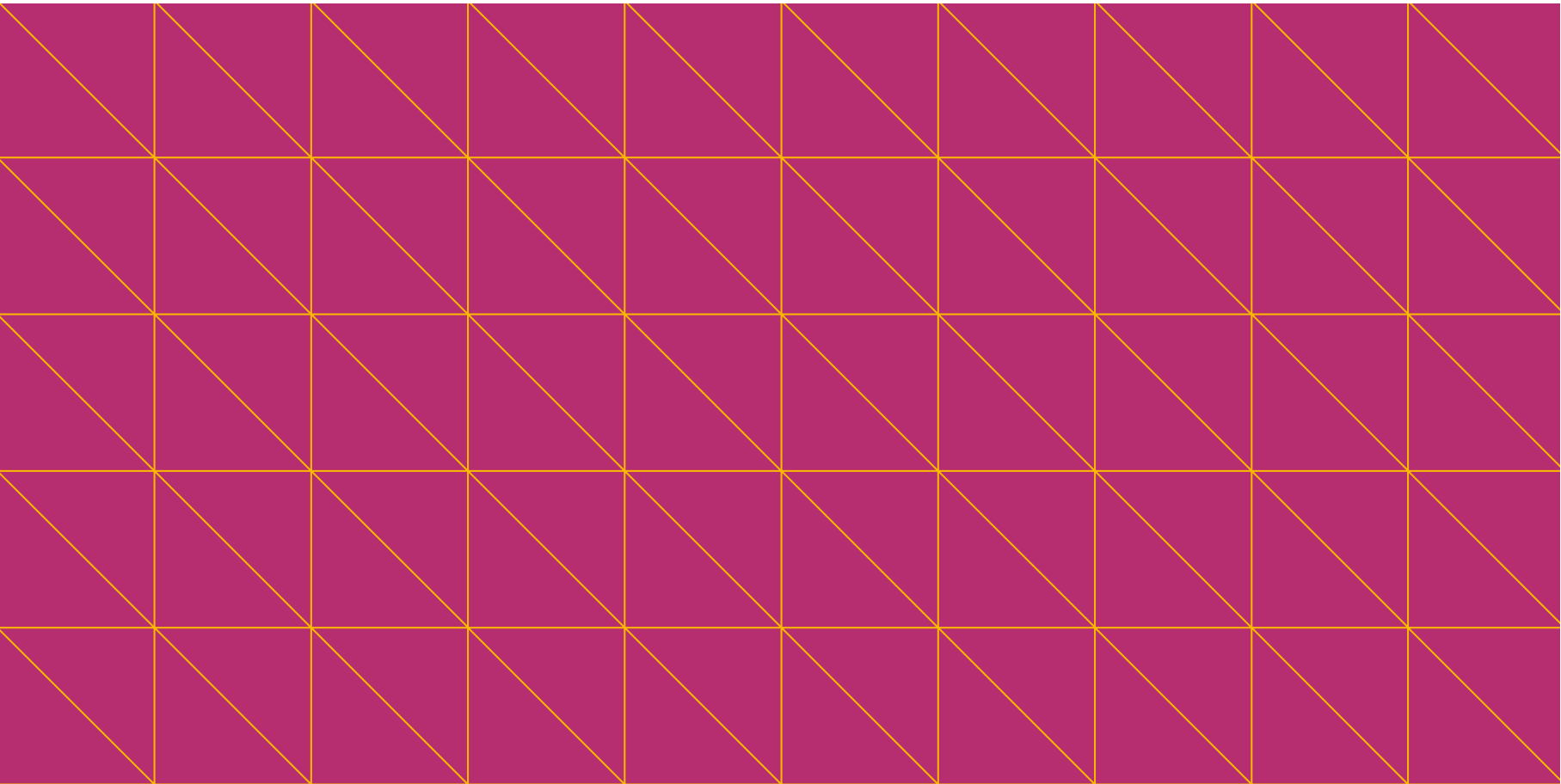
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