

06

Cultural landscapes  
and social perceptions  
on the Internet.  
A methodological  
proposal

Isabel Durán Salado y Silvia Fernández Cacho.  
Cultural Landscape Laboratory (IAPH)

## Introduction

The consolidation of the wide variety of content published on the Internet as a major information resource partly compensates for the limited accessibility or availability of media when the deployment of traditional face-to-face ethnographical techniques (observation, focal groups, interviews, workshops, etc.) is required during the execution of some type of research or management activity. This tremendous development currently enables new formats to be designed for compiling data with new spaces where they can be gathered (Orellana & Sánchez 2006; Córdón, 2016). The vast quantity of information that the Internet offers in conjunction with the variety of spaces and formats that it includes, far from being an obstacle, can be seen to be the ideal framework for the application of the obligatory methodological triangulation that enables to expand and validate research results, and broaden and delve further into understanding the study topic (Olsen, 2004; Vicente, 2009).

Notwithstanding, this does not mean that this is a route that can replace traditional ethnographical work. Rather, in the same way that the use of the Internet has changed

the behaviour of researchers to a greater or lesser extent, ethnographical fieldwork has been enriched by the opportunity for the humungous amount of information that exists on the net to be validated, once it has been filtered and collated, by direct contact with the agents involved, whether the contact is mediated by technology or not (Hine, 2000; Rowlands et al. 2011; Pink et al. 2015).

The *Landscape and Society. Analysis of social perception in cultural landscapes* project (hereafter PAYSOC), in which this monograph is framed, has been developed in this context<sup>1</sup>. The main aim is to use the available information to develop a methodology to analyse social perception in cultural landscapes. Priority has been given to applying a qualitative focus to the Internet to contrast vernacular knowledge with scientific and technical knowledge in a series of cultural landscapes with recognised heritage values. This recognition has taken the form of their inclusion in a variety of regional-scale (The Register of Landscapes of Cultural Interest in Andalusia<sup>2</sup>), national (100 cultural landscapes in Spain<sup>3</sup>) and international (World Heritage Landscapes<sup>4</sup>) knowledge and management instruments. This research seeks to evaluate the scale

of the results that can be obtained by combining documentary and ethnographical analysis techniques in digital contexts to obtain reliable approximations of the perceptions of the set of social agents involved in the management, use and/or exploitation of cultural landscapes.

### Approaches to the analysis of social perceptions in the landscape: a broad range of possibilities based on common interest

In this section, a set of cases in Europe, Asia and America has been selected to illustrate the state-of-the-art. All of these cases seek to incorporate the subjective dimension of landscape into their characterisation and management through the participation of the maximum possible number of interested parties.

In general, it can be stated that more quantitative techniques than qualitative techniques are applied. There is also a very positive predisposition to the use of mixed methodologies, with their strengths and weaknesses identified in every case. Similarly, it is proposed that landscape values transcend aesthetic aspects and their social dimension needs to be incorporated. Lastly, the use of the

Internet must be highlighted as a source for obtaining data through social networks, collaborative platforms and other online applications, and specifically, the opportunities for communication and interaction that Web 2.0. provides. Thus, new ways of developing scientific research are offered while simultaneously conducting an appraisal of the previously cited traditional methodologies.

### Quantitative approaches: measuring perception

The research carried out from a quantitative perspective focuses on measuring and estimating magnitudes, so data collection is oriented towards their measurement. This is the reason why surveys are prioritised for obtaining data from the interested parties, either in person (Bidegain et al., 2020; Santoro et al., 2021) or virtually (McClelland, 2019; Palacio et al., 2019).

In landscape planning and design contexts, perception analysis has also been performed by studying the use made of the media and social networks by the public authorities. This enables the identification of relevant information variables, the characteristics, and cultural and natural values of the image that they seek to project (Gabriel, 2016; Li & Yang, 2022).

Another interesting research line is the study of photographs published on social networks, particularly if they are geotagged. This enables to discover which places are most highly valued by the population while at the same time some of the difficulties of the method can be identified such as sample representativeness, the advertising strategy associated with social network use, content heterogeneity, the high volume of images to be processed, etc. (Oteros-Rozas et al., 2017; Van Berkel et al., 2018; Lieskovský, et al., 2017; Tieskens et al., 2018; King & Martin, 2021).

The use of collaborative technologies and open participation is another research strategy for landscape perception to exploit the power of Web 2.0. and has sparked the development of some useful bibliographical reviews and practical applications (López, Pertusa & González, 2007; Búbalo, Van Zante & Verburg, 2019; Callau et al., 2019).

In addition, to minimise the problems associated with the representativeness of data obtained from the Internet, a research line has been opened on the virtual practices of some limited population groups regarding cultural landscapes. Those associated with the so-called 'Generation-Y' can be highlighted due to

the great presence of millennials on digital media (Sziva & Zoltay, 2016; Yang & Luo, 2021; Rogatka et al., 2017).

### Qualitative and mixed approaches: interpreting social representations and discourses

Qualitative approaches help address the understanding of human processes and the motivations of the various social agents' interest in a specific topic. Consequently, proposals have been designed based on different qualitative techniques that are sometimes combined with other quantitative techniques to obtain more accurate information.

On occasion, traditional techniques of varying complexity are applied. These are directed at different areas of action such as conflict resolution (Lillehammer, 2004; Tully the al., 2019), analysis of the perception of impacts on and changes to the landscape in rural (Vila et al., 2009; Califano, 2020) and urban contexts (Martínez, Sanagustín & Blanco, 2018; Mercado & Fernández, 2008), the development of landscape diagnoses in heritage contexts (Duran, 2012; Barreiro & Criado, 2015) and, in the Spanish case, the development of landscape catalogues (Cortina 2011; Nogué, 2009; 2010; Zoido & Jiménez, 2015;

Zoido & Rodríguez, 2015), among others.

In recent years, advances have also been made in the use of digital environments for the safeguarding, dissemination and enhancement of local memory by compiling images and narrations that show the relationships between individuals and the landscapes where they perform their daily activities (Flower, 2008; Marques, MacIntosh & Carson, 2019). Notwithstanding, the use of digital environments for the application of qualitative techniques is still at a fledgling stage in the area of cultural landscapes, whereby the proposal presented here is a new contribution to this research field.

### Cultural Landscape Laboratory strategies for the analysis of social perceptions

The Cultural Landscape Laboratory (hereafter, the Laboratory) is one of the departments of the Andalusian Institute of Historical Heritage's (hereafter, IAPH) Documentation and Study Centre. The IAPH is a public agency in the Tourism, Culture and Sport Department of the Andalusian regional government, the Junta de Andalucía (Fernández & Sáenz de la Cuesta, 2018). A wide range of strategies have been developed

in the various projects and actions executed by the Laboratory for the analysis of social perception in cultural landscapes according to the spatial scale used, the number of agents involved, the sphere of the projects and the availability of resources.

### Direct analysis

Direct analysis is understood to be performed through on-site fieldwork in which agents are first mapped and then contacted. Subsequently, both quantitative (surveys, panels, censuses, ...) and qualitative (in-depth interviews, participant observation, focal groups, ...) techniques are applied followed by methodological triangulation to contrast the results. Technical studies can also be done on sensorial perceptions through visits to a place to analyse its formal characteristics, visual impacts, viewpoints, colours and characteristic sounds, etc.

This type of analysis can be expensive as it requires qualified personnel to travel to identify agents, hold on-site workshops and meetings or carry out technical studies. This is why deploying these techniques becomes increasingly more difficult as the project expands outwards from the local sphere or as the number of agents involved grows.

## Cultural Landscape Laboratory strategies for the analysis of social perception

Type of analysis	Project	No. of Agents	Scale	Scope
Direct	The landscape of the Antequera Dolmen archaeological complex	Medium	Objective	Local
Indirect	Heritage characterisation of the Map of Andalusian Landscapes	High	Subregional	Regional
	Register of Landscapes of Cultural Interest in Andalusia	High	Local	Regional
Mixed	Guide to the Cultural Landscape of the Bay of Bolonia	Low	Local	Local
	Guide to the Historic Urban Landscape of Seville	High	Local	Local

Cultural Landscape Laboratory strategies for the analysis of social perception.  
Prepared by authors



View from the Menga dolmen. Antequera Dolmen Archaeological Complex. Source: IAPH picture archives

The Laboratory applied direct analysis in the study project on the landscape dimension of the Antequera Dolmens Archaeological Complex (Caballero et al., 2011; Durán, 2012). In this case, documentary sources were examined to discover the context and meaning of social discourses on the dolmens in the town of Antequera, a map of local agents was developed on a participatory basis, and participant observation, semi-structured and in-depth interviews and discussion groups were conducted. A technical assessment was also made of

the visual landmarks in the setting and impact and risk assessments of alterations occurring to the megalithic constructions.

#### Indirect analysis

An analysis is regarded as indirect essentially when it is performed using documentary sources that are processed and interpreted from the technical and scientific perspectives. This type of analysis enables approaches to the projected image of landscapes to be developed through a variety of media such as the literature, the visual

or audio-visual arts, the press, the content of virtual platforms, territorial, tourism, and cultural plans and management programmes, etc.

Although indirect analysis has been used to a varying extent in Laboratory projects, on the whole, only two address landscape perceptions: the *Heritage characterisation of the Map of Andalusian Landscapes* project (Fernández et al., 2008) and the *Register of Landscapes of Cultural Interest in Andalusia* (Fernández et al., 2018). The sub-regional and local scales were used, respectively, although both of the projects were regional in scope. In the first case, the Andalusian territory was divided into 32 landscape demarcations for their characterisation, whereas in the second case, the characterisation was of 116 cultural interest landscapes identified at the local scale but distributed throughout the region. In both cases, the difficulty of applying direct analytical techniques prompted the use of other techniques more assimilated to documentary analysis. Despite a normalised procedure not being applied, an examination of documentary sources enabled a projected image to be obtained of all of the landscapes based on the most prominent aspects in the sources.

### Mixed analysis

Mixed analysis refers to the balanced use of direct and indirect analytical techniques. This type of strategy was developed in the two landscape guides prepared by the IAPH: the *Guide to the Cultural Landscape of the Bay of Bolonia* and the *Guide to the Historic Urban Landscape of Seville*.

In the first of these two cases, an ample ethnographical study was made of the cove and its surroundings. This provided an overview of local discourses on the landscape. Documentary sources and an on-site evaluation were also used to dig deeper into other aspects linked to the perception of the landscape, such as institutional perception, the perception of visitors to the Archaeological Complex, sensorial, tourist, artistic perception, etc. (Salmerón et al.)

With respect to the *Guide to the Historic Urban Landscape of Seville*, the study was focused on the local scale, but in an urban area with a high population density and agents that were potentially involved in the decision-making processes to safeguard the cultural, tangible and intangible urban landscape values.

An expert technical approach using documentary sources evoked





Panoramic view of Seville from the Schindler Tower. Source: IAPH picture archives

the image of Seville projected through the arts, commemorative monuments, tourism and contemporary architecture, including the discourses and the evaluations of heritage protection policies and the press. Direct analysis, in this case, was confined to participant observation, surveys of key agents and the formal analysis of the city viewed statically and dynamically from a distance and at close range (Fernández-Baca, Fernández & Salmerón, 2015; 2017).

### The PAYSOC project

The PAYSOC project was formulated to try to circumvent the factors that condition the study of the social perception of landscape when the project's spatial scale, the high number of agents involved or the

lack of resources are obstacles to the development of on-site fieldwork. The initial premises were:

- a) Social perceptions are not properly taken into account in cultural landscape characterisation and management processes.
  - b) The application of qualitative techniques is even less common for discourse and social representation analysis as they are more complex and costly than quantitative techniques.
  - c) The design of a methodology to process content and identify agents through the Internet can be considered a possible alternative.
- The research team comprises a very diverse range of professional profiles (Anthropology, Art History, Archaeology, Architecture, History, Geography, Sociology, Cultural

Management, Tourism and Digital Marketing), with the participation of five research organisations, four of which are Spanish and one international: the University of Seville, Pablo Olavide University, The European University of the Canary Islands and Ferrara University, under the coordination of the Andalusian Institute of Historical Heritage.

### Design

The project has been divided into a series of objectives and tasks that include some aspects related to the research object and others related to training, dissemination and transfer of the results. [Page 161](#) shows the diagram of activities and tasks.

The methodological proposal that has resulted from the project has been generated after a process developed in the area of exploratory research. In other words, as a first approach to the characteristics of an as yet unresearched topic (Ramos, 2020) with findings subject to methodological triangulation for contrasting (Stasiejko et al. 2009).

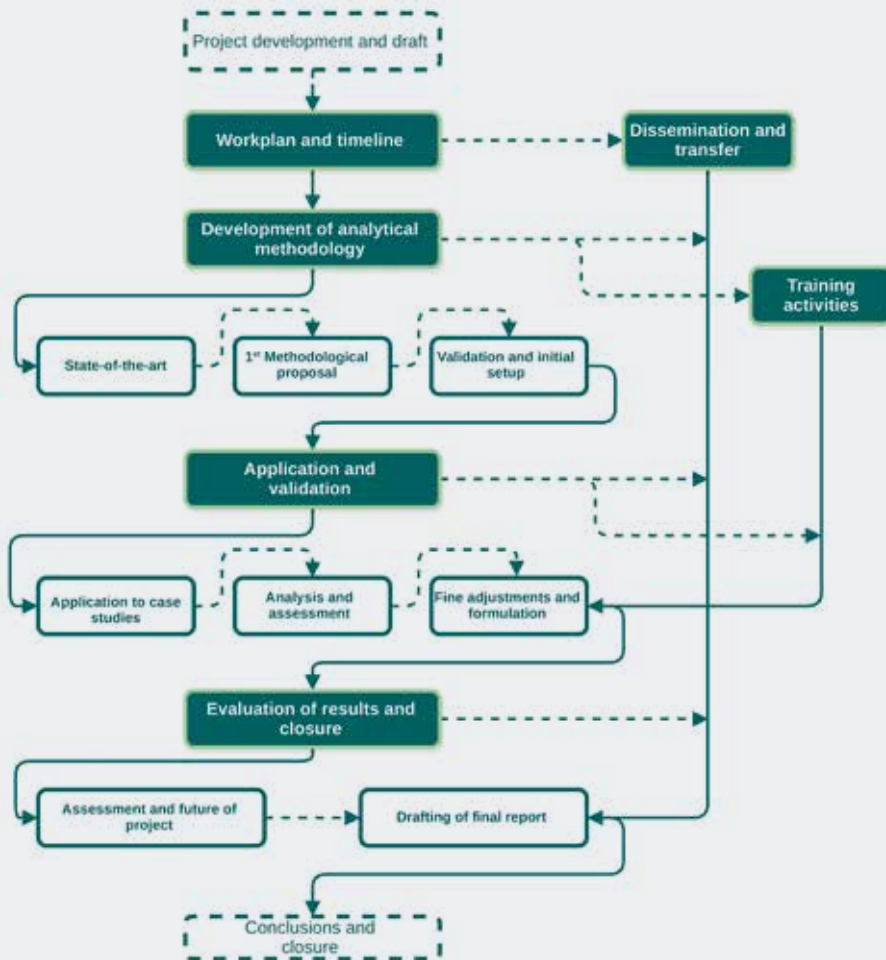
This research has enabled to set different levels of insight in the analysis of the information that the Internet offers on landscapes and the agents present in them.

The information obtained with this methodology has been cross-checked against the scientific and technical information previously compiled without the involvement of the local population on a series of landscapes included in the Register of Landscapes of Cultural Interest in Andalusia, 100 Cultural Landscapes in Spain and/or the World Heritage List to detect contributions, shortcomings and contradictory data that might help to determine its scope and validity. The results will be set out in the following section of this work.

As previously stated, a variety of activities linked to the communications plan and the transfer of the results have been executed throughout the development of this project. They can be classified into three groups:

a) Dissemination and communication activities. An image has been designed to identify the project for inclusion on consumables and dissemination and communication materials. An Internet microsite has also been developed on which information relating to the main project activities has been published<sup>5</sup>, and the activities have also been disseminated via the communication mechanisms of the research centres involved and on the ResearchGate platform<sup>6</sup>.

## Project design



Project design. Prepared by authors and José María Rodrigo Cámara

## PAYSOC case studies

<b>Name</b>	<b>Main classification*</b> (Category + Type + Subtype)	<b>Recognition</b>
Constantina landscape (Seville province)	Settlement systems. Predominantly rural. Mediaeval tradition	Landscape of Cultural Interest in Andalusia
Straits of Gibraltar landscape (Cadiz province)	Communications and transport system. Natural passes. Maritime	Landscape of Cultural Interest in Andalusia
Baños de la Encina landscape (Jaen province)	Security and defence systems. Support and positional. Fortifications	Landscape of Cultural Interest in Andalusia
Morón de la Frontera Lime-making landscape (Seville province)	Resource obtention and transformation. Mining resources. Lime-related	Landscape of Cultural Interest in Andalusia
Peña de the Enamorados recreated landscape	Ideological and associative systems. Arts and evocation. Connoted bio-geographical reference point	Landscape of Cultural Interest in Andalusia
Montilla vineyard landscape (Cordoba province)	Resource obtention and transformation. Agricultural. Wine growing	Landscape of Cultural Interest in Andalusia 100 Landscapes in Spain
Gor River megalithic landscape (Granada prov.)	Ideological and associative systems. Beliefs, rites and traditions. Funerary.	Landscape of Cultural Interest in Andalusia 100 Landscapes in Spain
Bolonia bay landscape (Cadiz province)	Settlement systems. Predominantly urban. From the Roman era	Landscape of Cultural Interest in Andalusia 100 Landscapes in Spain
Riotinto mining landscape (Huelva province)	Resource obtention and transformation. Mining resources. Metals	Landscape of Cultural Interest in Andalusia 100 Landscapes in Spain
Comacchio landscape (Ferrara province, Italy)	Settlement systems. Predominantly rural. Mediaeval tradition	World Heritage
Risco Caído and Montañas Sagradas landscape (Gran Canaria, Canary Islands)	Ideological and associative systems. Beliefs, rites and traditions. Magical-religious	World Heritage

\*Proposed classification in the Register of Landscapes of Cultural Interest in Andalusia (Fernández, Fernández and Rodrigo, 2018: 18)

PAYSOC project case studies. Prepared by authors



PAYSOC project exhibition. Photo: Jesús Cuevas García

Lastly, an on-site and virtual exhibition was also set up. The on-site exhibition ran at the IAPH from 15<sup>th</sup> January to 31<sup>st</sup> March 2021 and at the University of Seville School of Architecture from 4<sup>th</sup> to 29<sup>th</sup> April 2022. The virtual version was inaugurated on 8<sup>th</sup> June 2021 in the framework of the *Landscape Archaeology Congress 2020+1*, organised by the Centre for Human and Social Sciences of The Spanish National Research Council (CSIC)<sup>7</sup>.

b) Training activities. A variety of the project's methodological aspects have been applied to tutoring given to research/pre-PhD and undergraduate visitors from the University of Seville and Pablo de Olavide University (in areas of geography disciplines, architecture and sociology) and are being applied to two co-directed PhD theses (architecture and fine arts) registered at the University of Seville. In addition, teaching

modules on perception and social participation in cultural landscapes have been included in the IAPH's training offer<sup>8</sup> and the handbook for writing cultural landscape guides (Fernández et al., 2021).

c) Scientific activities. Two technical workshops have been organised to disseminate the project and delve further into some of the specific aspects of the subject matter. The first of these was held at the IAPH on 25<sup>th</sup> March 2021<sup>9</sup> and the second at the European University of the Canary Islands on 31<sup>st</sup> July 2021<sup>10</sup>. Scientific events have been participated in where, apart from the research team members presenting the contributions to this monograph, three articles submitted to indexed journals were also presented; two of these were under peer review at the time that this work was being completed. Two further articles have been produced as a result of participation in scientific meetings organised by the Polytechnic University of Madrid<sup>11</sup> and the San Pablo CEU and Juan Carlos (Madrid) Universities, respectively<sup>12</sup> (Fernández, 2019; Fernández, 2023; Fernández & Durán, 2023; Cuevas & Pozo, 2022). The monograph in which this text is included, published by the IAPH, will extend the transfer of its results by including contributions

by researchers from France, Portugal, Italy and Spain. These contributions have been presents during a International Simposium organised by the Univesity of Seville and the IAPH as a closing activity of the project.

### Research results

As stated in the preceding section, the final methodological proposal includes three levels of insight in the information or work phases. These all have their own scopes and opportunities for application that depend upon their characteristics, objectives and available resources<sup>13</sup>.

The first phase is directed at obtaining an overview of the images of the landscapes projected on the Internet. It is possible to expand upon this in subsequent phases by applying methodological triangulation. The first phase develops from an information search related to the landscape under study with the use of keywords ('landscape' + 'toponym'). Localised web resources usually contain a variety of formats and content: news items, websites on an economic activity developed in the area, forums, platforms with graphical content, public or private institution websites, etc.

Once the resources have been located, they are recorded in a

database used to systematise the information gathered and ensure the use of similar parameters when recording all the identified resources. The database contains data on the overall search results (date on which executed, information associated with it by searcher, basically, keywords and related searches), data on the resource located (date of generation and access, type, content, etc.) and on the agents that generate the information and those that they cite on the Internet (contact data, type of affiliation, associated activity, etc.). Lastly, the database includes some data on automatically generated syntheses such as a computation of the topics associated with the resources and the socio-economic activities developed by the agents that produce the content.

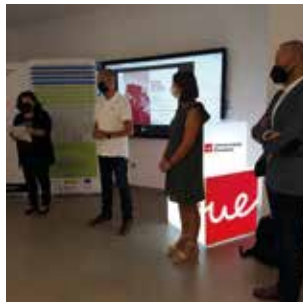
Once all the information has been added to the database, a series of quantitative analyses are carried out of both the resources and agents identified and the content itself. Regarding the first of these, we can highlight the distribution of resources by topic and the potential interest of the agents that they are produced by, the distribution of the agents by interest and affiliation, the numbers of valid and discarded resources, etc. The quantitative analysis of the content is performed

by generating word clouds of the published texts, especially those published by potentially high-interest agents.

The qualitative analysis is performed during this first phase by examining the whole set of content published by potentially high-interest agents under the uncertainty of occasional unavailability of data on their activities or contact data to confirm that they have links to the local or administrative district sphere. This phase is concluded by contrasting the information obtained with the information previously developed from a technical and scientific point of view. This is based on the procedure indicated in the Register of Landscapes of Cultural Interest in Andalusia, which is also applied for the characterisation of the landscapes under study that are outside the Register's scope (Risco Caído and Montañas Sagradas on the island of Gran Canaria and Comacchio in Ferrara province, Italy).

In general, it can be inferred from the execution of this first phase on the indicated case studies that the information directly associated with the selected landscapes is clearly biased towards tourism-related topics. This seems to indicate that, along with natural and cultural heritage, the landscape is perceived





II Scientific meeting Discover cultural landscapes. Tenerife, July 2021. Photo: Jesús Cuevas García



as an economic resource and this is how its image is projected on the Internet by agents of different profiles: institutional (local councils, provincial councils, regional governments, etc.), tourism management companies, the media, etc. In the same way, given this tendency to promote the landscape as a tourist resource, the negative aspects tend to be overlooked, even though a small number exist and can be regarded as more or less anecdotal depending on the landscape in question. Contrasting the information gathered on the Internet at this first level of insight with the information provided by the reference scientific and technical records indicates that the latter can be enriched with information about new heritage goods, which are more usually natural heritage or intangible cultural heritage in type, the identification of some conflicts that can be traced through blogs and newspaper articles, and local appraisals of the characteristics of each of the landscapes in question.

The second phase of the methodological proposal seeks to go beyond the image projected on the Internet for each of the case studies. For this, the review of the resources, which was previously limited to the websites found by the searches, is expanded to an individual analysis

of all of the websites where they were found. This enables to develop a map of agents present on the Internet, which allows a more accurate approximation and contextualisation of the content that they publish. The data collected in the database are used to further explore both the knowledge of the already identified potentially high-interest agent set and the wide range of economic activities with which they are associated. At this point, it is possible to determine whether the potential interest in the agents identified in the previous phase is correct or not and whether these agents are still active on the Internet. An analysis of their activities is begun and of the agents that they are related to -always based on published content- whether because they develop similar activities, share common interests or other issues. This part of the research is developed through an intentional Internet survey performed with the collection and filtering of information present there. For this, the following strategies are deployed:

- Search for information through the identification of interconnections and nodes-knots, which requires the use of multiple addresses and the expansion and combination of temporal frameworks. For example,

it is possible to complete a piece of information initially located in the yearly report of activities in a protected natural space weeks later with information from a news search in a digital district newspaper and, in addition, the other agents' websites and social networks. This implies the recording of these time jumps and the different formats, and the use of the repetition of events, facts and/or descriptions as a guide to dig deeper into the knowledge on the characteristics of the published content.

- Control of the level of uncertainty regarding the validity of the information located, which requires additional validation processes. The work hypotheses' high level of uncertainty regarding representativeness and types of relationships between the identified agents is a characteristic of Internet use in general, not only of the proposed mapping of agents. To reduce uncertainty, methodological triangulation is applied as a fundamental strategy to assess the validity and reliability of the information located. Local and district digital newspapers are especially useful for this, as are the websites of public entities whose area of thematic coverage involves the spatial frameworks of the analysed landscapes.

- Consideration of the variety of formats of the information that is located, which implicitly involves a great wealth of information sources, not to mention methodological difficulties for their analysis. This is a characteristic of the Internet and implies the opportunity to combine multiple sources, which contributes positively to the task of triangulation. Notwithstanding, many of these sources must be discarded, given that the certainty of their temporal frameworks is frequently unavailable, and also bearing in mind the objective with which the information is being sought and in an attempt to avoid making the enquiry too disperse. This does not exclude the fact that it will always be an added value to address local dynamics to be able to dig deeper into the context of which the identified agents are part.

In this phase, the information gathered is also systematised through the database, with the addition of the information on the socio-economic activity groups developed by the agents, the strategy for its identification and an evaluation of the degree of online accessibility. These data help to contextualise the activities developed by the agents and their relationships with third parties, as well as the content

that they publish on the Internet. Cross-checking the information obtained during this phase with the previous information enables the quantification and qualification of all the agents by activity and groups of activity in both phases, to relate the agents by activity and group of activity in order to identify the sphere (economic, symbolic or field of use) of which they form part in their cultural landscape and the contextualisation and understanding of the landscape-related content associated with each of the agents and activity groups.

In general, the number of (potentially high-interest) local agents and identified socio-economic activities has been demonstrated to increase considerably during the second phase. This makes agent mapping and activity grouping more reliable and enables the content that agents produce on the Internet to be expanded, as well as that identified in the first phase. As a result, the first thing that stands out is the viability of associating local discourses with the different activity groups of the agents that produce them and, secondly, allusions to the cultural and natural heritage are confirmed to validate and expand what was recorded in the previous phase.

The third and last phase of the methodological proposal, which is being executed at the time that the present work is being written, consists of daily contact with a selection of agents with the adaptation of the traditional ethnographical techniques to a virtual environment. The selection was made based on an assessment of their degree of online accessibility. Subsequently, information extraction tools and virtual contact strategies were designed. In other words, virtual fieldwork has been designed with participant observation now applied to social networks, surveys conducted by e-mail, in-depth interviews over the Internet and telephone interviews. The obtained results can now be contrasted with the results of the two preceding phases.

## Conclusions

The analysis of landscape perceptions is an emerging field of research that erupted onto the scientific scene after the promulgation by the Council of Europe Landscape Convention (2000), which placed social agents at the core of the development of landscape protection, management and planning policies. The objective of the PAYSOC project was to design a methodology for landscape perception analysis in

contexts in which the deployment of traditional ethnographical strategies is especially difficult due to a lack of resources, wars and conflicts, a lack of safety, social lockdown, etc. The project's interdisciplinary nature has also allowed strategies to be designed focused on the normalisation of the procedures developed so that they might be applied with similar criteria whatever disciplinary perspective is being worked from.

The execution of this project in the institutional framework of a Centre of (cultural heritage) Documentation and Studies has prompted the developed methodology to begin in the first work phase with the content on the Internet addressed as a compiler of information, and then to move on to online non-participant observation in the second phase and virtual participant observation in the third phase.

It can be concluded, in general, that the information provided by the local agents and collected during the first work phase, which is focused on the analysis of the image of landscapes projected on the Internet, complements the information obtained with scientific and technical criteria. This is due, firstly, to the existence of recognised values in the local sphere that

may be much less known outside said sphere and, secondly, to initial biases in the scientific and technical information depending on the disciplinary profile of the teams or organisations developing the studies, which can be detected and corrected in this phase of the study.

The second phase not only allows access to more detailed information but also to link this information to the social agents that produce it, who can already be segmented. The map of agents prepared during this phase will be a reliable starting point for beginning virtual or even on-site direct contact in the third phase. Thus, a step forward is taken from the identification of the main aspects associated with social perceptions of cultural landscapes to their explanation, which becomes more fine-tuned and complete as further advances are made in the second and third phases of the proposed methodology.

To summarise, based on the results obtained in this research, it is established that each phase of the methodological proposal contributes a level of valid information. An assessment will have to be made based on each project's objectives as to whether only an analysis of the projected image needs to be performed,

## Summary of methodological proposal



Summary of methodological proposal.  
Prepared by authors (except referenced  
images)

whether it is necessary to advance further in the development of a map of agents without a technical team on the ground (for which it would suffice to focus on this issue through the tools designed for the first and second phases), or whether, amongst other options, the intention is to propose some initial landscape quality objectives depending on the social perceptions identified in phase three.

The proposed methodology fulfils two important objectives: on the one hand, it enables to replicate the analyses that were performed, as the steps followed to obtain and process the data have been normalised and published to enable their examination. On the other hand, it also allows any changes in the perceptions of a given landscape to be monitored over time at a lower cost and with comparable data.

## Notas

1. Project subsidised by the Ministry of Science and Innovation through a competitive call by the State Research Agency in the programme 'Challenges to Society' in 2018 (RTI2018-096611-B-100).
2. This Register has been compiled by the Andalusian Institute of Historical Heritage in collaboration with the University of Seville and Pablo Olavide University. It can be accessed by performing a thematic search of the Digital Guide to Historical Heritage in Andalusia <https://guiadigital.iaph.es/busqueda/Paisaje%26currentGoogleType%3Dpaisaje> [Accessed 29/07/2022].
3. This is a selection of cultural landscapes made by the Spanish Autonomous Communities (regional authorities) coordinated by the Institute of Cultural Heritage of Spain through the National Cultural Landscape Plan, which can be accessed at <http://www.100paisajes.es/> [Accessed 29/07/2022].
4. The World Heritage List included the category of cultural landscapes as a cultural good that could be entered onto the List in 1992. The cultural landscapes on the List can be viewed at <https://whc.unesco.org/en/list/?search=&themes=4&order=country> [Accessed 29/07/2022].
5. <https://www.iaph.es/web/sites/paysoc-percepcion-social-del-paisaje-y-etnografia-virtual/index.html> [Accessed 2/09/2022].
6. <https://www.researchgate.net/project/PAYSOC-Landscapes-and-society-an-analysis-of-social-perception-in-cultural-landscapes> [Accessed 2/09/2022].
7. <https://guiadigital.iaph.es/exposicion-paysoc/> [Accessed 2/09/2022].
8. [https://www.juntadeandalucia.es/sites/default/files/2021-09/folleto\\_guias\\_de\\_paisaje\\_v08.pdf](https://www.juntadeandalucia.es/sites/default/files/2021-09/folleto_guias_de_paisaje_v08.pdf) [Accessed 02/09/2022].
9. <https://www.juntadeandalucia.es/organismos/turismoculturaydeporte/servicios/actualidad/eventos/detalle/210723.html> [Accessed 2/09/2022].
10. <https://www3.gobiernodecanarias.org/noticias/la-universidad-europea-de-canarias-promueve-un-encuentro-cientifico-interdisciplinar-sobre-paisajes-culturales/> [Accessed 2/09/2022].
11. <https://ensambles.eu/> [Accessed 2/09/2022].
12. <https://ciineco.org/simposios/> [Accessed 2/09/2022].
13. The parameters applied to searches and data processing have been included in handbooks that are available and in [https://repositorio.iaph.es/bitstream/11532/355518/1/Manual\\_Registro\\_V2\\_Repositoryio.pdf](https://repositorio.iaph.es/bitstream/11532/355518/1/Manual_Registro_V2_Repositoryio.pdf) [Accessed 15/09/2022].

## Bibliography

- Barreiro Martínez, D. and Criado-Boado, F. (2015) Analizando el valor social de Altamira. *Revista PH*, n.º 87, pp.108-127. Available at: <https://doi.org/10.33349/2015.0.3559> [Accessed: 02/08/2022]
- Bidegain, I., López-Santiago, C.A., González, J.A., Martínez-Sastre, R., Ravera, F. and Cerda, C. (2020) Social valuation of mediterranean cultural landscapes: Exploring landscape preferences and ecosystem services perceptions through a visual approach. *Land*, n.º 9 (10), 390. Available at: <https://doi.org/10.3390/land9100390> [Accessed: 02/08/2022]
- Bubalo, M., Van Zante, B. T. and Verburg, P.H. (2019) Crowdsourcing geo-information on landscape perceptions and preferences: A review. *Landscape and Urban Planning* n.º 184, pp. 101-111. Available at: <https://doi.org/10.1016/j.landurbplan.2019.01.001> [Accessed: 02/08/2022]
- Callau A.À., Albert, M.Y.P., Rota J.J. and Giné, D.S. (2019) Landscape characterization using photographs from crowdsourced platforms: content analysis of social media photographs. *Open Geosciences* vol. 11, n.º 1, pp. 558-571. Available in: <https://doi.org/10.1515/geo-2019-0046>. [Accessed: 02/08/2022]
- Califano, L.M. (2020) Percepción y manejo del paisaje y de los recursos vegetales por campesinos trashumantes de Iruya (Salta, Argentina). *Bonplandia*, 29(1), pp. 101-118. Available at: <http://dx.doi.org/10.30972/bon.2914112> [Accessed: 02/08/2022]
- Caballero Sánchez, J.V., Durán Salado M.I., García-Vázquez I. and López Martín, E. (2011) *El paisaje en el conjunto arqueológico Dólmenes de Antequera*. Junta de Andalucía, Instituto Andaluz del Patrimonio Histórico. Available at: <http://hdl.handle.net/11532/263972> [Accessed: 02/08/2022]
- Consejo de Europa (2000) *Council of Europe Landscape Convention as amended by the 2016 Protocol, Florence, 20.X.2000*. Available at: <https://rm.coe.int/16807b6bc7> [Accessed: 02/09/2022]
- Cordón García, J.A., Alonso Arévalo, J., Gómez Díaz, R. & García Rodríguez, A. (2016) *Las nuevas fuentes de información. La búsqueda informativa, documental y de investigación en el ámbito digital*. Madrid: Ediciones Pirámide
- Cortina Ramos, A. (2011) Las cartas del paisaje: un instrumento de concertación territorial y de compromiso ético a favor del paisaje. *Revista de Derecho Urbanístico y Medio Ambiente*, 26, pp. 167-198
- Cuevas García, J. and Pozo Cuevas, F. (2022) Percibir los paisajes culturales: exposición para dar a conocer treinta y dos paisajes culturales y una metodología de análisis de su percepción social basada en la etnografía virtual. L. González Díez, N. Navarro Sierra and R. Vinader Segura (coords.) *Tendencias en innovación y transferencia del conocimiento: de la universidad a la sociedad*. Madrid: Dykinson, pp. 231-245



- Ding, K., Yang, M. and Luo, S. (2021) Mountain landscape preferences of millennials based on social media data: A case study on Western Sichuan. *Land*, vol. 10, n.º 11. Available at: <https://doi.org/10.3390/land10111246> [Accessed: 02/08/2022]
- Durán Salado, I. (2012) Megalitismo y ciudadanía en Antequera (Málaga). Aproximación a los usos y significados sociales como estrategia para la gestión sostenible. *Menga: Revista de prehistoria de Andalucía*, 3, pp. 223-230. Available at: <http://hdl.handle.net/11532/269649> [Accessed: 02/08/2022]
- Fernández-Baca Casares, R., Fernández Cacho, S. and Salmerón Escobar, P. (coord.) (2015) *Guía del Paisaje Histórico Urbano de Sevilla*. Instituto Andaluz del Patrimonio Histórico. Junta de Andalucía. Available at: <https://hdl.handle.net/11532/326327> [Accessed: 2/09/2022]
- Fernández-Baca Casares, R., Fernández Cacho, S. and Salmerón Escobar, P. (coord.) (2017) *Guide of the Historic Urban Landscape of Seville*. Informative Document. Seville: Instituto Andaluz del Patrimonio Histórico. Junta de Andalucía
- Fernández Cacho, S., Fernández Salinas, V., Hernández León, E., López Martín, E., Quintero-Morón, V., Rodrigo Cámara, J.M. and Zarza Ballugera, D. (2008) Caracterización patrimonial del mapa de paisajes de Andalucía. *PH Boletín el Instituto Andaluz del Patrimonio Histórico*, n.º 66, mayo, pp. 16-31. Available at: <https://doi.org/10.33349/2008.66.2526> [Accessed: 02/08/2022]
- Fernández Cacho S. and Sáenz de la Cuesta, H. (2018) *Landscape Laboratory of the Andalusian Institute of Historical Heritage: actions and achievements for the implementation of the European Landscape Convention*. National Conference for the implementation of the European Landscape Convention of the Council of Europe. Integrated approach to landscape protection, management and planning in Croatia: Proceedings, nº 115, pp. 35-44
- Available at: [https://repositorio.iaph.es/bitstream/11532/327982/5/Landscape\\_laboratory\\_fern%c3%a1ndez\\_S%c3%a1enz\\_NCIELCCE\\_2018.pdf](https://repositorio.iaph.es/bitstream/11532/327982/5/Landscape_laboratory_fern%c3%a1ndez_S%c3%a1enz_NCIELCCE_2018.pdf) [Accessed: 02/08/2022]
- Fernández Cacho, S.; Fernández Salinas, V. and Rodrigo Cámara, J.M. (coord.) (2018) *Register of Landscapes of Cultural Interest in Andalusia. Informative Document*. Sevilla: Consejería de Cultura
- Fernández Cacho, S. (2019) La dimensión paisajística en la gestión del patrimonio cultural en España. *Estudios Geográficos*, vol. 80, 287. Available at: <https://doi.org/10.3989/estgeogr.201943.023> [Accessed: 02/08/2022]
- Fernández Cacho, S. and Durán Salado, M.I. (2023) Paisaje cultural, percepción social y etnografía virtual. Conceptos, experiencias y retos. In: Arques, F. y De la O, R. (ed.) *Ensamblajes: paisaje contemporáneo y practica patrimonial*. Madrid: Abada
- Fernández Cacho, S. (2023) Cultural Landscapes Inventories. Theories, Methods and Techniques. *ACE*:

*Architecture, City and Environment*, 17(51), 11807. Available at: <http://dx.doi.org/10.5821/ace.17.51.11807>

Fernández Cacho, S. & Durán Salado, M.I. (2023) Contenidos web y percepciones sociales. La imagen proyectada del paisaje cultural de Constantina (Sevilla, España). *Boletín de la Asociación Española de Geografía*, 95

Flower, J. (2008) *Xiakou. Moral landscape in a Sichuan mountain villa*. Available at: <http://www.sichuanvillage.org/> [Accessed: 29/08/2022]

Gabriel, M.A. (2016) Urban cultural landscapes in the information age. ACM SIGWEB Newsletter Spring, n.º 3, pp. 1-3 Available at: <https://dl.acm.org/doi/10.1145/2903513.2903516> [Accessed: 02/08/2022]

Hine, C. (2000) *Virtual Ethnography*. London: University of Surrey

King, I. and Martin, J. (2021) Exploring public recognition and perceived cultural value of the special qualities within English areas of outstanding natural beauty. *Sustainability*, vol. 13, n.º 21, 12178. Available at: <https://doi.org/10.3390/su132112178> [Accessed: 02/08/2022]

Li, S. and Yang, B. (2022) Social media for landscape planning and design: A review and discussion. *Landscape Research*, pp. 1-16. Available at: <https://doi.org/10.1080/01426397.2022.2060953> [Accessed: 02/08/2022]

Lieskovský, J., Rusňák, T., Klimantová, A., Izsóff, M. and Gašparovičová, P. (2017) Appreciation of landscape aesthetic values in Slovakia assessed by social media photographs. *Open Geosciences*,

vol. 9, n.º 1, pp. 593-99. Available at: <https://doi.org/10.1515/geo-2017-0044> [Accessed: 02/08/2022]

Lillehammer, G. (2007) The past in the present. Landscape Perception, Archeological Heritage and Marginal Farmland in Jaeren, South-western Norway. *Norwegian Archaeological Review*, vol. 40, n.º 2, pp. 159-178. Available at: <https://doi.org/10.1080/00293650701708891> [Accessed: 02/08/2022]

López Maciel, G.T., Pertusa Palacios, A. and González Rosas, E.L. (2017) Una revisión de la literatura sobre crowdsourcing. *Journal of Innovation & Knowledge*, vol. 2, n.º 1, January–April, pp. 24-30 Available at: <https://doi.org/10.1016/j.jik.2016.09.001> [Accessed: 02/08/2022]

Marques, B., McIntosh, J. and Carson, H. (2019) Whispering tales: using augmented reality to enhance cultural landscapes and Indigenous values. *AlterNative: An International Journal of Indigenous Peoples*, vol. 15, n.º 1.3, pp. 193-204. Available at: <https://doi.org/10.1177/1177180119860266> [Accessed: 02/08/2022]

Martínez Quintana, M. V., Sanagustín Fons, M.V. and Blanco Gregory, R. (2018) Paisajes culturales como imágenes de destino: percepción y valoración como producto turístico. *PASOS Revista de Turismo y Patrimonio Cultural*, n.º 16, vol.4, pp. 873–887. Available at: <https://doi.org/10.25145/j.pasos.2018.16.062> [Accessed: 02/08/2022]

McClelland, A. (2019) Spaces for public participation: Valuing the cross-border landscape in North West Ireland. *Irish*

- Geography* 52 (2): 193-211. Available at: [https://www.research.manchester.ac.uk/portal/en/publications/spaces-for-public-participation-valuing-the-crossborder-landscape-in-north-west-ireland\(0fec52b7-f741-4481-9f6f-c4699cff19e6\).html](https://www.research.manchester.ac.uk/portal/en/publications/spaces-for-public-participation-valuing-the-crossborder-landscape-in-north-west-ireland(0fec52b7-f741-4481-9f6f-c4699cff19e6).html) [Accessed: 02/08/2022]
- Mercado Alonso, I. and Fernández Tabales, A. (2018) Percepciones y valoraciones sociales del paisaje en destinos turísticos. Análisis de la ciudad de Sevilla a través de técnicas de investigación cualitativas. *Cuadernos de Turismo*, n.º 42, julio-diciembre, pp. 335-383. Available at: <https://doi.org/10.6018/turismo.42.16> [Accessed: 02/08/2022]
- Nogué i Font, J. (2009) El Observatorio del Paisaje de Cataluña y los catálogos de paisaje. La participación ciudadana en la ordenación del paisaje, En Castiglioni, B. and March, M. de (ed.) *Di chiè il paesaggio? La partecipazione degli attori nella individuazione, valutazione e pianificazione / Who wons the landscape? Actor's participation in characterization, assessment and planning*. Padova: Università degli Studi di Padova, pp. 19-28
- Nogué, J. (2010) El paisaje en la ordenación del territorio. La experiencia del Observatorio del Paisaje de Cataluña. *Estudios Geográficos*, vol. 71, No. 269, pp. 415-448. Available at: <https://doi.org/10.3989/estgeogr.201014> [Accessed: 02/08/2022]
- O'Brien, K. and Leichenko, R.M. (2003) Winners and Loser in the Context of Global Change. *Annals of the Associations of American Geographers*, vol. 93, n.º 1, pp 89-103. Available at: <https://www.jstor.org/stable/1515325> [Accessed: 02/09/2022]
- Olsen, W. (2004) Triangulation in Social Research: Qualitative and Quantitative Methods Can Really Be Mixed. In: Holborn, M. (ed.) *Development in Sociology*. Ormskirk: Causeway Press, pp. 1-30
- Orellana López, D.M. and Sánchez Gómez, M.C. (2006) Técnicas de recolección de datos en entornos virtuales más usadas en la investigación cualitativa. *Revista de Investigación Educativa*, vol. 24, n.º 1, pp. 205-222. Available at: <https://revistas.um.es/rie/article/view/97661> [Accessed: 02/08/2022]
- Oteros-Rozas, E., Martín-López B., Fagerholm N., Bieling C. and Plieninger T. (2018) Using social media photos to explore the relation between cultural ecosystem services and landscape features across five European sites. *Ecological Indicators*, vol. 94, pp. 74-86. Available at: <https://doi.org/10.1016/j.ecolind.2017.02.009> [Accessed: 02/08/2022]
- Palacio Vuendía, A. V., Pérez Albert, M.Y. and Serrano Giné, D. (2019) PPGIS and Public Use in Protected Areas: A Case Study in the Ebro Delta Natural Park, Spain. *ISPRS International Journal of Geo-Information*, vol. 8, n.º 6, 244. Available at: <https://doi.org/10.3390/ijgi80602244> [Accessed: 02/08/2022]
- Pink, S.; Horst, H., Postill, J., Hjorth, L., Lewis, T. and Tacchi, J. (2015) *Digital Ethnography Principles and Practices*. London: SAGE Publications

Quétier, F., Tapella, E., Conti, G., Cáceres, D. and Díaz, S. (2007) Servicios ecosistémicos y actores sociales. Aspectos conceptuales y metodológicos para un estudio interdisciplinario. *Gaceta Ecológica*, 84-85, pp. 17-26. Available at: <https://dialnet.unirioja.es/descarga/articulo/2873777.pdf> [Accessed: 02/08/2022]

Ramos Galarza, C. (2020) Los alcances de una investigación. *CienciaAmérica*, vol. 9 (3). Available at: <http://dx.doi.org/10.33210/ca.v9i3.336> [Accessed: 1/08/2022]

Rogatka, K., Chodkowska-Miszczuk, J., Bieganska, J., Grzelak-Kostulska, E. and Sroda-Murawska, S. (2017) Perception of the cultural landscape related to wind parks-Generation Y perspective. *Mitteilungen der Osterreichischen Geographischen Gesellschaft*, 159: 131-49. Available at: <https://doi.org/10.1553/moegg159s131> [Accessed: 02/08/2022]

Rowlands, I., Nicholas, D., Russell, B., Canty, N. and Watkinson, A. (2011) Social media use in the research workflow. *Learned Publishing*, vol. 24, n.º 3, pp. 183-195. Available at: <https://doi.org/10.1087/20110306> [Accessed 02/08/2022]

Salmerón, P. (coord.) (2004) *Guía del Paisaje Cultural de la Ensenada de Bolonia*. Avance. Instituto Andaluz del Patrimonio Histórico. Junta de Andalucía. Sevilla. Available at: [https://repositorio.iaph.es/bitstream/11532/331255/1/Guia\\_del\\_Paisaje\\_Cultural\\_de\\_la\\_Ensenada.pdf](https://repositorio.iaph.es/bitstream/11532/331255/1/Guia_del_Paisaje_Cultural_de_la_Ensenada.pdf) [Accessed: 3/09/2022]

Santoro, A., Venturi, M. and Agnoletti, M. (2021) Landscape perception and

public participation for the conservation and valorization of cultural landscapes: The case of the Cinque Terre and Porto Venere UNESCO site. *Land*, vol. 10, n.º 2, 93. Available at: <https://doi.org/10.3390/land10020093> [Accessed: 2/09/2022]

Stasiejko, H., Tristany, S.R., Krauth, K.E. and Valente, L.P. (2009) La triangulación de datos como criterio de validación interno en una investigación exploratoria. *Memoria Académica. UNLP-FaHCE*. Universidad Nacional de La Plata. Available at: [https://www.memoria.fahce.unlp.edu.ar/trab\\_eventos/ev.12024/ev.12024.pdf](https://www.memoria.fahce.unlp.edu.ar/trab_eventos/ev.12024/ev.12024.pdf) [Accessed: 03/08/2022]

Ivett, S. and Zoltay, R. (2016) How attractive can cultural landscapes be for Generation Y? *Alma Tourism. Journal of Tourism, Culture and Territorial Development*, vol. 7, n.º 14, pp. 1-16. Available in: <https://doi.org/10.6092/issn.2036-5195/6225> [Accessed: 02/08/2022]

Tieskens K.F., Van Zanten, B.T., Schulp, C.J.E. and Verburg, P.H. (2018) Aesthetic appreciation of the cultural landscape through social media: An analysis of revealed preference in the Dutch river landscape. *Landscape and Urban Planning*, n.º 177, pp. 128-37. Available at: [10.1016/j.landurbplan.2018.05.002](https://doi.org/10.1016/j.landurbplan.2018.05.002) [Accessed: 02/08/2022]

Tully, G., Piai, C., Rodríguez Hernández, J. and Delhommeau, E. (2019) Understanding perceptions of cultural landscapes in Europe: A comparative analysis using “oppida” landscapes. *The Historic Environment: Policy & Practice* 10 (2), pp. 198-223. Available at: <https://doi.org/10.1080/17567505.2019.1587251> [Accessed: 02/08/2022]

Van Berkel, D. B., Payam, T., Dorning, M.A., Smart, L., Newcomb, D., Mehaffey, M., Neale, A. and Meentemeyer K. (2018) Quantifying the visual-sensory landscape qualities that contribute to cultural ecosystem services using social media and LiDAR. *Ecosystem Services*, n.º 31, pp. 326-35. Available at: <https://doi.org/10.1016/j.ecoser.2018.03.022> [Accessed: 02/08/2022]

Vicente Mariño, M. (2009) Desde el análisis de contenido hacia el análisis del discurso. La necesidad de una apuesta decidida por la triangulación metodológica. In: Sierra, F.(coord.) *Iberoamérica: comunicación, cultura y desarrollo en la era digital*. Sevilla: Universidad de Sevilla

Vila Subirós, J., Ribas Palom, A., Varga Linde, D. and Llausàs Pascual, A. (2009) Medio siglo de cambios paisajísticos en la montaña mediterránea. Percepción y valoración social del paisaje en la alta Garrotxa (Girona). *Pirineos*, vol. 164, pp. 69-92. Available at: <https://pirineos.revistas.csic.es/index.php/pirineos/article/view/30/31> [Accessed: 02/08/2022]

Zoido Naranjo, F. and Jiménez Olivencia, A.Y. (Dir.) (2015) *Catálogo de Paisajes de la provincia de Granada*. Sevilla: Centro de Estudios Paisaje y Territorio y Consejería de Medio Ambiente y Ordenación del Territorio

Zoido Naranjo, F. and Rodríguez Rodríguez, J. (Dir.) (2015) *Catálogo de Paisajes de la provincia de Sevilla*. Sevilla: Centro de Estudios Paisaje y Territorio y Consejería de Medio Ambiente y Ordenación del Territorio