



Segovia after lockdown, 2020. Photo: the author.

# Abandon and reuse - The engineered space at a time of pandemics

Juan A. García-Esparza

School of Technology and Experimental Sciences (Universitat Jaume I).  
Email: [juan.garcia@uji.es](mailto:juan.garcia@uji.es)

**Abstract:** This paper critically explores the evaluation of Historic Centres (HC) to establish new perspectives for the management of their values and attributes. The unconventional interpretation of these HC relies on the revision of the UNESCO Operational Guidelines to achieve new approaches to the cultural diversity of these spaces. A methodological approach based on interviews and open data cross-referencing aims to integrate the social and cultural aspects of the World Heritage cities (WH) in Spain. The research analyses the eventual cultural, architectural and social stratification as elements that need updating to manage HC. Therefore, this research addresses narrative interpretations, both of inhabitants and visitors, as forms of behaviour, expressions and adaptations that result in idiosyncratic innovation and experimentation in the urban fabric. The research steams from a series of scientific contributions to the research projects Writing Urban Places, COST Action 18126, and Dynamics of placemaking, COST Action 18204, (2019-2023). Through a mixed methodology of qualitative and quantitative data analysis, the research aims to analyse the interdependencies between physical conservation, social awareness and sustainable development of some WH areas in Spain. Data is analysed by means of Geographic Information Systems (GIS) to spatially comprehend the engineered space in medium-sized heritage cities.

**Keywords:** contemporary urban landscape; local character assessment; World Heritage; ICOMOS; hybrid assessment.

## 1. Introduction

Contemporary conservation policies impact placemaking. Theoretical and empirical appraisals have examined the extent to which policies allow altering features of cultural significance and the reinterpretative character of cultural traditions. In this context, UNESCO's HUL Approach (2011) incorporates values, creations, and re-creations that lead to an improved understanding of the site due to various context tempos. These are complicated processes formed and reconstructed in specific situations as codes of practice - norms and current behaviour. However, when alternate forms of design are thought to reflect cognitive processes of socio-cultural stratification, a disagreement arises in historic preservation.

This study aims to discuss current challenges of abandonment in Spanish World Heritage Cities. If treated correctly, these places might be regarded as potential areas in terms of placemaking. Van Oers (2010) defines historical environment evaluation as "perception, surrounds, material components, their connection, and cultural restrictions across time" in this context. However, culture and circumstance have not always decided how contemporary invention and even abandonment are regarded in protected urban areas.

Communities are mentioned by UNESCO (2011) and ICOMOS (2011) when they recognize the function of communities occupying a given area when the environment, practices, and values are contextualized together. However, in the context of this study, the term urban habitat may be more relevant to emphasize inclusion, permeability, and changeability. Besides, this term helps extend the social ties as evidence of common patterns when occupying space. It also informs informally changing alternatives and is open to re-configurations in ambiguous settings (Edensor, 2005; García-Esparza, 2011; 2016; 2019; Martin, 2014).

The SARS-CoV-2 pandemic has changed how many people view and interact with their habitat. Worldwide, a series of national lockdowns limited the number of places individuals could use to complement daily life activities related to physical and mental health. Therefore, a comprehensive analysis would need to review how WH cities in Spain are affected by past and current conditions: 1. Housing conditions (HC); 2. The existence of sanitary facilities (HF); 3. Physical and digital access to culture (AC); 4. The presence and conditions of open spaces; 5. The forms and means of mobility; and 6. Elements and areas that allow the necessary sociability.

This paper analyses these issues from specific case studies. First, the discussion of distribution and equity

reflects how cultural and environmental planners, urban designers, and decision-makers position themselves and rethink the six spheres of well-being within the historic city. This research then proposes a method to tackle historical and contemporary issues, now stressed at time of pandemics, to better comprehend concerns about the cultural and architectural environments in heritage cities (García-Esparza & Altaba, 2022).

In doing so, social, economic and environmental considerations of sustainability play a role because the importance of a sustainable environment depends on preconditions of the place, such as the size of the population, the distribution of services and facilities and the way the administration takes on the responsibility to balance the concepts of environmental science, economy, socialisation and culture. It is worth mentioning that these places are relevant assets for local, regional and international tourism activities. But, as Higgins-Desbiolles (2018) and Butler (1999) mention, tourism can have a sustainable dimension. This description is valid to entirely grasp the extent of stagnation in historical places such as the ones under study. Ruhanen (2013) and Wesley and Pforr (2010) refer to sustainable tourism as the need for economic change. It balances environmental, economic and socio-cultural aspects that may help forms of equitable development.

As a result, this article examines how an analysis of patterns in WH cities is still a question of integration, appropriation, and meaning. The necessity to see space from an engineering viewpoint and the usage of technology aids in the development of hybrid informed cultural situations. Conservation and socio-cultural development are challenged with ethical issues, including the right to habitation, regeneration, subcultural development, vulnerability, tourism, and sustainability in various everyday contexts.

In this perspective, legacy provides 'representational' social and cultural experiences to which individuals openly participate (Smith, 2013). Furthermore, people tend to recognize 'alternative' values based on their assumptions or wishes and modify ideas according to their social, cultural, or economic conditions in regions that gradually lose cultural importance (de la Torre, 2013; Spennemann, 2006). Values linked with specific landscapes are not inherent qualities. Instead, the context, fabric, object, or medium are bearers of external interpretations, mainly natural, cultural, or historical connotations, which influence specific time perceptual frameworks, such as abandonment and dereliction (Carman, 2019).

## 2. Material and method

### 2.1. The area of study

This case of study critically explores the evaluation of a set of cities to establish new perspectives for managing values and attributes. Because they had WH regions identified for their historical centres, the researchers picked five medium-sized cities in Spain: Toledo, Segovia, Salamanca, Cuenca, and Vila. Furthermore, the examination of these five examples is prompted by the premise that they are localities with geographically comparable demographics and symbolic, patrimonial, and cultural relationships. As a result, the ability to cross-reference cultural aspects and indicators to understand the current socio-cultural condition is comparable and complementary.

The project “DocPlaces” emphasizes the significance of local urban stories as rich pieces of information on socio-spatial behaviours, attitudes, and aspirations of inhabitants as a scholarly commitment to the research study. The study connects geographical analysis with population and conservation studies. As a result, this project examines residents and tourists as forms of behaviour manifested in an engineered place, resulting in a hybrid assessment and experimentation of locations. The method argues that sites will be transformed through socio-cultural processes, resulting in more extensive and diverse opportunity zones.

### 2.2. Placemaking methods

The methodological approach compliments English Heritage’s (2008) and UNESCO’s (2011) suggestions, which aim to incorporate the everyday living features of places. In this way, the study examines how the power to select and internalize alternative ideas of heritage through evaluation activities affects subsequent cultural, architectural, and socioeconomic stratification (García-Esparza & Altaba, 2018; Altaba & García-Esparza, 2018; 2021).

The research developed this goal by combining periods of bibliographic study with fieldwork using classic ethnography and computer analytic methodologies. Interviews were conducted as part of the fieldwork, allowing the study team to outline and geographically categorise the findings. Thus, data analysis via database and GIS was part of the office work. These methodologies led to a fieldwork effort in which the elements and critical aspects of the urban fabric were researched and recorded. All of this visual data was geo-referenced thanks to a digital database. In addition, the author kept track of the several images that corresponded to each of the items under investigation—the colour-coded images assisted in the quantitative classification of services, facilities, and activities.

### 2.3. Interviews

One of the research’s goals was to bring specialists and locals together (Pendlebury & Townshend, 2014). The DocPlaces project created an initial questionnaire with questions about a literature evaluation of notions that pertain to global historic city concepts. Due to the initial identification and analysis of some social, economic, and environmental elements, the involvement of stakeholders with diverse interests provided a more open interpretation of current conditions (Dalgish and Leslie, 2016). As a result, participation is not employed as a shield or only as a validation technique with no further ramifications (Sánchez-Carretero & Jiménez-Esquinas, 2016). In reality, the interviews helped the team develop an opinion poll so that a more prominent public could participate in the research.

The study aims to elucidate the physical and intangible character of everyday living activities in medieval cities as essential principles for interpreting them. As a result, Speed et al. (2012) evaluation consider a comprehensive comparison of people and a collaborative examination of variations in integrating and appraising specific values. Harrison (2015) describes dialogical heritage evaluations as “a more fluid investigation of the link amongst culture and other societal, political, and environmental-related issues.” These studies do not regard the many areas as independent entities but rather as interrelated at the most fundamental and intricate levels.

Interviewers asked stakeholders about several topics. The first was related to heritage conservation and the eventual changes that happened since the WH nomination:

C: “I think it is not really what has generated the current problems. In other words, being nominated World Heritage Site has created the problem that heritage conservation has been ahead of the rehabilitation of society. That is to say; we have not changed buildings, we have not improved streets, we have not improved much, to maintain the heritage”. Carmen Zayas. Merchant. Toledo. 2021.

Another interviewee responded about depopulation, citizens’ movements and the eventual existence of some sorts of conflicts:

M: “Segovia suffered a quite important exodus, the number of people now living in the historical centre is not so relevant either, and many of them are older people. So, for mobilization, they lack the tools and impetus to organize themselves”. (...) “The historic centre greatly affects the price of housing. Building in the centre of Segovia is so expensive, and

there is so little land available that there has been an exodus, especially of young people". Marta Laguna. Economist. Segovia. 2021.

An activist and anthropologist was then asked about the reasons behind depopulation and how it was or not affected by the existence or absence of sustainable forms of tourism:

I: "I am a resident, I have lived in the old town, and I have lived there for a long time, and so has my family. So I have a vital trajectory linked to the historic centre. In November last year, I recently wrote a book: Visitors and residents, towards new logics of coexistence in Toledo". (...) "What I have tried to do is to connect community work in the historic centre with new policies linked to sustainable tourism, to see how it affects the depopulation of the historic centre". Isabel Ralero. Anthropologist. Toledo. 2021.

Further grasping on information about what sustainability in historic centres meant for different stakeholders, the following came to expose her doubts about the term and the excessive use we all make of it:

M: "Sustainability is a term that is always there, but what do we mean by sustainability and, in other words, what do we apply it to? When we talk about the historical centre, the term sustainability becomes very complex. What is sustainable for the historic centre of Toledo? Is it tourism? Well, maybe tourism is not sustainable, but if we do not have tourism, maybe we have an abandoned historic centre. (...) In the end, you end up relativizing everything because what is sustainable for some is not sustainable for others; that is, you end up talking about governance, society, economy..." María García. Geógrafa. Toledo y Ávila. 2021.

Finally, the last interviewee resolved about the touristic model of his city and how he, as a citizen living in a historic centre, perceived the situation of pandemics in 2020.

J: "The neighbours here have had a time-out. There has been no one, life was wonderful, you could go up here to the old part of the town. That has been commented on by all of us who live here. It has been wonderful to have the old part of town quiet again for a year, where you could do everything, go down to the Plaza Mayor, take the kids, walk, go up, go down, without people. That's for sure. (...) I'm not so sure about whether we have thought about total tourism. It is a problem because there is no one living here and the model is to reduce everything we have to the services business. No, I don't think that is going to happen or anything like that because there is no other option". José Luis Villagarcía. Architect. Cuenca. 2021.

## 2.4. The engineered space

The technique used in this study is based on that used by Stephenson (2008), Tudor (2014), and Wagtendonk and Vermaat (2014) to evaluate visitors' experiences in historic environments, both local and foreign (Saygi & Remondino, 2015). This method takes advantage of stakeholder engagement to better estimate stakeholder characteristics and maps them out (Brown & Fagerholm, 2015; Brown, Weber & de Bie, 2014). The research of Dupont et al. (2015) and Martin et al. (2016) has paved the way for the application of a joint analytical approach to photographic analysis through Geographic Information Systems (GIS).

GIS represented datasets from the National Statistics Institute (NSI) in Spain. According to the available data, Table 1 informs about the built area, the percentage of residential buildings in those areas, the total number of inhabitants within the entire city, the number of inhabitants living in the WH area, and the percentage of population comparing the two previous columns. Then, the low rate of the people inhabiting Ávila, Cuenca and Salamanca is remarkable. Similarly, Table 2 presents data about building's preservation in WH areas. Data express that more than 90% of buildings are functional in all cases, being the cases of Segovia and Salamanca de highest ranked (See also Figure 1).

**Table 1** | NSI data on population and surface areas in Ávila, Cuenca, Segovia, Salamanca, and Toledo; Spain. Searched conducted in 2021.

	Population and surface areas in cities with WH areas			Total inhabitants	
	Build Area WH (m <sup>2</sup> )	Residential (%)	Total inhabitants (City)	(HCWH)	% Population (HCWH)
Ávila	484,525	67.20%	58,369	1,608	2.75%
Cuenca	348,021	69.44%	54,621	1,662	3.04%
Segovia	976,826	70.91%	52,057	5,611	10.78%
Salamanca	748,293	55.57%	144,825	2,038	1.41%
Toledo	1,836,247	65.39%	85,811	12,533	14.61%

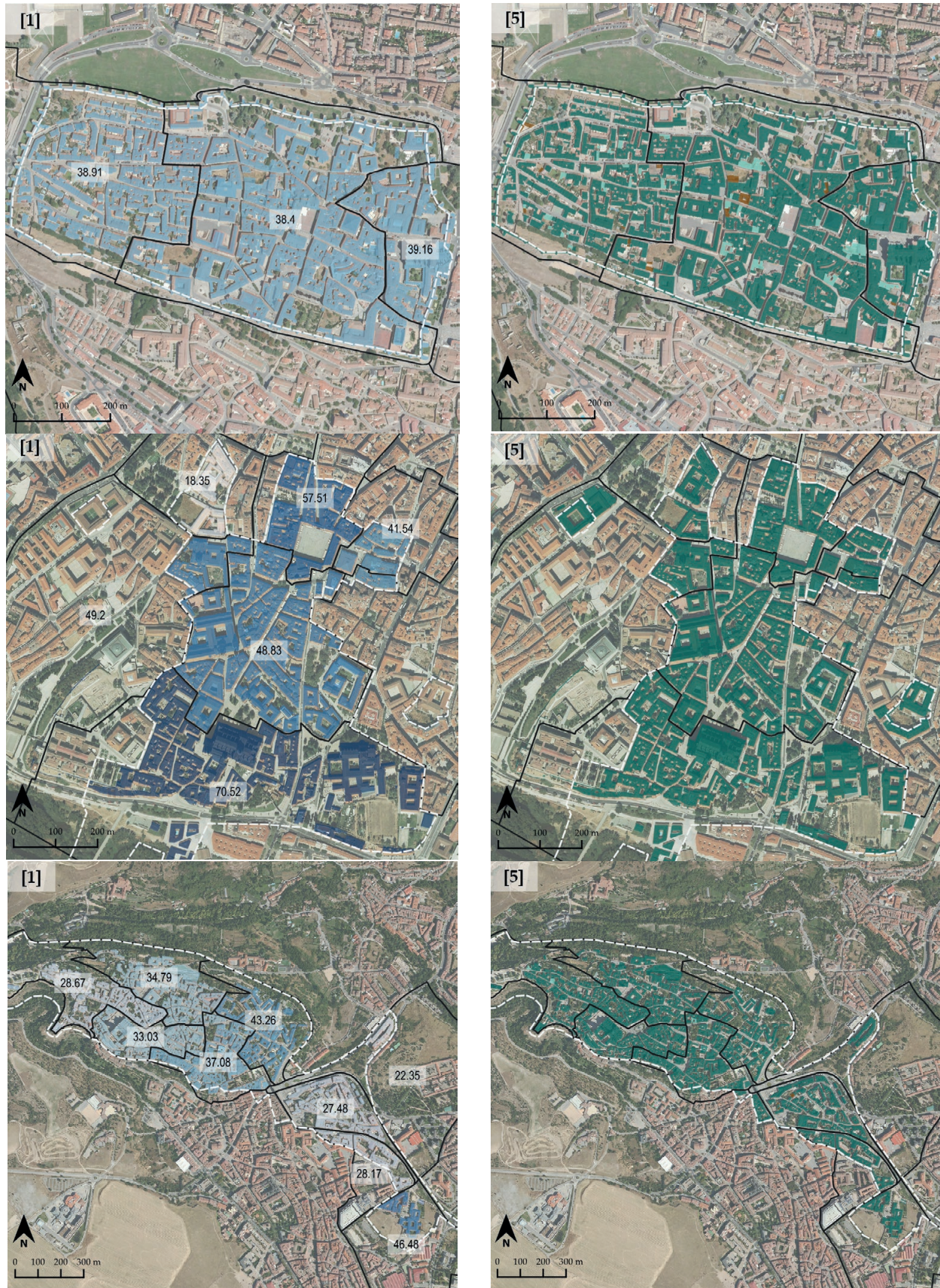


Figure 1 | Overlay of data from Cadastre and INE from each city. Ávila, Salamanca and Segovia. 1. Percentage of non-primary residence; and 2. Conservation of buildings. Source: Pablo Altaba and Juan A. García-Esparza.

It is relevant how Salamanca has the highest percentage of functional buildings but ranks the lowest in population inhabiting the WH area. Oppositely, Ávila and Cuenca rank the weakest in terms of functionality of the building stock but rank very low in the numbers of the population living in the protected site.

Therefore, it was relevant for the research to cross-source data with interviews to understand how objectivity and subjectivity play a role when digitally assessing services and infrastructures and activities.

To cartographically engineer data, the research employs QGIS Lyon 2.12.3 software. The tool gives several options for adding both forms of data, subjective places, activities and events and objective points of services and infrastructures. The research highlighted main corridors to access the historic centre (Figure 2). In the figure, photos 1 and 2 belong to relevant elements linked to monuments, food and recreation. Photos 3 and 4 represent accesses to public transport or residential neighbourhoods' thoroughfares. The research delineated activities and events; it established a buffer area in between, generating an intensity area where some of them spatially coincide.

**Table 2** | NSI data on the percentage of buildings preserved in the WH area of Ávila, Cuenca, Segovia, Salamanca and Toledo. Search conducted in 2021.

	Preservation of the WH area			
	Functional	Ruin	Declined	No data
Ávila	91.13%	2.26%	6.43%	0.17%
Cuenca	91.58%	0.00%	7.92%	0.50%
Segovia	98.81%	0.33%	0.87%	0.00%
Salamanca	97.54%	0.35%	1.05%	1.05%
Toledo	94.74%	0.04%	4.97%	0.25%

### 3. Discussion

Today's cutting-edge techniques can be used to analyse sociocultural nodes of values, assets, perception, governance, progress, and well-being, intending to integrate several perspectives. Liu, Butler, and Zhang (2019) present techniques to enhance public perception to comprehend better the significance of a location, which might contribute to its uniqueness.

The hybrid technique of this work helps comprehend historical locations seeks a proper examination of what is recognised within an as-yet-unresolved duality among authentic sites to visit and genuine settlements to live in (García-Esparza, 2022). As a live cultural process, the city presents historical settings to dynamic and possibly unorthodox determinations. Practices and tendencies allow new and diversified readings in a constant

re-contextualisation. Depending on the context, these structures might be considered part of a 'disordered' landscape that defies a unidirectional interpretation of legacy. On the other hand, data created settings can give a chance to understand modern history differently by examining variances and the multidirectional understanding of laws and norms.

The research shows that new practice-based approaches and data analysis would motivate and help improve protection in WH cities after three decades of WH nominations. Acknowledging how and why actions lead to an area being abandoned or densely populated is an essential part of the heritage argument. Investigating these locations revealed that earlier conceptualizations of historical regions included preconceptions about what is good and undesirable in change.

It now includes other values such as leisure, wellness, services, and amenities. These new features alter the environment to the extent that stakeholders allow them to. As interviewees remarked, adopting multidirectional modes of aesthetic assessment may assist engage pluralism and combat the erosion of socio-cultural vibrancy, perceptions of unwanted changes in urban images, and minorities' relocation.

The towns under consideration bear significant evidence of past human adaptation in regions where living resources are scarce: complicated orographic circumstances and difficult access. The WH regions give an unprecedented response to conservation, and these communities bear witness to the continuing growth of human settlements. It does not imply that these continually occupied neighbourhoods began a trend of abandonment and population decline, which deteriorated as owners migrated from the ancient urban centre to better-conditioned residential areas in the late twentieth century.

It is an evolutionary progression that is more or less in tune with its immediate environment. UNESCO's aesthetic 'visualisation' and 'authenticity' of built environments speak to more than only how the urban scene changes and is influenced materially. They also have to do with how residents and foreigners see and experience the past, which is a significant truth that now relies on fruition, provides character, a sense of belonging, and sustains communal memory. Given that conceptualisations and experiences in these urban scenarios are not firmly established in communities, the succession of socio-cultural layers and the form they stratify in the urban fabric come from a global pattern that has a contextually dependent consequence.



Figure 2 | Services, infrastructures, places, activities and events in Cuenca's WH area. Source: Pablo Altaba and Juan A. García Esparza.



The study discovered two main tendencies in how people perceive abandonment in WH settings. The first tendency implies rejection, whereas the second emphasizes the lyrical meanings and emotions of liberation that these settings evoke. The loss of aesthetic features, depopulation and a sense of a well-managed environment have a social impact that causes feelings of loneliness, alienation, and unattendance. In this line of thought, some argue that policies relying on economic profit rather than residents' well-being commodify the environment. And this may be inherent in the current value of places that require place-based contestation.

These cities have a fascinating story to express, shaped by various socioeconomic and cultural development layers. The multifaceted perspective of approaching abandoned historical towns is crucial to their perception, valuation, and re-enactment. Given that these sites are constantly evolving, both physically and intellectually, the validation of multiple epistemologies is required to assist others in identifying how the current layer serves as the foundation for future changes. One of the numerous ways to comprehend the historic city's past is to recognize that difference is inherent to it, even if change entails abandonment and future opportunity.

Concerns regarding current mindsets, behaviour, emotion, and social praxis, along with notions of time and location, have been expressed by interviewees. In the end, it's about everyday assets creating or modifying space rather than simply existing in it. Contemporary decision-making processes directly impact interactions in the ancient city, which are the consequence of accumulated socio-cultural recreations, appropriations, and subjugations. It is here that the perspectives of residents and visitors differ, depending on whether the observer is seeking a successful cultural development or a stationary aesthetic experience.

The emergence of abandoned locations or districts in WH areas attempts to challenge experiences, intensity, aesthetics, visualization, and respect without unduly polarizing or defacing the place's nature. Researchers have been able to identify locations with lower or more significant intensity pressures thanks to new methods, which has improved our awareness and appreciation for the external and internal changes that occur in these fragile locations with unknown opportunities. As a result, it's critical to examine stakeholders' authenticity and integrity values and understand how they are influenced by socio-cultural interactions that determine context, time, and location. Perceptions, evaluations, and analytical immersions, all backed by understanding and interpretation, are required for long-term approaches to opportunity sites.

Conservation objectives for sustainable built environments need to meet equilibrated multidimensional priorities without excessive polarisation. These two parameters are locally dependent and subject to perception and management but foreseen them guarantee to a certain extent the genuine continuity of the local character and the diversity of values. Thus, cognition and approach in contemporary habitats are open to dynamism susceptible to reengaging future different values.

Following to the digital scrutiny, there are three intensity levels for intervention in similar modern habitats inside WH areas: 1. High-intensity habitats with a noteworthy context from the cultural and social perspective, 2. Average-intensity habitats that have lost interest in their assets and cultural landscape's viewpoint, 3. Other low-intensity habitats. Hence, the protection of these habitats is subject to the state of conservation and its perception. The success of current management measures is dependent on follow-up and constant data collecting. Hybrid indicators that can be objectively verified and evaluated can be used to check the level of implementation and achievement and their consequences on the environment.

#### 4. Results and added-value

The study's end purpose was to link the findings to World Heritage regulations and provide scientific justification for evaluating the present historical city due to recognising and witnessing urban cultural differences. As a result, the project's first aim was achieved, which involved analysing the interconnections between architectural preservation, social awareness, and cultural vitality by determining what is necessary, distinctive, and particular to communities through a series of conversations. The project's second goal is to develop a hybrid technique for better studying the dynamics and conservation of Europe's medium-sized medieval cities with WH areas.

Several meetings and discussions were held as part of the research. In these interviews, locals addressed questions on the neighbourhood's architecture conservation, which a sociologist and cultural heritage specialist supervised. During the process, residents themselves revealed some insights concerning current fears and particular quirks linked to prior space usage. Throughout their fieldwork, researchers classified and geo-referenced data from meetings. Its significance relied on making it open-access and available online via a series of maps and other analytical records. Researchers were able to connect the old city to alternative locations with complementing cultural sources thanks to the mapping help.

As a result, maps and connected datasets enabled storing information about events, individuals who attended, activities, infrastructures and services, and other supplemental information. Integrating social media in visual outputs is a future project that might help townships assess what is most valued, what areas or tours are most popular, prevent mass densities, or suggest alternative activities to diversify demands (Figures 1 & 2), (García-Esparza & Altaba, 2018; 2020).

## 5. Conclusions

This study uncovered various obstacles and possibilities that impact abandoned districts in WH places. Sustainable methods rely on procedures that are sensitive to the unique characteristics of each location. The evaluation is legitimate because of how easily assets and values may be abstracted, and large areas share common features that make it easier to establish common standards. The comparison of instances has been made more accessible due to the study of five WH cities. This information is provided through GIS and online datasets. Fieldwork data registration and retrieval aided in the classification of items.

The hybrid technique explains how GIS technologies can help stakeholders categorize places. When categories are accessible to modifications and perception, categorization may be used in a variety of heritage situations. Personal variables, such as experiences and behaviours that tie subjectivity to locations, undeniably influence how people see the landscape. Nonetheless, some people can understand and interpret the complicated aspects of the evaluated regions and create a network of values, including potential ones, that describe the location.

Nevertheless, abandon is seldom regarded as spatial quality, and it requires strategic management following the city's identity. When it comes to the ideas of abandon and intensity, this study has shown how adopting

methodological changes may help. Furthermore, when the objective is to retain a diversity of social and cultural engagement within multi-faceted contemporary historic locations, the multiple characters of zones and options when assessing attributes is especially pertinent. As a result, the study can assist heritage researchers in furthering our understanding of the variety of heritage sites and heritage professionals in enriching placemaking processes.

To establish principles of coherence and continuity for WH areas, intensity and opportunity zones must be functional and crucial in comprehending circumstances. These are referred to as 'nurse zones,' or zones that require extra attention and understanding. Because of their varied nature, placemaking in these types of vulnerable historic areas can be difficult. They demand careful investigation, ethics, and knowledge not to fake their local character.

Hybrid methods, like the one described in this study, must be attentive to the environment and capable of absorbing its cultural values. Besides, intensity zones, itineraries, and other non-invasive placemaking tools bring up new avenues of inquiry for future study on the critical examination of historical areas, as well as big data approaches that challenge conventional wisdom. Finally, these issues aid in the appropriate treatment of the sustainability and variety of socio-cultural living spaces.

**Acknowledgements:** The author wants to thank the interviewees Xavier Ginés and Vicent Querol, the interviewees, Cristina Simón for the transcript of interviews, and the work of Pablo Altaba with the geospatial analysis. The author also wants to thank the anonymous reviewers for their valuable comments and suggestions.

**Funding:** The DocPlaces research project is funded by Ministerio de Ciencia, Innovación y Universidades: MCIN/AEI/10.13039/501100011033 [grant number PID2019-105197RA-I00].

## References

- Altaba, P., and García-Esparza, J.A. 2018. 'The heritagization of a Mediterranean Vernacular Mountain Landscape: Concepts, Problems and Processes'. *Heritage & Society*, 11(3), 189-210. <https://doi.org/10.3390/su13095144>
- Altaba, P., and García-Esparza, J.A. 2021. 'A Practical Vision of Heritage Tourism in Low-Population-Density Areas'. The Spanish Mediterranean as a Case Study. *Sustainability*, 13(9): 5144. <https://doi.org/10.1080/2159032X.2019.1670533>
- Brown, G., and Fagerholm, N. 2015. 'Empirical PPGIS/PGIS mapping of ecosystem services. A review and evaluation'. *Ecosystem Services*, 13, 119-133. <https://doi.org/10.1016/j.ecoser.2014.10.007>
- Brown, G., Weber, D., and de Bie, K. 2014. Assessing the value of public lands using public participation GIS (PPGIS) and social landscape metrics. *Applied Geography*, 53, 77-89. <https://doi.org/10.1016/j.apgeog.2014.06.006>

- Butler, R. W. Tourism: An evolutionary perspective. In Nelson JG, Butler R, Wall G. *Tourism and sustainable development: A civic approach*. Waterloo: University of Waterloo; 1999.
- Carman, J. 2019. 'What sustaining heritage really does'. *Vitruvio*, 4(1), 1-10. <https://doi.org/10.4995/vitruvio-ijats.2019.11772>
- Dalgligh, C., and Leslie, A. 2016. 'A question of what matters: landscape characterisation as a process of situated, problem-orientated'. *Landscape Research*, 41(2), 212-226. <https://doi.org/10.1080/01426397.2015.1135319>
- de la Torre, M. 2013. 'Values and Heritage Conservation'. *Heritage & Society*, 6(2), 155-166. <https://doi.org/10.1179/2159032X13Z.00000000011>
- Dupont, L., Antrop, M., and Van Eetvelde, V. 2015. 'Does landscape related expertise influence the visual perception of landscape photographs? Implications for participatory landscape planning and management'. *Landscape and Urban Planning*, 141, 68-77. <https://doi.org/10.1016/j.landurbplan.2015.05.003>
- Edensor, T. 2005. 'Waste matter – the debris of industrial ruins and the disordering of the material world'. *J. Mat. Cult.*, 10(3), 311-22. <https://doi.org/10.1177/1359183505057346>
- English Heritage. 2008. *Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment*. London: English Heritage; 2008.
- García-Esparza, J.A. 2011. 'Barracas on the Mediterranean coast'. *International Journal of Architectural Heritage*, 5(1), 27-47. <https://doi.org/10.1080/15583050903186532>
- García-Esparza, J.A. 2016. 'Re-thinking the validity of the past. Deconstructing what authenticity and integrity mean to the fruition of cultural heritage'. *Vitruvio*, 1(1), 21-34. <https://doi.org/10.4995/vitruvio-ijats.2016.4595>
- García-Esparza, J.A. 2019. 'Beyond the intangible-tangible binary in cultural heritage. An analysis from rural areas in Valencia Region, Spain'. *International Journal of Intangible Heritage*, 14(1), 123-137.
- García-Esparza, J.A., and Altaba, P. 2018. 'Time, cognition and approach. Sustainable strategies for abandoned vernacular landscapes'. *Sustainability*, 10(8), 2712-33. <https://doi.org/10.3390/su10082712>
- García-Esparza, J.A. and Altaba, P. 2020. 'A GIS-based Methodology for the Appraisal of Historical, Architectural and Social Values in Historic Urban Cores'. *Frontiers of Architectural Research*, 9(4), 900-913. <https://doi.org/10.1016/j.foar.2020.04.004>
- Harrison, R. 2015. 'Beyond "Natural" and "Cultural" Heritage: Toward an Ontological Politics of Heritage in the Age of Anthropocene'. *Heritage & Society*, 8(1), 24-42. <https://doi.org/10.1179/2159032X15Z.00000000036>
- Higgins-Desbiolles, F. 2018. 'Sustainable tourism: Sustaining tourism or something more?' *Tourism Management Perspectives*, 25, 157-160. <https://doi.org/10.1016/j.tmp.2017.11.017>
- ICOMOS. 2011. *The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas*. Paris: ICOMOS. Available at: [https://www.icomos.org/Paris2011/GA2011\\_CIVIH\\_text\\_EN\\_FR\\_final\\_20120110.pdf](https://www.icomos.org/Paris2011/GA2011_CIVIH_text_EN_FR_final_20120110.pdf) (accessed 25 November 2021).
- Liu, T., Butler, R.J., and Zhang, C. 2019. 'Evaluation of public perceptions of authenticity of urban heritage under the conservation paradigm of Historic Urban Landscape—a case study of the Five Avenues Historic District in Tianjin, China'. *J. Archit. Conserv.*, 25(3), 228-251. <https://doi.org/10.1080/13556207.2019.1638605>
- Martin, D. 2014. 'Translating Space: The Politics of Ruins, the Remote and Peripheral Places'. *Int. J. Urban Reg. Res.*, 38(3), 1102-119. <https://doi.org/10.1111/1468-2427.12121>
- Martín, B., Ortega, E., Otero, I., and Arce, R.M. 2016. Landscape character assessment with GIS using map-based indicators and photographs in the relationship between landscape and roads. *Journal of Environmental Management*, 180(15), 324-334. <https://doi.org/10.1016/j.jenvman.2016.05.044>
- Pendlebury, J., and Townshend, T. 2014. 'The Conservation of Historic Areas and Public Participation'. *Journal of Architectural Conservation*, 5(2), 72-87. <https://doi.org/10.1080/13556207.1999.10785244>
- Ruhanen, L. 2013. 'Local government: facilitator or inhibitor of sustainable tourism development?' *Journal of Sustainable Tourism*, 21(1), 80-98. <https://doi.org/10.1080/09669582.2012.680463>
- Sánchez-Carretero, C., and Jiménez-Esquinas, G. 2016. 'Relaciones entre actores patrimoniales: gobernanza patrimonial, modelos neoliberales y procesos participativos'. *Revista Ph90*. <https://doi.org/10.33349/2016.0.3827>

- Saygi, G., and Remondino, F. 2013. 'Management of Architectural Heritage Information in BIM and GIS: State-of-the-art and Future Perspectives'. *International Journal of Heritage in the Digital Era*, 2(4), 695-713. <https://doi.org/10.1260/2047-4970.2.4.695>
- Smith, L. 2011. 'El "espejo patrimonial" ¿ilusión narcisista o reflexion es múltiples?' *Antipoda*, 12, 39-63. <https://doi.org/10.7440/antipoda12.2011.04>
- Speed, J., Austrheim, G., Birks, H., Johnson, S., Kvamme, M., Nagy, L., and Thompson, D. 2012. Natural and cultural heritage in mountain landscapes: towards an integrated valuation. *Int. J. Biodivers. Sci. Ecosyst. Serv. Manag.*, 8(4), 313-320. <https://doi.org/10.1080/21513732.2012.725226>
- Spennemann, D.H.R. 2006. 'Gauging Community Values in Historic Preservation'. *CRM: The Journal of Heritage Stewardship*, 3(2), 6-20.
- Stephenson, J. 2008. 'The Cultural Values Model: An Integrated Approach to Values in Landscapes'. *Landscape and Urban Planning*, 84(2), 127-139. <https://doi.org/10.1016/j.landurbplan.2007.07.003>
- Tudor, C. 2014. *An approach to landscape character assessment*, Natural England. Retrieved May 17, 2017, from <https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types>
- UNESCO 2011. *Recommendation on the Historic Urban Landscape*. Available at: <http://whc.unesco.org/en/activities/638> (accessed 8 October 2021).
- van Oers, R. 2010. 'Managing cities and the historic urban landscape initiative'. In: R. van Oers and S. Haraguchi (Eds.), *Managing Historic Cities. World Heritage Papers*, 27 (pp. 7-17). Paris: UNESCO.
- Wagtendonk, A.J., and Vermaat, J.E. 2014. 'Visual perception of cluttering in landscapes: Developing a low-resolution GIS-evaluation method'. *Landscape and Urban Planning*, 124, 85-92. <https://doi.org/10.1016/j.landurbplan.2014.01.006>
- Wesley, A., and Pforr, C. 2010. 'The governance of coastal tourism: Unravelling the layers of complexity at Smiths Beach, Western Australia'. *Journal of Sustainable Tourism*, 18(6), 773-792. <https://doi.org/10.1080/09669581003721273>