

## Vernacular architecture and traditional trades. Social innovation and cultural heritage in rural Andalusia

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### Abstract

*The approval of the National Plan for Traditional Architecture (2014) gave a boost to the recognition of this heritage and provided a consensual methodological tool for its safeguarding. This text included a programme for the recovery of traditional construction systems and underlined the need for a holistic and multidisciplinary approach to their treatment. As a precedent in Andalusia, the Inventory of Popular Architecture (1994-1997) was a pioneering project to document these buildings and the activities they housed, highlighting the capacity of techniques, knowledge and objects to adapt to the environmental characteristics of the territory. Subsequently, the Atlas of the Intangible Heritage of Andalusia (2009-2014) collected a significant number of construction techniques and traditional trades linked to this vernacular architecture. This contribution is presented within the framework of two projects coordinated by the IAPH: LAPat, open laboratory of heritage and SIN-PAR, Innovation System for the Heritage of Rural Andalusia. Their common objective is to analyse social innovation related to architecture and traditional trades and the interaction of diverse stakeholders for their safeguarding. They both recognise the local community as the protagonist in safeguarding, enhancing these practices as an efficient response to the demographic challenge in the rural world. We will focus on three case studies: the dry stone technique in the province of Almería, the raw earth construction in Andalusia, and the artisanal production of lime in Morón de la Frontera. The ultimate aim is to strengthen the transmission of knowledge of these constructive techniques and to reveal their link with socio-territorial development.*

**Keywords:** dry stone technique; raw earth construction; lime; safeguarding; intangible cultural heritage

### 1. Introduction

The consideration of vernacular architecture as cultural heritage has been closely related to the cultural and social value of the traditional techniques associated with its construction. This paper attempts, through the analysis of three case studies in Andalusia, to extract the keys according to which traditional and constructive modes have contributed to the valuation of vernacular architecture, considering its contribution to local

development and the contribution of the community to the construction of the process of safeguarding these heritage assets.

This work has been carried out within the framework of two projects developed at the Andalusian Institute of Historical Heritage (hereinafter referred to as IAPH) and funded by the Andalusian Plan for Research, Development and Innovation (PAIDI, Junta de Andalucía), co-funded by 2014-2020 FEDER Programme: LAPat, Laboratorio Abierto del Patrimonio Cul-

tural de Andalucía (P18-RT-4334, PAIDI 2018), and SIN\_PAR, Sistema de Innovación para el Patrimonio de la Andalucía Rural (PY20-00298, PAIDI 2020).

### **1.1. Plans, inventories and atlas for the safeguarding of intangible cultural heritage**

Before the current heritage legislation, traditional architecture has generally been linked to the more than questionable concepts of the typical or the picturesque, or as images of context related to villages and places, but not for its values. Even so, its recognition has progressively appeared in the cultural heritage legislation that has been developed in Spain since the beginning of the 20th century. In some autonomous communities, the recognition of vernacular architecture and the interest in its protection from the heritage point of view implied the implementation of specific inventories aimed at certain typologies. In this context, traditional architecture plays an important role, highlighting, in the case of Spain, its rich cultural diversity.

In the case of Andalusia, we should highlight the importance of the Inventory of Popular Architecture of Andalusia (1993-1997), a project that consolidated the new values associated with the concept of cultural heritage, while pointing out the need to articulate strategies for the identification, knowledge and protection of an undervalued heritage (Agudo, Delgado & Sánchez, 2014). Promoted by the Directorate General for Cultural Heritage, this pioneering project aimed to highlight the diversity of traditional Andalusian architecture, proposing the identification and valuation of its spaces, as well as the breaking of the stereotypes created around it.

On this complex path, traditional architecture has also had important documents that consolidate its heritage values. One of the main ones has undoubtedly been the National Plan for Traditional Architecture (IPCE, 2014), a project drawn up between the state administration, the autonomous communities and other public and private institutions (Benito & Timón, 2014). The final docu-

ment analyzed the current situation of vernacular architecture and established several lines of action coordinated between cultural heritage managers throughout Spain. One of the main reasons that justified its implementation was the disappearance of numerous examples of our vernacular architecture, as well as the need not only to identify its presence in the territory but also to apply the existing legislation on cultural heritage, both state and regional, seeking new measures to safeguard it.

At the same time in Andalusia, between 2009 and 2014, IAPH was developing the Atlas of the Intangible Heritage of Andalusia (Carrera, 2009, 2016, 2021), where 1800 expressions of the intangible heritage of Andalusia were collected from an anthropological perspective and using participatory methodologies. In the field of trades and knowledge, trades related to dry stonework, vegetable coverings, cave cutter, construction of *balates* for agriculture in terraces, paving of floors, stone masonry, decorative painting, slate construction, or construction of ephemeral buildings (fair gates, pilgrimage huts), among others, have been documented. We have also recorded mineral transformation activities, including trades related to the production of construction materials (lime, plaster, tiles, bricks, hydraulic slabs).

### **1.2. Cultural heritage for sustainable development facing territorial vulnerability**

In recent decades, the consideration of cultural heritage linked to the territory has meant the rediscovery of a resource for the objectives of contemporary society (Sabaté Bel, 2004). The current concept of cultural heritage incorporates both human and social production, but also shared memory and identity, interpretation and the everyday use made of the environment. In this sense, the maintenance of heritage as a territorial resource must necessarily go through the consideration of its sustainability (Del Espino, 2015), which has been advocated and applied by UNESCO (United Nations, 2013).

Therefore, the conservation of heritage resources must include the protection of the social fabric and the cultural, environmental and economic values linked to heritage elements. With the recognition of vernacular architecture, ethnological and intangible heritage or, more recently, agricultural heritage, there is an evolution towards the detection and valuation of those which lack exceptional values but which bring together a large part of the life and history of their inhabitants and are intimately linked to their identity traits, thus reinforcing their links with the place and improving the possibilities of anchoring the local population. This results, on the one hand, in a progressive increase in the value of heritage categories considered *minor* and, on the other hand, in an approximation to the personal experience of citizens and the social use of its assets. In this sense, innovative and sustainable strategies based on traditional trades can contribute to strengthening the social-economic fabric of vulnerable territories through the creation of employment opportunities, the recruitment and training of qualified personnel or the rooting of the young population, among others (Del Espino, 2020).

Therefore, the consideration of vernacular architecture, as well as the traditional construction techniques linked to it, becomes urgent and pertinent. Urgent because they are precisely the territories with the largest and best examples of traditional constructions, the same that generally suffer from social and economic vulnerability, with serious risks of abandonment and desertification, so that regeneration based on the sustainable use of these techniques could be an opportunity for the survival of their social fabric. Relevant because, in the current context, it is necessary to implement actions in which cultural heritage is not only the object of protection and conservation but, beyond that, an instrument to improve social cohesion and participation in our territory (Del Espino, 2021).

### 1.3. Working with heritage agents to build the process of heritage safeguarding

The development of participatory methodologies related to various areas of heritage management – documentation, enhancement, training, intervention or restoration – is one of the objectives of the IAPH and, specifically, of the projects from which we approach this text on the importance of traditional trades and vernacular architecture. They both have also aim to reinforce the Network of Cultural Heritage Agents, initiated in the Atlas of the Intangible Heritage of Andalusia, and the role of the institution as an Open Heritage Laboratory, initiated in the Europeana Food and Drinks project, which sought to promote the philosophy of open government based on institutional transparency, collaboration and the creation of networks. Working along these lines and in direct relation with the social agents involved in the design of participatory safeguarding plans has been the next stage of the Atlas of the Intangible Heritage of Andalusia, carried out through the *Intangible Heritage Seminars*; the *RedPesca* project and the recent methodological proposal within the framework of the project *Methodological Guide for the design of Special Plans for the Safeguarding of Intangible Cultural Heritage* (Carrera (Coord.), 2021).

The trades and construction techniques discussed in this article are case studies of the LAPat and SIN\_PAR projects. In them, we have tried to implement the theoretical and methodological precepts on which we have been working for years with a priority objective: to innovate in heritage management by making it more open, reactive and transparent and to turn it into a useful instrument for social and territorial development, responding, among other social challenges, to the demographic challenge and the objectives of sustainable development. To this end, we have started from several initial approaches or premises. On the one hand, we consider that heritage elements – tangible or intangible – can play a decisive role in the social and territorial development of the community with which they are linked, contributing to improving its quality

of life, favouring integration and social cohesion and its sense of belonging, as well as the resilience of the territories in which they are generated. Secondly, we consider that social and technical innovation in cultural heritage are closely related so that the use of participatory methodologies in the generation and management of cultural heritage can improve the performance and action of heritage institutions and society to safeguard it. Thirdly, the collaboration between the administration, local actors and specialists in the field of heritage is the most effective strategy for overcoming the obstacles that normally limit the action of public guardianship concerning intangible heritage. Finally, the use of open data, free licenses and the generation and promotion of the reuse of heritage information by the IAPH can generate feedback between social and technical innovation in the field of heritage management.

The natural continuation of the Atlas of the Intangible Heritage of Andalusia was the holding of the Seminars on Intangible Heritage (Carrera, 2016, 2021) as a space for dialogue, debate and collaboration between public and private decision-makers and civil society to work on the values, risks, threats and possibilities of this heritage, placing the people who are the protagonists of this heritage on the same level as the experts. The ethnographic method was used for this purpose, relying on qualitative methods such as interviews, observation and analysis. This same format, but with an even more in-depth and intensive study on a specific case study – the fishing corrals of the northwest coast of Cádiz – was implemented in the project *RedPeSca: Redes para la salvaguarda del Patrimonio Cultural Inmaterial marítimo pesquero andaluz* (Florida & Carrera, 2019; Florida, 2021).

## **2. Three case studies for an approach to traditional trades in vernacular architecture**

The following case studies focus on the generation of Intangible Cultural Heritage Safeguarding Plans understood as a social agreement following

the models and methodologies launched and built collaboratively, intending to promote an experimental model and, potentially, become a good practice.

### **2.1. Dry stone**

The inclusion of the dry stone technique by UNESCO (2018) in the Representative List of the Intangible Cultural Heritage of Humanity was the end of a process in which different European countries participated, as well as some autonomous administrations of the Spanish state. This significant recognition embodied an incentive for the development of proposals for the safeguarding of this technique and its inherent values. The analysis carried out for the candidacy, as well as the identification of initiatives in the Andalusian territory that are related to the transmission of the techniques and knowledge of dry stone, are now, more than ever, a necessity. On the first of these issues, it should be stressed that UNESCO's declaration focuses on the valuation of knowledge and not on construction. Undoubtedly, the diversity of this architecture and its territorial extension would be worthy of protection but, in this case, recognition must be understood from an integrating vision.



Fig. 1. *Balates* or dry stone walls in Ohanes terrace agriculture (Aniceto Delgado Méndez, 2019)

The process initiated on the occasion of the candidacy of the dry stone technique made it possible, in Andalusia, to update the existing documentation and gain first-hand knowledge of the situation of this knowledge and know-how, as well as to make an overview of the complex

situation of dry stone, both in its tangible and intangible dimensions. In contrast to what is happening in other autonomous communities, we can observe the practical disappearance of the activity (Delgado, 2020), except for some areas where several master craftsmen survive. One of the most interesting examples is located in the province of Almería (Muñoz & Seca, 2020), where proposals for training, heritage protection and dissemination of dry stone are being developed.

Due to its relief conditions, the adaptation processes produced in this territory have formulated responses to solve the difficult living conditions. Dry stone constructions have played a fundamental role in the settlement of the population and the possibility of carrying out agricultural and livestock farming activities, which constitutes a great example of cultural heritage as a key for territorial sustainability. The relevance of these landscapes in places such as Ohanes, Abucena, Lubrín (Muñoz & Seca, 2021), Chercos or Bayárcal, and the need to conserve these structures, have allowed the transmission of the techniques and knowledge linked to dry stone.

The continuity of *balateros* and *balateras* in the province of Almería, who build based on the vernacular and contribute new ways of handling stone, allows us to be optimistic about the future of these techniques. Likewise, we must emphasise the implementation of actions to disseminate and enhance the value of the dry stone in this province by institutions such as the Institute of Almerian Studies, the Laboratory of Social and Cultural Anthropology of the University of Almería or different local entities, which are requesting the protection of dry stone constructions or the creation of exhibition spaces to show us the importance of this knowledge.

## 2.2. Raw earth construction

Raw earth is undoubtedly one of the most widely used materials in construction, although on numerous occasions its invisibility, especially in vernacular architecture, has greatly facilitated its

ignorance and also, why not, its contempt. The plastering of façades has been understood not only from a constructive point of view to give protection to the wall but also as a mechanism to disguise its presence and promote the use of materials understood as nobler. Aspects such as sustainability and bio-construction are closely related to the development of proposals that, from a contemporary perspective, are aimed at valuing the earth as a construction material and its consequent use in construction. In this sense, different associations are beginning to design and implement programmes that are committed to training.



Fig. 2. Housing built with raw earth. Hinojales, Huelva.(Aniceto Delgado Méndez, 2019)

In Andalusia, we can find regions where the use of raw earth has been a constant, although we should point out that the 1960s and 1970s were a turning point in the abandonment of these techniques and the appearance of new materials that were initially cheaper and simpler to use. These processes, accompanied by the rural exodus and the economic transformations of a large part of the Andalusian territory, caused great changes in the use of spaces, in the way of living and, in short, in the way of building. Thus, raw earth has become a material that is scarcely used and even undervalued. Nowadays, its use is limited to interventions in the monumental heritage and some repairs to domestic architecture or constructions related to agriculture and livestock farming.

Among the proposals developed in the Andalusian framework, we can highlight the participation of the Taph-Taph Association in the Eras-

mus+ Project entitled *HELPS* (2020), a participatory approach to land-based construction and people in precarious situations. The main objective of this network, made up of several European associations, is to improve the habitability of housing in vulnerable areas. We should also highlight the role taken on by other associations such as the *Museo de la Cal de Morón de la Frontera* (2021) in the recognition of rammed earth and other techniques centred on the use of earth through training courses in which, from practice, traditional knowledge is taught and knowledge and experiences are shared. In addition to their training nature, these courses generate a network of professionals who, beyond putting the knowledge learned into practice, advocate learning traditional techniques and promoting different ways of building and living, understanding and sharing paradigms that bring us closer to sustainable architecture.

### 2.3. Handcrafted lime production

The artisan lime making in Morón de la Frontera was one of the activities in the countryside of Morón included in the Atlas of the Intangible Heritage of Andalusia, which generated a close and enriching collaboration that continues. The diverse nature of an institution such as the IAPH has allowed different actions related to the broad concept of safeguarding defined by UNESCO (2003) to be tackled at the same time, intending to jointly understand and diagnose – including the necessary institutional, social and business agents – the problems that affect them and taking measures that can serve for their continuity as a craft and productive activity, taking into account the necessary involvement with agents.

Within the IAPH, this has meant the interrelation of different types of actions, including actions aimed at the documentation of cultural heritage (*Atlas of the Intangible Heritage of Andalusia, Cal, Transhabitat*), research in the field of geology and the behaviour of materials (standardization of the use of materials for restoration, application to interventions in historical heritage), the generation of recommendations in the field of the

cultural landscape, training through collaboration with the agents involved (Morón Lime Kilns Association and lime workers), the development of a cross-border collaboration project with Morocco (documentation of the activity in Andalusia and Morocco, dissemination of the cross-border lime route, participatory analysis of the activity in Morocco) and the holding of dissemination actions (European Heritage Days, open days, technical conferences, collaboration in publications, or the development of routes).

In the framework of the *Transhabitat* project, one of the actions carried out by the IAPH has been the development of a plan to safeguard the lime trade in Andalusia and Morocco (2012-2014). For its part, the Lime Route has made it possible to connect the lime kilns of the Sierra de Morón de la Frontera (Seville) with the active lime kilns in Morocco, which still practice the same artisan lime production techniques with some small and interesting variations. Thus, two spatial-temporal realities have been documented that have undergone or are in the process of undergoing profound changes in their artisan production systems, or of disappearing, if the necessary measures are not adopted from all spheres (Carrera, 2016: 376-476).



Fig. 3. Construction of the lime kiln, Morón de la Frontera, Sevilla (Juan Carlos Cazalla, 2008)

The artisan production of lime, therefore, becomes a fundamental element for the maintenance of vernacular, urban or rural architecture. It could contribute to the maintenance of Andalusian historic centres and Moroccan medinas in better conditions than those provided by other

less versatile, adaptable, resilient and sustainable building materials that have been introduced earlier in one territory than in the other. In turn, the promotion of the use of this material in heritage and conservation policies for buildings, neighbourhoods or cities should be a priority for the entities and institutions responsible and competent in heritage and housing in both territories. (Carrera, 2014, 2016).

Also from the IAPH, the Geology Laboratory works on the quality control of lime from Morón de la Frontera to optimize the artisan production of this product. In the laboratory, mortars are designed and their quality is controlled to ensure their adaptability to the requirements of use and functionality in the restoration of masonry works, with special emphasis on their use on site. In this way, it contributes to the support of the safeguarding plan and the reactivation of artisan activity as intangible heritage that allows biotechnological innovation and territorial sustainability given its future commercial projection. In addition, a standardized document of recommendations for the application of lime in the conservation of cultural assets has been drafted. Training is also one of the fundamental strategies in the activities developed around lime. In this case, training actions support the safeguarding measures and enable the professional qualification of senior technicians and applicators in the use of this material and the handling of traditional construction techniques.

### 3. Conclusions

Although steps are slow and cautious, we currently find in Andalusia interesting proposals that envisage new spaces and contexts for traditional trades and their link with vernacular architecture. However, it is still necessary to make progress in research as a mechanism of knowledge and the main asset for safeguarding, as well as in the identification of craftsmen who know traditional techniques, promoting the use of these techniques in new constructions and not only as a procedure for rehabilitation.

Concerning the study of these techniques, the concept of participation is present in academic discourse, social movements and public administration, but the necessary instruments and resources have not yet been developed to apply it comprehensively, in a way that allows its different aspects and meanings to be spun out and its multiple and varied social, environmental and cultural functions to be defended based on social innovation and public responsibility.

Safeguarding the ICH implies defending its multiple values for society and this requires a collective effort: committing the time, technical-research personnel, spaces and means necessary to make this co-management of heritage possible. Some of the actions on which work should continue are: collaborating in safeguarding the traditional mechanisms of knowledge transmission through formal and non-formal education; promoting the figure of masters or expert craftsmen and encourage their activity by craftwork subsidies, participation as a teacher in vocational training modules or workshop schools; implementing a fiscal policy favorable to the development of crafts activities in vernacular architecture, or generating a system of incentives for the production, marketing and consumption of crafts; promoting knowledge and appreciation of traditional building materials for their great ecological and environmental values, standardizing their use in architecture through training and dissemination; promoting the traditional knowledge and know-how regarding construction techniques for vernacular architecture and their application, creating the necessary forums for their transmission; and reviewing current legislation, eliminating contradictions and regulating the limitations on access to materials.

In short, it will be necessary to achieve institutional articulation in terms of competencies and common criteria around traditional building techniques as activities related to culture, the economy, trade, innovation, housing, landscape, sustainable construction, architectural restoration, the environment, or agriculture.

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