



From the Intervention of a Vernacular Heritage Structure in Oña – Ecuador, to the Improvement of the Cultural Landscape

M. C. Achig-Balarezo^(✉), S. Astudillo Cordero, and G. Barsallo Chávez

City Preservation Management Research Group, Faculty of Architecture and Urbanism,
University of Cuenca, Av. 12 de Abril s/n. Ciudadela Universitaria, Cuenca, Ecuador

{cecilia.achig,sebastian.astudillo,
gabriela.barsallo}@ucuenca.edu.ec

Abstract. The San Francisco de Oña neighborhood is in southern Ecuador and is included in the national heritage list. About 20% of the heritage buildings are in an advanced state of deterioration, mostly abandoned and without maintenance. This article shows the intervention in one of these vernacular heritage buildings through a so-called Maintenance Campaign, which is an initiative developed by the University of Cuenca and is based on the recognition of values and the participation of different social and institutional actors through collaborative work, known as “minga” in the Andean world. The research was carried out based on two methodologies: a) the preventive conservation methodology according to ICOMOS 2003 and b) the participatory methodologies according to RedCIMAS (2015), which allow for active interactions and mutual learning among its actors. The University of Cuenca developed twenty maintenance projects in the San Francisco de Oña neighborhood, although due to the Covid pandemic it was only possible to intervene in one building. This case study turned out to be very interesting, because not only was a heritage building rescued utilizing traditional constructive techniques, but also an urban project by the Municipality of Oña was halted, which would have led to the destruction of part of this building by transforming a narrow dirt road into a wide road for heavy traffic. If this project had been carried out, heritage in Oña would have been affected in two ways. First, one of the buildings with the highest heritage value of this neighborhood would have been lost and second, a drastic change would have occurred in the historical cultural landscape of the San Francisco de Oña neighborhood.

Keywords: Vernacular Heritage · Cultural Landscape · Minga · Preventive Conservation

1 Introduction

The San Francisco neighborhood is located in the canton of San Felipe de Oña, which is settled along an old bridle path and a meandering water canal that irrigates the neighboring planted areas as it passes. It is made up of a set of vernacular buildings built on the

basis of adobe, wood and tile roofs (Fig. 1). The landscape is strongly characterized by rural life: the pre-Hispanic road and the ramifications that derive from it, the irrigation canals, the crops, the color, texture and materiality of the buildings and the vegetation add to a strong sense of appropriation of those who live here and even of those who only come to visit it, adding value and significance to the area.



Fig. 1. The San Francisco neighborhood in the Oña canton. Source: Astudillo, 2021

In the year 2021 the idea of building a new road takes hold, which would give continuity to the roads in the areas surrounding the urban center. Unfortunately, the proposal for one of these road extensions would mutilate a heritage building that already was in very poor condition, ignoring its values as part of the built complex. This was the beginning of a wide debate as well as negotiations with several institutions to avoid its demolition. These efforts concluded with a minga, which was led by the University of Cuenca (UC) through the World Heritage City (CPM) research project of the Faculty of Architecture and Urbanism (FAUC), aimed restoring the building as a strategy to maintain not only the building itself but also the structure and urban configuration of the neighborhood as well as the recovery of the sense of appropriation and belonging of its inhabitants.

1.1 Objectives

This article shows the process that was developed applying the principles of preventive conservation and activating a participatory process, which concluded with the intervention of a heritage asset in Oña. The stated objectives were:

- To carry out documentary research on the neighborhood, emphasizing the aspects that characterize the area as a cultural landscape with a long history.
- To carry out documentary research on the property, highlighting the importance of vernacular architecture, mainly to the community of Oña and to the residents of the neighborhood.

- To make an intervention proposal aimed at rescuing the heritage building in dispute, with the participation of various actors, committing them to a minga through a Maintenance Campaign.
- To execute the process of recovery of the building with the contribution of various social actors and citizens, under the direction and coordination of the University of Cuenca, the CPM project, the Municipality of Oña and the National Institute of Cultural Heritage (INPC).

1.2 Background

The University of Cuenca, its FAUC with the conservation workshop and the CPM research project previously developed several research processes, such as among others the study of mineral pigments and the study of brick diversification. Several projects that focused on the conservation of heritage in the Oña canton have also been carried out, particularly in the cantonal capital and in the rural parish of Susudel, through Maintenance Campaigns based on so-called mingas. The minga is collaborative work consisting of the sum of efforts of diverse actors in a concerted and consensual manner to achieve community or even family benefits. The first Maintenance Campaign was carried out in Susudel in 2011, contributing to the maintenance of forty-nine peasant buildings of vernacular architecture. Immediately afterwards, in 2013, a second project that lasted five days focused on the recovery of the Susudel Cemetery. After these projects in rural areas the maintenance campaigns moved to an urban environment. They had all the facilities, but also the difficulties of an environment in which participation and social cohesion manifest themselves differently. In 2014 the first urban Maintenance Campaign was carried out in the San Roque neighborhood, a traditional neighborhood in the city of Cuenca, during which twenty-two buildings were intervened. In 2018 the Maintenance Campaign of the Las Herrerías neighborhood, which is another traditional neighborhood of Cuenca, was carried out with the intervention of twenty-one buildings, during which, as in previous campaigns, the minga brought together authorities from the city and the neighborhood, neighbors, the armed forces, social organizations, coordinated by teachers and students of the FAUC.

In the San Francisco de Oña neighborhood, the work of the University of Cuenca, the FAUC and the CPM project began in 2007–2008 with the research of its history and the context of the city as well as inventorying valuable heritage buildings. Five complete areas were studied in depth. The process culminated in the elaboration of individual maintenance cards, in which the damages and heritage values were identified through the Nara Matrix [1]. In addition, maintenance and improvement actions were proposed for each of the buildings. These actions, in which the University of Cuenca and the National Institute of Cultural Heritage (INPC) participated, resulted in a technical file that served as support for the declaration in 2013 of the urban center of Oña and the San Francisco neighborhood as assets belonging to the Cultural Heritage of the Country [2].

As a result of the presence since 2007 of the University of Cuenca, studies began for the recovery of the most emblematic building in the neighborhood, called the “Beauty of Paris”, which culminated in its comprehensive restoration, turning it into an intercultural community center with the institutional contribution from the Municipality of Verbeke, Belgium. In 2019, with the objective of contributing to the conservation of the

architectural and urban heritage of the neighborhood, the participation of various social actors was encouraged through a Maintenance Campaign. The University of Cuenca, as part of an academic exercise, worked on twenty of the fifty-five buildings that make up the neighborhood. The University of Cuenca carried out the registration, survey and maintenance proposal, in addition to a comprehensive project aimed at conserving and promoting the cultural landscape.

Due to the Covid-19 pandemic it was only possible to intervene in one building. In July 2021 a Maintenance Campaign was carried out in the building belonging to Mr. Miguel Calle (the “Lara-Espinoza” house), with the aim of saving it from the imminent opening of a new road that would have passed through it. With the new road, not only the vernacular building would have disappeared, but also the integrity and configuration of the neighborhood would have been affected.

2 The San Francisco de Oña Neighborhood and the “Lara-Espinoza” House

The San Francisco neighborhood is one of the oldest and most representative settlements in the region. Characterized by concentrating administrative, trade and management activities, it was a very active site where bakeries, shoe stores, soft drink factories and furniture factories were located. It was also the center of communication between various communities that marketed their products [3].

Although the neighborhood did not present major alterations or transformations in the urban-architectural aspect, the state of abandonment and deterioration that most of the buildings presented was notorious.

The neighborhood is characterized by its natural, cultural and landscape wealth, in contrast to the fragile socioeconomic condition of the population. In addition, the use of traditional construction techniques such as adobe and wood, typical of the Andean region, are all around, as well as the use of paint based on colored earths found locally, which gives the area a particular and unique character.

Despite the construction of the Pan-American Highway and the new Central Plaza, the neighborhood has transcended time and shows the traces of progressive abandonment and the economic precariousness of those who inhabit it, which is why today its buildings present a significant deterioration [4]. In the San Francisco de Oña neighborhood, the presence of the “Lara-Espinoza” house stands out, in which the Maintenance Campaign was carried out.

2.1 Maintenance Campaign in the San Francisco Neighborhood

Maintenance Campaigns are innovative processes in the field of preventive conservation of built cultural heritage, based on the recognition of its values and the coordination of various actors involved (academy, community, public institutions, private companies, foundations, etc.), in a work called *minga*. The term “Minga Multiactors” has been adopted for this collaborative process inspired by a form of organization of the Andean tradition: the *minga* [5]. To guarantee the optimization of resources, especially for owners who do not have money, as is the case of Mr. Miguel Calle, a Maintenance Campaign

was developed of his building. This intervention was challenging as it was developed during the COVID 19 pandemic (Fig. 2a-b).



Fig. 2. a-b. State of deterioration of the “Lara-Espinoza” house before its intervention. Source: 2a: Achig, 2019. 2b: Astudillo, 2010

The 2005 Faro Convention on the Value of Cultural Heritage for Society [6], emphasizes, among other aspects, the need for the whole of society to participate in the continuous process of defining and managing cultural heritage. It also recognizes personal and collective responsibility for this heritage, requiring greater synergy between the competencies of public and private agents and institutions, a situation that is close to the process developed in the “minga”, which also contributes to the construction of a peaceful and cohesive society, where collective interests take precedence over individual interests.

2.2 Methodology

The present investigation was developed under the consideration of the San Francisco de Oña neighborhood as a cultural landscape. In this context and based on experiences developed by the CPM Project, two methodologies were articulated: a) Preventive conservation, which includes the processes of analysis, diagnosis, therapy and control, proposed by the International Council on Monuments and Sites [7] and b) the participatory research methodology proposed by RedCIMAS [8], through which spaces for interaction and mutual learning between various actors are activated.

Participatory methodologies seek to facilitate and promote processes of social transformation through initiatives that encourage the involvement of various actors: neighborhood residents, members of the academy, technicians, officials of public institutions, among others. Each phase is complemented by a documentary research process that is essential to validate and feedback this information with the community and other actors, through participatory activities, obtaining a final result shared among the participants [9].

2.3 Results and Discussions

Phase I Analysis. During this phase information is collected to determine the heritage values. Students and teachers of the ninth semester of the Faculty of Architecture of

the University of Cuenca combined documentary and field work before and during the confinement due to Covid-19. Subsequently, with the community and other actors they proceeded to validate and interpret the information collected. Among the various analyses, the selection of the buildings to be intervened was based on four criteria: heritage valuation, state of conservation, availability and economic capacity of the owner. To collect this information, the field sheets developed by the CPM project were applied. First, the pre-registration analysis was carried out with a first view of all the buildings in the neighborhood.

Then the heritage values, damages and predisposition of the owner to participate in the campaign were assessed. Finally, the socio-economic condition of the owners was determined. Through the analysis of the applied files, it was possible to determine that 19% of the buildings in the neighborhood were in a poor state of conservation and 51% have a high heritage value. With this information the selection of the buildings was made and the architectural and photographic survey of them was carried out [10].

Phase II Diagnosis. In this phase the current state, history and heritage values of both the neighborhood and the buildings were determined. A SWOT analysis was applied to determine the situation of the landscape values of the area and of the social relations. The main strengths of the San Francisco neighborhood turned out to be the privileged views towards the entire Oña Valley, the amount of assets classified as national heritage and the high social cohesion of the neighborhood. Among the main opportunities are the prevalence of the historical memory of the neighborhood of several inhabitants, the tourist and architectural potential as well as the natural potential (waterfalls, lagoons, ditches, forests). The neighborhood presents some weaknesses such as the abandonment of the buildings, the few job opportunities and lack of education for its inhabitants, which leads to migration, little public space and the lack of legal protection for heritage conservation. Repeatedly the inhabitants referred to the inadequate paving of the streets, which makes the accessibility to a good part of the buildings difficult. The identified threats are the lack of attention to the neighborhood by the authorities as well as the abandonment by its inhabitants, in search of opportunities in other sectors of the city itself, with better conditions for commerce and with greater endowment of services and equipment [4].

Phase III Therapy. During this phase the execution of the Maintenance Campaign was planned in twenty buildings with the active participation of all the actors involved. The project aroused the interest of various institutions such as among others the Municipality of Oña, the National Institute of Cultural Heritage and the Prefecture of Azuay. Despite efforts made by the University of Cuenca the situation caused by the Covid-19 pandemic made it difficult to obtain financing for the campaign and the project could not be executed as planned. However, adding efforts and commitments, through the minga multiactors, the intervention of the “Lara-Espinoza” house was carried out. This hundred-year-old building was in an advanced state of deterioration and thanks to the willingness of the owner it could be restored.

On June 21, 2022 the preliminary cleaning and removal of the roof began. The pieces of wood and tile in good condition were cleaned and stored for reuse. The group of students joined the Maintenance Campaign between July 2 and 10. The expertise in traditional construction techniques of the owner, Mr. Miguel Calle, was very helpful

during the execution of the works, for example with the in-situ elaboration of the corbels, transmitting this knowledge to the students. The minga above all focused on the restoration of the roof, which was in a particularly poor condition. The traditional system of the roof is made of wood and to guarantee the proper functioning of its structure, all elements that were in poor condition were replaced. The walls were also repaired (at the lower and upper part) in order to support the roof and in this way the structure of the building was not affected by the added weight of the roof. The plasters were replaced, the balusters of the balconies were fixed, the floor of the house was leveled, and some additions such as a bathroom and a laundry room were demolished. Thanks to another research project that was taking place at the same time, artisanal paint prepared with mineral pigments from the area was donated, which was used to paint the facade of the building [11].

During the final day of the intervention the roof tiles were placed and cleanup work was carried out. Later on, all of the participants were witness of an emotional ceremony with the traditional placement of a cross on the roof. It is worth mentioning that the minga for the maintenance of the “Lara-Espinoza” house motivated other residents of the neighborhood to express their desire to paint their buildings and carry out repairs (Fig. 3).



Fig. 3. a-b. Recovery process of the Lara-Espinoza building through the Minga. Source: Astudillo, 2022.

3 Impact of the Campaign on the Urban Planning of the San Francisco De Oña Neighborhood

The intervention made it possible to recover a vernacular building typical of the rural landscape with evident heritage values and to stop an urban project of widening a narrow path into a wide avenue for the passage of cargo transportation (Fig. 4b), due to which this building would have been mutilated (Fig. 4a) and at the same time it would have caused a drastic change in the urban configuration of the neighborhood.

The project started considering the San Francisco neighborhood as a cultural landscape that allows us to understand the relationship established over time between human beings and nature. This is achieved through the layering of its values and attributes,

ultimately constituting part of the identity of the place and therefore a heritage of enormous value. A cultural landscape is created over time, given the dynamic nature of social processes, each with its own dynamics, assuming a vital function as a resource for social and economic development. It supposes a vision of the environment in which people live, where the protection and sustainable management of valuable spaces and natural resources is fundamental, guaranteeing the balanced maintenance of environmental aspects and their identity and character.

It is about protecting and managing heritage elements from a holistic and integrating vision, where the assets are as important as their context. According to UNESCO, cultural landscapes are defined as places that combine the work of nature and human beings, and that are illustrative of the evolution of human society and the use of space over time, under the influence of physical limitations and/or opportunities presented by the natural environment and of successive social, economic and cultural forces, both external and internal [12]. This definition goes beyond the traditional derivation between nature and human action, evidencing the synergistic relationship between these two components. Nature and humanity interact and are revealed in space, characterized by a dynamic vision of cultural change. In 2011 the INPC proposed a specific concept for the cultural landscapes of Ecuador, defining them as: *a part of the territory that encompasses a coherent, articulated system of natural and human actions and interactions marked and integrated by the geography that forms it and by the historical developed processes; product of which spaces, territories, of singular characteristics with historical, socio-cultural, ecological, aesthetic, visual, productive, economic, religious, spiritual and symbolic value of local, parish, cantonal, provincial and/or national recognition are created* [13].

On the other hand, the cultural landscape that characterizes the San Francisco neighborhood has been considered, in accordance with what Conti (2015) proposes, as a resource for social and economic development in the broadest sense of the term, making it necessary to promote a sustainable management model that leads to a balance between current and future needs, safeguarding the cultural heritage of the environment [14].

Heritage settlements must be managed with the intention of recovering and preserving heritage buildings and complexes with high socio-cultural value, as a way to strengthen identity, improve social cohesion and promote a sense of belonging, as is the case of the San Francisco neighborhood.

Understanding the impact generated by the recovery of the heritage asset and, at the same time, avoiding the opening of a wide avenue, altering the structure of the settlement, involves understanding the concept of integrity, beyond the formal and physical structure, including uses, functions, activities, perceptions, etc. Although the concept of integrity has been linked above all to the permanence of physical and material attributes, in order to escape from this and dialogue with the changing nature of heritage areas, the dynamic aspect of significance must be considered. As expressed by Hobson (2004), heritage cannot only act as a transmitter of stable and evident values, but must allow the renewal and adaptation of values [15]. Jokilehto (2006) suggests three dimensions to assess integrity. Social-functional integrity, that is, the identification of the functions related to the social development of the place. Structural integrity, that is, identification related to physical and material sources. Visual integrity, meaning that is required to

identify the aesthetic aspects of the place [16]. In this context, the opening of the road and the elimination of the heritage asset would have meant the alteration of these three aspects related to the integrity of the neighborhood. Both the loss of one of the heritage assets and the opening of the road would have meant drastically changing the integrity and continuity of the whole, affecting the section of significant layers and the continuity between past, present and future meanings, without allowing the constant reinterpretation of heritage values [17]. Continuity activities go through evidencing the heritage values and attributes, identifying the extent to which the heritage areas may undergo changes, without considering them as undesirable effects.

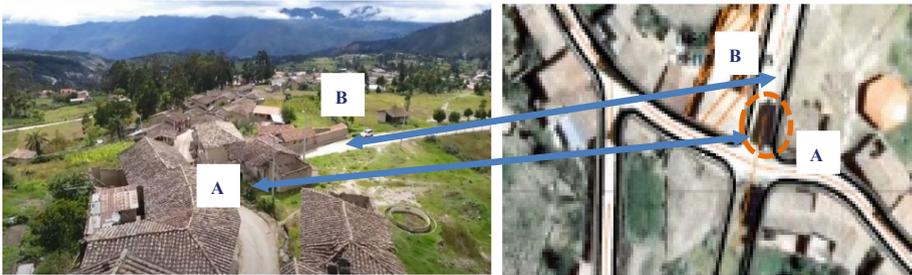


Fig. 4. a. Image of the building (A) and the road (B). Source: CPM Project 2017 b. Image of the planned road (B) and the effect on the heritage building. (A) Source: Oña Municipal GAD

4 Conclusions

Despite the difficult situation caused by the pandemic, a small cooperation network (multi-actor minga) was activated with the encouragement of the owner of the property, the group of University of Cuenca students and various institutions such as the Municipality of Oña and the National Institute of Cultural Heritage, generating the conditions to carry out the Maintenance Campaign. Once the Campaign began, the residents became interested in the process, motivating themselves and asking for collaboration to carry out similar actions in their homes. What happened in other Campaigns is ratified, where it was enough to undertake an initial impulse that detonated similar processes in other buildings. The Campaign contributed to promoting the appreciation of the neighborhood and its reactivation.

Previous negotiations with the authorities and the participatory process with the community contributed to raising awareness about the importance of cultural heritage. Both inhabitants and authorities as well as other stakeholders were able to better understand how heritage can become a resource for social and economic development and as such improve the quality of life of its inhabitants. Through this process of collaborative participation -minga- that culminated in the Maintenance Campaign, it was possible to prevent a narrow road from becoming a wide avenue destined to the transport of cargo, which would not only have meant the destruction of the individual heritage asset, but also would have considerably altered the configuration of the area and therefore

strongly affected the cultural landscape and its values. The intervention was the result of a proper understanding of the heritage values of the “Lara-Espinoza” house and its context. A small but important fraction of the history of the house and the neighborhood was preserved.

The in-situ learning process carried out by the University of Cuenca through its CPM research project and its Faculty of Architecture and Urbanism constitutes a living laboratory of experimentation for the benefit of the education of students and community. In fact, the knowledge of traditional construction techniques was transmitted by the owner and members of the community and at the same time maintenance was carried out of one of the most representative heritage buildings of rural vernacular architecture in the San Francisco de Oña neighborhood.

References

1. van Balen, K.: The Nara grid: an evaluation scheme based on the Nara document on authenticity. *APT Bull. J. Preserv. Technol.* **39**(2/3), 39–45 (2008). Nara Document on Authenticity (1994), UNESCO - ICCROM-ICOMOS, Japan. <http://whc.unesco.org/archive/nara94.htm>. Accessed Mar 2018
2. Astudillo, S., Achig-Balarezo, M.C., Barsallo, G., Cardoso, F.: The university work on the World Heritage City Project, intervention models for the rescue and preventive conservation of earth-based architecture. Article published in the Proceedings of the Terra Education III 2018 congress, held in Grenoble in June 2018 (2018)
3. Ullauri, G.: “Historia del cantón San Felipe de Oña”. En *Historia de los Cantones de la Provincia del Azuay*. Manuel Carrasco & María Neira editores, 256–282. Cuenca, Ecuador. Cátedra Abierta de Historia de Cuenca y su Región (2011)
4. Arce, E., et al.: Maintenance project of the vernacular heritage architecture of the San Francisco de Oña neighborhood, vol. 1. University of Cuenca (2019)
5. Tenze, A.: Informe de evaluación de la Campaña de Mantenimiento de las edificaciones patrimoniales de Las Herrerías (2018–2019) (2021). Unpublished document
6. Consejo de Europa: Council of Europe Framework Convention on the Value of Cultural Heritage for Society (2005). Recuperado de <https://www.coe.int/en/web/conventions/full-list/-/conventions/rms/0900001680083746>
7. ICOMOS Charter - Principles for the analysis, conservation and structural restoration of architectural heritage (2003) Art. 1.6 Downloaded (http://www.icomos.org/charters/structures_e.pdf). Accessed 01 June 2022)
8. Alberich, et al.: Metodologías participativas, Sociopraxis para la creatividad social. RedCIMAS-Observatorio Internacional de Ciudadanía y Medio Ambiente Sostenible, Madrid, España, DEXTRA (2015)
9. Achig-Balarezo, M.C., Guachichulca, J., Cardoso, F., Tenze, A.: Las Campañas de Mantenimiento del patrimonio vernáculo en tierra: el caso del barrio San Francisco de Oña, Ecuador. In: *Terra 2022. 13th World Congress on Earthen Architectural Heritage*, San Fe, New México, USA (2022)
10. Achig, M.C., Guachichulca, J., Cardoso, F., Tenze, A.: Las Campañas de Mantenimiento del patrimonio vernáculo en tierra: el caso del barrio San Francisco de Oña, Ecuador (2021)
11. Abril, D., et al.: Proyecto de mantenimiento de la arquitectura patrimonial vernácula del barrio San Francisco de Oña, Tomo 1. Universidad de Cuenca (2021)
12. UNESCO: Directrices prácticas para la implementación de la convención (1992). En Pérez S. y Fernández Víctor: *Los paisajes culturales de Unesco desde la perspectiva de América*

- Latina y el Caribe. Conceptualizaciones, situaciones y potencialidades: Revista INVI **30**(85), 181–212 (2015)
13. INPC: Guía Metodológica para el Paisaje Cultural Ecuatoriano, Quito (2015). disponible en: https://issuu.com/inpc/docs/ojo-guia_paisaje_cultural
 14. Conti, A.L.: La conservación y la gestión de las ciudades históricas desde la perspectiva del Paisaje Urbano Histórico. In: Encuentro Internacional “El Paisaje Urbano Histórico como herramienta del desarrollo urbano sostenible” (Quito, Ecuador, 9 al 11 de septiembre de 2015) (2015)
 15. Hobson, J.M., Hobson, J.M.: The Eastern origins of Western Civilization. Cambridge University Press, Cambridge (2004)
 16. Jokilehto, J.: World Heritage: defining the outstanding universal value. *City Time* **2**(2), 1–10 (2006)
 17. Zancheti, S.: Dynamic integrity as an approach to the conservation of Historic Urban Landscape (HUL): the case of Olinda and Recife. In: International Meeting of Contemporary Architecture on Historic Settings (2013)