

## Vernacular earthen architectures. Institutionalisation and management models for its conservation in northern Argentina

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#### Abstract

*The conservation of vernacular earthen architecture presents specific technical and social challenges, which implies particular reflections in relation to concrete actions for their restoration, but also to the management models implemented in the interventions. The heritagisation of many of these architectures implies an institutionalization of actions, with approaches on vernacular techniques with procedures that are often foreign to the logics of local constructive cultures. This paper is oriented to the analysis of two vernacular earthen architectures in northern Argentina: Casa del Marques -in the town of Yavi- and the Church of Uquía, both in the province of Jujuy. These analysis involve a recognition of the different trajectories around the institutionalization of conservation, both historical and contemporary. In this sense, the paper will focus on three issues: (a) the action of state institutions in the conservation of these architectures; (b) the problems associated with these actions in technical terms; (c) the possibilities of participatory approaches from vernacular practices. In methodological terms, this presentation will be based on the fieldwork carried out for the registration, diagnosis and support in the execution of the works, in dialogue with other approaches from archive documentation. In the particular case of Casa de Marques, the fieldwork implied the realization of different workshops with local communities, from participatory approaches.*

**Keywords:** Earthen heritage, Local communities, Participatory approaches

#### 1. Introduction

The processes of institutionalisation of heritage, consolidated fundamentally around the 19th century, were inseparable from the formation of modern national states, especially in Europe, and involved the construction of a set of imaginaries, narratives and representations of heritage. In many cases, this institutionalisation implied the creation of various state bodies that began to establish certain ways of managing these heritages, including the criteria for their conservation, based on the centralisation of decisions and actions, within networks that involved various actors. In a way, this

centralisation was constituted as a form of regulation of the relationships between social subjects and architectural objects, which implies thinking of it in terms of a regulation of materiality, understood, in Miller's (2005) terms, precisely as that relationship. These regulations, in turn, implied an invisibilisation of other possible relationships between social groups and their emblematic architectures, a significant issue for vernacular productions. Institutionalisation, and the adoption of certain management models, has not been unrelated to the technical choices that have been made in many cases for the conservation of these archi-

teatures, within the framework of theoretical constructions on conservation, which is of particular interest when looking at earthen architecture.

In the case of Argentina, these processes of institutionalisation began in the first half of the 20th century, replicating European structures, with the creation of the National Monuments Commission, which was also characterised by a centralisation in the selection of the properties to be valued and the criteria for their conservation. These criteria implied technical decisions that generated important transformations in the properties, and have historically been in tension with vernacular perspectives on durability and authenticity.

This paper will analyse these relationships between institutionalisation, management models and technical actions from two case studies in northwestern Argentina, the Church of the Santa Cruz and San Francisco de Paula in the town of Uquía, Quebrada de Humahuaca, and the Casa del Marqués, in the town of Yavi, in the Puna de Jujuy, both of colonial origin, built using earth construction techniques. In the first part, from their diverse trajectories to the present, these cases will allow us to analyse the common aspects and heterogeneities in the processes of institutionalisation, considering the technical implications they had; the second part will be oriented towards a review of the vernacular approaches to conservation, and the critical analysis of the interventions undertaken in recent years from different types of participatory approaches.

The material to be presented arises from the work carried out by the authors for the development of projects and interventions in these recent conservation actions, through the relationship of an academic space with the competent state bodies, particularly the Secretariat of Culture of the province of Jujuy, and with the various local organisations involved in the different communities. In this sense, the proposed approach to the institutionalisation of heritage and its conservation is based on participation in institutional relations.

### **1.1. Case studies**

The highlands of the province of Jujuy have historically been characterised by a construction culture based centrally on the use of earth as a material, with an outstanding place for adobe masonry. Within this framework, earthen construction plays a very important role in the whole of vernacular architecture, both historical and contemporary, with a centrality of colonial times, between the 16th and 19th centuries, both for institutional and ecclesiastical buildings as well as domestic ones. The Church of the Santa Cruz and San Francisco de Paula, and the Casa del Marqués are two very relevant examples of this colonial production in the current province of Jujuy.

The first is located in the town of Uquía, in the Quebrada de Humahuaca, and was built in 1691, as part of the processes of evangelisation and reduction of the indigenous population (Sica, 2016). It is a chapel that responds to the general features of ecclesiastical architecture in the Andean area (Gisbert, De Mesa, 1997), with a single nave, an adjoining sacristy, and a flat façade with a triangular frontispiece. The atrium is enclosed by a perimeter wall and has a single, free-standing tower located on one of the corners. In constructive terms, the chapel has adobe walls up to 1 m thick, and a roof finished with *torta de barro* (literally, mud cake) on a wooden structure with a collar beam. Although the urban environment in which it is located has undergone important transformations over time, the chapel continues to play a structural role in this area, with a central role in local devotions, as well as having become a very important tourist attraction in recent years.

The Casa del Marqués, on the other hand, is located in the town of Yavi, in the extreme north of the Puna of the province of Jujuy, and is a domestic architecture that was built in the 17th century, as a space for the residence and administration of a colonial hacienda, within a complex that also includes the Church of San Francisco (Barada, Tomasi, 2020). The house has a square floor plan, with a large central courtyard from which the dif-

ferent rooms are accessed. In terms of construction, it was also built with adobe masonry and a mud-cake roof over a wooden structure. Apart from its domestic use in colonial times, it was later put to different institutional uses, including the administration of a sugar ingenio and different functions for the public administration, and is currently used as a historical museum.

Both architectures, which are part of the universe of vernacular productions, have undergone processes of institutionalisation based on their heritage status, with different characteristics, which are relevant for the purposes of this paper.

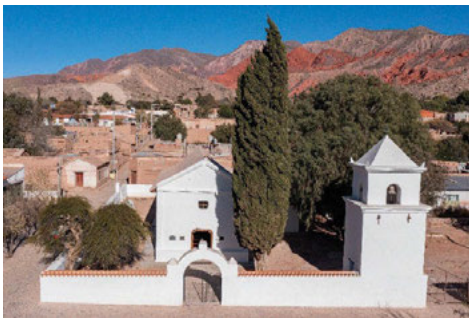


Fig. 1. The church of Uquia, Quebrada de Humahuaca, Jujuy © Walter Reniaga

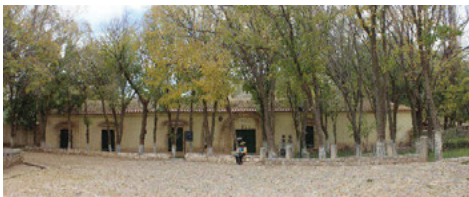


Fig. 2. Casa del Marqués, Yavi, Jujuy © Authors

## 2. The institutionalisation of historic vernacular architectures

Beyond some previous studies, the institutionalisation of the approach to heritage in Argentina began in the first half of the 20th century with the creation in 1938 of the former National Commission of Museums and Historical Places (currently the National Commission of Monuments, Sites and Historical Properties, CNMLyBH). This institution would be responsible for unifying the registration, cataloguing and conservation of certain properties defined as relevant in the construction of a national history and identity, through their

declaration as National Historic Monuments or Places (Viñuales, 2011; Herr, Rolón, 2018). From that moment on, the valuation and conservation actions were centralised in this institution, a role that is maintained to the present day, being the ultimate authority responsible for establishing the criteria and authorisation of any type of intervention, although in general it does not undertake the projects directly but rather they are developed through institutions.

### 2.1. Institutional trajectories

The Church of Uquia was declared a National Historic Monument in 1941, within the first set of declarations after the creation of the CNMLyBH in 1938, which included 122 properties until 1946. As Herr and Rolón (2018) have studied, in this period there was a strong emphasis on ecclesiastical architecture corresponding to colonial times, so that in the province of Jujuy 10 chapels from both the Quebrada de Humahuaca and the Puna were included. At the same time, in association with this bias towards colonial history, earthen construction had a very important incidence, with a presence in 45% of the NMM, which is paradoxical considering the prejudice towards these technologies that had been growing since the end of the 19th century. In any case, the valuation of these buildings was not based on their construction technology, as will be seen below, but on historical recognition of their belonging to a period that was claimed as the foundation of a "national identity", in opposition to the transformations produced by European immigration at the end of the 19th century.

The trajectory of the Casa del Marqués was so different that it was not declared a MHN until 2001. Around the 1930s the house was associated with the administration of the San Martín del Tabacal ingenio until its expropriation in 1949 (Barada, Tomasi, 2020). At that time, a prolonged interchange between the state agency in charge of the expropriation and the CNMLyBH began, as the latter was expected to take over the management of the historic building, something that did not happen for many decades. This is relevant in order to observe the bias in institutional interests over

heritage, since the Church of San Francisco, which formed part of the same complex and is contemporary to the Casa del Marqués, was declared an MHN in 1941, together with that of Uquiá, and even the town of Yavi itself was declared a National Historical Place in 1975. On the other hand, it is interesting to note the different levels of institutionalisation of the historic buildings, in that the Casa del Marqués was subject to institutional patrimonialisation at a very late stage, but at the same time it had institutional meanings, particularly in local terms, throughout the 20th century, having been the seat of the local government of Yavi, among other bodies, as well as being a space used intensively by the communities for different celebrations, such as the patron saint festivals.

## 2.2. Management models and conservation

The declarations as MHN have effectively implied an institutionalisation of these vernacular architectures, entering into networks of relations between different state agents linked to the valuation and conservation of heritage, reconfiguring the interactions with other social actors, particularly local ones. The CNMLyBH begins to be ultimately responsible for establishing the criteria for intervention and supervision of concrete works, although it is not directly in charge. That is to say, since the declaration as a MHN, local actors who used to be responsible for the conservation of these architectures, within their historically modelled relationships, begin to have a relation that is mediated by an institution that centralises the decisions and, moreover, the conceptions of architectural conservation.

In the case of the Church of Uquiá, actions for its conservation began rapidly after its declaration, with a very significant intervention in the early 1940s, which covered both morphological aspects and the constructive technologies that define this property. This first institutional intervention was followed by others in the 1960s and 1980s, until the most recent ones between 2012 and 2018, which focused on the mud-cake roof. The Casa del Marqués, in relation to its more recent patrimoni-

alisation, underwent a different process, with interventions that began later. In any case, the actions for its conservation from the 1950s to the 1970s were also carried out by different public bodies, although in a more dispersed manner, with the active participation of the General Directorate of Architecture of the province of Jujuy. These interventions also involved profound transformations and general reconstructions, which would be completed with other works in the following decades. In a certain sense, in the Casa del Marques, institutional conservation began before its formal recognition by a body such as the CNMLyBH, emerging from the networks of relations between state agents.



Fig. 3. Church of Uquiá in 1939, before its declaration as National Historic Monument © Hans Mann

The analysis of the limited documentary material available on the interventions shows how the conservation actions in both buildings were conceived and executed through the interaction between various public bodies, with the approval of the CNMLyBH, but without the direct or indirect participation of local communities and organisations. In this sense, the institutional reconfiguration of the relationships between people and these architectures can be observed, with the mediation of new actors who, over time, regulated the links between subjects and objects, with direct implications at the technical level.

## 2.3. Technical approaches

These models centred on the role of heterogeneous public bodies, alien to the participation of local actors, which has certainly been sustained over time,

have not only had implications for the management of conservation actions and articulation in social terms, but also had direct impacts in technical terms, with the understanding that the technical is a social fact (Lemonnier, 1992). The interventions developed over time tended towards the technological transformation of the buildings, based on a set of prejudices associated with earthen construction techniques, particularly adobe (Viñuales, 2011). In this sense, the work carried out was oriented, on the one hand, towards structural reinforcement and, on the other, increasing the durability of the materials, in both cases through the incorporation of a set of materials alien to local construction cultures.

Both the Church of Uquía and the Casa del Marqués are marked by the incorporation of structural elements of reinforced concrete. In the first case, in the intervention of the 1940s, a structure of beams and columns was built into the adobe walls, and a pyramid-shaped crowning on the tower, while in the Casa del Marqués, between 1950 and 1970, an upper chain beam was incorporated into the walls, also made of reinforced concrete. These technical strategies are crossed by an institutional logic based on the idea of the weakness of adobe and the overestimation of the capacities of concrete (Healey, 2009), together with the ignorance of the technical deficiencies emerging from the articulation between these materials. These reinforcements, hidden in the walls, were executed in order to sustain an aesthetic imaginary of the buildings, while altering the values of their construction systems.

The roofs were the second area where the greatest institutional interventions were made, in order to increase the durability of the mud cake which, due to their characteristics, require periodic renovation. To this end, in both buildings different solutions were implemented to reduce, or completely avoid, this periodic maintenance. While in the Church of Uquía this included the use of layers of cement mortar and plastic membranes, in the Casa del Marques during part of the 20th century, the mud cake was replaced by an integral tile roof. In both cases, the solutions not only failed to improve

the performance of the roofs, but also generated diverse pathologies, particularly in Uquía (Tomasi, Barada, 2021).



Fig. 4. Diagram of the reinforced concrete structure, in red, incorporated into the adobe walls in Uquía © Authors

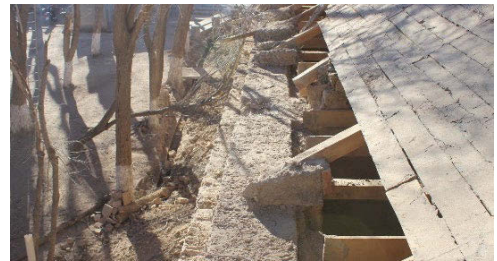


Fig. 5. Detail of the reinforced concrete beam incorporated into the adobe walls in Casa del Marques © Authors



Fig. 6. Detail of the roof in Uquía © Authors

In this framework, the institutionalisation of the conservation of these heritages, with their associated management models, implied the incorporation of materials and techniques that are also integrated in the institutional technical valuations. While earthen building cultures have been alien to the value systems and social representations of public and private organisations, other building systems have been institutionally endorsed, and have even managed to permeate the technical senses of local communities.

### **3. Towards participatory management**

In recent decades, debates within conservation theory have focused on the need to incorporate other voices, particularly those of local actors (Johnston and Myers, 2009; Alonso González, 2015; Watkins, 2019), emerging from in-depth discussions in critical studies on the very concept of heritage (Llorenç Prats, 2000). These searches, crossed by anthropological approaches to heritage, refer to the need to recognise the existence of other ontologies around the valuation and intervention of these architectures. These ontologies imply particular views on the temporality of heritage, on the greater or lesser duration of buildings, or on their becoming in time from the changing relationships with social subjects, which ultimately put institutional conceptions of the conservation and authenticity of the properties in tension. In any case, the meanings of participation remain a field in dispute regarding its real scope. In other words, it is a question of whether this participation enables the recognition of other materialities, of other possible relations between subjects and objects, or only the incorporation of other voices that provide nuances within the hegemonic interactions within the institutionally established hegemonic interactions. It is necessary to observe that institutional views and local perspectives, beyond their differences within asymmetrical power relations, are not constituted as totally antagonistic and independent fields, but are mutually permeated.

Ethnographic studies have made a significant contribution to observing the way in which societies develop different practices related to the duration of their emblematic architectures, whether for their maintenance over time, their transformation or their destruction in the course of relations in the flows of life. These practices are indivisible from the links established with architectural objects and their conditions of existence. In this framework, social relations are not simply prior to the development of actions on the buildings, but emerge or are strengthened in the very interaction with architectures. In the Andean context, different works have shown how the renovation of church roofs

creates and consolidates relationships within societies (Sendón, 2004), which leads us to a perspective that transcends the idea of "management models" as an a priori structure. The institutionalisation of conservation, in this framework, implies the establishment of formal links through certain agents that regulate the way in which relations between subjects unfold through architectural objects.

#### **3.1. Intersections between diverse actors and conceptions of vernacular practices**

Starting in 2018, conservation projects began to be developed in the Casa del Marqués, first, and then in the Church of Uquía, aimed at the remediation of existing damage, much of it caused by previous interventions, and the recovery of the material characteristics of the buildings, based on vernacular techniques. These projects were undertaken through a collaboration between a national science and technology organisation and the Secretariat of Culture of the Province of Jujuy, in a consensual search to explore alternative forms of joint construction of the process with the local communities and organisations. This search is framed within institutional relations, which implies recovering the question formulated above regarding the scope of participation within these institutional margins that ultimately regulate the universe of possible relations.

Both projects had different trajectories and dynamics in terms of the construction of interactions between the different actors involved, the scope of participation and the methodologies employed. The work carried out in the Casa del Marqués was based on the joint work with the ten communities that make up Yavi, in addition to the Municipal Commission, the local government body, and the role of the CNMLyBH. This allowed the whole process of survey, diagnosis and project, but also the development of the entire works, which are in progress, to be done from the community work. Participatory workshops were developed to address the different themes, seeking to recognise local perspectives from their heterogeneity, observing other social and constructive histories, beyond those valued in institutional terms (Barada, Tomasi, 2020).



Fig. 7. Participative workshops for the restoration project for Casa del Marqués © Authors



Fig. 8. Eaves with plant fibre fabrics in Casa del Marqués © Authors

This working methodology favoured the development of exchanges that highlighted the significance of this architecture, but also the technical possibilities within the earthen constructive cultures for the remediation of damage, together with the dialogue with other solutions developed in academic spaces. Given the incidence of previous interventions, the roof became a particularly relevant field where vernacular technical solutions were combined, including the use of plant fibre fabrics for the eaves, with the incorporation of reinforcements such as a wooden collar beam (Barada, Tomasi, 2020). Participative work allowed to rethink the characteristics of each technique involved, recognising their vulnerabilities and achieving reinforcement systems technically and historically coherent.

The process of the Church of Uquía, although based on similar objectives, took place in a different institutional context, in relation to the sources

of financing available and also due to the high exposure of this building, which limited the margins of action, favouring the reproduction of the existing management models. While in Casa del Marqués the intervention was undertaken by the communities themselves, in Uquía the work was carried out by a construction company, with the involvement of different public bodies at provincial and national level. In this context, participatory logics were more limited than in Yavi, concentrating on the generation of different instances of consultation and validation of proposals generated mainly by the technical team, based on the academic research carried out on vernacular architecture in the region. These decisions, in turn, had to be mediated by the various organisations involved, in addition to the opinion of the construction company. In this sense, the network of relations between actors had a greater institutional centrality than in the case of Yavi, particularly in terms of the influence of local organisations. Even though technical decisions adopted were consistent with the construction system, mainly regarding the reinforcement of walls through the use of ropes and the restoration of the original materiality of the roof. These were based on research, so they did not emerge with the same intensity as in the Casa del Marqués from the joint work, which led to the need to develop expositive activities in which the community could observe and be aware of the decisions and progress made. This was not exempt from discussions and discrepancies which, although they could be exposed, in some cases were not entirely settled. In this case, institutionality also implied limits to effective participation and, therefore, to the technical decisions adopted, and in particular regarding construction times.

#### 4. Conclusions

The processes of institutionalisation of heritage in Argentina began in the first half of the 20th century, with the creation of a state structure linked to its valuation, registration, protection and conservation, through the declaration of certain properties as National Historic Monuments, recreating the

forms and logics applied contemporaneously in various European countries. This institutionalisation has implied the establishment of certain relationships between subjects and objects, materialities, through centralised and vertical mechanisms, even within the heterogeneity and contradictions in the interests and policies involved in the functioning of the state. In any case, these processes of institutionalisation imply a relocation of the relations of social collectives with their significant architectures, including new conceptions of the durability and permanence of buildings and their authenticity and integrity.

The cases analysed of the Church of Uquía and the Casa del Marqués allow an approach to the processes of institutionalisation of what is defined as heritage, recognising the implications that this has had on the "management models" for its conservation. While these architectures have historically been sustained by diverse local actors, within the framework of their own tensions and consensuses, the action of hegemonic state and private institutions has implied a significant shift in the networks of relationships involved in conservation. This has not been alien to the technical actions in interventions on buildings, even up to the present day, insofar as the institutionalisation of architectural heritage has implied the use of materials and techniques that are also institutionalised and alien to vernacular logics.

The development of participatory processes, from the institutional spheres implies a challenge in relation to the recognition of the margins of action available in order to achieve articulations that are not limited to incorporating new voices within the already established dialogues, but to generate new and different ones.

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