

# Alternative conservation methodologies: valorization and reuse of built heritage. Case study Exhacienda San Diego del Jaral, Mexico

Angélica González-Franco, Ricardo Muñoz

**Abstract:** Architectural conservation had its origins on the “monumental” perspective, founded on the restoration as the methodological approach. Although there are different conservation strategies, it is important to consider new proposals. The reuse of the built preexistences based on management plans, presents itself as an integrated strategy; where conservation, social welfare, environmental and economical sustainability converge by giving relevance to the existing architecture, located in the different urban environments regardless if it is a “monumental” or a minor architecture. The case study of the Exhacienda San Diego del Jaral is an example of the current conservation problem in Mexico: a vast amount of built heritage that due to the lack of human and financial resources is abandoned. They are not inserted in a comprehensive conservation strategy, where it should overcome the paradigm of the vision of the heritage as public expenditures and move it, to a useful model for economic development.

**Key words:** Reuse, Built Heritage, Sustainable Development, Environmental sustainability, Jaral de Berrios.

## Metodologías alternativas de conservación: valorización y reutilización del patrimonio edificado. Caso de estudio de la Ex hacienda San Diego del Jaral, Méjico

**Resumen:** En la actualidad existen distintas estrategias para la conservación arquitectónica, mismas que han tenido sus orígenes en la perspectiva “monumental” y se han fundamentado en la metodología propia de la restauración, es importante considerar las propuestas actuales. La reutilización del patrimonio edificado, está fundamentada en los planes de manejo, se presenta como una estrategia integral, donde convergen la conservación, el bienestar social, la sustentabilidad ambiental y económica, para así poder brindarle pertinencia a la arquitectura existente ubicada en los distintos entornos urbanos, sin importar si ésta es “monumental” o contextual. El caso de estudio de la Ex hacienda de San Diego del Jaral, es un ejemplo de los actuales problemas de conservación en México: una vasta cantidad de patrimonio edificado que, debido a la falta de recursos humanos y financieros, se encuentran en abandono, ya que éste no se encuentra incluido dentro de una estrategia integral para la conservación, misma que busque romper los paradigmas de considerar a la conservación como un mero gasto público, para trasladarlo a un modelo de desarrollo económico.

**Palabras clave:** Reutilización, Patrimonio Edificado, Desarrollo sostenible, Sustentabilidad ambiental, Jaral de Berrios.

### Introduction

The current theoretical and practical approaches around conservation are facing paradigmatic challenges in Mexico as well as in the entire world. Conservation needs to attend the physical problems on the objects that constitute a part of the heritage, as well as to understand the functions, uses and values that societies assign them, in order to determine the strategies to conserve them in the first place. In other words, it is necessary to consider that conservation does not pretend to freeze cultural heritage on a specific time,

but is a methodology that adapts and modifies cultural expressions, either material or immaterial, according to the needs of a society that coexists with them. (Avrami & De la Torre, 2000). In this sense, the reuse of the built heritage is a comprehensive strategy for the conservation of any kind of architecture because it considers, not only the physical requirements for its conservation, but also the building’s users necessities. Besides, this proposal also considers the heritage approach by all the statements of current theories and the international recommendations in the discipline’s field.

The case study for the conservation of the Ex hacienda de San Diego del Jaral (located in Jaral de Berríos, San Felipe, Guanajuato), is the result of an academic work that considered as a starting point, not only by surveying the architectural complex and the understanding of the conservation theories and its processes, but also by questioning the process in which values are identified and assigned to both, material and immaterial, elements which conform the cultural heritage. This research was conducted from a mixed approach, which is the process that collects and analyzes qualitative and quantitative information simultaneously (Hernández et al, 2006), in order to obtain the interpretation, not only of the Exhacienda, but also of the urban context in which it is located. As a consequence, it also determines the contemporary challenges for the conservation of the built heritage in Mexico and how the reuse of these vast amounts of abandoned buildings could be a part of the answer.

### Values: recognition and assignment

As a starting point of the analysis we considered necessary to establish a specific methodology for its valorization process, in the understanding that this process will uncover the material and immaterial significant characteristics of the building in order to assign them values. Since this process is fundamental to determine the conservation strategy of the architectural complex, it is possible to affirm that the very genesis of the conservation process of any cultural expression happens when an individual or social group assigns a value to it recognizing its characteristics. In other words, values are the qualities that give meaning to these cultural expressions, because they represent the identity of a society, both historical and current (Muñoz et al, 2015), and whose purpose is the satisfaction of the spiritual necessities for the contemporary society, that is to say, as Alois Riegl affirmed, "an object by itself is not valuable, but it is us, Modern individuals, who attribute value to it" (Riegl, 1987).

There are different nomenclature values indicated in many conservation texts such as the ones enlisted on the UNESCO Convention of 1972, or the others that some authors such as Riegl, Feilden and González-Varas have proposed. Nevertheless, it is very important to understand that the valuing process "depends on a subjective manifestation, that is to say, on the effects that a cultural expression (material or immaterial) causes on the subject, either in their sensory perception or in their spiritual awareness" (Riegl, 1987). Avrami & De la Torre confirms this idea by stating that, the values are identified and assigned because of multiple reasons such as religious, emotional, economic or political, and very recently due to environmental consciousness (Avrami & De la Torre, 2000). Therefore, we considered Riegl's statements appropriate for the Exhaciendas study because his categories help get a more objective analysis (given that they are based on a philosophical, sociological and art criticism perspective),

which are divided in two categories: reminiscent (antiqueness, historical and intentional remembrance) and contemporary (instrumental and artistic).

Given the above, the understanding of the values of the Exhacienda helped determine the conservation strategy, in which in this particular case there were three within the framework of sustainable development: the reuse of the preexistence by the diversification of uses and activities, its restoration and the consideration of the architectural complex as a cultural tourism destination.

### Alternative conservation strategies: the reuse of built heritage

In these early years of the 21st century it is important to review the main conservation strategies, not in order to question their approach or methodology, but to inquire how these strategies can be complemented by different (and even controversial) approaches in order to maintain the relevance and validity of built preexistences in a world context that changes more vertiginously than ever. These are the new paradigms that conservation faces and the reason to consider mixed comprehensive strategies (besides physical restoration) in which methodological tools are included to attend the requirements of the built preexistence as well as the necessities of society, environmental and economical sustainability.

In the last sense, the reuse of built preexistences does not represent a new approach. In fact, it is a practice that has been carrying on since the beginning of architecture itself. However, when this methodology is enriched with the theoretical and methodological foundations of conservation, the concept changes to a practice that considers not only the reuse, but also the heritage sense of the built architecture. In this way, this conservation strategy inserts itself in the field of contemporary architecture, were design proposal that will change the use of an built preexistence, in a way or other, is justified in the conditions of a specific historic context (Roberts, 2014). In other words, it represents a new approach in which an architectural object must be valued, analyzed and interpreted (because of its heritage condition which makes it a cultural resource) in order to propose, in addition to its conservation, its enhancement, complementation or modification to satisfy the necessities of a society.

Therefore, the action field of reuse as a conservation strategy, is not limited to monumental architecture, but to all kind of contextual architecture that gives form to urban settlements, so it gives functional, and therefore, social and economic relevance to built preexistences. Thus, three fundamental qualities of reuse may be enunciated:

First, as a strategy for conservation based on a reuse project which recognizes the values of the built preexistence, to have the possibility to respect its heritage character, by

the designation of new uses to a preexisting building. This entails the possibility of enhancing specific characters, in its aspects and elements, for example, its material characteristics that are valuable, while also minimizing others (Heritage Council of Victoria, 2013).

Soria states that the reuse of any built preexistence must have its origins in the valorization of its own characteristics, in such a way that the proposal for the reuse project functions as an integrator bond of the cultural manifestations, both historical and contemporary, which are contained in the same structure. In other words, the reuse project must conjugate two cultural expressions of a specific time and space in a single enhanced element, thereby enabling harmony, unity and emphasizing past and present virtues, not only typologically speaking, but constructively, technologically, socially and economically (Soria et al, 2007).

Consequently, the conservation of a specific heritage urban environment, is determined by the integration of contemporary architecture, on the understanding that “corresponds to the necessity of a society in order to retrieve and transmit part of its legacy through an architectural proposal” (Vázquez, 2009), which is less worried on the form design and more into the history research, methodology, programs, systems, materials and technology that will be used in the intervention. Therefore, the fundamental objective is the valorization of the preexistences through creative interventions based on the methodological work of scientific investigation, nullifying the destructive action of the speculating in developable land. Also, it is worth mentioning that many international recommendations such as Athens (1931), Venice (1964), Burra (1999), Zimbabwe (2003) and others charts have directly referred to the suitability of the reuse of built heritage as part of its conservation strategies, as long as it considers respecting the values contained in cultural objects.

Secondly, the reuse can be attributed as a change developer for social welfare, as a strategy to achieve economical sustainability, by the conservation of built architecture in site. Many beneficial conditions for the development of these locations are generated or given continuity. This is to say that, built heritage as a container of cultural values, encourages the formation of multiplier effects at micro and macro economy scale due to its conservation (Arriaga and González 2014). According to an “input-output analysis”, it’s possible to estimate that from economic investment in urban environments with heritage characteristics, positive effects are generated in the economy of those localities. This is because the built preexistences are inserted into different chains of economic values such as cultural, touristic, infrastructure, construction sectors and industries. However, is noteworthy to say that these chains of value do not operate individually, but are interconnected, since development corresponds to the unit of different conditions. In this case, built heritage is

the center in which every economic activity is developed. (Avrami, 2016; Arriaga and González 2014).

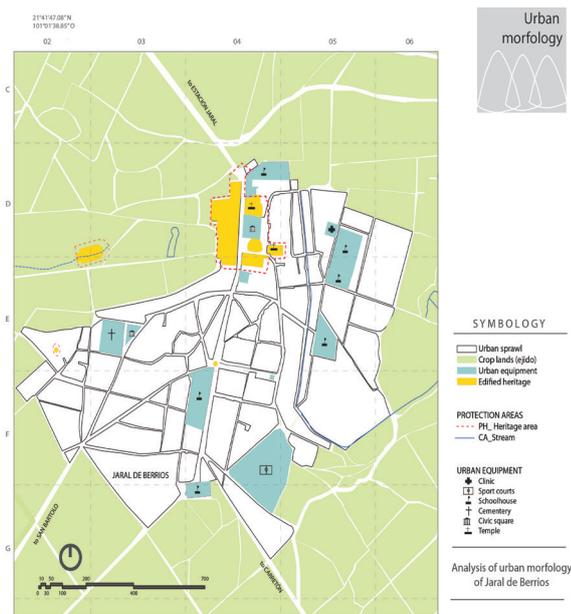
Therefore, it would be appropriate to consider built heritage as a non-renewable cultural resource in order to link it to the development strategies that most of the times, only considers social, natural, human and financial aspects. This will allow the development of more comprehensive strategies for the sustainable development, the enhancement of society and the long-term conservation (Solis et al 2014).

Finally, on the understanding that every building in its design and construction represents an expenditure of energy in addition to material, human and financial resources, which are qualities that should be used by the current and future society. In this sense, the reuse is a strategy that decreases environmental degradation because it reconsiders the utility cycle of the preexisting architecture, presenting according to Cavieres & Pino, three fundamental opportunities for the environmental improvement: the recovery of areas, reducing the demand for natural resources and waste reduction (Cavieres and Pino 2011).

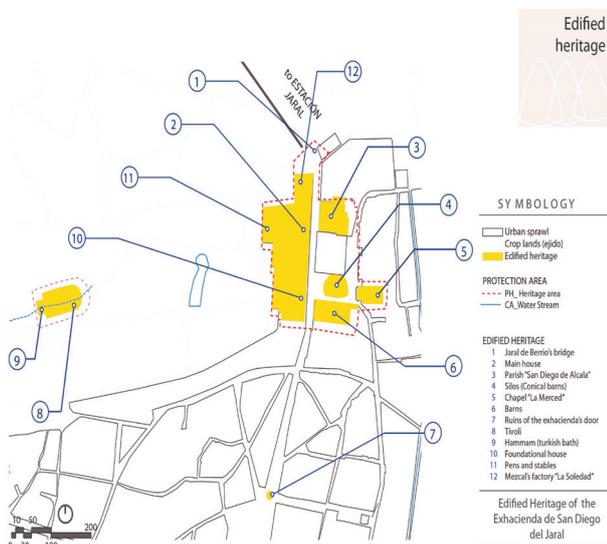
#### **Case study: Exhacienda de Jaral de Berrios**

At the center of the Mexican Bajío, north of the state of Guanajuato, the Exhacienda de San Diego del Jaral is located. It began operating in the middle of the seventeenth century and stopped in 1940, as an agro-industrial productive model. Since 1940’s the Exhacienda has been abandoned, giving as a result its current deteriorated condition. Likewise, the uncertainty of a rightful legal owner is an unfavorable aspect for its conservation. This has not allowed the community to find themselves identified to the Exhaciendas ruins, causing indifference for its conservation. Furthermore, even though the Exhacienda is considered an agro-industrial heritage in Mexico, the regulator institutes for the cultural heritage in México doesn’t legally protect the Exhacienda. It just allows it to be registered on Mexico’s list of built heritage (Muñoz et al 2015).

Jaral de Berrios, is located in a small rural town. Like other regional Exhaciendas it is immersed in a transformation moment, both at a social and infrastructure level. Social transformation has occurred due to the fact that local population has had the need to migrate to other urban centers in order to study and work. At an infrastructure level the changes involve the provision of non-existence infrastructure and networks which will transform the rural town of Jaral de Berrios to a more consolidated urban settlement [Figure 1]. These social contexts made us question if there is a comprehensive conservation strategy that would consider not only the attention of the requirements for the built heritage, but also the satisfaction of the community needs.



**Figure 1.-** Analysis of the urban morphology of Jaral de Berrios. GONZALEZ-FRANCO, A., MUÑOZ, R., (in press). *New visions for conservation in Mexico. Case study ex hacienda de San Diego del Jaral*. In: Congress Book of the "5th International Conference Youth in Conservation of Cultural Heritage YOCOUCU 2016". Madrid: MNCARS.



**Figure 2.-** Analysis of the built heritage of the Exhacienda de San Diego del Jaral. GONZALEZ-FRANCO, A., MUÑOZ, R., (in press). *New visions for conservation in Mexico. Case study ex hacienda de San Diego del Jaral*. In: Congress Book of the "In 5th International Conference Youth in Conservation of Cultural Heritage YOCOUCU 2016". Madrid: MNCARS.

The ruins of the Exhacienda are conformed by buildings that were used for housing, religious, productive and storage purposes [Figure 2]. These buildings are distributed at the north side of the community of Jaral de Berrios, which for this research were divided into five zones (Muñoz et al 2015):

- Houses and stables: conformed by the first main house of the XVIII century, and the actual main house of the XIX and XX centuries, their annexes, the cattle yard, stables and corrals located in the back part of the houses. [Figure 3]. This zone has an approximate area of 19,572.00 m<sup>2</sup>.
- Public area: composed by the parish of San Diego de Alcalá, the chapel of La Merced and the main square. The approximate area of the zone is about 13,600.00 m<sup>2</sup>.
- Orchard: all the zone its integrated by 26 hectares, which are divided in a farmland, a Turkish bath, a panoptic tower and a water tank.
- Barns: this set is composed by two barns, five *silos*, one mill, an animal powered thresher and a pepper dryer. The approximate area is 6,000.00 m<sup>2</sup>.
- The mezcal factory "La Soledad": is composed by three ovens, a *tahona*, a shredder, a room for distiller, two steam boilers and places for the aging of *mezcal*. The building area is around 2,045.00 m<sup>2</sup>.

As mentioned earlier, the valorization process of the Exhacienda was fundamental for the development of the conservation proposals, because and according to Riegel's methodology, each building in the built complex present heritage characteristics. In this sense, we concluded that many reminiscent and contemporary values can be assigned to the Exhacienda, both for its material characteristics and its immaterial context, such as the important role of the Exhaciendas in the historical development of México.

In order to make a comprehensive valorization of the Exhacienda, it was necessary to divide the architectural complex into 6 categories:

1. Architectural layout that is the disposition of all the architectural elements and the relation between that determines the function.
2. Formal elements that is the geometry of the structure of the architectural complex.
3. Materialization that corresponds to the materials with which the architectural complex is built of.
4. Constructive systems and techniques that conform the architectural complex.
5. Ornaments and decorations in every formal element.
6. Natural landscape in which the Exhacienda is located.

With this categorization, we were able to assign values on a more objective way according to Rigel's categories. [Figure 4].



**Figure 3.-** Panoramic west-east view of the main plaza of the locality. It's possible to see the main house, the barns and part of the public area. GONZALEZ-FRANCO, A., MUÑOZ, R., (in press). *New visions for conservation in Mexico. Case study exhacienda de San Diego del Jaral.* In: Congress Book of the "5th International Conference Youth in Conservation of Cultural Heritage YOCOCU 2016". Madrid: MNCARS.

Identified Values					
<b>Architectural Layout</b>	<b>Formal Elements</b>	<b>Materialization</b>	<b>Constructive Systems and Techniques</b>	<b>Ornaments and Decoration</b>	<b>Natural Landscape</b>
<ul style="list-style-type: none"> <li>Antiquity</li> <li>Historical</li> <li>Utility</li> </ul>	<ul style="list-style-type: none"> <li>Antiquity</li> <li>Historical</li> <li>Utility</li> <li>Artistic</li> </ul>	<ul style="list-style-type: none"> <li>Antiquity</li> <li>Historical</li> <li>Utility</li> </ul>	<ul style="list-style-type: none"> <li>Antiquity</li> <li>Historical</li> <li>Utility</li> </ul>	<ul style="list-style-type: none"> <li>Antiquity</li> <li>Historical</li> <li>Artistic</li> </ul>	<ul style="list-style-type: none"> <li>Historical</li> <li>Utility</li> <li>Environmental</li> </ul>
Conservation Strategies					
<b>Architectural Layout</b>	<b>Formal Elements</b>	<b>Materialization</b>	<b>Constructive Systems and Techniques</b>	<b>Ornaments and Decoration</b>	<b>Natural Landscape</b>
<ul style="list-style-type: none"> <li>Reuse</li> <li>Contrast</li> <li>Innovative</li> <li>Retractability / Reversible</li> </ul>	<ul style="list-style-type: none"> <li>Restoration</li> <li>Contrast</li> <li>Innovative</li> <li>Retractability / Reversible</li> </ul>	<ul style="list-style-type: none"> <li>Restoration</li> <li>Contrast</li> <li>Innovative</li> <li>Retractability / Reversible</li> </ul>	<ul style="list-style-type: none"> <li>Restoration</li> <li>Contrast</li> <li>Innovative</li> <li>Retractability / Reversible</li> </ul>	<ul style="list-style-type: none"> <li>Restoration</li> <li>Mimetic</li> <li>Orthodox</li> <li>Retractability / Reversible</li> </ul>	<ul style="list-style-type: none"> <li>Revitalization</li> <li>Contrast</li> <li>Innovative</li> <li>Irreversible</li> </ul>

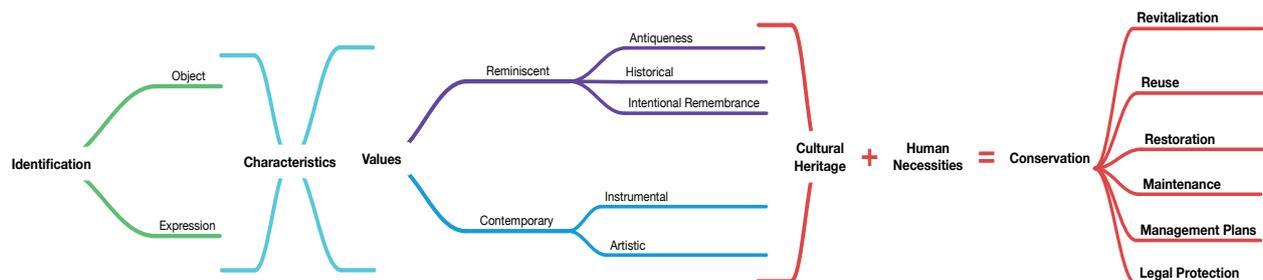
**Figure 4.-** Relationship between the valorization of the significant characteristics of the exhacienda and the conservation strategies due those values. Diagram: AGFH & RMN. (2016).

**Discussions and conclusions**

The conservation praxis needs a moment of reflection where as professionals on the field, we need to question ourselves in an objective manner: what's the ultimate reason for conservation? Are we moved only by the protectionist inertia of cultural objects, which undoubtedly are valuable and worthy of the deployment of resources and efforts for

its conservation? Or, should we make a pause and consider the existence of an indissoluble binomial between these objects (in this particular discussion limited to the built heritage) and the uses and functions that societies assign them? In other words, we should understand that the built heritage must satisfy multiple social needs, so that in a reciprocal way society provides, although paradoxically, the requirements for the conservation of built heritage. This leads us to the understanding of the symbiotic relationship between the society and built heritage as long as the last one is in use.

The conservation methodology used on the analysis of the Exhacienda San Diego del Jaral aimed to be as objective as possible, due to the complexity of the problem and the many approaches that could be applied. Therefore, we followed a 4 steps process [Figure 5]. Starting by identifying the cultural object or expression in which the particular case was the Exhacienda. It was at this stage that the analysis of different characteristics and historical context took place. As a second step, the gathered information was processed with Rigel's categories of values in order to assign to each significant characteristic of the built preexistence, its proper value. This process allowed the objective characterization of



**Figure 5.-** followed in order to analyze, valorize, identify human necessities and proposal for comprehensive conservation. Diagram: AGFH & RMN. (2016).

the Exhacienda as part of the built heritage of Mexico. As a third step, with the conviction that we were working with an important heritage, the analysis of the social context took place in order to determine which human necessities were needed to be satisfied by the conservation of the Exhacienda. Finally, with all the data gathered the conservation strategy was developed and we considered not only the reuse of the Exhacienda for different kind of functions, but also the restoration of the most important characteristics, the maintenance of the recently construction of infrastructure (sewerage, roads, water and electrical supply) and the elaboration of a comprehensive management plan for the supervision in the development of all the conservation master plan.

The analysis above allows us, as conservation professionals, to expand our field of action with the simultaneous implementation of different conservation strategies. The case study of Mexico and the Exhacienda allow us to consider the use of the vast amount of built heritage in our country in many different fields, not limited only to cultural and touristic ends, but industrial, agricultural, educational, and many other social areas which need to be developed. In this way, the comprehensive conservation through reuse, restoration and maintenance, along with the control of management models and executive plans, could be the detonator for sustainable development for many rural localities.

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