



Patio del Moro House

Case Study C&MHB Course 2007-2008

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Abstract

Patio del Moro House is a two storey neocolonial style building located in the historical centre of Villa de Guaduas, a representative city in the country's struggle for independence during the 18th and 19th centuries.

Built around the mid 1850's as a private residence and a lodge, it was used as a parking lot until late 1990's when it was bought by historian David Rubio, a valued cultural leader, who undertook the task of recovering it and giving it a cultural use as Museum of Arts and Traditions.

The building itself has been listed officially as a primary conservation site but it has not had technical surveys until now, thus the present report will serve as an initial approach for the recognition of its cultural significance and the registration of its values, while stating preliminary strategies towards a Conservation and Maintenance Program.

Introduction

In august 2007 Corporacion Cesos¹ attended a Seminar for Cultural Developers in the central Andean region of Colombia. A participatory process was promoted then, by the organisation in order to select a study case for C&MHB 2007-2008 course at Lund University.

Patio del Moro House was chosen because of its surviving authentic architectural values and its dynamic cultural role within the region as it performs outstanding social and educational functions.

“...rescuing domestic architecture is not only a “patrimonial” need of culture and history. It recovers a meaning of life, it stirs up a feeling of belonging, it proclaims that what is best and profound in man is his emotional self. And that this architecture, forgotten and banalized nowadays, continues to be a cultural fact.”² Fragment stated by colombian architect Rogelio Salmona in 1982.

¹ Corporacion Cesos, non governmental organisation founded in 2003, offers academic support to small municipalities by promoting inclusive processes and pilot projects in housing and sustainability issues.

² Tellez, German. Moure, Ernesto.
1982 *Repertorio Formal de Arquitectura Domestica, Cartagena de Indias Epoca Colonial.*
Corporacion Nacional de Turismo, Bogotá. In the foreword.

Background

Location

Villa de Guaduas is located in the mountainous central region of Colombia. Latitude 5° North, longitude 74° W, year round temperature of 24° C, altitude 1000 m, distant 105 km NE from Bogota the capital city.

Its population is about 33.000 hab. Its main income is agriculture, oil extraction and tourist activities.

The administrative area of Guaduas is 773 square km and includes mild and hot thermic levels. It is a gently sloped valley on the west side of the East mountain range facing Magdalena River basin. Several rivers cross the valley which add up to a rich agricultural setting. It is crossed also from east to west by the stone paved pedestrian pathway built in the colonial times to communicate the capital to the Caribbean coast.³

A significant urban outline of colonial style survives in its historic urban centre. It was founded incipiently in 1572 during the days of Spanish occupation. Next, in 1610 the San Francisco Convent was built there by priest Tomas de Morales and this made some nearby families to establish around it. Finally in 1644 military Francisco Perez de Guzman founded the “Villa de San Miguel de las Guaduas” giving its official name until today and outlining the traditional square pattern used by the Spaniards for the colonial settlements.

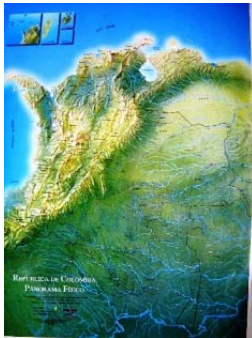


Fig 1
Colombia physical map

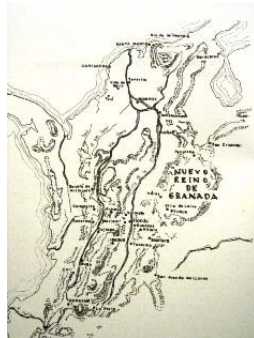


Fig 2
Urban settlements
until XVII century.



Fig 3
Villa de Guaduas aerial view.

The present urban layout was made distinctive only since the beginning of the 19th century, after independence wars, when military Joseph de Acosta distributed lots around the main square, and others bordering the stone paved pedestrian pathway known as Camino Real.

Located one block north from the main city square, ⁴ PdMH limits to the north with San Francisco River, to the west with a commercial street called Carrera de Ricaurte; to the south with the Casona Hotel and to the east with a modernized building that functions also as a hotel.



Fig 4
Guaduas aerial photography, 1970



Fig 5
Guaduas Historic Centre.

³ <http://www.villadeguaduas.gov.co/index.php?m1=municipio&m2=geof>

⁴ CEAM, Centro de Estudios de Arquitectura y Medio Ambiente.

1996, *Reglamentacion del Sector Antiguo de San Miguel de Las Guaduas.*, Colcultura, Bogotá.

Description

Patio del Moro House consists of a two story neo-colonial (XIX century) building made of a mixture of sun dried mud brick (adobe), rammed earth walls and clay brick almost 1m width, coated with limewash plaster; a wooden roof structure and double slope burnt clay tiled roof covering; wooden carved balconies, doors and windows, wooden staircase and stone and brick flooring.

It occupies an area of 714 sq.meters. Its central courtyard is 115 sq. meters. The total built area of the two floors is about 1200 sq m. It is an example of plain domestic architecture, it shows simple bare design features in doors, balconies, staircase or stucco decorations in façades or interiors. Even the stone frontispiece in the main entrance and the octagonal fountain in the patio denote a basic geometric design without embellished gilding.

It follows the traditional inner patio layout, pattern common in the colonial times with rooms along the sides and connected by hallways. The patio has an irregular form almost trapezoidal, it has a central octagonal stone fountain, and stone decorated pathways. It is enclosed in three of its sides by two storey blocks, bordered by a corridor with 3m high wooden columns.

It has an entrance corridor connecting the front street with a stone framed door case for the main door and two secondary accesses to the San Francisco River. Stucco decorations are found in the ceiling of the exhibition rooms and in the facades bordering the exterior eaves.

Most of the original materials and architectural layout are still in place, although notorious deterioration due to weather exposure and lack of maintenance is abundant. Minimum electrical and water equipments have been added (e.g. sanitary facilities for the shops and restaurant) in the ground floor. Some exterior balconies in the upper floor facing the river are missing. Mud plastered ceiling has been removed in most of the corridors and rooms.



Fig 6
View from calle Ricaurte,
Main access.



Fig 7
View from San Francisco
river bridge.



Fig 8
View of the central
courtyard.

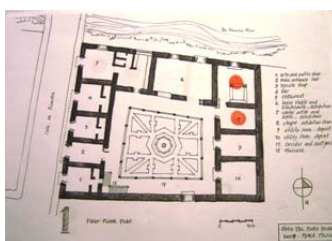


Fig 9
First floor plan

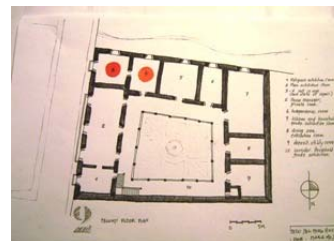


Fig 10
Second floor plan.

History

The house as it is seen today, was built around the mid 1850's by former owner Leandro Gutierrez, as part of "Casa Hotel de la Villa", thus resulting an "L" shaped lot with two patios, connected in the inside. The main entrance was facing the main square; and the side entrance-destined for horses, carts and the owner's family- was facing the street that leads to the River. Areas for commercial use facing the street were planned from the beginning, benefiting from the nearness to the main square.

Formerly called Casa del Puente de San Francisco (San Francisco Bridge House) since the first bridge was built around 1851, PdMH functioned mostly as a hotel, taking advantage of the city vocation as an obliged overnight stop for commercial traders and businessmen in their journey from Magdalena River to Bogota.⁵

In the past two centuries there were a horse stable, a blacksmith workshop and a water outlet with bath facilities in the NE corner of the ground floor facing the San Francisco River, these features and accessories are exhibited in its original locations. The 19th century dwellers lived in the upper floor where the kitchen, dining room and rest rooms were located.

In the late 1980's the property was separated from the south lot as the owner blocked the passage between the hotel in the first and second floors and used PdMH as a parking lot.

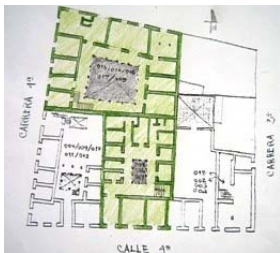


Fig 11
Ground floor distribution,
and surrounding properties..

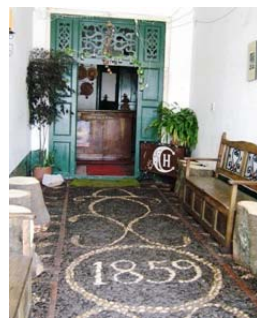


Fig 12
Hotel de la Villa, entrance
to former one piece property.



Fig 13
Octagonal stone fountain
in the courtyard.

The present owner, historian David Rubio, named it as Patio del Moro House because he saw an influence of Moroccan decorative style in the patio design, in its stone fountain and the basic floor figures.

It has become an obliged visit for locals and foreigners and its cultural importance has grown through the past decade, because of its educational outlooks and its architectural authenticity.

Uses

Its main use is as the Museum of Arts and Traditions. It shelters a collection of naïve domestic and religious objects, representing prevailing customs and popular rites which are celebrated annually by the villagers. The main exhibition is in the upper floor front rooms. An arts and crafts shop also offers products of regional artisans and tourist information. Other rooms are dedicated to the heroes of the independence period, as natives of Guaduas.

⁵ Interview with historian Alicia Hincapie, researcher and author on Villa de Guaduas built heritage.



Fig. 14
Museum main exhibition room



Fig. 15
Religious ornaments.

The corridors and many of the rooms are decorated with 19th and early 20th century furniture and household goods. The four commercial allocations in the ground floor accessing directly from the street, are offering services of a restaurant, a bar, a bicycle shop and an arts and crafts shop.

The central patio has a wooden platform for artistic performances. Here people take part in recitals, conferences, theater presentations, non-formal educational and recreational workshops.⁶ The restaurant attends also in the first floor corridors around the courtyard. Some of the ground floor rooms are used as wardrobe and scenery deposits of all kinds used for the cultural activities of the house and the town. In the second floor is a room destined for the living accommodation of the museum manager and her family.



Fig. 14
XIX century household goods



Fig 15
Arts and crafts shop



Fig 16
Corridors as restaurant



Fig. 17
XIX century household goods



Fig. 18
Wooden scenario in the courtyard



Fig. 19
Activity in the courtyard.



Fig. 20
Utility room

⁶ Interview with historian David Rubio, PdMH owner and cultural leader of Villa de Guaduas.

Technical Status

(See also Appendix 1 for additional graphic and technical status data)

A preliminary inspection of the main constructive items is described as follows:

Foundations

Mixed materials are used for foundations, sometimes burnt clay brick with rock or adobe bricks with irregular stone pieces sealed together with sand and lime mortar. It is visible in the north façade where lacking of covering might accelerate damage, due to the proximity to the river.

Walls

Further and precise examination is needed to determine status of the massive adobe walls, although an overall fair condition is observed at first sight. In the first floor some vertical cracks are visible which indicate settlement of foundations due to profound water currents. This has to do with the drainage system made of brick and stone that could have continuous filtrations in the past. Some original door openings have been modified, this needs to be surveyed in order to recover the original design features. The lime and sand plaster has signs of mold and decay because of humidity, specially in the first floor corridors and façades. In the second floor two rooms in the north west corner are sealed due to bad conditions, inspection has to be thorough to indicate specific areas of repair.

Wooden Structure

This issue is to be surveyed in a complete way as it includes three constructive systems: the first and second floor courtyard columns, the second floor structure including the corridor veranda, and the roof structure. The columns of the inner patio show stable conditions, they are coated with oil paint, but still they need specific inspection for insect or moisture damage. The second floor structure is visible and unprotected: it is severely damaged in the sealed rooms, thus a substitution of beams and overall reconstruction is sure. In general this material urges coating to prevent humidity, insect or fungus threats. After a thorough inspection wooden beams and slabs might need repair or substitution in other parts of the house.

Floors

The original burnt clay flooring- square 20x20cm tiles-, is still visible in first and second floors. Many pieces are missing, others broken and presents severe unevenness; it needs leveling, sand and lime mortar filling and probably substitution of pieces with equivalent material, size, and color. There are wooden floors in some of the the second level rooms which need recoating with varnish or wax; modern cement floors have been added in the commercial locations that have undergone transformations. The central patio has a stone decorated paving, but is uneven and has missing pieces. It needs gardening and plant controlling to prevent moisture, cracks and filtrations.

Roofs

Roof wooden structure is mostly preserved the original but needs further inventory to determine if substitution of structural beams is needed. Same with wooden floor structure: this material urges protection to prevent humidity, insect or fungus threats. The second floor rooms in the east and west corners need urgent roof repair because leaking is current. The burnt clay tiles have severe mold and fungus due to weather conditions. Cracked or misplaced tiles are probably a cause for water filtering and deterioration.

Architectural Elements

These are issues that deserve craftsmanship expertise to determine specialized treatment. Carved Stone: Main entrance threshold. Column pedestals and courtyard perimeter. Octagonal fountain and entire patio covering. Carpentry: Balconies and interior verandas. Staircase. All doors and windows, doorcases, shutters, including metal fittings and accessories.

Legislation

The city of Guaduas was listed as a National Monument since 1959, Law N° 163; only 13 built environments in the country were listed since that year.

In 1985, almost 30 years later, the former Instituto Colombiano de Cultura - (the Institute of Culture, founded in 1968) undertook a preliminary survey on Guaduas historic Centre. It was the first attempt for a serious evaluation of the town's physical and historical surroundings.

In 1993 the city council of Guaduas engaged a professional assessment and developed the Regulation for the Historic Centre which was edited finally in 1996. Here the historic centre is finally marked, enclosed, surveyed, analyzed and special regulations for each listed building and its surroundings were established.⁷

Legal Status for Patio del Moro House

In this document, PdMH is listed as an Integral Conservation Building. This category covers: “ *the buildings listed directly by the Board of National Monuments. This Integral Conservation typology includes individual buildings that exhibit singularity and historic values and are to be protected entirely, not only its volumetric appearance, spatial distribution and structural system but also relevant architectural elements such as doors, windows and ornaments.*”

Additional information in the above study is fundamental for designing conservation strategies for PdMH. The interventions allowed (maintenance, reconstruction, repairing, adequation, consolidation, reintegration, liberation, and restoration) for the PdMH typology of strict (integral)conservation are:⁸

1. Maintenance. Works that have to do with repairing the existing elements, without affecting structure, spatial distribution, form, function and use:

- Coating (paint) totally or partially, with original colours and materials
- Healing damaged walls against moisture threats- either upward (capillarity from foundations) or downward (leaking from roofs, windows and façades). As well as fungi control.

2. Reconstruction works are those that intend total or partial refurbishing of the structure. It can be partial (recovering a collapsed wall, a column pedestal, part of a roof), or total (the whole building). In PdMH partial reconstruction is needed for roof and floor structure in second floor north west corner rooms.

3. Repairing works include substitution and extension of water pipes, drainage and electrical systems. Wall exploration must be done to secure the new materials. PdMH is lacking thorough repair in electrical and water systems.

4. Adequation works look forward to add functionality to the building. To build bathrooms, kitchens and services that permit normal use. To modify, widen or open passageways in interior walls, making the changes readable in the existing structure. To divide partially a room, using see-through or low panel divisions without affecting original proportions and design. To add

⁷ CEAM, Centro de Estudios de Arquitectura y Medio Ambiente.

1996, *Reglamentacion del Sector Antiguo de San Miguel de Las Guaduas.*, Colcultura, Bogotá.

⁸ Idem. Pags 37-42.

special equipment and facilities, normal- water, electricity, telephone, drainage systems; or exceptional –sound system, air conditioning, fire prevention equipment.

5. Consolidation works look towards the preservation of the whole building or part of it, affected notoriously by decay. It is *Structural* when intervention is on structural elements as foundations and walls, floor structure, roofing. Or it can be *Formal* when the intervention is on non structural elements (plasters, moldures, cornisons, interior walls, stucco).

6. Reintegration works are those that replace lost or completely damaged elements that have altered the unity and integrity of the building. It includes formal repertoire of door openings, existing or altered. Missing formal elements as stucco decorations, moldures, cornises, doorcases, etc. Replacing missing wall plaster coating. Recovering texture values lost by alteration of original materials.

7. Liberation works are those that remove additions that hide essential spatial and formal values or affect structural stability. This includes removing interior walls that alter original proportions and formal appearance; demolition of volumetric additions to original architectural volumes; removing of built areas that cause extra weight and threats structural stability; removal of cement mortar that has been applied over original sand and limewash plastered walls; removal of modern floor coverings that hide original floorings; restoring original openings of windows, doors, niches, etc.

8. Restoration works are procedures that aim to preserve and reveal aesthetic, historical values of the site, respectful towards ancient and authentic parts. Restoration is always preceded by archaeological and historical surveys.

Recent laws compel for conservation practices

Since 1997, Law 388 commands all municipalities to develop a Basic Plan for Territory Regulation and following the National Law of Culture set as obligatory for local governments to protect built heritage and invest in its conservation and maintenance, as stated in Basic Territorial Regulation Plan (PBOT) for Villa de Guaduas delivered 2000.⁹

Since 2005 the Ministry of Culture produced the Handbook for Built Heritage Inventory (*Manual para Inventario de Bienes Inmuebles*), as an essential tool for everyone who deals with historic sites. The document presents a technical procedure to register, survey, analyze and diagnose a building distinguished as cultural heritage.¹⁰ This becomes another basic tool for the purpose of PdMH conservation, as it is a priority to start with the official registration and inventory of the site.

To complement the above legislation the Ministry of Culture is about to undertake the first stage of the “Special Protection Plan” for the Historic Centre of Guaduas. This means an overall profound study with detailed regulations and statements to consider for the built heritage environment.

⁹ <http://www.villadeguaduas.gov.co/extras/PBOT.pdf>

¹⁰ Ministerio de Cultura, Direccion de Patrimonio.

2005 *Manual para Inventario de Bienes Culturales Inmuebles*. Imprenta Nacional, Bogota.
<http://www.mincultura.gov.co/eContent/library/documents/DocNewsNo240DocumentNo1734.PDF>

Analysis

Values

According to Bernard M. Feilden's classification the values of an historic building can be classified under three main headings:

Emotional (*wonder, identity, continuity, respect and veneration, symbolic and spiritual*);

Cultural (*documentary, historic, archaeological /age, aesthetic and architectural, townscape, landscape/ ecological, technological /scientific*);

Use (*functional, economic-including tourism, social-including identity and continuity, educational, political.*)¹¹

To determine the "significance" of Patio del Moro House, the identified values are analyzed, synthesized and placed in order of priority, as follows:

1 Use

Functional - It is a remarkable institution as it works actively with the community in cultural participatory projects.

Social - Locals and foreigners recognize PdMH as a reliable institution in the growth of identity and pride.

Educational - It performs an educational function, as a place where people gather and seek advice in historic and cultural matters.

Economic - Current programming of tourist and cultural activities can also help prevent economic threats, as it increases the usefulness of the building.

2 Cultural

Documentary - The authentic neocolonial style still legible transmits significant information about traditional building technologies.

Historic - Vestiges of household installations (like the inside water outlet, the blacksmith room and the coal stove and kitchen area in the 2nd floor, among others), are authentic testimonies of the past.

Townscape - Its massive volume, its façades and stylistic neocolonial elements contribute to the homogeneous outline of the historic centre.

Aesthetic - The presence of harmony, scale, proportion and rhythm in the architectural repertoire of this building increases its quality values.

3 Emotional

Identity - The possibility of discovering its significant layout, proportions, forms and spaces adds up to its endurance as a statement of neocolonial domestic architecture.

Continuity - It links the rich historical past to the cultural awareness of the present generations.

Respect - The museum exhibitions immersed in authentic spatial proportions contribute to create an atmosphere of recognition and cherish for the heritage.

Symbolic - Being a live proactive space where people build up collective projects it has gained a relevant position as a representative icon of the town.

¹¹ Feilden, Bernard M.

2003 *Conservation of Historic Buildings*. Elsevier Architectural Press, London. Pages vii-ix.

SWOT analysis

Strengths

- The building is officially listed as primary conservation, and information about regulations and inventory procedures are available and ready to use.
- The building is considered a cultural landmark by the majority of the town dwellers, because it fulfils an exemplary destination as a gathering place, not only because of the museum itself, but of the live events that unite people and institutions around the enrichment of the cultural spirit of the town.
- The owner has an esteemed and important influence in the decisions that affect the cultural life of the town, as he is part of the governmental staff in the assessment of historical and cultural matters.
- Since 2000 refurbishing of the Main square and the Cathedral have been accomplished, and this could mean other cultural sites in Guaduas are in turn to be studied and maintained.

Weaknesses

- The building is a private property, and this can be an obstacle for the search of financial support, the planning and implementation of the maintenance program.
- Although it is marked as primary conservation since 1996, it has not been surveyed by experts in order to determine its real aims, needs, and urgencies.
- Lack of maintenance is due to insufficient financial resources, and immediate repair is urgent in the north west corner second floor.
- The Museum needs idoneous additional staff in order to face the upgrading of museum exhibits, the programming of inventory and evaluation procedures.

Opportunities

- The cherished communitarian festivities that are organized or directed from this place can unite the dwellers and beneficiaries to search for funds for the maintenance tasks.
- The new local authorities and staff which started January 2008, have stated their interest on the conservation of historical monuments.
- Its present use as a museum and cultural centre benefits the sustainability issue, because it is an “old but useful bulding”.
- Cesos Corporation technical assessment and this first report on the building means a beggining in the pursuit for financial support from national and international organisations (Sida, Jica, Usaid, others).

Threats

- The always insufficient governmental funds left for historic building conservation, because more important matters are always there to solve for the benefit of the town.
- Physical deterioration of the house is likely to increase if the execution of studies and the maintenance agenda is delayed for months or years.
- Authorization from the Board of National Monuments (highest level specialized council of the Ministry of Culture) is required for any kind of intervention. This might represent further delays in initiating the restoration and repairing procedures.

Proposal

Short term activities. 0-6 months

Immediate care of severe damages:

- Restoration and consolidation of north west second floor. Roof, structure, flooring.¹²
- Repairing north east corner rooms in ground floor. Foundations, wall fissures, plastering.

Medium term activities. 0-36 months

- The architectural project. An integrated decision making process to improve current functioning. Study of basic needs and architectural layout, planning of new services, administrative and technical facilities.
- The technical evaluations and projects for each issue:
 - 1 Foundations and walls. Detailed inspection and restoration project.
 - 2 Wooden structure. Columns, floor, roof structure and covering.
 - 3 Carpentry elements. Doors, windows, verandas, balconies.
 - 4 Stone restoration project. Pedestals,, courtyard, entrance threshold.
 - 5 Sanitary, electrical and lighting systems. Adequation and repairing.
 - 6 Floor coverings. Clay, brick, stone, wood. Evaluation and restoration.
 - 7 Stucco and plastering terminations. Project for consolidation.
- The museum project. Studies for sustainability. Inventory of objects and improving of maintenance and exhibition techniques.
- The cultural centre project. Objectives, expectations, sustainability.
- The financial project. Objectives, expectations, viability.

Continuous or long term activities.

- Initiate the use of basic tools for maintenace routines of historic buildings ¹³ as time tables, checking lists filled by the selected caretakers.

Method

After the urgent restoration of critical damaged areas of the house, the implementation of a Maintenance Plan for Patio del Moro House using the systematic methodologies from C&MHB course and other local technical assessments will initiate a significant practice in the pursuit of conservation objectives. An important assessment in the technical issues must be accompanied by the foundation of an administrative staff, (e.g. Management Board for PdM), to become an efficient operating team in the tasks of surveying the different projects and especially the maintenance issues.

Charts must be developed as fill in forms to indicate observations on technical status, degree of repair, short and long term intervention and kind of intervention proposed.

Indication of weekly, monthly and year executions to assure the conservation objectives of the site include diagrams, drawings, photographs and blank spaces to fill with precise information about the status, activities done and who is responsible for each one.

¹² CEAM, Centro de Estudios de Arquitectura y Medio Ambiente.

1996 *Reglamentacion del Sector Antiguo de San Miguel de La Guaduas.*, Colcultura, Bogotá.

¹³ Sandberg, Dick.

2007 *Practical binder for Maintenance Programs, Maintenance Plan and Documentation*, lecturer at C&MHB course at Lund University.

Maintenance Issues

The main issues to take in account for this type of buildings can be documented in various technical reports and surveys published periodically in the last three decades; the following is extracted from 1978 publication.¹⁴

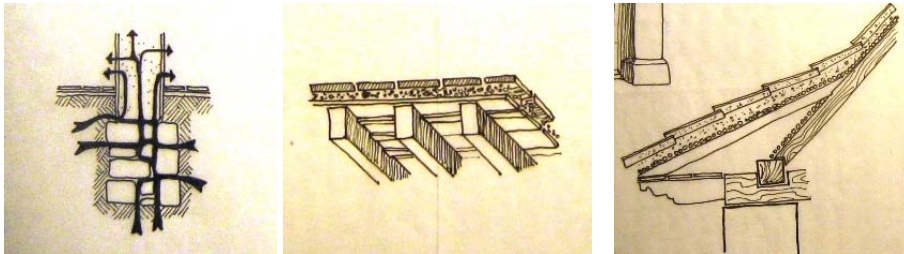
I Foundations All fissures, cracks and settings must be surveyed and repaired to save the structure, by reinforcing or subwalling (building an additional foundation below the damaged one) or by controlling water filtrations.

These works require design and supervision of engineers or specialized architects. The common practice of removing plaster covering and applying chemical waterproofing substances on the surface of the walls is not enough to eradicate moisture.

Certain type of moisture comes from the soil and passes upward through foundations and by capillarity appears later on the walls. *Figure*

Small perforations made beneath the walls and grouted with waterproofing substances could be enough to seal and control the water.

And in a complex case it is necessary to excavate along the walls and build a drainage duct in both sides at foundation level to evacuate filtration water.



II Structural Elements All walls should be coated or plastered except special brick and carved stone works. Plastering avoids decay of the inner wall materials. The original plastering material should be preserved without mixing others because of resistance, expansion and appearance reasons. The original mud and sand plaster covering may present moisture signs because it has been covered by oil paint, vinyl, caseine and others.

Walls can be dried up by simply removing strange coatings, as mortar water absorption is compensated with circulating air. Mixing types of materials accelerate degradation. The same occurs when removing plaster from walls, because of exposure to weather threats.

The interior and exterior wall zocle prevents sprinkling of water and dirt, but is not enough to protect from humidity and decay. It is advisable to reinforce zocle plaster with a mixture of lime or cement mortar, no matter if it thickens slightly from the original wall depth. Water drain systems in the courtyards must be maintained clean to prevent later humidity in walls because of water retainment or puddles

Cracked and fissured rammed and adobe walls must be repaired with mud and plastered with sand and lime mortar, which is the only element that adheres and consolidates properly. In Feilden's op. cit.: "Portland cement should not be used for mortars or plaster in historic buildings, but as a last resort a small proportion of Portland cement, preferably white cement,

¹⁴ Instituto Colombiano de Cultura
1978 *Normas Mínimas para la Conservación de los Bienes Culturales*. Editorial Escala, Bogotá.
Pags 86-97

although it costs more, should be added to the lime but not more than 10% of the volume of the lime without expert advice.”¹⁵

Deteriorated structural columns must be replaced with the same material and form, taking care of using temporary supporting during the replacement. Unsecure beams and lintels should be replaced following the same routine. When recovering a floor structure equivalent materials should be used. In some cases a thin cement mortar layer spread over a metal frame as supporting system for the ceramic tile covering, is used as a substitute of the original layer of mud to alleviate weight.

Staircases are part of the building structure. Materials, design and building technique must be preserved, and expert technical support is desirable if repair or replacement is needed.

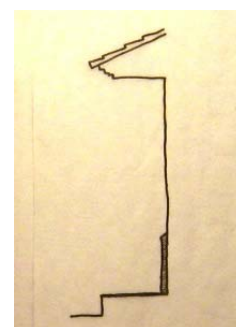
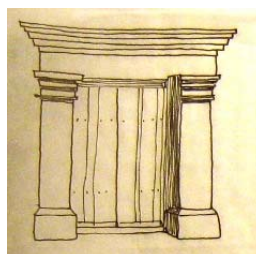
Original floor coverings like ceramic, brick, stone or wood must be preserved avoiding replacement of elements for waterproof or glassy materials that inhibit soil ventilation. In the corners of the courtyard it is advisable to place containers (ceramic or others) to avoid water sprinkling on walls, columns or floors.

Roof gutters and ducts must be revised periodically to clean dirt, leaves, stones, etc. that can block water drainage.

Ceramic tile roofs rest usually on entablature system or directly on eaves. They can have one slope or a change inclination in the slope. The entablature should be repaired or restored with equivalent design and materials. The eaves must be repaired by changing damaged brackets, putting again the wood planks and securing tiles over bamboo strips.

Special care and observation to leaking in ceramic tile roofs to prevent vertical moisture which is main cause of decay in abandoned buildings.

All wooden elements that menace the building's stability should be replaced. Lime wash coating over wood is essential because it protects against humidity and termites, when removed it lefts exposure to insect and decay. Anti-fungi chemical products containing pentaclorofenol are better because they do not change wood natural color. When altered the original roof construction technique results in a loss of authenticity and integrity. Replacing building materials can cause unestability in the structural system. Roof repairing should be undertaken as a reconstruction rather than a replacement of materials and structures.



III Wooden Carpentry. The formal repertoire of an architectural style is legible in doors, windows and balconies, and it is a mistake to replace any of the elements. Preservation of wooden carpentry must follow this process: 1-

¹⁵ Feilden, Bernard M.

2003 *Conservation of Historic Buildings*. Elsevier Architectural Press, London. Pags 72-77

disinfection (recommended pentaclorofenol products). 2- consolidation (useh wax dissolved in gasoil)and 3- protection with transparent varnish.

IV Capping and Coverings. It is essential to preserve lime wash coating over stone and wood columns and never paint over another lime caseine coating. Walls and carpentry must be protected with lime wash.

V Ornaments. stucco and gypsum decorations displayed over ceilings and walls as cornises and flowers are part of the architectural style, they should not be eliminated. Paintings that are found over ceilings, columns, walls, carpentry, etc., must be preserved because of documentary, historical and aesthetic values.

VI Additions for modern facilities

The current museum area is lacking of basic sanitary services for visitors. It is essential to procure the accommodation of an array of bathroom facilities, preferably in the ground floor. These new spaces should not alter the character and structural elements of the building, so water and electrical appliances, lighting, sanitary and ventilation equipment should be arranged separately from the original structure, if possible.

- Other Cesos Corporation activities in the project:
 - 1 Present to local authorities the PdMH project for registration.
 - 2 Organize technical inspection teams to complete preliminary inventory.
 - 3 Contact local craftmans and team of caretakers; evaluate their knowledge and expertise in traditional building techniques.
 - 4 Promote workshops with owner, authorities and stakeholders to discuss sponsorship, caretaking and administrative issues.
 - 5 Promote the funding of PdMH Managing Board that can deal with administrative tasks. (contract caretakers, supervise, administrate funds).

Results

A long process of technical and administrative assessment has just begun and must continue to promote further commitment of the authorities and increase community participation. But an operating team as stated before would evidently become mandatory to face all kinds of administrative tasks, permitting the owner to dedicate to the cultural and historical assessment of the town.

The local authorities should acknowledge the Management plan for PdMH as a pilot project, and the process may be applied to other listed buildings.

The community involved in the activities organised by PdMH should request investment and improving of this cultural centre, as well as the implementation of conservation practices for the other rich historic environment. This is a starting point.

Conclusions

This paper is a preliminary approach to the development and put in action of a management plan for PdMH, an exceptional case of a historic building which has legal protection from authorities and rich heritage awareness from the community. Cultural tourism for heritage buildings as a sustainable goal in this case is to be a succesful enterprise due to the commitment of owner, community and authorities.

Systematic methods for controlling and preventing deterioration of built heritage not only benefit the object itself, but also contribute to facilitate the approach to historic buildings as sustainable projects.


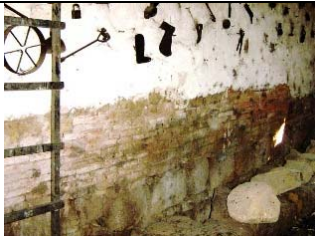
As always the main issue is lacking financial support so this has to be considered as decisive, thus presenting the project to national and international funding organisations will contribute to elucidate this aspect.



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Appendix 1



Technical Status / Building Materials 1



<p>1 Foundations Stone and earth brick with mud mortar. Irregular size of bricks and masonry.</p> <p>Stone and clay brick for the inside foundations.</p>	 <p><i>Exterior north wall facing river.</i></p>	 <p><i>Interior of blacksmith shop, ground floor.</i></p>
<p><i>Technical status</i></p>	<p>No signs of cracking or inclination. Visible decay by moisture in upper coating.</p>	<p>No visible ground settlement or soil failures.</p>

<p>2 Structural elements (piers, columns) Mud brick column with mud limewash coating. Monolithic carved stone piece repeated around the central patio.</p>	 <p><i>Entrance to water outlet room and chape, ground floor</i></p>	 <p><i>Stonecarved pedestals in inner central patio.</i></p>
<p><i>Technical status</i></p>	<p>Longitudinal fissure due to foundation settings. Mud plaster coating in severe bad state.</p>	<p>Stone pieces well preserved. Some horizontal pieces are missing.</p>

<p>3 Structural elements (walls, columns) Mud brick masonry 12x24x40 with no coating</p> <p>Wooden 15x15 column and stone pedestals.</p>	 <p><i>East corner in ground floor corridor.</i></p>	 <p><i>Structure around courtyard first and second floors.</i></p>
<p><i>Technical status</i></p>	<p>Mud brick wall exposure to weather threats; needs grouting and mud lime plaster covering.</p>	<p>No leaning or bending of wooden columns; rot in lower parts and paint decay is somewhat visible.</p>







Technical Status / Building Materials 2

<p>4 Floors Burnt clay tiles and stone pieces.</p> <p>Irregular stone pieces, geometric patterns around the fountain..</p>	 <p><i>Ground floor east hallway</i></p>	 <p><i>Courtyard floor stone covering</i></p>
<p><i>Technical status</i></p>	<p>Uneven floor covering, not fixed, pieces missing or scattered.</p>	<p>Stone pieces are uneven, lichen and bacteria is much present, needs gardening control.</p>

<p>5 Floors (second storey)</p> <p>Round beams 2.5m long resting on walls and wooden frame</p> <p>Floor covering of clay tiles colonial style</p>	 <p><i>Wooden beams for second storey. Westgallery</i></p>	 <p><i>South corridor floor covering in second level</i></p>
<p><i>Technical status</i></p>	<p>Climate and biological exposure to decay. Needs prevention of insect and fungi. Structural system still in good functioning.</p>	<p>Uneven floor covering, scattered or broken pieces, missing plaster joins, not fixed.</p>

<p>6 Roofs</p> <p>Wooden roof structure beams, rafters, tie beams, not protected.</p> <p>Covering with original burnt clay tiles colonial style</p>	 <p><i>West gallery wooden structure.</i></p>	 <p><i>East gallery roof covering</i></p>
<p><i>Technical status</i></p>	<p>Exposure to moisture, wind, dust and solar radiation. Lacking prevention of moisture, insect or fungi.</p>	<p>No severe inclination or fissures.</p>

Technical Status / Architectural Elements 1

<p>1 Staircase and Main entrance</p> <p>Wooden structure coated with oil paint, supported by brick walls. Stone carved front piece, basic classic reminiscence.</p>	 <p><i>South west corner in ground floor.</i></p>	 <p><i>Main entrance or "portada". Access from Calle Ricaurte</i></p>
<p><i>Technical status</i></p>	<p>Fairly in good state, original materials except for brick wall and deposit beneath staircase.</p>	<p>No severe inclinations or fissures. Dust and climate exposure.</p>
<p>2 Doors</p> <p>Exterior wooden two leafs with shutters, wooden frame and bindings. Coated with oil paint.</p> <p>Interior wooden two winged door, high ventilation .</p>	 <p><i>North façade of second floor</i></p>	 <p><i>East corner entrance to water outlet room, ground floor</i></p>
<p><i>Technical status</i></p>	<p>Exposure to weather threats, visible decay. Missing pieces of door wings and whole balcony.</p>	<p>No visible bending or distortion of material. Needs peeling coating, protecting</p>
<p>3 Balconies</p> <p>Carved wooden balusters, wood floor structure. Oil paint coating. Clay tile floor covering as inside.</p> <p>Corridor veranda repeats pattern round patio. Oil paint coating</p>	 <p><i>West façade balconies facing calle Ricaurte.</i></p>	 <p><i>South side corridor in second floor</i></p>
<p><i>Technical status</i></p>	<p>Exposure to weather threats, visible decay on surface. Needs further examination.</p>	<p>Decay in surface of beams and verandas. Needs prevention of insect, fungi and weather. No inclination or fissures.</p>