LEARNING FROM ANDEAN VERNACULAR ARCHITECTURE: A PROPOSAL FOR A TOURIST CENTER IN SAN PEDRO DE CASTA MARCAHUASI

by
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MASTER IN ARCHITECTURE

approved

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LEARNING FROM ANDEAN VERNACULAR ARCHITECTURE:
A PROPOSAL FOR A TOURIST CENTER IN SAN PEDRO
DE CASTA - MARCAHUASI

by

Bertha Maria Veliz

Committee Chairman: Gregory K. Hunt
Architecture
(ABSTRACT)

The architectural intentions may best be described in the phrases: "symbolic meaning of the environment" - "the spirit of place" - and the need to assure the "historical continuity".

The main points of the program are the following:
1.- to create a service unit corresponding to the needs of the overall development of the micro-region as regards to tourism,
2.- to favor contact between the tourists and the local population,
3.- to express this aim by means of an open type of structure,
4.- to offer a wide range of activities corresponding to the needs and desires of the occupants,
5.- not to destroy the natural and existing environment.
ACKNOWLEDGMENTS

To my parents and sisters for their support and understanding.

To and for their help.

To my professors and friends for their motivation and encouragement.
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Introduction
San Pedro de Casta is an Andean Village, a Peruvian rural community located 80 kilometers away from the capital city Lima. It lies at 3000 meters above sea level, in an area surrounded by megalithic sculptures and pre-Inca ruins. Only a two-hour hike separates San Pedro de Casta from the plateau of Marcahuasi.

Marcahuasi was discovered by the historian Daniel Ruzo, who lived for nine years in the plateau studying the megalithic forms. Every day, more and more tourists arrive to the village of San Pedro de Casta in order to visit the mysterious "Marcahuasi" site.

Thesis Objective
The principle aim of this thesis is to create a tourist center in a nearby area to the archeologic plateau of Marcahuasi in response to:
1) A microregional physical, economical and social study of San Pedro de Casta and five other adjacent districts, with emphasis on the analysis of the physical context; that is, within a morphologic analysis of the urban elements (typologies of houses) and the urban structure, I seek to define the architectural vocabulary of design, that will integrate the new architecture to the existing context.
2) a touristic marketing survey in terms of touristic offer and lodging demands.

Scope
It is believed that tourism will contribute to the development of the valley of Santa Eulalia, where the districts mentioned above are located. A touristic service unit in San Pedro de Casta will increase the site's touristic receptive capacity, because of it's attractions and facilities to be implemented. This will increase the actual number of visitors to Marcahuasi.

By means of a microregional physical, social and economical analysis, it is possible to detect the problems in the different productive and service areas so as to canalize future investments toward their solution.

The microregional morphologic analysis of the urban elements and the urban structure should allow:
1) the remodelling of the Andean village of San Pedro de Casta, and
2) within a long period the remodelling of the other Andean villages located in the same valley.

Justification of Project
On August 16, 1979, the rural community of San Pedro de Casta made the following request to the Peruvian State Secretary of Tourism, in relation to the touristic exploitation of Marcahuasi:
1) To promote tourism to the area under study through publications, bulletins, etc.
2) To develop a lodging architectural project for visitors to Marcahuasi.

The touristic potential of Marcahuasi and the village of San Pedro de Casta may be significantly to the development of Peru's tourism. Tourists are constantly arriving to visit the plateau, yet the site lacks an appropriate lodging service. The existing unit does not satisfy the needs of a tourist, nor the actual lodging demand.

The other districts of the microregion also have historic and cultural touristic attractions including pre-Inca ruins and villages.

The history of these is rich in fairs, celebrations and other popular observances. These attractions and the ones offered by San Pedro de Casta make the microregion potentially attractive for the benefit of tourists as for the good of the inhabitants themselves.

A hotel or touristic service unit near the plateau of Marcahuasi will be the first step in the development of the valley of Santa Eulalia, as a new tourist center in
THE VISUAL CONTEXT

GEOGRAPHICAL LOCATION
VALLEY OF SANTA EULALIA
AND ENVIRONS
(San Pedro de Casta, Huanza,
San Juan de Iris, Laraos,
Callahuanca, Carampona)
PART I
MICRO-REGIONAL CONTEXT
**PART I**

1. **Micro-Regional Socio-Economic and Physical Aspects**

In the **Economic Aspect**, the productive areas (agriculture, farming, commerce, industry, transport, energy) and the service units (education, health, housing, tourism, recreation) were analysed. The micro-region's economy is based mainly on agriculture and farming, which is mostly destined to self-consumption and, in a small scale, to commerce and industry.

In very broad terms, these villages have very low standards of living; and tourism has been shown to be the most viable way to progress.

In the **Social Aspect**, the communities' systems (the same for all the villages of the micro-region) were analyzed. All the habitants have to be registered as members of a community, they all have equal rights, obligations and penalties for not accomplishing them. The following are some of the communities accomplishments:

- the service units (health, education, housing, tourism, recreation),
- the irrigation system (which has an ancestral origin),
- water and drainage systems,
- electric power,
- construction of roads and bridges.

**Physical Aspect**— The study of this aspect is based on the morphologic analysis of the urban elements (domestic architecture) and the urban structure. Through this analysis:

- I will define the architectural vocabulary of design, in order to develop a project that will integrate to the existing structure.
- This architectural language will allow the remodelling of San Pedro de Casta and the other villages of the micro-region.

I seek the preservation and evaluation of this genuine, creative and intuitive architectural forms, product of a popular culture.

In order to gain an understanding and esthetic evaluation, it is necessary to recognize the cultures that developed in the micro-region. The problem of how the environment conditioned man, and the first expressions of dwellings appeared, were studied.

The analysis of the physical context was divided into the following parts:

1. **Origin and Development of the Microregion Settlements**

The analysis included the development of human settlements, from the pre-Inca period (200 B.C.), through the Spanish conquest period (where the former settlements were dissolved and the villages began to take form), and the Republican period to our days (the villages of the micro-region are officially recognized as rural communities and districts).

The following figures illustrate the analysis of the physical context:

- Figure #1 to figure #3: Origin and Development of the Micro-Regional Settlements.
- Figure #1: First Period: Pre-Inca to Inca Settlements (200 A.C. to 1470 D.C.)
- Figure #2: Second Period: Spanish Conquest and Colonization (1538), formation of the villages of the valley.
- Figure #3: Third Period: The Republican Days

2. **The Urban Structure**

The common characteristics of the settlements of the micro-region, in terms of urban forms and urban patterns were then analysed.

All the villages studied are located in the hills surrounding the narrow valley of Santa Eulalia. They all have one vehicular access to the village, ending in the main plaza, from where all the other streets, pedestrian walkways, are drawn. (See figure #4).

3. **The Urban Elements**

a) **Domestic Architecture**—

A chronological typology of houses of the micro-region was established on the basis of their architectural details and the construction materials used. (See figure #5).

The causes that determined the architectural changes and development were analysed. This typology included examples from the pre-Inca period, through the Spanish conquest period, and the Republican years up to our days.
The houses analyzed were generally of the cottage type, small, pretty and cozy. All the dwellings were of one, two and occasionally three rooms; and for that reason, the analysis from a functional point of view has been outlined in very broad terms. (See figure #16).

Special attention was given to the identification and isolation of the formal architectural components. A parallel between the architecture of the micro-region and certain districts of the capital city of Lima, was made in order to show the possible influence of the latter on the first. (See figure #18).

Taking San Pedro de Casta as an example, a location plan of these typologies of houses was made. It was observed that the most elaborate dwellings were located around and near the main plaza; and as they get further away, they become more and more simple. This criteria has been followed also by the rest of the villages of the micro-region.

The following figures illustrate the analysis of the domestic architecture:

**Figure #5:** Scheme of the chronological typology of houses of the micro-region. Notice that this typology is based on the architectural components, the constructive materials and their combinations.

**Figure #6:** Analysis of the Pre-Inca houses of the micro-region. Plans and elevations. Notice that these houses are more like beehive huts of stone walls and stone roofs.

**Figure #7:** Houses type 1. These precede the Pre-Inca houses. They also have stone walls, but the roof has changed to thatched, and from hipped to a gable end. The doors are elaborate, with decorative work carved on them.

**Figures #8-15:** The houses analyzed have been grouped in terms of architectural languages. These belong to the different styles that arrived in Lima as European influences and later expanded into rural areas.

Plans, elevations and components such as doors, windows and balconies, have been drawn for each house. The houses have been grouped under the following architectural components:

**Figure #8:**

**Figure #9:**

**Figure #10:**

**Figure #11:**

**Figure #12:**

**Figure #13:**

**Figure #14:**

**Figure #15:**

**Figure #16:** Top left: Housing Functional Analysis. Most houses for a family of five or more have a two floor plan with one room per floor. While the first floor is used as a store-room or store; the second floor is usually the living-room and bedroom altogether. The kitchen is always located outside the house as a separate hut. Other alternatives are houses of one floor and one room only, and houses of a two floor plan with two rooms per floor.

Bottom left: Location plan of this typology of houses. The most elaborate dwellings are located around and near the main plaza, as they get further away they become more and more simple.

Right: Analysis of the constructive system: types of foundations, walling (stone and earth) roof systems (thatched and corrugated iron roof covering).

**Figure #17:** Continues, Analysis of the constructive system.

b) Streets and Blocks.- The main open urban spaces were analyzed in relationship to units of domestic architecture. (See figure 19).

c) Spatial Structure.- In this morphologic analysis, an attempt was made to
better understand the way how man adapting himself to the existing environment, organized his settlement: spontaneously and by the influence of Lima. The purpose of this study was to complement the architectural vocabulary of design.

The "World Organization of Tourism" states that the main factors of consideration for tourism are those of a social, educational, cultural or political value, whereas those of economic or commercial value are only secondary.

Peru has outstanding touristic possibilities. It has a great variety of natural, cultural and human resources many of which are unknown or have not been exploited adequately.

Tourism as an activity of services constitutes an element in the economic activity of the country as it demands goods and services from the other sectors and satisfies the exterior demand (receptive tourism) and the demand of residents (internal tourism).

This activity has a very important role, particularly as a generator of capital, re-distributor of wealth and generator of employment.

Tourism is a complex activity, but with good promotion and administration, it may promote a lasting influence on the economy.

The economic recuperation and the touristic possibilities of Peru are attracting foreign investors and well-known hotel technicians who are interested in investing on touristic infrastructure. Peru has a growing receptive tourism. The following are some summary statistics:

<table>
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<th>Year</th>
<th>Number of Tourists Arriving to the Country (Thousands)</th>
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<tr>
<td>1970</td>
<td>133.5</td>
</tr>
<tr>
<td>1975</td>
<td>256.2</td>
</tr>
<tr>
<td>1976</td>
<td>264.0</td>
</tr>
<tr>
<td>1977</td>
<td>274.7</td>
</tr>
<tr>
<td>1978</td>
<td>293.4</td>
</tr>
<tr>
<td>1979</td>
<td>339.2</td>
</tr>
<tr>
<td>1980</td>
<td>390.2</td>
</tr>
<tr>
<td>1981</td>
<td>463.1</td>
</tr>
<tr>
<td>1982</td>
<td>564.6</td>
</tr>
<tr>
<td>1983</td>
<td>699.6</td>
</tr>
</tbody>
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2.- Touristic Activity in Peru
This section reviews how tourism is being developed in Peru. It includes a study of the tourists' motivations and the importance of developing new touristic centres in our country.

Tourism was defined as the very great interest in travelling around one's own country or other countries for distraction and entertainment.
3. Touristic Marketing Survey.

Through this study I have demonstrated the touristic potential of San Pedro de Casta - Marcahuasi and the other nearby villages located in the valley of Santa Eulalia. The historic and cultural resources represented by the pre-Inca archeologic ruins as well as the domestic architecture and public buildings give a peculiar pictorial aspect to the towns located in the sides of the mountains.

Although San Pedro de Casta- Marcahuasi receives a permanent flow of visitors, it lacks an adequate touristic infrastructure. The existing services are inadequate to provide food and housing.

Tourism will be the determinant factor in order to elevate the economic level of the villages of the micro-region under study. A touristic infrastructure in San Pedro de Casta will provide a larger receptive capacity for visitors and will thereby bring along a larger flow of visitors.

The present study locates geographically every village of the micro-region; with their altitudes above sea level, as well as the distances to Lima, capital of the country. Also described are the means of communication, climates, agriculture, farming, industrial and touristic resources with emphasis in the sculptures of Marcahuasi as well as the archeologic resources: ruins, irrigation system and pre-Inca reservoirs of water. I also describe the human resources and communal organizations, clothing, religious and folkloric activities that as a group constitute a very interesting touristic attraction.

In every town of the micro-region the listed touristic resources have been evaluated following the methodology of the Peruvian General Office of Tourism. Marcahuasi is the principle attraction of the area being able to motivate by itself an actual and potential flow of national and international visitors.

With these antecedents, I recommend to take actions oriented to protect the touristic patrimony of Marcahuasi in San Pedro de Casta. Creating a touristic centre, it would have more commodities and facilities for transportation, lodging, food, and communication. Similarly other touristic circuits of the microregion could be developed and would withhold the resources of other towns of the Santa Eulalia valley.

As a long term plan I recommend the urban renewal of San Pedro de Casta and the other nearby towns respecting the typical architecture of the area.

The statistic information of the touristic movement towards the plateau of Marcahuasi during 1979, 1980 and 1981 has been analyzed, and the annual increment of the flow of travelers can be seen. One may conclude that the pernoctations will increase if an adequate touristic infrastructure is implemented.

The principle demand is constituted by young visitors, students, professionals, and employees of 20 to 30 years of age. The touristic demand by nationalities is represented basically by Peruvians ranging from 85 to 88% of the total; the rest is constituted by internationals, basically Europeans (6 to 8%), South Americans (3%), and North Americans (2.5%).

It was concluded that a touristic infrastructure of 100 beds will be necessary to satisfy the increasing demand of tourists towards the plateau of Marcahuasi. This figure was arrived at, through the analysis of the touristic offer and demand, application of surveys, methods of projection and formulas.
ORIGIN AND DEVELOPMENT OF THE MICRO-REGION SETTLEMENTS

First Period: Pre-Inca and Inca Settlements
(200 A.C. - 1470 D.C.)
Second Period: Spanish Conquest and Colonization 1538

Figure No2

villages
Figure No3

Third Period: The Republican Days

Micro-regional Villages
Archeological Ruins
Figure No4

THE URBAN STRUCTURE

- Typology of Settlements
- The Urban Form
- Grids
THE URBAN ELEMENTS
Domestic Architecture

Cronologic Typology of Houses in the Santa Eulalia Valley
Figure No6

Analysis of the Pre-Inca Houses in the Santa Eulalia Valley

Figure No7

Houses that Precede the Pre-Inca Houses
Figure No10

THE URBAN ELEMENTS
Domestic Architecture
THE URBAN ELEMENTS
Domestic Architecture
THE URBAN ELEMENTS
Domestic Architecture
Figure No. 14

THE URBAN ELEMENTS
Domestic Architecture
Figure No15

THE URBAN ELEMENTS
Domestic Architecture
Figure No16

Housing Schemes, Location Plan of Typologies of Houses and Constructive System.

Figure No17

Constructive System
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Figure No20
The Spatial Structure
Elevations of Blocks No1 and No2
THE URBAN ELEMENTS
Elevations of Streets

Figure No21
PART II
ARCHITECTURAL PROPOSAL
PART II

Architectural Proposal

The service unit will be a one hundred bed capacity hotel, located in a close proximity to the archeological plateau of Marcahuasi.

The idea for organizing the touristic complex is based on a central plaza (from where the pedestrian walkways are generated) and the creation of two blocks with lodging modules. Around the main plaza the following functions have been located: the recreation area, conference and exhibition area, administration area, workshops, dinning halls, kitchen, laundry, storage and maintainance workshops areas. Although there is only one vehicular access, service vehicles, employee parking and guest parking, are all segregated.

In organizing the touristic complex emphasis has been given to create visual effects within each area, as well as views to the valley, through control of heights and orientation of buildings.

The following areas have been developed:

A.- The recreation area which includes suites in the second, third and fourth level and stores in the first level; two lobbies, a bar, a discotheque and an area for games.

This area also includes a swimming pool for which dressing rooms and a cafeteria have been designed. Above the cafeteria there are two restaurants that compliment the main dinning hall and have a view to the valley.

To control the interior heights of the buildings decorative hanging lamps were proposed.

B.- The area of lodging modules include double bungalows, family bungalows and suites. These have been organized in two blocks having each inner courtyards. The first floor of each bungalow has a patio while the second floor has balconies that face the valley, the recreation area or the other group of modules. All bungalows have a daylighting system that comes through the roof.

C.- The main plaza has basically two levels and different functions. In a section of it (close to the recreation area) there will be exhibitions and folk music bands. The dinning hall buildings have an area of expansion to the exterior for the location of tables and the plateau of Marcahuasi has been designed on the plaza floor, so the tourist will get an idea of the attractions he will find when he climbs to the plateau. Connected to the workshops there is an area for the display of arts and crafts done by the villagers. This plaza has 3 fountains, a sculpture and green areas.

In the section for conferences there will be an area of expansion from one of the conference rooms for outdoor lectures.

Traditional building materials are used in the small units: adobe, wooden roofs and tiles and wooden balconies. The bigger units will have concrete structures, adobe walls, wooden balconies, wooden roofs and clay tiles.

The materials were chosen according to the architectural intentions that were first mentioned in the abstract.

An abstraction of the different types of balconies found in the analysis of typology of houses was done. On the basis of these abstractions other balconies were designed.
LOCATION OF THE SITE IN RELATION TO MARCAHUASI AND SAN PEDRO DE CASTA:
A. San Pedro de Casta
B. Pre-Inca Ruins
C. Building Site
D. Plateau of Marcahuasi

E. Road of Access From San Pedro de Casta to the Building Site
GENERAL SITE PLAN:
Principal Access to the Touristic Center, Parking Lot and Tennis Courts
A. The Organization in terms of a Main Plaza and Secondary Plazas.

B. The Landmarks
   The Visual Effects

C. The Circulation System:
   Tourists Circulation
   Service Circulation
FIRST FLOOR PLAN
Scale 1/250

AREA I
RECREATION AREA
A. Store
B. Terrace
C. Bay
D. Swimming pool
E. Terrace
F. Cafeteria

AREA II
CONFERENCE AREA
A. Exhibition Area
B. Conference Area
C. Kitchen
D. Refinery
E. Store

AREA III
ADMINISTRATION AREA
A. Lobby
B. Main entrance
C. Administration: reception, accounting, reservations
D. Administration: conference room
E. Administration: assistant to manager, secretary
F. Manager, Secretary

AREA IV
WORKSHOPS
A. Lobby
B. Workshop
C. Workshop

AREA V
SERVICE SUPPORT
A. Lobby
B. Dining halls
C. Private dining room
D. Kitchen
E. Dishwashing
F. Dining room for employees
G. Storage room
H. Baker's room
I. Boiler room
J. Food deposit
K. Control
L. Control of Water and Electricity
M. Storage room
N. Maintenance
O. Employees' locker room
P. Uniform storage
Q. First aid
R. Laundry
S. Central of Food and Beverage

AREA VI
BEDROOMS
A. Two-bedroom bungalows
B. Two-bedroom bungalows
C. Family bungalows
D. Suites

AREA VII
BEDROOMS
A. Two-bedroom bungalows
B. Two-bedroom bungalows
C. Family bungalows
D. Suites
THIRD, FOURTH, FIFTH FLOOR PLANS
Scale 1/250

AREA I
A. Suites
B. Lobby
C. Restaurant Third Floor
D. Restaurant Fourth Floor
E. In basement, locker room for swimming pool

AREA II
A. Exhibition Area Third Floor
B. Exhibition Area Fourth Floor

AREA III
A. Reading Room Third Floor
B. Look out Room Fourth and Fifth Floor

AREA V
A. Kitchen Third Floor
B. Cafeteria Fourth Floor

SECTIONS AND ELEVATIONS
Scale 1/250
Section 1-1
SECTIONS AND ELEVATIONS
Scale 1/250
Section 1-1

Section 2-2

Section 3-3
RECREATION AREA
THIRD FLOOR PLAN

A. Suites
B. Lobby
C. Restaurant
RECREATION AREA
FOURTH FLOOR PLAN

A. Suites
B. Restaurants
THE MAIN PLAZA

A. Exhibitions and folk music bands
B. Expansion of dining halls and design of the Marcahuasi plateau on the floor
C. Workshop's area for the display of arts and crafts
D. Expansion of administration area
E. Expansion of conference rooms
COTTAGES' AREA
FIRST AND SECOND FLOOR PLANS
Scale 1/125
A. Two bedroom bungalows
B. Two bedroom bungalows
C. Family Bungalows
D. Suites
COMPONENTS SELECTED FOR THE CONTEXTUAL ABSTRACTION
de Chiara, Joseph & Callender, John, 
*Time Saver Standards for Building Types* 

Fathy, Hassan, 
*An Exhibition of Selected Projects* 
School of Architecture and Planning, MIT, 1981.

Gasparini and Margolies, 
*Inca Architecture* 

Graham Paul, Mc Henry Jr AIA, 
*Adobe and Rammed Earth - Building Design Construction* 
Architect, Alburquerque, New Mexico.

Gray Virginia, Macrae Alan, 
*Adobe Houses* 
Santa Barbara, California, 1976.

Gray Virginia, Macrae Alan, 
*Mud, Space and Spirit : handmade adobe* 
Santa Barbara, California, 1976.

Grupo Andino - Junta del Acuerdo de Cartagena. Patdt-Report, 
*Manual de Diseno para Maderas* 
Lima-Peru, 1980

Hardoy, Jorge Enrique, 
*Urban Planning in Pre-Columbian America* 

Hopson, Rex C. 
*A Comprehensive Bibliography : Adobe* 
The Lighting Tree 
Jane Lyon Publisher

INCA 
*Revista Trimestral de Estudios Antropológicos* 
Organismo del Museo de Arqueología de la Universidad Mayor de San Marcos 
Vol I, No 2, Julio C. Tello 
Abril-Junio 1923 
Lima-Peru

Kendall, Ann, 
*Descripción e Inventario de las Formas Arquitectónicas Incas* 
Lima, Peru.
Limerick, Jeffrey,  
*America's Grand Resort Hotels*  
New York: Pantheon Books, 1979

Milla, Villena, Carlos,  
1974, *Catastro del Valle del Rimac*  
Biblioteca de la DCIRBM

**MIMAR** 
Architecture in Development  
Mimar 15, 1985

Neufert, Ernst,  
*Architect's Data*  
Granada Publication  
New York, Halsted Press, 1980

Palma Ricardo: "La Casa de Pilatos"  
*Tradiciones Peruanas*, Volume I, Pg 49-52  
1951

Ministerio de Industria, Turismo e Integracion,  
*Reglamento de Hoteles*  
Lima-Peru.

Reid, Richard,  
*The Shell Book of Cottages*  

Rostworowski, Maria,  
*Senorios Indigenas de Lima y Canta*  
I.E.P. Lima.  
1978

Spreiregen, Paul D.  
*Urban Design: the architecture of towns and cities*  
New York, Mc Graw Hill, 1965

Unrau, John.  
*Looking at Architecture with Ruskin*  
1978, Thames and Hudson

Velarde, Hector,  
*Arquitectura Peruana*  
Tercera Edicion - Ediciones Studium  
Lima-Peru.

Villar, Cordova, Pedro,  
*Arqueologia del Departamento de Lima*  
1935.
The vita has been removed from the scanned document