THE SRI LANKAN RURAL VERNACULAR:

An Examination of the changing pattern of houses with special reference to Matale District

Dissertation presented to the
Faculty of Architecture
University of Moratuwa

For the M.Sc (Arch.) Final Examination

K. M. S. FERNANDO
Faculty of Architecture
University of Moratuwa
Sri Lanka

July 1998
ACKNOWLEDGEMENT

I kneel down with gratitude before many, who criticised, argued, advised, guided and encouraged me throughout in making this a success.

* Prof. Nimal de Silva, Head, Dept. of Architecture, for many eye opening discussions I had with him and for valuable advise given to at the initial stages.

* Dr. Ranjith Dayaratne, Senior Lecturer, Dept. of Architecture, for giving me valuable advice and hints during the draft stages to make this a success and for correcting the draft.

* Mr. Vidura Sri Nammuni and Mr. V. Basnayake, Senior Lecturers, Dept. of Architecture, for lengthy discussions and inspiration given to me when I needed it most.

* Dr. S. Manawadu, Senior Lecturer, Dept. of Architecture, for giving me necessary nourishment, advice, guidance and valuable comments.

* Mr. R. Alahakoon, (Year Master) Senior Lecturer, Dept of Architecture for his assistance.

* Mrs. Basnayake, Mr & Mrs. Kumarasinghe, Grama Niladari and all the villagers of Dullewa Village, Mrs. Kobbeakaduwa, Mrs. Aluvihare and Mrs. Wegodapola for providing me with necessary data, discussions and granting permission to photograph their houses.

* Mr & Mrs R. Tillakasekera and Family for providing all the facilities during my stay at Matale.

* My dear friends Chamil, Chaminda, Mayura, Indralal and Preethika and all others, whom have become a source of help, assistance and encouragement at my needy moments.

* Last but not least, my dearest parents, who were like my shadow, ready to help me at a moment of notice be it night or day, for their continuous guidance, encouragement and blessings given at all times.
CONTENTS

Acknowledgement

Contents

List of illustrations

Introduction

Observation
Impact
Cause
Intention of study
Methodology
Limitation

CHAPTER ONE : THE VERNACULAR ARCHITECTURE AND HOUSE FORM

1.1 The vernacular tradition

1.1.1 Characteristics of vernacular tradition

1.2 Architecture as an evolutionary process

1.2.1 Formation of rural vernacular architecture (from primitive to vernacular)

1.3 The house form and its importance

1.3.1 Forces which influenced the house form

1.3.1.1 Socio cultural factors

i Society

a) Man and family

b) House and society

ii Caste and family

iii Culture

1.3.1.2 Climate

1.3.1.3 Materials/ construction and technology

1.3.1.4 Economy
"THE PAST LIVES IN THE PRESENT
PRESENT IN THE FUTURE,
LINKING THE DEAD PAST,
WITH UNBORN FUTURE"

(Srinivasan, K.)
<table>
<thead>
<tr>
<th>Fig. No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dwellings of Marsh Arabs</td>
</tr>
<tr>
<td>2</td>
<td>The ceremonial space of Anazazi Indians</td>
</tr>
<tr>
<td>3</td>
<td>Primitive house</td>
</tr>
<tr>
<td>4</td>
<td>Different primitive forms of different cultures</td>
</tr>
<tr>
<td>5</td>
<td>Relationship between family and society</td>
</tr>
<tr>
<td>6</td>
<td>Igloo and Tepee houses</td>
</tr>
<tr>
<td>7</td>
<td>Change of the house form of different castes (monogamous and polygamous situation)</td>
</tr>
<tr>
<td>8</td>
<td>Different house forms in different cultures</td>
</tr>
<tr>
<td>9</td>
<td>House forms differ with climate – Foreign</td>
</tr>
<tr>
<td>10</td>
<td>Different house forms varying with climatic conditions in Sri Lanka</td>
</tr>
<tr>
<td>11</td>
<td>Different house forms using same materials</td>
</tr>
<tr>
<td>12</td>
<td>Economic influence in housing</td>
</tr>
<tr>
<td>13</td>
<td>Section – a traditional dwelling</td>
</tr>
<tr>
<td>14</td>
<td>Plinth of a traditional rural house</td>
</tr>
<tr>
<td>15</td>
<td>Typical traditional thatched roof</td>
</tr>
<tr>
<td>16</td>
<td>Small openings provide better quality light</td>
</tr>
<tr>
<td>17</td>
<td>Rural vernacular house</td>
</tr>
<tr>
<td>18</td>
<td>Basic unit of a vernacular house (plan and section)</td>
</tr>
<tr>
<td>19</td>
<td>Two roomed, two verandah house (plan and section)</td>
</tr>
<tr>
<td>20</td>
<td>Simple courtyard house (Yeomans house)</td>
</tr>
<tr>
<td>21</td>
<td>Plan of a Yeomans house</td>
</tr>
<tr>
<td>22</td>
<td>Plan of a Feudals house</td>
</tr>
<tr>
<td>23</td>
<td>Dutch influenced vernacular house</td>
</tr>
<tr>
<td>24</td>
<td>British influenced vernacular house</td>
</tr>
<tr>
<td>25</td>
<td>British influenced vernacular house – imposed western forms without Responding to the building traditions of Sri Lanka</td>
</tr>
<tr>
<td>26</td>
<td>Location of the house</td>
</tr>
<tr>
<td>27</td>
<td>Plan of old house (Muthubanda)</td>
</tr>
<tr>
<td>28</td>
<td>Section - of the old house</td>
</tr>
<tr>
<td>29</td>
<td>Elevation of the old house</td>
</tr>
</tbody>
</table>
Plan of the new house (Basnayake)
Section - of the new house (Basnayake)
Front elevation of the new house (Basnayake)
Entrance porch
Old part of the house is out of traditional materials
Raised plinth of the old house
Low plinth and large windows of the new house
Existing portion of the old house, with straw thatched roof and small openings
Windows at about 4'0" above the ground
Ventilation pattern of the old and new house
Plan of house (Dullewa Walauwwa)
Section - of the house (Dullewa Walauwwa)
Elevation of the house (Dullewa Walauwwa)
G.l. sheet roof of the new construction
Wee polanage (winnowing house)
Carved wooden column supports the roof
The half wall facing meda midula
Decorative small windows
Heavy timber roof structure
Ornamental doors with brass locks
Hinge of the door
Ventilation pattern of the house
Plan of the house (Aluvihre Walauwwa)
Section - of the house (Aluvihare Walauwwa)
Elevation - of the house (Aluvihare Walauwwa)
Stone steps lead from compound to the entrance
Round column in stone and clay motar (facing the courtyard)
Ventilation pattern of the house
Plan of the old house (S. Kumarasinghe)
Section - of the old house (S. Kumarasinghe)
Elevation of the old house (S. Kumarasinghe)
Plan of the new house (P. Kumarasinghe)
Section - of the new house (P. Kumarasinghe)
Elevation of the new house

Courtyard still remaining (left side part of the old house)

Extension to the old house can be used as an annex

Part of the old house (with raised plinth, timber doors & windows and
Roof is replaced by G.I. sheets)

Grills are fitted onto windows for extra security

Ventilation pattern of houses

Plan - of the house (Wegodapola)

Section - of the house (Wegodapola)

Elevation - of the house (Wegodapola)

Round columns facing the courtyard

New addition of carport does not destroy the old form

Ventilation pattern

Plan - of the house (Weligala Walauwwa)

Section - of the house (Weligala Walauwwa)

Front elevation – of the house (Weligala Walauwwa)

Side elevation – of the house (Weligala Walauwwa)

Kitchen area (notice the roof covered with G.I. roofing sheets)

Ventilation pattern

Change of house forms depending on extended family units

Old atuwa converted to a lounge (note the low head clearance)

The earliest form of vernacular houses used environment friendly
Materials for construction

Dullewa Walauwwa (environment friendly materials were used here
for construction)

Courtyards once kept opened are obstructed by wooden trellis work

How sunlight passes through windows

Orientation of a building

Pada bedima

Inspiration drawn from temples is seen here
INTRODUCTION
INTRODUCTION

Vernacular can be termed as native or indigenous form of activities, such as Art, Architecture, Music or language of a nation. The house form of Veddha community of Sri Lanka, their language and songs too could be termed vernacular. Similarly, the temples, palaces and houses built during early periods. A nation who does not possess traditions could be considered a nation without its roots. Hence, the true identity of a nation could be well judged from its vernacular traditions and buildings.

OBSERVATION:

The vernacular in all arts has always been a source of inspiration for everyone, and it helps to tie one to its roots. The 'self sustained' products are not a significant way of satisfying peoples wishes. There should be a basic foundation or a basic knowledge to produce a qualitative product. From the past 'vernacular' has been involved in producing successive out-puts. Therefore it is important to retain it in any art form including architecture. Unique characteristics of vernacular architecture assign it an important role in built environment of any human settlement/dwelling.

Vernacular is not copying what is there, it is understanding the past. Vernacular cannot be faked. It is a reaction to something. Therefore vernacular architecture has an important role to play in built environment of any human settlement. One has to accept the fact that vernacular art form, be it music, dance or architecture will invariably undergo changes with time, because of external influences. An example to this effect can be seen from the ancient architectural masterpieces seen at Polonnaruwa, which was influenced by South Indian and North Indian architectural forms. But of late it is being distorted by external forces who does not give a thought to their traditions, be it architecture, music or dance forms. Thus there is a great danger looming over the source of reference of our roots which may be lost eventually.
IMPACT:

Architecture evolved through a long period of time which has gone through many changes during the past. Man is related to the built environment, he lives and normally tries to change and modify it to suite his whims and fancies. As the time passes, art, music and architecture continuous to evolve which changes, it grows and develops with time. The success of vernacular buildings, over a time may lie on the constraints which were guided by architectural tradition of the particular locality.

"Tradition is very essential for the preservation of stability and advancement of a nation, society or even a family. No nation or society will survive as an integrated whole if its tradition is completely wiped out" (Martin Wickremasinghe)

In this process each generation inherits an existing built forms shaped by the preceding generation, and continues to alter and develop before handing over to the successive generation. Nowadays people are slaves of new ideas, because of the changing society and also the marketing of new materials. The danger is that, if we detach ourselves from our roots, we would be lost in the international culture of architecture without regional or national identity, in a world where high-tech is creeping, into all fields of science and arts at an alarming rate. Hence whatever we do, must be done in a manner which will not destroy our traditions, which were preserved over generations.

CAUSE:

Since the vernacular buildings are moulded by the use of local technology, materials, organising of labour and cultural aspects, they could be considered as a true mirror depicting the living style and social behaviour of a society. With the passing of time people try to change over to the developing trend and adjust themselves to it.
"The past is dead and it cannot be revived. That which cannot change becomes inert and dies. That which changes survive. The past survive in us because we have been changing. We can perpetuate the past, only by changing ourselves and our heritage" - (Martin Wickremasinghe)

Therefore the continuity of architectural tradition (vernacular) in rural has lost its momentum in recent built forms. Most of the new forms are a result of 'inspiration'. Despite the urgency of the situation, the need to preserve the rural vernacular has not been given the highest priority which it deserves. The reason for this being the present perception among people that the rural vernacular has to change with time and that its death is inevitable. This perception may be far from right, but one has to accept that the changes are inevitable.

INTENTION OF STUDY:

Majority of Sri Lankans still live in rural areas. The built environment of the rural settlements comprise of numerous structures belonging to one of the two basic categories, namely vernacular and grand tradition. The vernacular tradition has a longer history. This study is made to highlight situations where the rural vernacular has been preserved and even evolved without losing its identity and essential nature. This also will examine the demands made on rural vernacular (by technology and change) and how these have been countered successfully.

METHODOLOGY:

The following are the steps that were considered in this study:

* Selection of representative rural dwellings and make a detailed analysis of the changing trends.
* Observation of the effects of the above changes on vernacular architecture and analysis of the negative aspects of those changes.
* Finding ways and means of minimising the negative aspects of those changes without changing or disturbing the quality of vernacular architecture.
LIMITATIONS:

Of the vernacular Arts, such as Art, Architecture, Music and Dancing, only the vernacular architecture was considered. Out of vernacular architecture, only vernacular houses were studied. Though there are so many vernacular houses located in various parts of Sri Lanka, Matale District was selected for this study, mainly because the two types of houses that of Yeomans and Feudals are found in abundance here.