AR 01/500

18/00N/103/2014 DAR 04/497

A SENSE OF PLACE IN THE RE-UTILIZATION OF SPACE: A STUDY WITH SPECIAL REFERENCE TO THE RE-USE OF OLD BUILDINGS

A DISSERTATION

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE OF THE UNIVERSITY OF MORATUWA IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER SCIENCE

IN

ARCHITECTURE

LIBRARY UNIVERSITY OF MORATUWA, SRI LANKA MORATUWA

72 "04" 72 (343)



BY DAHANAYAKE H.D. 2004



ACKNOWLEDGEMENT

I do strive to find the correct words and explanation to pay my tribute for all the outstanding extraordinary, wonderful and gifted people mentioning below in making this dissertation success.

I offer my thanks to Architect Vidura Sri Nammuni, the head of the department of architecture of university of Moratuwa for initial guidance, worthy comments and above all the valuable advise given from the M.sc. first year onwards.

I forward my thanks to Archt. Prasanna Kulatilake, lecturer and course coordinator of the M.Sc. final year, department of architecture, for unending help, guidance and encouragement given when it was needed so disparately.

My whole hearted gratitude forwarded to Archt. Chris de Saram my tutor, senior lecturer department of Architecture, for providing me with much needed encouragement, advice and outstanding comments throughout the course of study.

My heartiest thanks goes to Archt. Ranjith Alahakoon, M.Sc. final year, year master, Archt. Channa Daswatte, lecturer, department of Architecture for providing me all the information needed for my case studies and for guidance given from the beginning of the course of study.

I also extend my thanks to all the academic staff members of the department of Architecture, for the knowledge, encouragement and the help and it is with deep sense of gratitude that Dr. Harsha Munasinghe, Archt. D.P. Chandrasekara and Archt, Varuna De Silva are been commended for the valuable knowledge and immense help extended towards me. I forward my thanks to Archt. Ashely De Vos, for providing the needed information and valuable knowledge regarding the subject area.

ii

My whole hearted gratitude's thanks forwarded to my family members, Malin and my cousin Uma for their excellent encouragement, help and being with me from the very beginning when the going was rough.

I also forward my thanks to my seniors, juniors and batch mates for their help provided for continuation of the study and also to Mrs. Keerthisinghe, Mr. Dahanayake and Mr. Wijesekara for their full time devotion in language correction.

I also extend my thanks to all the kind hearted personalities who gave access to their premises without any hesitation in order to achieve successful case studies.

Dahanayake H.D. Department of Architecture University of Moratuwa.

CONTENT

ACKNOWLEDGEMENT	H
TABLE OF CONTENTS	IV
LIST OF PLATES	VIII
LIST OFFIGURES	XI
ABSTRACT	XIV
INTRODUCTION	XV
Observation	
Criticality	
Intention of the study	
Objectives	
Hypothesis	
Methodology	
Scope and limitations	

CHAPTER ONE -SPACE, PLACE & SENSE OF PLACE

1.1. Human spatial relationships		1
1.1.1. Concept of "Space"		1
1.1.2. Architectural Space		2
1.1.3. From "Space" to "Place"		4
1.1.4. Concept of "Place"		5
1.2. Sense of place and place making		9
1.3. Constituents of "Identity of place"		10
1.4. Physical setting		12
1.4.1. Quantitative dimensions		14
1.4.1.1. Horizontal space defining elements		14
1.4.1.2. Vertical space defining elements		19
1.4.1.3. Openings		23

26
26
29
30
31
32
33
34
37
38
42

CHAPTER TWO - URBAN HOUSE AS A PLACE; PHYSICAL SETTING, ACTIVITY, MEANING

2.1. Concept of house	43
2.2. Spaces within the urban house	45
2.2.1. Public	47
Physical setting	47
Activity	48
Meaning	49
2.2.2. Semi public	50
Physical setting	50
Activity	51
Meaning	52
2.2.3. Semi private	52
Physical setting	52
Activity	53
Meaning	53
2.2.4. Private	53
Physical setting	53
Activity	54
Meaning	54

2.3. "Reuse" of Houses	55
2.3.1. Re-use concept	55
2.3.2. Philosophical approach	55
2.3.3. Cultural approach	57
2.3.4. Changing situation in reuse concept	58
2.3.5. Applicability of re-use concept	59
2.3.6. Reusable urban house	62
2.4. Concluding remarks	63
CHAPTER THREE - AN EXAMINATION OF THE CONCEPTUAL	
RE-UTILIZATION OF OLD HOUSES	
3.1. Introduction	65
3.2. Case study one - Gallery Café	67
3.3. Case study two - Dutch House, Galle	84
3.4. Case study three – ODEL Unlimited	106
3.5. Case study four – Methodist Collage	124
3.6. Comparative study of case studies	133
CONCLUSION	137
REFERENCES	140

LIST OF PLATES

Plate	Page	No
Plane 3 15r The subline		
Plate 1.1: Architectural space		2
Plate 1.2: The man made Space and its changing character.		4
Plate 1.3: Formation of place		6
Plate 1.4: Sense of place		9
Plate 1.5: Physical setting, activity and meaning as constituents	of place	12
Plate 1.6: Base plane	thed 1	15
Plate 1.7: Columns forming edges, corners and density		21
Plate 1.8: Single vertical plane		22
Plate 1.9: "L" shape planes		22
Plate 1.10: Openings in planes		23
Plate 1.11: On space		26
Plate 1.12: Under space		27
Plate 1.13: Side space		27
Plate 1.14: Between space		28
Plate 1.15: Around space		28
Plate 1.16: In space		28
Plate 1.17: Play of light		29
Plate 1.18: Play of color		30
Plate 1.19: Centre		32
Plate 1.20: The spaces are in Juxtaposition		35
Plate 1.21: Activity and place		37
Plate 1.22: Meaning of place		38
Plate 1.23: Meaning deriving from function		41
Plate 2.1: Evolution of house		43
Plate 2.2: House as a central place of humans		45
Plate 2.3: The physical setting of an entrance		48
Plate 2.4: An entrance to a house		49
Plate 2.5: Living and dining areas		50
Plate 2.6: Bed room arrangement		53
Plate 2.7: Comyn Ching triangle, London		60
Plate 2.8: Tobacco Dock after renovation		60
Plate 2.9: The Ospizio San Michele in Rome		61
Plate 2.10: A re-used urban house with colonial influences		62
Plate 3.1: Entrance to the complex		67
Plate 3.2: Movement pattern towards the complex		70
Plate 3.3: The entrance court		72
Plate 3.4: The reception verandah		72
Plate 3.5: Passage towards the inner court		73
Plate 3.6: Inner court		74
Plate 3.7: Display area with alcoves		75
Plate 3.8: The open space before conversion		75
Plate 3.9: The open space		76
Plate 3.10: Corner shop		77

Plate 3.11: The office space which was the main space before	
Transformation	79
Plate 3.12: The office space using as a cafe after the transformation	79
Plate 3.13: The new pavilion space	80
Plate 3.14: The position of the pavilion	81
Plate 3.15: The pavilion	81
Plate 3.16: Objective which harmonize with nature of the building	82
Plate 3.17: Change in luminance levels creating pools of light	82
Plate 3.18: House before transformation	85
Plate 3.19: A distant view of the house from the entrance pathway	88
Plate 3.20: The Physical setting of entrance verandah	89
Plate 3.21: The non disturbed verandah space gives a more sanctified	89
Plate 3.22: The monotony of floor finish in passage and living	
before the transformation	90
Plate 3.23: The short passage leading towards the living	91
Plate 3.24: Living area before the transformation takes place	94
Plate 3.25: After the transformation as more humanized space	95
Plate 3.26: Entrance to suite	95
Plate 3.27: The Bed room	96
Plate 3.28: Sitting area with small private spaces	97
Plate 3.29: Bath room as a private domain in a dead end with seating	98
Plate 3.30: The rear verandah which leading towards the pantry	99
Plate 3.31: Building after transformation	99
Plate 3.32: Secondary part of the house transformed into a suite	
with a side verandah	100
Plate 3.33: Suite with sitting room and bed room	100
Plate 3.34: Bathroom at the intersection of old and new buildings	101
Plate 3.35: Interior of the new wing	102
Plate 3.36: The open court	103
Plate 3.37: movement between suites and the continuity between	104
inside and outside is facilitated by the main space	104
Plate 3.38: The trees in the court	105
Plate 3.39: The pool merging with the surrounding context	106 109
Plate 3.40: The view from outside	1109
Plate 3.41: The entrance verandah of new extension	113
Plate 3.42: The left wing as a flexible shopping space	114
Plate 3.43: Entrance to new (atrium space), from old.	115
Plate 3.44: The atrium space forms a shopping street.	117
Plate 3.45: Atrium as a shopping street	118
Plate 3.46: The atrium as the main space or the centre	118
Plate 3.47: Psychologically comfortable main space	119
Plate 3.48: The shopping street within the atrium space Plate 3.49: Café lounge adjacent to the shopping street	120
Plate 3.50: Stair lobby as an exhibition space	121
Plate 3.51: The sky light facilitates the vertical movement	122
Plate 3.52: Shops in the upper floor levels of the atrium	122
Plate 3.53: Entrance to the complex	124
Plate 3.54: The entrance void	125
Plate 3.55: The view from entrance	126
Flate 0.00. The view nonit entrance	120

Plate 3.56: The opening	127
Plate 3.57: The principal's room is located in the front verandah.	128
Plate 3.58: Side entrance	128
Plate 3.59: The living, dining areas of the old house converted to an	
assembly room	129
Plate 3.60: The colors and the physical setting create class rooms	
with intimate and dynamic quality	129
Plate 3.61: The strip of land in the rear side	129
Plate 3.62: The corridor space	131
Plate 3.63: The semi private space (a family room may be)	131
Plate 3.64: The Bridge connecting old and new	131
Plate 3.65: The bridge space connecting old and new	132
Plate 3.66: Class room arrangement	132

Fig 1.25: House with traditional elements

Fig 1.26: Housing in Southport

rig 1.27: Perbon of old people a home in Herizberger

Fig 2.1. Internacy gradient trough the house

Fig 2.2. Encapos transition

Fig 2.3. Physical setting of semi public spaces

Circ C. S. Disordinal methods of designed a second

La 2 C Manue Dilaka Calavaanansii aas

1 7 Conservation of the state of the state

LIST OF FIGURES

Figure Pag	e No
Fig 1.1: Constituents of place	11
Fig 1.2: Base plane	15
Fig 1.3: Elevated base plane	16
Fig 1.4: The degree of spatial and visual continuity between elevated	
Planes and it's surrounding	16
Fig 1.5: Depressed base plane	17
Fig 1.6: Degree of spatial and visual continuity between depressed	
base plane and its surrounding	17
Fig 1.7: Over head plane	18
Fig 1.8: Linear vertical elements	19
Fig 1.9: A vertical plane will articulate the space that it fronts.	20
Fig 1.10: An "L"- shaped configuration of planes generates a field of	~~
space from its corner outward along a diagonal.	20
Fig 1.11: Parallel planes define a volume of space between them that	
is axially oriented towards the open ends of the configuration	20
Fig 1.12: A "U" – shaped configuration of planes defines a volume of	20
space that is oriented toward the open end of the configuration	20
Fig 1.13: Four planes enclose an introverted space, and articulate the	21
field of space around the enclosure	21
Fig 1.14: Openings within planes located wholly within a wall or ceiling plane and be surrounded on all sides by the surface of plane	24
Fig 1.15: Openings at corners can be located along one edge or at	27
a corner of a wall or ceiling plane	24
Fig 1.16: Openings between planes can visually span vertically between	2.1
floor and ceiling planes, or horizontally between wall planes	25
Fig 1.17: Light effect on design	30
Fig 1.18: Visual links enable trough the openings	31
Fig 1.19: Physiological enclosure	33
Fig 1.20: Spatial juxtaposition and interpenetration	34
Fig 1.21: Linear organization	35
Fig 1.22: Centralized organization	36
Fig 1.23: Radial organization	36
Fig 1.24: Meaning of place	39
Fig 1.25: House with traditional elements	39
Fig 1.26: Housing in Southport	40
Fig 1.27: Portion of old people's home in Hertzberger	40
Fig 2.1: Intimacy gradient trough the house	46
Fig 2.2: Entrance transition	48
Fig 2.3: Physical setting of semi public spaces	51
Fig 2.4: Physical setting of semi private spaces	52
Fig 2.5: Physical setting of private spaces	54
Fig 2.6: Vinaya Pitaka, Cullavaggapali, part-2	56
Fig 2.7: Samanthapasadika or Vinayatthakatha, part-1	56

y

Fi	g 3.1: Street elevation	67
Fi	g 3.2: Plans, sections and elevations in the previous layout	68
Fi	-	69
Fi		70
Fi	g 3.5: Orientation towards the reception verandah	71
Fi		72
Fi		73
Fi	g 3.8: Transition from entrance court to reception verandah	73
	g 3.9: Activity pockets in inner court	75
	g 3.10: The open space with well defied spatiality	76
	g 3.11: Path configuration before conversion	77
	g 3.12: Path configuration after conversion	78
	g 3.13: In former layout office space as the main space	78
	g 3.14: The seating arrangement	79
	g 3.15: A place can be felt. A distinct positive space	80
	3.16: Plans, sections and elevations of the previous layout	85
	3.17: Plans, sections and elevation in the present situation	86
	3.18: The pathway with a soft enclosure as a transitional space	87
	3.19: Entrance transition with change of direction and view	88
	3.20: The passage as a part of living, projecting towards the front	
	verandah to create a transitional space.	90
Fig	g 3. 21: Progression towards the living area	91
	3.22: Generosity of movement between spaces	92
	3.23: The former layout and the permeability graph it.	92
	3.24: The new space arrangement and the permeability graph.	93
	3.25: Common spaces lie tangent to the main path	94
	3.26: More humanized space with relative intimacy	94
	3.27: Bed room enclosure	96
-	3.28: The adjustment of visual and spatial continuity before and	
	after conversion	96
Fig	3.29: The sitting room as private space and as semi private space	97
-	3.30: Semi private garden spaces	98
-	3.31: Intimacy gradient within the suite	101
	3.32: The dominance of main building is emphasized by making	
	the new wing smaller	102
Fig	3.33: Extension as a continuation of the old Building.	103
	3.34: The positive outdoor space as the main space	103
Fic	3.35: Rooted-ness of the building facilitating the spatial and visual	
	continuity.	104
Fic	3.36: Spatial progression towards the larger garden space	105
Fig		106
Fig	•	108
-	3.39: Entrance transition	109
	3.40: Realm of transitional spaces.	111
	3.41: Facilitation of social integration through circulation loops	
	Smaller rings demarcate the social integration.	112
Fig	3.42: Space arrangement after the transformation (the ground floor).	
-	3.43: Formation of shopping street.	116
	3.44: The shopping street which runs throughout the building.	116
	3.45: Section through the building complex.	117

Fig 3.46: Activities and the roof height.	119
Fig 3.47: The physical setting of the café lounge.	120
Fig 3.48: Axial space arrangement and cardinal orientation	123
Fig 3.50: The creation of positive outdoor environment	126
Fig 3.50: The entrance transition.	127
Fig 3.51: The intimacy gradient of play areas	130

are governed by them. The relevance of place". This fact cannot be quelty of places that achieving "Eurae of place". This fact cannot be neglected as it is a concept that should be pointed out in re-utilizing spaces. Presence of these characteristics make the place significant and embances the quarky ht build environment as well as of its users. Otherwise these spaces will be placeless gaps in the upon environment.

For an analytical shidy about human spotial relationships the nature of attachments in between must be understood. When consider the urban environment especially the urban labels is unimportant and duregard without the human attachments and behavioral patterns. It would be interesting to investigate an elementary teature that will hold the character, comfort in spaces specifically in re-use spaces in this devertation.

The absent of this concept creates not only the materialistic polition, but also atthudinal polition occur parallely with the rapid urbanication. Even the attachment to cristing context seems to be neglected. Likewise abandoned old buildings exist unknowingly in the urban table as placeless gaps. Hence this study mainly focuses on immediate surrounding and the interfor of the re-used spaces, its quantitative and qualitative attributoe, to achieve "Sense of place"

PREFACE

"Place" is a concept which receive initial attention when consider the socio spatial relationships. The vitality of this concept makes it examined by architects, planers and designers. Place is an entity which constitutes spatial, social and psychological aspects and therefore their characteristics are governed by them. The refinement of these aspects will enrich the quality of places thus achieving "Sense of place". This fact cannot be neglected as it is a concept that should be pointed out in re-utilizing spaces. Presence of these characteristics make the place significant and enhances the quality of build environment as well as of its users. Otherwise these spaces will be placeless gaps in the urban environment.

For an analytical study about human spatial relationships the nature of attachments in between must be understood. When consider the urban environment especially the urban fabric is unimportant and disregard without the human attachments and behavioral patterns. It would be interesting to investigate an elementary feature that will hold the character, comfort in spaces specifically in re-use spaces in this dissertation.

The absent of this concept creates not only the materialistic pollution, but also attitudinal pollution occur parallely with the rapid urbanization. Even the attachment to existing context seems to be neglected. Likewise abandoned old buildings exist unknowingly in the urban fabric as placeless gaps. Hence this study mainly focuses on immediate surrounding and the interior of the re-used spaces, its quantitative and qualitative attributes, to achieve "Sense of place".

DECLARATION

I declared that, this dissertation represent my own work, expect were acknowledgement are made, and that it has not been previously included in thesis, dissertation or report submitted to this university or to any other institutions for a degree, diploma or other qualification.

Sign

UOM Verified Signature

(H.D.Dahanayake)

INTRODUCTION

1.1. OBSERVATION

Humans have significant relationships with places as he is living in a world filled with "places". Place can be recognized as the fundamental aspect of man's existence in the world as we have to identify those places and then respond to them.

Places can be identified as entire surface of earth or a city or town as well as a part of space and the belongings of that particular space. Man needs to identify his belonging to places. Then such intimate spaces are considered as the place we live or a building or a place of interest. In this aspect all the architectural entities are potential places and have a direct link with the place making concept. Through this it facilitates a fundamental need in human habitation.

"It seems common place that almost everyone is born with the need for identification with his surrounding and a relationship to them- with the need to be in a recognizable place. So sense of place is a not fine art extra, it is something we cannot afford to do without". Relph (1976:63)

The "sense of place "can be introduced as the ability to recognize different identities of places. This identification of a place is a vital factor that must be present for our existence and facilitate personalization of space which is a fundamental nature of the living being. The qualities of architecture should also be its ability to be personalized by its people. Places are generated through this personalization of architecture and human existence depends on this. It covers a full range of awareness, from simply recognizing the orientation in relation to the other elements in the surrounding. Through this orientation the physical and physiological comfort is facilitated.

Places are never static and have a changing character through time. So to perceive a character of a place, continuation of our experience of a change is needed. When the buildings are reused, a transformation occurs and excluding these psychological needs numbers of goals which are going to be achieved through it come into play.

Old buildings are tangible forms which preserve the cultural and historical values. They are not made as monuments but as objects to be used. They have been in use and still can be used and adapted to the needs and demands of time. They are contributors which promotes the link between the past and future. This is a vital factor that should be taken into consideration as we have a tradition and colonial heritage with number of buildings which needs re-utilizing.

Recently there is an increasing tendency towards reusing old buildings for contemporary uses without just leaving them as empty shells. This prevents leaving them as mere physical elements or images of the past. They have a value embedded in them as cultural heritage or simply as build entities. With engraving suitable function they can be promoted as "places". This gives a place identity thus facilitating the "Sense of place". This space perception is a key factor which defines its continuity as a re-used space, than the tangible physical elements.

By achieving these psychological aspects, a successfully reused space which fulfils its own goals can be created. When transformation occurs personalization should occur irrespective of its function, size or location. So the newly transformed place must be given orientation to facilitate physical and psychological comfort to same level. That fundamental aspect is place making. But at present this aspect is neglected and as a result the concept of "place" of these transformed or reused spaces are being faded.

---- XV1

Some physical settings facilitate this process while some do not. Although there is a contradiction, through reusing buildings these problems should be overcome and the "Sense of place" should be facilitated. Through these better "places" which safeguards the continuity of reused buildings will be created.

1.2. CRITICALITY

"Nothing calls attention to itself, it is all remarkably unremarkable......you have seen it , heard it, experience it all before and yetyou have seen and experience nothing......" Kurtz (1973.23)

Human emotions are tight and combined with significant places. This bond between the place and human is inevitable. But with rapid urbanization the demand for infrastructure facilities for commercial sector increases and buildings are reused and transformed according to new functional necessities.

Though it is a present day need, the new architectural interventions in the country express the image of a modernist world. The economic system and changing attitudes, values systems make a background which historical and cultural values become unimportant. In this context the previously designed built environment becomes meaningless and sometimes unaffordable and are often pushed aside or ignored. As this situation evolves, the relationship between the past and the future is disappeared and old buildings were subjected to demolishment or large scale adjustments. New activities were injected to the spaces which destroy the value of it. This decreases the value of our asset completely or partly. The answer is not to create copies but to make them identical places with their new functions thus facilitating the continuity between past and future. These places can attract new social groups towards them developing new images and value systems while giving an economic strength to support the re-utilization.

----- XV11

Introduction

With the changing context, the meanings of these spaces have been deteriorated and become meaningless. They are to be discovered and reinterpret with new function. The way of using the reutilized spaces is a fact that should be given considerable attention as the renewal of validity of a space is not a single face problem.

The maintenance of formal characteristics of the building and the compatibility of it to the re-established utility must consider in these projects. Thus to safeguard its existence as it has to serve a totally different function it was originally designed for. The physical setting should adjust to suit the new functions which are going to be embedded within it. Their maintenance and profitability are the other aspects that should be taken into consideration. All of these aspects are vital when considering the continuity of the reused spaces and are the resultants of achieving the "Sense of place". The successfully transformed spaces can be used wisely to attract the investment as they promote the livability of the space embedding distinctive social and economic activities.

But they have become major failures because it has only considered the problem of embedding a new function. In these situations priority was given to cost and time neglecting the importance of place making aspect. This has created a situation where emotions of people and place making concept has become unachievable.

As the world changes and more and more conversions are to be expected there is responsibility and challenge presented to designer. Otherwise in the future there will be a situation where "sense of place "simply does not matter. So the re-use spaces should be pointed out as timeless entities which adapt to accommodate the needs of modernized world which facilitates this. By doing so we can eliminate the "placeless ness "where identities of the places are neglected.

-----XVIII

Introduction

This elimination of placeless gaps will upgrade the environmental quality thus uplifting the living standards. This will establish a socio economic space organization which facilitates the link between the past and the future and a "Sense of place" which facilitates the variety of human experience.

1.3. INTENTION OF THE STUDY

The intention of the study is to identify the need for the reuse of buildings making them "places". Further, to reconsider the effectiveness of reestablishing "sense of place" or the "identity" of reused or transformed houses towards the new function.

To achieve this goal, the dissertation intends to understand various definitions, meanings and concepts established by theoreticians and designers in relation to concept of place. The reuse concept and its applicable house styles must also be identified and the study also intends to explore situations where these concepts use correctly or incorrectly to discuss the usability of the place making concept.

1.4. OBJECTIVES OF THE STUDY

Available indications form neither a "Sense of place" nor any other framework to analyze the transferring of one place to another. This has led to a situation where reused spaces become placeless. Thus it is important to come up with a strategy or framework to interrelate both aspects. There is a strong link between reuse of spaces and "Sense of place". In present day Sri Lanka there is more tendency of reusing houses for different functions. When applying the aspects of "Sense of place" successfully it improves the quality of reused spaces. The specific objectives to be within this range of intentions are as follows:

----- XIX

- To examine the different aspects considered in "Sense of place", which have an effect on space reusing.
- To analyze the changing factors and constant factors in accordance to the application of reuse concept.
 - To identify the possibility of achieving the "sense of place" in" reused" or "transformed" buildings.
- To identify the importance of reuse of spaces in the context of "Sense of place".

1.5. HYPOTHESIS

 "Sense of Place" can be achieved irrespectively of the repeated form of the particular space.

1.6. METHODOLOGY

This dissertation is to be written as an attempt to participate in the development of an alternative approach to understand the possibility of achieving the 'Sense of place' in reused spaces.

Initially the study attempts to identify the concept and principles on "Space" and 'place' through an extensive literature survey. The sense of place and the orientation governed by it is also to be discussed. It is considered not only with theories, but also with setting and situations we live in, know and experience in our day today activities. It is an examination of phenomenon of world we live and attempt to establish the change in diversity and intensity of our experience towards the 'places' in change.

The house is man's most primary and most intimate place and would be visualized in the form of a micros; in which the man dwells within the macros; the city. Some selected spaces which were considered as most important to discuss under the constituents of place. These principles are generally discussed in relation to urban spaces which have possibility to reuse.

It is expected to study the urban house under these principles as it can be considered as the micro-place of the macro-place. Then the reused concepts, its psychological approach, cultural approaches and changing situation of this concept are explored.

To support this theoretical examination, selected houses designed by architects, which are situated in different locations and reuse for different functions will be studied and analyzed. These examples were to be selected from the numerous houses examined in the process of this study.

1.7. SCOPE AND LIMITATIONS

In this dissertation the main aim is to identify a particular way of achieving "Sense of place" in particular situation like "reuse spaces". Here the "Sense of place" is strictly considered in relation to the architecture. The concept of "place" is discussed in relation to houses which have a possibility of reuse to do an in depth survey though selection of house types are not discussed in this study.

The places inside the house and in the immediate outside are included in this discussion. The effectiveness of reuse of spaces is measured regarding the aspects of "identity of place" which constitute the underling principle to achieve "Sense of place". Here the process of place making will not be examined, but the end product the "Place" will be discussed.

----- XXI

CHAPTER ONE: SPACE, PLACE & SENSE OF PLACE

1.1. HUMAN SPATIAL RELATIONSHIPS

1.1.1. CONCEPT OF "SPACE"

The range of our understanding about space is very great. In general terms it may be the gap which does not have qualitative or quantitative measurements such as dimension or a limitation of it's extend. The space we experience as landscape, villages, streets and buildings are our experience and identification of spaces. It is intangible entity which cannot be given a straight forward definition. However, when we describe the space it is combined and related to the concept of place.

Aristotle defines space as a container of things-a short of succession of allinclusive envelopes from what is "within the limits of the sky" to the very smallest, rather like Russian dolls. It establish outside inside relationship as the primary aspect of space determining its possession of qualities like extension and enclosure. It describes the space as a limited exterior with a hollow interior to be filled up. Every space is a filled up entities with a certain position. It is even true for the human being conceived in mother's womb and it's also the beginning of his interaction with the space.

"Man imagines in the first place the space which surrounds him and not the physical objects which are supports of symbolic significant." Miess (1986:101)

The space is one major component which contributes forming a "place". It constitutes the physical setting in which activities happened. He experiences it via senses: sight, hearing, smell, touch. These experiences crystallized his bond or attachment with the space and contribute to establish a sense of place. Architectural space is man made space which you are attached to, experience and which you dwell within.

1.1.2. ARCHITECTURAL SPACE

An architectural space is simply the spaces created by man's effort for purpose of living or more specifically dwelling. It could be recognize as a conscious attempt over the space which contributes to unselfconscious spatial experience. An architectural space occurs as a resultant of creative process. It gives birth to variety of expressions and concern initially with imaginative spatial experience. This experience is spatiality is achieved to its maximum standards in creatively designed architectural entities, where the basic idea of space is highly developed.

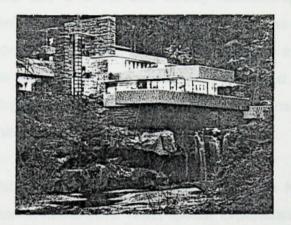


Plate1.1:Architecturalspace.Theexpressions given bythem givebirth tovaryingspatialexperience.

"Architecture is art of hollow; it is defined both from the interior and from the exterior." Miess (1986:101)

It has its own functional realm as well as symbolic and cultural expressions and its spatiality is both defined from inside and outside. Regarding this aspect it differs from all other art works like paintings, sculptures, etc. which defined from exterior and can be experienced from outside and only facilitate a mental penetration. As mentioned architecture is an art of hollow which both exterior as well as the hollow interior contribute to the experiencing architecture. In architecture the hollow interior is not just a meaningless gap. It is a shell created for events to be contained.

When activities activate it, it becomes a place. From the exterior we penetrate to filled internality to experience it. These aspects must be taken into consideration as work of architecture is done. Otherwise the elimination of spatial characteristics will occur.

"Architecture is 'art' when he design of space clearly takes precedence over the design of the object. A Spatial intention is the living soul of architectural creation."

Miess (1986:101)

Space has a direct and strong relationship with architecture. The living pattern of man always had influenced by the environment he lives either the entity is built or natural. His act, thoughts and events of life were inspired from the feelings encountered in inhabited space. Thus govern by these feelings, human beings build spaces or transform one space to another and architecture is an end product of this.

Architecture is purposely created by man for his living in. These spaces comprise mans inner most spatial experience and is a concretization of his image about the space. This leaves a direct link between man and architectural space. His emotions and feelings are embedded within it and he communicates with these spaces and it made him understand of the qualities within the space. When events occur in these spaces they become meaningful place of livelihood.

Since each and every architectural entity can be identified as a "space" their probability to become places must be examined. A "Place" is a "space" which has distinguished character. The activities and the meanings of build entities are the other stake holders forming this specific character. With the involvement of these aspects the mare "Space" steps towards the "Place" thus leading to the "Sense of place".

1.1.3. FROM SPACE TO PLACE

According to A. Van Eyck,

"...Whatever space and time mean, place and occasion means more.... Space has no room, time not a moment for man. Make of each door a welcoming and give a face to each window. Make of each a place, a bunch of places of each house and each city..."

We have to go beyond the common visual approach to conceptualize architecture. An architectural entity gathers within itself a functional realm belongs to it, the emotions and traces of your experience in events. The character of space will be change in according to time of the day and seasons while the place changers with the involvement of human beings. Though the spatiality is the same it will form a rather differentiated place by the variety of activities happens within it.

Architecture as mastery of the space should have the possibility and the value of becoming places. These places should have an identity which interwoven with the identity of its inhabitants. To identify the gap or the difference between space and place the concept of place is further discussed. Trough this probability of re-use of "spaces" becoming re-used "places" can be established.



Plate 1.2: Space and its changing character. The character of the place changes in the different times of the day.

Δ

Chapter one: Space, place and sense of place

1.1.4. THE CONCEPT OF PLACE

"Place" is a word use in everyday life in various ways to give various meanings. This word makes a significant difference according to different individuals like architects, geographers and laymen look at it and conceptualizing it. As the concept of place is not coherent first it must be recognized. According to May (1970:214) points out the notion of "place" has been used by geographers in four different ways.

As the place is where man live in it is a word to identify the entire surface of earth. Secondly space such as countries, provinces and cities which are units of a larger area which cannot be clearly identified from a region was used to recognize as places.

- Colombo is the capital of Sri Lanka.
- Sri Lanka is a South Asian country.

Third, it is a term imply to particular and specific part of spaces and the belonging elements of that space.

- Place of residence as a particular building
- Temples, parks, etc. as place of worship or amusement

Finally locations are also referring as places in broader sense as they have exact positions.

- Location of rooms in a house
- Location of furniture in a room

Different people use the term "place" to give several meanings in different situations to give different meanings. Each place has an embedded importance within it as it has an effect on human beings both physically and emotionally. Although they give different meanings they also have six major components identical to them accordingly to Luckmann (1964).

- 1. The idea of location.
- 2. Places got an identity which involve with nature, culture and elements.
- 3. Places are interconnected to each other though they have uniqueness.
- 4. Places are localized
- 5. Places are emerging or becoming
- 6. Places have meaning

According to this places are complex integration of nature and culture that developed in particular locations or spaces, and which is interrelated by flows of people and goods to other places. A "place" is not only a physical setting or a geographical location but identifiable meaningful phenomenon that considers each and every aspect of a space. It consists of humans, animals, vegetations, streets and buildings. And it also consists of intangible phenomenon like emotions.

Form, shape, openings, texture, color, light and material are spatial qualities a space owns. The spatial qualities give a place an identity, character and spirit which are the fundamental aspects of a place. The character of Space changes with the being of people thus making them places. So the meaning of the place is something more than a location.



Plate 1.3: Formation of place. The place is a piece of the whole environment that has been claimed by feelings.

"People are their place and a place is its people."

Relph (1976:34)

6

Chapter one: Space, place and sense of place

There is a significant relationship between people and place. They form a fundamental part of the place which gives it an identity. All the places carry this identity and are expressed through everything occupied in them including the human beings. Without people the physical setting and landscape provides a mere background of a place. They are two bonds which reinforced each other. As the people themselves have an effect on place as their being or not being, their actions in that particular place has an direct effect on changing the character of the place.

"A place is a centre of action and intention, it is a focus where we experience the meaningful events of our existence."

Schulz (1971:19)

7

There is an interrelationship between people and places. Places are identical when the human involvement is there. When it is absence the character of the place changes and it is then considered as a location, not as a place.

If we consider the vice versa of this, our each and every act is influenced and intense by the context in which they happened. They are meaningless without those places. Place consist of tangible things like landscape, human beings and animals. It also consist intangible things like character spirit and identity. These tangible and intangible things form the content of our experience.

There is no scale limit for place. As a family member my place is home, and as a citizen my place is Sri Lanka. It differs from situation to Situation because conceptualizing of place is done in various ways depending on our intentions, attitudes and experience.

"The boundaries enclose the form And the form becomes boundary: Seclusion towards the outside But openness towards inside. Makes Place."

Habraken (1983:7)

There is a significant pattern in movement through spaces. When boundaries crossed there is a selection towards one direction while there is openness towards the other direction. They suggest the way of behavior. Some places encourage movements while some eliminates it to facilitate withdrawal. This movement pattern gives order and it makes the place. Each and very aspects like these are to be considered when an identical place has to be created. When function of a place changes the physical setting of that place must change accordingly. As this adjusts the movement pattern of people the character and the meaning of that particular place also changes.

"In general a place is given as such a character or "atmosphere". A place is therefore a qualitative, "total" phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without loosing its concrete nature out of sight".

Schulz (1980:8)

8

Places are directly experience phenomena of a live world and hence are full with meanings, with real objects, and with ongoing activities. They are important sources of individual and communal identity. An elimination of fundamental aspects like above will make a place loose its identity.

When reuse takes position the new functions take place, space is changed to suit the new function and this altogether has a great effect on the actions and the meaning people get through it. In most initial way it can be said that these aspects are interwoven and leading from one to another finally towards achieving a "New sense of place"

1.2. "SENSE" OF PLACE & IDENTITY OF PLACE

The ability to recognize different places and different identities of places is the meager meaning of the sense of place. But in reality it is more complex and profound thing than just differentiating different places or localities as it plays as a key factor for his survival in the world. People make attachment to places that are critical to their well being or distress. An individual's sense of place is both a biological response to the surrounding physical environments and cultural creations, as geographer Yi-Fu Tuan has argued. This covers an individuals awareness to an extend from identifying different places, responding to them to permitting orientation.



Plate 1.4: Sense of place. The build environment is a one aspect, trough which we feel sense of identity.

This identity and meaning of a space is to be achieved in the place making process. N.J. Habraken states that Architecture is both the product and process of human habitation and attempts are made to develop mechanisms of designing spaces which embedded these properties.

According to lan Nairn,

"It seems a commonplace that almost everyone is born with the need for identification with his surroundings and a relationship to them – with the need to in a recognizable place. So sense of place is not a fine art extra, it is something we cannot afford to do without."

Rapport states that there are two distinguish manifestations of identity. They are private identity and public identity. In both cases the expectation was to recognize by others. Therefore the distinct signs of identity can be experienced in our societies or culture. The buildings which have ability to cope with this double aspect of identity will have good sense of place.

When re-use concepts are adapting these problems of achieving identity should give initial consideration. Therefore it is important to understand how an identity can be given to a place. As mentioned above identity is the preliminary factor which governs the "sense" of a particular place and which makes it a place. Thus by recognizing constituent of "identity" and by responding to them places with distinguish characters can be produced. As this concept of place has a direct relationship to architecture its formation should be understood to apply it in contemporary practice.

1.3. CONSTITUANTS OF IDENTITY OF "PLACE"

"Places are not abstractions or concepts, but are directly experience phenomena of a live world and hence are full with meanings, with real objects, and with ongoing activities. They are important sources of individual and communal identity, and are often profound enters of human existence to which people have deep emotions and physiological ties. Indeed our relationships with places are just as necessary, varied and sometimes perhaps just as unpleasant, as our relationships with other people."

Relph (1976:14)

10

We consider places in relation to their content which have a vast diversity. All the places consists three components. Those are physical setting, activity and meaning. Though they are bound together and have transactions they can be identify separately. Their properties of place like spirit, character and identified are depending on the intensity it expresses through above aspects.

The model offered by Canter is a useful tool to understand these three characteristics of place. According to Canter, place is perceive as an overlapping of physical, social and psychological systems. The manner in which these components are interrelated creates differentiated place. The diagrammatic way of presenting this is shown below.

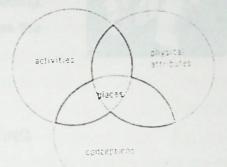


Fig 1.1: Constituents of place

These constituents play a major role in identifying places and differentiating them. When different functions are introduced the acts of people change to suit the new situation. The meaning they perceive will be also affected. If the spaces adjust accordingly to new function this mechanism will be more successful, making it a "place" with a new identity enabling "sense of place".

From the everyday experience denotes that different functions need different environments to take place in meaningful and satisfactory way. Similar functions also demand different places as they happened in different ways. In re-utilization of buildings the changes in these constituents are permitted, and as a result the identity of that place also shifts. It is advisable to discuss the "sense of place" along with the adjustments done in the constituents for better understanding.

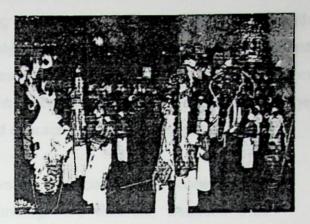


Plate 1.5: Physical setting, activity and meaning as the constituents of place.

1.4. PHYSICAL SETTING

This physical setting means the position of it which establishes the suitability for a purpose it is to perform. It can be man made or natural and can be expressed through landscape, building and through other objects. This can be identified as the primary or the basic constituent of the "place". It provides the context for meaning and activity which have psychological, social and cultural values.

"A vivid and integrated physical setting, capable of producing a sharp image, plays a social role as well."

Lynch (1982:4)

A physically entrapped space acts as a territorial demarcation. Territory marks continuity or discontinuity and inside outside relationships in spaces. A good environment image gives an emotional security and stability to its possessor thus generating man's inherent need for sense of belongingness. This enables a strong relationship between him and outside world.

People perceive place in terms of physical setting. Therefore the identity of the place is mainly depends on physical setting and let the beholder experience it through its physical appearance.

That means every human being experiences identity of place either selfconsciously or unselfconsciously. Identity is not a constant but adjust accordingly to change in attitudes and the existing setting. Therefore it can be said that physical setting contributes to experiences. Thus facilitates the creation of different identities and characters of physical setting.

"When two physical windows are identical the relationships which they have to their surroundings are different, because their surroundings are different."

Alexander (1979:150)

Although every other thing is constant a slight change in surrounding will make an every thing change. As the basic element of place it should have defined by physical components. Through the adjustments of physical settings a distinguish environment can be established. The hierarchical order of physical setting can be an inspiration to differentiated spaces and gives a distinctive character to such places.

It is the most comprehensive property of the place and denotes the general atmosphere of physical setting. Linear arrangement, radial arrangements are some of the spatial arrangement of physical setting. There are elements which defines place. The way space defining elements were treated also contributes to the character. A distinguish different can be made to the settings of build entity through acquire adjustments of these elements. Horizontal and vertical planes, openings, view, light and shadow can be identity as these elements. These physical qualities give rise to symbolic qualities which develop the social contribution. This is a vital factor that should discuss when re-use take place. When buildings were re-used adjustment of these settings take place occurs. Therefore this change of character must be understood well to achieve a "New sense of place" is needed.

1.4.1. QUANTITATIVE DIMENSIONS

1.4.1.1. HORIZONTAL SPACE DEFINING ELEMENTS

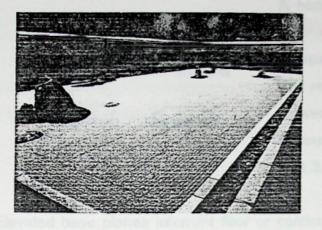
"Architectural space is born from the relationship between objects or boundaries and from planes which do not themselves have the character of object, but which defines limit."

Miess, (1986:101)

Limits were established through boundaries, which consist of uninterrupted continuous surfaces or cues which the observer identify as a limit. There are elements which plays an identical role in this as vertical and horizontal planes. They transform and establish edges and corners which form the major cues for the orientation. In any space, intersections of planes act as a major cues of understanding the space as they form corners and edges. The intensity of present of these planes will influence the perception of space. The elimination of these planes is possible as the basic or essential skeleton remains and defines inside and outside of architectural entity through edges and boundaries.

Ching, (1979:115) discussed about defining space in accordance with vertical and horizontal elements. As he points out there are four horizontal elements defining space.

1) The base plane



A simple field of space may be defined by a horizontal plane lying as a figure on a contrasting background. There are several ways in which this field can be visually reinforced.

Plate 1.6: Base plane

----- 15

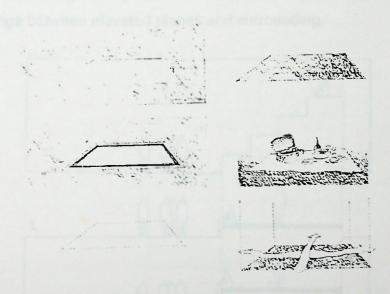
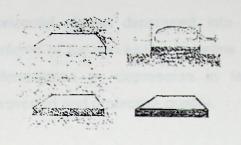


Fig 1.2: Base plane. The differentiated textural patterns demarcates the plane

The change of color or texture facilitates seeing this plane as a separate figure and when edge is strongly defined the field becomes more contrasting. Though continuity is possible across the defined field it is a territorial demarcation or a boundary to that space separating it from its context. These demarcations of fields have a strong effect on movement pattern of people defining paths of movement and places to rest.

2) The base plane elevated



A horizontal plane elevated above the ground plane establishes vertical surfaces along its edges that reinforce the visual separation between its field and the surrounding ground. Fig1.3: Elevated base plane

Elevated base planes interrupt flow or continuity trough the space and by changing the edge condition can create a distinct figure which is significant from its surrounding. The spatial and visual continuity can adjust through the level change between elevated planes and surrounding.

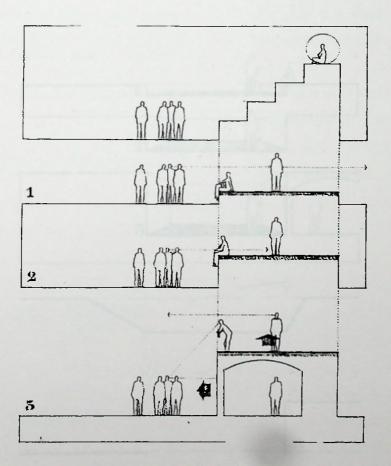
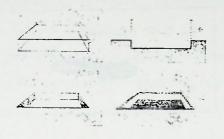


Fig 1.4: The degree of spatial and visual continuity between elevated planes And it's surrounding

16

3) The base plane depressed

Horizontal planes depressed into the ground plane utilize the vertical surfaces of the depression to define a volume of space. In depressed plane, differentiation or depression in level change defines the space with introverted and protective quality.



The space can be further defined by making the depressed area contrasting in texture, color, geometry and orientation.

17

Fig 1.5: Depressed base plane

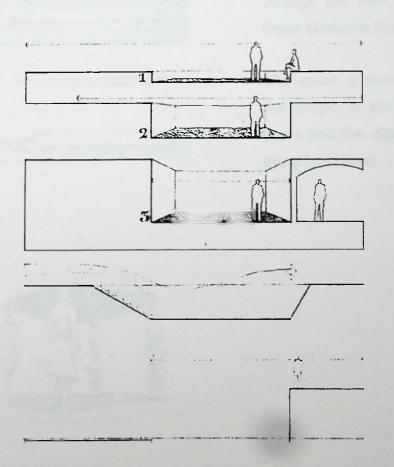
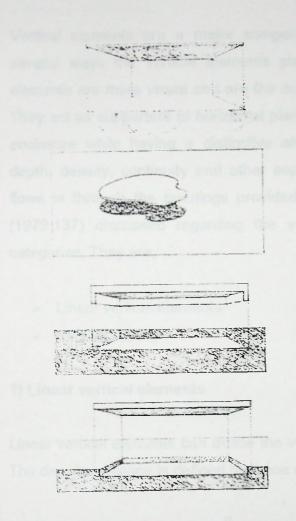


Fig 1.6: Degree of spatial and visual continuity between depressed base plane and its surrounding

4) The overhead plane



The horizontal plane located overhead defines a volume of space between itself and ground plane. The overhead plane defines an enclosed space between itself and ground. The volume can be distinctly separated by an overhead plane. The overhead plane can be supported without disturbing the flow of movement through the field when use linear elements like columns.

The space is determined by the shape of the overhead plane and the distance from the ground level.



Fig 1.7: Over head plane Source: Architecture form, space and order

1.4.1.2. VERTICAL SPACE DEFINING ELEMENTS

Vertical elements are a major component in defining space. There are several ways the vertical elements play to establish the space. These elements are more visual and are the major contributors for defining space. They act as supporters to horizontal planes and establish a strong sense of enclosure while having a distinctive affect on other spatial qualities like depth, density, continuity and other aspects as air, light and noise which flows in through the openings provided in the vertical elements. Ching, (1979:137) discussed regarding the vertical elements under two main categories. They are,

- Linear vertical elements
- Vertical planes

1) Linear vertical elements

Linear vertical elements can define the vertical edges of a volume of space. The density of space is defined by these elements.

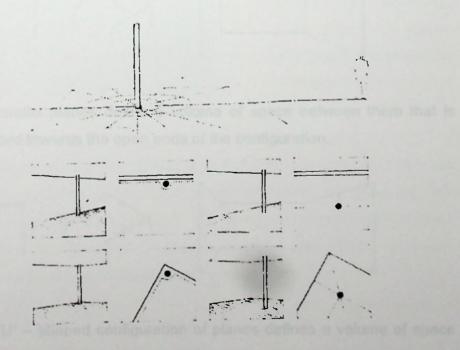


Fig 1.8: Linear vertical elements

19

Chapter one: Space, place and sense of place

According to the composition of the vertical planes there are various types of articulation of space.



Fig 1.9: A vertical plane will articulate the space that it fronts.

Fig 1.10: An "L"- shaped configuration of planes generates a field of space from its corner outward along a diagonal.

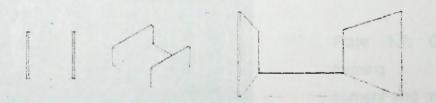


Fig 1.11: Parallel planes define a volume of space between them that is axially oriented towards the open ends of the configuration.

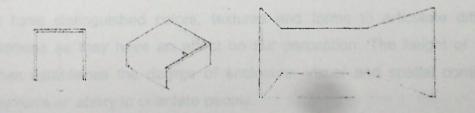


Fig1.12: A "U" – shaped configuration of planes defines a volume of space that is oriented toward the open end of the configuration.

20

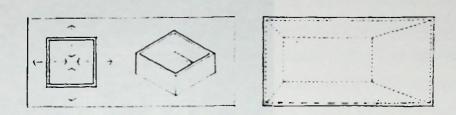


Fig 1.13: Four planes enclose an introverted space, and articulate the field of space around the enclosure.

Columns are the vertical linear elements that can be identified within a space. It can articulate zones, surface or corners within a space thus enabling visual and spatial continuity. The columns can make a space dense by diminishing the scale and defining zones within it.

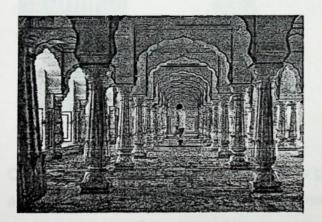
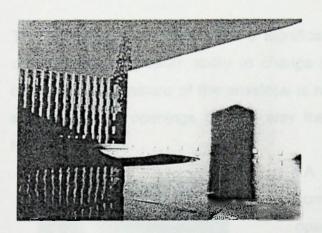


Plate 1.7: Columns forming edges, corners and make the space dense.

Single vertical planes can define edges to separate volumes and the faces can have distinguished colors, textures and forms to articulate different conditions as they have an affect on our perception. The height of these planes establishes the degree of enclosure, visual and spatial continuity. They have an ability to orientate people.



Plate 1.8: Single vertical plane



By introducing openings to corner spaces the definition of the field can be varied. The "L" shape planes are flexible elements and by varying it can establish a rich variety of spaces.

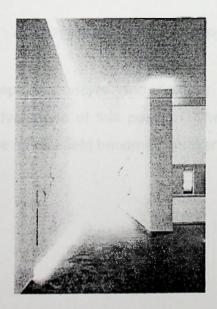
Plate 1.9: "L" shape planes

Comparing to these parallel vertical planes gives a strong directional quality along its axis and defines the space between them. But the directional quality can modulate by introducing openings to one or both of the planes. It has an extroverted nature and the spatial field can adjust by setting the horizontal fields. The "U" shape configuration of planes has an inward focus and outward orientation. The open end of the configuration is the main point which permits the visual and spatial continuity to other spaces. In the spatial field the open end plays a vital role establishing the primary face of the field and by the adjustment done to this field will define the field or level of visual and spatial continuity.

The most common and strongest spatial definition is the completely enclosed field. The space has an introverted quality and without openings the visual or spatial continuity with other spaces are unachievable. The openings in an enclosed field have a greater affect on orientation and movement and other spatial qualities like light and view. The size, number and location of the openings are the defining factors for above aspects. The primary face of the field can be dominated by differentiating its size, form, surface or openings within it.

1.4.1.3. OPENINGS

The openings in a space have a significant impact on our perception of space. It has a greater ability to change its closure while facilitating the orientation. The nature of the envelope is not only influenced by size, form and quantity of openings but the way they positioned in the vertical or horizontal planes.



A door or a window is the most common way of representing openings in walls as they act as a route of passing through or as element permitting view or light. They can erode the spatial field. The greater the size and quantity becomes the sense of enclosure weakened and begin to merge with adjacent spaces thus permitting visual and spatial continuity.

Plate 1.10: Openings in planes. Openings between ceiling and wall planes weaken the enclosed quality of the space and merge the space with the adjacent spaces.

	23
Chapter one: Space, place and sense of place	

OPENINGS WITHIN PLANES

These openings are stable and by changing the shape or orientation can make contrasting with the enclosing plane. When the size of the opening increases it becomes a positive element and enhances visual and spatial continuity.



Fig 1.14: Openings within planes located wholly within a wall or ceiling plane and be surrounded on all sides by the surface of plane

OPENINGS AT CORNERS

Capturing views and lighting up the dark corners are the locational advantages of this position. The corner openings eliminate the edges and the spatial field becomes weaker.

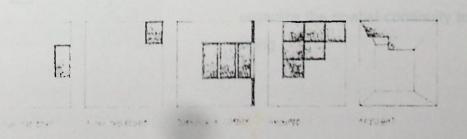


Fig 1.15: Openings at corners can be located along one edge or at a corner of a wall or ceiling plane

OPENINGS BETWEEN PLANES

These openings can span in-between vertical and horizontal planes. It can grow and become a positive element of the space. For the perception of space the illumination of the surfaces and objects within it is needed. The sun is a rich source of illumination of architectural space.

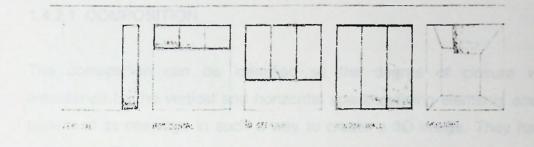


Fig 1.16: Openings between planes can visually span vertically between floor and ceiling planes, or horizontally between wall planes.

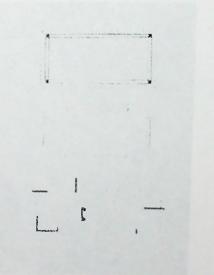


Fig 1.17: Openings within planes. These diagrams show Frank Lloyd Wright's new spatial conception: first adjusting the corners, he continues by distorting the initial spatial geometry, displacing the turning segments of the geometric envelope by 90 degrees in order to organize the spatial continuity to his liking.

1.4.2. QUALITATIVE DIMENSIONS

The vertical and horizontal planes as quantitative dimensions help to perceive the space as an entity. Though it gets its form through these quantitative dimensions, it gets its properties like closure, light and view through the qualitative dimensions.

1.4.2.1. COMPOSITION

The composition can be identified as the degree of closure which established by the vertical and horizontal space defining elements and the pattern of its openings in such a way to create a 3D image. They have a significant effect of our perception and orientation of the space.

1) On space



Base plane is the initial component which creates this space. The differentiations in base planes produce different types on space and give impressions in a wide range.

Plate 11: On space

2) Under space

The overhead plane helps to establish this plane. Variations in overhead plane give rise to different kinds of under space. The impression it gives will be influenced by the gap in-between the base plane and overhead plane.



Plate 1.12: Under space. The form of the shape determined by the shape of overhead plane

3) Side space



Single vertical plane and the base plane forms the basic constituents of the base plane to create this space. The adjustments of the se basic constituents will create side spaces which can be experienced in difference ways.

Plate 1.13: Side space

4) Between space

Two vertical planes with base plane create this plane. The vertical planes perpendicular to base plane and parallel to each other defines a space in between the vertical planes. It is axially oriented towards the open ends of its configuration.



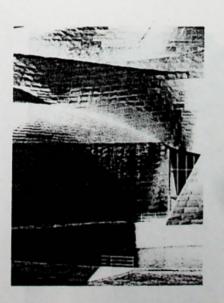
According to the heights and widths of the vertical and horizontal planes, the between space can be experienced in different ways.

Plate1.14: Between space. The tight winding alley ways in Stockholm.

5) Around space



6) In space



A vertical linear element articulate with the base plane and defines the space around the vertical element as an around space.

Plate 1.15: Around space. The end of Kufurstendamm Street in Berlin.

Four vertical spaces with a base plane define this space. The vertical planes are positioning at the edge of the base plane and provide the enclosure within that space.

28

Plate 1.16: In space

1.4.2.2. LIGHT AND SHADE

The illumination of surface and forms is identified as light. As Le Corbusier states, architecture is the mastery, correct and magnificent play of masses brought together in light. Our eyes are made to see forms in light; light and shade reveal these forms. Quantity of light has an ability of changing its atmosphere and has a strong influence on qualities of space.

There are two different light sources as day light and artificial light. In a tropical context as this the day light is the richest source of lighting and can make the building entity a combination of delightful, comfortable sunlight spaces. Light sources make surfaces and objects more enlivens by articulating colors and texture of them. The perception of space differs in different times of the day and in different seasons. And the space is entirely new space when it lit artificially at night. The location of the light source gives a different perception to the same geometric space.

When penetrate from one room to other in the presence of different atmospheres we percept it in relation to other spaces. This increases the spatial qualities of an architectural space. The changers in light level permits easier transition from outside to inside as well as movement within the rooms and contribute to define spatial geometry and spatial limits of a space.

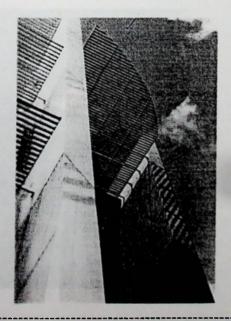


Plate 1.17: Play of light. Here the play of light plays a major role giving varying spatial experience throughout the day accordingly to the sun path.

29

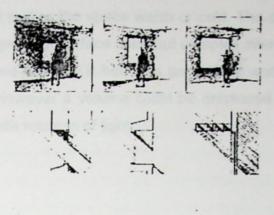
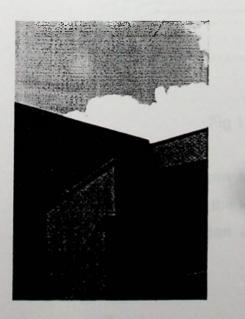


Fig 1.17: Light effect on design Source: Architecture form, space and order

1.4.2.3. COLOR

Humans can perceive this property only from the vision. It encompasses a power and capacity to create volumes. Color gives a form a rhythm or creates an emphasis on form. There are three primary colors red, yellow and blue. The rich variation of colors are a compose mixture of these primary colors.



The green and grey colors used in hospitals express calm and cold environment. In contrary bright colors are warm, and this warm of the colors in room effects a great deal making the space comfortable or uncomfortable. The color of light makes the space warm or cold.

30

Plate 1.18: Play of color

The color of light makes the space warm or cold. The color of light space is not entirely a property of surface color but complex interaction between color of light source and the way it bounces on surface and the amount of light reflects from it. However a volume could be enhanced by using a series of colors together with sources of light.

1.4.2.4. VIEW

Another quality of space which defines by openings is its orientation. The view as a qualitative attribute gives a strong directional quality towards the internal spaces and outward spaces. This visual relationship between rooms and their surroundings are permitted through the windows and sky light openings. The size and position of these openings will determine the view seen through them.

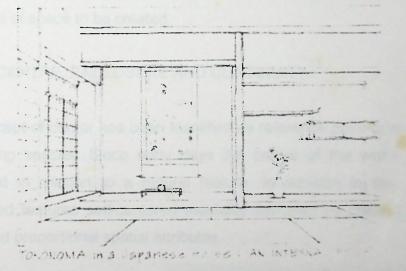


Fig 1.18: Visual links enable trough the openings

The view of the scenery can act as a backdrop to the activities within it. Through the positioning of the window the orientation within a room can be also influenced and this can be used to give orientation towards target spaces.

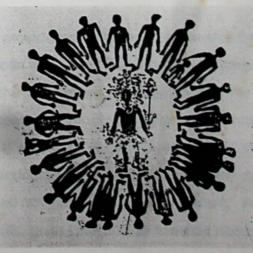
1.4.3. EMOTIONAL ATTRIBUTES OF SPACE

To feel or sense the space with its true manifestation one has to grasp the meaning of its originality and present it in terms of qualitative and quantitative dimension of space. Quantitative dimensions expand or contract the quality of space and also including its governing factors of accessibility and continuity. In the same manner qualitative attributes uplift the standards of space for a long lasting human habitation and existence.

This definition of space (the quantitative attribute) and standardization (the qualitative attribute) has to be sensed. This sensibility has to be engraved to strengthen the togetherness of quality and quantity of space. This enwrapped the ability to sense or emotional attributes involve within spaces. Alternatively this mixture of quantitative and qualitative attributes has to be mixed with the emotional attributes for the ultimate achievement of overall fulfillment of space to be created.

1.4.3.1. CENTRE, ENCLOSURE AND CONTINUITY

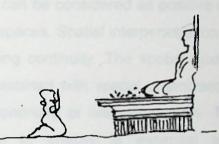
The concept of center has been identified as reference point or major space of defining spaces. Since early days the center of the world has been discussed in relation to a natural feature. In addition to that elemental centralized features self-centered mentality can also be created with wellcomposed proportional spatial attributes.



32

Plate 19: Centre

In this case the surrounding concaveness is needed to establish the essence of personal dominance. In that kind of a spatial volume one would tend to observe surrounding compared to self, whereas the self centered dominance increases. This centralization could be supported with the atmosphere which has enclosing character. Enclosure can also be sensed in terms of physiological dimensions. Since from the moment emerge at the mother's womb; the physical enclosure is fully facilitated in terms of safety and security.



33

Physiological enclosure is mostly attached to the belief and faith of an individual. Though there are no walls and boundaries, with only the floor space physiological enclosure occurs, without physical demarcations. Therefore the need of the physical enclosure mostly arises with the social structure and with the involvement of legal background.

Physical enclosure of the space provide advantageous gathering for the by passers as the flow of spaces can be seen. But the total enclosure, the complete enclosure eliminates the movement or flow trough the spaces while separating a number of spaces without knowing what's happening within each and every unit. As a whole to achieve unity within variety a continuing quality must be embedded in enclosure. There are specified areas that are properly maintained with this quality of continuity. Also this quality of continuity helps individuals, giving orientation towards necessity.

Fig 1.19: Physiological enclosure

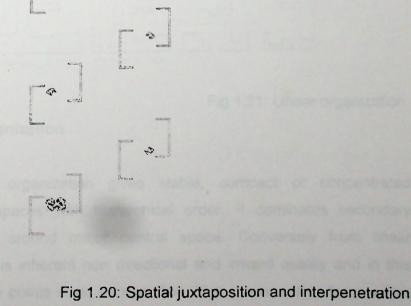
1.4.4. SPATIAL ORGANIZATION, JUXTAPOSITSION AND INTERPENATRATION

"The elements of spatial definition and the openings characterize the types of spatial relationships, indeed the degree to which the space remains autonomous or is more or less linked to other spaces."

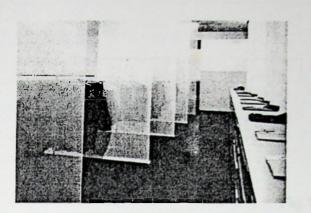
Miess (1986:109)

The spatial interpenetration can be considered as positive approach relating to the orientation within the spaces. Spatial interpenetration permits link from one space to other facilitating continuity. The spatial qualities like planes, openings, light and view combined with spatial organization plays a major role in permitting spatial continuity or interpenetration. The assembly of rooms or grouping series of spaces is essential to maintain this interpenetration or continuity.

83



Chapter one: Space, place and sense of place



The different spatial organizations are outcome of requirements for various kinds of spaces such as specific functions, privacy needs, accessibility and exposure to light, ventilation and view.

Plate 1.20: The spaces are in Juxtaposition

Linear organization

It is the most elementary or frequent way of grouping spaces. A linear distribution creates series of spaces as in streets and corridor. This kind of organization expresses a strong directional quality and signifies the movement. The functionally important spaces can make articulate by their size, form and location. These forms are flexible and can be related to the other forms in its context.

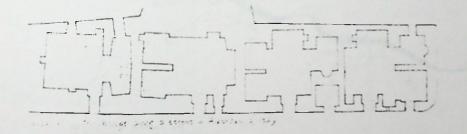


Fig 1.21: Linear organization

35

Centralized organization

The centralized organization gives stable, compact or concentrated composition of spaces with hierarchical order. It dominates secondary spaces grouped around major central space. Conversely from linear organization this is inherent non directional and inward quality and in this organization entry points must be specified. The movement patterns within these spaces are radial but terminate in the central area.

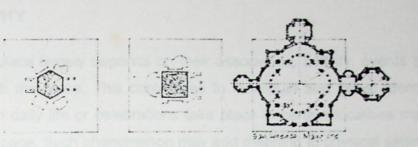


Fig 1.22: Centralized organization

Radial organization

It derives from combination between centrality and linearity. It consist several series of spaces radiate from centralized space. It has an extroverted quality and can be adjusted accordingly to functional necessities. In this kind of organization there are problems like achieving hierarchy of spaces and orientation.



Fig 1.23: Radial organization

1.5. ACTIVITY

Identity of a place largely depends on their association, activity, events and familiarity with the place. This contributes to individual and group identity. The events in daily life or celebrations take place in certain localities make place out of space. Such phenomenon may add meaning to physical setting.

The place can emphasize different characters in the different times of the day or different seasons of the year. Even activities and experience in one place by two people will be different. Even they are in the same place their intentions made them perceive the space in two differential ways.



Plate 1.21: Activity and place. People involve in two different activities at same time at same place though experiencing it in different ways.

Each individual has his own mix of feelings, attitudes which relate to his image of that place and his activities are based on that. When people personalize the place, they can respond to it through conscious and unconscious activities. The significant of these constituent is vital as the place is a combined affect of them. Without these three constituents a place cannot be in existence.

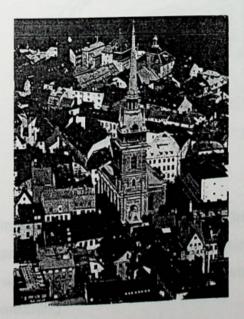
1.6. MEANING

The meaning is another aspect of perceiving place. People response to the place through the meaning they perceive from them.

"The meaning of place may be rooted in the physical setting and objects and activities, but they are not property of them- rather they are a property of human intentions and experiences."

Ralph, (1976: 47)

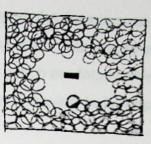
The other two constituents of the place can be easily understood than this. It is a result of transactions between physical setting and activity and the essence of that total experience. It can be state as understanding between people and place. According to Rapoport, people respond to different environmental qualities before they analyze it in more specific terms. This gives a meaning into place, as identifying them as beautiful, lonely, weary or ugly, as it is an expression of meaning. Material objects are the constituent which sets the context for more specific image and in built environments effective image plays a major role.



People identify some places as nice because of this meaning they convey to them. The life among the old stones, cobbled and gable roofs in streets Stockholm creates a more human and thoroughly livable urban environment. Here the place has environmental given а dood image to people.

Plate 1.22: Meaning of place

Chapter one: Space, place and sense of place



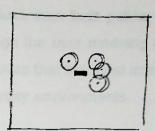


Fig 1.24: Meaning of place. Clearing in a forest and trees on plane used to indicate human presence.

The meaning people grasp can be shown using an environmental example. There is an unmentioned meaning in presence of trees and their absent. The contrast between humanized and non humanized spaces established this differential perception of meaning.



Fig 1.25: House with traditional elements. Tough new materials were used the total image is traditional to an extreme degree, thus giving a good environmental image.

In low cost housing projects in Britain, people prefer to buy lower standard private housing than public housing. The reason was the removal of some significant stylistic elements, which helps to communicate appropriate meaning. In Southport the housing scheme cost less than built public housing thus conveying good meaning to people. Tough the user meaning and designer meaning which are totally difference it proves that the most important aspect is the user meaning as it is a part of everyday environments.

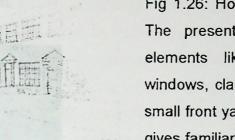


Fig 1.26: Housing in Southport. The present of most striking elements like small paneled windows, classical doorway and small front yards with low fences gives familiar meaning.

The importance of meaning particularly the user meaning is neglected in contemporary practice. Designers react to environment in different way than the users. The recent example which shows the mismatch of those two reactions is the Hertzberger's old people's home in Amsterdam. The white frames and the black infill resemble to crosses and coffins have a highly negative meaning. Tough young people and the architects here do not perceive the negative aspect of it the particular user group has.



Fig 1.27: Portion of old people's home in Hertzberger. It gives a highly negative meaning to its user group, the old people.

The "Meaning" also has an importance in relation to function. Through the meaning you can understand how the environment works. The meaning has a strong relationship with function and forms the most important aspect of the function. The build entities are a possible way of conveying the self identity.

It is an essential fact needs to perform activities as it gives rise to emotional security. When people identify place through meaning the acts they take are appropriate to the situation. It is essential to generate activities within a place. It is an essential factor to well organize social communication. Meaning is more difficult thing to grasp than the other two constituents and it is not a property of them.



Plate 1.23: Meaning deriving from function. They act appropriate to the situation when they grasp this meaning.

How these meanings derived and how objects work best should be understood in any building project because of this vitality of meaning. It is more difficult task in re-use buildings as the adjustment can be done to give a different meaning is very little.

Therefore encoderal contents also be engreed to a spatial volume as an expression, which encodered meaning to the space. This facilitating mans basic peers to encoderate and identify his surpounding. The this meaning of deeting, and "energies and identify his surpounding. The this meaning of deeting," and "energies and identify his surpounding. The this meaning of deeting," and "energies are been tennework to experience the "sense" which becomes to here are present.

1.7. CONCLUDING REMARKS

The scope of this study is to identify re-use space as spatiality which contributes to achieve sense of place. But its existence in built fabric and the negative use of it eliminate the sense of place and their meaning has been evaporated. To find out a solution to re awake the re-use concept to achieve sense of place is to be discussed in this chapter. So the first chapter is devoted to forward the background information for the achievement of the focus of scope. Chapter elaborates the differential concepts of space and place simply because the need of emphasizing relationship of them to architectural space. Then their constituents (physiological, psychological and emotional attributes) have being discussed thus emphasizing its contribution towards the sense of place.

Therefore in the first paragraph space, architectural space, place and sense of place have been described. Then focus project onward to establish the constituents of place. The physical attribute consists of the three dimensional organization which denotes by the space defining elements creates the space. The slightest change in space defining elements posses a characteristic change of the spatial organization. With the involvement of activities and emotions the specific "Spatial organizations" or "Spaces" becomes" Places".

Therefore emotional attributes also be engraved to a spatial volume as an expression, which embedded meaning to the space. Thus facilitating man's basic need to experience and identify his surrounding. The true meaning of "dwelling" and "orientation" is approached through these aspects. This identification forms the basic framework to experience the "sense" which belongs to that particular place.

CHAPTER TWO: HOUSE AS A PLACE

When significant meanings of places are considered, the most important place, which has the distinct capacity to transmit meanings is our home. The essence of it is derived from the intense attachment that we have got with it, as a place. According to Bachelerd, our home is our corner of our world....it is our first universe, a real cosmos in every sense of the world. Home is a universal place, despite of religious and cultural barriers. Home has an exaggerate power and capacity to convey meaning to the people who inhabit or dwell its space. It is the place where we feel sense of place in its highest form.

2.1. CONCEPT OF THE "HOUSE"

The formation of the house was a slow gradual process. The change of people's life style from hunter to farmer which happens 10,000 years ago, was an important step taken to activate this formation. This was the beginning of settlements and with this the caves became isolated and abandoned. The houses or the settlements were a new creation, a shelter need derived from the idea of a cave. It was a translation of cave, which is a minimum shelter need and the only available example. Then observation of minimum structure which needs to "make the space" and translate them to elements which conveys a meaning to them was done. Therefore the shape was derived from the important events of the daily life was experienced and which conveys a meaning to them.

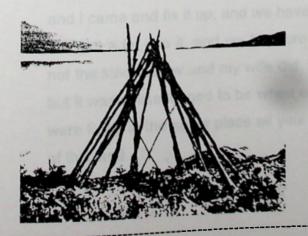


Plate 2.1: Evolution of house. House is the primary place, through which people express meaning.

Chapter two: House as a place

According to Schulz the house is the central place for human existence, the place where the child learns to understand his being in the world and the place from which man departs and to which he returns to. It is a place where any individual find easy to live in and the most meaningful place for him, in the world.

"Home is the foundation of our identity as individuals and as members of a community, the dwelling place of being."

Relph (1976:39)

People are attached to their "dwelling" which gives their life an orientation though departures may happen. It is not just a space you chose to live in, but the irreplaceable centre representing of your being in the world. A "house", is the place where you dwell and have an ability to represent you in the community. It is the smallest entity in the world and the one which you have control on. Though it is rather philosophical it is the simple truth in reality.

As Robert Coles quote Farmer's statement,

"It's just not that much of a home here, a place that you have and your kin always have had and your children and theirs will have, until the end of time when god calls us all to account. This here place -its good house mind you-but it's just the place I got. A neighbor of my daddy s had it and he left it, and my daddy heard and I came and fix it up, and we have it for nothing. We work hard and put a lot into it, and we treasure it, but it never was a home, not the kind I knew and my wife did. We came back to the hollow but it wasn't like it used to be when we were kids and you felt you were living in the same place all your ancestors did. We were part of this land..."



Home is the most primary place which humans have attachment when comparing to the other places which have limited significance. It has become square or centre representing you, and which all the significant events your life embedded in-to. Plate 2.2: House as a central place of humans

2.2. SPACES WITHIN A "HOUSE"

"In any building – house, office, public building, summer cottage – people need a gradient of settings, which have different degrees of intimacy."

Alexander, (1977:610)

House is the place which enables different acts in one's daily life. These permits different intimate activities of humans since the house communicates his existence with the world. Then the need to be with neighbors, relations arises, gradually demanding furthest privacy to be in one's personal world. Thus it could be defined in four basic spatial entities. According to Christopher Alexander the hierarchy describes as,

"Layout the spaces of a building so that they create a sequence which begins with the entrance and the most public parts of the building, then leads into the slightly more private areas and finally to the most private domains"

Alexander (1977: 613)

Therefore, similarly the spaces within a house could also be categorized as public, semi public, semi private and private domains respectively.

- Public
- Semi public
- Semi private
- Private

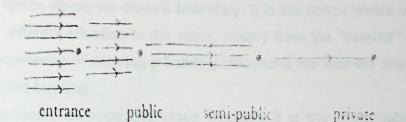


Fig 2.1: Intimacy gradient through the house

Thus one could categorize the various spaces within the house into these main domains.

- Public Entrance/ verandah/ car porch
- Semi public Living/ dinning room
- Semi private Family room /family dining/ pantry/ kitchen
- Private Master bedroom/ other bedrooms

The bedroom can be considered as the most intimate while the family rooms and study rooms are in a below level. Dining areas and living seems to be less public since the front porch and entrance forms the most public areas. When such a gradient exists within a house, people could encounter a different level of meaning, according to its Position on the gradient. It could be said that every building, every part of the building needs a definite gradient from "front" to "back" forming most formal spaces at the front and the most intimate spaces at the back in the setting. All rooms having a similar degree of intimacy within the house would eliminate subtlety of social interaction.

----- 46

2.2.1. PUBLIC SPACES

Entrance/ car porch

"Entering a building a room within a building, or a defined field of exterior space, involves the act of penetrating a vertical plane that distinguishes one space from another and separates "here" from "there" Ching (1979:256)

Entrance is the space where we cross a boundary. It is the space where we move from one different situation to the other, mainly from the "exterior" to "interior". The experience of entering a building influences the way we orient ourselves inside the building.

The entrance becomes an important place because it is the most public place in the house. When people enter the house they naturally want to shift from the busy street environment, and settle down completely in-to a mode of behavior which appropriates to a house. Houses with a graceful transition between the street and the inside are considered more peaceful than opening directly to the street. Thus an entrance, which is a meaningful transitional space, should become a "place" and should have its own identity. In this context it is useful to discuss how the entrance can be designed in such a way so that it becomes a "place".

a) Physical setting

"Entering a building, room within a building, or a defined field of exterior space, involves the act of penetrating a vertical plane that distinguishes one space from another, and separates "here" from "there." Ching (1979:256)

Generally the entrance could be identified as an element situated where urban space which in case is a street that flows into the premises. If that entrance is set back there is a well established transitional space between the entrance and the street.

This penetration through vertical plane or entering can be signified in many subtle ways according to the function the building serves. Even the scale of each entrance could differ according to user categories, symbolizing social hierarchy. Level differences, surface treatments, views, light and shade can play an initial role in gaining desired visual and spatial continuity while permitting to form an identity. Furthermore, the use of appropriate contrasting colors and textures on the vertical and horizontal planes will facilitate this.

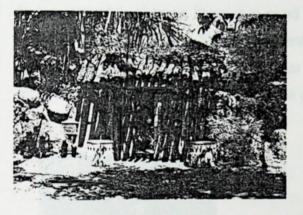
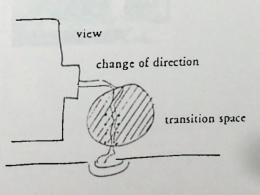


Plate 2.3: The physical setting of an entrance.

The physical setting of the entrance shifts the threshold further away. The territorial demarcation was enhanced by the entrance which has a fortified character.

b) Activity



Entering is the central activity of the entrance. The entrance is the place where the dweller transforms from the outside world into the private world. It is also the place where one meets his visitors. By crossing this transitional space one feels "coming home".

Fig 2.2: Entrance transition

48

Chapter two: House as a place

c) Meaning

Since the entrance denotes the distinct between inside and outside it means a protective threshold from the outside. Thus and entrance to a house defines a territory of familiarity and safety away from and unknown world. Further its meaning should be related to the context in terms of a variation from the already existing context. It could emphasize in terms of color, texture and other intimate physical attributions to give an identity.

In the stressful urbanity, there is a need for a protective threshold signifying the mood of the interior. Though the entrance to an urban house meant to establish continuity to the inside familiar world, it should further provide the optimum sense of withdrawal as a place of change from the macro context.

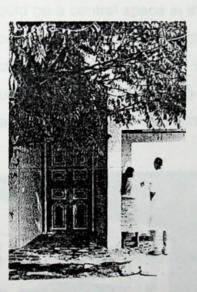


Plate 2.4: An entrance to a house. A good transitional space have been created thus the entry is abrupt from street to house.

2.2.2. SEMI PUBLIC SPACES

· Living room/ Dining room

a) Physical setting

The living rooms and dining rooms accordingly should be located in a way that it is easily accessible from the entrance and the act of entering should comfortably continue from entrance into the living room. The living room could ideally be defined by extending boundaries like objects, furniture towards the dining area rather than solid walls enabling extensions vertically to other spaces in order to create large volumes for large gathering.

It could be opened into courtyards, gardens, verandahs and also could be connected either directly or indirectly to other spaces in the house. Thus it could be a central space in the house relating to other activities and to other spaces. It would be ideal if the lighting levels are adjustable to suit different activities such as relaxing, reading, dining or gathering of large crowds. Furniture should generally be arranged in order to facilitate the transformations. It could be zoned according to purposes it uses.

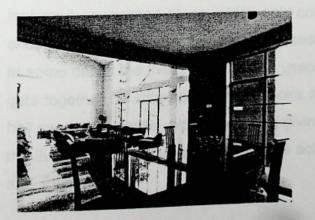


Plate 2.5: Living and dining areas.

The setting (large glazed windows, views, light levels ...etc.) helps to create a semi public space suite to the particular activity.

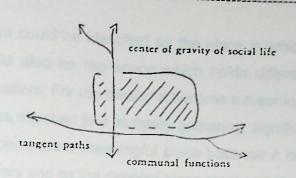


Fig 2.3: Physical setting of semi public spaces

b) Activity

"No social group – whether a family, a work group, or a school group – can survive without constant informal contacts among its members."

Alexander, (1977:618)

The living areas are the spaces where almost all activities take place such as eating, reading, relaxation, entertaining etc. Further it could be defined as the common public area in the house which people constantly pass by. The degree to which these activities take place depends on the need of the dweller. Some living spaces are specifically meant for entertaining visitors, making it an isolated place, which only comes to life when entertaining. In another case the living room could be used for extended activities as dining. In some cases the living room is also used as the family room which family gets together for relaxation. In Sri Lanka the living room is a multipurpose hall used for funerals, weddings, alms giving's etc. Thus the main activity of the living room can be identified as the act of gathering of family members and other visitors.

The varying degrees of enclosure enable various activities to take place at different situations. This can be manipulated by the furniture arrangement, the surface and the furniture finishes, view, lighting levels and level differences etc.

c) Meaning

The living room could be identified as the place in which most of dwelling occurs. It could also be the space which holds different meaning to the visitors and dwellers. For the dweller it become a meaningful space because of the memories attached to it as family gathering, significant events etc. For the visitors it becomes a meaningful place because it is where they get to know the dwellers and as the deepest place most commonly they are invited. Thus to enhance the meaning it holds for large number of user categories, it should be designed with great care.

2.3.3. SEMI PRIVATE SPACES

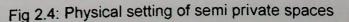
Family room/ family dining/ pantry/ kitchen

a) Physical setting

The semi private spaces of a house are very important as they are the spaces where family members get together. They should be at the physical heart of the setting, located as parts or extensions of formal living area, forming a private area for the family. These particular spaces should be located in a way that it is linked to all parts of the house, especially to private domains like bed rooms.

It is more suitable if the family rooms, dining room and pantry located nearby, as discussions of day today work can be done while the other related works like ironing, cooking going on. Although enclosure is important, in order to keep the family together, continuity is also important because it should flow into other spaces, thus making it a potential place for the family.





b) Activity

These rooms can be identified as spaces where there are contacts among the family members. It acts as a place for family gathering as they could have their own corners for themselves and involve in different activities.

c) Meaning

It is clear that these spaces must be comfortable to every family member. It is the place where family gets a feeling about private domain. It should be designed to emphasize identity.

2.3.4. PRIVATE SPACES

Bed rooms

a) Physical setting

Since the bedrooms need extreme privacy from the rest, the location of it should be in a way that it feels isolated. Subsequently the other rooms such as family room, dining area and pantry are commonly located in a space where it is easily accessible. Unlike living areas these rooms are totally separated by vertical planes. The lighting levels and colors should be selected to create a peaceful and calm environment.

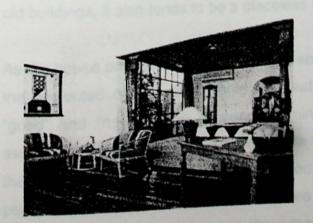


Plate2.6:Thebedroomarrangement.Theseparatebedclosurefacilitatesprivacy needs.

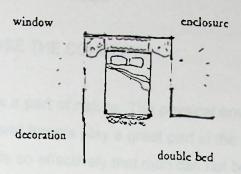


Fig 2.5: Physical setting of private spaces

b) Activity

Bedroom basically means relaxation from stressful life. It is where one sleeps, awakes and prepares to daily life. In common it is also used for several other purposes as reading and, studying as it forms a well isolated entity from the other spaces of the house.

c) Meaning

It is where the mood changes from sleeping to waking up. It is also identified as a territory which sustains a personal atmosphere of individuals. It is the only place within the house which expresses your individuality.

The physical setting, activity and the meaning altogether gives the combine feeling of spatial experience. Some build entities facilitates this while some does not. The elimination of these spatial experiences makes placeless gaps in the urban fabric. When there are neglected old buildings or malfunctioning old buildings, it also tends to be a placeless gap.

As the house engraves the most familiar spatial experience to human being the neglected old houses should be treated with great care to create a "good" and "new" image of people's mind. An understanding of above aspects is therefore a vital need to provide a good spaciousness throughout the building. This facilitates human need for orientation thus facilitating psychological comfort for them. This makes re-use buildings a success, thus facilitating the function embedded, there maintenance thus their existence.

2.4. RE-USE OF HOUSES

2.4.1. RE-USE THE CONCEPT

Humans are a part of nature. The physical environment including soil, rivers, mountains and forests play a great part in the man's history and is related to the man's life so effectively that man can not be separated from them.

Human has planned himself accordingly to the environment from the beginning of his existence and he defines a place to make his "Dwelling" in the world. In this aspect he made his own dwelling by crystallization of the existing environment so as to have lived in the world where he made responses to the environment as required. His role was to perceive the environment, be existed in the environment and think about the environment for the sake of future generation. With the establishment of these aspects the concept of reuse came to exist.

However, the basic principle adopted is the environment-concerning aspect. Because the environment is understood as an interwoven part of his life, which should be protected for the existence of man kind. Therefore the concept of reuse has its evolution from the beginning of human existence and developed with culture and their religion.

2.4.2. PHILOSOPHICAL APPROACH

Religious background of the re-use concept can be discussed with the teaching of the philosophy of Buddha. This philosophy gives a basic idea of how to spend a simple life style.

The re-use concept is included in "Vinaya Pitakaye" which is the main resource of information. There were established rules for bikkus to get the maximum use of their belongings and to re-use them.

ບ ແກລະ ພາຍາດ ເປຂາສາສາຫາ ຢາເພດາາ.

Fig 2.6: Vinaya Pitaka, Cullavaggapali, part-2

From these sections the concept of re-use has established as a strict rule. Lord Buddha has laid a set of rules and methods to use their robes till the very end of its useful life. The robe first use as a cloth, as a "siuru", and then it should be laid on the bed as an "Athirili" (bed sheet) then as a covering for the mattresses, then should be used as Bumuthurunu (Door mat), then as rajas harana kada (dirt remover) and finally as a plastering walls with mud. In this manner, the maximum use of the item is taken for different purposes.

The concept of re-use had been a main feature of the Buddhist philosophy, and it further explains how to get the best use of the Pattraya (receptacle).

> > Fig 2.7: Samanthapasadika or Vinayatthakatha, part-1

It says that the "pattraya" (receptacle) of a bikku (monk) must use until it gets five damages. Breaking this rule will be an offence for him because it was a strict rule that must be obeyed. This shows how the concept of reuse has been embedded in the philosophy of Lord Buddha. Thus the concept of "reuse" is not a new idea to the people of Asian countries since they have been influenced by these philosophies.

Further Buddha has said in "Singalowada Sutra" how this concept becomes impotence in the life of a layman. There the concept is expressed in economical problems of life. For layman Buddha has directed how to use their belonging with care. It has given some important considerations in the way of production and how to use this production carefully.

Therefore Asian people who had spent their life in this religious environment had a good base, enriched by good knowledge and sense of nature. This could lead them to get maximum use of their belonging and to reuse it as a habit although there were more than enough resources available. Therefore the concept of reuse had got its root from primitive time and developed into a philosophical thinking of religion and culture.

2.4.3. CULTURAL APPROACH

Every part of the earth where men have lived had created culture and their means of subsistence was something to share. Civilizations which have been built up have flourished and their thinking process is arisen from the basic ground of environment. It is a fact that it is this nature that provides resources. Therefore they lived in a manner devoted to nature and to protect it as a resource.

In this way our country expresses this concept of reuse. This concept was used without knowing as a concept but only with consciousness, as a day to day activity because our folk life or the culture had used this concept activated in their life styles for the sake of our future generation

These Sinhalese traditions are inseparable from the Buddhist conceptions of the world, and can be considered as an influence of it. In this way, the concept of reuse had been embedded in main character in most of the countries from the past. In this way this concept has been developed with culture from primitive time and it also developed as a philosophy with their religious background. Therefore this concept has been evolved throughout the history and got its face changed in the mediaeval period.

2.4.4. CHANGING SITUATION OF REUSE CONCEPT.

Change has become the influencing factor of our age, new materials develop, social attributes and culture itself is changing faster than ever before. This will create better life for us and degradation of the whole environment and life of the people. People respond to various environments which are governed by their attitudes and ideas. These reposes get changed from place to place because of changes and differences in social, cultural, ritual and economic status.

These status and responses may also change in the same place with the time factor. Therefore the concept of reuse also gets changed with changing pattern of physical, social and cultural context. After the industrial revolution the concept of reuse has been given a new vision. People thought about the reuse in a different manner. With this revolution, market economy comes to exist even in eastern countries. This profit oriented market economy has given a new face to the attitudes of the man completely.

Therefore people were tending to use the concept reuse, as people tend to use more resources and face the problem of scarcity of resources. Because they use resources more than enough and make people to go for new materials and then again reuse concept becomes eliminated. The economical way of thinking seeks to do the work in a less time. Therefore they try to find out the shortest and less time consuming method for every thing.

Therefore the concept of reuse gets changed for the sake of several reasons in the mediaeval period. The open economy came to exist after the industrial revolution and it made the financial return oriented economy. This leads people not to think about reuse but new production and new passion come to exist instead of that. As a result of the open economy people tend to get more production as they wanted to seek more profit. This leads to maximum use of resources. This profit motivated society made the problem of scarcity of resources and the reason hidden in this was the elimination of reusing concept.

2.4.5. APPPLICABILITY OF THE CONCEPT REUSE

"Earth provides enough to satisfy every mans need, but not for every mans greed" – Gandi

Though there can be a growth towards a limited objective, there can't be unlimited growth. It is a need factor to discuss importance or applicability of this concept in architecture as it has become a great threat for the built environment. To satisfy man's basic needs it is essential to provide him with shelter. However, this satisfaction has gone beyond from the limited objective. Therefore, the unlimited consumption of resources has become as a problem in architecture. As a solution for this problem, the concept of reuse comes to exist in the present day.

The re-use of any building is an interesting architectural challenge which have identified by most of the architects. The "New sense of place" was generated from what is already there. By re-using the value of the building should be enhanced maintaining the continuity between past and future. Awareness of the special qualities of the building and the adaptation potential should identify before choosing them to new uses.

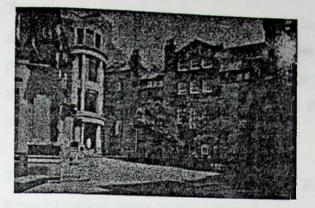


Plate 2.7: Comyn Ching triangle, London. The juxtaposition of new with the old was done through detailing.

Comyn Ching triangle is a building complex which has been used by the iron monger over two decades. Due to the motorways build through, it was abandoned as an unattractive placeless gap in the urban fabric.

With the re-utilization a new square was formed with the contribution of three historical rows of buildings on each side. The space was well defined by introducing new elements at corners and there is way through which the public can access it.

The conservation of Tobacco Dock warehouses was another example for this kind of approach. They were built like cul-de-sacs beside the great stacks. They were used to store tobacco and other valuable goods. The complex was built between 1810 and 1815 and perfect example for pre-Victorian engineering. The best technology and the material like cast iron, stone, brick and timber, which were the best of that time was used to build it.



Plate 2.8: Tobacco Dock after renovation. The new building was a result of demolishment of unwanted parts, addition of new materials and new elements.

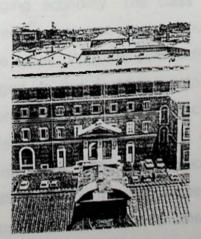
Chapter two: House as a place

The complex was build as a very private building for security purposes. But as the only use acceptable to the client is a shopping village, the original privacy concept has to be reversed. There was a greater challenge to form access routes and escape routes through the building which had overcome successfully.

The renovation of San Michele in Rome is the most significant transformation done in Italy. It was designed by Archt. Carlo Fontana and was erected from 1686. The challenges to face were handling its size, preventing it becoming a void in the context of urban landscape.

Buildings and courtyards of different sizes connected in irregular pattern establishing lack of homogeneity throughout the building. It was designed to house orphans and abandoned children. It was used as male and female prisons till 1972.

Considering the monumental and historical value of the building to save it from destruction proposals was made of functional re-utilization of the building. Remaking of roof, consolidation of foundations and walls were done to strengthen the structure. Some times partial alterations have done and there is a necessity to adapt the spaces to new needs. But the original characteristics of the building were maintained to its maximum standards.



The church which is the centre of San Michele still officiates and use as an exhibition hall and conference hall. The monument was restored giving life to its spaces thus re-integrating the complex with the urban fabric as a proper cultural centre. Plate 1.9: The Ospizio San Michele in

Rome

2.4.6. REUSABLE URBAN "HOUSE"

In early primitive societies everyone has the ability, knowledge and capability of building his own house. As these societies were strongly traditionoriented, the house forms restrict changers. As a result, in these societies, the dwellings type was basically identical.

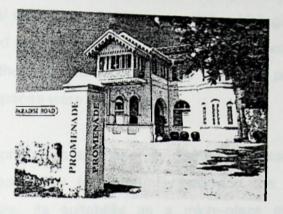


Plate 2.10: A re-used urban house with colonial influences

Then later with the involvement of craftsman and individual attitudes differentiation of house form occurs. Still some individual effects were there in modifying the house, but the basic type remains the same. Such house types had become "traditional". But these traditions disappear for several reasons like the complexity of change in attitudes of people, towards the traditional style. As a result, society becomes dissatisfied with traditional forms.

With the beginning of the industrial revolution life styles changed with the changing economy. The class structure based on the economy made differences between social groups emerging complex and differentiated house types. With the colonization, the house, the entire social structure changed. In this context, the spaces within the houses had organized to respond to the life style and social structure. As a result the complex and sophisticated house forms with colonial influences emerge. As the value system, people's attitudes and economic systems changed the necessity or the affordability of maintaining these houses eliminated. Most of these types of houses are now reused for other purposes.

2.4.7. CONCLUDING REMARKS

Human beings have attachment with places. The house is the centre of his existence in the world and most intimate place for him. He grasp the meaning of this immediate environment trough the physical setting and the function within it. Each and every space of the house has distinctive physical setting and function or activity which gives meaning to them. Some selected spaces which were considered as most important, have discussed under these constituents of place to give a proper understanding of how these spaces were experienced.

These principles are generally discussed in relation to urban houses which have possibility to reuse. By studying the urban house under these principles, its suitability as a micro-place of the macro-place can be understood. These constituents will form a framework to establish its suitability to the context as they form the identity of a place.

Then the reused concepts, its psychological approach, cultural approaches and changing situation of this concept give an understanding of formation of reuse concept and its elimination. The time constrains, economic constrains and changes in value systems are the facts which change the cultural attitudes about re-use in the society. Proper solutions can be given to these problems trough achieving "Sense of place".

By introducing a proper function the continuity of buildings can be established while facilitating their maintenance. The buildings function properly when they have the appropriate physical setting and convey a meaning which facilitates that function. As the physical setting activity and meaning are the constituents of identity of place it can be simply said if the re-used buildings have a sense of place this target can be easily achieve.

Therefore the link between the "re-utilization" and "Sense of place" cannot be denied. The successful restoration projects are done with integration of this concept. The understanding of this relationship is needed to analyze the case studies using this concept of "Sense of place". Selected houses renovated by architects, which are situated in different locations and reuse for different functions will be studied and analyzed to show how this concept has been used successfully.

CHAPTER THREE: AN EXAMINATION OF THE CONCEPTUAL RE-UTILIZATION OF OLD HOUSES

3.1. INTRODUCTION

In contemporary architecture, it has been tried to use the concept of re use very consciously through the involvement of architects. Here the study is referring to the re-use of houses. Houses converted to differential purposes have been analyzed to examine the applicability of this concept. To study renovation projects where sense of place is successfully used, a few architectural examples have to be selected. From the numerous buildings studied in the process of study, four buildings have been chosen for the purpose of the discussion in this chapter.

This discussion is based on the theoretical concepts and principles discussed in chapter one and two. The case studies analyze under three main constituents of place; physical setting, activity and meaning. The role of building planes in creating volumes and their spatial qualities as well as the activity and meaning of each and every space will be discussed in this chapter.

The selected examples emphasize the success they achieve when converting them to suffice the new function. The adjustment in the physical setting and the new meaning given to them contributes to its new sense of place. To give a clear understanding of this change, the sense of place of house in its original use (which was discussed in chapter two) will be helpful. Furthermore the changes occur and how the "Sense" of that particular place adjusts according to new situation is also to be discussed in this study.

Case study one - Gallery cafe Case study two - ODEL Unlimited Case study three - The "Dutch House" Case study four - Methodist College, Primary school

Chapter three: An examination of the conceptual re-utilization of old buildings

The successfulness of the projects and the differentiation in activities they serve has been the main reason to select these four buildings.

1) Gallery café : The house was built in the urban context. There is a greater challenge to convert it to a more personalized peaceful public place. The activity housed in it has used the houseness of the building to a great extend to make it a successful piece of architecture. And it is worthwhile to study this building which embedded new activity with minimal changers and achieve a new sense of place.

2) ODEL Unlimited: These houses were also in an urban context. There was a challenge of converting this house to a sophisticated shopping complex thus connecting two buildings in a fine way. The character of the building had been totally change to establish a more busy and interesting realm of spaces.

3) The Dutch House: The housed was located in a calm environment in Galle. Here also the houseness of the building has been used into its extremes to create a guest house with more private and peaceful environment. The other adjustment which takes place had also contributes in creating a more personalized place.

4) Methodist College: Through this project more secure environment which facilitates the integration of children had been created. It is a vital fact that must be taken into consideration when specially re-designing school environments. The old and new building altogether contributes to create this new situation. Through the study the applicability of reuse of houses for distinguishes functions like this can be analyzed.

Chapter three: An examination of the conceptual re-utilization of old buildings

3.2. CASE STUDY ONE: GALLERY CAFÉ, COLOMBO

3.2.1. BACKGROUND TO THE PROJECT

The building was originally planned as a doctor's house. Later Archt. Bawa bought this property and converted the building into an office. Thus the spaces were transformed according to the new function of office. The kitchen space was converted into accounts office, pantry space for quantity surveyor's room, the three bedrooms upstairs into a drawing room, a meeting room and Bawa's office. The architects office was to be entered through the entrance courtyard, corridor space, central courtyard and then from the vast meeting room. Along with the introduction of new role interventions took place and the building layout changed.



Plate 3.1: Entrance to the complex. The solidity of the entrance creates a transitional space still attracting public towards it trough the setback of building and gateway

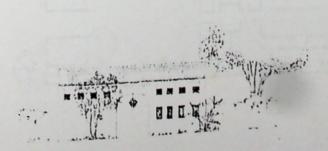


Fig 3.1: Street elevation

67

A sense of place in the re-utilization of space: A study with special reference to the

In the present the building function is changed without spoiling the charm and simplicity of the building. Today it serves as an innovatively designed café having the nature and qualities of traditional architecture. It contains several other activities which blend with the restaurant activities. A more personalized shopping activity, a display area for art works gives a more tranquil environment.

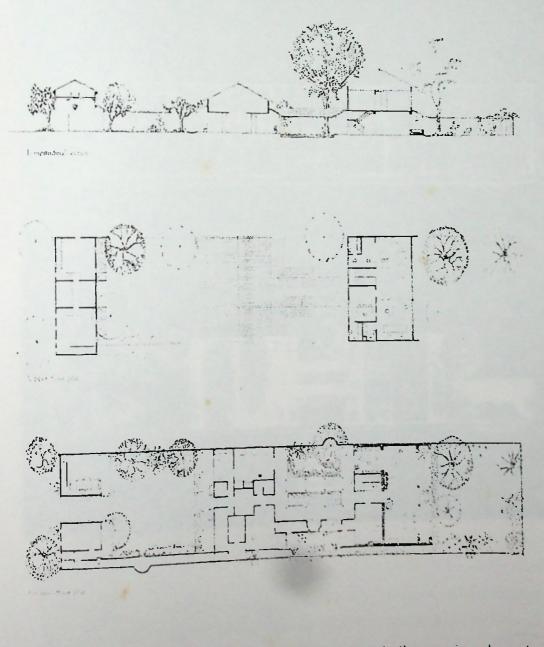


Fig 3.2: Plans, sections and elevations in the previous layout

68

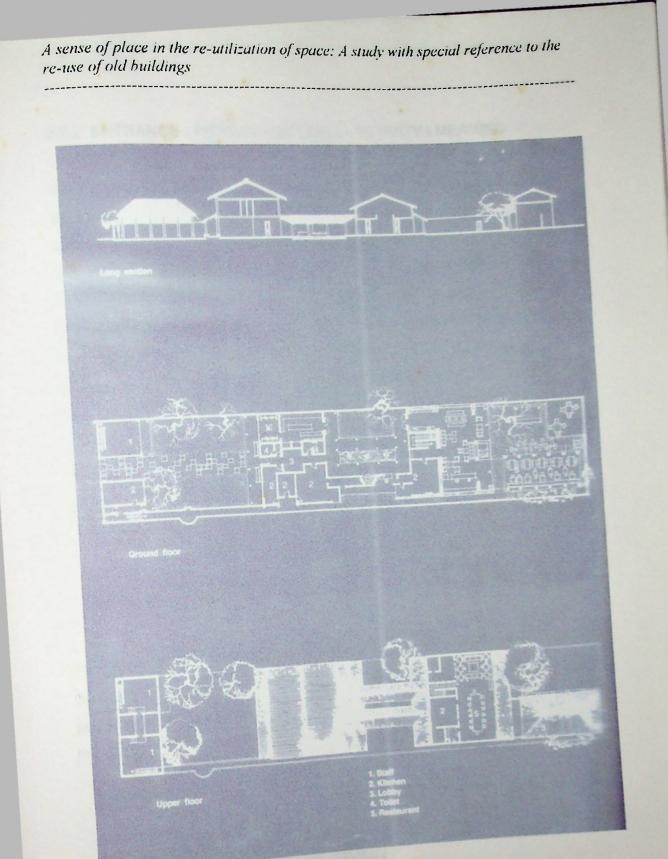


Fig 3.3: The plans and sections after the transformation

Chapter three: An examination of the conceptual re-utilization of old buildings

3.2.2. ENTRANCE : PHYSICAL SETTING \ ACTIVITY \ MEANING

The white washed facade hasn't changed a bit. The remaining solidarity, shape and color of it demarcate the end to the tension appropriate to the street behavior and permit experiencing more sanctified public experience. Especially the solidity of the entrance creates a crucial feeling of entrance transition. Though the solidity of the facade has an extroverted nature belonging to the house to which it was originally planned, the arched, white porte-cochere of old building still remains providing shelter and gathering a portion of exterior space to the public realm through the building.

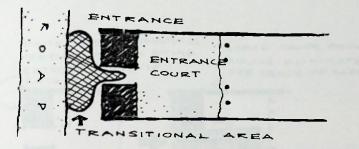


Fig 3.4: Entrance transition

The skirting of the entrance court is us as a parking area at present marked by boundary walls on two sides and built entities from other two sides prevent from seeing it from outside, without interfering the orientation towards the main pathway towards the entrance verandah.



Plate 3.2: Movement pattern towards the complex

70

This is further reinforced by continuing a paving pattern from entrance towards the main access and the two doorways of entrance and reception veranda. Converting the entrance court to parking area the abrupt entry to the building was prevented. By doing so the inner activities were embedded in well sanctified nature.

This direct axis between entrance and main access in reception verandah is emphasized by the two sober color wall planes eliminate the introverted enclosed quality and direct the movement or flow towards the entrance veranda. The garage spaces in the original plans now have been changed into security rooms and stores, which functions well in its new position.

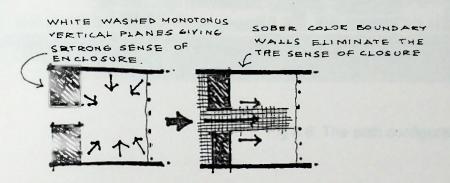


Fig 3.5: Orientation towards the reception verandah. Degree of enclosure was eliminated.

The building complex includes a large transitional area which gives a strong directional orientation. The set back edge of the street façade and the whole area including the entrance and entrance court act as a transitional space separating the building from the busy outside context. Though the building complex is meant for public gathering the manner the functions took place essentially need a sense of seclusion from the outside world. The visitors are not interfered by the commercial activities from the moment of entering. Thus by providing those transitional areas adjust the individuals mind set to expect more personalized experience and here it fulfill this requirement up to its maximum standards.

Chapter three: An examination of the conceptual re-utilization of old buildings

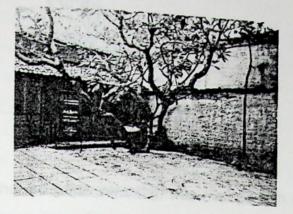


Plate 3.3: The entrance court. Colors, paving eliminate the enclosing nature and activate the movement towards the reception verandah.

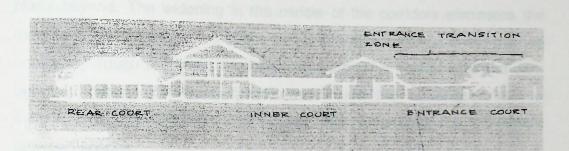


Fig 3.6: The path configuration

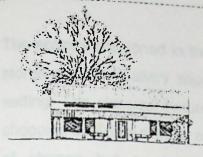
3.2.3. ENTRANCE VARANDAH : PHYSICAL SETTING \ ACTIVITY \ MEANING



Once the entry court is passed the welcoming to the building is shown by simply positioning a stone container full of water and floating flowers in the centre of the path. At this point one will feel a change as he was to be spare few seconds to recognize the configuration of the path.

Plate 3.4: the reception verandah

- 72



Entrance facade to othres

Fig 3.7: Facade to building complex

The reception verandah was marked with stepped verandah with a trellised door giving glimpse of inside activities. Through the trellised front door you can see the continuity of pathway and glimpse of change that has taken place beyond. The widening in the middle of the corridors eliminates the monotony of flow trough the space and the lower luminance levels pushes one going trough it towards the inner courtyard. This play of light and dark between outside courtyard spaces and inside the buildings create a delightful difference among the spaces thus enhancing the movement between spaces.

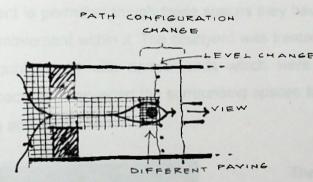


Fig 3.8: Transition from entrance court to reception verandah

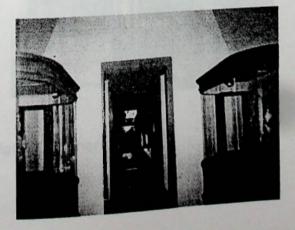


Plate 3.5: Passage towards the inner court

73

The spaces positioned in the side ways of the passage were converted into stores and the Gallery shop very successfully, without disturbing the new setting. The classical nature of the building turns the busy restaurant and shopping activities simpler and contained. The new interior is not just a result of change but an innovative change in architectural intent, as the interventions were done as a response to the new situation.

3.2.4. INNER COURT : PHYSICAL SETTING \ ACTIVITY \ MEANING

The path leads towards the restaurant area trough the central court which now has a more defined role as the display area. The old building was providing the context or the backdrop for the activities to happen. The former layout has made flexible spaces to these interventions to take place without interfering the old building.

As movement is permitted trough these spaces they have created patterns of rest and movement within it. The courtyard was treated as a bulge in the middle of public path with narrow ends which were meant for public gathering space and converted the surrounding spaces for related functions demarcating activity pockets.



These partly enclosed spaces in the skirting were facing the open space in the middle and contain activities which make people to get involve.

Plate 3.6: Inner court

Chapter three: An examination of the conceptual re-utilization of old buildings

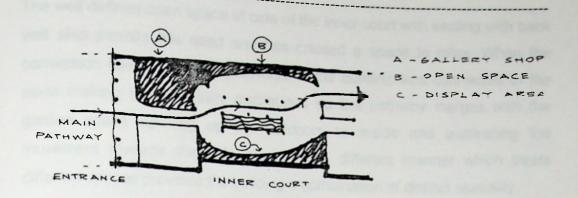


Fig 3.9: Activity pockets in inner court

The loosely positioned functions give people a chance to be alone among the community activities in the surrounding. The alcoves in the edge of display area with smaller ceiling heights and with pool in front and paintings can be appreciated thus permits ones needs for some seclusion and some community at the same time within the building.

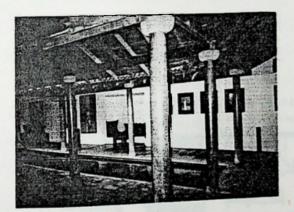


Plate 3.7: Display area with alcoves



Plate 3.8: The open space before conversion.

Chapter three: An examination of the conceptual re-utilization of old buildings

A sense of place in the re-utilization of space: A study with special reference to the

The well defined open space at side of the inner court with seating with back wall also permits this need and has created a space to relax. When the conversion takes place the pathways of the building was connected to the earth making the boundary ambiguous so the pathway merges with the garden space opening up the outdoors to inside and eliminating the movement towards the café lounge. The different manner which treats different spaces provides the building a combination of distinct spatiality.

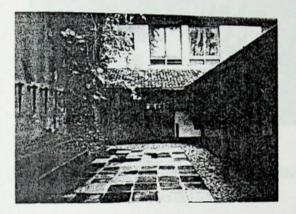
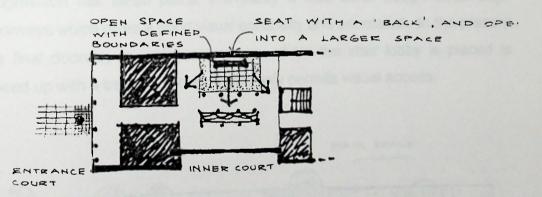
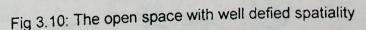


Plate 3.9: The open space with seating with back and display area in front provides a calmer environment comparing to the café lounge

76





The Gallery shop area and display area would attract people as they are being located in juxtaposition to main path and where the path configuration changes. The spatial characteristics of display area, paved garden area, seating and the cooling environment created by the pond can make you pause and relax.

The gallery shop in the corner creates another innovatively design activity pocket in the edge of the inner square. New square structures were built to display items and were light up giving pools of light to each and every structure.

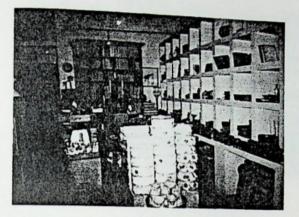


Plate 3.10: Corner shop

3.2.5. RESTAURENT : PHYSICAL SETTING VACTIVITY \ MEANING

These two side spaces were free from the main pathway, which pushes you towards the restaurant. With new architectural intentions the disperse entry progression has taken place. Previously it was done trough three align doorways which gives a good visual continuity and orientation. In the present the final doorway to restaurant space, where the stair lobby is placed is closed up with a trellised screen which only permits visual access.

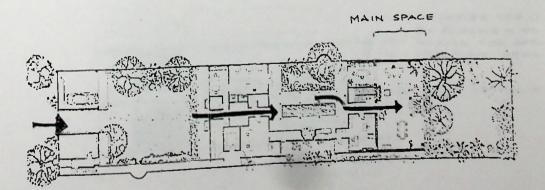


Fig 3.11: Path configuration before conversion

77

The new route has been provided trough the former office space in a side room which is not direct or noticeable space. The architectural intention beyond this was clearly seen when you enter the café lounge. The new progression directly contributes to a good sense of arrival.

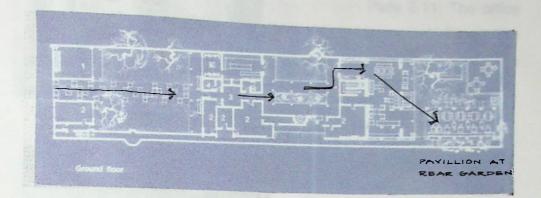


Fig 3.12: Path configuration after conversion

In the previous layout the office area is considered as the "Main space" or the point of reference of the building. By positioning a pond in front of the third doorway the spatial continuity across the office area was eliminated. By achieving new intervention the process of entering is done from the sideway and continuity towards the restaurant space (formerly the rear garden) is permitted. Thereby shifting the" Main space" from café area towards the pavilion or the restaurant space.

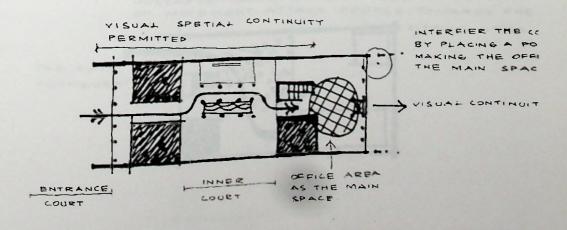


Fig 3.13: In former layout office space as the main space

78

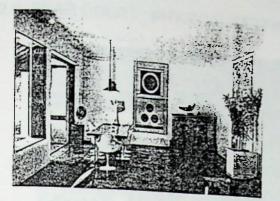
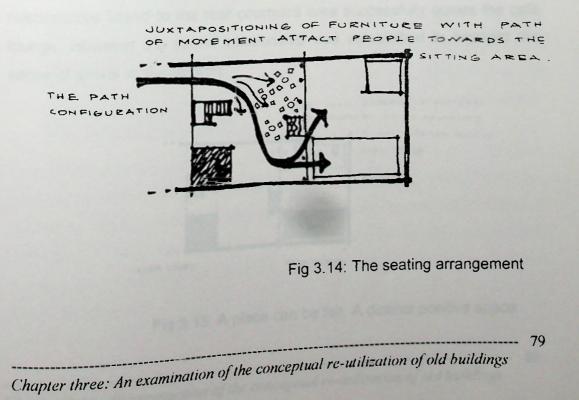


Plate 3.11: The office space which was the main space before transformation



Plate 3.12: The office space using as a cafe after the transformation

The sitting areas (in former office space) were juxtaposition with the paths of movement thus attracting people naturally gravitating towards the sitting areas.



3.2.6. REAR COURT : PHYSICAL SETTING \ ACTIVITY \ MEANING

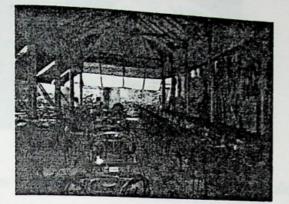


Plate 3.13: The new pavilion space with its dominance as the main space.

Through these transformations the rear courtyard was successfully converted to a positive outdoor space which has become a more dominant space. Once you enter the café area the newly constructed pavilion becomes visible as the most significant space in the complex.

The new pavilion was connected to the old building from one side keeping the maximum standard of openness in the rear court, at the same time preventing it being an isolated space. This upgrades the spatial continuity from old to new. This has created a more healthy space which acts as a part of the older building. This transitional space between old and new was highlighted by positioning the bar thus keeping the network of spatial relationships linked to the rear courtyard area successfully across the café lounge. However the spatial relationship was established to highlight the sense of arrival to the pavilion.

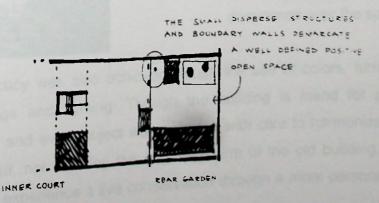


Fig 3.15: A place can be felt. A distinct positive space.

80

A sense of place in the re-utilization of space: A study with special reference to the

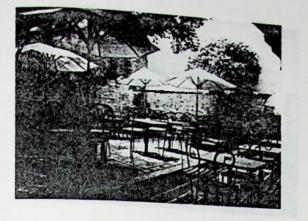


Plate 3.14: The position of the pavilion. The undisturbed nature of the space is maintained and can be felt. This has make it a positive outdoor space.

It was innovatively designed by using old building elements and had created a more personalized outdoor environment. The high roof and the proportions of the pavilion differ from the other spaces emphasizing its dominance over the space. Thus the density inside created by the separation of the eaves of the roof into smaller portions adjusts its proportions, making it a more personalized space. At present it functions as the soul of the building complex giving a more communal feeling.

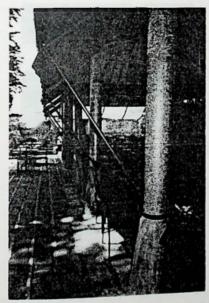


Plate 3.15: The pavilion. the Demarcates main space with its high roof, decorative qualities and innovatively designed by old building using elements. The scale of the emphasizing its pavilion dominance over the space.

The visual delicacy was also achieved trough the use of colors, furniture, objects, paintings and lighting. Though the building is mend for public gathering, each and every object was selected with care to harmonize with the building itself, not violating the original charm of the old building. This exposes you to experience a live conservation through a more personalized public activity.

81

A sense of place in the re-utilization of space: A study with special reference to the



Plate 3.16: Objective which harmonize with nature of the building

This juxtaposition of furniture as well as the building elements had created spatial changers within the buildings. The creation of alternating area of light and dark affects the movement pattern throughout the spaces. This facilitates the orientation within the building leaving less simple arrangement of places with events. Even in same space the change in luminance levels has innovatively created the increase of the public gathering space around those pools of light.



Plate 3.17: Change in luminance levels creating pools of light

82

The path configuration has worked out in a way that orientation is facilitated. The intermediate entrances are positioned in a way that they are visible from the other giving an excitement to the journey trough the building. The intimacy gradient which belongs to a house has been successfully violated according to new function, to give a more personalized community gathering space. Thus the most private areas still function efficiently as gathering spaces attracting the public realm towards them.

3.3. CASE STUDY TWO - DOORNBERG, GALLE

3.3.1. BACKGROUND TO THE PROJECT

The house was built on a hill overlooking the harbor and Dutch fort. Formerly it was an elegant residence built for an Admiral of Dutch East India Company and was later used as a well kept orphanage. It is an elegant house located in a perfect site at the top of the Richmond Hill with a great panoramic view.

The Dutch house is an excellent example showing the formal features of Dutch architecture. The open verandah with four pillars and roof sweep make it one of the best Dutch houses in Ceylon. The house was built in 1712, constituting the characteristics of the architecture of Dutch in seventeenth and eighteenth centuries though its origin was related to Italian country villas in the late sixteenth and early nineteenth centuries. As a result of colonization, this style was introduced to this country by the Dutch officers. These influences contribute to establish a new architectural style which was popularized by the wealthy plantation owners.

In the former layout there were entrance, bed rooms and hall which were extended by adding another realm of spaces on either side, thus preserving the symmetry of the building. It was done in the second stage of development. So the original building may have consists above mentioned four rooms together with another wing or separate building embedding kitchens, store and servants rooms. Except the rear and front verandahs the other verandah spaces may not have been there in the beginning. It would have built in the surrounding landscape with a raised open stoep across the full width of the front façade.

Today, it has been transformed into a spectacular country house, providing space with optimum standard of privacy. The ornamentation of the house is done with Dutch colonial features while interior and exteriors and garden spaces have been treated in an appropriate manner to create a perfect setting to relax.

Chapter three: An examination of the conceptual re-utilization of old buildings

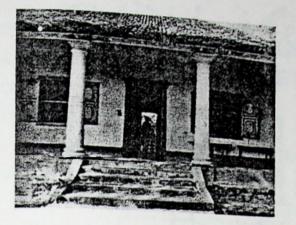


Plate 3.18: House before transformation.

Trough the transformation many changers have taken place and the spaces, colors, finishes were exposed to conversions to create the appropriate context suitable for new functions.

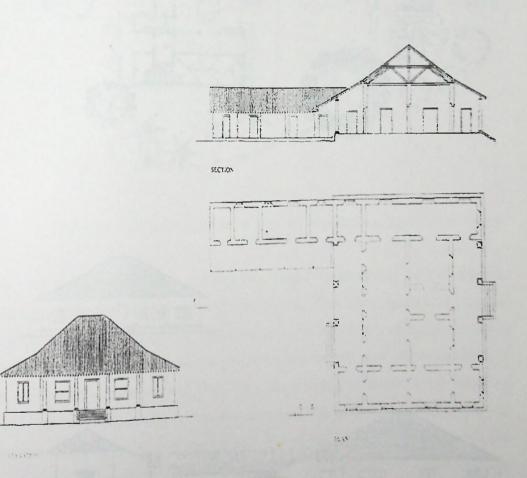


Fig 3.16 : Plans, sections and elevations of the previous layout

A sense of place in the re-utilization of space: A study with special reference to the

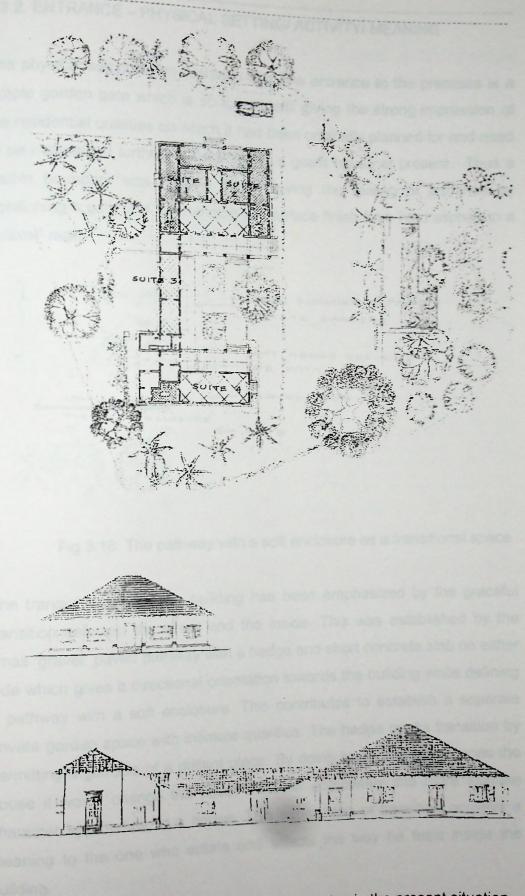


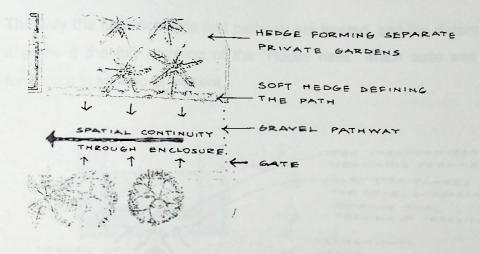
Fig 3.17: Plans and elevation in the present situation

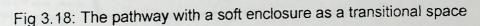
86

A sense of place in the re-utilization of space: A study with special reference to the

3.3.2. ENTRANCE - PHYSICAL SETTING/ ACTIVITY/ MEANING

The physical setting of an entrance is a The entrance to the premises is a simple garden gate which is so formal, still giving the strong impression of the residential qualities on which it had been originally planned for and need to be maintained further. It functions as a guest house at present. Thus a visible boundary was created simply giving the feeling of entrance by positioning a gate and by changing the surface finish from hard asphalt to a "gravel" road.





The tranquil quality of the building has been emphasized by the graceful transition between the street and the inside. This was established by the small "gravel" paved pathway with a hedge and short concrete slab on either side which gives a directional orientation towards the building while defining a pathway with a soft enclosure. This contributes to establish a separate private garden space with intimate qualities. The hedge marks transition by permitting a glimpse of a distant place. By doing so, when one reaches the house it would change the street behavior completely into more intimate character appropriate to a house. This experience of transition conveys a meaning to the one who enters and affects the way he feels inside the building.

87

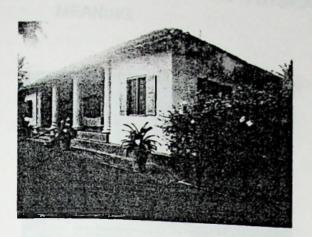


Plate 3.19: A distant view of the house from the entrance pathway. The soft boundary (the hedge) facilitates the orientation while creating a semi private garden space.

The way the entrance gate and pathway are treated, and the distant view of it gives it the full meaning of the "House ness" which suite well for the function it is serving at present.

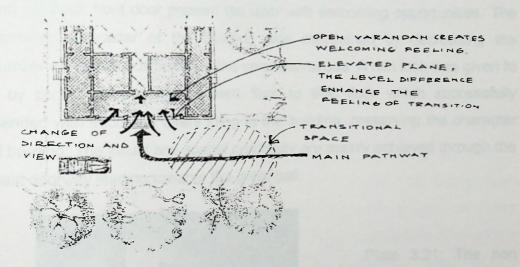


Fig 3.19: Entrance transition with change of direction and view

As the house was originally planned for residential purposes the entrance had been treated as a private domain. The front door was set back, creating a transition space between it and the pathway, establishing this domain successfully. This is a vital factor that must be taking into consideration even in dwellings like apartments or guest houses as they impart a sense of seclusion from the world.

- --c re-utilization of space: A study with special reference to the re-use of old buildings

3.3.3. ENTRANCE VARANDAH - PHYSICAL SETTING/ ACTIVITY/

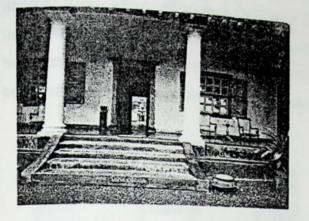


Plate 3.20: The Physical setting of entrance verandah. The set back front door makes а transitional space.

The house stood high over the surrounding landscape with an open verandah in the front. The steps projecting outwards and the open verandah and set back front door present the user with welcoming opportunities. The sanctified character of the building was maintained by decreasing the number of objects positioned in the verandah space. A rich look was given to it by converting polished cement floor to tiled floor which successfully blended with each and every thing in the building, preserving the character of building. The visual and spatial continuity are mainly achieved through the main doorway leading towards the great hall.

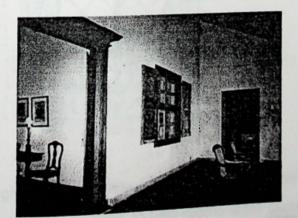


Plate 3.21: The non verandah disturbed space gives a more sanctified nature to the building as well as to the function

The elegant floor finish with Dutch influences was a result of conversion. The same floor finish in living and passage area makes the narrow space part of living area and creates a projection of the living area towards the front verandah.

Chapter three: An examination of the conceptual re-utilization of old buildings

89

Thus marking a transitional point between semi public (front verandah) and semi private (living area) spaces. The view through the passage way is concentrated on a tree in the open courtyard while giving the glimpse of another wing, which altogether facilitates the continuity of the spaces. One who enters through the main doorway will be attracted towards the hall or the living area trough this establishment. It creates a transitional space between the public front verandah and semi public living area.

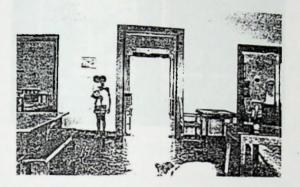


Plate 3.22: The monotony of floor finish in passage and living before the transformation

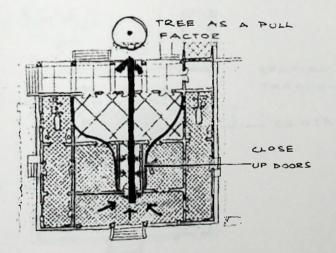


Fig 3.20: The passage as a part of living, projecting towards the front verandah to create a transitional space.

To give a strong directional orientation the doors on either side of the passage which open to bed rooms were closed up, and are replace by wall planes. This eliminates the disturbances which could have occurred due to the direct link created between the public space (The passage) and the private space (bed rooms). This contributes to preserve the intimacy gradient throughout the building.

90

The monotony of the short passage which directs towards the living area is eliminated by placing a piece of furniture in the edges of the space and this has made it as much like a room. By constructing a ceiling relating to the length and breadth of the space, it has been possible to convert it to more humanized space thus achieving the residential characteristics.

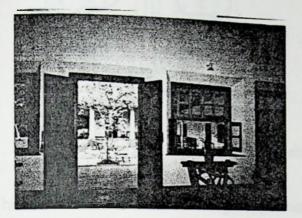


Plate 3.23: The short passage leading towards the living area with a view of the open court and beyond.

3.3.4. LIVING ROOM - PHYSICAL SETTING/ ACTIVITY/ MEANING

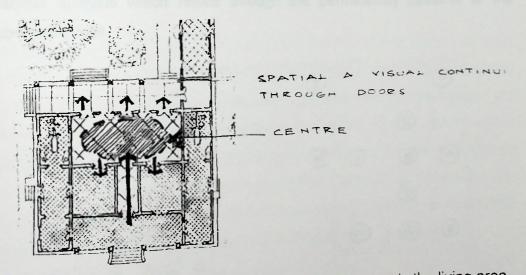


Fig 3. 21: Progression towards the living area

Living area or the great hall acts as the centre of the building and spatial continuity is created by interconnecting adjoining rooms' trough doors. This facilitates the movements by forming wider circulation loops through it. This facilitates a generous movement between the spaces as well as the privacy -- 91 need.

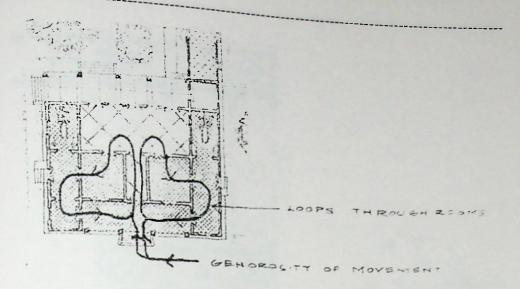
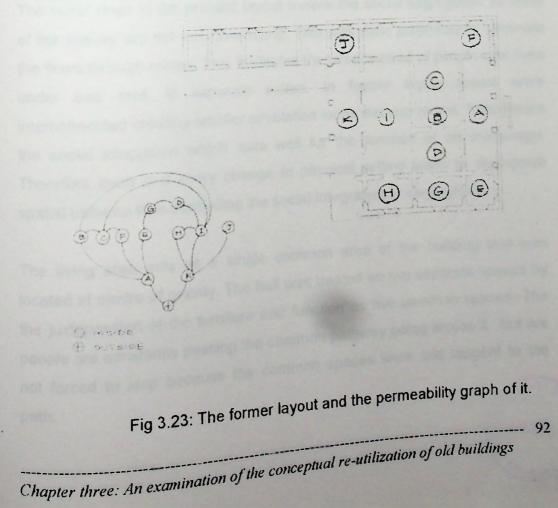
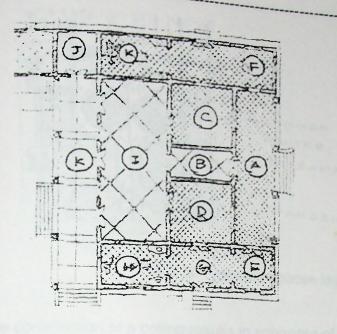


Fig 3.22: Generosity of movement between spaces

This could explain further through a permeability graph. Here the buildings are considered as domains which have unitary control and is expressed trough two properties. They are continuous outer boundary and continuous internal permeability. This set of relationships can be expressed through Gamma analysis which raised through the permeability patterns of the subdivided cells.





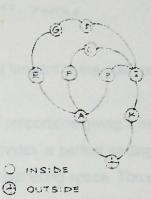


Fig 3.24: The new space arrangement and the permeability graph.

The wider rings in the present layout means the social segregation as most of the spaces are not interconnecting. This was done purposely to eliminate the flows through rooms. This facilitates the privacy need of people who lives under one roof, in separate suites. In former layout rooms were interconnected creating smaller circulation loops through rooms. This means the social integration which suits well for the function of an orphanage. Therefore each and every change in physical setting leads to distinguish spatial patterns thus controlling the social integration or segregation.

The living area acts as a single common area of the building and was located at centre of gravity. The hall was treated as two separate spaces by the juxtaposition of the furniture and function as two common spaces. The people are constantly passing the common pathway going across it but are not forced to stop because the common spaces were laid tangent to the path.

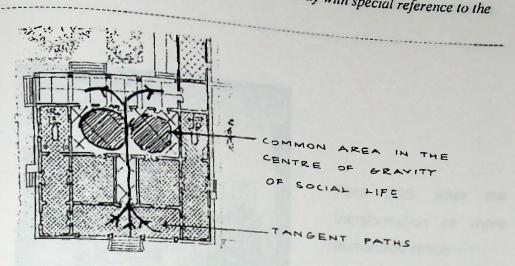


Fig 3.25: Common spaces lay tangent to the main path

The construction of a ceiling results in snugness of proportions giving a more humanized, domestic scale to the structure. It provides a perfect setting to relax as it establishes a more personalized private gathering space. Through this transformation varying height and shape of the ceiling has achieved giving relative intimacy to each and every space.

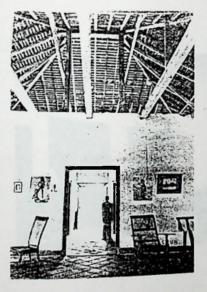


Plate 3.24: Living area the transformation before takes place. The high roof with formal qualities creates non humanized space which suit to an not does small orphanage or personalized guest house.

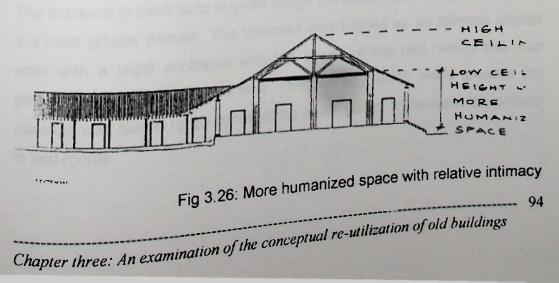




Plate 3.25: After the transformation as more humanized space

Considering the living area as the centre couple of suites was established on either side of it emphasizing the symmetry of the space arrangement. This suite creates circulation loops trough them while preserving the intimacy gradient.

3.3.5. SUITE 1& 2 - PHYSICAL SETTING/ ACTIVITY/ MEANING

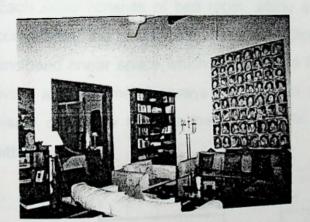
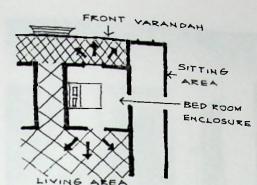
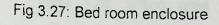


Plate 3.26: Entrance to suite

95

The entrance to each suite is given trough the semi public living area making it a most private domain. The bedroom was treated as an intimate anchor point with a slight enclosure with the shape of the bed, which has four posters defining shape of its own. The doorway which leads towards the passage was closed up by constructing a wall plane, to maintain the privacy in bed rooms.





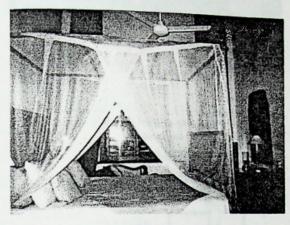


Plate 3.27: The Bed room

Each suite consists of bed room, sitting area and bath room. Before the conversion the sitting area located adjacent to the bed room was an enclosed linear space which opens out to front and rear verandahs and to living area. Some doorways were closed up to eliminate the spatial and visual continuity towards the inner rooms, and make it the most private sitting space.

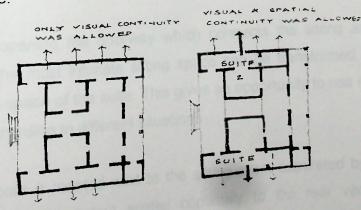


Fig 3.28: The adjustment of visual and spatial continuity before and after

conversion

96



Plate 3.28: Sitting area with small private spaces

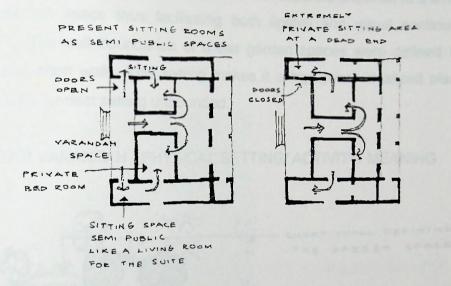


Fig 3.29: The sitting room as private space and as semi private space

Simply by opening the doorway which connects the sitting area to front verandah, the most intimate sitting space can be transformed into a semi public living space of the suite. This gives an opportunity to use it in different manners according to different situations.

The bath room is located next to the sitting room separated by a partition wall. In the earlier layout spatial continuity to the rear verandah was permitted. Now the enclosed space in rear verandah is demolished and the doorway leading to it is closed making the bathing area a private domain in a doarway leading to it is closed making the bathing area a private domain in a doarway leading to it is closed making the bathing area. 97

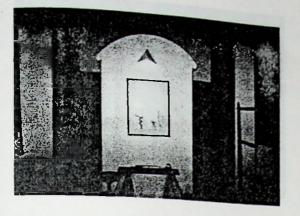


Plate 3.29: Bath room as a private domain in a dead end with seating

Before the transformation only visual continuity was allowed to the garden space. Now it is converted to a sitting room with separate entrance to a small private garden space thus facilitating both spatial and visual continuity towards it. The soft boundaries of these garden spaces were defined by hedges and short walls. This setting makes it a highly individualized place and creates a perfect setting unbounded.

3.3.6. REAR VARANDAH - PHYSICAL SETTING/ ACTIVITY/ MEANING

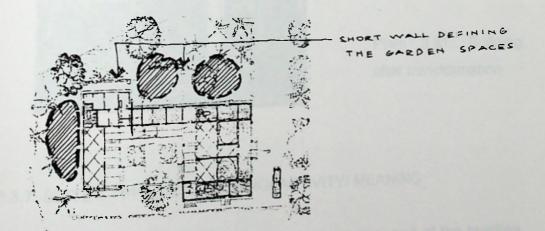


Fig 3.30: Semi private garden spaces

The pantry was located at the corner of the rear verandah with direct access to it. The position facilitates the functional efficiency as it is in a position which is easily accessible from all the rooms. As it is a semi public space the interference which occurs from being located in an intersection is less. 98



Plate 3.30: The rear verandah which leading towards the pantry

The front and rear verandahs, living areas, couple of suites and pantry forms the main building. With the transformation the building was extended by adding another couple of suites on either side thus preserving the symmetry. One suite was an entirely new wing which connects with the old building preventing the new part being isolated.

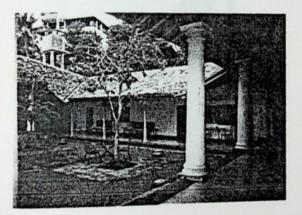


Plate 3.31: Building after transformation

3.3.7. SUITE 3 - PHYSICAL SETTING/ ACTIVITY/ MEANING

The other suite was a transformation of the secondary part of the building. Previously this secondary part was used as coops of the farm house. With the transformation they were converted to an elegant suite very successfully. The spaces used as coops were cleared and converted to a suite with a front verandah. This suite also includes a bed room, sitting room and bath room. In the former layout there were several spaces opening into the verandah space allowing visual and spatial continuity towards it.

The garden space at rear side was a neglected part as spatial continuity was not facilitated towards it. With the conversion the intermediate walls were demolished and the space was treated as a single entity. The semi public verandah space opens out to the semi private sitting area thus responding to the intimacy gradient of the spaces. The long narrow space is separated using small strips of vertical walls. The positioning of furniture further defines this separation. Trough this space continuity towards the semi private garden space is facilitated thus permitting it to function freely.



Plate 3.32: Secondary part of the house transformed into a suite with a side verandah



Plate 3.33: Suite with sitting room and bed room

Chapter three: An examination of the conceptual re-utilization of old buildings

- 100

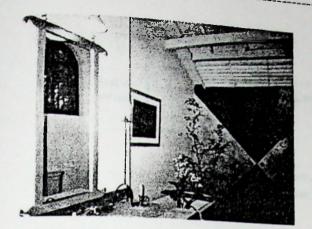


Plate 3.34: Bathroom at the intersection of old and new buildings

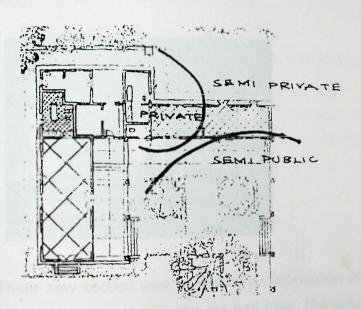


Fig 3.31: Intimacy gradient within the suite

3.3.8. SUITE 4 - PHYSICAL SETTING/ ACTIVITY/ MEANING

The newly build suite is constructed in a far end of premises still keeping the connection with the rest of the building. This has created a free environment with a semi private rear garden. It was treated as a mirror image of the living room with front verandah and the same floor finishes. The length and breadth and height of this wing are smaller than in the main building thus emphasizing the dominance of the old building over the whole complex.

Chapter three: An examination of the conceptual re-utilization of old buildings

--- 101

A sense of place in the re-utilization of space: A study with special reference to the re-use of old buildings SECONDARY BUILDING NEW WING LENGTH, BREADTH AND HEIGHT LARGER THAN NEW WING.

Fig 3.32: The dominance of main building is emphasized by making the new wing smaller

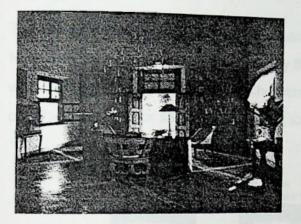


Plate 3.35: Interior of the new wing

There new section was treated as a continuation of the old building without keeping a gap between the old and new. The differences between the old and new wing is not identifiable. It was treated truly as a continuing part of the old building to prevent it from being seen as a separate and isolated wing. Instead of clustering the rooms around a centre the spaces were laid one after the other. Thus, by doing so, the distance between the points of the building is further increased creating a great spaciousness and eliminating the feeling of overcrowding.

The varying degree of public ness in this layout has established a distinction between the suites. The suite near the pathway was meant to be more public while other back one is more private and physically secluded. These spaces correspond to the basic human need of being extroverted or introverted.

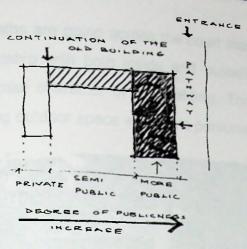


Fig 3.33: Extension as a continuation of the old Building. It increases the distance between the points while permitting degrees of public ness.

3.3.9. OPEN COURT - PHYSICAL SETTING/ ACTIVITY/ MEANING

The former layout creates a negative outdoor space which is poorly defined. Now the open court was well defined by the building itself. The open end of it was defined by a green belt. This has created a well enclosed, positive and comfortable outdoor space opening out to a larger garden space.



SPACE TDOOR



DEFINED POSITIVE OUTDOOR SPACE

Fig 3.34: The positive outdoor space main as the space



Plate 3.36: The open facilitating court between movement suites while permitting the continuity between inside and outside

-- 103

The paths are going across the court making it live. This has facilitated the relationship with both inside and outside. Furthermore it emphasized the residential character of the building. This contributes to establish a more relaxing outdoor space with more personalized holiday experience.

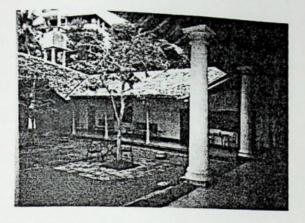


Plate 3.37: movement between suites and the continuity between inside and outside is facilitated by the main space.

The rooted-ness of the building is highly emphasized at this point. The physical setting, steps and earth surface have facilitated this establishment. The spatial progression consists of a series of spaces from well enclosed (suite), to semi enclosed (verandah) and then to open court. The open court has an ambiguous boundary which makes it merge with the building. This has opened the view of outdoors to inside thus enhancing the spatial and visual continuity between them. The green patches represent a projection of green belt beyond it. This facilitates the spatial and visual continuity towards the larger garden space.

WELL ENCLOSED	THE SPECIAL
	PROGRESSION FR
SEMI ENCLOSED	WELL ENCLOSED
OPEN	SEMI ENCLOSED
	OPEN COULT
Lies Later	~

Fig 3.35: Rooted-ness of the building facilitating the spatial and visual continuity.

- 104

The trees in the court had created a special social place with a sense of beauty and peace. Here the low sprawling trees function as an umbrella, defining an outdoor space. They form the centre within the court giving a strong and steady pulse to it. This establishment attracts people towards it to

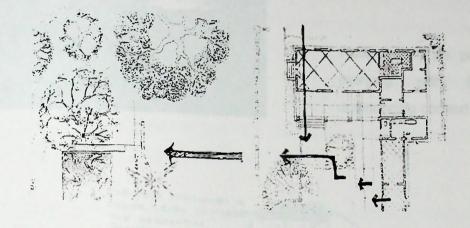


Fig 3.36: Spatial progression towards the larger garden space

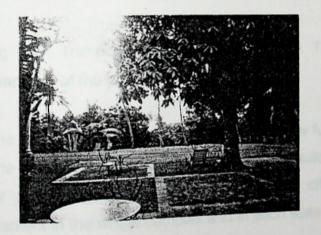


Plate 3.38: The trees in the court acts as centers of gravity providing places to relax

3.3.10. POOL - PHYSICAL SETTING/ ACTIVITY/ MEANING

The pool is located at the edge of the large garden space maintaining the rhythm of the slope. It is positioned at a lower level which is invisible for a distant view. It was made more natural by creating a merging edge with the environment. The reflecting surface of the pool with shadows of trees enhances the tranquil quality of the surrounding context. This contributes to secure the residential character of the building.

Chapter three: An examination of the conceptual re-utilization of old buildings

--- 105

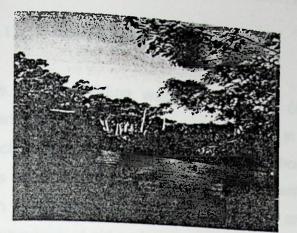


Plate 3.39: The pool merging with the surrounding context.

THE POOL POSITIONED IN ER LEVEL TO PRESERV VIEW SECTION THROUGH THE POOL

Fig 3.37: The pool invisible from a distance. This enhances the residential character of the building.

The building is converted successfully to new function with extending wings. The degree of public ness throughout the building creates a place suitable for anyone permitting social gathering in different levels. The intimacy gradient in the whole complex and in each suite has contributed in creating a more personalized place.

3.4. CASE STUDY THREE : ODEL UNLIMITED

3.4.1. BACKGROUND TO THE PROJECT

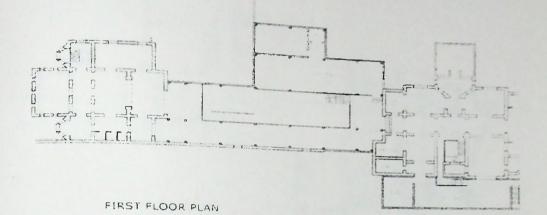
The ODEL building was located in an old house in the Ward place overlooking the highly dense urban context in which more suitable for its new function as a shopping complex than as a house .Originally this large house was used as the ODEL building. Subsequently, the building was combined with extension to the neighboring house, creating one complex. It was a combination of old and new with two old houses in two sides connected with innovatively designed bridge space in the middle.

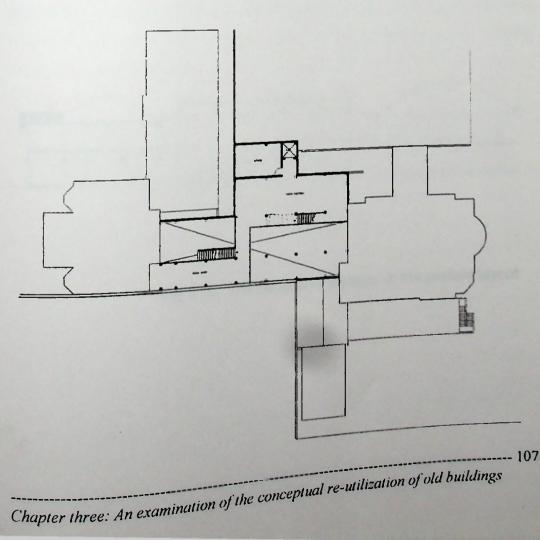
The buildings were old houses with British architectural features. The large scale of these buildings and the locational advantage enable their function as shopping complex. The sophisticated and personalized shopping experience is also successfully maintained and enhanced through its setting on this highly dense urban context. The shopping mall is the opposite of the privacy concept in the original building.

3.4.2. ENTRANCE : PHYSICAL SETTING \ ACTIVITY MEANING

The character of activities take place inside and outside of the building is rather opposing. To emphasize the change of character there is a need to demarcate the physical boundary which directly creates a boundary in peoples mind. The premises of the building are reinforced by the old high wall encircling it. This has formed a more distinct and vivid enclosed space in the larger context. The paths which enter are marked with gateways to give a good transitional space. The white washed vertical wall planes gives an impression of more personalized space embedded within it and acts as the main barrier demarcate the difference between outside and inside activities. Though the outer appearance of the house is mostly the same, the glimpse of activities going on and the large open space in the front gives an idea about a public gathering place.

- 106





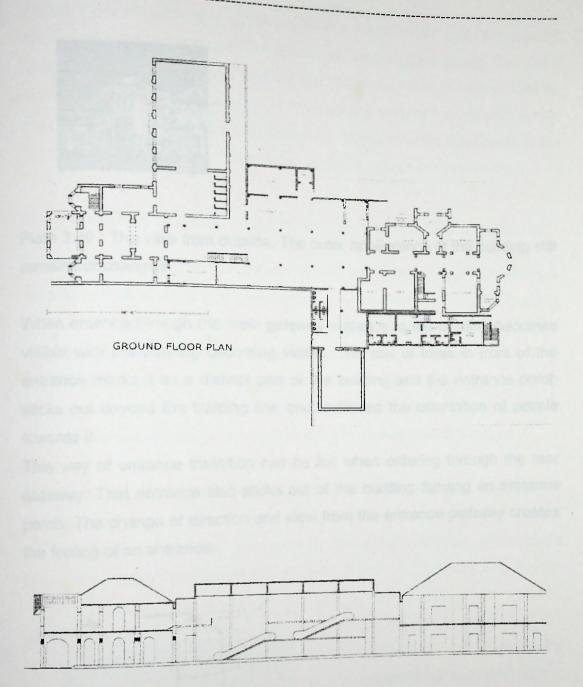


Fig 3.38: The plans and sections of the present layout

-- 108



Plate 3.40 : The view from outside. The outer appearance of the building still remains unchanged.

When entering through the main gateway entrance to the building becomes visible with the building becoming visible. The row of trees in front of the entrance marks it as a distinct part of the building and the entrance porch sticks out beyond the building line and facilitates the orientation of people towards it.

This way of entrance transition can be felt when entering through the rear gateway. That entrance also sticks out of the building forming an entrance porch. The change of direction and view from the entrance pathway creates the feeling of an entrance.

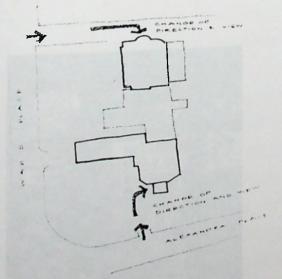


Fig 3.39: Entrance transition. The change of direction of pathway, view and building line marks the entrances to the building.

As there are car parking areas in the front the way to the main entrance of the building, the environment is not calm as entering to a house. Though it provides a background to maintain the street behavior to some extend, which is needed to experience a commercial activity the tension which appropriate to street behavior is eliminated. These activities take place in the outside context gives a hint of a public gathering space to the outsiders.

3.4.3. ENTRANCE ROOMS : PHYSICAL SETTING \ ACTIVITY MEANING

In some situations physical setting should be adjusted according to new situation. Subsequently in some situations the original setting of the building facilitates these adjustments. Here also there are few spaces in the front of two houses which create a realm of transitional spaces. The porches in front of the old houses projecting towards the garden were only used as transitional spaces from outside to inside. In the front house the counter is also embedded in this structure considering the functional necessities.

The front verandah space with simple arches creates the feeling of a transitional space. It serves as a semi public space as it was in its original use. The orientation was facilitated by the direct pathway which leads towards the heart of the complex.

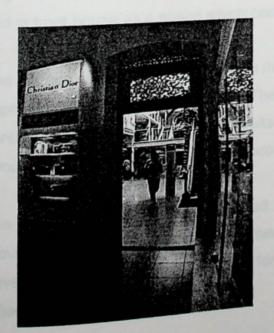


Plate 3.41: The entrance verandah of new extension.

The glimpse of busy shopping street and the highly illuminated atrium space acts as a pull factor which attracts people towards it.

----- 110

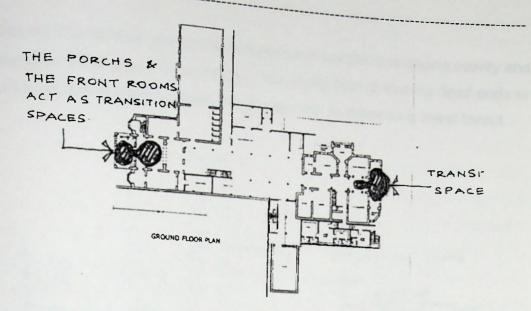


Fig 3.40 : Realm of transitional spaces. The former living, dining areas are using as transitional spaces.

3.4.4. SHOPPING SPACES: PHYSICAL SETTING \ ACTIVITY \ MEANING

The intermediate rooms between the verandah and atrium space are the former living and dining areas. Its importance as a living dining space is now eliminated due to shifting of the main space backwards, to the atrium space. Now they are converted to reception spaces and exhibition spaces. Though they form a part of shopping street it initially functions as a transitional space and in front house as a space which connects the adjoining spaces.

The surface character with decorative moldings is maintained to enhance the sophistication in shopping activity. The white color surface had created a contrasting background for the exhibits. It gives the feeling of personalized shopping space which suites the particular function and the space.

The former realms of spaces had been maintained thus facilitating movement through widening the permeable points. These combined spaces have a great importance as they form small circulation loops with the adjacent spaces.

---- 111

This loop circulation shows the integration of people in shopping activity and facilitates generosity of movement. The prevention of forming dead ends or cul-de-sacs make the shopping mall more like an interesting street layout.

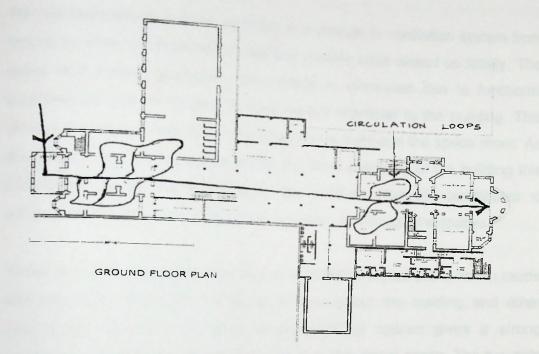


Fig 3.41 : Facilitation of social integration through circulation loops Smaller rings demarcate the social integration. The elimination of inside outside relationship can be also seen.

In a house the need for privacy is very high. Therefore social integration was limited to some extend. Especially the bed rooms are considered as spaces where the segregation need is high. These spaces are therefore located in either sides of living, dining areas with view towards outside. With the transformation the reversal of privacy concept and social segregation take

Though the living, dining areas serves similar function the function of most private areas the bed rooms is changed to a public use. To facilitate the social integration the former layout has been adjusted. This has been done through facilitating loop circulation which can be achieved through very few changers.

--- 112

The permeable points between rooms (doors, arches, etc) had been widened and door sashes had been removed to facilitate this further. This has been done through out the building as it is a need of each and every space. This facilitates people's unconscious movement through spaces.

The windows are shut down as there is a change in ventilation system from natural to artificial. Some doors leading outside were closed up totally. The visual and spatial continuity with outside is eliminated due to functional purposes as well as to give a more inward character to the building. This gives a chance to experience the shopping activity and the space more. As the outside context do not facilitates the inner character of the building this inwardness uplifts the spatiality of the building. Also this contributes to enhance the feeling of wholeness as you wander through the spaces.

There is a challenge presented to the architect to attract public realm inside and organize their path configuration throughout the building and other constrains involved. The axial arrangement of spaces gives a strong orientation towards the main space which is the atrium space. The two side spaces which could have used as bed rooms are now converted to shopping areas and cash counters.



Plate 3.42: The left wing as a flexible shopping space. Small track light system and shops facing inward gives an impression of a shopping street.

--- 113

The left wing in front house is transformed into a shopping space. The space is divided into smaller section by the ceiling beams. The spaces are in juxtaposition due to the partition walls and items. The linear space gives an impression of a shopping street. The small track light systems which illuminate the space enhance this feeling.

3.4.5: ATRIUM : PHYSICAL SETTING \ ACTIVITY \ MEANING



The direct pathway from entrance verandah creates access to the rear verandahs (in former setting), which now are in juxtaposition new (the atrium space) building.

Plate 3.43: Entrance to new (atrium space), from old.

The atrium is the enormous creation which had been done in the second stage of development. It was an extension of the project to annex the neighboring property which is a grand old villa with great architectural characteristics. The main focus of the project was of the space between two old houses which now forms the three storey glass roofed atrium. The contrast between old and new has gain through the distinct difference between volumes and through the simple detailing. The white color and similar pattern of floor has continued throughout the building to facilitate the spatial and visual continuity.

---- 114



Plate 3.44: The atrium space forms a shopping street. It is the spine of the building complex and runs through the entire building, giving it a life.

The main spaces (living areas) are at the front of two houses letting the rear spaces to be a typical "Back space". These isolated buildings leave useless space around them. The diagram below shows the physical setting after the transformation. The two old houses with a new infill which forms a continuation of old houses.

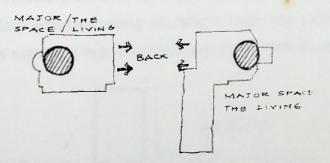


Fig 3.42: Space arrangement after the transformation (the ground floor). The main space shift from Living area towards the atrium.

The atrium spaces consist of two rows of spaces in either side which makes a space in between. This emphasized a shopping street or shopping arcade which runs through the entire building. The door sashes had been removed and the points of accesses had made wider to emphasize this axial space arrangement. The original layout of the houses also facilitates this setting. ---- 115

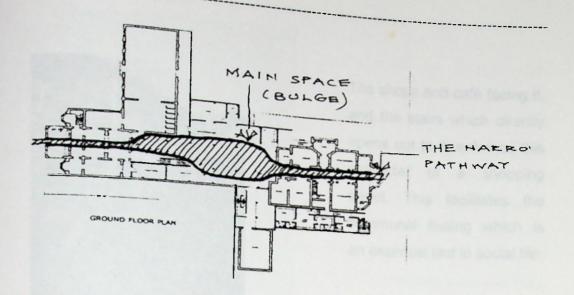


Fig 3.43: Formation of shopping street. Main space is a bulge in the middle of a narrow pathway.

This central position of shopping arcade facilitates the linking of main activity nodes throughout the building to it. As the entrance points are at the two ends there are constant movements in-between. By making the main space (atrium) a bulge in the middle of the public paths with narrow ends (corridor spaces of houses), it forms an enclosure where people tends to stay. The concentrated activities along its length make the promenade dense with action thus making it live. This facilitates mans instinct need for free browse.

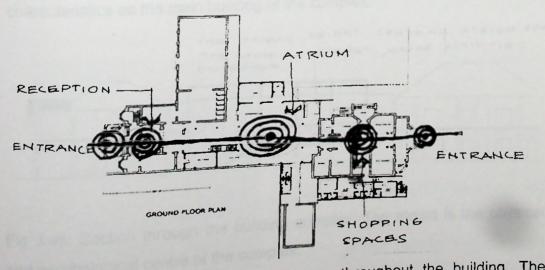


Fig 3.44: The shopping street which runs throughout the building. The activity nodes along it are shown.

- 116



The shops and café facing it, and the stairs which directly opens out to it, enhance this character of a shopping street. This facilitates the communal feeling which is an essential fact in social life.

Plate 3.45: Atrium as a shopping street

The single storey service spaces of old buildings were demolished to build the new structure. It provides space for shopping, relaxing and staff facilities. It forms a street theater where people gather, stroll and browse.

It is the centre of the complex and the public realm. The most essential functions are embedded in this space and it acts as the reference point of the building which facilitates the orientation of people. The tribal height space and the high glass roof which fully light up it; enhance its characteristics as the main building of the complex.



Fig 3.45: Section through the building complex. The atrium is the physical and psychological centre of the complex.

--- 117

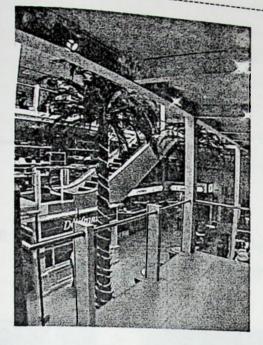


Plate 3.46: The atrium as the main space or the centre. The new materials mark a distinct difference between old and new, thus presenting the continuation.

Though the atrium is a large tribal height space it is dense as it has broken into smaller parts. This is done through the three floor spaces which embed shopping activities within the building including the mezzanine floor. The columns, bridges and artificial palm trees enhance this character of space. The trees help to interpret space as a street.

The middle of it where people are passing through the ceiling is tribal height while the edges where the people stop to shop and to relax, were made lower using the upper floor planes. This makes it a psychologically comfortable space.



Plate 3.47: Psychologically comfortable main space. The dense environment makes one feel comfortable.

---- 118

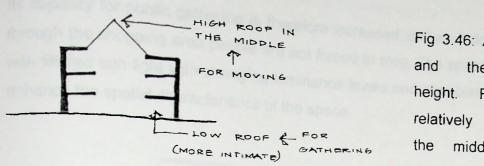


Fig 3.46: Activities and the roof height. Roof is relatively high in middle and lower at edges.

3.4.6: SHOPPING SPACES WITHIN THE GROUND FLOOR OF ATRIUM : PHYSICAL SETTING \ ACTIVITY \ MEANING



Plate 3.48: The shopping street within the atrium space. The flexible shopping spaces give opportunity to create personalized shopping spaces.

The shops along the shopping street is minimally marked providing no more than columns and the roof of the mezzanine floor. The different shopping areas were demarcated by juxtaposition of items and cupboards. This provides a flexible shopping space which can be adjusted according to seasonal needs.

3.4.7: CAFÉ : PHYSICAL SETTING \ ACTIVITY \ MEANING

The café is located adjacent to the shopping street with half open to it and set of tables stretching out of it towards the street. This makes the place more like a real way side café where joy of mixing in public can be experienced. As it is laid tangent to the shopping street there will be people who pass the space constantly.

--- 119

Chapter three: An examination of the conceptual re-utilization of old buildings

107268

Its capacity for public gathering is therefore increased and as it doesn't go through the shopping area people are not forced to stop. The space light up with filtered sun light with changing luminance levels and shadows patterns enhance the spatial characteristics of the space.

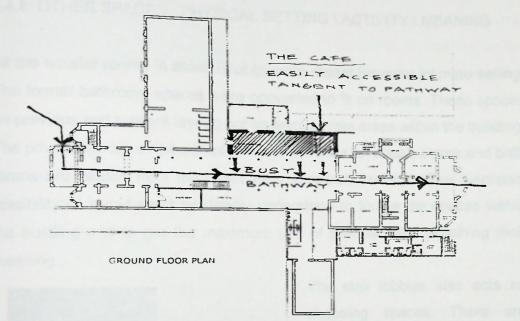


Fig 3.47: The physical setting of the café lounge



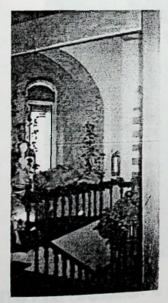
Plate 3.49: Café lounge adjacent to the shopping The tribal height street. space creates a perfect setting to relax and gather.

--- 120

The original layout of the building had used in its maximum to create an axial arrangement of spaces thus creating loop circulation along it. Through some adjustment of openings (removal of door sashes, widening of doors) the continuous hierarchies of spaces are interconnected and form an interesting

3.4.8: OTHER SPACES : PHYSICAL SETTING \ ACTIVITY \ MEANING

All the smaller rooms in those houses were meant for more intimate selling. The former bathroom spaces were converted to fit on rooms. These spaces (in previous and present layout) act as semi private areas within the building. The private spaces of the complex which are the staff areas, stores and bath rooms are hidden from the direct view very successfully. The functional feasibility of layout must be deeply understood to locate the spaces within the building and to get the maximum use of spaces still maintaining their meaning.



The stair lobbies also acts as shopping spaces. There are multi use spaces according to their position in the space arrangement. Smaller lobby spaces are used as exhibition areas.

Plate 3.50: Stair lobby as an exhibition space

The people tend to go towards the light. Here this aspect had been used to facilitate the vertical movement in the atrium space. The spaces in upper floor level of the atrium are fully open to the tribal height space in the middle. It facilitates human instinct to see the world from a higher point (atrium). They give people places where you can see far away and therefore can orientate yourself towards it.

---- 121

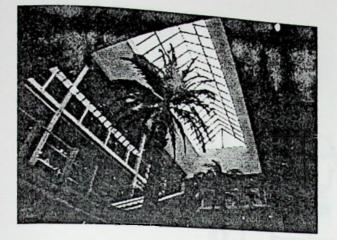


Plate 3.51: The sky light facilitates the vertical movement. The view towards the tribal height space facilitates the shopping activity and human instinct to see the world from a higher point.

The shopping street in the atrium flows onto several levels, creating links to interpenetrate. The upper floor has another role as shopping areas rather than bridge connecting two old buildings. It is not divided into separate shops but the juxtaposition of items makes a simple space arrangement.



Plate 52: Shops in the upper floor levels of the atrium

The loop circulation is facilitated thus ensuring the cardinal orientation. The circulation network is rather simple and regular. The atrium space acts as an intersection and reference point to pause. The individuality of spaces helps to recognize them thus facilitating orientation. This need for orientation is vital in an unknown territory. In a shopping activity also this understanding of the starting point and the cardinal orientation is needed to find an escape route when one needs to end the activity.

----- 122

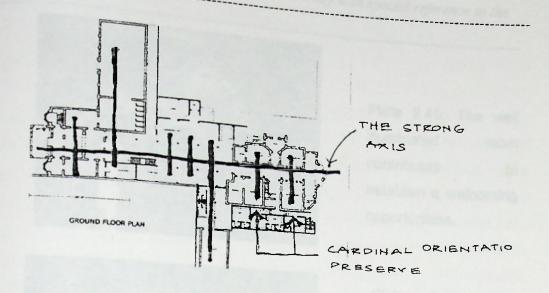


Fig 3.48: Axial space arrangement and cardinal orientation

The lighting was completely new, done accordingly to shop design requirements. The simple furniture emphasizes the transformation of old to new. The floor finish was high quality ceramic tiles which suites the floor finish in old buildings. This binds the old and new parts of the buildings. The roofs are the old ones with new ceilings. The white, grey, black and silver colors wee used to enhance the sophisticated quality of the building. The white washed surfaces of the new buildings emphasized a continuation of old building.

However there is a marked difference in old and new though continuity is facilitated. The spaces within the old building have a more sanctified character comparing to the new. The low light levels and materials used in old buildings eliminate the dynamic character one can feel within the atrium.

The challenge here was to convert an old house to a fashionable shopping space. The transformation of formal old building to a contemporary shop interior was achieved successfully. The building was used as a constituent which facilitates good image of the brand name. The continuation of old and past was done successfully and therefore the new building is not an

alienated space.



Plate 3.49: The well illuminated room contributes to establish a welcoming opportunities.

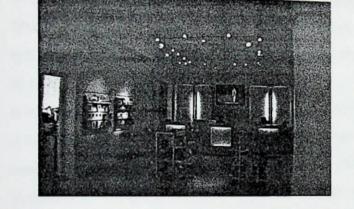




Plate 3.50: The shopping areas. The rich sophisticated quality of the old house was enhanced through the colors and pools of light.

Plate 3.51: The corridor space of the rear house. It facilitates the axial arrangement of spaces.

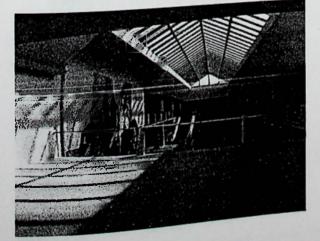


Plate 3.52: The first floor. Fully light up space facilitates esthetic requirements as well as functional requirements.

124

3.5. CASE STUDY FOUR : METHODIST COLLEGE, PRIMARY SCHOOL

3.5.1. BACKGROUND TO THE PROJECT

Formerly it was an elegant residence built for a Persian family. Later Methodist college bought this property and converted the house into a school. Thus the spaces were transformed according to the new function of a school. Along with the introduction of new role interventions took place and the building layout changed. The upper floor spaces were used for hostels. The ground floor used for class rooms, was extended with the first extension. The addition of another wing provides more class rooms. The second extension which was done by Archt. Channa Daswatte gives the real sense of a primary school to it.

It is an elegant house located in a perfect site overlooking the sea. This was a major aspect considered by the Persians and may have been the major reason to built this house in this particular site. The long verandahs and rooms with a great view of sea are things which appreciated by them. Subsequently with the new developments the surrounding context urbanized making the premises tight and compact. There was a big challenge in the extension project to create a more peaceful secure environment for the small children who are primary user of this building.

3.5.2. ENTRANCE: PHYSICAL SETTING \ ACTIVITY \ MEANING

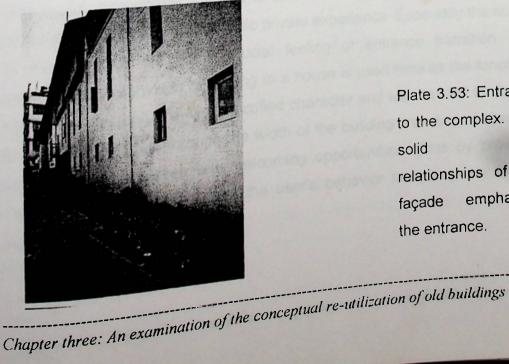


Plate 3.53: Entrance to the complex. The void solid relationships of the façade emphasize the entrance.

---- 124

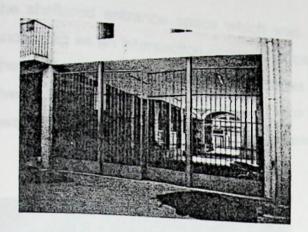


Plate 3.54: The entrance void. It creates a transitional space while maintaining the continuity between street and building.

The facade was demarcated by the new building which was constructed in the second stage of extension. The new front building, which entrance is given through, partly separates the inner activities from the busy outside context. The facade of this building expresses a play of solid void relationship. Thus cutting out the disturbances occur by the busy public road providing a more intimate play area for children. The reason behind this could have been the need of creating a secured environment for the children thus maintaining continuity with the street. The continuity character enhances the live ness of the street by merging the dynamic day today activities within the school and gives opportunity to experience the outside world from the school without totally separating them from the world.

The color of the facade and the void which gives a direct view of the playground, demarcates the end to tension which appropriate to the street behavior and permit more dynamic private experience. Especially the solidity of the entrance creates a crucial feeling of entrance transition. This introverted nature which belonging to a house is used here as the functional necessity to establish a well sanctified character and well defined territories. The void which span through the width of the building providing shelter and gathering space serves with welcoming opportunities. Thus by providing those transitional areas adjust the user's behavior to appropriate for the school environment.

..... 125

The sheltered entrance space which was a part of ground floor area is functioning as an intersection connecting many other spaces in the building. The entrance (through the façade), acts as a gate since the porch in front gives a strong sense of an entrance. There is a good directional orientation towards the porch since it is in a direct access with the main gateway.

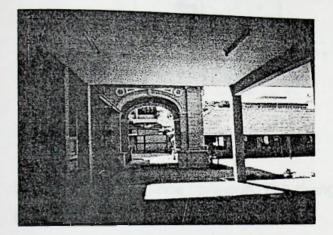


Plate 3.55: The view from entrance. The directional orientation towards the main building is given. The play area is converted to more а intimate place encircled by the buildings.

In former layout the play area was opened out to the street. Subsequently with the new extension it is converted to a place with more intimate quality. This has created a positive outdoor environment.

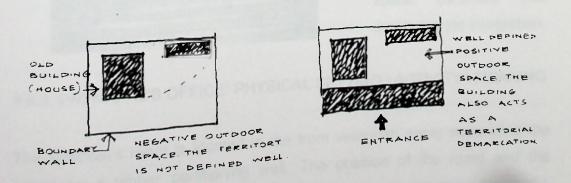


Fig 3.50: The creation of positive outdoor environment makes the play area a more intimate space. ----- 126

The change of this direction is occurred at the porch giving a feeling of transition. With this, the front verandah and building interior comes visible, giving the feeling of entering. The highly decorative detailing which was totally contrasting from the simple forms experience on the way up to this point enriches this feeling.

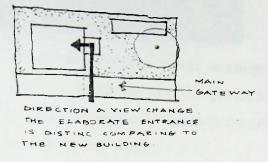


Fig 3.51: The entrance transition. The change of direction and view facilitate the transition.

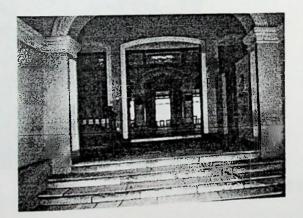


Plate 3.56: The openings facilitate the visual and continuity thus spatial facilitating the integration.

3.5.3. PRINCIPAL'S OFFICE: PHYSICAL SETTING \ ACTIVITY \ MEANING

The principal's room is located in the front verandah easily separating the space by a timber partitioning wall. The position of the room and the openness of it provide opportunity to see her appearance more frequently. This adjusts the behavior pattern of children to some extend, while creating a closer relationship among them. The other advantage of this is that, all the buildings in the school can be seen from this position.

----- 127

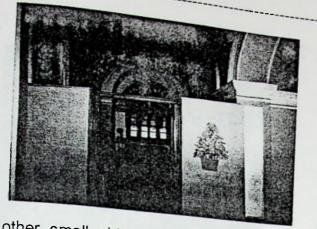


Plate 3.57: The principal's room is located in the front verandah. The openness of it provides opportunity to see her more frequently.

The other small side entrance which students used more frequently is positioned making a direct axis with the principals' room in the verandah of the old house. As the entrance is visible to the principals, it prevents children leaving school without permission.

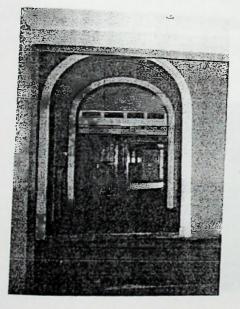


Plate 3.58: Side entrance which students used more frequently is positioned making a direct axis with the principal's room.

3.5.4. ASSEMBLY ROOM: PHYSICAL SETTING \ ACTIVITY \ MEANING

The physical setting of the old house facilitates the transformation of some spaces. The living, dining areas of the old house is easily converted to an assembly room. In both former and new settings it is the most pubic space and the main space. The decorative moldings, floor finishes make it suitable for this kind of purpose. The bedrooms on either side of living, dining area s are now converted to class rooms. These class rooms opened out to the assembly hall, facilitate the circulation through them thus facilitating the interaction of children.

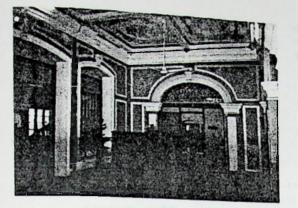


Plate 3.59: The living, dining areas of the old house converted to an assembly room. The class rooms opened out to the assembly hall facilitates the interaction of children.

The other doorways of class rooms which are leading towards the rear verandah space are closed now to create a more intimate space; a class room which is a functional necessity. The colors used for the walls, furniture give the true sense of primary school creating a dynamic environment.



Plate 3.60: The colors and the physical setting create class rooms with dynamic intimate and quality.

3.5.5. REAR GARDEN: PHYSICAL SETTING \ ACTIVITY \ MEANING

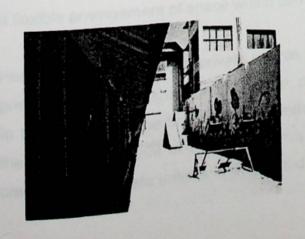


Plate 3.61: The strip of land in the rear side was converted to the most intimate play area of the school which is for the smaller children, with an adjoining canteen.

---- 129

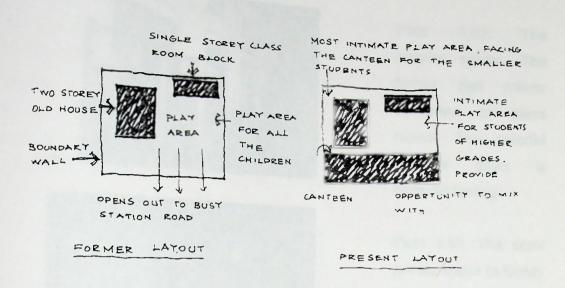


Fig 3.52: The intimacy gradient of play areas

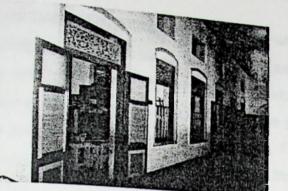
The bright contrasting colors had given a dynamic character to the building thus enabling continuity with new building in which the same colors were used. The wall and ceiling planes painted in contrasting colors and the old decorative floor finishes create a dense and humanized environment.

3.5.6. UPPER FLOOR: PHYSICAL SETTING \ ACTIVITY \ MEANING

The stairway which begins from front verandah opens out to the corridor space in upper floor. In upper floor the class rooms, library and sick rooms have been located around the corridor. The library space is in the middle of other rooms and the doorways were closed up using the furniture, providing a flexible arrangement of space which can adjust according to future needs.

Here the semi private and private spaces have been converted easily to the present needs. The space in the middle, probably the family room converted to the library and the bed rooms converted to class rooms thus preserving the intimacy gradient of the house. This also suites to this function, as it create more intimate entities in which students will feel secure.

--- 130



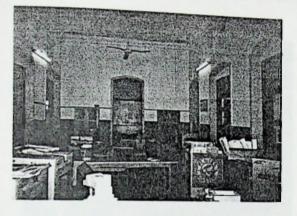


Plate 3.62: The corridor space. The former bed rooms converted to class rooms. The colorful furniture gives a dynamic feeling

Plate 3.63: The semi private space (a family room may be) in upper floor now transformed into a library.

3.5.7. NEW BUILDING: PHYSICAL SETTING \ ACTIVITY \ MEANING

The connection to the new building from the old is given through a bridge. As it is built in such a way (in an upper level with a view of ground floor) it must have provided an adventurous journey for the small children. At this point you can intensely feel the transformation from old to new. The highly detailed planes changed into more simple form though the color schemes remain same enabling the continuity through them.



3.65: The Bridge Plate connecting old and new. The transformation from detailed planes to simple planes though the color same schemes remain continuity the enabling through them.

-- 131

The new building is a three storey building which forms the street boundary. The bridge directly connects the first and second floor to the old building. There are corridor spaces which spans along the length of the building combining all the class rooms to it. At some points the corridor space forms a real bridge with court yards in either side. This prevents disturbance which can occur due to street while separating from the old building. The north south facing building also creates a more comfortable and livable space.

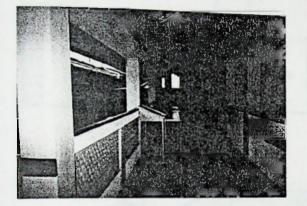
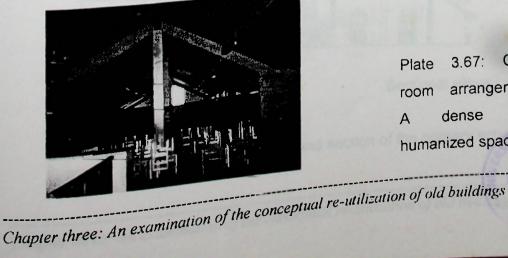


Plate 3.66: The bridge space connecting old This and new. provides a gathering space which has good light and ventilation levels.

The doors with small balcony space projecting towards the road allow visual and spatial continuity to some extend. The thin window strip also facilitates light and ventilation needs thus preventing the unnecessary disturbance that can be occurred from the busy street.

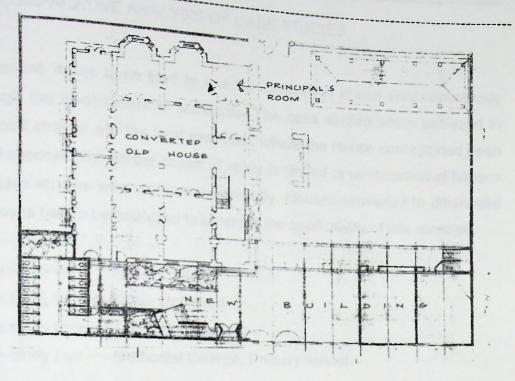
The short walls (Approximately five feet high) separating the class rooms create a more humanized space for children. This also facilitates ventilating class rooms from both sides. The timber partitioning walls in second floor provide the flexibility of spatial organization. The painted exposed beams make the space dense though more human.



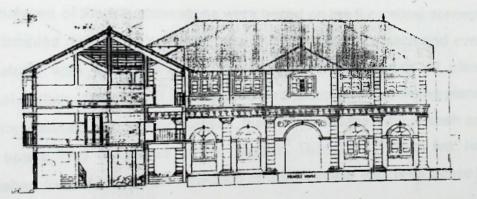
Class 3.67: Plate arrangement. room and dense Α humanized space

- 132

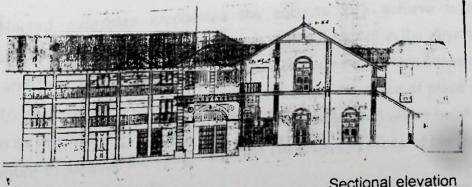
A sense of place in the re-utilization of space: A study with special reference to the



Ground floor



Sectional elevation



Chapter three: An examination of the conceptual re-utilization of old buildings

Sectional elevation

Fig 3.53: Plans and section of the primary school

135

3.6. COMPARATIVE ANALYSIS OF CASE STUDIES

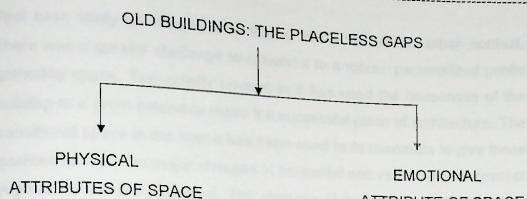
In present, it has been tried to use the concept of re-use very consciously through the involvement of architects. The case studies which analyzed in the third chapter are the best examples where the re-use concept had been used successfully. As the scope of study is limited to re-utilization of houses the case studies were chosen accordingly. Houses converted to differential purposes had to be analyzed to examine the applicability of this concept.

Case study one	- Gallery cafe
Case study two	- ODEL Unlimited
Case study three	- The "Dutch House"
Case study four	- Methodist College, Primary school

The analyses of the transformations were based on the theoretical concepts and principles discussed in chapter one and two. Therefore each and every case study was analyzed under the three main constituents of place; physical setting, activity and meaning. The transformation in building planes to create volumes and spatial qualities, the activity and meaning of each and every space had discussed in this chapter. Therefore a direct link had established to understand the formation of overall image and "New Sense of place".

The selected examples emphasize the success they achieve when converting them to suffice the new function. The adjustment in the physical setting and the new meaning given to them contributes to its new sense of place. To give a clear understanding of this change, the sense of place of house in its original use (which was discussed in chapter two) will be helpful. Furthermore to simplify the comparison the constituent of sense of place is shown in a diagrammatic way.

---- 133



Quantitative diminutions

- Horizontal space defining elements
- Vertical space defining elements

Qualitative dimensions

- Composition
- Color
- Light and shade
- View

EMOTIONAL ATTRIBUTE OF SPACE

Emotional dimensions

Centre Enclosure Continuity

Spiritual dimension

Spatial juxtaposition Interpenetration

PHYSICALL SETTING (ADJUST)

ACTIVITY (NEW)

MEANING (USER MEANING\ DESIGNER MEANING)

"NEW SENSE OF PLACE"

- 134

First case study the Gallery café was a house built in the urban context. There was a greater challenge to convert it to a more personalized public gathering space. The activity housed in it has used the houseness of the building to a great extend to make it a successful piece of architecture. The transitional space in the house has been used to its maximum to give these qualities to it. So the major changes in horizontal and vertical planes (except in pavilion) are not significant. The changes of floor finisher's addition of a new pavilion space are adjustments that can be seen. The conversion of physical setting had been done through color, lighting, paintings, furniture arrangements and path configuration. When the new function not totally different it is possible to convert them with minimum alterations.

Though the building is now open out to public, each and every object was selected with care to harmonize with the building itself, not violating the original charm of the old building. This original charm of the house also enables achieving these objectives. The meaning is also conveyed properly without loosing its intensity. Therefore it is worthwhile to study this building which embedded new activity with minimal changers and achieve a new sense of place.

ODEL Unlimited is another case study that was selected. These houses were also located in an urban context. Unlike in Gallery café here the challenge was to convert this house to a sophisticated shopping complex, thus connecting two buildings in a fine way. By doing so not only the houses but the neglected "Back" spaces of these houses are utilized well. The character of the building had totally changed to establish a busier and interesting realm of spaces.

Here the houseness of the buildings has not used as the function has a distinguish difference from a character of a house. Subsequently the scale and rich ornamentation makes it suit for this kind of function. Though, the example highlighted the ability of a house to be adjusted into a new function.

The atrium is a totally new building which was innovatively designed by using two new vertical planes and an overhead (sky light) plane. The removing and widening of doors create a good circulation realm. The luminance levels had been created to encourage vertical movement. The colors had been used to maintain the continuity and rich sophisticated character of the building.

The Dutch House was located in a calm environment in Galle. Here also the houseness of the building has used into its extremes to make a guest house with more private and peaceful environment. As the function of a guest house is familiar to a function of a house, the alterations that have to do are minimized. With few changes of horizontal and vertical planes (doors, walls. Floor finishes, roof, and garden) the house has been converted into a more personalized place.

In Methodist College the challenge was to create more secure environment facilitates the integration of children. It is a vital fact that must take which into consideration when specially re-designing school environments. The old and new building altogether contributes to create this new situation. Through the study the applicability of reuse of houses into most distinguish functions like these. Here the spaces have been easily converted into class rooms giving a secured environment. The play areas, class rooms were formed creating intimate spaces.

This exposes you to experience a live conservation through a more public activity. Intimacy gradient has been changed successfully to the new function with extending wings. The building creates a place suitable for social gathering in different levels. As the result the whole complex and each and every space has contributed to create a "Sense of place".

CONCLUSION

The term "Place" is used in the day to day life to express various meanings. In other words the humans are living in a world filled with "Places". As the meaning of this word is used in a wide range, the exact idea of it has to be discussed before going to an in depth study. This has to be studied through the various definitions presented by the theorists, educationists, planers and designers. From this it was concluded that a "Place" is a directly experienced phenomena of a live world which was filled with meanings, real objects and ongoing activities. As they form the individual identity of a place can be considered as the fundamental aspects of place that should be taken into consideration.

There is an excellent emotional bond between the man and the physical environment. Achieving a secure position which orientates man is a deepest necessity of all human beings. These places can be either natural or man made spaces.

Architectural space is the space created by man for purpose of living. It is a representation of physical setting which is a constituent of place. Here the task of an architect is to create spaces which are potential places. This physical setting provides the context for an activity to happen. An activity can induce meanings to the spaces. Thus the meaning can be interpreted as the extract of the interrelationship between physical setting and activity as a total experience. Since the value of a place establishes by the user meaning, it is important to respond to their needs.

The "Places" with identity has a great ability to facilitate this by enabling physical and psychological comfort of humans. Their physical setting, function together conveys a meaning to people. The orientation is given through this physical and psychological comfort. This identification of place through the sense of place which is the ability to understand different leads towards the sense of place which is the ability to understand different places.

---- 137

When the elimination of this happens, the orientation becomes difficult and the environment becomes stressful to its users. And especially when old buildings which were neglected or transformed without proper care had the potential of becoming placeless gaps in the built fabric, thus eliminating the sense of place. These have been discussed in chapter one. The concept of space, place and the constituents of the place had been studied using theories and definitions. This emphasized the relationship of them to architectural space. Then their constituents (physiological, psychological and emotional attributes) have been discussed thus emphasizing its contribution towards the sense of place.

Through this one can understand how the adjustments in the constituents affect the character of the place thus giving it a new identity. The physical attribute consists of the three dimensional organization which denotes by the space defining elements creates the space. The slightest change in space defining elements demarcates a characteristic change of the spatial organization. With the involvement of activities and emotions these specific "Spatial organizations" becomes "Places". Thus facilitating man's basic need to experience and identify his surrounding. This identification forms the basic framework to experience the "sense" which belongs to that particular place.

Chapter two focuses on house which is the central place of human existence. The evolution of the house, the changes it underwent due to the socio economic and cultural changes is discussed in this chapter. Here the spaces within the house are been categorized into four basic domains: public, semi public, semi private and private. The public domain includes space like entrance, verandah and car porch. The living and dining rooms were categorized under semi public while the family room, family dining, pantry and kitchen are semi private spaces and finally the bed rooms under private domain. This kind of intimacy gradient conveys a meaning thus facilitating orientation.

- 138

To understand its original character each and every space is discussed under physical setting, activity and meaning which are the constituents of place. This gives a rough idea of how the house gives the idea of a physically and psychologically comfortable place.

From the research done in the chapters it can be concluded that for design purposes it is important to study re-interpretation of old buildings. Each and every space should be given extra thought to create a new "Sense of place" as a whole. The original use, the intimacy gradient as a house can be used to enhance the character of the place according to function it serves. The understanding of a sense of a house in its extremes will help in creating new "Sense of place" within that building. Through the case studies it is analyzed how these old buildings are utilized innovatively. This creation is vital as it creates timeless entities which adapt to modern world, thus eliminating the placeless gaps that could appear in the built fabric. This enhances the continuation of past and future and sense of place, which facilitates variety of human experience.



REFERENCES

Alexander, C. (1979), The Timeless Way of Buildings, New York: Oxford University Press

...... (1997), A pattern language, London: Oxford University Press.

Bachelard, G. (1958), La poetique de l'espace: translated by Jolas M. (1964), The poetics of space, Boston: Beacon press.

Benlley, Lan and alock, Alan and Murrian, Paul and Mcguylymn, Sue and Smith, Graham (1985), Responsive Environments, London: The Architectural press.

Ching, F.D.K. (1979), Architecture: Form Space & Order, New York: Van Nostrand Reinhold.

Cooper, c. (1974), The house as the symbol of self, Pennsylvania: Dowden Hutchison & Ross Inc.

Gardiner, S. (1975) Evolution of the house, London: Constable & company Ltd.

Habraken, N. J. 1983, Transformation of the site, Massachusetts: awater press

Harland, E. (1998) Eco Renovation, Guilford: biddles Ltd

Hayden, D, (1995), Power of place, Cambridge: MIT Press.

Jhonson, S. (1993) Greener building, The Macmillan press Ltd

Lynch, K, (1960), The image of the city, Cambridge: MIT Press.

Miess, P.V. (1986), Elements of architecture from Form to Place,

Switzerland: Polytechniques romandes Oliver, M. (1970), Psychology of the house, London: Thames and Hudson

Ltd. Porter, t. (1997), The Architect's eye, Hong Kong: Dah Hua Press.

Powell, R. (1996), Tropical Asian houses, London: Thames and Hudson.

Rapoport, A. (1969), Houses form and culture, New jursey: Prentice-Hall Inc

..... (1982), The meaning of the built environment, London: SAJE

Rasmussen, S.E. (1995), Experiencing Architecture, Massachusetts: The MIT Press

Relph, E (1976) Place and placelessness, London: Pion Ltd

Rudofsky, B. (1981), Architecture without Architects, London: Academy Editions

Schulz, C.N. (1971), Existance space and Architecture, London: Studio Vista.

Schulz, C.N. (1988), Genius Loci - Towards a phenomenology of Architecture, New York: International Publications Inc.

Turner, J.F.C. (1976), Housing by people, Marion Boyars.

JOURNALS

Beng T.H. (19...) " Two conservations\restorations from Singapore", SLA Journal, Vol. 101, No 19, pp.48-52.

Daswatte C. (19...) " The Tea Factory: The transformation", SLA Journal, Vol. 101,No 18, pp.27-29.

Daswatte C. (2000), "An overview of 50 years of architecture since independence in Sri Lanka", SLA Journal, Vol. 102, No. 03, pp.40-45.

Dayaratne R. and Rajapakse A. (1998), "Towards place sensitive urban intervention", Built-Environment Sri Lanka, Vol. 01, Issue 01, pp.23-32.

Dharmasena K. (19...) "Conservation in urban development: A conflict of interests", SLA Journal, Vol. 101, No 18, pp.37-39.

Marchetti P. (1989), The Ospizio Michele in Rome, Seminar proceedings at the Royal fine arts commission on Conservation today.

Abdulac S. (1989), Conservation in the countryside in France, Seminar proceedings at the Royal fine arts commission on Conservation today.

Curran M.C. 91989), Conservation in the countryside in Malta, Seminar proceedings at the Royal fine arts commission on Conservation today.

Stigt A.J.V. (1989), The Entrepot Dok inAmsterdam, Seminar proceedings at the Royal fine arts commission on Conservation today.

Haagensen H. (1989), The Gammel Dok in Copenhagen, Seminar proceedings at the Royal fine arts commission on Conservation today.

Kabar O. (1989), Institutions and adaptations, Seminar proceedings at the Royal fine arts commission on Conservation today.

Falk N. (1989), Adapting and re-use, Seminar proceedings at the Royal fine arts commission on Conservation today.

Fonseka M. (19...) "The conservation of old Colombo", SLA Journal, Vol. 101,No 19, pp.38-47.

Guneratne R, and Gomas W. (2000), "Gallery café: The stretching of an icon", SLA Journal, Vol. 102, No. 03, pp.22-28.

Manawadu S. (19..) "Architectural conservation of monuments and sites, and the controversial shelter over the Buddha image at Avukana", SLA Journal, Vol. 101,No 18, pp.17-22.

Munasinghe, H. (1998), "Towards a conceptual framework for the conservation of urban heritage", Built-Environment Sri Lanka, Vol.01, Issue 01, pp. 1-4.

SEMINAR PROCEEDINGS

Boutwood J. (1989), Conservation in the countryside, Seminar proceedings at the Royal fine arts commission on Conservation today.

Farrell T. (1989), Adaptive re-use of large scale buildings, Seminar proceedings at the Royal fine arts commission on Conservation today.

Munasinghe H. (2002), Towards a new urban reality: Urban renaissance through conservation, Seminar proceedings at the Colombo Colloquium on Urban Renaissance through city architecture, Colombo.

Rapoport A. (2002), Urban Regeneration: culture and design, Seminar proceedings at the Colombo Colloquium on Urban Renaissance through city architecture, Colombo.

Sevenaer L.L.M.V.N.T. (1989), The management of the Netherlands architectural heritage, Seminar proceedings at the Royal fine arts commission on Conservation today.

Wijesundara J. (2002), The current approaches to urban renewal: Lessons from Germany and Sri Lanka, Seminar proceedings at the Colombo Colloquium on Urban Renaissance through city architecture, Colombo.

E P S

15 OCT 2014

JRAHY