

HOUSING THE LOW INCOME :

A STUDY OF SOCIO – CULTURAL CONTEXT OF URBAN LOW INCOME SETTLEMENTS AND ITS IMPLICATIONS ON HOUSING DESIGN.

Dissertation presented to the
Department of Architecture,
University of Moratuwa, Sri Lanka,
For the M.Sc.(Architecture) final examination 2000 and
To the Royal Institute of British Architects.
For the R.I.B.A (Part II) examination.

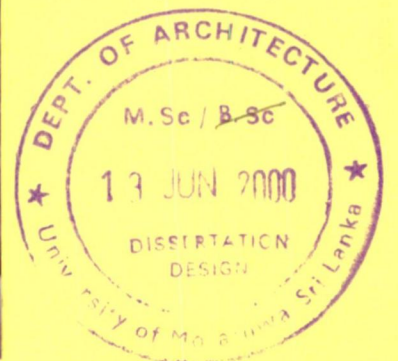


University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk



සමස්තය ලෙස
අනුමැතිය ලබා දෙනු ලැබූ
සාකච්ඡා
සමාජය.

74120



L.H.D.M.MADUMANTHA.



M Sc 2000.

72 "00"

711.582

74120

TH

ACKNOWLEDGEMENT

The gratitude of mine is given to prof : Nimal De Silva, the dean faculty of Architecture further it is extended to the year masters of year 5 archt: Vidura Sri Nammani and Archt:Ranjith Alahakoon.

My deepest gratefulness is offered to Dr.Waduge for being my tutor guiding Through the whole endeavor. I thank all the residents in Wanathamulla , Navagampura and Panchikawatta settlements for all the help give me to wards the consolation of this study.

I thank heartily to my friends ; Chandrakumara ; Rasika ; Ajantha ;Kanchana; Chathu and Akila for all their advise and help. To Anu I praise evenly for being with me in all despair encouraging me to the utmost .

I further acknowledge my late mother ; and honor this study for her personage .



ABSTRACT

“Architecture is for people as become a well known cliché which is been used without a precise comprehension of its deeper assets. Thus intern, it has created a discomfort in the ultimate user especially in the provision of housing for the poor community dweller.

Similarly, in a rigid grid iron pattern designed, repetitively stacked dwellings do not in co – operate (or enhance) with the socio cultura context of urban low income dwellers. At all the ultimate result is that they return to their original dwelling which create shanty settlements within urban premises.

Thus more concern has to be given to the socio cultural context of urban low income dwellers and examine the extent of its contribution for their dwelling designs

Housing settlement is a basic need for human existance. The present issue of housing has been comprehended as a provision of ‘Homes’;.....
..... ‘housing,’ as the developed shelter; a greater need of **home making**

CONTENTS	PAGE
<u>CHAPTER ONE</u> : HOUSING SETTLEMENT AS A GREATER NEED FOR HUMAN SURVIVAL	
1.1 BASIC HUMAN NEEDS AND SHELTER.	01
1.2 "HOUSING" AS THE DEVELOPED SHELTER, A GREATER NEED TOWARDS HOME MAKING.	02
1.3 HOME : PLACE MAKING PROCESS AND CONCEPT OF HUMAN EXISTANCY	
1.3.1 : Home as a symbolioc expression of place	05
1.3.2 : Authentic sense of place .	07
1.4 SOCIO-CULTURAL FACTORS OF DWELLER AS BASIC MOULDER IN SELF CONSCIOUS PLACE MAKING FOR HUMAN EXISTANCY.	11
<u>CHAPTER TWO</u> : URBAN LOW INCOME SETTLEMENTS IN SRI LANKAN CONTEXT	
2.1. URBAN LOW INCOME SETTLEMENTS	
2.1.1. The origin	13
2.1.2. Slum and shanty population in the developing world	15

2.2. URBAN LOW INCOME SETTLEMENTS IN
SRI LANKAN CONTEXT.


- 2.2.1. Characteristics of slum &
squatter settlement :
Reference to its built form 16
- 2.2.2. Slum & squatter settlement
within Colombo city limits. 17

CHAPTER THREE : SOCIO-CULTURAL CONTEXT OF
URBAN LOW INCOME CATEGORY

- 3.1 SOCIO-CULTURAL CONTEXT OF URBAN LOW INCOME
CATEGORY : THEORITICAL PERSPECTIVE 25
- 3.2 SOCIO-CULTURAL CONTEXT AND ITS DETERMINANT
FACTORS OF URBAN LOW INCOME CATEGORY 28
- 3.2.1. Economic status 28
- 3.2.2. Dwelling status
- a) Public activities. 31
- b) Non-public activities. 37

CHAPTER FOUR : SOCIO CULTURAL CONTEXT
AND ITS IMPLICATIONS ON
HOUSING DESIGN.

- CASE STUDY : INSIGHT INTO SELECTED
SPONTANEOUS URBAN LOW INCOME
SETTLEMENTS WITHIN COLOMBO CITY
LIMITS. 39

4.1. INTRODUCTION.	39
4.2. SCHEMATIC ADAPTATIONS FOR SOCIO CULTURAL CONTEXT OF DWELLERS WITHIN NEIGHBORHOOD.	-
4.2.1. Public activities : public realm.	40
4.2.2. Non - public activities : family realm.	40
4.3. WANATHAMULLA.	-
4.3.1. Ecological schemata	42
4.3.2. Neighborhood communities .	44
4.3.3. Schematic adaptations for socio cultural activities within neighborhood.	45
(a).Public realm .	45
(b).Family realm.	49
 University of Moratuwa, Sri Lanka. Electronic Access to Dissertations www.lib.mru.ac.lk	
4.4. PANCHIKAWATTA.	-
4.4.1. Ecological schemata .	63
4.4.2. Neighborhood communities.	65
4.4.3. Schematic adaptations for socio cultural activities within neighborhood	65
(a) . public realm.	65
(b). Family realm.	69

4 . 5 . NAVAGAMPURA.

4 . 5 . 1 . Ecological schemata .	81
4 . 5 . 2 . Neighborhood communities.	82
4 . 5 . 3 . Schematic adaptations for socio cultural activities withn the neighborhood.	83
(a). Public realm.	84
(b). Family realm.	87
CONCLUSION	94
BIBLIOGRAPHY	97



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

INTRODUCTION.

Topic explanation

Housing the urban poor coherently has been a prominent snatch in the recent past. The issue has been convincingly comprehended as a process of home making beyond the parameters of mere housing. It is felt that in order to achieve the foreseen results; the dwellers intimate perceptions of 'home' should be comprehensively distinguished with respect to their unique socio – cultural profile.

The past housing endeavors have mostly been recognized as a concept of actualizing the dweller's quantitative requirements in spite of the qualitative needs. That they mere provisions of tangible human comfort and have lacked perceptual stimulation's of home. Therefore it could be stated that the scheme have not provided the stipulations for the dweller's socio- cultural manifestations that are essential for their existence .

Accordingly as Rapaport says ;

“the form of a house or a settlement is not simply a result of physical forces or any single casual factor ; but it is the consequences of a whole range of socio-cultural factors seen in their broadest terms given a certain climate the availability of materials and capabilities of a given level of technology; what finally decides is the form of dwelling and moulds the space and their relationship the vision that people have of their ideal life. The environment sought reflect many socio-cultural

forces including religious beliefs ; family clan structures; social organization ; way of gaining livelihood and social relations between individuals” .

Considering the existing urban low income settlements ; eventhough The living conditions are very poor, the personalization of individual Dwellings as well as settlements planning within the neighbourhood fit well with their socio-cultural context .

Therefore it is essential to deeply study the socio-cultural context of the dweller when designing for urban low income category .

Intension of the study



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Various scholars believe that the socio-cultural context of urban low income dwellers pay a major contribution in the case of personalizing their individual dwellings and settlement planning within neighbourhoods . Therefore; the intention of this study is to examine the extent of the contribution of socio-cultural context of dwellers in determining their individual dwellings (external expression of home as well as internal planning) and settlement planning within the community group .

The need of the study

The urgent need for housing ; specially for the low income house holds is one of the most acute problem faced by the developing countries . This is

widely depicted in the form of shanty settlements

When professionals are involved in housing for the low income category most of these attempts fail to accept the values and needs of the people concerned but aim at achieving more goals which are far beyond the means and life styles of people.

Thus, what occurs is that the inhabitants of these project based settlements tend to return to their original dwellings, creating undesirable shanty settlements within city premises.

The ultimate truth is that this kind of a criteria badly effects on the development of the city as a whole. Therefore well designed dwellings that fit to the surrounding neighborhood and their socio cultural context is essential



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Methodology

As and when houses are being designed for the low income categories, the **initial hypothesis** is the **socio cultural context** of them. The socio cultural context is reflected by their activities such as, home based economic activities, community living, cultural activities..... etc.

The spaces that are created by them for the purpose of distinguishing activities are deemed to be examined. In this particular study ; the activities are expected to be categorized in two different groups namely the **public and non public activities**

It is expected to analyze the spaces where public activities take place under the **public realm** whilst the spaces where non public activities are **family realm** examined under the category of finding the examples for the study of family realm was based upon the categorization of John F.C. Turner

Public realm of low income category ' is considered by taking in to Account the factors of their community living and cultural cohesiveness .

Scope and limitations.

The study will distinguish the urban context of the Colombo unity limits to console the development of the area .
Furthermore , distinction will be given to the settlers ' socio-cultural Context and it will be studied under the economic condition and the status of the dwellers.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk



CHAPTER ONE :

HOUSING AS A GREATER NEED FOR HUMAN SURVIVAL.



1.1 Basic human needs and 'shelter'

From the beginning of mankind, it has found itself competing with the other elements in nature. Being identified as the most intelligent of species, man has found his survival more complex and challenging than the rest. Thus, the existential needs have become complex. The basic needs in overcoming the fore said challenges could be categorized in to two;

- a) Physiological needs such as food for hunger, air to breath and similar tangibles, and

- b) Psychological needs.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Psychological needs though were not felt as very important initially, the refined man has found those as the main driving forces in their existence. Thus were identified as sense of belonging, self-esteem, status and every other intangible, needed for the existence of its kind.

According to psychologist Abraham Maslow , "*Self - actualization is 'the' mans main driving force.*" He believes that there is a natural unfolding of four needs in a gradual and progressive fashion from the lower to the higher. The individual follows this development process as he matures arriving finally at self-actualization. Basically there are five levels in hierarchical order.

- 1) Physiological needs, hunger and thirst
- 2) Safety needs, security, freedom from pain, discomfort and threat
- 3) Belonging and love needs
- 4) Esteem needs, from prestige, recognition success and respect from others
- 5) Needs of self actualization

In Maslows' Hierarchy, **Shelter** has to cater to all the five levels of needs to a more or lesser degree.

1.2. "Housing" as the developed shelter; a greater need towards home making



Pragmatically 'shelter' has been identified as a quantitative physiological need for security and protection from natures threatening forces. Latter cognitive development of man and complex survival has identified the importance of a psychological component in addition to the aforesaid. It encompasses all the auxiliary services and community facilities, which are necessary for human well being. This 'quality' in shelter has to fulfill the need for belonging and love and all esteem needs, that helps one in self-actualization as an element of a larger context. In this sense, providing shelter for people has been identified in a deeper perspective as..**housing**. The degree of the complexity of the issue has been looked into in many ways.



University of Moratuwa
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

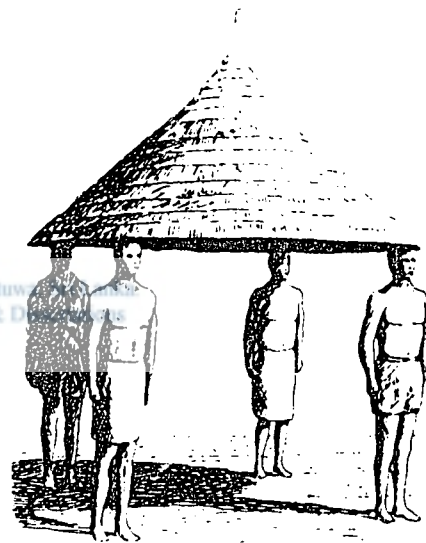


Fig 1- Man and shelter a basic need for protection.
Source- Laffer – Temple of the House

“housing issues will agree that they are primarily in twofold. One, there is a need to housing the poor, who cannot house themselves. The other is that there is a shortfall of supply to demand which is ever increasing despite all the investments and innovations.”

(Perera L.S.R-S.L.I.A annual sessions 1995)

In greater depths one can observe that housing converges more than one aspect. Hence the process could also be looked into in a simulated depth.

*“Housing is the process enabling the act of ‘dwelling’,
establishing one’s existence as appropriate for his
living on earth in the form of making ‘homes’.”*

(Dayarathne R.-S.L.I.A. annual sessions 1995)



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

In this extent dwelling could be simply magnified as the tangible enwrap and the house as the spirit of that place which has created an emotional bond between the dwelling and the dweller, embedded with memories, emotions, histories and a sense of belonging. Also it has provided individual territories identifies, desires and strengths to live and mainly to be humane. The ultimate aim in housing has been to provide the above; to provide ‘home’.




1.3. Home : Place making process and concept at human existancy

1.3.1 Home as a symbolic expression of place

The “house” can be defined as a place where the dweller finds himself at ease and harmony. That is what is meant by a meaningful place.

“When environments provide opportunities and possibilities for making meaningful places, people find them intimate and feel “at home” in them“ [Dayarathne 1985: 2].

 University of Moratuwa, Sri Lanka.
www.lib.mrt.ac.lk
The place is constructed by endeavouring some specific part of space [Relph 1977, Tuan 1976]. [Fig –1]

As one experiences the meaningful events of existence, place becomes a center of action [Norberg Schultz].

To acquire the specific significance of a house, it should be spaced in a specific geographical location.

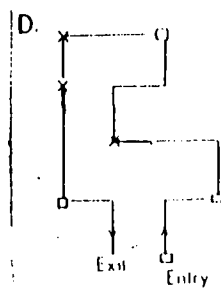
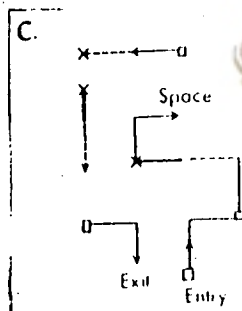
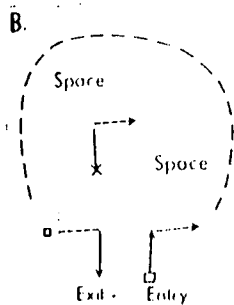
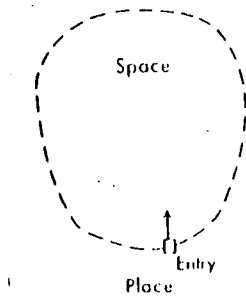
Home is a single unit that man can live within, and control. However, the present day project-based mass housing has completely forgotten this rich psychological need of the human being.

It has become a grim business of facts and figures being kept within professional and political bureaucracies.

However, according to Alexander .

..... People feel proud and happy to be living in them and would not give them up for anything because they are their houses, because they are the products of their lives because the house is everything to them.

The concrete expression of their place in the world, the concrete expression of themselves. [Alexander 1985 : 16]



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Landmarks

-
- ×
-

When the person and the home are continuously integrated in the close relationship, it becomes an “authentic” place.

1.3.2 Authentic sense of place

The term authenticity suggests a more strenuous moral experience. However, authenticity will still connote “that which is genuine, unadulterated, without hypocrisy and honest to itself, not just in terms of superficial characteristics, but at depth in the more precise, but more obscure terms of existentialism. Authenticity refers to a mode which recognizes a man’s freedom and responsibility for his own existence.

[Heidegger cited Relph 1977 : 64].



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Man’s possibilities are his own, for he directly presents himself to the world, and in authentic existence, a person lives his or her life in full awareness of this basic and inescapable relationship. Nevertheless, these possibilities are in part communal, because the actions we take, are necessarily taken in a social context.

An authentic attitude to place is thus understood to be a direct and genuine experience of the entire complex of the identity of places neither mediated by any distorted through a series of quite arbitrary social and intellectual fashions, about how that experience should be, nor following stereotyped conventions.

It comes from a full awareness of places for what they are as products of man's intentions and the meaningful settings for human activities, or from a profound and unselfconscious identity with place.

[Relph 1976]

(a) Unself-conscious sense of place

In unself-conscious experience, an authentic sense of place is rather like the type of relationship characterized by Martin Buber (1958) as "I-Thou" in which division between the subject and object, person and place are wholly replaced by the relationship itself, for this is complete and mutual. It has often been suggested that, this type of relationship to places, is most strongly developed in "unspoilt" primitive



[Cited Relph 1977 : 65]

Considering these facts, most traditional societies have some "shared image" of "type buildings" that is often an implicit knowledge of the place.

As Habraken says –

This sharing of the form may explain the creation of houses, towns, ships and so many other artifacts through history with only a minimum need for plans or models, if any.

It also explains how these forms, for all we knew were received, by the social body that used them as familiar



companions in the life: not more peculiar at least than one's fellow citizens. [Habraken 1985 : 13].

An "I-Thou" experience of place is a total and unself-conscious involvement, in which person and place are indissociable. Such relationships are properly uncommon and certainly difficult to achieve in contemporary societies.

(b) Self-conscious sense of place

This is going to be a "I-You" relationship. This is perhaps more supercial and the union between subject and



A considerable intensity of association with places is still possible. The "I-You" relationship is essentially that of the outsider or a stranger. This sense of place is explicit. [Relph 1976 : 68]

In this kind of experience, authentic sense of place is not completed. This kind of loosened relationship can be found today's mass housing. If the house we live in is not our product but someone else's product, then there is a tendency for the "Home" to become a machine.



According to Habraken

“..... I now propose to take this concept one step further and argue that we always think of objects in terms of our relative position in that shared space. It is characteristic of the machine. The devise, the tool that we look at it from the outside. It is an object to be manipulated.

On the other hand, we must enter a house to make use of it's inside. To make use of a machine, we position ourselves outside it” [Habraken 1985 : 88].

However, of course a self-conscious sense of place can be



University of Moratuwa, Sri Lanka

improved towards an authentic self-conscious sense of

www.lib.mrt.ac.lk


place, by giving user more responsibility to change and control over his solution space, with a fair amount of time.

This is the piecemeal growth of place consciousness.

However a self conscious sense of place making can be improved towards an authentic self-conscious sense of place, by paying more attention to identify the dweller through dweller's socio-cultural context within home making process.

2.3 Socio-cultural factors of dweller as basic moulder in self conscious place making for human existence

Rapport (1969) regards socio-cultural factors as more important than climate or techniques and materials in their effect on house form. Once these other physical or functional factors are understood, then it is the aspirations of the inhabitants – restricted by what is acceptable – that has most significance. Even the most rigorous climate conditions and limited availability of materials will leave some choices to the society as to how to house itself. And house form is probably the building type least determined by physical considerations.

Religion, the make-up of family and clan, work processes and the intercourse  University of Moratuwa, Sri Lanka
www.lib.mrt.ac.lk are all expressed and symbolized by house form. Many choices are available, and different socio-cultural aspects will be dominant in societies with similar physical environments. Some societies, such as the Dogon who inhabit the Bandiagara escarpment on the edge of the Niger valley, use the form of both their houses and their settlements as a complex symbol of their idealized universe. Griaule, as quoted in Oliver (1971), demonstrated that the village may be laid out in oval form to represent the world egg. But it is also a person and must lie in the north –south direction. The smithy is the head and certain shrines the feet. The woman's huts are the hands and are placed to the east and west.

Thus house form is used to extend and prolong the life of the ideals, values, attitudes & images, not at an individual but of the specific society as a whole. A house is not only a physical object with functional attributes. It also reflects the socio-cultural control of dweller as well.

This may not be quite so trace of modern societies, where social pressures and their expression in house form can be more individualistic. Modern social institutions can form alternative channels and barriers. They can replace to some extent, though not completely 'the role of traditional house of transmitting socio-cultural values of user into authentic self-conscious place making'.



The most of attempt in creating 'homes' for dwellers have ended up with unsuccessful haphazard development as in many of those cases, the professionals have lack of knowledge about the socio-cultural context of dweller. So, it is an essential thing to do in 'home making' is to consider 'Socio-cultural context of dweller as a basic mould.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk



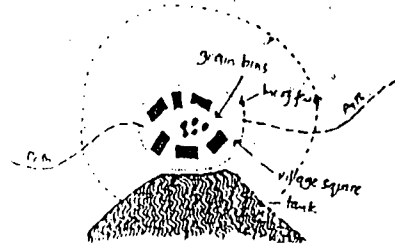
CHAPTER TWO :

**URBAN LOW INCOME SETTLEMENTS IN SRI LANKAN
CONTEXT.**

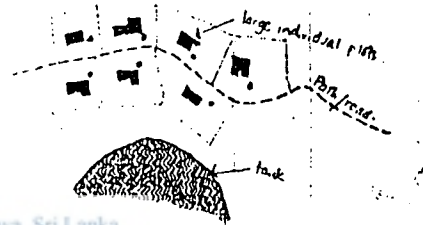


2.1. Spontaneous urban Housing Settlements

In his struggle for survival
In complex ambiances,
man has faced difficulties
in assuring his existence.
But with his advanced
intellect and skills he has
found himself in thriving
or inferior projections of
'spontaneous existences',
through spontaneous
settlements.



Rain-fed villages



Rain - Tank-fed villages

Fig 4 - Spontaneous settlement of ancient Sri Lanka.


Source - S.L.I.A. Journal

2.1.1. The origin

"Slums and shanties as described by social scientists is a by product of modern era Industrialization, cities emerged comprising population of labour from rural areas"

(kaldate/Joshi 1989:12)

Accordingly to the capitalization of the industrial revolution, the agricultural based world economy, as well as the land uses has inherited a notable change. The agriculture in the rural areas degraded and whilst the industries upgraded in the cities, providing employment opportunities in abundance. The migrant rural folk seeked occupation in city areas, coherently resulted in an overflow of population and an increased demand for amenities. Eventually, has induced a majour calamity in the socio-political structure, apart from the excessive demand for food and water. Thus has demanded proper resolutions favorable for the migrant population as well as the 'citizens'.

 University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.moratuwa.lk

As a result of unformed solutions, mainly for shelter, people had motivated them in self – establishment, enabling the prime lands in city areas, in approximation to their work places. The resulted 'spontaneous settlements' eventually, has become wasted filth like backwaters; a negative element in the developing urban realm.

2.1.2 Slum and shanty population in the developing world

The emergence of slums and squatters settlements is an urban phenomenon common to the developing world. The world housing Survey (1974) has revealed that between 1/3 and 2/3 of the population in the most developing countries could be considered as living under poor quality housing conditions. Table 2.1 represents the wide spreads prevalence of low income housing in seven major cities of the developing world.

Table 2.1 : Percentage of slum and squatter population in selected cities of the developing world – 1974

Country	City	Percentage of city population
Africa	Addis Ababa	90
	Accra	61
	Nairobi	33
Asia	Culcutta	67
Latin America	Mexico	46
	Lima	40
	Caracus	42

Adopted from the World Housing Survey – 1974,

United Nations – New York.

2.2. Urban low income settlement in Sri Lankan context.

2.2.1. Characteristics of slums and squatter settlements : Reference to it's built form

In Sri Lanka the term “slums” is used to designate the two forms of low quality housing. They are single family shelters converted into several compartments, as single storey “rows”.



Dwellings made out of non durable materials

Squatter settlements on the other hand is a concentration of illegal occupiers of land who have constructed unauthorized dwellings of non-durable materials such as Cadjan, planks, jute – hession or zinc sheets. Slums may be either owner or lease – holder occupied. But a squatter does not have land tenure or right of the use as he occupies state or local authority land or sometimes private land. The former kind of concentration is called a “slum” or “tenement garden” and the latter “a colony” or “Koriyawa”.

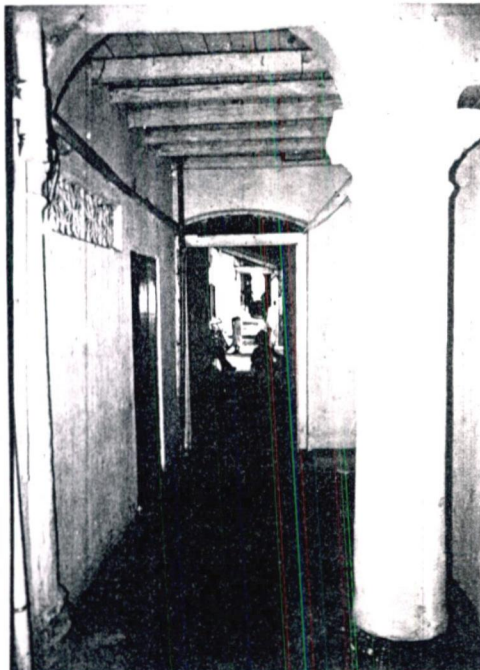
Unauthorized dwellings in such a colony are commonly referred to as shanties.

2.2.2. Slums and shanty settlements within Colombo city limits

Slums and squatter settlements in Colombo have three principle origins. Some slums have been formed by the conversion of old buildings to tenements from other uses. (others are buildings constructed to house port, industrial and other workers during colonial times.) Through years of neglect and misuse, these dwellings today, are in a state of disrepair. Old buildings converted to a number of residential units are known as “tenements”. Those, which were built to house port and industrial workers, are known as slum gardens.

University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrl.ac.lk

Conversion of old buildings to function as low quality dwelling: Tenements



The earliest types of slum gardens were built by companies, colonial corporations and real estate developers. Slum gardens were built adjacent to work places of the dwellers and were meant to earn a commercial return on investment and entrepreneurs economized as material and constructions costs. In order to economise on land they packed rows of houses densely together, usually with walkway 2-3 metre wide separating one row from another. These dwellings were on the model of the English factory tenements at the time of the industrial revolution. Rising costs and wartime controls brought this process of development to an end by the 1940's.

The second type of low quality dwellings are the tenements. After 1945 middle income families left their dwellings and moved out from the core-areas of Colombo city to less congested and more comfortable surroundings. The property owners in the core-area then converted the old houses and building into low income tenements. In this way they were able to collect low rents from more households. The number of convertible buildings however limited the number of families that could be housed in this way. While the supply of such dwellings was fixed, demand rose, and as a result the densities and rents steadily rose. The situation was accompanied by physical deterioration of structures and worsening per capital provision of services.

Shanties the third type, appeared after the independence. They emerged originally as temporary buildings put up by flood refugees and as time went

on people dehousing for various reasons joined them. The new migrant unemployed population to the city of Colombo also put up more shanties, squatters built their own shanties usually on government lands especially after the mid 1950's. These shanties are generally located on low lying marshy lands, canal banks and road reservations in Colombo. A poor quality of life is associated with squatter settlements.



An over crowded settlement

Slums and squatter settlements are characterized by high densities and mixed land uses. Considerable local economic activity in the form of agriculture and petty trading and commerce flourish in the settlements. Uniformly too, there exist poor services and unhygienic conditions. Sometimes each unit is shared by four and five families and consequently the occupancy rate is very high. It is necessary to understand the need for the emergence of low quality housing in Colombo. In the pre-independence era, commercial and industrial ventures centered round the processing and packing of plantation products. The decades after independence however, saw an expansion not only of these traditional commercial ventures, but also a widening of the commercial and industrial market itself. Employment opportunities became more varied and more available in Colombo which

was the centre of the economic activity. Thus Colombo became the mecca of employment seekers from its hinterland which is all of Sri Lanka.

In Colombo city, the growth of population in absolute terms is given below the table 2.2

Table 2.2 – Changes in population, Colombo city 1953 - 1981

Year	Number in '000	Average annual rate of growth		
		Colombo	All Urban	National
1953	426.1	2.4	3.0	3.1
1963	562.6	2.0	6.2	3.1
1971	562.4	1.2	5.1	2.5
1981	584.8	0.4	1.2	1.7

Adopted from census of population 1971, 1981 and statistical abstract of Ceylon 1977

Department of Census and Statistics, Sri Lanka

Table 2.2 portrays the increase in population of the city of Colombo from 426,100 at 585,800 during the period 1953 – 1981. Although the increase in

population of Colombo is not remarkable, the annual increase has made Colombo city four times larger than the second largest town, Dehiwala – Mount Lavinia.

The growth in population of Colombo could be attributed to two main reasons : (a) natural increase (b) Rural –Urban migration. The share of net migration in Sri Lanka is higher than in many comparable countries, and the situation is clearly demonstrated by Table 2.3

Table 2.3 : Share of net migration in urban growth in selected Asian countries, 1979

Country	Annual rate of growth of urban population	Share of net migration	Annual rate of growth of total population
Thailand	5.3	45.3	2.9
Philippines	4.8	41.7	2.8
Indonesia	4.7	48.9	2.4
Sri Lanka	4.3	60.5	2.1
India	3.8	44.7	1.7

- Adopted from World Bank Staff Working Papers, No 347.

July 1979 – National Urbanization policies in developing countries.

During the intercensus period 1963 – 1971, although the population of Colombo city had increased by 50,800. Table 2.4 given below demonstrates the magnitude of the problem.

Table 2.4 : Changes in population and housing stock – Colombo city :

1953 - 1981

	Number in '000				Average annual rate of increase		
	1953	1963	1971	1981	53 – 63	63-71	71-81
Population	426.1	511.6	562.4	585.8	2.0	1.2	0.4
No. of housing units	-	72.02	75.61	n.h.	-	less than one	-

- Adopted from census of population 1971 and 1981 Department of
 University of Moratuwa, Sri Lanka.
 Electronic Theses & Dissertations
 Census and Statistics, Sri Lanka

The average annual rate of increase in population was reported to be 2.0% and the increase in housing stock was less than 1.0%. The imbalance between population growth and growth of accommodation availability has consequently created the problem of emergence of substandard housing and over crowding of existing housing units.

The situation can be demonstrated very clearly by assessing population living in slums and squatter settlements as well as their occupancy rates. The

overall estimate of slums and shanty settlements in Colombo city in 1971 have been classified in table 2.5

Table 2.5 : Types, Number and percentage of Slums/Shanty dwellers in the city of Colombo, 1971

Type	No. Of Units	Occupancy Rate	Estimated population	% of Total population
1. Tenement slums	19,576	6.99	136.836	22.4
2. Old houses	8,172	7.02	57.367	9.4
3. Shanties	25,000	6.29	156.750	25.6
	42,748			

Table 2.5 is adopted from Marga Housing in Sri Lanka (P.80) –1975

Number of persons occupying a dwelling.

Table 2.5 given above reveals that 57.4% of the total population (estimated mid year population is 611,000 of the Colombo Municipal Council area lived in slums and shanties)



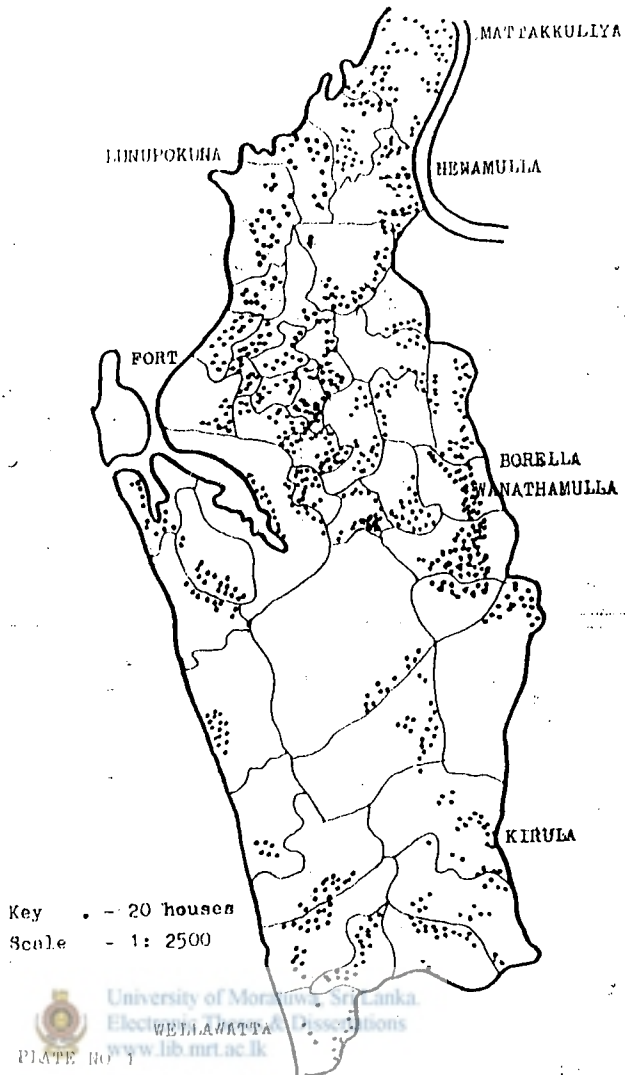


PLATE NO 1

LOCATION OF SLUM AND SHANTIES WITHIN THE UNITS
OF COLOMBO

Shanties are found along the northern and eastern borders of the city and in the marshy lands, road reservations and along the canal banks. Plate(X)provides the spatial distribution of slums, shanties within the limits of the Colombo City.

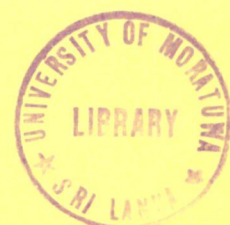


University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk



CHAPTER THREE :

**SOCIO - CULTURAL CONTEXT OF URBAN LOW INCOME
CATEGORY.**



3.1 Socio-cultural context of urban low income category :

Theoretical perspective

"I see what I see very clearly but I don't know what I'm look at."

*-V. S Naipaul
The Enigma of Arrival*

A systematic research on social and cultural manifestations of urban Poverty began with the "Culture of Poverty". Studies founded by Oscar Lewis in the 1950's. Lewis and his Followers saw poverty not merely as a lack of adequate income, but rather as a way of life handed down from generation to generation through well defined social networks (Lewis 1959, 1965).

This theory holds that the uprooted slum dwellers, while rejecting the dominant values of the large society, have certain values of their own, conditioned by their upbringing, migration experience, economic circumstances, lifestyle and social segregation.

However, a major weakness of this theory is its implicit assumption that the way of life of the urban poor is generated purely by conditions within their own communities.

In the 1970's, the theory of marginality emerged as a popular model to understand the character of slums and shanty towns especially in the third world cities.

These communities were considered marginal to the mainstream of urban society in a geographical and spatial sense, as well as in a social and economic sense.

While external circumstances give rise to their marginalisation, the internal dynamics may be viewed as an adaption to, and at the same time , reaction against conditions imposed by the larger society (Nelson 1969, Lomnitz 1977 Kapferer 1977).

The theory of marginality too does not fully explain the variation among different types of urban low-income communities.

Finally, J F C Turner, in his conceptualisation of the poor in the third world cities, describes them as a dynamic and potentially upwardly mobile category capable of, and at the same time, highly motivated towards improving themselves through their own efforts.

Turner further argues that the voluntary housing action of the urban poor often constitutes both rational and creative response on their part to their housing requirements (Turner 1967, 1970).

Further he contends that the housing requirements of the urban low-income Families are not static but variable. Turner identifies different types of urban settlements and places them in a continuum where levels of physical development vary from temporary shelter to middle class housing.

Turner distinguishes three types and levels of social situations:

(1) The bridge header

Who seeks a foothold in the city and hopes to improve himself. He has high priority for location of his residence, tenure and the quality of his house has a low priority for him.

(2) The consolidator

Who has gained a relatively firm foothold in the city. He gives high priority to tenure and not yet to quality of his house.

(3) The status seeker

With a medium income, whose first priority is a house of good quality [Kice Yap-Sheng (1982:15)].

Turner's ideas had a considerable influence on the recent shift of policy from slum clearance to slum upgrading, evident in many third world countries [Payne 1977].

Finally, the new urban sociology founded by Castells re-examines many aspects of the urban society, using a Marxist perspective [Castells 1977, 1978, 1983]. According to Castells, the urban centers in capitalist societies are not only centers of production, distribution and consumption, but also important centers of reproduction of a labour power responding to the needs of capitalist economic system.

3.2 Socio cultural context and its determinant factors of urban low income category

3.2.1 Introduction

According to Rapoport socio-cultural context can be categories into;

- a) Basic needs,
- b) Family
- c) The position of woman
- d) The need for privacy and
- e) Social intercourse


Within the study it will be paid attention to consider about above mentioned facts under “dwelling status” of urban low income dwellers.

Besides that the Economic conditions of dwellers pay a major role in determining the socio-cultural context of them. In considering wherever the slum & shanty settlements, most of dwellers live under poor economic conditions and that will be discussed through ‘Economic status’ of dwellers within the study.

3.2.2. Economic Status

The ability to buy, the ability to possess and thereby the ability for self-expression in a house form, depend much on the economic strength of a particular person or a family. Therefore the economic ability or the strength has become a determining factor of the socio-cultural context of a person or a family.

People from rural areas, agglomerated to urban centres with having an idea of employment. Even though in most of the cases, the income level of employment fairly enough to supplement of basic needs except from a proper place for living.

In an urban  centres everything including much which in a rural situation would be taken for granted has a cash value. Space is at a premium. Earth for building cannot be taken from any site without leaving a dangerous borrow pit.

It is not only a question of owning sufficient land to built a house but also of proximity to work, water, schools and boutiques that is a question of location. Water disposal, sanitation and noise pollution may be absent or easily dealt with in a rural environment, in the city, they must be in highly complexed manner to solve.

Under these circumstances it hardly available places for living for employers who agglomerated to urban centres from rural areas. In such situations, unplanned slum & shanty settlements will be come up within urban centres which provide spaces for living under poor economic conditions.

A study conducted by the Marga Institute in 1978 estimated that 19.3 percent of the total work force in Colombo was employed in the formal sector [Marga Institute 1979:27] Employment opportunities in the Middle East have given rise to an enhanced degree of economic dynamism among the urban poor in Sri Lanka since 1979. These new employment avenues have enabled a segment of the urban poor to achieve some degree of upward social mobility within their own communities and rise to some extent within the larger urban society in Sri Lanka. The income from Middle East jobs has been mainly utilized mainly for housing improvements.

As Nabeel Hamdi points out;

“ recently the family having two daughters working in the Middle East as housemaids, have now become quite well-off and could afford to pay a local

builder for the renovations and have not taken advantage of the government's cheap loans to upgrade their dwellings”

3.2.3. Dwelling status : Socio – cultural activities of dwellers

3.2.3.1 Public activities.

Under public activities it will be intended to discussed about the community activities and cultural activities at their depth due to the fact that these activities are mainly effect on determining the status of dwellers

a).Community activities

Community activities in residential neighborhood.

Neolithic settlements are not sited in a purely natural environment, but in a part of nature transformed according to a human plan (Benevalo 1975:10). It included tiny shelters as a place for them to sleep, to store their wealth, food and animals and most of their living took place outside in the environment.

In those societies house was not taken in isolation. It was viewed as part of a total social and spatial system “*Man lives in the whole settlement of*

which the house is only a part, and the way he uses the settlement affects the house form..... because the living pattern always extends beyond the house to a certain degree" (Rapoport, 1969.69).

In many of those traditional settlements, the settlement pattern was an adaptation to their communal activities. These communal activities were basically shaped by the socio-cultural and religious attitudes attached to the communal life. However, the layouts and the orientation of the dwellings were in such a manner so as to enhance social contacts among the occupants.

Fig C₁ Reflection of communal life in Masai settlements the cattle was the basic feature in which their communal life was focused upon.

This was considered not only as their wealth but also as a mystical and religious power to bind the community. Note - the evolution of the settlement pattern accordingly.

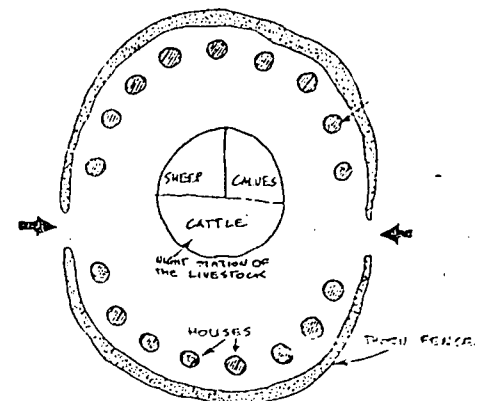
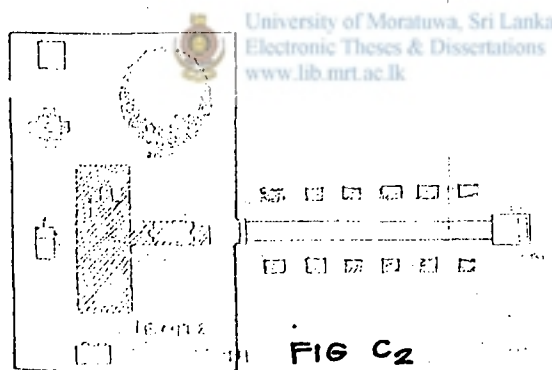


FIG C₁

This phenomenon could be illustrated by studying how traditional societies shape to their settlements. Cluster settlements in traditional societies was an expression to fulfill this need for social contacts, for the well being of their own members as well as for the protection of their belongings (Fig.).

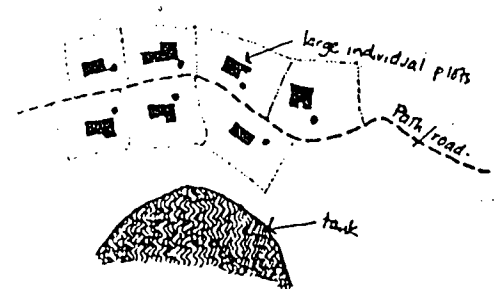
Communal space in the form of a court-yard or as a linear path was initiated as a result of extended family activities. Court-yard clusters of Masai and the Tank-fed villages of Sri-Lanka are some of the examples for the court-yard type while the long house of Iroquois and Devalagama villages in Sri-Lanka are good examples for the linear settlements (fig C₂) Also narrow shady streets of Punjab became full of life as they serve some social functions These streets link the three elements village-house, temple or mosque and bazaar which generated the circulation patterns transcending social interactions among the members (Rapoport,1969:67).

Fig – Court-yard settlements - Tank-fed village Sri Lanka



Devalagama village.

Fig.(8).Linear settlements-



Rain –Tank-fed villages

Fig.4- Spontaneous settlement of ancient Sri Lanka.

Source- S.L.I.A. Journal

FIG C₃

The development of neighborhood attitudes towards, strengthening the social bonds are advantageous to create a positive communal life, in the generation of a sense of community within a neighborhood. Therefore, in order to understand the meaningful connections created between the

community space and the people, it is important to examine the nature of communal life it supports.

The community spaces created by traditional societies are the reflection of the nature of communal life. In communal life there is a dynamic balance between public and private activities. The emphasis given to them and the values they express can be viewed in terms of various differences across cultures, locations and with the change of time (Carr, 1992).

Communal life offers relief from the stress of work, providing opportunities for relaxation, entertainment and social contacts. It also allows, people to discover and to gain experience by learning from others (Carr and Lynch, 1968 as cited in Carr, 1992:45) (Healthy communal life is an expression of maintaining a sense of privacy, security and identity while providing opportunities for social contact.)

As Jacobs points out, "community gains competence and strength partly from growth of trust" (Jacobs, 1961:295). She further notes that in order to develop the essential-links 'within the neighborhood, "the growth of trust, the growth of cooperation, that is at least at first, apt to be casual and tentative, and the people who have considerable self-confidence, or

sufficient concern about local public problems” are important characters to strengthen the social bonds within them (Jacobs, 1964:146)

As Brill (1989:20) views, public life ‘with strangers’ involves ‘spectating and observation, while neighborhood life deals much about verbal interaction’. Contrary to this we can see, much of the contemporary life in community spaces in the presence of strangers. Yet this can be in a context that makes people more available for social interactions, perhaps in a safer encounter.

The shared interest people have within the community by space and the rituals that occur in them can lead to a spiritual and some what mystical experience in a society. Events taking place within the neighbourhood create opportunities in the generation of a healthy communal life that goes beyond the individual household, offering a type of communication, that transcends language (Carr, 1992)

By observing others and their activities and participating with them in a shared task such as communal activities, celebrations and events etc. can firm their communal quality. “with the assembly of people, sharing and unity are possible that can give expressions to communal feelings (Carr, 1992:34) This is the basis in confirming the existence of a community. This

enables people to feel, that they are a part and a parcel of the community and also makes them feel a 'sense of belonging' within them.

Nevertheless Alexander points out the necessity of a partly defined space in a neighbourhood as the starting point in the generation of casual interest and involvement towards a shared activity (Alexander, 1977:350) How ever these shared interest may vary with the differences in life cycle, for instance;

Teenagers, specially boys select special corners where they could hang around, old people prefer quiet places expecting to find others whereas small children need sand lots, mud plants and water.



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

b) Cultural Cohesiveness

Cultural Factors

One's attitudes and value systems are moulded by a host of complex cultural factors prevailing in a particular society. They include the religious beliefs, customs, ethics etc. These cultural factors in turn contribute to determine the physical setting of neighbourhood and also to form a 'generic image' or a form of the house form of such setting.

Most of urban low income settlements consist of no. of neighbourhood communities which belongs to different to cultures one to another. Their



76

12

religious beliefs, customs and ethics are also differ one from another. But cultural cohesiveness which remain at a higher level within the neighbourhood may allow every person to prevail their cultural attitudes as they wish.

In 'Sinhala – Hindu Auwradu' festival time, both of sinhalese and Hindu families meet together to do their cultural activities.

3.2.3.2. Non public activities



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Family based activities.

In urban low income settlements ,the dwellers settle down came from different areas of the country which belongs to different socio cultural backgrounds. In most of these situations they have to house within very limited space which have lack of facility to live. Eventhough after settledown , gradually they adapt their limited physical entity in order to achieve their socio cultural attitudes and values. Within this process they make this physical entity into more livable by adding their socio cultural activities around it. It will be a necessity of hierachy of spaces within certain

physical entity to function these activities. Within the study these activities will be analitically examined under the **family based activities**.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk



CHAPTER FOUR :

**SOCIO - CULTURAL CONTEXT AND ITS IMPLICATIONS
ON HOUSING DESIGN.**



Case study : Insight into selected spontaneous urban low income

Settlements within Colombo city limits

4.1 . Introduction

A Number of spontaneous urban low income settlements are being examined within the study and in the selection process the examples for the case study are being limited into three as mentioned below.

(a) Wanathamulla urban housing settlements

Most properly established spontaneous settlements are being represented through Wanathamulla and even now it bears less of changes from external forces.

(b) Nawagampura – 19th lane community.

A special reason that caused this settlement to be selected as an example for the case studies is that this settlement is shifted aside by the regenerated low- income housing scheme near by. Eventhough they help to each other in need, the 19th lane settlers have a negative attitude towards the new.

(c) Panchikawatta.

In most of the cases, the dwellers are established within old buildings by partitioning them according to their tenement. Likewise, the mixed culture of sinhala, tamil and moore is represented though this urban low income settlements.



4.2. Schematic adaptations for socio – cultural context of dwellers within the neighborhood.

Eventhough the economic status of dwellers bears a major role in determining their living pattern and physical entity, the main attention is launched towards the socio - cultural context of dwellers within the study.

4.2.1 Public activities : public realm

All people who are not socially isolated are members of communities. As many commentators have noted, urban designers (Eg: Le Corbusier, Clarence Stein, Christoper Alexander) have long sought to enhance the sense of community through a physical design and the location of facilities that provide for social opportunities (C.Stein 1957, Gutman 1966, Brill 1989). In most spontaneous urban low income settlements, it is a common phenomenon of public spaces to enhance the qualities of the **public realm** which bring people together for socio cultural activities. So it is intended to discuss **community activities** and **cultural cohesiveness** of the neighborhood under public realm within the study.

4.2.2 Non public activities : Family realm.

As described earlier ‘home’ can be considered as a better representative of socio cultural context of its dweller The physical entity of home is made into a livable unit depending on the socio cultural activities around it.

The physical entity of home including its relevant socio cultural activities

are being expressed through '**Family realm**' within the study.

For the purpose of the detailed studies of family realm three dwelling unit will be selected from each spontaneous urban low income settlements. The principle of selecting them is based on Turner's classification depending on the **status** of the dwellers as;

- a) Bridge header
- b) Consolidator
- c) Status seekers

In selecting the individuals the following criteria is to be used;

- a) Economic status
- b) Appropriate indirect questionnaire
- c) General observation.

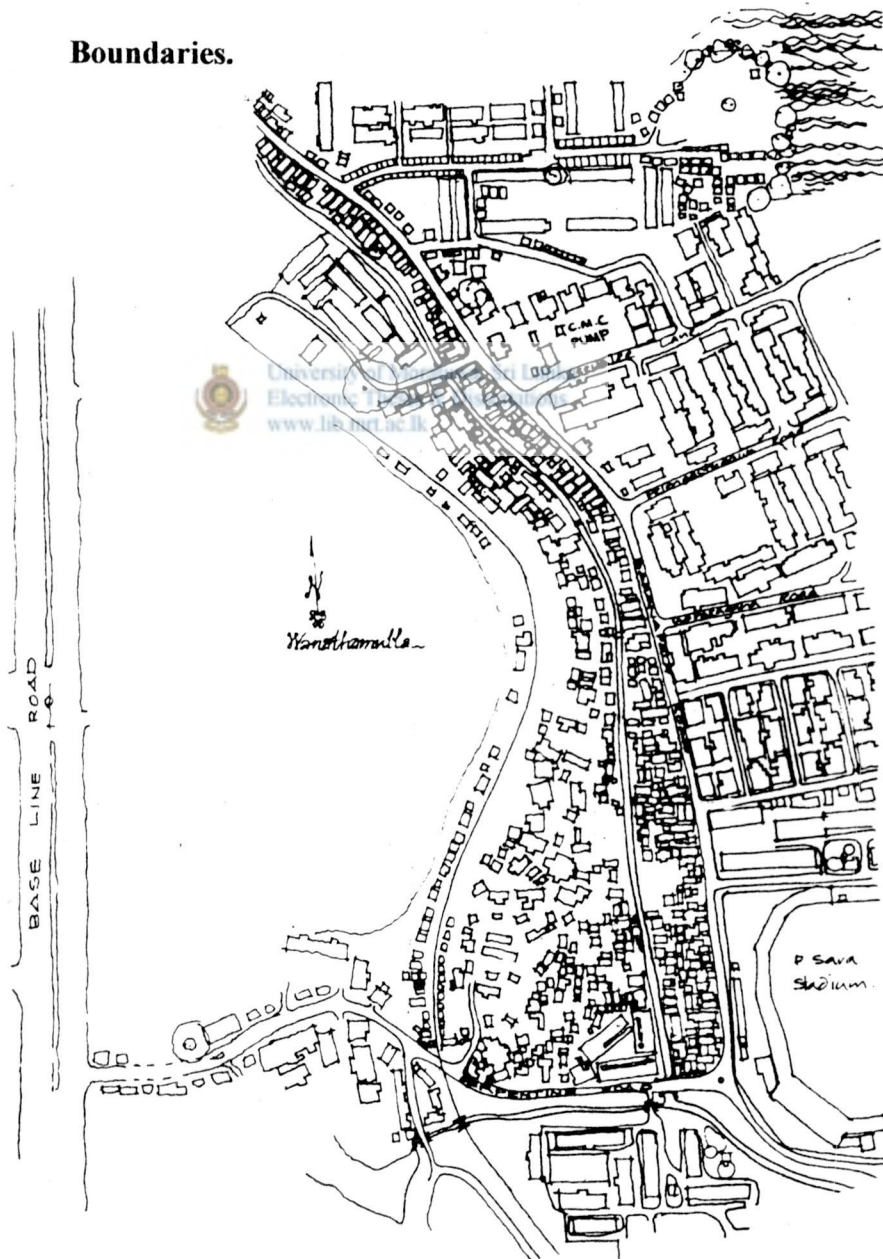


4.3. Wanathamulla

4.3.1. Ecological schemata.

Location.

Boundaries.



Wanathamulla spontaneous settlement is bordered by a marsh on the East and the South directions. The Western border sites the Welikada prison and Kelani weli Rail-line The Western marsh provides a territorial demarcation to the community from the upper middle class community of Borella area .

Access

Access to the settlement is from Baseline Road , which continues through to serpentine Road . The thirty feet wide Serpentine Road provides access to each of the above mentioned communities through lanes, paths or alleys .

Response to natural environment



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations

Wanattamulla canal as a natural element has been negatively responded.

All soil waste from the community and the surrounding institutions are been collected directly on to the canal, which overflow during heavy seasonal rains . The canal embankment has been deteriorated due to improper maintenance strategies and the disjoined rubble has been an income source for the drug addicts .

Topography

The settlement descends from west to east but the prominent graduation has been flattened by the original dweller to ease the construction. The land gradually descends to the marsh where the poorer community exists on the

water- retained land. The dwellers claim the land as a filled dump yard.

Land extent and the population density

The studied Cadernanage Watte comprises of approximately 35 acres of land. The dwelling unit could be counted as over 3000 and more units could be seen under construction.

The other studied area of the poorest community is Alghakumbura which is about two acres in extent but houses nearly 3000 dwelling units.

4.3.2. Neighborhood communities

The settlement has projected a unique character, as it comprises a verity of communities in a single context. The communities have projected a symbiosis neighborhood through the hierarchy of the intermediate spaces. The settlement hosts three levels of low-income middle class people . The study has been done on three different communities to emphasize the variation of socio-cultural background of them and to look after their dwelling designs.

The western marsh has segregated the low-income community from the higher income groups around Borella. Although high-income dwellers could be observed in patches at the foot of the Wanathamulla community.

4.3.3 Schematic adaptations for socio - cultural activities within neighborhood

a) Public realm

Cultural cohesiveness.



A centre of worship

The whole settlement has projected their interdependence as well as privacy. The latter has been bequeathed at inter - community level by showing an exuberant tendency towards the immediate neighborhood. The temple at the foot of the community and the absence of other religious synagogues emphasizes the prominent culture of Wanathamulla.

The persistent altercations in both verbal and physical terms have shown the level of education rather than communal segregation.

The inter-communal cohesiveness has been observed at a high level within Wanathamulla. Furthermore it could be observed that their cultural cohesiveness remains at a similar standard through mixed



marriages and alike consortiums.

The standard of education some what has upgraded due to the satisfying number of school attendants during the passed few years.

It could also be said that the Unesco aided training centers have provided the suitable skill for the self employment. It could be further abbreviated the fact that their social values have inclined due to the above mentioned and could be exemplified by the declination of violence.

Community Activities

Community activities have been observed at various cultural levels.

The open areas between the communities provide play grounds for the two bordering communities as well as for others in the settlement. The play areas have provided facility for communal gathering for the settlers. It also provides dumping yards for the dwellers Usually the youngsters play whilst the adults engage in their daily activities

Youngsters play whilst the adults engage in their daily activities : alleyways act as communal space



It is a common phenomenon of the adaptations of the living area or fore garden of dwelling or raised plinth of the boutique or shady of well grown tree as a community gathering space within the neighbourhood



Fore garden of the dwelling as a communal gathering space

Both sexes gather around the common tap or common well to collect water or bathe and they are used to chat about their day today happenings.

University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

They are chatting each other gathering around the common tap



The prominent communal gathering space : The common well or common tap

Apart from the leisure activities it could be observed the presence of societies of social welfare . The canal though it could be distinguished as a



prominent landscape element, has not been successfully utilized for community activities.



Strong territorial demarcations in Cardernanas Watta

Furthermore higher walls could be observed in higher communities even within the settlement. The addition of these higher walls demarcating their personal territories and not enhance the harmonizing of family realm with public realm.



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

b) Family realm

Initially the dwellings sit scattered in one area with ample space between each unit for accessing and gathering purposes. The latter houses sit on both sides of the narrow alleys with their uneven roof eaves omitting the fall of sunlight on to the damp floor. Each house could be seen directly connected to the alleyways by half dawn doors.

Family realm extends it's branches beyond family unit towards the common alley ways where communal activities are taken place

The dweller interacts with the by passes and the neighboring families through the door ways. So, it is difficult to specify or demarcate one's family realm and it is more dweller depended. It is more unique.



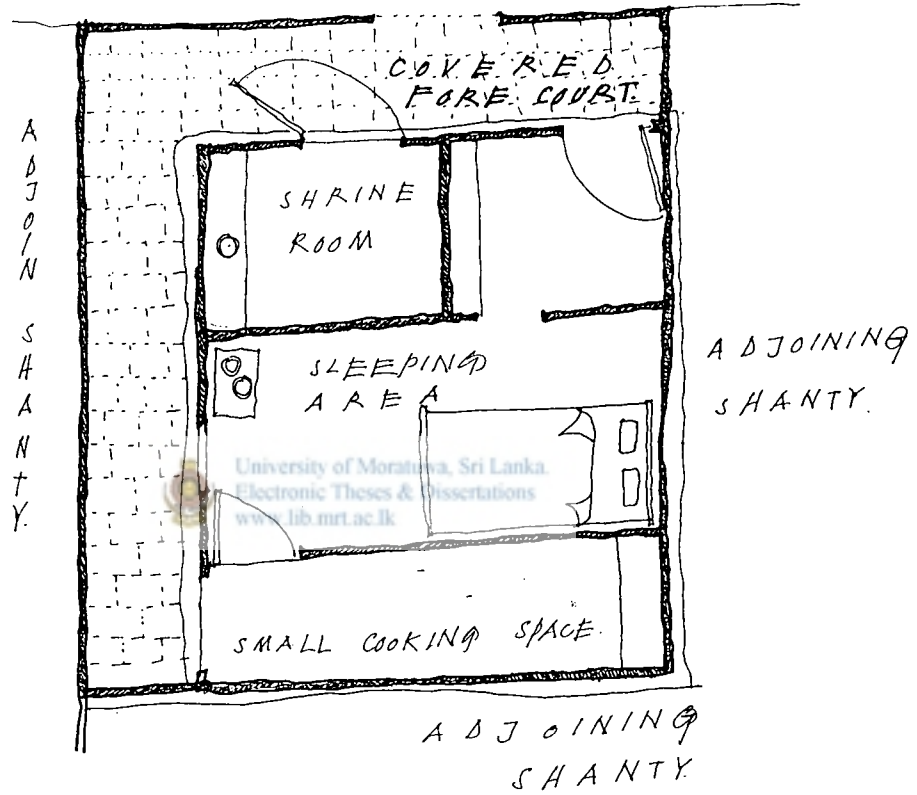
University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

The dwelling of Mr. Mulan Perera

Family Profile

Mulan Perera is 46 years of age and lives with his son who is 20 years of age that waits for a job after leaving school. Mr.Mulan Perera does fortune telling as his main profession, while he also engages himself as a laborer at other free times.

A C C E S S R O A D .



Space allocation within the dwelling
Not to in scale



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Space allocation within the dwelling
Not to in scale

4.3.4 Insight into family realm.

Observation shows that the dwellers have put in some effort to beautify their home and personalize it according to their needs.

Mulan Perera prefers to be engaged in social activities while he also believes in preserving his family unit as a private entity. Thus he has personalized his home in such a way, that both of the above mentioned attitudes are satisfied.

The nature of his profession is such that many people visit his home day and night. This condition has made him demarcate the private domain of the family unit from that of the visitors, by using a covered fore court (A)



semi public domain: covered fore court (space A)

Mr. Mulan Perera prefers landscaping but on the space is limited he found it difficult to do so on the horizontal plane. Thus, he has used a timber wall as vertical plane to landscape using a spreading plant type on it. This vertical

element has again highlighted the demarcation between the public and family domains.



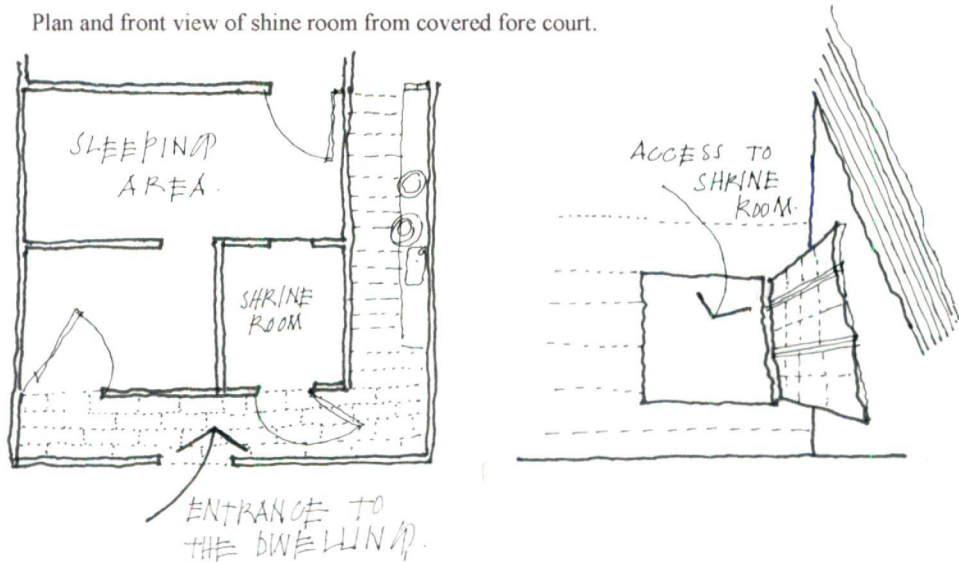
Highly landscaped front wall made out of timber planks

As it is a necessity to acquire due respect for the shrine room and to avoid “Killa” (pollution) that can be caused by the visitors and others that come to this house, Mr. Perera has created a small door that makes a person bend while entering the shrine room. Therefore, the shrine room does not provide easy access to its interior though it is connected to the covered fore court.



Interior view of shrine room

Plan and front view of shine room from covered fore court.



Though Mr. Mulan prefers to live with a strong cultural background his son follows an entirely different attitude. He has shown this by using the common gathering area of the dwelling as his territory. He has decorated it by pasting colorful pictures of various Hindi actors, actresses and other heroes thus reflecting the nature of his attitudes and values.



View of sleeping area from common gathering area

Common sleeping area of the dwelling is shifted to the rear of the site thus providing enough privacy. But sleeping area has the flexibility to convert itself in to a multi functional space in various festival times.

Eg.: to function as main dining area or common sleeping area for relatives.

Likewise, the cooking area is formed by a very small linear strip of space as cooking, according to their way of living is less priority due to the fact that they mostly buy their meals.



Narrow linear strip provide enough ventilation to inside.

As the dwelling unit is framed by other shanties on three sides of the site, the necessity of light and ventilation is provided by the narrow linear strip which open to the sky. It also acts as a preparation space of 'Puja vatti' and as a storage for landscape items.



As it is seen in the above sketch and as described above, the forecourt and the linear strip can be named as binding elements of public and family activities. Thus they also become more 'livable' spaces, than the rest.

House of Mr. Dharmadasa

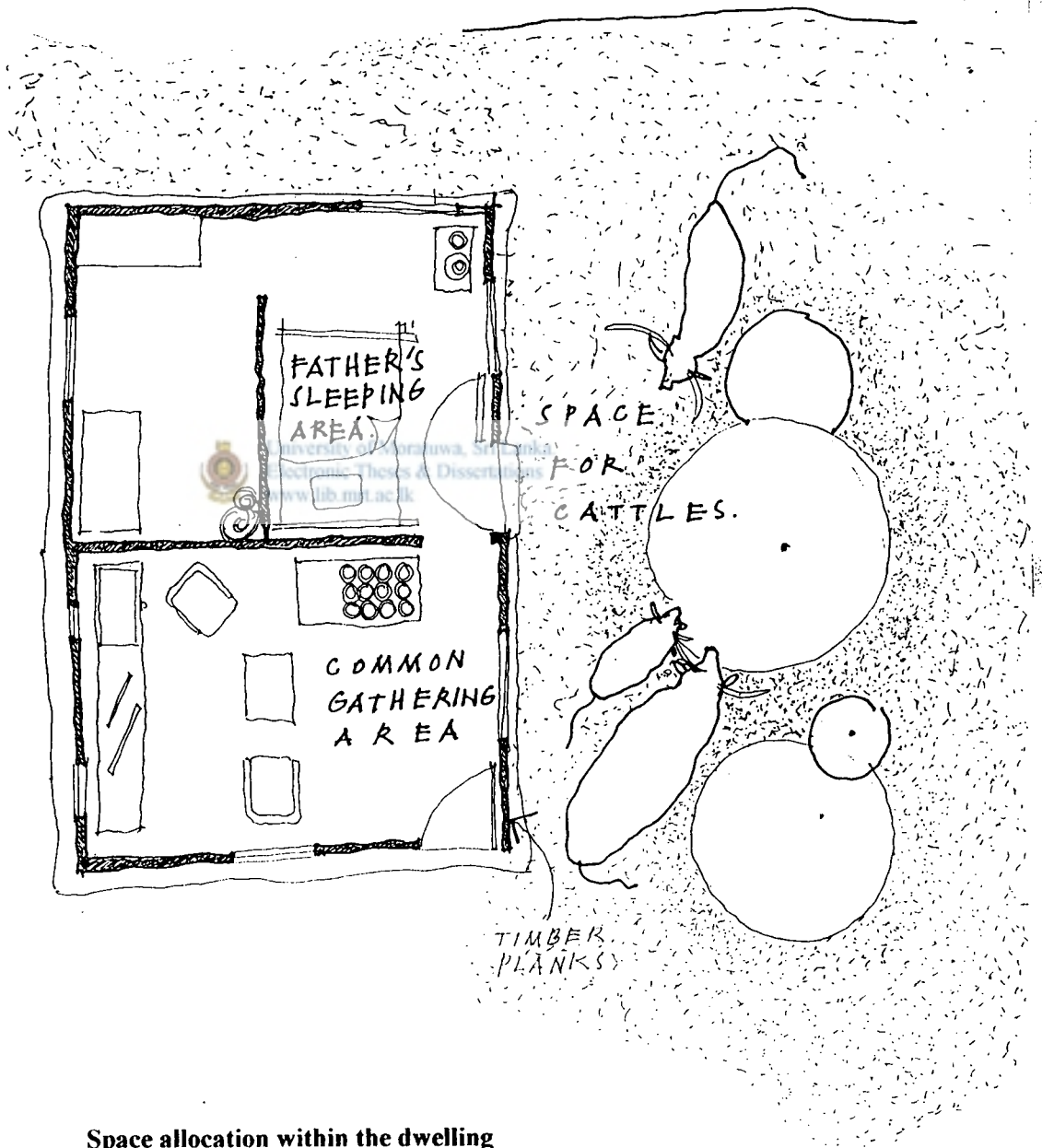
Family Profile

Mr. Dharmadasa is 60 years of age and lives with his two sons named Nihal and Shantha. Both of them are engaged in producing curd at a small scale home based economic activity and their father is also involved in this activity by taking the responsibility of looking after the herd of cattle.

Most of effort of the dwellers has been allocated in improving their economic activity rather than the quality of their dwelling. According to Turner's classification this is one of the dwelling which reflects the **consolidator** category.

Insight into family realm.

They have given priority to their home based economic activity even in positioning their home on the limited amount of land. Thus, they have allocated a larger extent of land for cattles and have minimized their space for living.



Space allocation within the dwelling
 Not to in scale



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Space allocation within the dwelling
Not to in scale



Allocation of more area for cattles while minimizing their space for living

Other than this, the activities, which are taken place among family members and also personalization of spaces within family unit, are centered around the major activity of producing curd.



Home based economic activity : producing of curd.

The dwelling unit consist of a multi functional common gathering area, a father's sleeping area and a small space to function as cooking space. Common gathering area acts as a binding element (space) between public

realm and family realm in such a way that it organizes the space for chatting, playing cards or any other recreational activities that involves themselves with the neighbourhood.

Likewise in the daytime, the common gathering area is utilized as curd preparation area while it functions as a sleeping area for the two young members of family at night.

Both of the sleeping areas of Mr. Dharmadasa and his two young sons, are located directly facing the herd of cattles with an idea of protecting them at night.

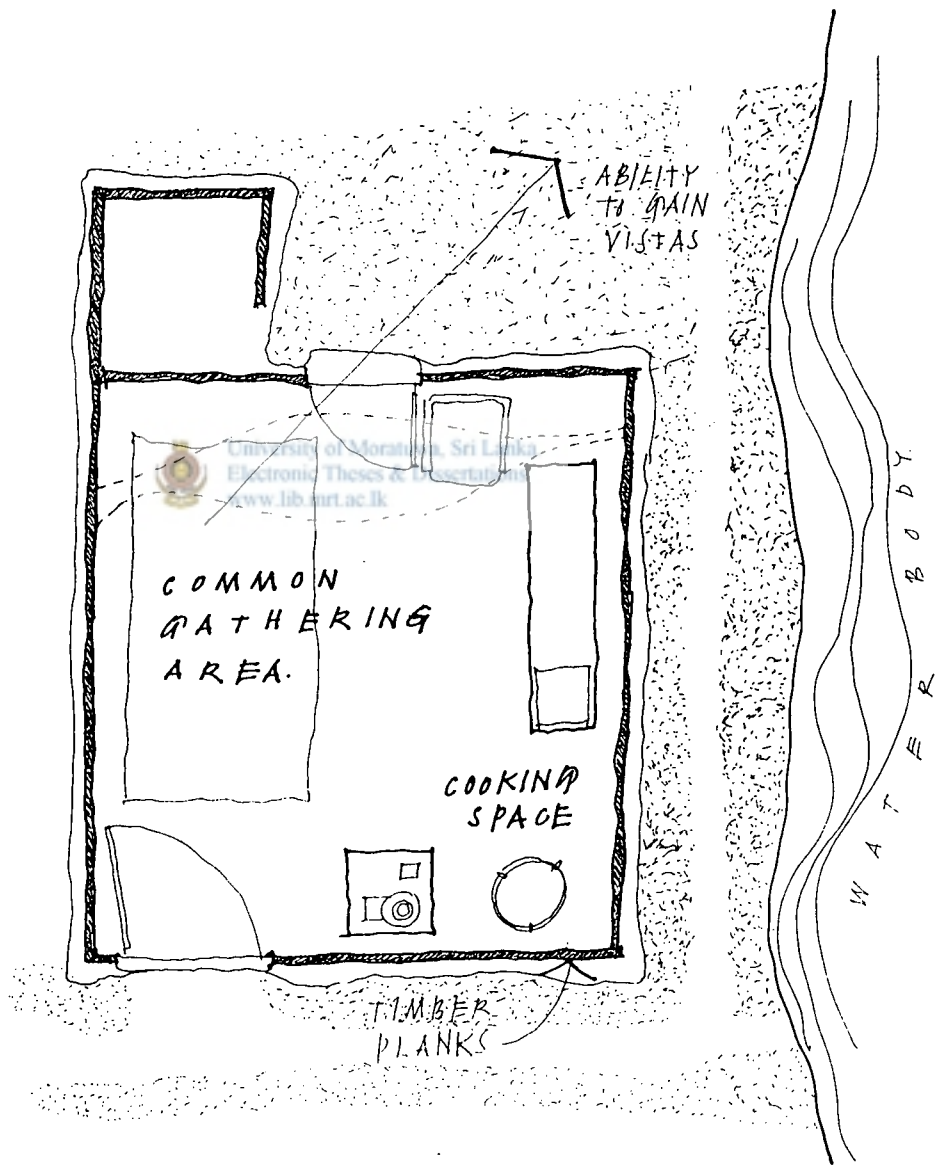
Mr. Dharmadasa is more introverted person and he fairly personalized his territory between the common gathering area and cooking space.

But comparing with their father, two young sons bear less of attempt to personalize their living space as they have an attitude of improving their home based economic activity rather than the quality of their dwelling.

Dwelling of Manju & Shirani

Family Profile

Manju & Shirani are a recently married and are in their early twenties. Since both of them prefer to spend an isolated life style they, have settled down in



Space allocation within the dwelling
Not to in scale



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Space allocation within the dwelling
Not to in scale

a small dwelling unit which was built just near their parent's within very compacted neighbourhood.



Entrance to the territory of relative families demarcated by a timber planks.

Insight into family realm

Shirani is a house wife who prefers more extraverted life style and she always enjoys a company of the childrens who live within the neighbourhood. Manju is a singer in a music group formed by his friend and they use to do their performances in public spaces trains or buses.

The economic status of the family mainly depends on the unpredictable and volatile income through Manju's employment and it is not sufficient to satisfy even their basic needs. That may be the reason for them to have paid less of attention towards improving the quality of their dwelling unit.

But the personalization of the spaces within the limited space is at a higher level and it express the attitudes and values of the dwellers well.



All day today activities are taken place within limited (12'-0" x 10'-0") multi functional space. The user adaptations to this space may provide enough changes in the physical environment and the psychological entity to satisfy the required activities of dwellers within this limited space.



The cot made out of textiles hanged, in a way of gaining nice view at the distance

The hanging cot made all of textiles is placed near the opening which allows one to gain a nice view and create a calm environment amidst very busy, noisy surrounding. This may help the dweller to contemplate on his music and play the instrument on one hand and on the other to obtain relaxation.

The central place is flexible enough to play the role of a joyful, live, cheerful environment at an instance of a musical party, when the dweller and their friends perform and also turn out to be a more secured, more private comfortable sleeping environment for a recently married couple.

The curtain which goes along the rope fixed parallel to the ridge plate, may help to divide the limited living space into, semi-public and semi private spaces according to the need of various activities.



4.4 Panchicawatte

Panchikawatte spontaneous settlement could be identified scattered on 14 hectares of land . The study will distinguish a single community of the settlement, which is situated along **Mohideen Masjeed Road**.

4.4.1 Ecological Schemata.

Location



Panchikawatta spontaneous settlement

The community could be observed along Mohideen Masjeed road that connects Sir Sangarajga Mawath from the north and Maradana road from the south. Mohideen masjeed road has provided the western border to the community whilst the community extends through the settlement through alleys and paths towards the east.

Access

The community extends between Maradana road and Sir Sangarajha Mawatha and is accessible from Mohideen Masjeed road . Though the road connects the two main highways its narrowness does not allow through traffic, thus has been defined as a private access for the settlement. Even though it has given such a statement still acts as a public walk way.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Topography

The settlement is located at a higher locale in the punchikawatte 'triangle'. The settlement and the subjacent community have responded to the varying topography.

Land extent and population density

The inner core of the triangle encompasses 1580 housing units and is occupied by 2042 families.(U.D.A.RESEARCH 1997) The above population is dispersed on a land extent of approximately 10 hectares.(27 acres)

Cultural cohesiveness

The prominent existences of Islamic synagogues along the community have reflected the dominant culture . The cohesiveness has initiated from the level of an individual family and it has extended through out the community Furthermore it could be said that they live peacefully with the other communities in the settlement. The settlers are united as a community and are vigilant about the pass-by strangers, They also poses close contacts with the high scale businessmen in the triangle periphery.

Community activities



Alleyways formed sub communities within the neighborhood

The houses have extended beyond its physical configurations in to the narrow alleys or common open courts. The alleyways have been used to interact with the family member and their immediate neighbors. The

neighbors mostly are related to each other thus the alleyway has become a feature in their personal territories.

Further more it could be said that each alleyway has become a sub community as it has mostly been engrossed by extended families.



Part of open court adapted to function as common toilets and showers

The open courts have been utilized for common toilet or showers while part of it adapted to function as communal gathering space.



The small children's park has provided a community centre but is used rarely by the dwellers. The street and open spaces between buildings have

provided them with better play areas and could be observed under frequent utilization for a popular game of cricket. The Sunday school even though has aided the community in their social upliftment is not a prominent element in the context compared to the betting centres.



The prominent communal gathering spaces can be identified at the shop front and could be seen in a continuous function.



The immediate context houses public buildings for recreation such as the Elphinston theatre and the Tower Hall theatre. The above too have provided the settlers with community spaces where they have been able to exchange their individual spirits of art and drama with each other.

b) Family realm

Though houses were considered as simple spatial enwrap in such spontaneous settlements the Masjeed road dweller has improvised their personal territories within existing old buildings after doing some alterations or modifications as their desires. Though the extent of the house has only provided the dweller with space to concentrate, their colours, location and other unique characters have subordinated the dweller's identity to a considerable extent.

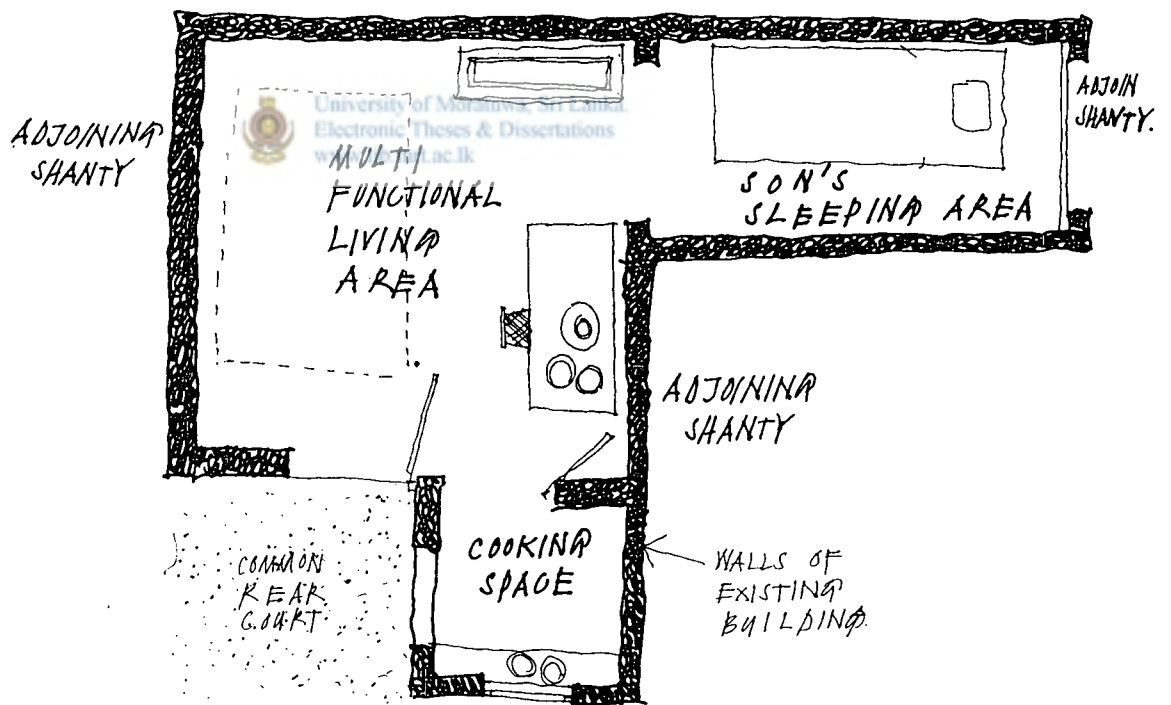
Dwelling of Mr. Mohommad Nazir.

Family Profile

Mr. Mohommad Nazir is 55 years of age and lives with his wife Farzana (40) and their son Mohommad Sabeer (22). They settle down in a part of an old building, which was built in 1940s to function as quarters for members of railway department.

Insight into family realm.

Mohammed Nazir manages his day-today family expenses from the profit he gets by selling development lotteries with the help of his son at the small boutique near the Mohideen Masjead Road for the reasoning of both of them have to involve in their business through out the day time they have less contribution towards the day today family activities.



Space allocation within the dwelling
Not to in scale

Mrs. Fazana who bears more extraverted attitudes and plays a major role within the family level as well as neighboring family levels.



Shared open court : Fazana as an active member among the neighboring family members

All day-today activities are taken place within very limited space within part of the existing old building. But the personalization of spaces within the dwelling is at a higher level.

 Electronic Theses & Dissertations
www.lib.mrt.ac.lk



Multi functional living area

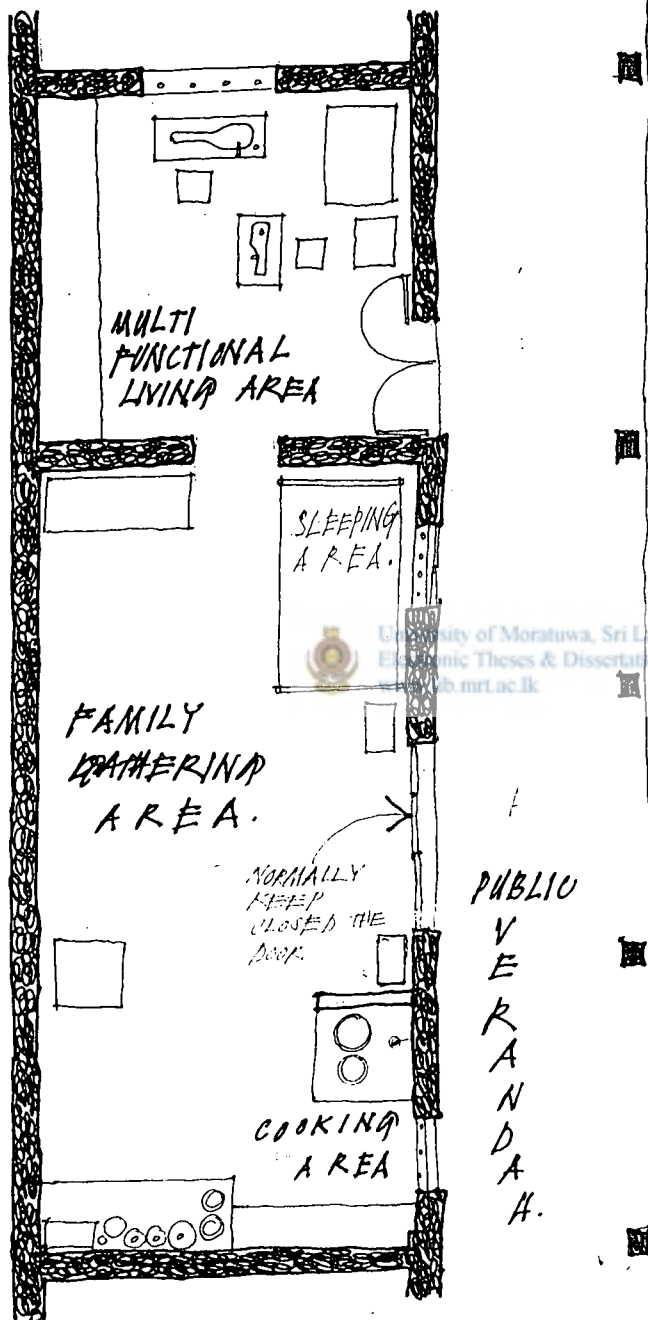
The dwelling consist of a multi functional living area, a cooking space and a narrow linear strip to function as the son's sleeping area. The

multifunctional living area functions as a common gathering at day time while it bears the ability to re-organize the arrangement to function as parents sleeping area at night.



Cooking space having visual & communal connections with common rear court.

The main space of the home, is represented through the cooking space creating an environment which provides communal and visual connections with neighboring family members who engage in different kind of activities at the rear court yard facing the cooking space.



Space allocation within the dwelling of Hassan
 Not to in scale



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

(The location of Panchikawatta bears a great potential to develop it as a commercial centre. It is a common phenomenon that most of the younger generation that live in this urban low income settlements have business minded attitudes rather than their education.)

Dwelling of Mr. Hazzan

Hazzan is 22 years of age and lives with his wife Rehanna (18) in a part of an old building. He conducts a home based economic activity within the dwelling after doing some modifications and alterations.

The long linear strip of the old building is divided into two main spaces to function as a multifunctional living area and an inner room area. Living area bears an ability to function as a common gathering area, while it provides space for the home based economic activity.



Home based economic activity, conducted within the living area which engaged with the public verandah nearby.



The common gathering space directly opens to the public verandah and it has become place that exhibits productions of the home based economic activity. People who walk along the public verandah, has the habit of buying leather items from Hazzan and he uses this money to mange his daily expenses.



Inner room area adapted to provides spaces for cooking, sleeping and **family** living

The inner room area provides enough privacy to function as a sleeping area. The dwellers are used to give less priority for cooking activity due to fact that they mostly buy meals and this may cause to ignore a separate space for cooking within the dwelling.

The small worktop which is fixed at the edge of the inner room area provides facility for preparing foods when it necessary.

Even though Hazzan is able to earn a fair amount of money to satisfy their day today needs, less attention has been given to improve the quality of the dwelling. So, according to the Turner's classifications, this can be expressed as **consolidator** category.

Dwelling of Mr. Ikbar

Family profile

Mr. Ikbar is 58 years of age and lives with his wife, Siththi, daughter Fathima and her son Faruk in a part of an old building after doing some modifications and alterations in order to obtain their increasing needs. He also tries to confirm the tenure of and pays attention to uplift the quality of the dwelling. So according to Turner's classification he becomes a good example for a **status seeker** type of dweller.

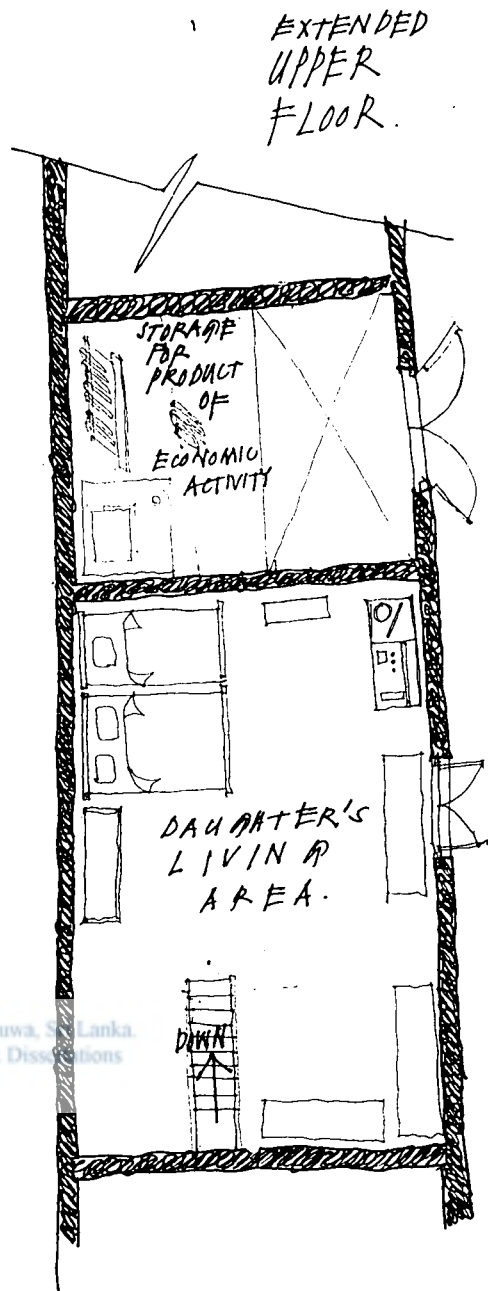
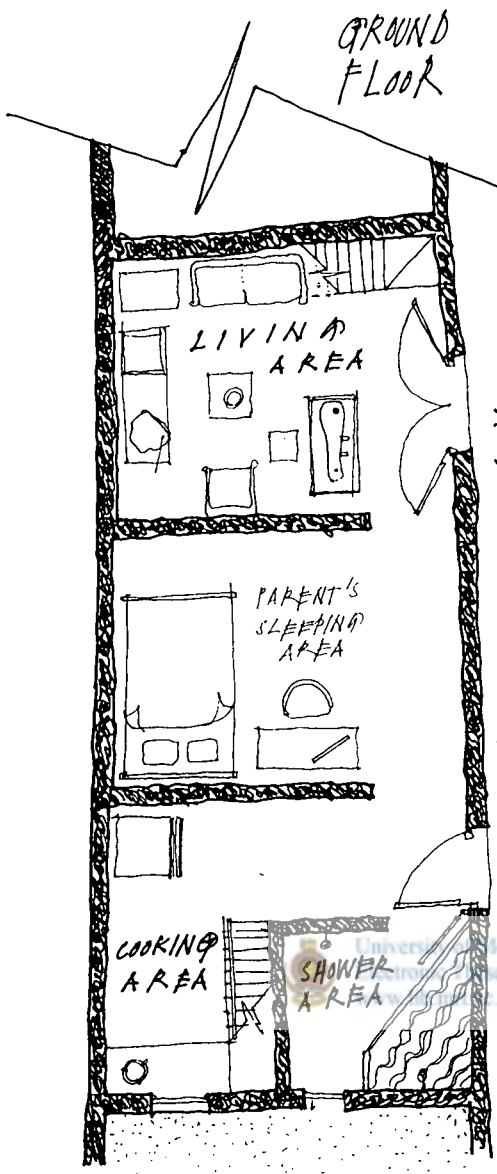


University of Moratuwa, Sri Lanka
www.lib.mrt.ac.lk

Insight into family realm.

During the early period after the settlement, the dwelling consisted of only a common living area, a common sleeping area and a small area to function as a cooking space. After Ikbar's daughter Fathima was married, the necessity to divide the old house arose to accommodate the new family of Fathima. A part of the common living area itself was used for this purpose while on the other part Mr. Ikbar housed for his economic activity.

After Fathima's husband employed in a Middle East country, they were able to status and thus caused to change their living standards.



Space allocation within the dwelling
Not in scale



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Mr. Ikbar re-designed his dwelling into two storied block including several modifications to the existing old building.



Extended upper floor provide space for increasing family needs: daughter's sleeping area

Part of the upper floor has been allocated to function as his daughter's living area while other part of it functions as a storage for products of the home based economic activity.



A part of upper floor provides room to store leather items



The common living area still being functioned for the home based economic activity and it act as an exhibition space for the productions of leather bags, belts, leather easy chair etc. There is a big demand for the leather items sold by Ikbar, as the people who walk along the verandah see the common living area full of these productions directly through the openings.



Ikbar adapted part of the living area to function his economic activity

Cooking space also creates an environment which enhances the community living within neighborhood. It may provide communal and visual connections towards the neighboring family members in chatting, laughing or in any other recreational activities while dweller engages in cooking.



Minimize the space for cooking due to adaptations of increasing family needs

The limited cooking area has been adapted to suit the increasing demand for various functions and has become a multi – faceted space. It includes the functions of cooking, housing the stair well for the daughter’s living area and a newly built shower area in an organized manner.



Electronic Theses & Dissertations
www.lib.mrt.ac.lk

4.5 Navagampura.

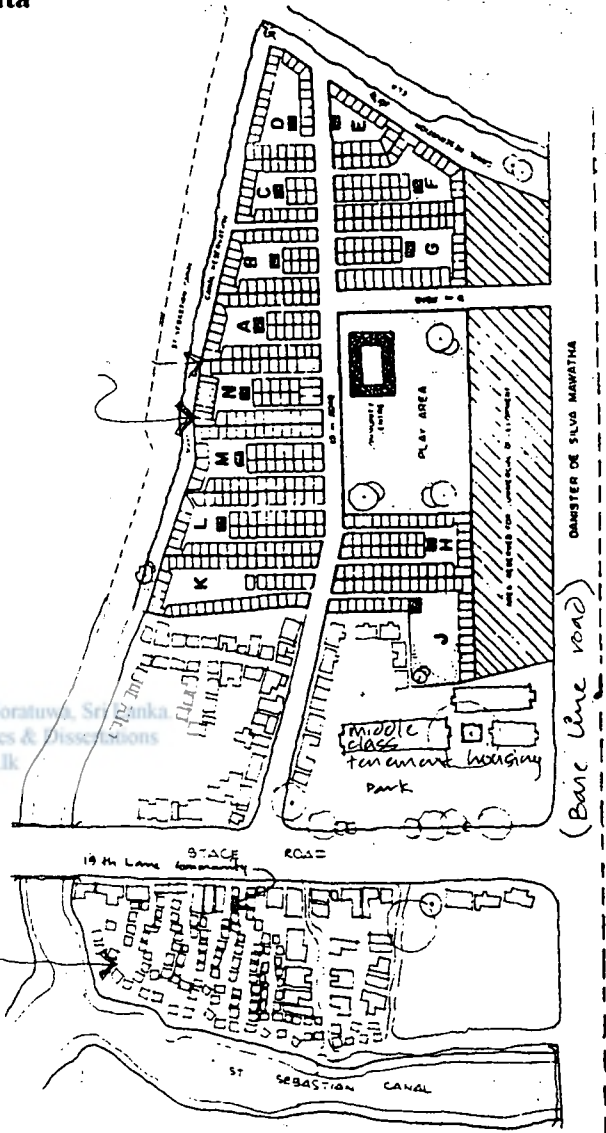
4.5.1 Ecological schemata

Location.

Boundaries



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk



Navagampura spontaneous settlement

The 19th lane community settlement is bounded on the East by Baseline Road, which leads to Kelani bridge and on the West and the South, by Sen 'Sebastian canal'. Stace Road borders the north, which bisect the original and the resettled communities.

Access

The scheme is accessible from Stace Road and is located away from the main public access, baseline road . The large community space at the beginning of Stace road provides a territorial demarcation to the settlement entrance. The thirty feet wide Stace road branches in to smaller alleys of three to ten feet wide, providing access in to the settlement. The alleys further fork in to paths, ending in cul-de-sacs or connecting other alleys in the form of maize. The alleys do not project much significance due the monotonous response to the main road.

Response to natural environment-

The main natural element could be said as St . Sebastian canal . The settlement has given a negative response to it by backing the water whilst disposing it s wasted filth.

Topography

The settlement is on a filled dump yard and the fill varies from four to eighteen feet . The rainy seasons brings the exhausted fumes to the ground surface with the rising dampness.

4.5.2 Neighborhood communities

The middle class tenement-housing complex provides a shield for the low-income communities . The almost deteriorated blocks sits away from the

access road providing a play area in between . The regenerated scheme consists of 525 houses and was established in 1986 . The new scheme consists of 13 clusters of 45 house units. The scheme has resettled displaced people from other 'gardens' from the Colombo city area. The scheme has relocated the settlers behind a commercial façade, segregating them from a similar community of Orugodawatte. The latter road widening has aggravated the situation and has induced a cultural conflict.

The 19th Land community also consists of different clusters, which are accessible through lanes and alleyways. The continuation of these lanes and alleyways has bounded the individual cluster as a unique feature.

4.5.3 Schematic adaptations for socio – cultural activities within the neighborhood.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

a) Public realm

Cultural cohesiveness

The initial community though has existed as one the latter additions of the new regenerated scheme have created a mixed culture. The present community shows some segregation mainly due to the high spirits of the original settler towards their homeland. The different holy atmosphere represents the existence of a multi religious community.

The original settlers have a negative attitude towards the new, though they help each other in need. The Navagampura settlers' claims of security

threats from some clusters due to the existence of underworld violence. The above clusters consist of a distinct culture, which has been resettled from war- grown areas of the North. A minimum cohesiveness is seen with the above cultural group mainly due to poor communication.

Public Realm.

Community activities

The prominent community space is located at the entrance providing a play area for the whole neighborhood. The line of grown trees has given the spatial dimensions and is enhanced by the shade. The well-grown Bo tree has given the community space a centre and a place to relax.



Shaded area of well grown trees enhance the communal gathering

Most of community activities are taken place along the alleyways which provides accessible for the neighbourhood.

Alleyways as public realm*



The narrow alleyways, some has ended up in cul-de-sacs, providing communal gathering spaces for inter family interactions whilst the others connect with the similar alleyways of other clusters.



Alleyways ended up with cul-de-sacs creating communal gathering spaces within neighborhood*



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations

Most alleyways lead into open areas with shade, provided by the short roof eaves and trees. These spaces have become ideal grounds for communal gathering. The continuations from these spaces have linked the settlement with similar spaces. Thus could be said that public realm continues through the settlement along alleys and paths.

The family realm extend up to alley ways and some time it merge with the public realm. The dwellers are used to engage in some home basd activities along the alleyways where just in front of their dwellings.

Alleyway provides space for home based economic activity



The frequently utilized taps have become places for interaction. Both sexes gather at the same tap where they exchange thoughts, ideas and news about the out-side world.



They exchange their thoughts at the common tap

The new scheme consists of a separated community centre, which is accessible to anyone. This is based in the Buddhist temple but is accessible to all ethnic groups. The centre consists of a library , a pre school for children, and a conference hall. The earlier existed vocational centre has been neglected due to the dwellers' lack of responsibility towards the centre.



b) Family realm

The individual units open to the leading alleyways whilst backing the main road. Though the dwellings are considered as simple spatial enwrap, their family realms are more complex and totally differ one from each other.

Dwelling of Nizal

Family Profile

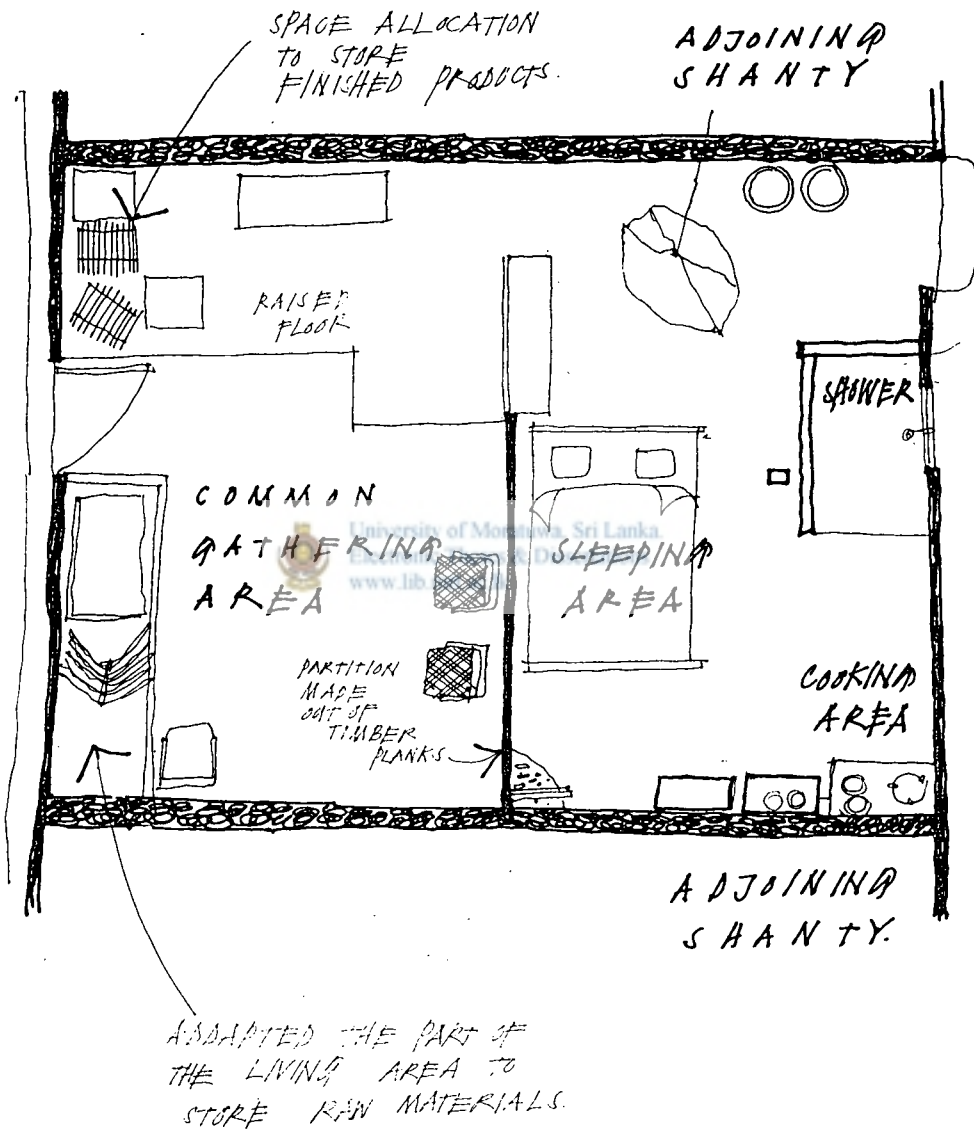
Nizal (30) lives with his wife Rizafa (25) and two children named Hashina and Zakir

Insight in to family realm.



Nizal's dwelling consists of two main spaces; a fairly large living area and a sleeping area. Living area functions to accommodate a home based economic activity of making envelopes. This space has been adapted to satisfy the various needs of producing envelopes such as, a separate space just closed to the entrance door to function as storage for raw materials while the adjacent, raised linear strip been allocated to keep the finished envelopes. The living area having a flexibility to function as a gathering space as well as a sleeping area for a visitor when it necessary.

During the earlier times of producing envelopes the dwelling was totally built up of more temporary building materials such as timber planks, cadjan



Space allocation within the dwelling
 Not to in scale



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

roof etc. But when the income level went up they have used durable materials are used to confirm their ownership. For an example the boundary walls are made out to be cement blocks while the personalizing of spaces ; inside the dwelling are demarcated by using timber planks.



Living area : a multifunctional unit.

Furniture arrangement is also taking a part of personalizing the internal spaces. The sleeping area separated from the living area while maximizing its privet domain with the help of wall made out of timber planks and timber almirah which placed as a continuation of timber wall. (fig)

Part of the sleeping room been adapted to function as shower area and enclosed it with the help of half walls made out of cement blocks.



When the dwellers became status conscious they are used to bear more innovative ideas. For an example, eventhough, it is a habit of the neighborhood to use a common tap or a well, Nizal has built a shower area at a side of sleeping area using a half wall made out of cement blocks.

Space allocation for the function of cooking is minimize due to the fact that they are used to buy their meals instead of cooking inside the dwelling.

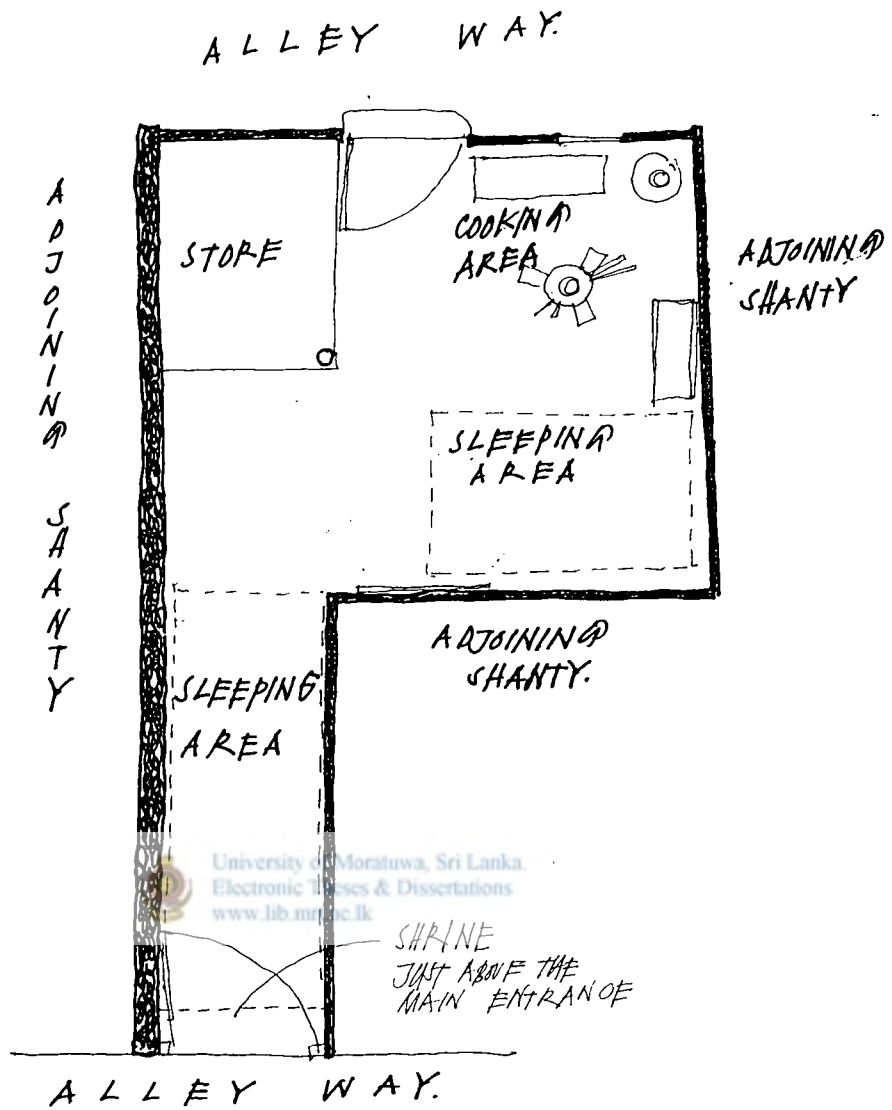
Dwelling of Mr.Nandasena

Family profile

Mr.Nandasena is 43 years of age and he lives with his son Chamaka Kumara and daughter Vajira; within very compacted shanty dwelling at Navagampura 19th lane.

Front view of the dwelling





Space allocation within the dwelling
Not to in scale

The front elevation only consists of access door to the shanty. The dwelling consists of narrow linear strip and fairly large inner room.

The dwelling is totally built up with temporary building materials and the dwellers pay less of attention towards to uplift the quality of dwelling but for ensure its' tenure. In accordance with turner's classification this would be a representative of **bridge header** category.



The narrow linear strip : male sleeping area.

The narrow linear strip act as a fore space for the inner room area while it provides space for male sleeping area.

As Mr.Nandasena is more religious person, he adapted the limited area of linear strip to perform his religious activities. Thus he placed the statues of

Lord Buddha and other gods just above the entrance door with having an concept of “we believe our religion ; we honor gods who control the world. So, god bless to our dwelling”



Inner room area having a flexibility to function various home based activities.

Inner room has the flexibility to convert its self into a common gathering area at day time while can be functioned as female sleeping area at night.

Cooking activity is also taken place within the inner room area without having any physical demarcation to separate it from the rest.

Nandadasa's daughter employs in a toys production company and she is the bread winner of the family. Monthly income not sufficient enough to satisfy even their basic needs and that may cause to pay a less of attention to personalize their dwellings in accordance with their desires.

CONCLUSION.

People that belong to the low income category take refuge in their **socio cultural context** as a base. Thus, their aspirations, attitudes, and values are the major components that reflect the socio cultural background that they belong to.

As observed, even this socio cultural context spreads in to a wider parameter in variety within the same community

Observation also shows that in determining the external expression as well as internal planning of such dwelling units, the dweller's socio cultural background has played a major role. In many instances, his attitudes and values, are expressed and enhanced through the dwelling unit, using various materials, finishes, landscaping etc.



A dwelling unit is represented in a neighborhood in two ways;

- a) .Individual dwelling in relation with its inhabitants
- b) .Individual dwelling in relation with its neighborhood

This coincides with two important factors theorized by Christopher

Alexander ;

- a). Every person and family is unique and that uniqueness has to be expressed in their dwelling.

- B) Every family and every person is a part of a society and require bonds of association.

Considering the first factor, observation shows that even within the same community a lot of variations can occur, in terms of their planning and appearance. This is the result of the differentiation of priorities and the degree of exposure to the organized society.

Considering the second factor, observation shows that maximum contribution to **community living** is only given by the two categories of **bridge header** type and **consolidator** type.

When one considers the spaces that has been adapted by the inhabitants in a neighborhood, to perform the function of community living, it shows that they are not separately designed for that particular purpose. Often, a shop front, a fore court of a dwelling, a common gathering area in a dwelling or a shade of a huge tree is used to satisfy community living.

The status seekers in a shanty community are more security conscious and try to segregate themselves from their previous neighboring community. When the threatening of eviction disappears, they are less involved in managing the social, physical and its overall planning but are more enthusiastic in building their own houses, clarifying domains by introducing parapet boundary walls and try to spring up to higher ranks or social status. It is also observed that when the dweller springs up to a higher status, simultaneously the socio cultural context also been changed

Overall observation derives the fact that attitudes and values of the urban low income category are very complex and varied. Thus, it is impossible for one to identify them in groups. But their socio-cultural context becomes a means of measure in understanding the reasons for their various dwelling expressions.

Thus **socio-cultural context** can be stated as the **basic design parameter** That defines the nature of the dwellings that fit the urban low income category.

However, as the socio-cultural context is also not static but changes with time, its parallel adaptation are also to be considered, when it is used as a design parameter



11. Rappoport, A House Form and Culture
Pranticle Hall ince.
New Jersey 1969.
12. Schults, C N Concept of Dwelling
Rizzoli international
publications inc.
New York, 1993.
13. Schults, C N Existence Space and Architecture
Studio Vista London 1971.
14. Silva, K T
Athukorala, K The Watta Dwellers
A Sociological Study of
Selected Urban Low-income
Communities in Sri Lanka
University press of America
USA, 1991.
15. Tuan, Y Space and place
Edward Arnolda, Londen 1977.
16. Turner J.F.C. Housing by people
Towards Autonomy in buildings



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Seminars

- 1 Dayaratne, R What is housing –The Wider
Perspective
Present and future Trends in Housing
Public speech,
S.L.I.A. Annual sessions.1995
2. Perera L.S.R The Ecological, Traditional and
Socio economic Imperatives in
the Sri Lankan Poor.
Public Speech, S.L.I.A
Annual Sessions 1995

