

HOUSE FORM AND CULTURAL PERCEPTIONS

**EXAMINATION OF THE NEED AND MANIFESTATION OF THIS PRINCIPLE
IN URBAN PUBLIC HOUSING**

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Declaration

I declare that this dissertation represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this university or to any other institution for a degree, diploma or other qualification.

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**HOUSE FORM AND CULTURAL PERCEPTIONS: EXAMINATION OF THE NEED AND
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Abstract

This dissertation is an attempt to show the connection between the perceptions people have about what a house form should be like due to their cultural and social background, and the importance of manifesting these perceptions in architectural design of housing.

Special attention is paid to the need and importance in the manifestation of cultural perceptions in house form design when it comes to public housing. Attempts to relate to the user and their requirements made by other architects are looked into and possible methods that can be used for this purpose are pointed out and discussed.

Case studies on Jayawadanagama housing scheme and Summit Flats are done as examples to show different methods adopted in public housing design in Sri Lanka and their success and failures discussed.





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INTRODUCTION

0.1 Preamble

The primary concern and existence of architecture depends on People. Hence, Architectural design should also be approached through People. Different people in different cultures have varying psychological and sociological inclinations and aspirations as to what they want and how they want to live. Therefore if individual analysis of each user is not possible, at least a good cultural and sociological analysis of user communities should be made, and through that those needs should be catered to with appropriate architectural solutions.

Another important aspect is the relationship of different communities and cultures to nature and their surroundings. It should be noted that not every culture in the world relate to their outside environment with the same attitude or enthusiasm as another culture, each having different sets of values or climatic conditions.



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Each culture is formed through a set of values and norms which are established through a long period of time and help organize and structure their life. This in turn leads to a particular behavioral pattern among the people of that culture, establishing a certain hierarchy between people of different age, gender and civic status etc determining the different ways in which they interact with each other.

To maintain these unique relationships between people of a given culture, they need a certain spatial arrangement in their dwellings (which include forms of individual houses and specific patterns of arrangements) that facilitate this behavioral need. Hence the basic Form of the Dwelling derive from these constrains which holds the cultural perception of the spaces which allow people to retain their life style is what determines their identity.

Finding this out and creating the exactly 'right' Form is the architects prime responsibility and this is what separates his role from that of a planner or a builder.

0.2 Topic Proposal

0.2.1 Observation/Issue

"In the postindustrial society of the 20th century, housing in developing nations and poor parts of developed countries continues to be of insufficient quality and does not meet the demand of some parts of the population."¹

In urban towns housing is seen as simply permanent shelter for human habitation. Therefore a lot of the housing schemes or public houses that has been built address the need for shelter and respond quantitatively to solve it. But the qualitative aspect of what makes the house a home for the user has not been addressed effectively. Hence it does not give the user the feeling of belonging or the personal element that allows them to make the house in which they live, a true home for their family.

¹"Housing (shelter)." *Microsoft® Encarta® Encyclopedia 2001*. © 1993-2000 Microsoft Corporation. All rights reserved.

0.2.2 Criticality

*“The effects of bad housing can be measured directly. It lessens industrial efficiency, encourages inferior citizenship, lowers the standard of family life, and deprives people of reasonable comfort. There are also direct relationships between poor housing and poor health, and between poor housing and crime.”*²

The safest and the most comfortable space for one should be their home. The house being the space that provides ones anchorage and a base from which they grow and extend in to the rest of the world, it will be a determining factor of ones mental and psychological shaping.

Each person has an idea of what a house is and they relate to a certain type of spatial arrangement or a built form that allows for certain activities essential to the life style of their background to take place.


The way spaces of the house relate to the outside, the spatial penetration across the house and the circulation pattern of the house are distinctly associated with different communities depending on their socio-cultural background. Culture is the knowledge, beliefs and values etc that molds the social thinking of any individual, and this is what enables one to perceive the rest of the world in a meaningful manner.

²“Economic Conditions of the South.” Microsoft® Encarta® Encyclopedia 2001. © 1993-2000 Microsoft Corporation. All rights reserved.

Hence each person has a cultural perception of what they need as a house in order to experience the essence of a home with the human activities that he needs to make happen to achieve the psychological relaxation one expects and needs to get from their home.

This mental relaxation that should be possible to be achieved from a house is necessary for any person to become mentally balanced. Therefore the lack of this affects the psychology and the balance of people who actually work for the city, making the productivity of the city highly inefficient.

Hence the form of the house should be derived according to the cultural perception of space and its use in a house in order to maintain a balanced psychological condition in the workforce of the city in order to achieve efficiency of the city.

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Due to land limitations and the influx of people in cities, the concept of mass housing for the public has become a more realistic solution to individual housing.

Hence when housing *groups of people* in public housing schemes, it is all the more important to derive a method of designing housing that cater to a large number of people while still making the houses and the environment fit to larger cultural perceptions in order to make sure the people get what they require both physically and psychologically through the spaces created both inside and around their houses.

If this issue is not rightly handled to deliver a sense of belonging, an identity, privacy and a territoriality to each user, it will not just affect the psychology of one person or family, but that of thousands of people in the city.

0.2.3 Possible Causes for Unsuccessful Housing Solutions

- a. The ignorance of the need to address the qualitative aspects of the cultural needs of space and its arrangements when designing houses for people even in urban conditions. Basically the fact that there is such a problem is not seen.
- b. Even when the problem is understood, the need for addressing it is rejected due to physical, economic and political situations as restrictions through financial difficulties to provide quality housing, the need for economizing by designing basic unit houses in the accepted standard for a shelter and to suite technical efficiencies etc in order to provide a larger number of houses to house more people.
- c. The *mechanism* through which it could be achieved is not known by the Architects. The method of how to understand and analyze the cultural issues of the user or how to architecturally resolve these cultural needs when designing a house dwelling is not known.



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0.2.3.1 The Hypothesis

When considering the above reasons it is seen that even when the cultural needs are understood, the fundamental need to address this issue when it comes to urban houses is not realised.

Even the most basic form, can be made into a comfortable home if that basic cultural concept of the house, in the users head has been manifested in it.

It is seen that this is mostly true of architect designed housing for the poor. Many lessons though can be learnt from the people designed houses of the shanties. Architect designed houses often become slums due to the lack of the architects understanding the cultural perception of the people they are building for.

Therefore, more than anything else, it is the lack of studying the cultural background of the user and analyzing his/ her psychological needs (or profile) that has made housing today so qualitatively poor and not up to standard.



0.2.4 The Study as the Remedy

0.2.4.1 The Intension of the Study

This study will look into the urban housing needs of today and attempt to establish that, the idea of what a house is comes through the cultural background of the user and that it is essential to cater to this cultural perception of what a house is in order to provide them with housing which will be psychologically satisfying as much as physically providing shelter.

It will go on to show that, this information about the cultural perception of what the house should be for different people can be collectively studied by doing a psycho-socio profile of the socio-cultural background of the entire community since

it is not possible to analyze and individualize for each and every person when it come to community housing. .

0.2.4.2 Method of Work

- A look in to how architecture becomes a social art which is purposeless devoid of the people who use it.
- Study of the components and factors affecting house form.
- The way culture and society determines how one perceives the world.
- The idea of 'Home' and how it has been perceived through culture will be studied to show how the house form is derived through cultural needs and conditions – creating a definite perception of the House Form in the minds of the people, which is required for them to be psychologically satisfied in a house as much as gain shelter from it physically.
- A study of the urban housing need, its shortcomings and essential requirements for its improvement will be made.
- Finally the study will look into how it is possible for an architect to deliver this cultural perception of the house, in urban community housing.
- Case studies of community housing projects that has tried to cater to this need will be done to see how it has helped in uplifting the quality of urban community housing.

0.2.4.3 Scope and Limitations

The need to relate to a preconceived cultural perception of what a house is in housing design, is true for every type of house. May it be custom designed individual housing, public housing, flats, apartments or condominiums, in urban or rural context, they still need to psychologically and physically satisfy the user.

This study will be looking into the house form in general through points of views of architecture and culture initially and then relating it to “urban community housing” requirements.

The discussions and examples will be made in a generalized manner with specific examples to give the broader idea of the concept in discussion rather than detailing each concept in depth. This is done so since there are a number of such concepts that needs to be discussed in order to clarify the main idea of the topic.

The study will use relevant design project done in the first year of M.Sc. architecture at the University of Moratuwa as examples to demonstrate some of the possible strategies that can be used in housing design.

There will be case studies done from two housing schemes in Colombo to demonstrate successful and unsuccessful attempts of existing public housing solutions in Sri Lanka.

0.3 Line of Reasoning

Housing is an essential need for humans, and the quality of housing affects the mental state and psychological conditions of people. Good housing would mean a way in which both qualitative and quantitative needs of housing are achieved.

In order to achieve this, the houses in which people live should be made in away that it can become a home for the user.

The idea of 'home' is different in the minds of each person, and it depends strongly on the perceptions one has due to their socio cultural upbringing.

Hence by analyzing the socio cultural backgrounds, it is possible to design housing form in a way that the user himself can perceive it as their home easily.

But the difficult part is when it comes to design for public housing; since there is no specific user. But here, it should be still possible to achieve qualitative results by analyzing the *user group* as a whole to see what their cultural perceptions are about community living and homes, and catering the housing so that these are achieved successfully and leave room for flexible adjustments so that the user himself can adjust it with his lifestyle and truly personalize it – but with the main form of it still in tact since it reflects what they desire as a home deep inside.



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CHAPTER ONE

Architecture as a Social Art

1.1 Architecture

"Architecture is all about 'relationships', 'socio-spatial relationships.' Positioning architecture along such a line of thought and action while paraphrasing its function as an 'art', enables it to be perceived as a 'social art'. All forms of art do have a social dimension. Of these, architecture becomes unique in the way it represents and enables the co-existence of society and space as inextricably interwoven entities. It is both the process and the product of human habitation" (Habraken, 1983).

Most architects would agree that architecture is as much about process as it is about product. The design process becomes a partnership of consultation between architect and client. The product of it is the design solution, or *the architecture*. With this view, the question of social and cultural appropriateness becomes two-fold. It might also be argued that if the process is sufficiently socially responsive, then the product is more likely to be culturally appropriate.



Image 1.1 : Architecture and its inner life. Children playing on top of a building in the overcrowded Kowloon Wall City in Hong Kong.
(source: personal photograph)

"The Architecture that a society creates is a substantial organic expression of it's inner life." (Bandaranayake Senaka, 1974)

Architecture is about culture, of course, but with increasing globalization the question arises, "Whose culture?" Does Kuala Lumpur need the tallest buildings in the world? Should Sri Lanka do away with courtyards and natural ventilation of buildings? Did the Hong Kong and Shanghai Bank in Hong Kong need to be the most expensive building to be built in the world at the time – in 1985?

Of all the great branches of human activity, the art of building is one most closely related to the progress of mankind. The subject is found to be expressive of something more than consideration of mere necessity, being in fact associated with the various stages of the upward struggle of man. With the advance of intellect it became inevitable that from the earliest utilitarian structures new forms expressive of higher ideals should be evolved.

One of the most important issues an architect faces is the image that the building will communicate. It may require a number of communicating elements to reinforce a total image or to separate and express different aspects of a single building.

1.1.1 A way of Expression

Expression is something that is seen in all art forms – the element that communicates and connects with the thoughts of others. Just like facial expressions of people which allow us to understand what they mean, artistic expression can touch emotions or bring back feelings as well.

Being the mother of all arts, Architecture is the most imposing of the art forms and it is not only the outcome of assembling materials, but has always relied upon its ultimate effect on the dynamic

expression of the human thought. Aesthetic inspiration, as opposed to the crude assembling of materials, is more clearly indicated in the masterpiece buildings.

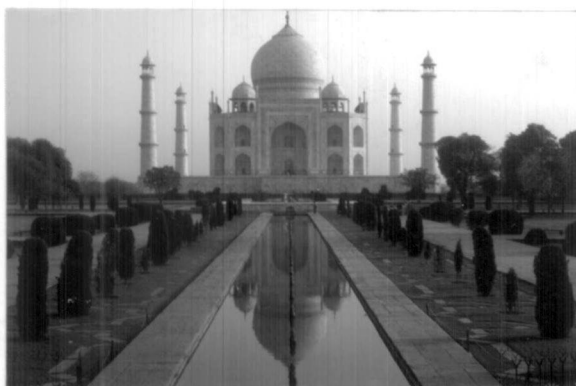


Image 1.2 : Taj Mahal.
An expression of love and
power

source: *dissertation
archives, u.o.m)*

As a building, while it needs to express its function being – a house, commercial building, religious building, school, hospital etc and its functional status among other building types, Architecture being a social art, it also becomes a means of expressing various elements about the society it was built in or about the people who use it.

Expression of certain buildings would even project the social state of a given society at the time of its construction – the glory, pride, defeat, setbacks or the triumphs of a society. For example, the Roman buildings in its glorious days, when they were powerful and mighty, express their power and glory to the world by their architecture – which is seen even today through the powerful majesty of the buildings they built.

If we consider a single building type as a “house” for example, we can see how it expresses different statements and information about the dwellers and their society.

“ Architecture is perhaps the first of all the art, and that the home was the most perfect expression of the self.”(Oliver Marc, 1977)

A house could be an expression of oneself, expression of one's attitude towards life, the status in society, the political and economic power of the dwellers, their relationship and attitude towards the outside and nature or the achievements of technological development of the craft in the given society.

This expression of buildings is achieved primarily through the composition, scale and shape of architectural built form. It is further assisted by the use of appropriate architectural language and materials, followed by finer detailing.



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1.1.2 A way of Influencing Human Behavior

It is seen that one of the main aspects of architectural design is to create spatial layouts that will provide for the activity patterns required by a set of building users to achieve their goals.

This is done through the orchestration of spaces within the building to give different spatial effects that are strategically tied to one another using push and pull elements to direct the way people are to use or experience the building.

A good example for this would be the Lighthouse hotel in Galle, designed by Archt. Geoffrey Bawa. Here he has played with form, shapes, textures, lighting, enclosures and openings together with different other detailing elements to make visitors experience the entire building and the beautiful surrounding in a systematic

manner. He makes people stay and experience certain spaces and he makes them move through others giving hints of different spatial experiences. He takes them around to finally bring them to rest at a spatial climax, making them want to look back again before they leave the building.

The character of the spaces are achieved through volumes, colours, lighting, textures and other elements which will condition the mood of the person entering and direct his behavior in a manner desirable to the purpose of the functioning of the building.

1.1.3 A way of Creating a place



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A space that carries a certain meaning to an individual can be identified as a *place*. A place forms a connection with the user and his memories, letting them identify it with certain events, emotions, feelings or memories – affecting their reaction to the space.

"The concept of place involves the 'where' dimension of people's relationship to the physical environment conjuring up a feeling of 'belonging'." (Ranjith Dayaratne, The Sri Lanka Architect. Vol.101 No.01, June-Aug 1992)

People often refer to certain spaces as 'romantic places', 'cosy places', 'spooky places', 'energetic spaces' etc owing to the impression it makes in their minds. Such impressions are created due to the architecture of the space – making it a place for the people using it.

“The significance of place in human experience goes far deeper than it is apparent in the actions of individuals and groups protecting their places against outside forces or destruction, or is known to anyone who has experienced homesickness and nostalgia for particular places. To be human is to live in a world full of significant places: To be human is to have and to know your place.” (Ralph, E. 1976)



Image 1.3 : Inside of Lahore walled city. The activities happening, makes it a place that people can relate to. (source: personal photograph)

A shelter one lives in for a certain period of time could be made into a home for that person if it becomes a *place* with good memories and emotional attachments. (Similarly it could be a place one would dread coming back to.) Which ever it is, by attaching a significance of some sort to a space, you can make it a place you relate to.

Architecture facilitates this process of creating a *Place*, through the quality of the spaces it creates.

1.1.4 Dwelling Architecture and Social Symbolism

"To build a house is to create an area of peace, claim a security, a replica of the mother's womb, where we can leave the world and listen to our own rhythm. It is to create a place of our very own, away from danger.

Once we have crossed the threshold and shut the door behind us we can be at one with ourselves" (Marc Oliver, 1977)

A dwelling is a unit of habitation – in other words, a *house*. A house is what becomes a home for a family or an individual when it becomes the center of their world providing them the security they needs both physically and psychologically, a place to be themselves – to be culturally comfortable and which gives him a sense of belonging and permanence to orientate himself in the world.

"...the word 'home' has a closer and more concrete meaning. It simply tells us that any man's personal world has its centre" (Schult, 1971)

The architecture of this dwelling expresses much information about the dwellers itself. Society is such that each person or family is seen as one unit of its construction and has a status and identity attached to them.

Even in the olden days, the housing of different strata of people in society could be distinctly identified by the architecture of their houses.

The kings and the chieftains had larger houses that were more spacious and built of permanent material, while the peasants had their houses made smaller and with less permanent material. The

expression of the different house types differed, and each group had their houses built to suit and compliment their socio cultural needs and habits in society.



Image 1.4 : Cheung King Mansion, Kowloon, Hong Kong.

A residential building identified with illegal immigrants, cheap facilities and low social status.

(source: *personal photograph*)

Even today, the house one lives in becomes a certain measuring factor of status, power and position in society. Hence, with the increase in socio cultural status, people aspire to build bigger houses to suit the increased standards. This in turn helps them fit in with and become part of that particular society – a way of entering in to desired social circle since people acknowledge your standard together with the house you live in to a great extent.



1.1.4.1 Housing

Food, Clothing and Shelter are the three basic most requirements for any living person. Therefore 'Housing' falling under the category of "Shelter" becomes a basic need for anyone.

There are two main ways of fulfilling today's housing needs. Either you build a house specifically for yourself exactly the way you want, or you buy a house that has been already built by someone else, sometimes as a common design for many people. Either way, the house should finally be a place where one could feel comfortable, secure and in peace when at home.

"There is a strong psychological connection between the individuality and the house not anything else that its his home, where he gets maximum psychological satisfaction"(J. M. Richard, 1976).

1.1.4.2 Layout and Settlement Patterns [Form of Housing]

Humans are social beings. They need assistance, help, acknowledgement, care, support etc form others for their own existence.

A newborn calf could struggle on to his feet and find his way to food almost right after its born. But a human child needs to be attended to, looked after and assisted with everything for years after he is born.



DIAGRAMATIC REPRESENTATION OF TRADITIONAL VILLAGE TYPES.

Image 1.5 : Traditional village settlements of Sri Lanka created through cultural needs to cater to the social requirements of the community. (source: Ashley de Vos)

This could probably be a reason for why humans are socially dependant on each other all through their lives. Isolation and banishment from society is in a way a punishment for anti-social behavior. Therefore, the relationship one has with others in a community is crucial and hence the relationship one's house has with the other houses is as important to attain this communal connection with one another in a society.

This is what makes '*layout design*' as much an important part of housing design as the design of the house units itself.

This is also one reason why settlement patterns in Sri Lankan villages are so important for the sustainability of their communities. The settlement forms have risen to facilitate the functioning of the community (social structure) and is vital for the existence of that community.



1.1.4.3 House \ Housing Form and its Components

A house is essentially a form of shelter and enclosure. Within the enclosure there may be several spaces that link together to form a spatial arrangement which facilitates the required function of the house according to the needs of the dwellers. Hence its *form* depends on the shape and nature of its enclosure, the shape and size of its roof and the arrangement of spaces within and around the enclosure.

The housing form will depend on the formation of housing clusters, layouts and the relationship it creates between adjacent houses. The house form will intern relate to this

inside outside relationships between houses and the communal attitudes that determined the cultural base of the relationships necessary for the existence of the community.

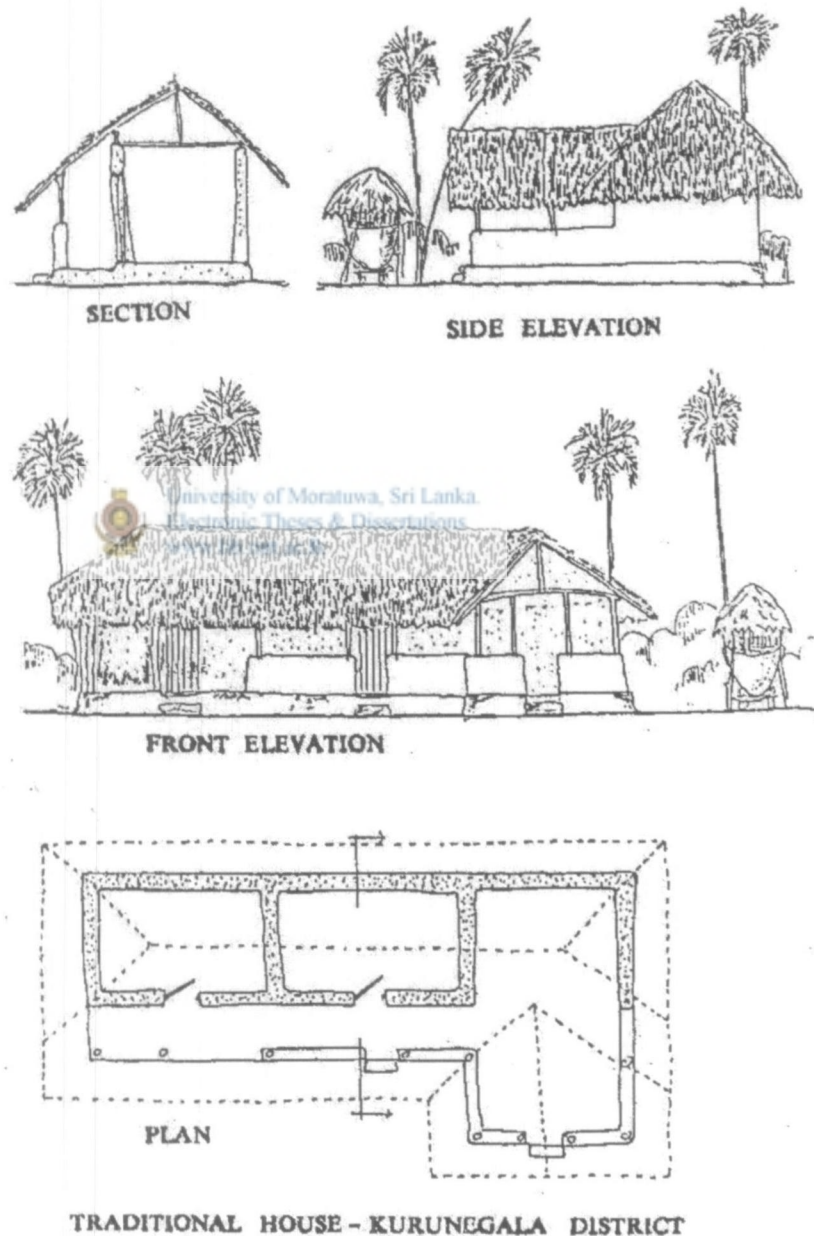


Image 1.6 : A traditional house form of Sri Lanka (source: Nimal De Silva)

1.1.4.4 Determinants of Form

A *determinant* would be the primary factor that decides what the form of a house or housing settlement or building would be.

There are many factors that effects the house / housing form as climate and environmental conditions, available material and construction technologies, site conditions, defense strategies, economic reasons, religious or cultural requirements etc.

However, the purpose of a building is for it to be used for a certain purpose by people. And the way people would need to use it will depend on the way they know or, are taught from childhood to handle or react to the function that happens in this building. Hence despite any other affecting conditions, the house form will have to facilitate and cater to these ways of behavior of the particular user of the house, in order to justify its own existence.

Climate and Environmental Factors:

Climate and prevailing environmental conditions are widely accepted as factors that play a main role in the determining of Architecture.

"We build houses to keep in a consistent climate, and to keep out predators". (Archer L.B. 1964)

Since one of the functions of shelter itself is to protect the inhabitants from natural climatic conditions as rain, sun, wind and predators, architecture most certainly need to respond to the climate and environmental conditions.

The importance of 'climate' need not be denied in order to question *its determining role* in the creation of built form.

If Climate was the main determining force of architectural form, then;

- a. It should be that architecture created in different places with similar climatic conditions should show similar form of architecture, and
- b. Within a single climatic area, there should be no different architectural forms to be seen.



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If we consider the origin of the court yard house in both Sri Lanka and China, it is seen that the climatic conditions of the two places are not similar. China has a varying climate with a colder winter and a warmer summer and Sri Lanka is mostly temperate with not much change in climate during the year. Yet, due to certain social organizational needs, the courtyard house is seen to have been used by people from both China and Sri Lanka despite the change in Climatic conditions.

In severe climates as the Arctic, the forms of the dwellings of different people may be very different – as are those of the Eskimo and the Athabascans. These forms cannot be explained in terms of climate alone.

Materials, Construction and Technology:

It could be said that the materials, technology and construction methods available in a certain area determines the form of architecture present in that area. Undoubtedly materials do make a difference, especially by making some procedures impossible. It is not possible for an Eskimo to build an igloo during summer since there has to be enough snow available for him to cut out blocks of ice to build it.

In Japan we see sometimes that the same type of material is used basing the same construction method, but the form of the house depends on the social status and economic wealth of the people using the house.



“Materials themselves do not seem to determine the form. In Japan, thatch takes on many forms, sizes, and slopes. The sizes of roof beams and roofs are related to their function as a status symbol, the wealth of the farmer, and the Japanese love of nature and hence of natural materials, some times at the expense of rational construction. In fact the structure of the Japanese house is said to be generally irrational.” (Taut, 1959)

MATERIALS AND HOUSE FORM



FIG. 2.3. Dwellings made of one material (reeds). Left: Uru dwelling, Lake Titicaca, Peru. Right: Marsh Arab dwelling, Iraq-Iran border.

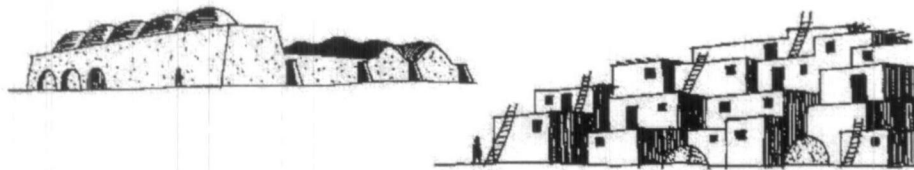


FIG. 2.4. Dwellings made of one material (mud). Left: Iran. Right: Pueblos, southwestern United States.



FIG. 2.5. Portable tents of sticks and felt. Left: Arab tent. Right: Mongol Yurt.



FIG. 2.6. Two examples from the great range of house forms using thatch and wood as materials. Left: Masai dwelling (Africa). Right: Yagua dwelling (Amazon). The houses in figures 2.3 through 2.6 are not drawn to the same scale, but their size is indicated by comparison with the human figure.

Image 1.7 : showing examples of different house forms built using the same material and construction methods, making us question if the materials used for building are in fact a determinants of the house form or not. (source: Rapoport. 1969)

Site Conditions:

"I am not certain that any consistent theory of site as a form determinant has ever been proposed. However there have been attempts to explain the form of such settlements as Italian hill towns and towns and villages in Greek islands – hence also house form – in terms of terrain, lack of land and so on." (Rapoport, A. 1969)

If we talk about context generated architecture, we might wonder if this is not the shaping of architectural form according to the site context. In a way, yes, it is the shaping of architectural "form" – but it is the *form* that has been conceived due to the social requirements of the user that is further shaped by the contextual forces here.

This is the reason why all houses built on flat land, slopes, or green surroundings don't all look the same. Of course they might have certain similarities since the site conditions need to be addressed when designing, but that might not mean the determining of its form was due to the site.

"In the southwestern United States, areas of similar site and climatic conditions have been a setting for both the highly individual Navajo house and the Pueblo cluster, which is basically a social unit the collective nature of which is essential." (Jackson, J.B., Landscape 1, Spring 1951)

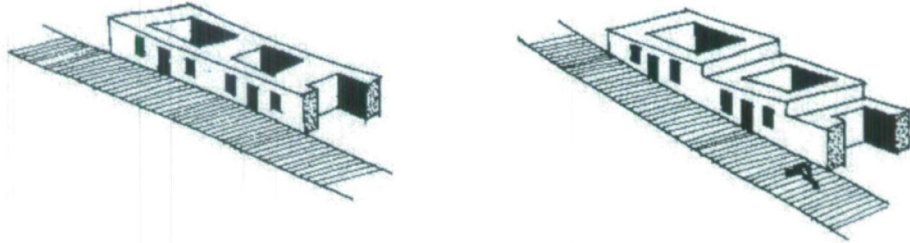


Image 1.8 : Showing how the same house form is built in a set of row-houses in Latin America on a flat site and on a sloping site. Hence it shows that the difference in site conditions had little effect on the actual house form even though it had to adjust to the slope of the site.

Defense Needs:



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Houses like the Chinese Hakka house who's form is directly a consequence of defense requirements, are usually not individual dwellings. They are an entire settlement where hundreds of people and families live in one single Hakka house.



Image 1.9 : Hakka clan house- China. A collection of a large number of individual house units. Its circular form derived as a defense strategy against other war clans.


(source: traditional china)



“Defense has been sighted more to account for tight urban patterns than to explain the form of dwellings, but even in this respect it does not provide a fully adequate explanation.” (Raperport, A. 1969)

Defense certainly play a role in deciding housing form since it would be a method used by a community to overcome threats and protect themselves form enemies. But it might not be as much of an important factor when it comes to individual house form.

Economics:

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“generally, since people with similar economic status in the world may have different moral systems and world views, and since the house is an expression of the of world view, economic life has no determining effect on house form”. (Rapaport A. 1969)

The economic status of a family will determine their ability to build bigger or smaller houses using different material. This might lead to further variations in house form.

Culture and Religion:

Culture and religion is what sets the norms, values and beliefs in people's lives. Hence the house form reflects cretin cultural and social values and characters. People experience the world and behave within the conceptual

framework of their own culture. Customs, beliefs, norms, rules and other elements of culture, provide the context in which people perceive the built environment.

Sometimes, even if certain people move away from their social communities physically and make home in a different region, they still require and desire a house to be of the form they perceive through their culture.

“In countries like Fiji, Malaysia and Japan, not only did the Europeans often live in houses unsuited to the climate, but the relatively comfortable traditional houses are now being replaced with galvanized iron roofed (or even worse, all metal) houses which are even less satisfactory.”

(Rapoport, Amos, 1969)
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At times, people aspire to build houses that take the form of houses used by people of higher status. For example, some of the elite Sinhalese houses of Sri Lanka during the Dutch period take the form of Dutch houses, but of course, internally they use techniques to separate and open out space to suit their own culture.

a. Communities

A community is a group of people who share a common social structure and resources. It can in a way be defined by the extent to which interaction, correlation, sharing and dependency takes place among each other within the group.

Through the inter-relations and the need for cohabitation within a given area, a community adjusts and individualizes its culture to a certain extent. A community that has existed for a larger period of time will have a distinct culture of their own.

Hence depending on the cultural relationships within the community, and the attitudes they have about privacy, territoriality and sharing, the housing form will have to change according to each community to facilitate their required behavior patterns and relationships that need to place between different families and people.



A single family or individuals who dwell in one house can be seen as the user or users of that house. Just as much as there needs to be certain relationships formed between different houses due to community requirements, the spatial qualities within the house needs to be designed to suit the needs of its specific user group.

Even within one community, each individual or family would require an identity of their own and would have their individual needs. Hence the house form will have to satisfy these requirements of the user.

1.2 The User

Architecture being a form of social art, it cannot be devoid of people. Hence the society for which it is created for or the people who actually use it becomes of utmost importance. If the architecture of a building does not address the people who use it, it simply becomes nothing more than just a sculpture.

"The environment is not random assemblage of things. It organizes both people's lives & the settings for their lives" (Rapaport, 19)

Specially when it comes to houses, it becomes all the more important to address the user since a house is a personal dwelling and is the place one must feel most comfortable in. Even as a figure of speech, if one is to be asked to make himself comfortable in a certain place, they will always be told to 'make themselves at home'.

1.2.1 User Types

The user is the person or group of people who ultimately use the building directly or indirectly. Even if one doesn't use it directly, if the existence of the building affects him in some way, he still becomes an indirect user.

The main user or group of users of a building is referred to as the primary user. The others, who use the building besides the primary user, are referred to as the secondary users. There can be several levels of secondary users due to the extent to which they use the building and the relationship they have with it.

1.2.1.1 Primary Users

Primary user is the main user of the building. The primary user is the one or ones who occupy the building or use the building for its primary function. Since architecture is the art of creating spaces and buildings for the use of people, it is designed mainly concerning the primary user group or the primary user and as to how the functioning of the building is done with regard to them and their needs.

For example, if a house is designed for a particular person and his family, but yet the house will be used by visitors, maids, guests etc, the primary user will essentially be the family for which the house is custom designed for. They are the main people who will be using this house and will be the most permanent

1.2.1.2 Secondary users

The people who do not use the building for its main purpose, but indirectly use it for one of the secondary activities going in the building are referred to as secondary users.

In the case of a house; any visitors, temporary occupants, maids, cleaning staff, neighbors and even passers by some times can be called secondary users of that house.

Some time the house might be used predominantly by a few people of the same family and rarely by some, in that case the

people to whom this house is not their home can also be called secondary users.

1.2.2 Needs and Aspirations of a User

There are physical and psychological needs for any human being and there are specific needs of both types he needs fulfilled through his house – since that's his most intimate place of living.

“House is a structure intended or used for human habitation ,it is man's intimate place of living.” (Whittick,A, 1974)



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1.2.2.1 Psychological

There are a lot of things which people fear in life. Of these, some concern physical injuries and dangers while others concern injury to one's personality status, or cause psychological trauma.

It could be daemons, thunder, snakes, cockroaches or getting raped, but in ones own home, he should feel secure and protected.

Similarly, there are a lot of things people aspire for in life as well. They have dreams and hopes, which they spend their life trying to achieve. Become famous, be respected, powerful, rich or happy, the place from which one would prepare himself for achieving all that and finally when achieve the place

through which they project its outcome to the rest of the world
become his home.

*“People are not mere users of built space. They live in them
and make them become what they are.” (Bachlard, 1964)*

Psychologically one should feel protected and secure when he
is in his house. Similarly he should be able to identify himself
with his house and feel in possession of his own territory by
the control he has through his house.

1.2.2.2 Physical

Physically, one needs to be sheltered from the natural
elements and keep away predators and intruders from coming
into his secure, personal space – his home.

Within the house one needs to have a spatial arrangement
that would allow him to act in a way most comfortable to him
and his family. The spatial arrangement within should satisfy
the space requirements and should be worked out to provide
efficient functioning of activities inside the house.

1.2.2.3 Social

It is true that the house is ones personal space. But it is also
what reflects one’s identity and image to the rest of the
society. Hence the house has a social importance that helps
you project your image and state your status as part of a
community or a culture.

Your acceptance, identity and the fact that you belong to a certain society or a group of people with a distinct culture or character, is socially projected through the house.

Guests, visitors and friends depending on the relationship and the closeness of it, are invited into one's home to be entertained and hosted. Depending on the level of acquaintance, they are allowed to come into certain parts of the house.

The house should be equipped and spatially arranged to facilitate this social encounter according to the required cultural norms and ways.



1.2.2.4 Cultural

"Culture is the total material ,mental, and spiritual life of a community and all the implements they use in creating their ways of life." (Martin 1984)

The ways of living, level of privacy needed, rituals performed and relationships among people depend on the cultural base of the dweller. Hence the house should be a place where these activities and relationships could take place effectively.

1.2.3 Background and Experiences

“We know perfectly that we feel calm and quite and more confident when in the old home in the house we were born in where we belong than we do in the houses in street where we have only lived as transient.” (Bachelard.G.1969).

Memories and experiences affect the way we perceive things – especially spaces we live in. The place where we felt most safe and comfortable in our childhood will always be in our minds. We have anchored the emotions generated in our minds, of the experiences with spatial qualities of its occurrence.

Hence subconsciously we desire such places of emotional comfort and delight created within our own homes – even as adults.



CONCLUDING REMARKS:

Architecture cannot be meaningfully seen without people who use it since it is a way of creating socio spatial relationships. This makes architecture, a social art. Architecture is used for expressing; for manipulating human behavior and for creating places.

Dwelling architecture expresses an identity or image about its dwellers; it creates spatial relationships that facilitate required behavioral patterns within the house and relationships with the out side; and it creates a place that will be perceived as the center of its users world.

Out of the many arguments that might be made regarding the determining factor of the 'house form', the socio-culture of the user community takes the main role since the purpose of the house is in fact to provide a spatial form that helps the user make it his home.

There are several levels of users. The main user or user group of the dwelling is seen as the primary user and the others fall under secondary users.

The user has certain needs. Besides satisfying his physical needs, he needs to be psychologically satisfied as well. For this his socio-cultural requirements should be achieved through his home.

The next chapter will talk about culture, its roots, and the way it affects people's perceptions of the world. And how these perceptions in turn affect the image of a dwelling or the house one would want to live in.



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CHAPTER TWO

The Impact of Culture on User Perception



2.1 Culture

The knowledge, beliefs, values, arts, manners, rules and rituals etc and other skills one gains from his society as a member of that particular group of people can be referred to as culture.

Culture and society are two words that have very close relations to each other, and it is a clear fact that no society can exist without a culture. This means that, without an accepted organized way of living that is followed by the people in terms of ways and attitudes in a society, it cannot function properly. Similarly, there cannot be a culture without a society to uphold it and culture always exists based on the society. Hence, society and culture are inseparable in its existence.

Image 2.1: a tribal ritual of Wadda community in Sri Lanka.

(source: dissertation archival u.o.m)



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If society is what uphold culture, then, culture can be called a complete social pattern based on traditional knowledge and beliefs and hence – a social heritage.

When using the word “heritage”, it might in a way sound as though its simply all the traditions, beliefs, art forms, and the knowledge we inherit from our forefathers, but in actual fact it is all that, together with what we - ourselves add to it with our own experience and what is to be passed down to the future generations.

The culture of a society affects each and every person in it and is what determines one's way of living or lifestyle.

Culture is not something we are born with, but something we are born into. There are two main ways in which people become different to each other. First would obviously be the physical characteristics of individuals and the second will be the social characteristics one inherits from his society.

Another word that closely overlaps with the definition of “culture” would be “civilization”. But it is best to use these two words separately since civilization is a more advanced state of a culture.

2.1.1 Determinants of Culture

Culture is the result of the acquisition of knowledge through time and generations. It is tried and put to test, and altered to fit the changing times for generations of human existence. Humans have to adopt and clash with the surrounding natural environment and finally adjust themselves to be in harmony with everything else so that coexistence could take place and the human race could flourish through this understanding.

During this process humans start understanding the repercussions of certain actions or reactions – may it be with nature or with other beings. When they start understanding the nature of things they start comprehending with the laws of the world – the world around them. Through this understanding, he builds up a set of norms and taboos that helps a human community to walk forward in time safely without harming themselves, others or the human kind.

2.1.1.1 Climate and Natural Environment

Through out life, man keeps changing his natural environment each time he comes into contact with it. Every time he reacts to the external environment, he creates a secondary environment to suit him artificially. This happens when he obtains and prepares food, create roads and pathways for moving about and the use of machinery and equipment to help him with his activities etc.

By having experienced the environment with rain, sun or cold winters through many hundreds of years, people know and are aware of its nature and each community has derived means of protecting themselves from it and methods of harnessing the best out of natural conditions.

The successful solutions for addressing environmental issues are accepted as norms in society and are made part of the culture of that community.



Image 2.2 : Underground Cave Houses in China. These houses are a very effective way of living. Keeps houses warm during the night and cooler during the day.

Even housing solutions become so, as a result of the cultural way of living which was adopted due to various climatic and environmental conditions through generations.

Image 2.3 :
Traditional
SriLankan
Vernacular
Dwelling.



(Source: Nihal Fernando)



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Vernacular architecture of a society is due to this cultural response to handling climate and other needs. Hence vernacular architecture is derived through the best methods tried and tested for generations to adapt to given living conditions.

2.1.1.2 Social Structure

For the long-term survival of any organization, there should be a disciplined and structured manner to its conduct. There needs to be a hierarchy and distribution of work in order to make it functionally efficient.

A community is a social organization and hence it too needs such structuring within it for its functioning and even survival. This is the only way society could provide for all necessities of individuals in a community.

The hierarchy of status and social strata created in society is due to this reason. With time, this organization classification gets established and becomes tradition. Its reality is nurtured into people born to a particular society and like religion, it becomes a true belief.

For example, the caste system in Sri Lanka is based on the duty assigned to a family of people in the social organization.

The people born to the royal families rule the country and their duty is to lead and look after the best interest of his people. The man who makes pots for the villagers to cook in, becomes the potter and his family will be the descendants of the potter family. There will be another family that will do the laundry service for the entire community and similarly each need of the society was divided and assigned to different families and they all earned by performing the jobs they were assigned.

Such social organizations develop and harnessed skills in people since they were driven to become specialists in the field of work they were assigned. This knowledge and output of skill became traditional heritage and is added to the culture.

Similarly each caste or strata of society was identifiable through the clothes they wore, the jewelry they used and the houses they lived in.

2.1.1.3 Socio Economic Conditions

Economic conditions are forever changing, and social conditions are driven by the economy. With this continuous change in socio economic status of the world, each community and every individual in it needs to adjust and gradually change with it.

In the older days the pace of change of economic standards were not very fast or abrupt – as were most other things in society then. But since of recent, with globalization and the connecting of the entire world in one economy, the changes happen more often and frequently compared to before. This could be since any significant change happening in any part of the world would affect every one through this global web that ties all economies and societies together.

This effect on culture is usually absorbed and the culture adjusts to it gradually but when the changes come too fast and there is no time to adjust, as it happens most of the time today, people get confused and some times end up rejecting culture all together or try adopting other cultures who they feel are handling the situation more effectively.

This is probably why tropical countries like Malaysia or Sri Lanka would build glass towers and air-condition those.

2.1.1.4 Religion

Religion gives a base to any culture. The beliefs, values and rights and wrongs of human lives are taught through religion. The determining factor of most rituals and lifestyles can also

be identified as the religious background of the people or community.

This could be understood easily by looking at a catholic family and a Muslim family in Sri Lanka. The lifestyle, values, behavior and appearance of the people of the two communities will be distinctly different most of the time.



Image 2.4 :

Muslim Ladies at work: shy nature with clothes that cover even the head.

(source: *architecture in the Islamic world,2001*)

The way they relate to others, especially outsiders and people of the opposite gender, will be different and hence even their living environments will have to suite their religious attitudes and requirements.

2.1.1.5 Communal Attitudes and Social Relationships

According to the social structure and the way society functions, the nature of the extent to which human relationships are necessary – make the attitudes they form regarding social relationships.

Starting from relationships and attitudes between family members to the way a complete stranger is treated, depends on this cultural attitude of how one is expected to relate to others.

Some societies look up to the mother of a family as the most important person who keeps the family members together with her love and wisdom while even the father would respect her and take it upon the male children and himself to keep her happy. Another societies might see the mother as someone who is there to keep the father happy, give birth, cook, and take care of the work needed to be done at home, while the father is the macho bread winner who goes out to work and has the final say in any issue regarding the family since he is the person who brings home food. There might be another instance where individuality is respected and both parents are seen as equal individuals who differ only by their own personal capabilities and talents.

This would even become their social reality of family relationships.

For example, the Australian Aborigines have repeatedly stressed that, for them, home is wherever a family member extends sustenance, whether emotional or physical... Moreover, the extended family network and family obligations

and expectations mean that a person even temporarily living with relatives is not 'homeless'.

The relationship attitudes that are traditionally cultivated at home from small days reflect the way people relate to others outside their homes.

The relationships with the outside could be seen in several lights. It could be with people outside one's house – neighbors, visitors, guests, strangers etc, or it could be how their lives are connected to the nature. This relationship they have become part and parcel of the culture with time, and people tend to perceive them as necessities for social existence.



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Even the houses they live in will relate to and become a tool that maintain or control these relationships they have with the outside.

2.2 Perceptions

A perception is an intuitive understanding and/ or an insight. It is the reading, understanding or interpreting of something. Perceptions give an ability to relate, interpret and become aware of things through senses. Basically there are mental concepts that are developed as a consequence of perceiving things through your senses.

2.2.1 Socio Cultural Perceptions

This could be seen as the way one has learnt to perceive, understand or relate to various things in the world due to his social background and culture. These perceptions will differ with different cultures and social backgrounds. Right and wrong in the world, Beauty and ugliness in things etc will all depend on the cultural back ground one comes from.

For example, the image of a beautiful woman held by an Indian man would be completely different to that of a Chinese man. In Indian culture, femininity is seen through the shape and the curves of the body. Big breasts, wide hips, fair skin with long black hair would be a generalized ideal of what a beautiful woman is to an Indian man. Beauty in the Chinese world would mean something much different. Slim, petite, small, tiny, helpless, doll-like, with no curves (since that requires flesh on the body) and eyes as big as it can get might be the image of a beautiful woman for a Chinese man.



Image 2.5 a) and b) : Chinese bound foot – A Golden Lotus. And the erotic shoe. Source: www.ccds.charlotte.nc

Cultural rituals might also determine people's perceptions of certain things. The ritual of foot binding in China has made them perceive the 'foot' of a woman for much more than just a part of her body that assists her in walking.

Foot binding is about restricting the foot to grow from small days by keeping it bound with herbs inside a special shoe which keeps decreasing in size. The foot in its attempt to grow with age deforms into a bulging lump that is no bigger than three to five inches in length in a grown woman. Since men are deprived of seeing women's feet due to this, the 'foot' becomes an erotic symbol of lust, and is referred to as a 'golden lotus' which is only seen by the husband since he is the only person allowed to take it off her when he makes love.


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Even the significance attached to objects, places or people would also differ according to the cultural perceptions one has of them.

Image 2.6 : Siva Lingam
Perceived as an object of mystique power and divine nature suitable of worship – by the Hindus.

(source: ammaeurope.org)



The hermaphroditic eunuchs roaming the streets of India, dressed in sari, with chest hair and masculine voices are perceived to be a group

of people with mysterious powers in Indian culture due the reason of them being neither a man nor a woman. They have a social significance and are paid to come and bless people at all auspicious occasions as weddings, baby showers etc.

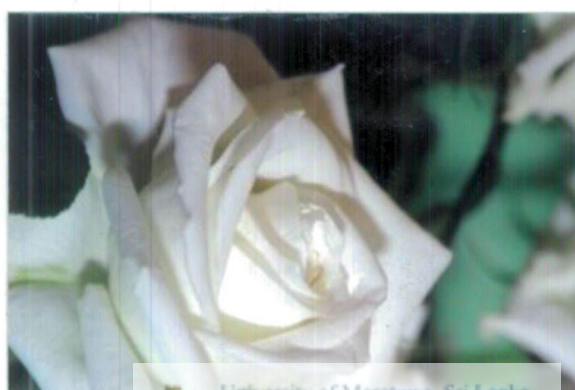


Image 2.7 : A white Flower .

A symbol of purity and is fit to be offered at a Temple in a Buddhist society. A symbol of death, after life and misfortune in Japanese society. A symbol of platonic friendship in the west.



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(source: snap-shot.com)

Rituals, manners, knowledge, beliefs, norms etc of a culture moulds ones perceptions of how they react to certain things. Significances are attached, taboos are set and the glass is painted for one to look through it and see the world through the shading of his socio-cultural background.

2.2.1.1 Social Cognition

Social cognition is the way one understands and relates to the world. The way one would grasp what is happening in the

world and with other people. This understanding is achieved through his socio-cultural perceptions.

If you need some help and there is no one you know around other than a stranger, before you approach him you will first judge his expressions and his actions without directly going to him. Through this observation if you decide that this stranger seems friendly and might help you out with your problem if you ask him.

In order to judge the stranger, you needed to understand and interpret his actions. And the fact that you had a perception on what sort of human reactions indicated a friendly personality in contrast to an unapproachable person, helped you decide on your actions.



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People perceive certain things the same way globally – like a friendly smile. But there are other things that are perceived differently in different cultures like for example the way one would dress for a funeral. If you were all white and walk into an American funeral, as you might do in Sri Lanka, they would wonder what statement you are trying to make, since they do not perceive ‘being dressed in white’ as a symbol of mourning or loss.

A red light lit near a window is a common sight both in Hong Kong and in some parts of Europe. The difference is the way they are perceived in the two cultures. In Hong Kong it would be recognized for an ancestral shrine which is lit up and worshipped inside a house, but in Europe it will symbolize the availability of a prostitute in that room and will be understood

as an invitation for a man to come up and please himself for money.

Therefore when a European goes to Hong Kong, there is a good chance of him being misled due to the wrongful interpretation of the red light at the window.

Social cognition helps us understand things that take place in society so that we can appropriately react to them. Hence people are at all times trying to understand and read the behavior and actions of others in order to know what to expect next and to decide how they should react to it.

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2.2.1.2 Attitudes and Reaction
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In Wilcannia, one is immediately struck by the extreme difference between black and white concepts of privacy. In the white man's society the need for close privacy has become one of the strongest influences on the way that the immediate environment is manipulated, and as such becomes fundamental to the design process of architects.

The compulsion to separate privacy and communality within the house form may seem a perfectly natural condition to us--a high degree of acoustic and visual isolation, a sophisticated nesting of individual compartments which, in the standard detached bungalow, reveals a set of spatial complexities with predetermined psychological roles. This particular formal composition has little to do with the mechanical function of

shelter, but is much more a reflection of intrinsic cultural and symbolic values held by the occupants.

On moving into the Aboriginal world, our own criteria of privacy are immediately challenged. The basic difference is that whereas in our culture privacy really does demand a high degree of visual and aural isolation, in Aboriginal society it can exist without such structural supports... We simply refuse to accept that members of an Aboriginal family group need to sleep in a single undivided space, rather than in our suburban ideal of one's own bedroom. All sorts of experts condemn the 'shocking overcrowding' in camp shelters, without bothering to consider that such a notion is a purely subjective response.



2.2.1.3 Religion, Beliefs and Superstition

Religions are usually what bring about beliefs and superstitions to a culture. It states out what is acceptable and not acceptable. And hence different cultures having varying religious beliefs will feel comfortable or uncomfortable depending on how acceptable it is in their belief.

Even food habits of cultures vary mainly depending on religious cultural differences.



Image 2.8 : Garden snails being fried at a street stall at Temple street in Hong Kong.

A snail meal is as popular among Hong Kong people as much as they would like eating snake. But with the Buddhist ahimsa culture with food in Sri Lanka, such a sight would be nothing short from outrageous.

(source: Personal Photograph)

Hong Kong being a place where space is scarce and hence is one of the most expensive real-estate markets in the world. Therefore the rent of apartments are extremely high due to heavy demand.

But if in case some one dies inside a house – specially some sort of a tragic death; renting out or selling that apartment will be extremely difficult. It will also bring down the value of that property to an absurd low.

A plot of land along the main Nathan Street in Kowloon still stands there, unwanted, with a building damaged by fire since no one is willing to buy that land and develop it. This is because there had been a great fire in the 1980's in this building and a large number of people were burnt to death

inside the building. Such superstitious beliefs about death, manage to stop even the Hong Kong real-estate developers from developing prime land.

2.2.1.4 Social Behavior

The way one behaves in society shows the grooming and etiquette of a person. But a certain type of behavior which is considered (perceived as) the right way of behaving might be preposterous at a similar situation with people of a different socio cultural background.

The way of greeting in different communities can be taken and an example to demonstrate the different mannerisms used by people of different cultures. A Sri Lankan or an Indian would bring their hands together in front of the chest and say Ayubowan or Namaste in greeting strangers. The Americans would stretch their hands forward and shake hands. The Arabians will hug and kiss cheek to cheek three times.

If this social behavior is mixed up and the same manner was used with different cultural backgrounds, some people would feel uncomfortable, offended or sometimes even angry.

Similarly the way in which one would act at another's house or entertain a guest will vary in different cultures. The people might be comfortable allowing their guests to come right into the house or walk right across it when others might not want any outsider coming into certain parts of their house.

2.2.1.5 living and Lifestyle

Since in the past no architect was needed for building a house to translate the values of a particular epoch into house, it was through the family itself that morals of society were made manifest in building, a causality that lifted anonymous architecture above the level of mere practical device. Because of this direct creative process, a house of the past is apt to give a better picture of the philosophies of society at that time than the formalized and architect-designed buildings of ecclesiastic or aristocratic architecture.

- **Community living**

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Even before the ape evolved fully into man, his instinctive means of survival had been to live in closely knit communities, to gather food, reproduce his own kind, and protect himself from predators.

*"Man is a social animal and has managed to survive through some hundreds of centuries largely by virtue of his ability shared with some other animals to form communities."
(Allsopp, B. 1974).*

Thus he achieved communal life by living in settlements, and as being valued his privacy, created and surrounded himself with a some of protection in a home, his ultimate retreat a citadel where he felt secure. The basic unit indicating the dwelling and the settlement, was and still is, the village, and in today's context is manifest in housing scheme and neighborhood units, which provide residence and the necessary communal facilities. The most distant

and isolates dwelling does not detach the occupant from a human community upon which he depends on for many physical necessities, and most importantly, for his sense of belonging to a community, to an order of human relationship, thus providing him with his instinctive needs for survival.

- **Life Style**

The way in which people live, or their pattern of living can be called their life style. Depending on different cultural attitudes, religious beliefs and social structuring, the lifestyles of different people will change.



2.2.2 The Objects of Socio Cultural Perceptions

- **The World**

The world and global ideas make a large impact on the socio cultural perceptions. The changing trends of the world affect the cultures all around and it changes the social situation of communities.


The formation of cities and city culture grew rapidly after the industrial revolution and world war two. People moved to the cities after the industrial revolution leaving their homes and cultural setup behind. They had to adapt to the new culture of the city and mingle with people of all sorts of cultural backgrounds. The main objective of this new culture became money and survival. This exposure changed the socio cultural attitudes of many people and the world war two changed the

social set up of the world further affecting cultures not only in Europe but also in the entire world.

Housing conditions were different, the workers housing in American and European cities and the Chawl housing in Indian cities like Bombay and Calcutta came up. These were of bad condition and people survived in them. This obviously effected people's perceptions of housing – in the cities.

▪ **Governance**

The civic condition of the society, its government and the laws and regulations make a significant impact on peoples socio cultural perceptions.

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The best example is, in Sri Lanka, if you know the right people, there is absolutely nothing that cannot be done. If you don't have address proof to buy a phone package, provided you know the people, you can still get it somehow by keeping some other document which may even be of a family member's with similar initials. Finally what you need done can be got done by some way or the other.

In China, if you have one part of a letter in your signature running outside the border of the space given for you to sign inside, the chances are that even if it was a good friend of yours at the office counter, that your form might be rejected.

There are goods and bads in both cases but the reason behind it is that the way in which non-communist countries look at the law and how communist countries do.

In China, every thing other than for what is said to be allowed in the law – is *not* allowed. Where as in other countries, everything other than for what is not allowed is *allowed*.

Therefore in Sri Lanka if one finds out that a certain thing can not be done in one way, they always tend to look at other possible ways available to achieve what you need done. But the Chinese are taught from their small days, that if something says no, it means no.

▪ **Society**

The society is what is affected by all other factors to form or modify its culture. The essence of culture in a society creates a social reality of things in people's minds.

Cultural perceptions, due to various social experiences create social realities which people perceive to feel and experience as true. These are images in the minds of the people and their society caters to this attempt to fulfill the notions of cultural reality people(or social experiences) have created for themselves.

It is said that the perceptions of a society on effects even its greatest built forms. It is the way a society perceives themselves that is reflected through their architecture. Egyptian societies, which were paternal-based and more masculine in their outlook, built rigid and masculine monuments like he Pyramids.



Image 2.9 :
A Pyramid. A representation
of the paternal masculinity
of Egyptian society
(source: dissertation archival
u.o.m)



Image 2.10 :
A Stupa. A representation
of the maternal femininity of
Sri Lankan society
(source: dissertation archival
u.o.m)



At the same time, Indian or Sri Lankan communities which were maternal-based, built more curvier and rounder monuments like the Stupas.

These notions or perceptions play a large role in the cultural behavior and psychological needs of the people in different societies.

▪ **Family**

Family is the collective body of persons who form one household under one roof. Family in building; it has initiated architecture because of the necessity of constructing shelter. It constitutes the essence of residential architecture; The Family is not only exerting influence. It is also receiving influence in that progressive architecture frequently changes manners of living and, by creating new values of life, transforms the ethics of family.

Most ethics and habits of the family have been handed down from the past, as much as many tastes and preferences are rooted in standard of the past. The reality of family finds expression in three ways – in the manner in which the family unit is organized both morally and practically; in the position that each family member occupies in this organism and in the resulting mode of living.

The family order with its consistency, its underlying moral principles and its practical manifestation through manners of living, influences to such degree as to become instrumental in the formation of residential architecture.

2.2.2.1 House

As well as prescribing a complex set of behaviours and duties, a house embodies an elaborate set of ideas and values. The ideas of what a house is and what it does are very much a function of cultural and socio-economic background.

2.3 House Form and Cultural Perception

Perception of house form differs with cultures. The different elements of the house form itself are perceived differently by various cultures and a good example would be to examine two developed countries from the East and the West. In fact Japanese culture is rich with its own philosophy that how ever much Japan is comparable with the west in terms of Economic status, its architectural form is different since the way they perceive the house is culturally different.

The two Chinese characters that stand for home, ka-tei, mean "house-garden", and this ideographic phenomenon reflects the Japanese conception that *only through the garden can mere house become a real home*. The garden space in the dwelling, favored by generally mild climate and sustained by the old habits and customs, is an inseparable part of the house due to the multiple interdependent links, the physical, functional spatial and the philosophical view of Japanese culture.

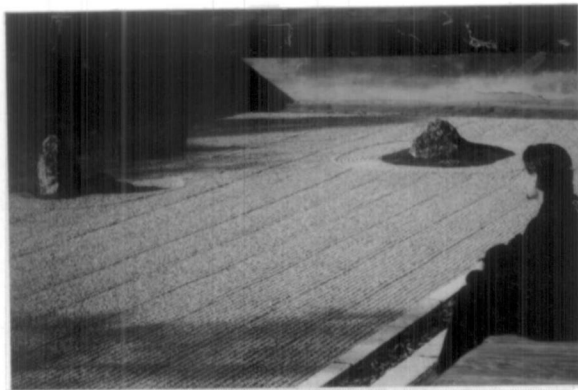


Image 2.11: A Zen garden outside a Japanese Home. A Japanese house is perceived together with its garden.

(source: dissertation archives u.o.m)

Even in Sri Lanka, people as 'Sri Lankans', have a broader sense of what they consider to be a house in their minds. This may have the specific spatial patterns depending on social behavior of people etc. Also each individual will

have their own specific image of a house-form depending on his cultural perceptions, experiences and social background.

A survey done to see what kind of house image children of different cultures and backgrounds would draw, showed us that while all the houses were identifiable as 'a house', images by children from similar cultures had certain similarities in the way they perceived a house in comparison to others.

Similarly by examining the specific requirements given by the client, in the brief to the architect, it can be seen that each person has an image of what they want as their house.



2.3.1 Survey 1 – Children’s Perceptions on House Form

(Children of Different Cultures and Backgrounds)

When we examine children’s drawings of houses we can infer whether there is any similarity between the children of similar culture or not. This would suggest that the socio cultural background effects the perceptions we have of the place we live in from childhood.

The first four images were taken from an English Penguin book publication in 1976, of “Children Solve Problems” by Edward de Bono.

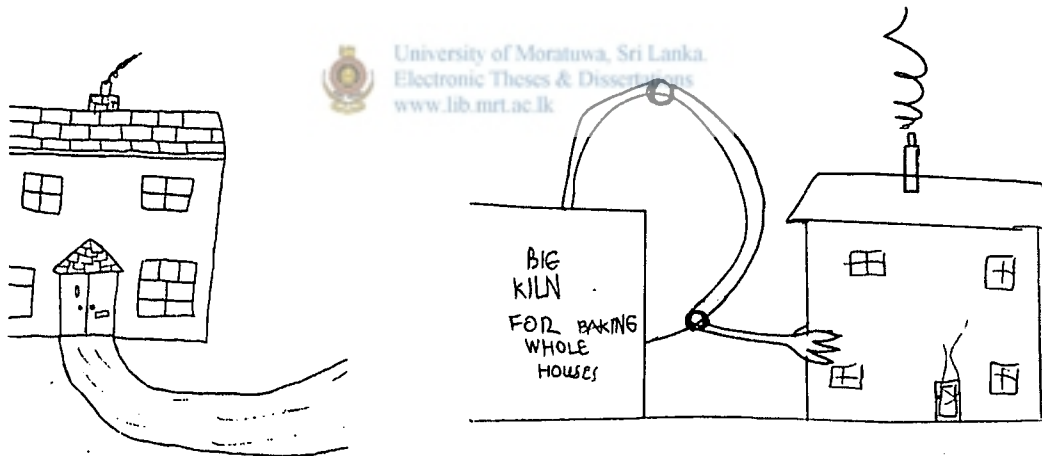


Image 2.12 and Image 2.13 : two typical Houses drawn by English children in 1972.
(source: children solve problems,1976)

The interesting part is that each house seem to have two sets of window rows – indicating that the image of a house they have is almost always more than one story high, and had an entrance door marked at the bottom level. Every house that was drawn had a chimney with smoke going out as well.



Image 2. 14 : Section of a house, drawn by a child in England in 1972.
(source: children solve problems, 1976)

This shows how the child perceives the space inside the house. The central and most essential element is the fire place (with a burning fire), and the idea of parents sitting around the fire reading or doing something; with the pet cat sitting besides the mother (who is bigger in size and is closer to the fire) that the main space where everyone gather in the house is perceived as the center of the house with everything else happening around it.

The volume proportions inside the house is interesting to notice since the space is more in height than width.

Next we can see Drawings of houses made by Sri Lankan children of both middleclass suburban and elite city families.

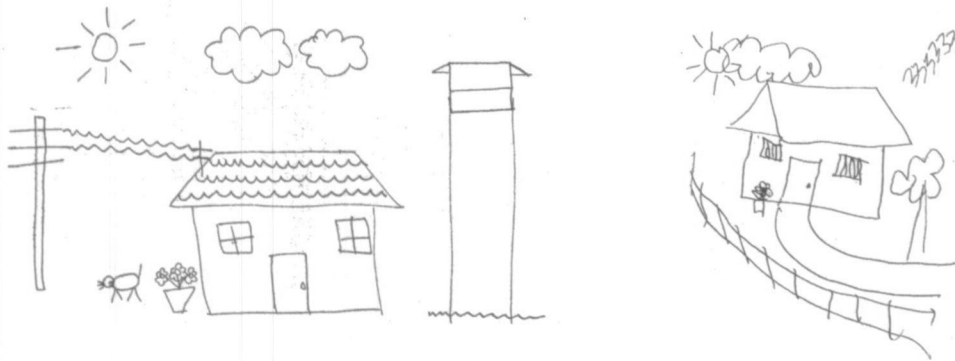
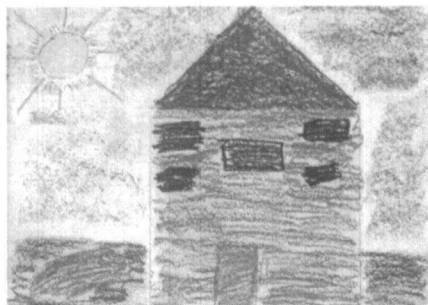


Image 2. 15 and Image 2.16 : Houses drawn by two Sri Lankan children living in the suburbs.

The houses are both single story and has two windows (indicating more than one room in the house). The roof is detailed either with tiles or by showing it's a gable. The most striking similarity is the amount of element drawn outside the house. This indicates the relationship they have with the outside environment. The house is drawn in isolation but with a lot of other natural elements surrounding it.

Image:2.17and Image 2.18 : Houses drawn by two children living in Colombo, from elite families.



The proportions of the house are more vertical and have detailed the inside of the house more than the outside. Very little vegetation shown compared to the earlier children from the suburbs.

There are two or three rows of window in 2.17 indicating a multistory house.

There are distinct differences seen between the children's perceptions in the two social groups considered.

When comparing all the houses though, we see that the houses drawn by the Sri Lankan children can be identified from the English children's houses.

2.3.2 Survey 2 – Adults' Images of their Dream House



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(Sri Lankan Adults of Different Socio Cultural
Backgrounds)

For this survey, several practicing architects were kind enough to give me information about some of their 'client requirements' when clients came to get their house built. For ethical reasons, no architect's or clients name will be used in this document.

Brief – A

(Teachers with two children)

The client and his wife are both teachers and they have two children.

The exact requirements of the client with the special notes taken are as below:

1. 4 bed rooms
2. A living room

3. Dining and pantry
4. Kitchen and store room
5. Verandah – large space which could be used for a group class
6. Study room with library

Special notes:

- It should be a big, traditional type of house with Sinhala Ulu roof tiles.
- House should be open to the garden.
- A study room with library area is very important.
- The verandah should be large enough to conduct tuition classes.
- Normal cement floor
- A single roof for the house (without having many small roofs)



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Brief – B

(Lady, married to foreigner with two children)

The client is a Sri Lankan Lady, married to a foreigner. They have two children. The client's requirements and the special notes taken at the first meeting are as below:

1. 6 bed room
2. Large living room
3. Dining room with pantry area – single space
4. Kitchen and store
5. Swimming pool

Special Notes:

- Would like to have a waterfall and sculptures in the house.
- Wants Beeralu concrete columns decorated with moldings.

- Images of foreign Presidents' houses shown in order to extract elements from them for the design.
- Large boundary wall to be built all around the house with a large gate.
- Marble floor finishes.
- Would like to have a glass roof for one part of the house.
- Use separate roofs to cover each part of the house instead of a single roof.

These two client briefs were chosen since they show completely different perceptions of houses with the background of client.

2.3.3 Relationship Between the Perception of House Form and Socio Cultural Background

It was clearly seen that each person has an image of the form of what he believes to be a house is from child hood.

In their images, there were certain elements which they perceived to be essential for a house, and its manifestation needs to be there for them to experience a house really as a home.

It was also seen that children from similar socio cultural backgrounds had distinct similarities in the way they perceived the house form. Hence as much as each person has their perception of what a house is, people of similar socio cultural backgrounds have major similarities in the way they perceive house form.

CONCLUDING REMARKS:

Culture is an essential part of the society and it is what helps people perceive and understand the rest of the world.

People of different cultures perceive the world differently (although there are some similarities). Hence, the way in which people from different socio cultural backgrounds perceives the basic form of a house becomes different.

The next chapter will focus on to urban housing issues and will aim to show how architects could use the socio cultural perceptions of user groups to design quality housing for the urban public.





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CHAPTER THREE

Manifestation of Cultural Perceptions in Public Housing

3.1 Shelter and Housing Design

The first and most consciously selected form to represent the self of any human being is an image of his body, for it is the outward reflection, and the enclosure of, self. The clothing he wears performs the same function symbolically. On a least conscious level, man frequently selects his home, the basic protector of his environment beyond skin and clothing, to symbolize self.

The home is the place where man belongs to, and since even the most ordinary man is aware of his uniqueness, it is natural for him to want to express his individuality in his home, which is the symbol of status, and of social acceptance.

In pre-industrial societies, housing was not a problem, although the need for houses existed. But problems of overcrowding began to get acute with industrialization and the advancement in medical and technological fields made during the 18th and 19th centuries. Along with the influx of people into urban areas, there arose the misconception of providing accommodation for people, rather than houses.

As seen through Levis Humford's book – "The City in History", at the time they did not see the importance of identity and individuality of people, but only saw them as workers or migrants who simply needed shelter in the city.

"The house as symbol of self... may partly explain the inability of the society to come to grips with the housing problem, which is quite within its technological and financial capabilities to solve..." (Humford, L. 1961).

Mass housing programs emerged rapidly, and they deliberately suppressed individuality, by confining the 'house' of an individual into just one of the cells in a hive.

3.1.1 Urban Housing Need

Housing in the context of environmental science can be defined as the placing of the individual families within an environment which is ideal for their well being and to which they can creatively respond.

The house is a part of the environmental structure which consists of employment and recreational centres, open spaces, services such as education, health, marketing and transport. These can be called “support structures” for the family living in the house.

The prevalence of these support structures in greater or lesser degree has a bearing on the housing situation and on the quality of the houses.

When the support structures are unfairly concentrated there will be congested housing and an imbalance within the environment, is created. This is the situation in towns and cities where the housing problem is compounded with a socio- economic problem.

Throughout the world, people are migrating into urban cities to find jobs and to seek a better life. As jobs and facilities get concentrated in cities and agricultural processors locate plants in rural areas with raw materials and lower labor costs, towns have started experiencing pressures. They are experiencing an increase in the number of jobs available and a shortage of affordable housing to meet the needs of a growing population.

“In the early stages of the industrial revolution, the urban magnet attracted country people into town with the promises of jobs, variety and excitement creating an inward flow” (Alexandra, C. 1996)

When this occurs desperate attempts are made to speedily house the overspill of families in habitations which because of hasty design do not fit their social context.

Image 3.1: Kowloon Wall City, Hong Kong. This is the densest housing area ever to have existed in the world. Now broken down and converted to a Chinese Garden.

(source: TOFU Magazine, HK)



Housing has been a key problem of rapid urban growth for many years and it is a basic human need and the right to it is now widely recognized. Yet, housing continues to be deficient in both quantity and quality in cities. Furthermore, the lower incomes and the increase in land price due to the shortage of land makes it impossible for everyone to afford individual housing, nor is it practical. Therefore it is more sensible to use land in an efficient and economical way, by having suitable public community housing instead of trying to build houses individually in separate plots.

Housing practice internationally seems to stress, now more than ever, the need to recognize housing as but one of a myriad settlement elements. Exclusive focus on housing as though it existed in a vacuum diverts attention from fundamental human settlement needs which require coordinated attention. This points to the need to define housing holistically, with the underlying theme of a holistic definition being one of creating good quality total living environments. Furthermore, the potential of housing as a restructuring tool that can contribute towards social and spatial reintegration of the apartheid city in a manner which promotes economic efficiency, reduces long commuter distances and provides opportunities closer to centers of opportunity, and provides for the creation of sustainable social, and

physical environments within a legal political and socio-economic environment, has to be fully exploited.

Image 3.2: Mass Housing at Repulse Bay, Hong Kong.

Considered to be one of the better housing solutions that accompany Chinese cultural beliefs and feng-sui requirements.

(source: Personal Photograph)



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Housing has a further role to play. It is clear that increased quality and more suitable solutions for housing has the potential to stimulate economic growth due to its strong linkages with other sectors of the economy. The link between health and housing has also been established. This potential needs to be tapped into. Housing is about these various interrelated aspects that are deemed critical in a holistic delivery system. It is about redressing the current city configuration. Above all, housing goes beyond the physical habitat to encompass empowerment and democracy; it is a spiritual need which goes to the root of a dignified and tolerable life.

3.1.2 Urban Housing Need and Policies in Sri Lanka

In Sri Lanka there are two main categories of housing that can be identified as *Individual Housing* and *Community Housing*.

With the increase in population, rise of inflation, and people gathering around cities and urban areas for work, most people today will opt for

community housing rather than individual housing, provided they have good facilities and favorable living conditions for an affordable price. This will also build up community ties and create a harmony between different communities of people.

It was during the time of hon. Peiter Keuneman- as the housing minister of Sri Lanka in the early 1970's that a detailed study of the urban housing need was done and a report submitted as the "Ali's report". This report showed the needs and identified sub-urban locations for community housing as the best locations, giving the type and the quantities of housing needed to be addressed at the time.

MESSAGE FROM

MR. PIETER KEUNEMAN, M. P

Minister of Housing & Construction

Volume I of the booklet on "Economy Type Housing Plans" was published in March 1972. It was encouraging to note that many house builders had advantageously made use of this booklet for the construction of their houses.

Volume II of the series, now being brought out has a further set of 14 designs for houses and flats which have been developed by the Department of Buildings and the State Engineering Corporation since the publication of Volume I.

These plans have been prepared to enable the private house builder and the housing developer to get maximum benefits from the new housing laws that have been enacted and the new institutions set up under the Ministry of Housing and Construction.

The more significant aspects of these laws and the benefits that are available to the private house builder from the various institutions set up under this Ministry are outlined in brief at the end of this booklet.

I am confident that this booklet, just like Volume I, will be a great help to the private house builder as it makes available a set of ready-made plans and documents from which he can make a selection in keeping with his needs, and with the confidence that it will also satisfy the requirements of the various laws and ordinances which are in force today in this country relevant to the field of housing.

Pieter Keuneman

Minister of Housing & Construction

"Transworks House"
Colombo 1, October 07, 1974

Image 3.3 : A message from the minister with the publishing of approved type plans of houses and flats for the public to buy, by the ministry of housing and construction. 1974.

(source: "houses and flats", Vol.2)

At the time of the President Premadasa, the Sri Lankan Housing issue seemed to have a big importance amidst the other national issues, hence numerous housing projects were launched and there has been an attempt to think of housing through a complete vision of a village – as *Community Housing*, through *Gam Udawa*.

There after, housing in Sri Lanka has taken a back seat to other things and different ministries now handle different parts of housing with no cohesion between various communities in the country. The community housing issues seem to be neglected as a national issue by the ruling bodies today, and sadly there seem to be no hint of even a National Housing Plan for Sri Lanka presently being followed.

Today in this country, plantation housing is handled by the Plantation Ministry, the fisheries housing is handled by the Fisheries Ministry, urban housing is handled by the Urban Development Ministry and so on ... since handling housing is seen as one of the best means of gaining votes for politicians and it is also used as the best method of rewarding the people who personally help during politically needed times. Therefore Housing in Sri Lanka is not kept under one ministry, but distributed amongst -as many ministries as possible, so that a larger number of Ministers could benefit from it rather than just a single Housing Minister.

But Architects have a professional responsibility to look at this issue in a border perspective and seek out the best way of housing these communities with out attaching a label to people living in different community housing schemes. In any case, no single community can survive alone with out the support and integration with other communities in society. All groups of people in a society is networked and connected strongly that one cannot survive without another.

3.1.3 Limitations of Urban Public Housing

Unlike in conventional forms of housing where there is ample space to build and low cost conventional methods of construction were available, where today in urban public housing, there are many constraints and limitations.

The main problem faced in this case is the scarcity of land availability to build conventional houses for every one coming in to cities and for the people already in the towns. Hence a large number of people should be accommodated within a limited area of space in a way that is habitable and with decent living conditions.

Due to the limitation of land for building, the housing units need to become more compact and smaller in size. The arrangement of individual housing units also needs to be rethought and most often arranged in a vertical manner rather than the horizontally spread way of building as most Sri Lankans are used to living in.

Since the land is scarce, the land prices also become much higher and the rate of affordability decreases, therefore the plot sizes will decrease to a large extent and also the cost of building the house unit will need to be brought down to make it affordable.

3.1.4 Need for the Manifestation of Cultural Perception in Public Housing

"House form is not simply the result of physical forces or any causal factor, but is the consequences of a whole range of social, cultural, factors seen in their broadest terms. Form is intern modified by climatic conditions & technology. It will call the social cultural forces preliminary & the others secondary or modifying" (Rapaport, A. 1969)

Since the behavior patterns, use of space, human relationships and the relationship between the outer world and the inside of the house depends on the socio-cultural background of the user community, and the perception of a house one has his base on this background, its manifestation in the house form is essential for the user to be able to use and perceive it as his home.

In a case where the house form does not relate to the perception of a house the user has in his mind, they naturally tend to change its form by alteration and additions to the house. The changes might even change the use of the spaces completely and rearrange the interior spatial relationship to suit the dwellers. Some times even the outer appearance of the house is changed to be able to project their own image from it rather than what was built initially.



Image 3.4 – The house on the right – at Jayawadanagama housing scheme changed beyond recognition to express a different image. (source: personal photograph)

Where the user is unable to change such a house, they end up giving it up and moving to a place where they feel more comfortable in.

In the case of the Maligawatte housing scheme project in Sri Lanka where the shanty dwellers were given well constructed flats in the scheme, these houses didn't cater to their socio-cultural needs of community bonding, lifestyle perceptions or ways of living. Hence they found it inconvenient and unsuitable for their living even though it was of better construction and therefore sold the flats to middle class families who felt it was suitable for them, and moved back in to the shanties they were used to.

Recently (in 2003) the University of Moratuwa was involved in the mass re-housing projects after the flood devastations in the south of Sri Lanka. The issues in hand when the project was taken up was to psychologically cater to the losses experienced through the devastation while retaining a regional identity of the dwelling.



It was thought that, simply providing the victims with a shelter with the aid money received would not do after what they had experienced and gone through. Hence it was thought that if the house could provide or give provisions for a social upliftment to these people, that might at least partly compensate for some of their losses, traumatic experiences and help them re build their lives to step above what they were using this as a stepping stone to rise in society.

The university made several generic forms for different districts effected considering the nature of floods experienced and the type of houses seen in the area of a lower middleclass level onwards since most people effected were from lesser economic strata. The people were allowed to select the generic type which suited them the most and were given a chance to sit with an architect and individualize it to suite his specific needs.

This was done at this stage so that people have a chance to change the design to suite their socio-cultural needs before the house is built rather than having to change it after it was built.

The basic house form consisted of a narrow rectangular shape with an asymmetrical high sloping roof to give enough height inside to put up a usable mezzanine or attic space which could later be converted comfortably into an upstairs to form a two story house.

In most of the rural areas where these housing was required, the people's image of a house was fixed to a large extent.

They wanted a more square house with proportions as 9:7, 7:5 or 9:9 (in traditional measurement of wadu riyana or raja riyana) with a symmetrical roof. The basic houses designed and costs calculated for was in feet and inches thinking metric scale might be difficult for people to relate to, but the imperial measurements were as redundant and the houses had to be re-proportioned according to the traditional building scale of the villagers.

There was not much privacy stressed on. A person entering from the front can walkthrough the house and out of the back door. Kitchen needed to be connected to the outside or be separately built.

Most people stressed on not having an attic space or another story to the house since they do not want an upstairs to their house at any stage.



Image 3.5 a), b), and c) : Section Q-Q' , Upper Floor Plan , Ground Floor Plan. (not to scale)
Generic model of flood re-housing program which was then personalized according to user.
(source: Personal sketches)

Image 3.6:

Personalization of generic house form according to user ideals by a postgraduate student of architecture at flood re-housing program held in Deniyaya in 2003.

(source: Personal Photograph)



Finally when the houses were built; for example in Baddegama where more than several hundred houses were personalized; only 3 of them had any resemblance to the original house form that was proposed to them.



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Of course the original house form was done basing the situation and as an effective solution to overcoming the effects of the trauma. But we are talking about houses here, and people –specially from the rural areas with a stronger social system and culture still in tact have very strong perceptions of what their house should be like. They know that it makes them part of the community and identifies with their own social layer of people.

Hence making any changes to that will make them different from the others and uncomfortable to adjust to new ways of using space in a house. Therefore they are most comfortable with the house form they know and have lived in for all their lives.



As students of architecture, it was indeed an amazing experience to have been able to talk to so many people and find out why and how they wanted their house to be of a certain form and it most certainly was an eye opener to us about realizing the importance of socio-cultural perceptions in people when it comes to housing.

3.2 Architectural Response to Socio-Cultural needs of Public Housing

"In the building of rented apartment blocks today, economic considerations demand a rationalisation and standardisation of construction. But, on the other hand, the increasing variety of our housing needs demands the greatest freedom of methods of utilisation. In the future it will be necessary to satisfy both these tendencies. For this, skeleton construction is the most suitable system. It permits rational manufacture while leaving free the organisation of interior space. If one limits oneself to designing only the kitchen and bathroom as permanent rooms, on account of their installations, and if one resolves to divide up the remaining living space with movable walls, then I believe that by these means we will be able to satisfy every reasonable domestic requirement." (Mies Van Der Rohe, 1927)

There are various ways in which architects have tried to manifest cultural perceptions in housing designs and cater to the socio-cultural needs of the people.

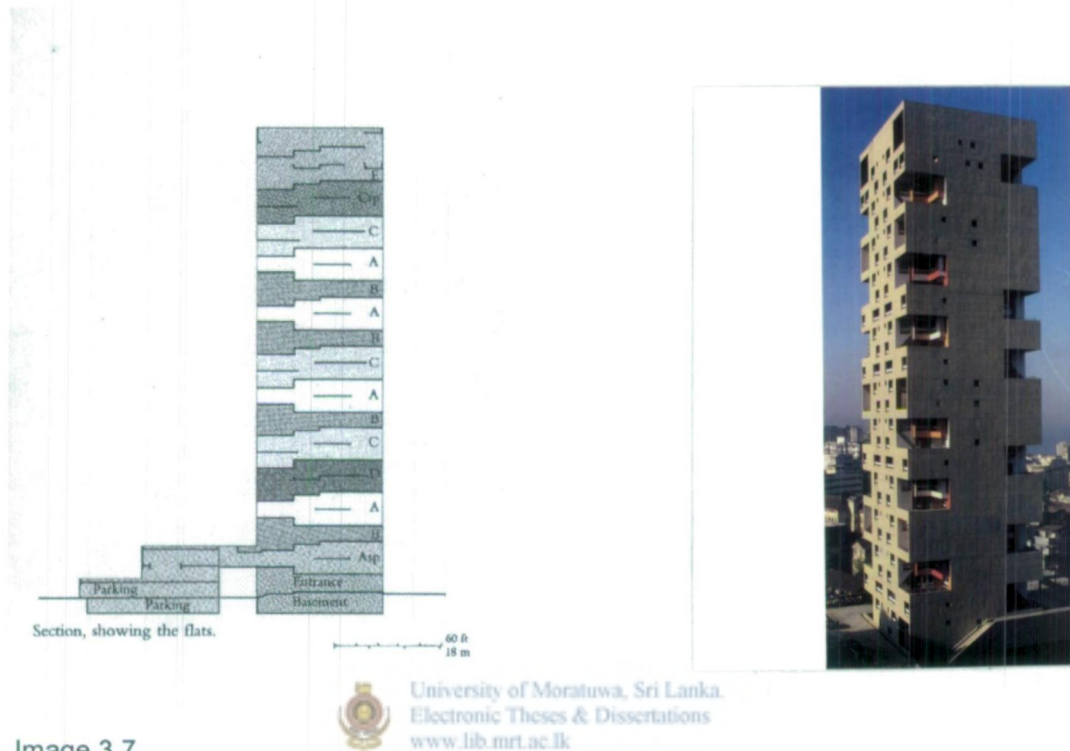
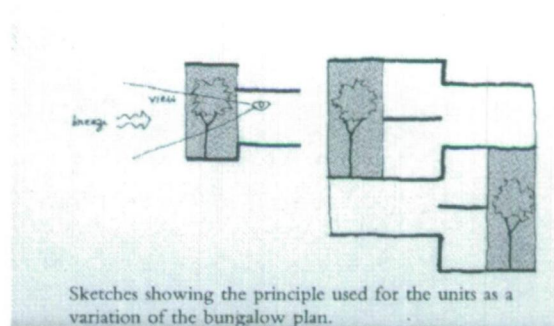


Image 3.7
Kanchanjanga apartments in Bombay where Charles Correa tried to achieve the traditional volumes and spatial arrangements people culturally desire in India even in a high rise vertical arrangement of houses.

a) diagrammatic section, b) image of building, c) a concept diagram.

(source: works of charles correa)



Many Architects and related professionals concerned with the housing quality and user based built environments as Christopher Alexander, Nabeel Hamdi, John Habraken, Amos Rapoport, Clair Cooper, Jane Jacobs, Hassan Fathy, Comerio and many others have tried or

experimented with people based, social biased housing design methods. Some of them used participatory methods while others were research based or experimental.

Nabeel Hamdi, together with the Sri Lankan National Housing Development Authority in the 1980's have carried out participatory housing design experiments in Wanathamulla –Sri Lanka.

The project was conducted with the principles of *Participation, Flexibility* and *Enablement* as the concept.

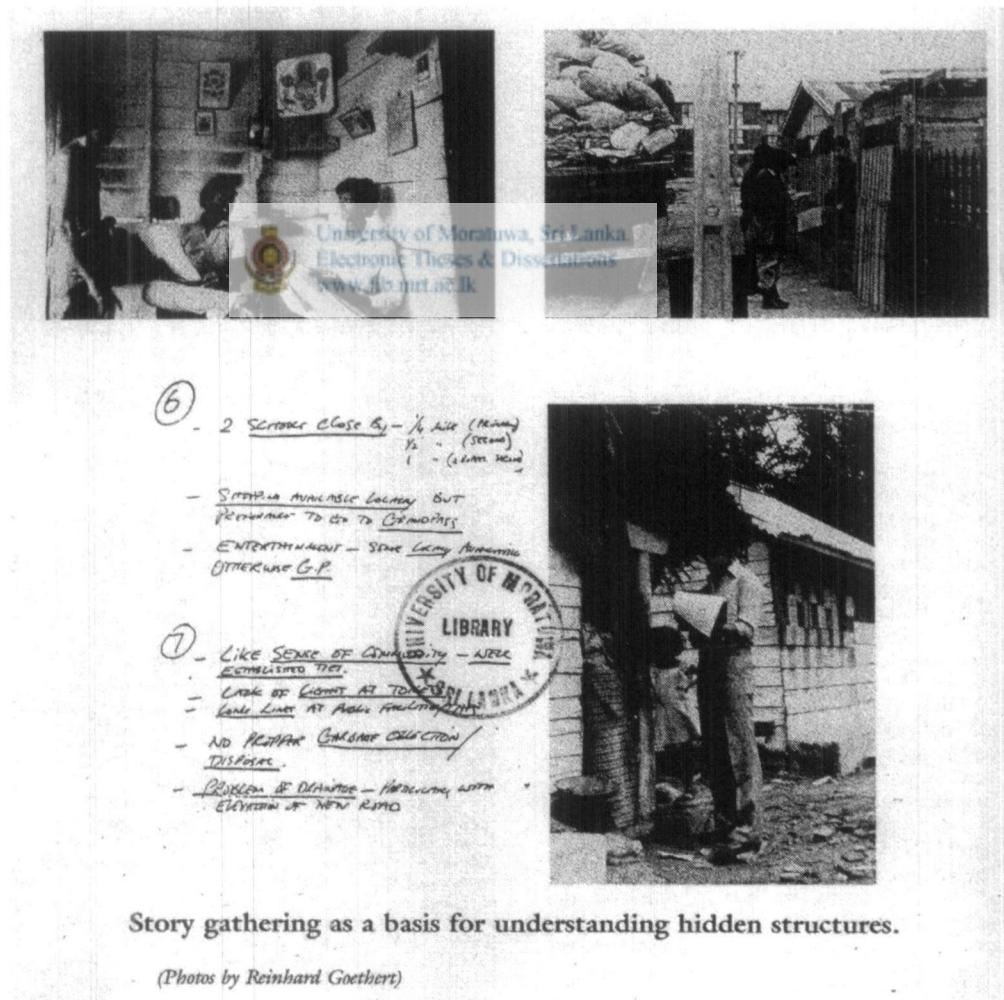


Image 3.8 : gathering information in Wanathamulla for user participatory housing program. (source: *Housing without Houses*, Hamdi, N.1991)

Information was gathered to understand the shanty community in Wanathamulla and to find out what activities take place and how the spatial arrangement of the area was needed for the functioning of the community.

In recent times there was another attempt to re locate the Wanathamulla residents and the Sahasrapura Housing Project was incepted during the time of Hon. Indika Gunawardena as the Housing and Urban Development Minister in the late 1990's.

Here they have attempted to create a built environment that will facilitate the communal activities and will not restrict the relationships between the inhabitants of different houses, since this was one of the most important aspects that drove forward the spirit of the entire community.

Being a high-rise housing development, there are wide corridors that act as the pedestrian streets which were there in Wanathamulla – where every one would sit outside chatting, playing cards or carom and the kids playing cricket.



Image 3.9 – The use of upper floor corridors are streets by children and adults.

(source: personal photograph)

3.2.1 Role of Architect when Designing

The architect is responsible for creating a built environment which physically and psychologically responds positively to the requirements of the user while it serves the function of the building type.

It is the role of the architect to make sure, together with the quantitative requirements (which is what the client might be most interested in), the qualitative attributes of housing is also achieved to suite the user's socio-cultural requirements.

There are several possible methods of achieving qualitative results in housing design, but ultimately what needs to happen is to create a place or dwelling where the user feels comfortable and is psychologically content when living there.

The procedure of analyzing the user in order to respond to their socio cultural needs is referred to as psycho-socio profiling in the masters program in architecture at the university of Moratuwa.

3.2.2 Psycho Socio Profile

The psycho-socio profile would be an analysis of the socio cultural background of the user to decide what sort of an environment should be created in order to cater to his psychological requirements of the built environment and to suit the spatial organization to users' behavioral patterns.

In order to demonstrate what exactly is meant by psycho-socio analysis of user, it is best to use examples of a few hypothetical academic design projects done in the first year of M.Sc. Architecture at the Moratuwa University.

Example 1 – Psycho-socio profile Analysis for a given Family:

This is an example of a psycho-socio profile analysis which was attempted as an academic design project in M.Sc Architecture first year at the University of Moratuwa 2003 by a student.

Psycho-Socio Profile of Family:

“The family consists of a forty year old doctor from a rural background, the son [only child] of a farmer. The doctor works at the Childrens' Hospital Borella. The wife is the daughter of a gem merchant from Ratnapura [who owns a very decorative house there]. The wife of the doctor has only studied upto 'o' levels, forsaking education to marry.

They have 3 children, a 14 year old girl who goes to an International School [on the insistence of the mother] and the two boys, younger than the girl, attend a leading Buddhist School in Colombo.

The parents of the wife who live in Ratnapura stay over with this family when they visit Colombo which they do often. The doctor and family live in a rented house in Colombo 7 at the moment, the rent of which is borne by the wife's father.

The husband's parents rarely visit the son. But due to the recent bereavement of the doctor's mother, the father has sold his property in the village very reluctantly and plans to live out the rest of his life with the doctor.

The doctor feels obliged to make the last days of his father comfortable and to his taste and has suggested moving a little away from Colombo Metropolitan area.

Although the wife and her parents disapprove of this move, the doctor's own preference for a quiet life has resulted in the gem merchant agreeing to buy the land for the house. The doctor insists on paying for the construction of the house.

The doctor is a kind, easygoing, simple person who can nevertheless be very assertive on issues 'that matter'. He has a close clique of friends who

meet socially to have a chat and a quiet drink. He is an open air man and the wife is more of a 'social butterfly', socially mobile and extremely house proud. She is an asthmatic and a 'bit of a complainer'.

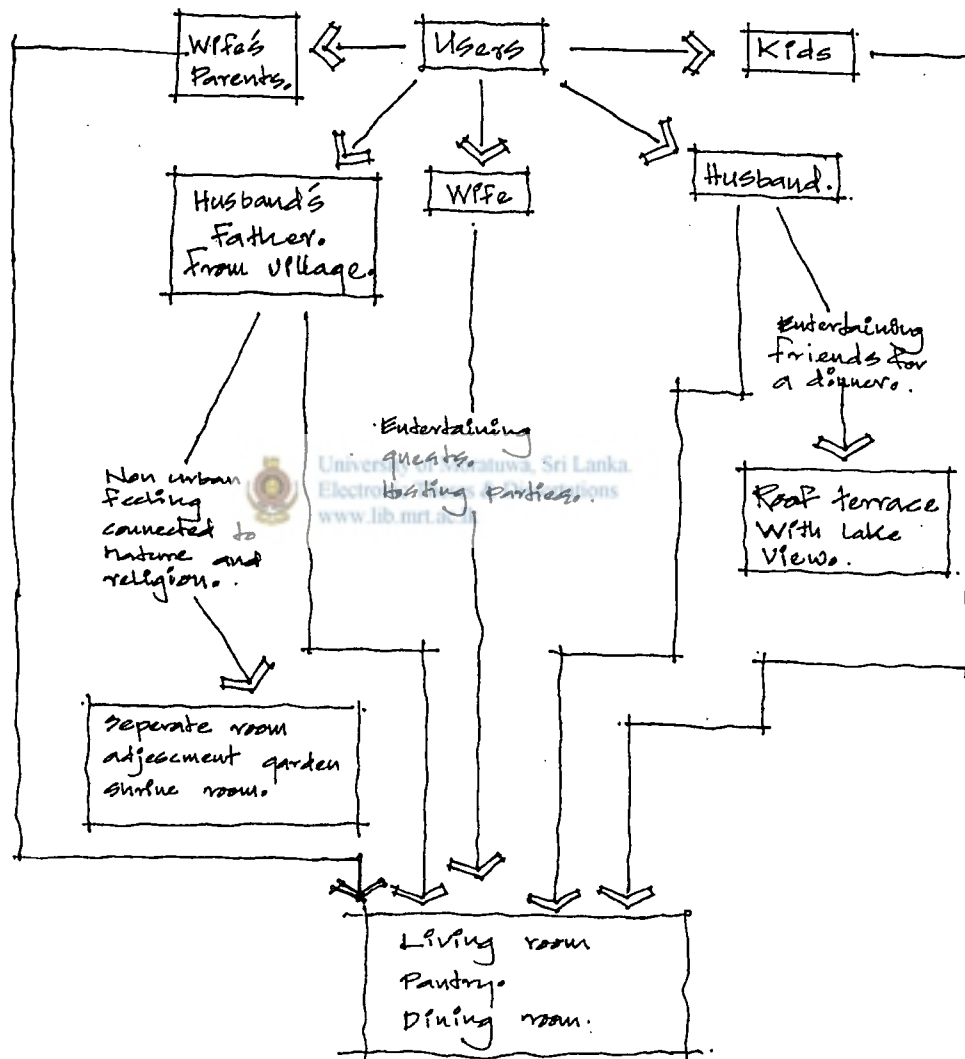
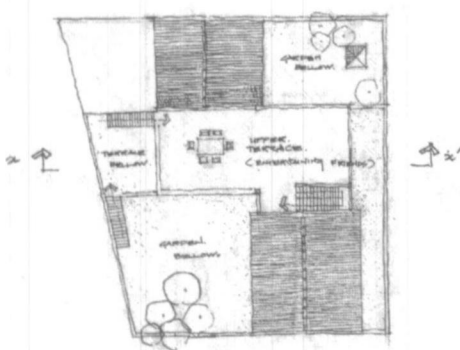


Image 3.10: Mapping of spatial usage of each user according to psycho-socio analysis of user personalities.



a) Second Floor Plan (not to scale)



b) First Floor Plan (not to scale)

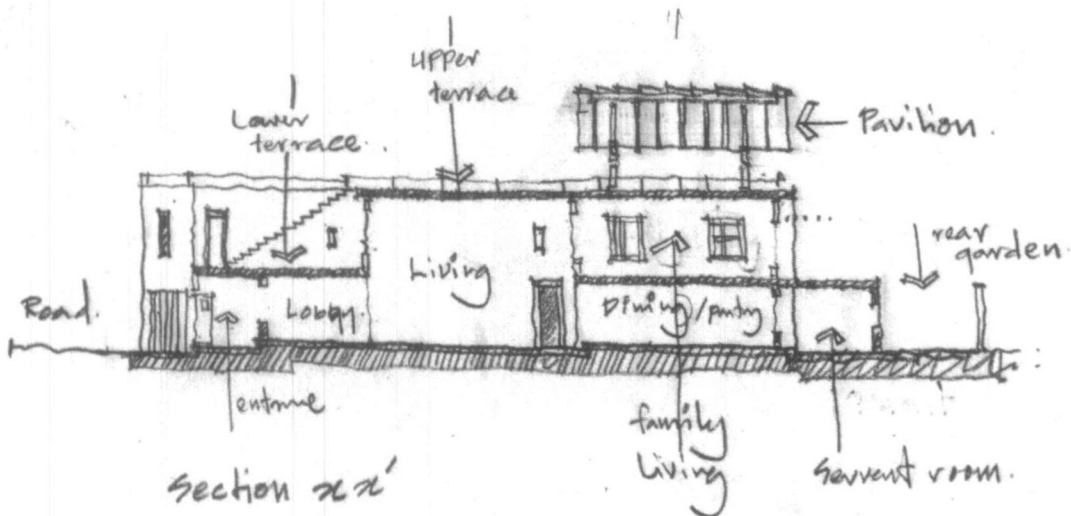


c) Ground Floor Plan (not to scale)

Image 3. 11 : plans (a, b,c,) and section (d) of house design in example 1 – to demonstrate the use of psycho socio profile in architectural design.

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(source: personal drawings)



d) Section x-x' (not to scale)

Example 2 – Community Housing solution for Elderly Citizens

This project is also an academic project of a student of the M.Sc. Architecture First year class of 2003 at the University of Moratuwa, Sri Lanka.

Here, the primary user community was analysed and a housing solution to cater to their psychological requirements were derived as shown below:

Elderly Citizens: They need to have people around them, to feel able, wanted, part of the society and useful. They need a lot of care and companionship.

The problem in a regular Old Peoples Home is that they only have Old people living there, and the inmates might feel cut off from the rest of the society, secluded and rejected due to this. The care and attention they get there might be seen and felt as sympathy, than anything else since they are living in an “*Old Peoples Home*” as “*Old People*” who have nothing to do in life or no one to be with.

Therefore, in this project it is attempted to create a society where Elderly people live amongst others from various generations and occupations. The rest of the tenants living in this community will also provide services and different functions that may in some way be useful to the sustainability of the Elderly community.

While having others living around, it is also necessary to let the Elderly interact with each other. For this purpose this project tried to *integrate two networks of activity paths* in cohesion.

The concept of a granny flat (which is like having an annex to a house) that gives both the sense of being both attached and detached at the same time is used for this housing solution. The granny flats are made to be part of a housing block rather than of a single house.

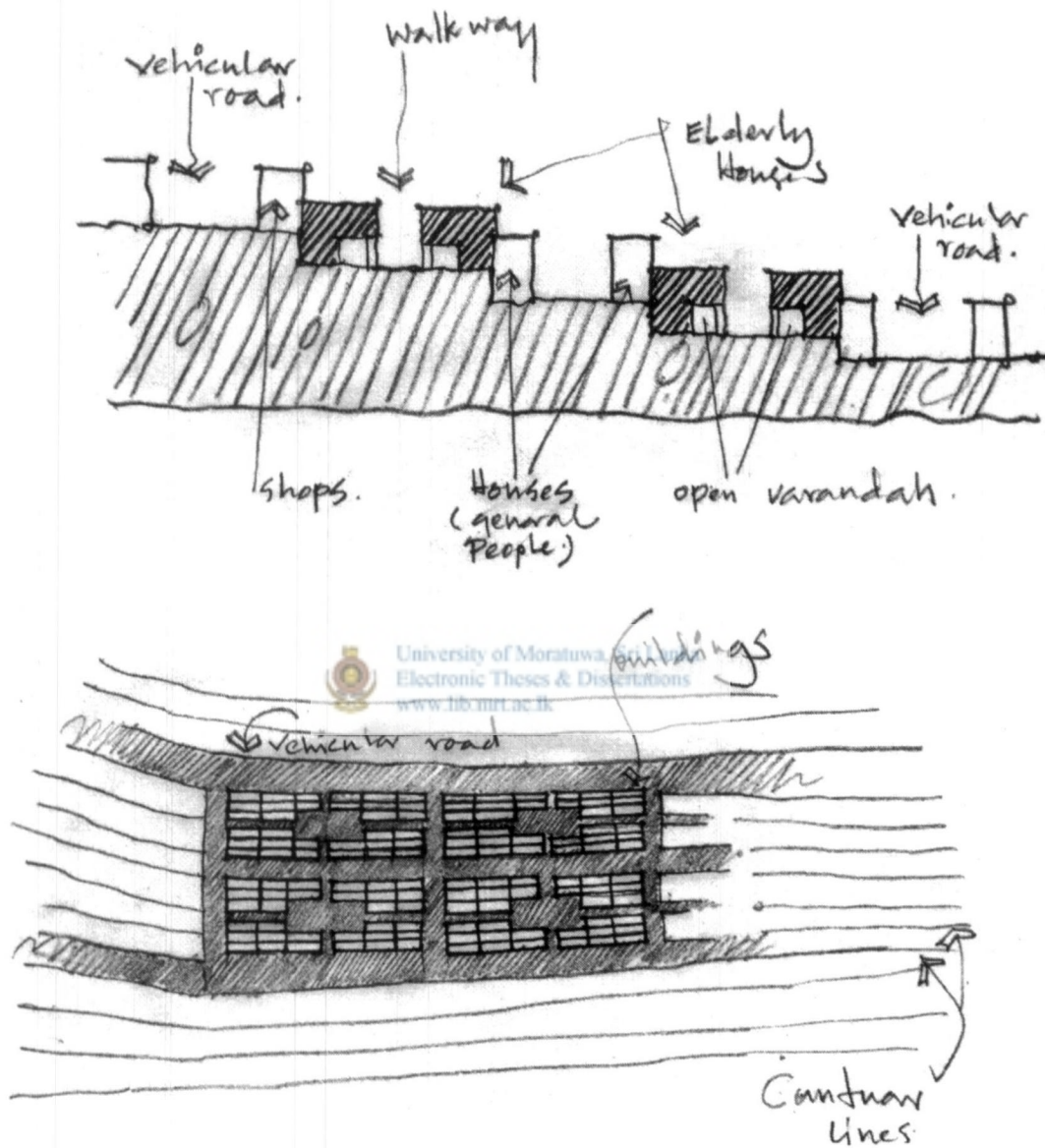


Image 3.12 , a) and b) : Conceptual section across the contours of the site and the arrangement of residential blocks along the contours.
(source: personal sketches)

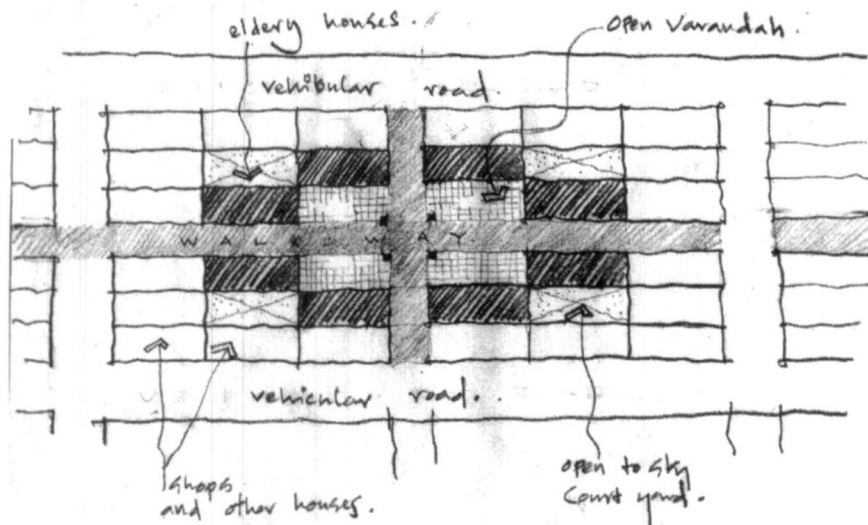


Image 3.13 : a cluster of four blocks showing how the alley ways going through the middle opens in to the semi-covered pocket at the central intersection – where the granny-flats meet.
(source: personal sketch)

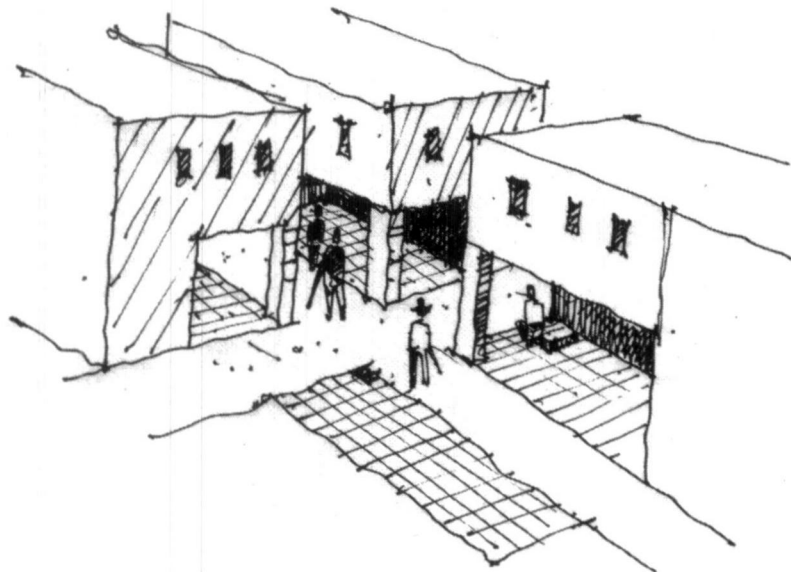


Image 3.14: A sketch of the alleyway pocket in isolation. A place where the common verandahs open to the alley. A place where the elderly community mingles with each other.

3.2.3 Responding to Psycho Socio Profile

Initially when analyzing the psycho-socio profile, you can react to it intuitively to realize what sort of spaces should be created according to the characteristics of the users and their requirements.

Then a method of achieving those qualities can be worked out by abstracting them into an architectural idiom. This architectural idiom would be an abstract imagery of the dwelling form which could be developed conceptually and then shaped by all the other factors that come into play when designing or building the dwelling.

When it comes to public housing, since the analysis of each user unit cannot be done individually, the entire user group could be analyzed as a community. For this analysis the cultural perceptions and socio cultural nature of the community as a whole should be considered.

This way an abstract architectural idiom could be derived for the community so that the larger and basic needs which are common to the community are fulfilled and further room left for the individual personalization of the houses after occupying.

This way the public housing users will not feel completely alien to the houses they live in but feels free to make small adjustments to personalize it to the specific needs of their own family.



3.3 Manifestation of Cultural Perceptions in Public Housing

Design

When the need for the manifestation of cultural perceptions in housing (of all types) is accepted; the fact that it is more difficult to cater to it when we don't know the user specifically as individuals, but only as a target group of people who might potentially use the housing, makes it even more difficult. But its importance never the less remains the same, and we still need to address the issue.

Architects have used several tactics in trying to achieve socio cultural suitability when doing housing designs. Most of them have been experimental where some proved at least partially successful while others failed.

In both these cases, people still live in those houses since a house – on its larger picture, is not seen as a commodity which you use and throw away after a while – at least for most people in Sri Lanka. Hence by studying existing housing scheme designs, we might be able to see to what extent those solutions have become successful or unsuccessful.

As a study of this we can examine existing housing solutions to see how well this principal is manifested and how people have reacted to it when its not manifested.

In order to study the extent to which the manifestation of this principal takes place in existing housing schemes in the country, the following case studies were done.

Case Study 1

3.3.1 JAYAWADANAGAMA HOUSING SCHEME

Background :

Jayawadanagama is one of the largest housing schemes done under the 'Hundred Thousand Houses' program which was pioneered during the reign of president Premadasa, and was given to be occupied by the public in 1983.

There are 705 houses in the scheme and are of 8 different types – classified from A to H. The different house types are of varying sizes, zoned and located in different locations of the larger site. The amount of land or private garden space available for each house vary even within the same type of houses.

The house types vary from single roomed bachelor's housing to three bedroom larger houses. The size of the house varies from 350 sq.ft. to 1200 sq.ft. of floor area.

The housing scheme is occupied nearly entirely by middle class families. The social nature of the occupants span from one end of the middleclass strata to the other. Within this it includes people of all religions and ethnic groups as well.

The reason for choosing jayawadanagama as a case study was due to its diversity in both user cultures and house types.

Through the examination of the house form, the manner in which it is used, and how far the users feel at home, would give indication of the cultural suitability of the houses - with regard to its user.

For this purpose, two house types, The H- type and the D-type were chosen and several houses of each type studied.

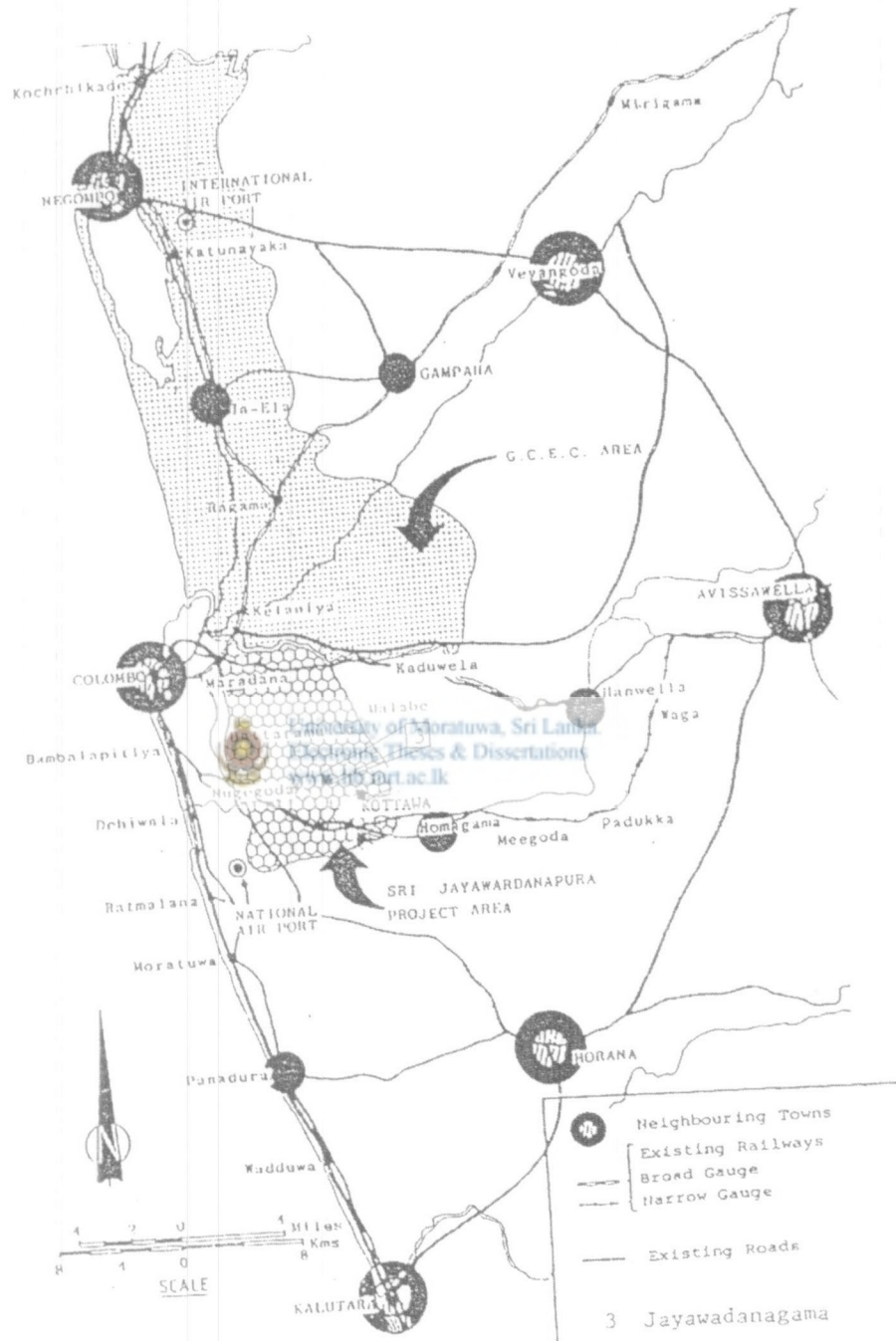


Image 3.15 : Map of Colombo showing the location of Jayawadanagama with respect to the rest of Colombo. (source: dissertation archives u.o.m.: 2000/58)

Location:

Jayawadanagama is located approximately 16km from the central business district of Colombo. It is located on Kottawa – Borella main road, between Thalawathugoda and Palawatte.

The nearest major town is 1.6 km away and there is a direct bus service under bus rout number – 186. It is walking distance to the 176 bus stop or the Wickramasinghepura junction, where other busses pass through.

The North boundary of Jayawadanagama is to the Palawatte military camp. To the North-East is a large rubber estate, known as 'rubber kale'.

To the south of the scheme is the Wickramasinghepura housing scheme, and the Weahena village is to the south-east.

From the west and south-west, the scheme ends at Kumaragewatte village and Palawatte.



Landscape and Topography:

The Jayawadanagama site is made of two sloping lands which are making a valley at the middle. The houses are constructed along the slopes and the valley is used for common activities as the playground, pond and the community center.



Image 3.16 : Map of the immediate context of Jayawadanagama showing its setting and the surrounding. (not to scale)

(source: dissertation archives- u.o.m, 2000/58)

3.3.1.1 Layout

There is no rigid grid pattern to the layout, and the houses are zoned in similar type clusters. The clusters or housing groups are arranged in a linear manner along the slope of the land. Some zones have a mixture of house types mixed together, where as certain zones consist only of a single type of house.

The playground and the common facilities are found at the valley in the center

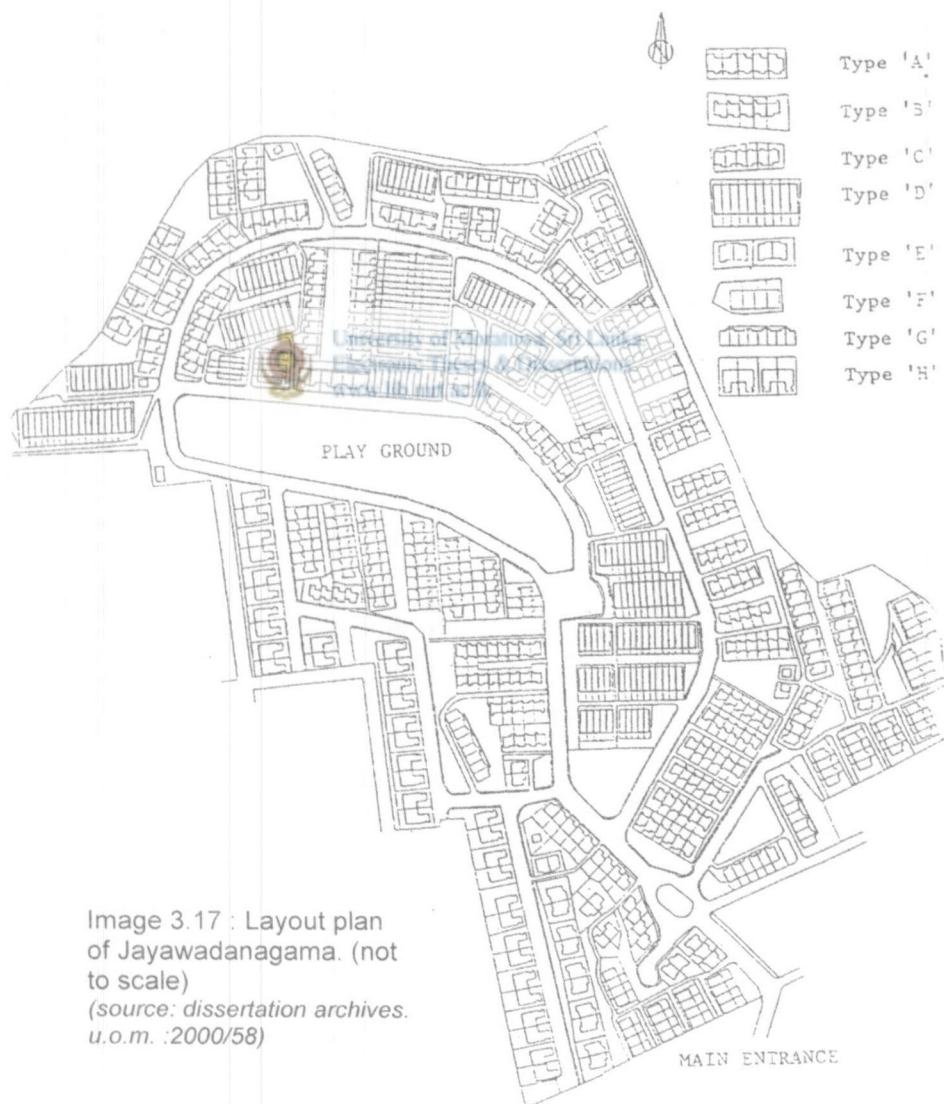


Image 3.17 : Layout plan of Jayawadanagama. (not to scale)
(source: dissertation archives. u.o.m. :2000/58)

3.3.1.2 House Forms

H – TYPE



Image 3.18 : H- type housing units. A view of two such units.

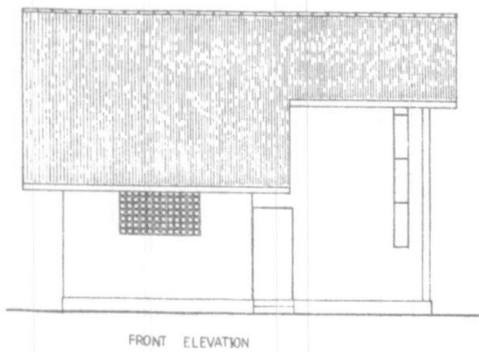
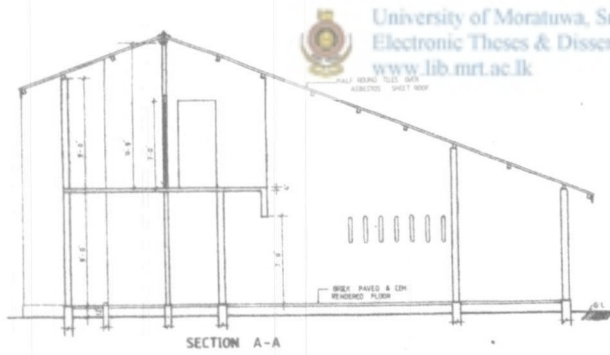
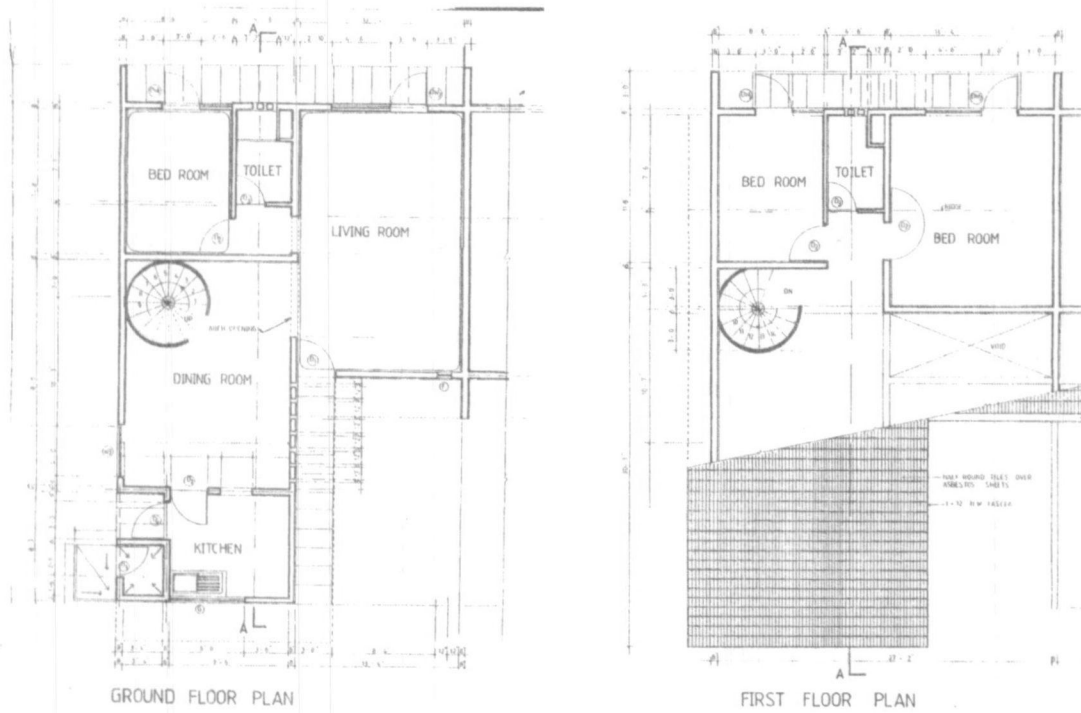


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This is the largest house type in the scheme with an area of 1200 sq.ft. costing Rupees. 465,000. There are 36 H-type housing units consisting of three bedrooms, two toilets, living area, dining, kitchen and garden space to park a vehicle.

These houses are occupied mostly by upwardly mobile middleclass families either of managerial level occupations or professionals.

For this exercise, there will be three houses of this type looked into. They will be referred to as House- 1, House- 2 and House- 3 without using names' of the occupants.



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Image 3.19 : Original plans, section and elevation of H-type house at Jayawadanagama Housing scheme. (not to scale)

(source: national Housing Development Authority)

House-1 :

Catholic Burgher family of eight members. Father is a retired chemical engineer of a pharmaceutical company. Mother is an arts graduate. Four daughters and two sons. Highly educated children with two daughters married and one son about to complete his Ph.D at the age of 27 in England. Father had studied at St. Anthony's College Kandy, and the sons were at St. Josephs College Colombo. Mother is a Sinhalese Catholic and is a graduate from Sri Jayawardenapura University. The four daughters studied at Holy Family Convent in Dehiwala.

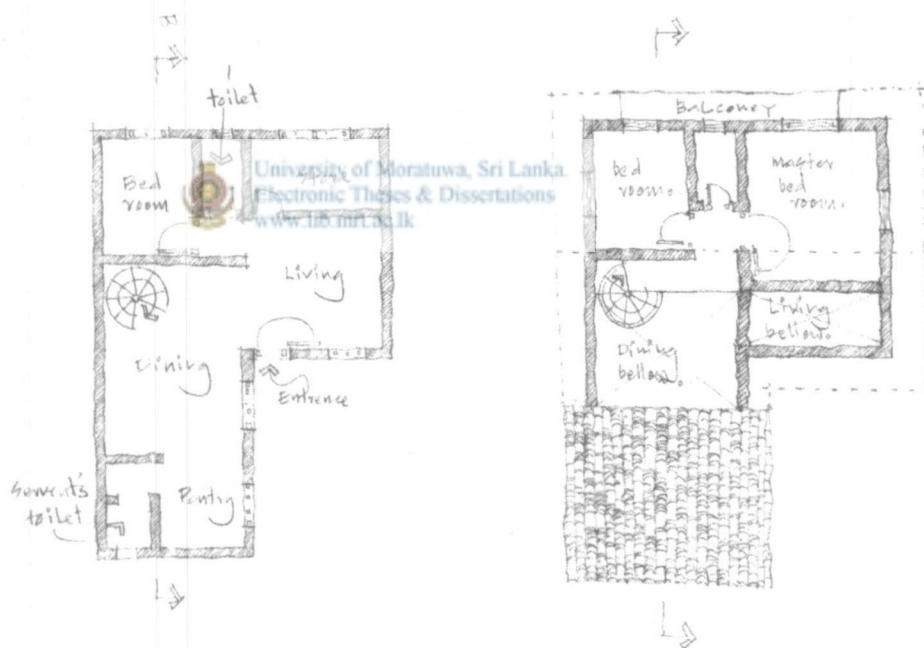


Image 20 a) and b) : ground floor and upper floor - changed plans of House- 1. The addition of a store room has been made, by reducing the size of the living area. (not to scale)

(source: personal sketch)





Image 3.21 : shows how the living room behind has been reduced to a small space due to the building of a wall and creating a store room while showing lively activities going on in the adjacent dining area.

(source: Personal Photograph)

Image 3.22 : the amount and the variety of things seen in the dining room show that, this space is the most used space in the entire house.

(source: personal photograph)



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The parents use the guest room down stairs, the 4 daughters share the master bedroom upstairs and the 2 sons share the other room up stairs.

They spend most of the time in the dining area and this is the center of the house for them. All activities happen with the dining room as the center and the living room is hardly used. Hence a wall was constructed across the living room to convert part of it into a much-needed store.

Not much concern is given to the image or the tidiness of the house. As decoration, only religious images, a white board and Christmas decorations at the time were to be seen amidst utility items. Functionality seems to be the most important aspect for them.

House- 2 :

A Sinhalese Christian lady living with her physically challenged daughter. She is widowed and is a music teacher by profession. Her son is married and is out of the country. There is a house maid living at the house and she does all the cooking and cleaning etc.

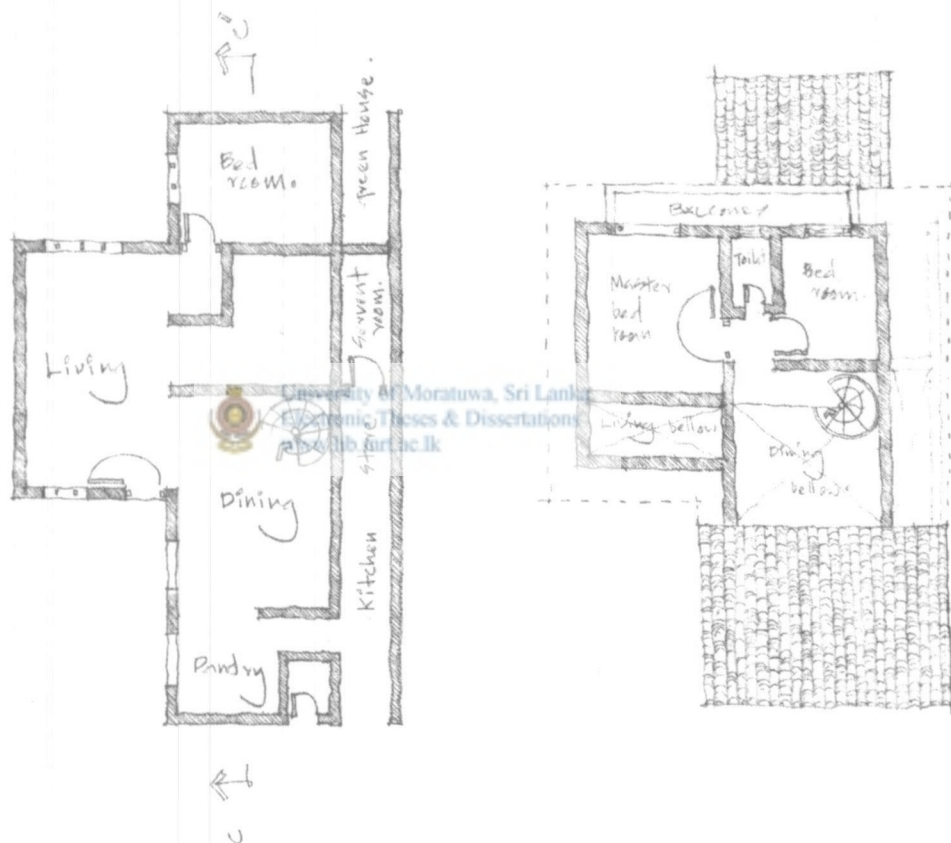


Image 23 a) and b) : ground floor and upper floor - changed plans of House- 2. The addition of a kitchen, servant's room, bed room and a greenhouse is shown. (not to scale)

(source: personal sketch)

Since her daughter can not go up and down the stairs (specially not along the spiral staircase of the house; most activities take place down stars.

There are extensions from all sides of the house, increasing its horizontality. There is an extra room built adjoining the room downstairs from behind and another four and a half feet from the side of the house to make a traditional kitchen and a servant's room.



Image 3.24 : use of living room for piano lessons.

(source: Personal Photograph)



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Image 3.25 : added servant's room next to the kitchen.

The proportions of the room are extremely narrow and long, with just enough space to keep a bed.

(source: Personal Photograph)





Image 3.26 : added kitchen to the side of the house. Even though is a pantry like kitchen in the house, another traditional kitchen was desired.

(source: Personal Photograph)

The garden is well kept and maintained at the back and even the front garden is cleaned, raked and gravel with plants at the entrance.



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The appearance of the house from outside seems to be much more important than the inside , even though the inside is also reasonably well kept.

Special care has been given to the outdoor work and imaginability.



Image 3.27: the outer image of the house.

House-1 :

This is the house of a retired mechanical engineer who is currently living with his wife. They have one daughter who is married and not living with them any more.

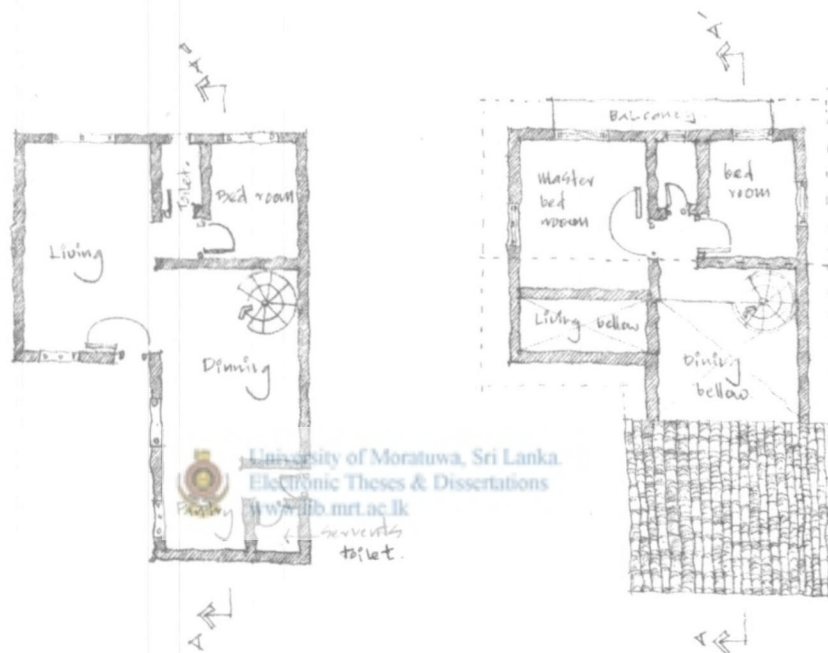


Image 2.28 a) and b) : ground floor and upper floor - changed plans of House- 2. No changes done to the original design except a temporary shelter for the car park.(not to scale)
(source: personal sketch)

There has been no need for them to change the house other than for adding a shelter for the car at the entrance.

The house is kept beautifully cleaned and arranged with ornaments and decorative items, but has a simple charm to it as well. House is not over crowded with furniture.



Image 3.29 : decorated and well maintained inside of the house.
(source: Personal Photograph)



Image 3.30 : living room – with tiled floor and is not over crowded.
(source: Personal Photograph)

The house is specifically kept spaciouly and in an aesthetically pleasing manner.

D – TYPE



Image 3.31 : D- type housing units in a row as seen from the outside.

(source: Personal Photograph)

These are a narrow, long type of houses and they were originally intended for the use of bachelors.



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The house consists of a living area, dining area, kitchen, toilet, bathroom and a loft like area to sleep in. There is a fairly large courtyard between the dining area and the kitchen – for ventilation since the two long sides of the houses are blind walls separating one house from another.

Each housing unit is a two story house of 430 sq.ft. in area. There are 202 of these D-type house units in the scheme and the cost of a house was Ruppees 102,000.

This is the most common house type in the Jayawadanagama housing scheme.

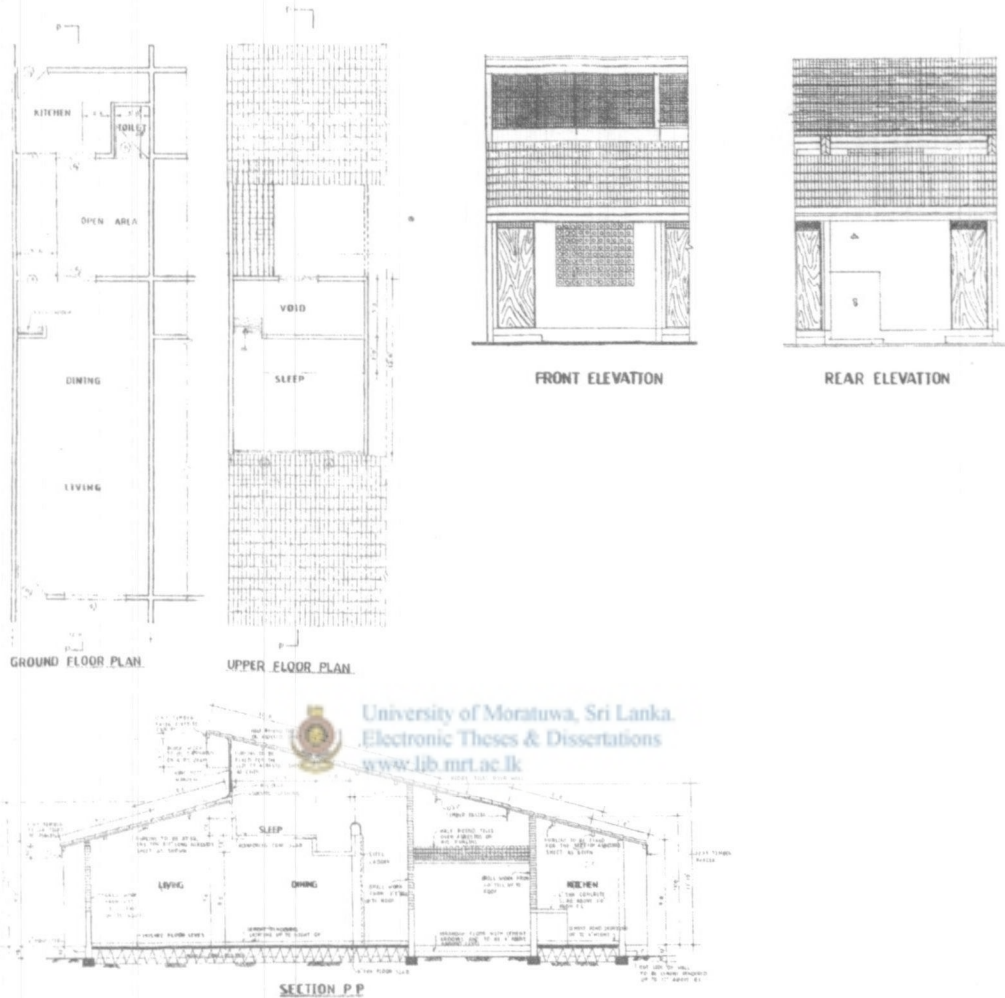


Image 3.32 : Original plans, section and elevation of D-type house at Jayawadanagama Housing scheme. (not to scale)

(source: national Housing Development Authority)

For the purpose of this exercise, there are two houses shown here. Since there is not much provisions left for any alteration horizontally to take place, the main way one would expand this house is by adding more floor area upstairs.

House- 4

A family of mother and two sons, where one son is married and not living in this house, but the other son (who is also married) and his wife are living with the mother in this house.

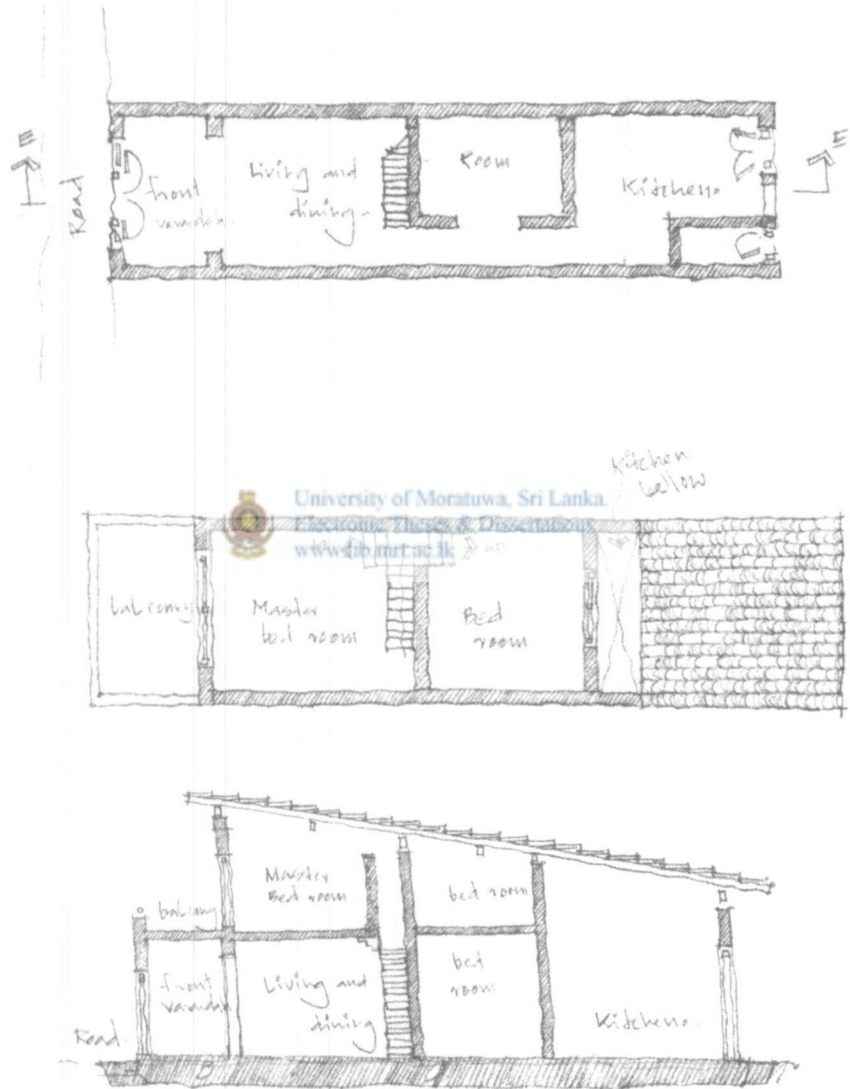


Image 2.33 a) , b) and c) : ground floor plan, upper floor plan and section of House- 4. Since there are no provisions for change in the ground floor, the addition of an upper floor is seen. (source: personal sketches)

The space provided in this house is not at all sufficient for them. Hence the first thing they have done is to put a slab over the courtyard and make two rooms – above and under the slab.

They have changed the staircase, which was originally a steep ladder connecting the loft-room. The slab of the loft has been extended to cover the entire length of the house and built two extra rooms in the upper level.

The kitchen is extended as far as the land was available.

Due to all the changes, the ventilation of the house is nearly completely cut off. Only the openings at the front and the back ventilate the ground floor.



Image 3.34 : living room and dining room – a thin long strip.
(source: Personal Photograph)



Image 3.35 : the loft room – which was intended to be the only room upstairs, the bachelors who were expected to buy this house were supposed to put a mattress on the higher floor instead of a bed.

It is now used as a TV and utility space.

(source: Personal Photograph)

House- 5

In this house type intended for bachelors, this was the closest that could be found. An old burgher lady - retired and living alone. She has only done two significant changes to the house, which apparently are the first two things every single person who bought this house type did as soon as they got possession. That is, covering up of the courtyard and changing the staircase.

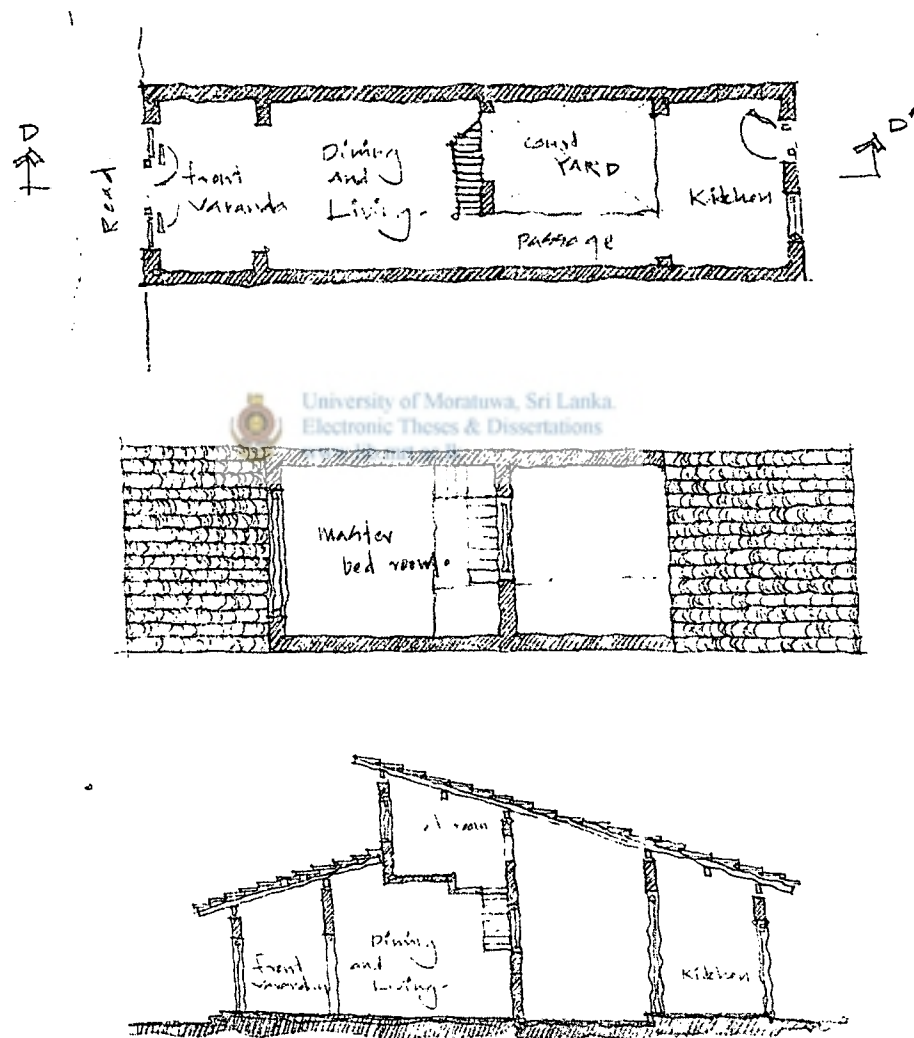


Image 2.33 a) , b) and c) : ground floor plan, upper floor plan and section of House- 5. only changes done are the covering up of the courtyard and changing the ladder to a staircase.
(source: personal sketches)

3.3.1.3 Review on Architectural Response to Cultural Perceptions

Considering the fact that Sri Lankans traditionally perceive wealth and possession through the ownership of land, people generally perceive the notion of a house together with the land it is built on; the fact that these housing are on individual plots, fulfill that perception and makes them feel the house is fully and completely theirs. That is an essential criterion that gives a sense of possession or ownership to Sri Lankan people which is necessary for them to develop a sense of identity with the house or their home.

In this sense, the design is partly successful since the people feel a sense of identity when it gives a sense of control of the land on which the house is built. But this is probably one reason why most of them dare to change the house form so drastically that some houses are changed beyond recognition.

For example; one A-type house occupied by a Muslim family, was converted to a 4 bedroom two story house which was well over 3500 sq.ft. They have taken off part of the common roof that goes over their house, and raised the house up by two more floors.

But, even though nine different house types were made, it obviously can not cover even the significant socio cultural groups that will spread over 700 families of the large middle class of society that might buy houses in this scheme.

When it is known that the possible users for such a housing scheme might be countless, there are two options that can be followed.

Either try and find out all the possible types of socio cultural groups, target them, and build house forms to fit all those groups. Or the next option is to generalize in the larger context of the user group (or sub groups with in it), to identify the crucial most primary elements that need to exist, and cater to those strongly while making the rest flexible enough for people to comfortably adjust the house form to suit their requirements – but with in a frame work that is given.

Case Study 2

3.3.2 SUMMIT FLATS HOUSING SCHEME

Background* :

The summit flats were constructed for in 1976 for the Non-Aligned Summit Conference. Its intension was to fulfill the need of housing the contingent of international journalists visiting for the purpose of this summit.

How ever, the project has been conceived much earlier to fulfill the need for high-density low-rise housing for middle-income government servants.

The intension of the architects was to plan a middle class housing scheme with all amenities such as shops and recreation.

The nature of the site with its magnificent trees and old colonial bungalows required the use of labour intensive methods in order to cause the least amount of damage to the existing environment.

Circumstances have worked out in the architect's way allowing them to fulfill their desire of keeping every single tree in tact.

The original proposal was to house a total of 5000 persons, as 167 persons per acre. This was to be obtained by building 960 living units of 985 sq.ft. each. But finally only 180 units were built with a density of 30 persons per acre.

The objective of the scheme was to create a high-density low rise housing for government servants. They needed to build a multistory complex but with out the use of elevators since that would have cost too much. Thus the maximum height of the buildings were restricted to 45 feet.

This housing scheme is now occupied by upper middleclass or elite class families of high-profile government servants who have a higher degree of sense of individuality. Even in social activities they attempt to establish a selective sub-group among themselves. This housing scheme caters well to this need.

* Information taken from newspaper article on "Mass housing ignored the individuals and their Aspirations" written by Archt. Varuna de Silva and Deepali Mody, from the Daily News. Thursday November 20, 2003 -pg 34.

The main reason for choosing this housing scheme is the way it has catered to the perception in housing for any Sri Lankan with the way it has reacted to nature and the way the layout is worked out.

Location:

Summit flats are situated in an exclusively residential area at Kappetipola Mawatha in Thimbrigasyaya. This is very central in its location and is in the center of Colombo.



Image3.34 : The context of the location of summit flats.

(source: dissertation archives, u.o.m.)

Fig.(49) Map showing the location of Kappetipola housing

3.3.2.1 Layout



Image 3.35 : showing how the buildings were designed without harming the trees on site.
(source: dissertation archives. u.o.m.)

The new multi storey building was built around the existing buildings and the trees in such a way as to maintain the existing residential character as much as possible.

It was built keeping every single tree in tact – which contributes to the Sri Lankan attitudes deep down in every Sri Lankan heart.



Image 3.36 : showing how the buildings were designed without harming the trees on site.

(source: personal photograph)

Circulation paths were open air bridges with walkways twisting between trees and widening in front of the entrances to each unit. These widened areas of the walkway act as open air meeting places.



Image 3.37 : the walkways and the space in front of the entrances which are personalized with plants.

(source: personal photograph)

On the ground, the walkways structures act as over hangs projecting the walkways below. The board terraces in front of each unit allows for a covered space for the units at the lower level.



Image 3.38 : walkways structures protecting and shading the entrances below.
(source: personal photograph)



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It was the intension of the architects to create a space for receiving guests by providing a separate "verandah". In this verandah each house owner can pus his furniture or have plants kept the way he wants so that they could personalize it to his liking.



Image 3.39 : receiving guests in front of the house.
(source: personal photograph)

There are 44 flats in this scheme and are located as clusters of four, five or seven with in the pockets of land between the trees and the old bungalows. Each

cluster of flats has a common entrance. This ensures the easy comprehension of the cluster through entry point.

The layout is design with a sensitivity to the requirements of the occupants.

3.3.2.2 House Forms

Each block has four living units of two storeys each. There are various methods used to achieve a human scale in this design. This has enhanced the sense of belonging of occupants living here.



Image 3.40 : the four storey building proportioned to not feel too tall.

(source: personal photograph)



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Although the block consists of four storeys the scale and the proportions of it is such that it retains the character of a two storey building.

Even though the floor area of the house is not too big, it is designed with spacious spatial arrangements. It has one large room and such spaces make you feel as though you are living in a big house.



Image 3.41 : Inside of a spacious room.

(source: personal photograph)

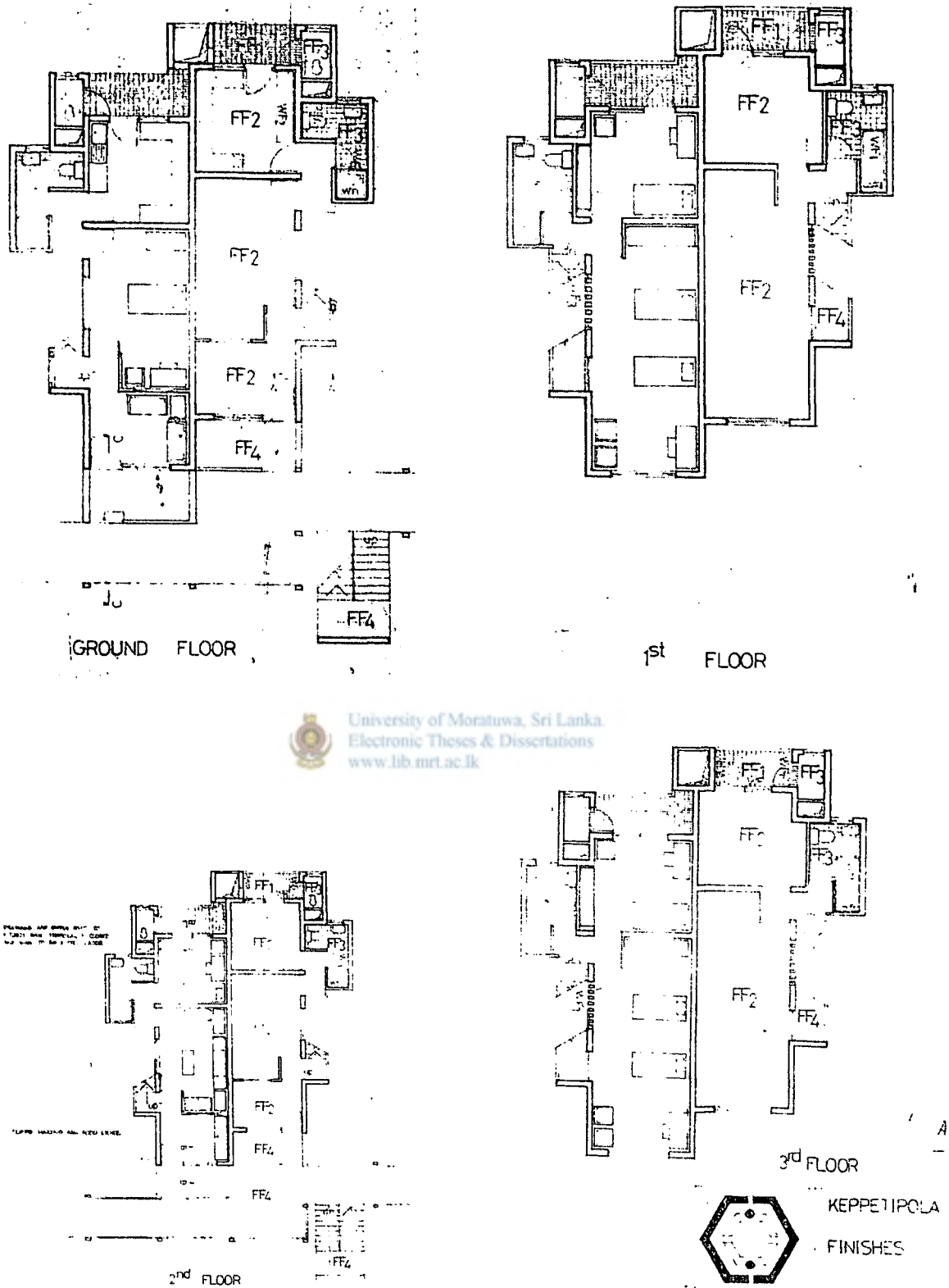


Image 3.42: typical plans of housing unit
(source: State Engineering cooperation)

3.3.2.3 Review on Architectural Response to Cultural Perceptions

The architect here has responded to the occupants needs to a large extent. As a result, there was not much major alteration seen being done to the house units and house forms.

The layout is done in a very sensitive manner and the housing character is achieved even on the upper floor houses. This caters well to the sri lankan need of perceiving a house to be on the ground floor even while it builds multistorey blocks of housing.



3.4 Determination of Cultural Perception through Socio- Cultural Needs in Housing

When reviewing both the case studies together, we can see the success of the summit flats design in responding to the socio cultural requirements of the clients. The clusters are done in such away that smaller groups of people are able to make acquaintances.

The flexibility at some places for personalization gives people a chance to gain an identity without having to change the house form in order to do that. The skillfully worked out walkway system with trees bending over it, makes the upper floor houses still achieve the perception of living on the ground.

The Jayawadanagama scheme is less successful in the respect of catering to socio cultural perceptions of the occupants. There are a large number of house types available, but the rigidity of them works against it in the case a certain occupant desires slight changes in them.

Also some of the concepts like building houses for bachelors is an alien concept for a Sri Lankan community. Hence at the higher levels of perceptions of what any Sri Lankan would want itself is not addressed here.

All bachelors houses are occupied by families and hence despite the lack of qualitative requirements needed by the users, the quantitative requirements of space is also lacking. Hence it is inevitable that the users will change the house to try and achieve what they require from the house.

Where as in the Summit flats scheme the housing perceptions of a Sri Lankan is first handled and then requirements of the socio cultural background and status level of user is catered to a certain extent, and flexibilities left making it possible for users do slight changes without changing the house form.

This way the core requirements which are culturally deep rooted are satisfied and the user feels comfortable and psychologically satisfied living in such and environment.

CONCLUDING REMARKS:

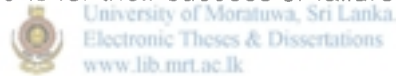
This chapter looked in to the Urban Housing Problem in Sri Lanka and how and whether it is handled in Sri Lanka appropriately.

It discussed the limitations in urban housing issues and the government policies that have addressed this need in the recent past.

It tried to establish the need to address socio cultural need of people in housing design and the attempts made by architects to handle this problem were discussed.

An experimental method of socio-psycho analysis for architectural design is discussed as a possible method for architects to address this issue during the initial stages of design was discussed.

Case studies on two distinctly different housing schemes which had adopted different approached to solving the issue of catering to user perception on housing form were discussed and the reasons for their success or failure was pointed out.



Through this, an idea of a possible way to approach handling the issue of providing a house form that many people of a larger group might be able to perceive as being close to their image of it – to a certain extent at least is suggested through the inferences.



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CONCLUSION

Conclusion

Every personality is partly a result of all the experiences they had from the day they were born. When one is born, they are born like an empty canvas – ready to be painted on. Each experience becomes a brush stroke of society, which adds up to form the final painting that holds the meaning of wisdom and knowledge through time.

It is through this knowledge that we perceive the world and understand things for what we know it to be. This knowledge is part of our culture.

It is through this same knowledge that comes from previous experiences and upbringing of our life, that we perceive what a house is, and what form it should take for us to perceive it as a house.

By realizing this, architects can design housing that can be perceived by the people using it, as a house – as what they know it to be. This way they can feel and re-experience in their minds, the previous desirable experiences they had as a child or while growing up in a place they called home. (similarly by avoiding making places that bring out experiences that were not desirable)

This does not mean the replication of an ancestral home, but the creation of a place that gives the essence of the image one perceives as a home.

These perceptions can be identified in different levels. As an individual, as a member of a certain family, as a member of a distinct small group, as a member of a particular subculture, as a member of a particular religious group within a culture, a person having a certain cultural background, as a person from the same country with a similar social background or as a human being. The requirements start from the end and go deep until individual perceptions are achieved.

When designing public housing, the architect should realize, to which level of perceptual requirement should the housing be catered to depending on the cross section of potential user groups.

After establishing that goal of requirement, there should a some flexibility left which allows the user to adjust house to which ever critical level of perceptual need they may have, without needing to change the basic form of the house.

This dissertation could be taken forward further, through a research that will aim to find out what the critical level of perception different groups of people might have; and how to find out which level of it to cater to when designing public housing.

To achieve this the art of architecture could be used to create the desirable form and spatial effects needed in order to manifest the required cultural perceptions in housing design.

An art can be seen as something that brings meaning to ones life, takes your experience to a final emancipation, brings out desires and establishes virtues.ⁱ

This can be achieved through the proper architecture of one's house – which is when it can be called a home.

Hence it goes to showing that Architecture in fact, is a social art that can be used to make the lives of people more meaningful.

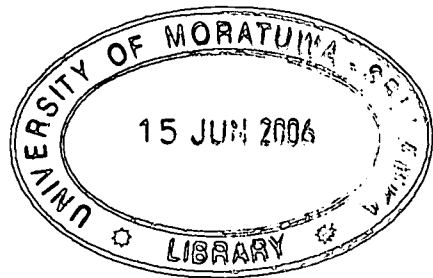
ⁱ The meaning of art was adopted through translating it's meaning from a speech given at a bharatha natyam arangethrum by professor Vini Witharana when he was asked to comment on the performance on behalf of the audience. In his words, the four elements that should be brought out in order for something to be called an Art were, Arutha, Dharma, Kama and Moksha.

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