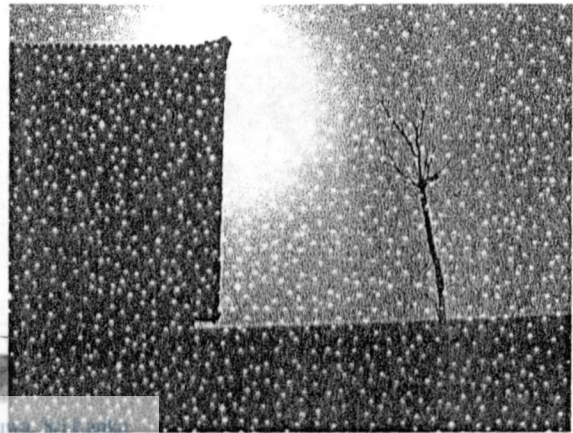
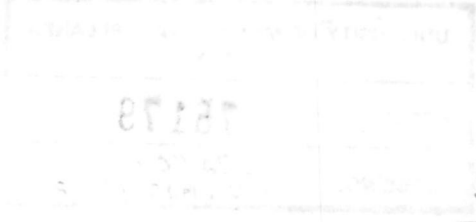


COGNIZANT STREETS;

AN ANALYTICAL STUDY OF ARCHITECTURAL PSYCHOLOGY
IN RELATION TO THE SIX SENSES
WITH SPECIAL REFERANCE TO URBAN STREETS.



A DISSERTATION SUBMITTED TO THE DEPT. OF ARCHITECTURE
FOR THE FINAL EXAMINATION IN M.Sc.(ARCHITECTURE)
AND FOR THE PART II OF R.I.B.A.



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A B S T R A C T

The designers of built environment, the place makers have always be concerned with generating the 'appropriate place'. So many theories, visions and paradigms have been formed through analysis and visionary of numerous designers and architects through out the history on creating 'proper place for 'proper function'.

Still most of the views have placed their emphasis on the visual aspects of the place. The plans, giving rise eventually to the three dimensional form, by which one is envired, and the majestic elevations which create the face of the built environment, the colors, lighting, solid and void ratios, visual proportions, visual balance, all has been subject to extensive analysis.

In all but a few of place making analysis, we find that architecture is not to be seen, but to be felt the stand taken throughout the study. For most probably except the few gifted people known as architects or designers the space is to be felt, rather than to be seen. The elevations are not seen except form far away, the plan form is not recognized, except for the immediate enclosure where one is in, instead the space is felt through all the five tangible sensory organs, to create a visualization, the big picture in our mind, the sixth sense of man. The big visual created through the perceptions obtained through all the senses, makes one recognize each place in a unique way, a way unique in many aspects than just the visual ones.

This base is taken through the study to analyze the street. The street, its unique way of usability than just the conveyer function is analyzed in the study through the concept that the street is a place felt by all the five senses and recognized through the sixth sense.

The analysis is taken further based on the fact various visualizations of the streets by the user is formed by the input they obtain through the five senses. The street

formed the base, as street is recognized to be more dynamic a space than the static places which have more rigid characteristics, and are less impulsive on the senses. This study concentrates on analyzing the street, in the sense that it is a place to be felt; felt by all the five senses and to be grabbed or visualized by the sixth sense.

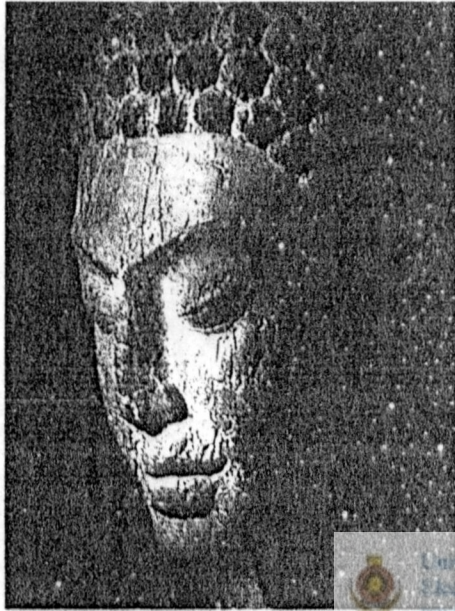


Fig. O.O.1 The perfect sense of the sense

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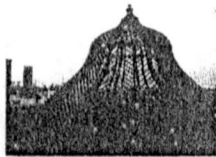
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Last but not least I would like to thank my mother, father, mother-in-law and father-in low for providing me the support and encouragement to carryout the study without any other concerns.



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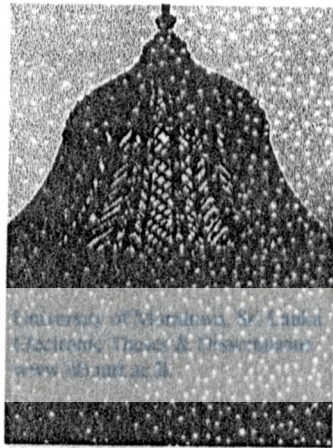
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INTRODUCTION

I N T R O D U C T I O N

Human body touches the space wrapped him with five senses round-the-clock and obtains different type of signals from his external environment. Human body itself is a part of the space, which is higher in density, than the surrounding. As the ancient philosophers believed, it was a created by a meaningful constitution of the five main elements, "Earth", "Water", "Fire", "Air" and "Space". So it can reasonably be considered as a densified formation of the same context that we live in. If it is analyzed in to little deeper, it can be visualized as whatever the change passing through the surrounding space, the body measures them through the five different gauges, that are in direct contact with the space outside.



Fig. O.1.1 The space in the space.

Architecture is the technique that is used to create meaningful spaces in the existent space, which contain controlled media with befitting signals and expedient transformations for the bodies the creation encompasses and the things inside the bodies. Space can be separated in to three successive stages, namely space, denser space in that, or the bodies and spaces within those bodies. In that presentation the largest space is the universe or the planet and its natural environment, the second level is the built environment and the third level is the human body.

The various advancements which occurred in the recent past, and very often, independently applied in architecture in various aspects, have not addressed to a very subtle, yet, very essential component in architecture that affect the psyche of man and as a result of that both human and architecture have been deserted without the ability to combine themselves in to a wholesome relationship.

Tallying with evidences, great number of buildings and manmade environments in historic instances has manifested and articulated with this philosophy consciously. The built environment trying to be in synchronization with the human body distinctly and decently with regards to all the five sense, and has been trying top address the sixth sense or the minds through these. But in most contemporary buildings this comfortableness obtained through the balancing of these physical and psychological factors, is even non-existent.

Almost all modern buildings constructed in recent past are highly comfortable in physical and planning viewpoints due to the development and involvement of the advance technologies in building-construction industry in past few decades. But notable number of them has been insufficiently balanced with psychological luxuriousness that causes to devalue their physical extravagancy. The struggle to gratify this prostrated interdependence through just focused concern on single fundamental like visual stimulation, using contrast of light and shade, with different colour, materials, size and shapes etc, has proved to be hardly successful.



Fig. O.1.2 Sense of volume

The streaming of one space over another is an intricate condition, which depends on number of complex variables and causes to emerge the ultimate entity as a result. The body of an aquatic life form, is touched by water, the medium surrounding the body, and the organism receives light signals, senses the temperature and the roughness, hears sound waves and taste the flavors at the same instance. But for this life form most of these must be so common, that it may not even know they do exist. The same applies to humans as well. We are surrounded by a sea of air, and most of the things which we do feel are so common that most of the time they are just taken for granted, and we do perceive only the most dynamic ones, which do change rapidly. We will be aware of most things, only when we find a lack of them, still we wont be able to identify of which we do lack, because of the lack of understanding, of what we take for granted. So it seems to be unreasonable to respect only about one sense, even though we consciously perceive only that sense, while others are partly or completely neglected.



Fig. O.1.3 Unimpeachable sensation

Unlike in the case of most arts, such as music or sculpture, the architecture has the ability to touch all the senses. As Bruno Zevi mentions, man has to physically be and move inside the work of art to experience it (Zevi, 1975). In other words, for an intensive experience of an art, both physical and psychological penetration through it is involved. In this instance all his senses become exposed to experience that which is created. In this case, not only visual but also all his senses demand and receive nourishment. As to how nourishment happens; it should be said, it is because

stimulations of sound, smell, touch and taste that travels in the medium. The mind, the sixth sense, plays the big role of coordinating all the senses to formulate the big picture, and to make the user feel, and be conscious about the space he is in. Through an unintentional or sometimes intentional analysis of the inputs through the five sensual organs.

It is intended in the study that the space be analyzed in terms of all the five senses. The feeling of space being a composite of all the five senses, it is irrational to be analyzed in terms of only visual perception of space. Thus a more rational base to analyze the space would be through consideration of all the five senses.

In the study, the street has been selected as the space to be analyzed, in relation to the experience it generates through all the five senses. The street having a more dynamic nature, than all the places that we utilize, provides an ideal to be analyzed. The ever-changing characteristic of street in contrast to the places we live in or work in, addresses most of our sensual organs, to consciously feel its characteristics, unlike the other places which do let us consciously feel only one or two characteristics, due to their ever constant nature, which forces our senses to be in disregard.

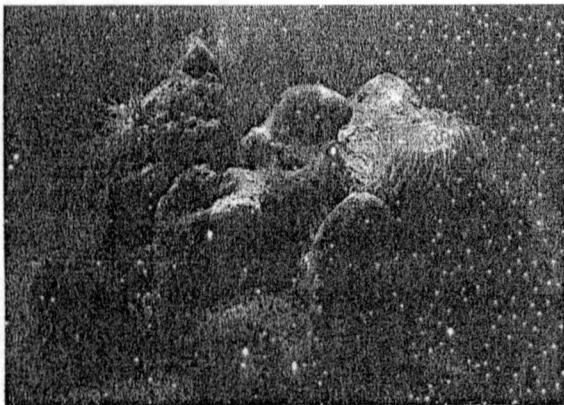


Fig. O. I .4 Space filled with a medium

THE ISSUE

The quality of place has always been a relative issue. As in any qualitative aspect the place also does not have specific criteria or a yardstick in which it could be measured. The quality of place thus is something felt; and depends on the individual who feels it.

Still most often the visual aspect of the place has become the criteria for judgment. The designers of the place have most often placed their emphasis on visual appeal of the place and the three dimensional form of the place.

It is a fact that for most, except the architects and the persons who take their time to appreciate three-dimensional form does not 'See' the place. The situation becomes more of a issue in 'Street'. The ever changing dynamic quality and the 'Conveyor' function of the street prevents it from being 'Seen', as the visual of a street in human mind does not just emanate from mere vision.

Thus the issue handled in the study is to view the qualitative aspects of a place; in relation to street in a more balanced way than just the visual aspect.

RATONALE

'Place' is something 'Felt'. The vision being one major aspect creating a general 'Sense of a Place' or a visualization in the sixth sense. All the five tangible senses of human being contributing more or less to formulate the visualization.

Still the link between the real 'Feeling' of place created in mind; in the sixth sense and the feelings grasped through the five senses is weakly established. This is mostly due to the reason that vision plays the 'Major role'. Yet in a dynamic place such as a street the dominance of vision is questionable. The 'Street' for general human being is not a place that he 'See'. It is a place that he 'Feels', with ever changing dynamism, yet some powerful aspects formulating a static visualization in mind.

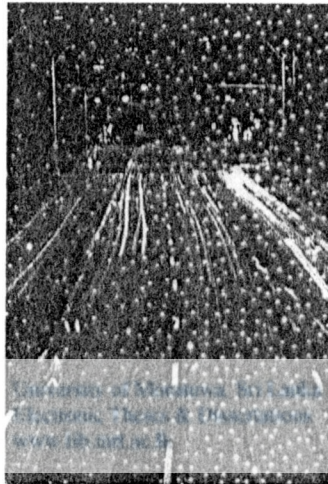
The rationale was to have an insight in to the missing link, between the five senses and the static visualization of street in mind.

OBJECTIVE

The objective was to provide a study of the contribution of each sense in formulating the final visualization 'The big picture', of a place in the sixth sense; enabling a human being to identify a particular place.

The street was to be used as a base upon which the idea is to be tested. The concept that each street generates a unique static. Visualization in the mind in spite of ever changing streetscape made the street the ideal place to study the theory upon.

Finally the study was to use the street as a ground to analyze the missing link between the five senses and the final visualization; or the feeling of place.



CHAPTER ONE

CHAPTER ONE

ULTIMATE PSYCHOLOGICAL PICTURE AS A COINCIDENCE OF THE SIX SENSUAL EMOTIONS

*'Meaningful places are those that allow people to make strong connections between the place, their personal lives and the larger outside world. Such a place must communicate what kind of place it is and whether they are welcome. This is a place that would invite the eye and the ear to greater attention and participation'*¹

The human is created with five tangible sensual organs, which act as the human's connection with the outside world, from where the human being receives communication from the outside world. The world of environmental diversity is felt and grasped by these five sensual organs, to create an imagery of the environment in mind, the most superior, yet intangible of all the human organs. Thus since old age the humans were compelled to think of six senses instead of five. The five physical tangible sensory organs and the mind, through which the feelings of the five sensory organs were merged to form a unified sense of the context.



Fig. 1.O.1 The temple as a perfect place in relation to the six senses towards 'Nirvana'.

¹ Lynch.9

Thus any context can be felt; felt through the sixth sense of the humans. The sixth sense itself is a coincidence of the five tangible sensory organs, which interact with the outside world to produce imagery; an imagery of the context, which is a unique combination of each feeling obtained through each sensory organ.



1 . 1

HUMAN SENSE ORGANS AS DEVICES RECEIVING INFORMATION OF THE SURROUNDING.

It is the five sense organs that come into direct contact with the environment. Hence they receive all kinds of information from the outside world.

The outside world, the three dimensional vast space, contains so much of information, so much of changes to be grasped. It is evident that these organs are exposed at a certain time to an unlimited amount of dynamic environmental conditions. It is of biological uncertainty how the human manages to handle all the information at once.

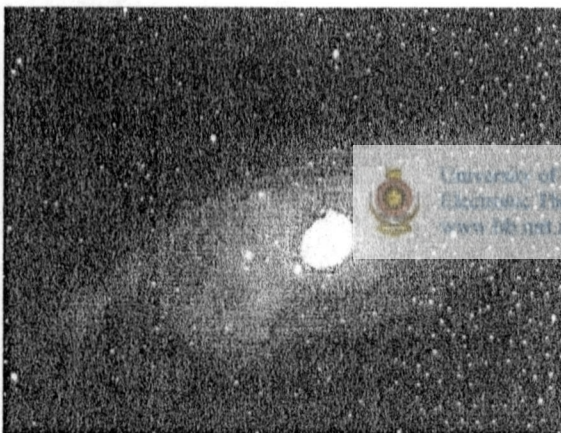


Fig. 1.1.1 Dynamic change is a property of almost all the objects, still the time it takes differs for each object.

The sense organs thus do seem to manage to, filter out the responses, the most appropriate information. The ones that the mind expects to grasp, or kept stored for further reference. The fact that human organs are capable of grasping more than what it naturally does seem to feel, is evident in certain situations. As an example in the case of most blind people, we find that their other four sensory organs become rather more sensitive, than of a normal person and some deaf persons could read the lips and understand what a person says.

"මගේ ඇස් පෙනෙන්නේ වත් කන් ඇසෙන්නේවත් නැති නමුත් මම ස්වාභාවිකවම අතිශයින් ප්‍රිය කරමි. නා නා වර්ගවල සුවද විලවුන් මට සිඹ ඛාලිය නැත. හිරුගේ දැඩි උණුසුම මට දැනේ. තද සුර්‍ය රශ්මියට භාජනයවීමෙන් පසු සෙවණින් හා සිසිල් ජලයෙන් සිරාරට ලැබෙන සුවය මම දනිමි.

මුහුදු වෙරළ මට ඉතා ප්‍රියය. මුහුදට ප්‍රංචන වීද දැනෙන සුවදින් එය මට කිව නැත. මුහුදු නොපෙනුනත්, මුහුදු අසළට වී එහි සුබදායක වාතය ආශ්වාස ප්‍රශ්වාස කිරීමෙන් මට මනස් ආශ්වාදයක් ලැබේ. මා මුහුදු වෙරළේ සිටී අවස්ථාවලදී එහි විශාලත්වයත්, සුන්දරත්වයත් පිළිබඳව මා හුළු ජනිත වූ ගෞරවය මුසු බිය අනුකාරයෙන් මුහුදු ගැන මා සිසින මවා ගත් රූපයක් ඇත.

ගඳ සුවද දැන ගත නැති පරිද්දෙන් ම මට ගෙයි බඩු මුට්ටු එනා මෙනා කරන වීට ඇති වන නා නා ගබ්ද වෙන් වෙන් වශයෙන් වටනා ගත නැති වේ. ගෙබීම ඇති වන කම්පනයෙන් බඩු එනා මෙනා අදහස බව මට දැනේ.

හුණුරුදු ගොඩනැගිල්ලකට මා ඇතුළු වූ විට එහි බීම හා ගරජු පෙළ කෙසේ වේදැයි මම සැණකඩින් දනිමි. උදාහරණයක් වශයෙන් , ලී තරප්පු පෙළක් ඇති නම් මා අභිය තබන විට දීර්ඝ කම්පනයක් වැනි යමක් මට දැනේ. එහෙත් කොන්ක්‍රීට් තරප්පු පෙළක් නම් මට දැනෙන්නේ කෙටි කම්පනයකි.

ආලෝකය අඳුර හෝ පිළිබඳව මට අදහසක් නැත. එහෙත් උණුසුම හා සිතල පිළිබඳව සමට දැනෙන සංවේදන මට ඇත. මම ඒවා ආලෝකය හා අඳුර සමඟ සම්බන්ධ කර ගනිමි. සිසිර සමයේ හෝ වසන්ත සමයේ ප්‍රා හිරු රැස් මා මුහුණ සිස ගනිත්ම හිතැතින් මුවකට මදකසක් නැගේ."

Sinhaia book, Year 10, 1997, P. 11

It is evident from the above quotation that the blind person does perceive more from his other sensory organs, than a normal person would. This means that in a normal person the other sensory organs do balance out with the vision and only filters in whatever is appropriate to feel the situation the person is in. Another thing that the

above quotation suggests is that, being blind does not prevent a person from feeling the space he is in. The person is able to determine an associative quality of the place he is in even without vision.

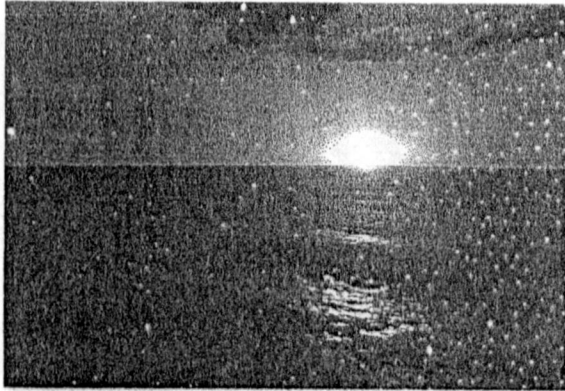


Fig. 1.1.2 The sun set; Bright, Warm and kinetic

Neglect of other sensory organs, in comparison to vision is particularly evident in analysis of space. This is mainly due to vision being the most necessary in analyzing space. Still it is a fact that all the sensory organs do contribute to make a place be experienced properly. With conscious or even intuitive effort, some forms of the built environment have contributed to conscious sensation through the other senses as well.

In dig garden palace Rajasthan Sawan and Bhadon Bawans are named after the monsoon months, their exaggerated 'bangaldar' roofs positively invite sever rains. Kesav Bhawan had elaborated devices to reproduce the effect of the monsoon: it seems to have stone balls in the ceiling, which could be agitated by piped running water to re-create the noise of thunder; and the water was released through the spouts above the arches to fall as rain in sheets around the open hall. a broad canal running round the edge of the pavilion increased the sense of being penned in by water. The protective feeling one must have had

in the dryness surrounded by a great enclosure of rain is explained in the Vidyapathi's lament.²

This all points out to the fact that the five tangible sensory organs of the human, do act as information channels to the mind, which seem to regulate and gather the most appropriate, for later reproduction.

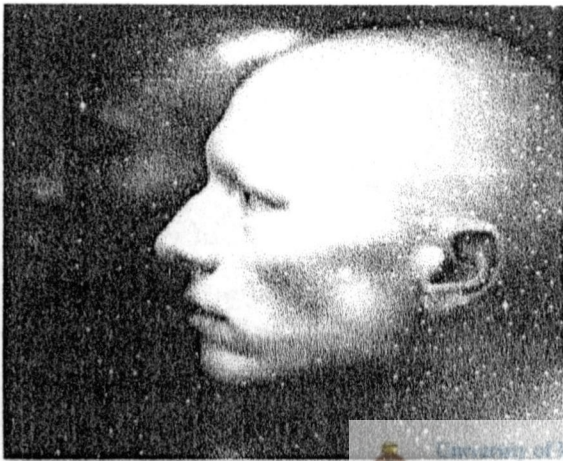


Fig. 1.1.3 Channel of the Information



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² Edirisooriya, the mystical touch, P. 38

1 . 2

THE MIND AS THE SIXTH SENSE.

The five sensory organs do connect with the outside world, to gather information and to present inside. It is a fact that the vast majority of information is discarded. Only the information required in establishing the imagery, the unique imagery of certain context is retained in mind. And when we encounter the same context it is this sixth sense, *the mind* that comes into activation, and makes us conscious of the context.



Fig. 1.2.1 devoted to build a perfect mind

It is the total imagery that we recall. It is not just visual, nor the audible, the smell, the taste or not even the touch of warmth or coldness. It is something made out of all these, something intangible, an indescribable mixture of sensations that subconsciously make us feel at certain place. It is true by effort we could relate a certain place to a single set of information, a certain visual or something we felt or heard. Still will that single set of information be enough recalling that place. If we encounter the same visual or the same sound, the same feeling at a certain other place, will we recognize this as the place we had originally in mind. What prevents us from such false identification is the sixth sense, the subconscious mind which keeps track of all the information received through the sensory organs, and do relate these to create the subconscious imagery of the place.





Fig. 1.2.2 Concentration of mind

Thus the mind prevails, as the sixth sense, over all the other sensual organs, guiding the signals gathered through all of them, and organizing them into the subconscious to identify the context in its merits.



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Fig. 1.2.3 Art as a strong media which communication with mind.

1 . 3**CONTRIBUTION OF EACH ORGAN IN COMPOSING THE DETERMINATIVE PSYCHOLOGICAL PICTURE.**

Since ancient times has been said to consist of five elements-earth, water, fire, air and space. These are not the chemical elements described in the chart of atomic weights and numbers but are qualities of consciousness or patterns of intelligence that portray the characteristic of physical form. Earth is said to express the spiritual attributes of stability, support, and firmness; water, the features of fluidity, translucency, receptivity, surrender, nourishment, and sparkle; fire is warm, radiant and clear; air is flexible, light, transparent, and soft; space exhibits the qualities of transcendence, openness, expansion, and potentiality.

Every architectural form and part of the body can be described as a combination of the five elements. A curved stair case, for instance ' displays earth in the support of each tread, water in the fluid shape of its hand rail, fire in its color and shades of light and shadow, air in its rise above gravity and space in the gaps between the balusters and treads.

The form and function of your hand expresses earth in its firmness, water in the folds of the skin, fire in its warmth, air in its dexterity, and space between the fingers.

'The physical attrite of these element are connected to the mind and body through of five senses. Sound is transmitted through the medium of spade and is related to hearing; air is related to touch; fire to sight; water to taste; and earth to smell. Since our experience of architecture is received through the senses, the design of its form and function can be understood as a composition of the fire elements. The sounds of a concert hall describe the quality of the quality of its space; the texture of its floor, wall and ceiling convey its air, or atmosphere; its color and

*lighting sparkle with fire; the fluid curves of the balcony or seats describe the tastefulness of its design; and the wafting of perfume or other aromas impart its smell.*³

All the sense organs do contribute to gain information about surroundings. The tangible sense organs do gain information through the some receptors specific to them, while the sixth sense, the mind gains information through its own specific way of analyzing the information it gains through the receptors of the other organs.

The feeling of place, the specific emotion unique to each place that we get, is created through the contribution of all these senses. Information the eye receives, creates the visual emotion associated with the place, contributing largely towards the unique identification of place in our mind. Then there is the touch, creating a unique emotion about the texture that makes up the place; the relative physical comfort associated with the place goes into our mind through the sense of touch.

The sound, a unique identification of the noise, or the noiselessness embracing a particular place seems to strike the mind in a stunning way. The smell and the taste work together to create a composite sense, together with the other senses the vision and touch the, smell and taste of a place do give us a unique identification.

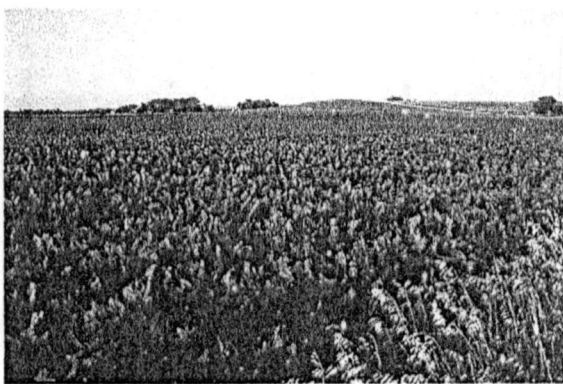


Fig. 1.3.1 Nice color scheme,
Sounds of birds,
Fresh smells
place.

³ Temple in the house, P.103

Together all these feelings, which are obtained through the tangible sense organs contribute towards creating the composite feeling of a place, a feeling which is uniquely gets deep-rooted in the mind.

THE VISION

The vision is inarguably the major contributor towards the unique feeling of place. It is the major reason why most architectural designs cater for the visual excellence of a place. The vision is stimulated through most of the design elements used in creating the built environment, and it is the vision that is stimulated by most of the inspiring creations of the nature.



Fig. 1.3.2 Dynamic frame of vision

The dynamic visuals, created through the moving elements inserted on a space create a deep-rooted feeling, a feeling of a live picture in the mind. The visual dynamism is one of the most effective elements creating conscious awareness of a place. The effect of visual dynamism the changing colors, shadows and light levels do contribute largely towards the visual awareness of a place, rather than a place where the visual effect is static. Even the living beings, the live landscape of a place, the people moving around with their colorful attire, contribute to the visual dynamism

in their own way. Visual signal also can be used as symbols to create different feelings in the mind such as happy, fear, trust, doubt, ambiguity, sorrow etc. They are like key words in a speech. And visual signal make a weighable contribution to the final psychological picture.

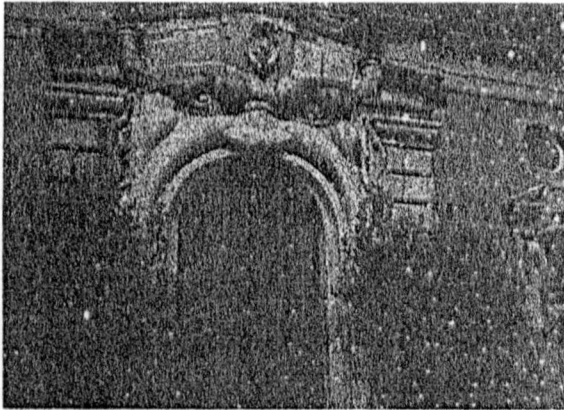


Fig. 1.3.3 A key frame in a visual signal flow

Also visual signal contribute to get the idea of the three dimensions. By analyzing the perspective view and the shadow properties a person can have an idea about the comparison distances to objects, which are away from him. And visual signals are not only just conveying the idea of visual, but sometimes giving senses of sound, taste, texture, smells and memory too.



Fig. 1.3.4 Visual symbol as a direction



Fig. 1.3.5 Contrast and the brightness of the visual signal



Fig. 1.3.6 Light and shadow

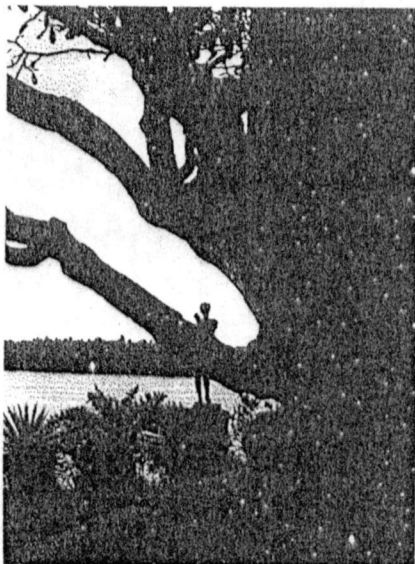


Fig. 1.3.7 Visual perspective

THE SOUND

The sound seems to complement the vision, contributing in a major way towards the big picture of the place.

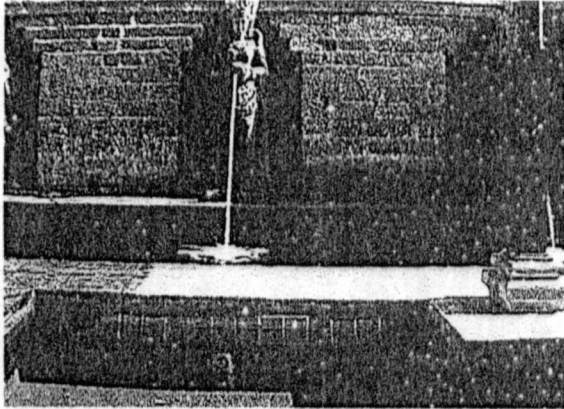


Fig. 1.3.8 Sound breaking the silent



Fig. 1.3.9 One could almost hear the sound of horses, and the army in the quiet staircase of the Light House hotel

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The noise or the noiselessness of a place gets stuck in the mind inseparably with the visual effects of a place. The dynamic visual picture is generally supported with the dynamic sounds of a place. A place where the flowing sounds, such as the sounds of flowing water, the sound of gust blowing through do contribute immensely towards complementing the visual dynamism of a place, strengthening the conscious awareness of the dynamic qualities of the place.

In the same sense an audibly noiseless space could generate its own noise, a noise which is felt rather than heard. A noise that is generated through the composite feeling of sixth sense of the place, and associates itself with the audibly calm setting.

Similarly the noiselessness of a place will contribute to strengthen the serene feeling of a place. The serene visual effects obtained through vistas and static views do get strengthened through the quietness, bound to the particular place. The quietness has its own audio qualities, its own associated audible sense. The sense that associates itself with the composite identity of the place.



Fig. 1.3.10 The quietness could almost be felt through the visual, only audible sound being the sound of gust blowing. The audible sense inseparably associated with the place.



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SMELLS AND THE TASTE.

It is almost impossible to visualize smells and tastes associated with a place. Still the places are associated with a their own feeling of smells and tastes. In most of the situations there is no conscious awareness of the smells or tastes associated with the place, due to the reason that it is so static that our senses of smell and taste have got used to it.

It is impossible to have air surrounding us totally pure, without any aroma. Still as the human sense of smell and taste gets used to such small variations pretty quickly, it is not consciously felt.

Fig. 1.3.11 Smell of the sea breeze, a natural perfume to the place.



Conscious feeling of smell and taste arise only when it is dynamically felt. In a place where the smell is carried dynamically through the blowing wind, in a place where the smell is felt by stimulating both the vision and smell, it gets strongly associated with the place.



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The dynamic change will also let the dynamic change of a fragrance to be associated with the place. The visual continuity will associate itself constructively with the smell that is present.

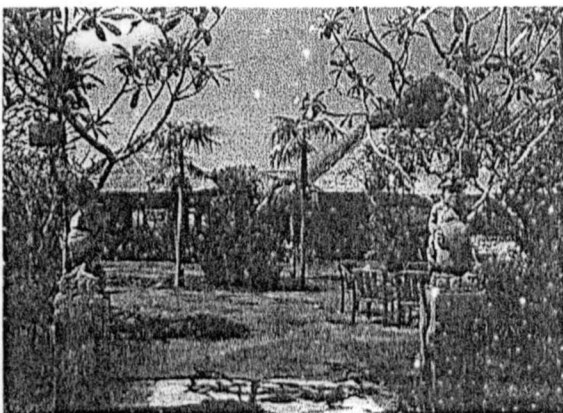


Fig. 1.3.12 A place where the aroma is almost seen, rather than felt. Even without the real smell the associated fragrance will be there, to be felt.



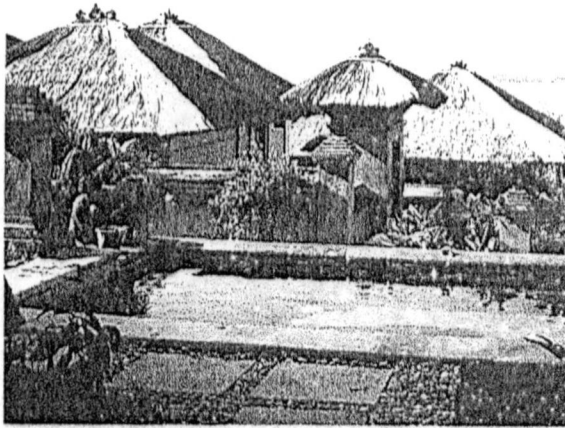


Fig. 1.3.13 Different natural materials makes different smells both physically and psychologically.



Fig. 1.3.14 Taste makes the place complete and complete the psychological picture

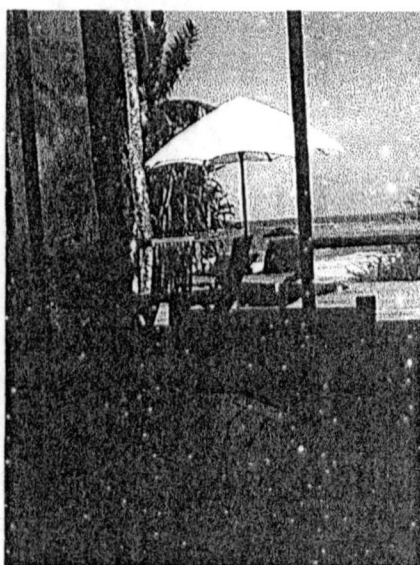


Fig. 1.3.15 A beach hotel as an attractive place of tourists. Fulfills vision, sound, texture, memory and specially smell and taste.

THE TOUCH

Architecture touches the human sense with all its textures, and the comfort levels the environment generates. It could be the physical touch of warmth, coldness or the wind blowing, or it can even be the touch without physical elements such as the texture that we feel through the vision, the textures created by the light and shade which makes us experience the touch rather than feel it. All the textures do make the user relate it to a certain feeling that he knows,



Fig. 1.3.16 The texture to do make touch to be experienced rather than felt



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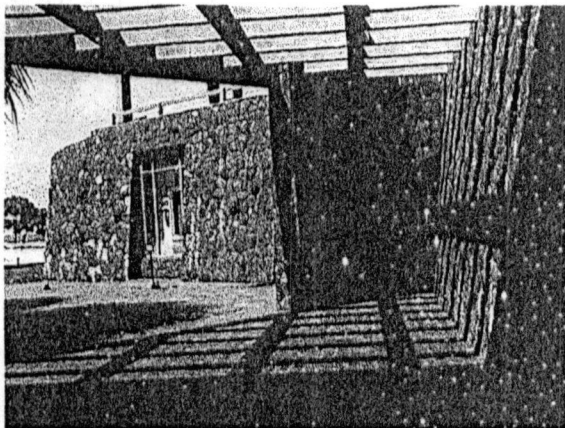


Fig. 1.3.17 The touch is felt through the light and shade

The touch felt through all over the body and those signals receive continuously. So, it is similarly important like vision. It can feel not only solids but also liquids and air too. In architecture textures are playing a major role. It can be feel as well as seen.

For example the feeling get by sitting on a carpeted floor and tiled floor is different to each other and likewise the visual signal of the smooth plastered wall and the exposed rubble wall is different to each other.

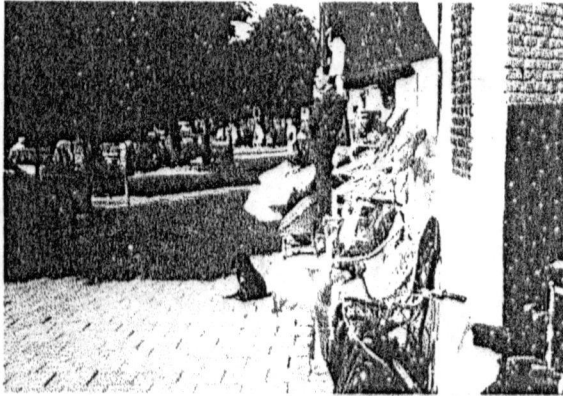


Fig. 1.3.18 Rough tiled texture gently invites for walker, but not for vehicles

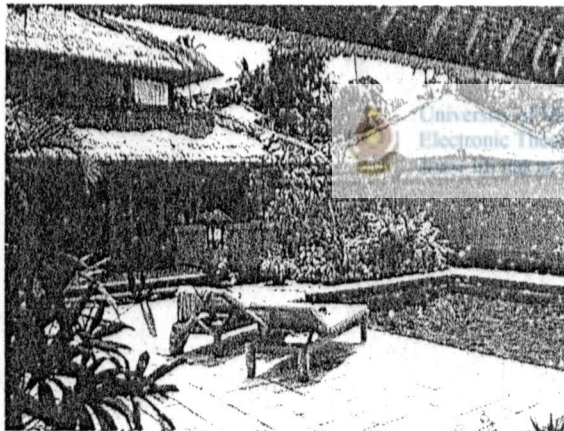


Fig. 1.3.19 A waving pond is a surface with a dynamic texture

Like solids the liquid surfaces display textures. But most of them are not constant and being changing ever and also air surfaces inheriting with various textures like heat, cold, warm etc.

Textures are used to separate spaces psychologically but not physically and to break the visual monotony. And also they can be used to express different ideas and feelings. For example a paved path is basically meant for pedestrians and for

walkers rather than for vehicles. Fare face brick wall impressed the quality of rustic or warehouse while a smooth plastered well-finished wall shows a luxurious quality.

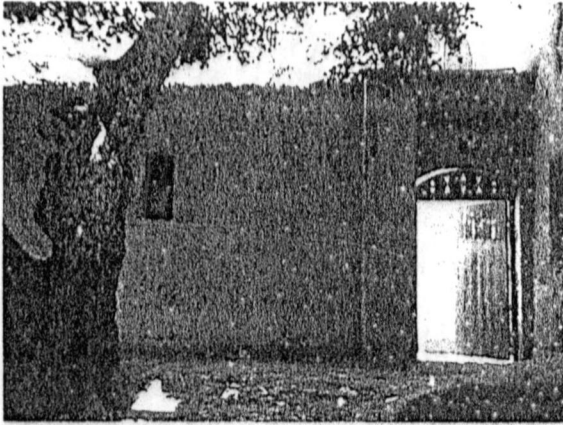


Fig. 1.3.20 Gradual variation of textures from out side to inside.

THE MEMORY

The mind or the sixth sense is where all the communication through the other senses is analyzed. It is the location where the imagery is formulated, and is kept for further reference. It is this imagery that matters, when some place is to be recalled.



Fig. 1.3.21 Key frames are caught by the memory

It is some stunning quality of the space that the mind captures in the first place. Although all the other senses do compliment and contribute towards the formulation of this imagery, one dominant quality seems to prevail, and gets attached to the

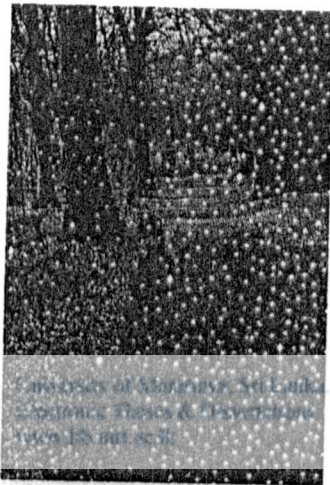
place inseparably. The dominant sense may depend on the users viewpoint, and the experience of the place. Still most master designers have been successful getting their own design message across to the proper sense.



Fig. 1.3.22 It is the memory of this dramatic sequence of events, that plays the major role in the imagery of place, although the other senses do contribute to form it.



Fig. 1.3.23 Usually the main object or place bind the whole place to the memory



CHAPTER TWO

CHAPTER TWO

STREET AS A PLACE STIMULATING ALL SENSES

'A good place is acceptable to senses, making visible of the air, engages the perception of its inhabitants'.¹

A place that stays deep-rooted in ones mind, is a place, which is accessed by all the senses, one that stimulates and gets the attention of all the senses. To touch all the senses the place must have dynamism, a place stagnated with unchanging visual elements, with unchanging audible noise and with the wind carrying the same smell will not access the senses as much as a constantly changing, dynamic space will do. Any settlement, thus to become a place of interest has to have the touching qualities to stimulate most of the senses if not all.

'Settlements become ill when the balance break down, when the optimum mix degenerates to homogeneity, growth breaks its bounds, recycling fails, parts dedifferentiate or self-repair ceases. Illness is in factions, and it can spread if not treated or cut out'.²

The street in its merits, have all the dynamic constant changing qualities, the facades changing up their dressing, the people, the flow of traffic all do provide a new experience each day, touching the senses with their changing elegance. Thus the street is a place where all the senses are touched dynamically.

¹ Kevin Lynch, Good city form, P. 133

² Ibid, P. 94

2 . 1**STREET AS A PLACE OF ALL SENSUAL INSPIRATIONS**

Street is place, much more dynamic compared to the places we utilize in our day-to-day life. The characteristics are ever changing. The people, the vehicles, the skies just to mention a few, all do change each day, and each hour. Even the relatively static elements such as the façades, the flooring do also change more rapidly, compared to space within our houses or workplaces, notwithstanding more dynamic aspects such as aromas, sounds and the environmental conditions, such as heat or cold.



Fig. 2.1.1 street starts from a path. Inspirations starts from the nature.

In consideration, the human body reacts, with conscious sensation. A sensation that is felt much stronger than at a place where the things are relatively constant. The rapid change of stimulus does affect senses as rapidly as well. In recognition of this the senses seem to feel more, being more alert at a street than in a more static space. It is a well known fact that, in feeling a static sense the sensory organs soon do start to disregard the feeling, in analogue to getting used to the feeling. In a street the constant change of state does influence the senses continuously. It is this more attentive nature that makes one notice billboards on streets more than an advertisement on paper.

Vision is the sense that is most affected, as in any other space. It is the visual sense that picks up the major characteristics once we enter a street. It does pick up the elegance of all the facades, the changing colors of the peoples dress, the color of the sky, the width and length of the street even the level of lighting is picked up quickly by the eye, and stimulates the mind to give a characteristic imagery to the particular street.

Then as one proceeds along, all the other senses do come into work. The sounds, for instance; the entrant starts hearing the voices, the vehicular traffic, the composite sounds created by a mixture of all these, to formulate a perception of level of noise. All these noises do contribute, for one to form a different imagery of the street than the one he just sees. No one will ever be able to imagine a street without all the noises associated with it.

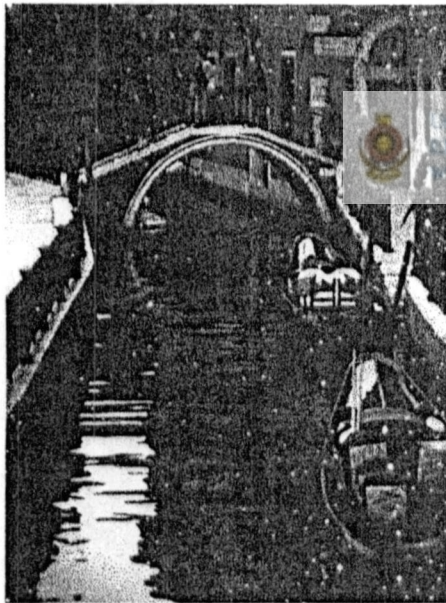


Fig. 2.1.2 A water street

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The feeling of heat; the sun's radiation falling on ones body, or the coldness of the street in a rainy day, even the mild warmth under a shade, with the breeze or the lack of it creating uneasy humidity, do all contribute to the felt street. The feeling does seem to get stuck, in the mind, relating the street with a certain level of comfort.

"There are streets and places we avoid because we know them to be physically uncomfortable. I will always avoid Golden Gate Avenue at Polk Street in San Francisco because of the cold, hard wind that rushes down from the Federal Building there" ³

The taste and the smell seem to go in hand in hand, on a street. The smells associated with a street, may come from the fragrance of flowers at night, from the gardens flanking the street. Or the smell may emanate from a factory or some kind of a refinery, or even the street may have restaurants flanking it, emanating to the air the aroma of things being cooked inside. The taste is associated with the space, as we have a bite of this and that from a restaurant on the street, or from a street vendor.

Altogether the street, being a place so dynamic than the other places, always changing its characteristics, makes itself be felt through all the five senses, of a normal human being.



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Fig. 2.1.3 Character of the street ever changing

³ Making Great Streets, P.274



2 . 2**THE STREET; A DEFINITION**

'Nearly every one in the world lives on streets. They have been the place where children first learn about the world, where neighbors met, the social centers of towns and cities the rallying points for revolts, the scenic of repression...also been the channels for transportation and access' ⁴

The street has been defined as the line, which connects two points, a conveyor where people and the vehicles to move from one point to another. It is beyond doubt with the street becoming the only open space in a vast jungle of buildings, especially in the urban and suburban areas; it has been changed from a conveyor to a place to live. Even in the rural areas, the street is not a mere connection; it is where the people meet, where people talk with one another, children run along.

In fact it is a place where life occurs, as a collective whole. It is the street that one experiences when he gets out of the monotonous space of home or workplace. It is where the people get out to dynamic activity after spending hours inside home or inside the workplace. Thus it can be seen that it is a place of better sensual stimulation, a place where a person is more at attention, a place considered as the out side world, but a very familiar one.

Just like the pre-historic man gets out of his cave to insecurity or even the security of jungle, with more attention, contemporary human being gets to street, to better attentiveness to the surroundings.

⁴ Joseph rykwert, the street, P. 19

2.3 THE BACKGROUND

The street started its evolution as a path. Any line marking the way from one point to another could be considered as a path. Still as the growth of civilizations progressed the street has to come to a different role than that of being just a path from one point to another. Especially with the trend of urbanization has become the place holding the only open area of the city.

'Street should be for staying in and not just for moving through' ⁵

The stand taken throughout this examination is the concept that urban street is not just a channel; a channel facilitating vehicular and pedestrian traffic; a channel providing a way to layout the sewer lines, the electricity and telecommunication lines and the public water supply lines; rather it is a lively space, a place to be experienced. And the study tries to analyze the street in the meaning that it is a place to be felt through all the five senses, and a place to be recognized through all the six senses, and is also of the opinion that being a place where one faces the unknown, the senses are better attention in a street.

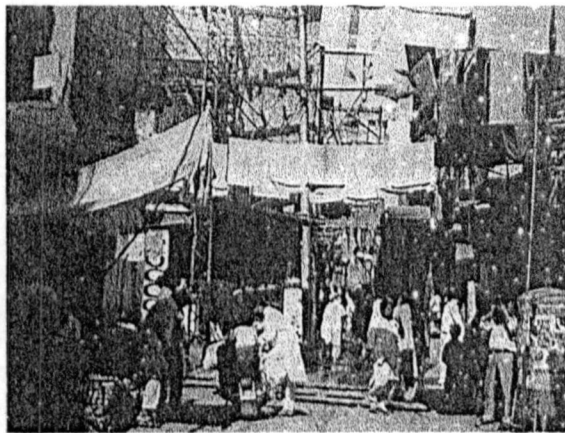


Fig. 2.3.1 The street is not just for moving through

⁵ C. Alexander, Pattern Language, P.28

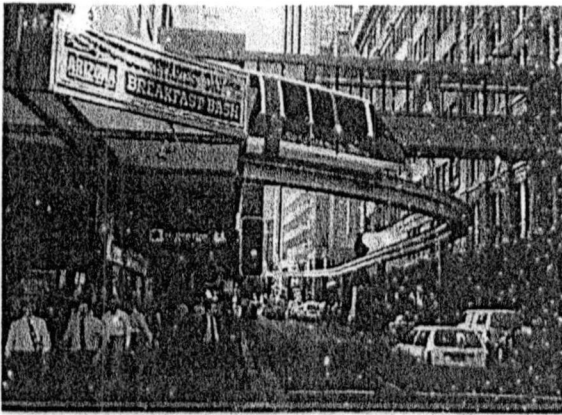


Fig. 2.3.2 Three different streets.

The street has always been the component that determines the character of a city or town. The function of a street is to provide a convenient path between two locations it may seem. But the urban street has overridden that simple definition. They have become places of activity; commercial social and even artistic. They have become places to be felt, just like grand interior of a church or the serene space inside a temple. Their constitution has been changed by the civilization, from a specific path to a space that is lively, space where activity occurs. And place where activity is to be felt.

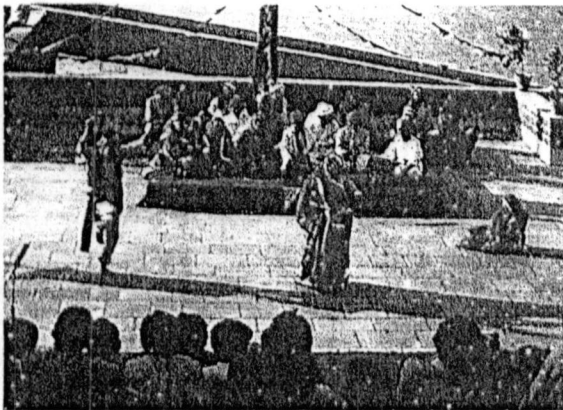


Fig. 2.3.3 Place for even performing art.

The definition of a street has overgrow the simple idea of moving from one place to another. It has gained many interpretations, many concepts are bound to streets, and many have tried to relate social occurrences to characteristics of streets.

Psychologists always have strived to find a relationship between urban crime and the dark alleys and overcrowded streets. The more deterministic architects have tried to relate the forms that define the street as defining the activity pattern of a street.

The urban streets holds the vital open space of the densely built up city, in a setting where enclosed structures do cover up the last possible inch, the street becomes the only space left out for outdoor activities. It is this quality, that gives the street its uniqueness in being dynamic, and ever changing.



Fig. 2.3.4 The street as a vital open space in densely built cities

In the face of industrialization and rapid technological development the necessity for high speed transportation could not be avoided. But there must exist a balance; a balance where the transportation is given its right place and not emphasized too much, a balance where the need of urban dweller to be out side is properly considered.

2 .4

HISTORICAL BACKGROUND

The usage of tracks was the beginning of the street. The origin of the track lies in the pre-history. They originated when the pre historic men found a way to keep their whereabouts marked. He used heaps of pebbles or broken branches to keep the way he followed, marked. This enabled him to find out his way the next time he wanted to arrive at the same destination. In the most primitive times, the track was used to make paths to waterholes. The path becomes a street once it is followed by the others, than the initiator himself.

'The road and the street are social institutions and it is their acceptance by this community that gives them the name and the function' ⁶

Since the beginnings of existence of the homo sapience, till the Neolithic stage, they have lived on the same basis as of the other animals. That is by gathering naturally occurring foodstuff and by preying on other animals and by fishing. The society was necessarily a mobile one. The man started to become stationary, only around 14,000 B.C.

'As the last great ice age was approaching men were sufficiently well equipped to evict other denizens and themselves to find shelter in caves' ⁷

The appearance of permanent settlements naturally gave way to the next step. The formation of community, and consequently the villages, once the villages were formed naturally the street appeared.

⁶ Joseph Rykwert, On Street, P. 15

⁷ A.E.J. Morris, History of Urban Form, P. 03

'Perhaps as early as 4000 B.C., the settlement occupied an area of at least 600 x 400 yards, and in one part some of the huts are arranged in two definite rows with a lane in between.'⁸

It is suppose that the transformation of Neolithic villages to the first cities occurred in 3500 – 3000 B.C. in this millennium, the humans gained sufficient technological knowledge to formulate the urban revolution. There were inventions, and discoveries, that gradually formed the basis for urban revolution.

The introduction of wheel and the carts at the beginning introduced the usage of vehicles. These vehicles, even in their crudest form naturally influenced material exchanged between locations that are placed at greater distances. As these vehicles required that streets that could accommodate their movement, long running great streets were formed. The Silk Road being the most famous of such long paths.



Fig. 2.4.1 Radial road network strengthened the city center and the leadership

The urban streets originated as the villages gathered in to form townships. Once built forms are created at all available spaces, the space left out for access become the streets. The earliest of such were not in planned layouts, they were of just natural origin, just grown out of the existing conditions. This type of growth is

⁸ A.E.J. Morris, History of Urban Form, P. 03

generally termed as Organic Growth, and is the growth pattern most widely followed by cities through the history, except for some very few planned ones.

The Harappan cities are identified as the first planned cities. They followed a grid-iron layout the houses had their entrances facing the minor lanes at right angles to the main routes. These were followed by, Greek Cities, in Hellenistic times. Then there was the Rome, and there were others too.

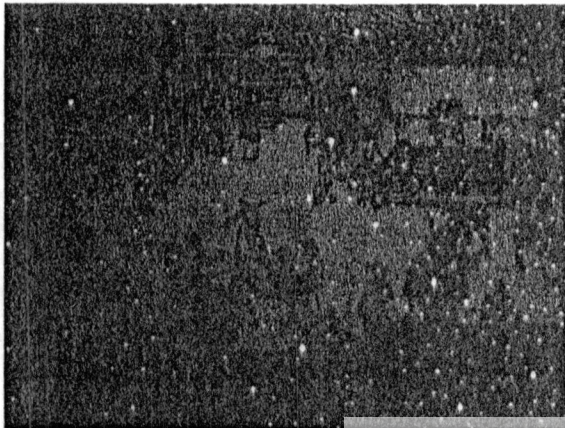


Fig. 2.4.2 Ancient Chinese street



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2 .5

THE STREET IN CONTEMPORARY URBAN CONTEXT

The street in urban context has become much more than a two dimensional path that links two entities. It has become a place that reflects and emphasizes the urban character of the township. The pedestrians, hawkers, the vehicular traffic, the built form all contribute to give wholesome to the urban streets.

The street to many will be a two dimensional entity, a paved or demarcated way with some width and a longer distance. Still it is not possible to consider the street alone, the surroundings are an integral part of the street. Without surroundings the street will not be defined. Thus the street is itself an entity with more than two dimensions, as much as the built form that flanks it. In a better sense the street runs in to even more than three dimensions, the fourth dimension being its users.

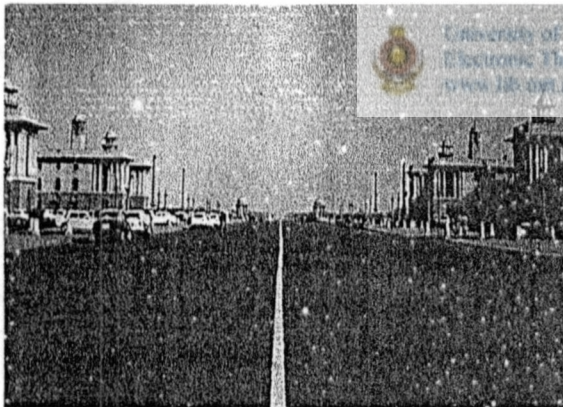


Fig. 2.5.1 Street, running towards the horizon

Generally the current urban street accommodates pedestrian and vehicular traffic. Some urban Streets are meant just to accommodate traffic, some streets are residential, in that they have houses flanking them, still others are mainly commercial and some others may serve diverse functions as celebrations.

'The very word street, as its etymology suggests, denotes a delimited surface part of an urban texture, characterized by an extended area lined with buildings on either side'⁹

Many of the streets have mixed functionality. The facades, arcades, heights, rooflines all give each street a unique characteristic. Each urban street has a character of its own that gives it an identity.

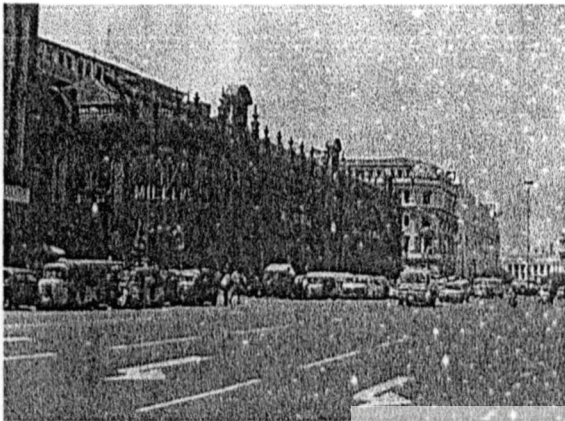


Fig. 2.5.2 Modern street with its own character

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Fig. 2.5.3 Business street

With the advent of the industrial revolution, and consequently the new transportation systems, the function of the street has changed dramatically. The urban street has changed its face to serve the faster moving vehicles. To accommodate these

⁹ Joseph Rykwert, *On Street*, P. 249

vehicles, which were moving at a pace of their own the people are separated, and given a less significant place in the street. The no longer, the lifeblood was flowing in the street, instead of the vehicles, from private cars to commercial vehicles, moving at a speed that is only possible for machinery has taken up their places.

*'Cities ought to be places where great buildings and lively outdoor spaces are found, which was usual until modern times. The European capitals still provide many wonderful examples of good urban spaces. Piazza San Marco is perhaps the greatest: of them all, peaceful yet vibrant. Most Italian cities have gorgeous squares, a few of which have been protected from cars.'*¹⁰

The most unbelievable thing is that, the time taken from the street to be changed from the lively place, where people were the mainstream, to a place where automobile dominates was even less than seven decades. As the transportation is an essential thing for any large township, the streets in the town have undergone many changes to accommodate the new transportation system.

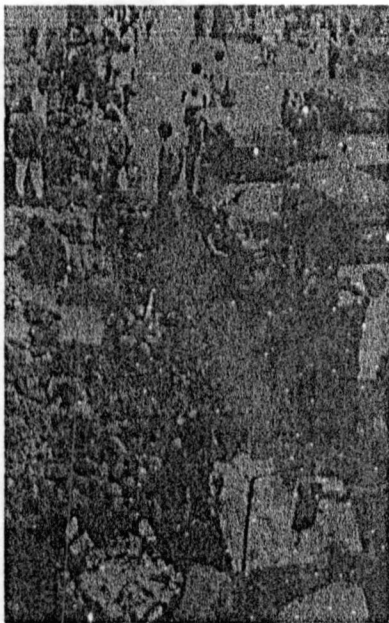


Fig. 2.5.4 Commercial functions has become a major element of a street

¹⁰ Joseph Rykwert, *On Street*, P. 103

Lively streets filled with people have given way to rigidly paved high ways; people are confined to the pavements. The main streets have grown in width, to have more traffic lanes. The street has failed to function as a place where people rub shoulders any more. The urban folk that travel to the city have become to using the same route, and meeting the same people everyday, and are effectively isolated from the other community, even in a city with millions of people.

*'As classic 'main street' towns have disappeared, the social space they once provided has been replaced mainly by shopping malls, a tepid substitute indeed. Not all social encounters on the streets of a well function city are present, but the friction that sometimes arises does save an important function, it helps people to learn how to tolerate and get along with one another.'*¹¹



Fig. 2.5.5 Street is a community room

¹¹ Allen B.J, Great streets, P. 83



CHAPTER THREE

CHAPTER THREE

MAKING THE STREET A BETTER PLACE FOR COMMUNITY.

'A room is a beginning of Architecture' ¹

'A street is a community room' ²

There are no clear-cut criteria to define as to whether a street is a good one or bad one. Instead it is actually in the mind of the observer, that a street will be remembered as to be a good or a bad one. Even one simple occurrence, an experience that emanates pleasant memories in his mind, will make a user feel that the street is a good one; similarly an unpleasant occurrence could register a street to be a bad one. Some times a seasonal uncomforted, or physically comfortable situation will register a street as a good or a bad one in an occasional users mind.

'I will always avoid golden Gate Avenue at Polk Street in San Francisco because of the cold, hard wind that rushes down from the federal building there' ³

But for a street to be collectively judge as good or bad its users and the community, it must mean with some general criteria most of these criteria are qualitative aspects and cannot thus be given a specific threshold levels to make one judge where the quality is presence in required amount or not, still these qualitative aspects can be seen as a good ground for ascertaining the place an urban street gains in the mind of the user, and couple with some basic necessities, the criteria that can be arrived at are accessibility, bringing people together, public ness, livability, safety, comfort, participation and responsibility.

¹ Luis I khan, Writing, Lectures, Interviews, P. 263

² Ibid, P. 315

³ Making Good Streets

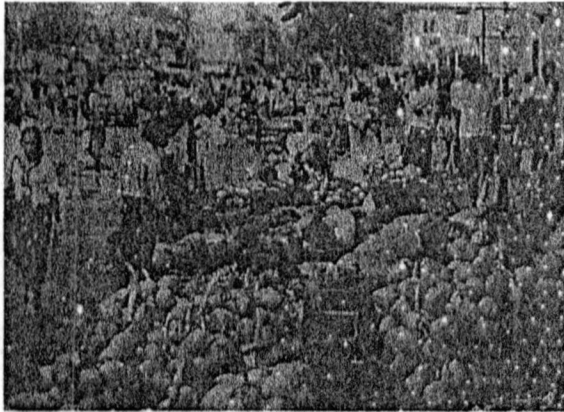


Fig. 3.0.1 Street as a commercial venue. Buy the things on the way to home

Just one of the factors being present will some times create a pleasant picture in the users biased towards that requirement, but for the street to be judged as good all the previous criteria are essential parts, although there may be infrequent exceptions.



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3 . 1**CHARACTERISTICS WHICH INCREASE THE QUALITY AND ENCOURAGE THE SOCIAL PRESENCE ON STREET**

The characteristics discussed above are the essential ones that make up a good street. In this section it is intended to carry out a detailed analysis on these. To make the street a better place for behave in relation to the six senses, it has certain factors to consider in order to enhance the livable quality of there.

The quality of a street is basically discuss with elements such as accessibility, gathering, public ness, safety, comfort, livability and participation. In this section aforesaid qualities are to be looked in to with the background of six sense conceptual framework.

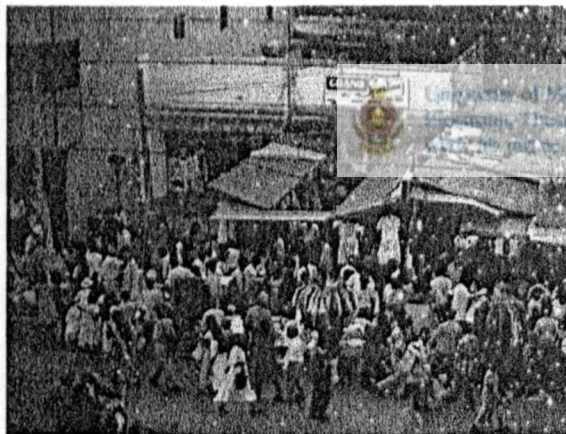


Fig. 3.1.1 Gathering and Public ness

'We have good neighbors. They help each other a lot. They help take care of the kids, if someone is sick or if someone dies, all the neighbors do cocking. I love this street.

I guess because it's my home' ⁴

⁴ R. Appleyard, *Livable Strcets*, P. 105

ACCESSIBILITY

A Street of course has to be a place accessible. Without easy access for public an urban street or for that matter any type of urban public space could not possibly exist. An urban street most probably will have to be accessed by motorized vehicles; cyclists, the pedestrians even by small children, must access it. To be accessible is to be a place where all these are accommodated.



Fig. 3.1.2 Physically accessible but visually not



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Fig. 3.1.3 Sides defined, but accessible

The factor of accessibility can be achieved by both physically and psychologically. Sometimes it may be physically accessible but visually inconvenient and feels like unapproachable. The other thing which could be done to increase the pedestrian accessibility is to decrease the speed of the vehicular traffic or discourage them. By applying a different texture like hard paving that can be achieved. Usefully it can be applied for shopping streets which may start with a car park or which may not necessarily enter vehicles to the particular street.

Still for the urban street to be a one that supports community the accessibility means more than what it takes for people to just gain access to the street, for the purpose of getting from one place to another. It means to accommodate the forms of transport in equal basis. The street must care for its users, it must be a place that looks after walking children, a place that cares for elderly, a place that makes disabled to walk and most of all a place that is adapted to its users. Not a place where users have to adapt themselves into and not a place where unwanted restrictions are placed on the user.



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Fig. 3.1.4 Handrail fixed, as a safety device for the people has become a psychological barrier as well as a restriction for the accessibility of the street

Also by encouraging the traditional crossroads can increase the accessibility. To do that several things can be implemented such as create the visual comfortable, Traditional crossroads can be encouraged in the town, where appropriate waiting and sitting nodes. People would like to walk on nicely paved textured floors with less noise of vehicles and bad smells of wayside garbage, but with appropriate musical

background and smells of the foods on the street carts. And also they would appreciate to taste a warm eatable with having a chat with a friend or with the fiancé.



Fig. 3.1.5 Traditional alleyway

It is expected that most of these guidelines are followed in order to make the street an accessible one, because the prime requirement for a good street is its accessibility.



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PUBLIC GATHERING

Once you come out of the house, your work place, or the school, you are in other place, the street, thus the street has to be a place accommodating people, not just accommodating, but making them meet each other. Because the street provides the opportunity, once you get out of your own place, for meeting a different set of people, than whom you were with all day long. People you meet will be different each day, rather than being a same faces as in your workplace. Among those you will find so many different faces, so many different attitudes most of all you will have so many experiences, regarding people similar to having a memory location for different familiar places registered in the mind.

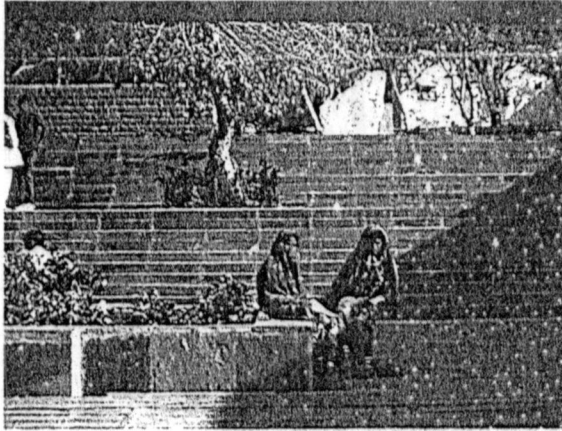


Fig. 3.1.6 Street provides the opportunity to meet people and talk to each other and comfortable to stay

Even if you will never talk to those stringers you see in the street, you will feel you are not isolated, it is the street that makes you part of the larger world, with so many different faces, and so many different ways, rather than the cocoon you are in at the work place, home or the school.

Thus being a meeting place, a place where you meet people face to face, and notice them is a very important attribute of a good street.



*'Streets are components of the urban communication system the means of moving objects, people and information from one sector to another.'*⁵

For it to become a meeting place some important attributes and characteristics that must be present can be identified. One of this is the street must support people to stop, and to talk to each other and provide necessary and appropriate facilities to encourage that activity. But most of the streets in the world do not properly facilitate for two friends suddenly met each other to have a small talk by isolating a bit from main activity stream.

⁵ Vernez, Moudon, A, Public Streets for Public use, P.12

Once two persons who know each other, or two people who just got to know each other meet on the street, a strong urge is created for them to stop and talk to each other. The street to be great must provide for these urges. They must have a tree to stand under, a bench to be seated, or even a nice bus halt may some times suffice.



Fig. 3.1.7 Facilities for public recreation beside the street. breaking the monotonous of the linearity.

And it must let children to be playful, to follow their natural instincts. Groups of children must be able to walk along the street, talking to each other, running all over, slowing down and stopping to see something. The street must be able to tolerate all the mischief of the little ones and both visual and physical feeling make comfortable, to make them get to know each other. And sounds of the birds on trees and smells of the flowers coming from wayside flower shops will catch by the memory than the noise of the vehicles and smells of burned fuels. When grown up, the sixth sense become activated and sweet memories of the street, they grow up walking, talking to each other and getting to know each other must be left for them.

People always do not enter the street to get to their destination as soon as possible. Most of the tome they will enter the street in time. Often, in the evenings the users of the street have more time. In such cases they will used to walk in pairs or groups, chatting or talking to each other. Thus the street must provide appropriate environment for leisurely walk, with out being intimidated. By having different

functions along the street could interest walking and dynamic sensual stimulations will be obtained along the journey.

The street has to be a place to wait. Where a young boy wait for his girlfriend, or one of the senior citizen wait for another of his partners. Even many youngsters prefer to use the street as the initial gathering place, when they have to meet a set of friend and go somewhere.



Fig. 3.1.8 Street as a waiting place. physical and psychological comfort make not the waiting is uncomfortable



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PUBLICNESS

Being public means essentially to be popular among people. It is so arguable how a street is to be popular among people. The urban street, being part of the life pattern is more of a living thing than a lifeless path. It talks with the people, through visual, breezy, noisy, tasty and textural signals and they amplified with the sweet memories.

It interact with the people with its start points, end points, breakthroughs and vistas and it listens to people with the public gatherings providing for the street vender to sell his products. letting the performers to perform on open areas and letting the possessions to take place along its width.

Thus to be public the street has to be in step with its people. It must provide for commercial activity when the people needs to shop for, it has to be a dramatic set up

when people are to perform and observe. The street has to provide varying modes of getting from one place to place to another, be a safe place for its users further the street has to change with the generation, and must adapt in order to survive as a public place.

Support the economic vitality of the region is one of the major functional requirements of a street. Any region has its own economic characteristics. Especially the sustenance of urbanity needs dynamic economic activity. Being an unavoidable public area for the community, the street must support this economic activity. But its special quality and character can improve the economic function as well.



Fig. 3.1.9 The improvement of the psychological picture of a street also supports to the economic stream of the region as well.

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The street functioning as a marketplace, or being a place for hawkers to sell their commodities is an unavoidable fact. It is not possible for a street to be popular, without its places to obtain a bargain, on your way to work or way back from your work. The street has to house major forms of economic activity as well, in the buildings flanking it. The good street must reflect the major economic force that gives life, the essential currency to the region.

And the other important factor of increasing the public ness of a street is to provide facilities for the public functions of the region. In some regions they have their

specific public ceremonies at different periods of the year and some of them were held on streets. So this transport channel transform in to a public venue and create totally different environment by giving user a tremendous experience.

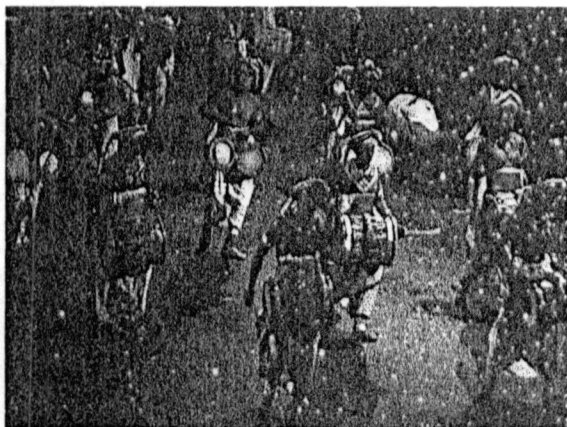


Fig.3.1.10 Transformation of a transport channel in to a public venue

SAFETY

Safety has become a key word in the recent past. With the number of the street based accidents and, crimes in the street on the increase. Major measures are underway worldwide to make the streets safer to the community. A street may be physically safer from the vehicular traffic but it may not be safer to the user by psychologically. Streets with dark silent with no big crowd could be felt unsafely to mind of the user.

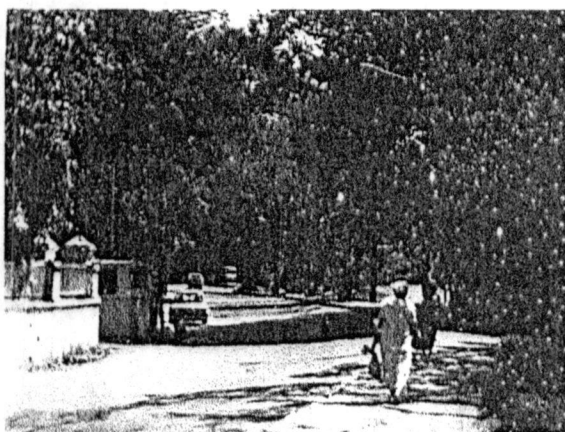


Fig.3.1.11 Physically safe but psychologically venturous

It is most of the time an enlightening experience to walk in a street that provides for leisurely pace, where you neither get the feeling of being crowded nor you feel alone. You do not have to be consciously aware of the street around you. You could be thinking of anything, daydreaming or just blank. Still you are assured that there want be any speeding motorists to hit you or no street based crime to bother you. This is what safety is all about, a street that do not let you be concerned about being on the street, a street that gives you mental assurance that there is nothing to break your concentration, while walking along.

'Every fine street that has been identified in this book is one that invites leisurely, safe walking. It sounds simple and basically it is. There have to be walkways that permit people to walk at varying paces, including most importantly a leisurely pace, with neither a sense of crowding nor of being alone, and that are safe primarily from vehicles'

There are several clearly visible factors that contribute to the feeling of safety. The facades, attractive, colored brightly and humanly scaled are feels safe visually. Even the facades can contribute to the enhancement of safety. Facades, which are attractive, humanly scaled and accessible to pedestrians, provide a sense of enclosure, interest and variety and visual safety.

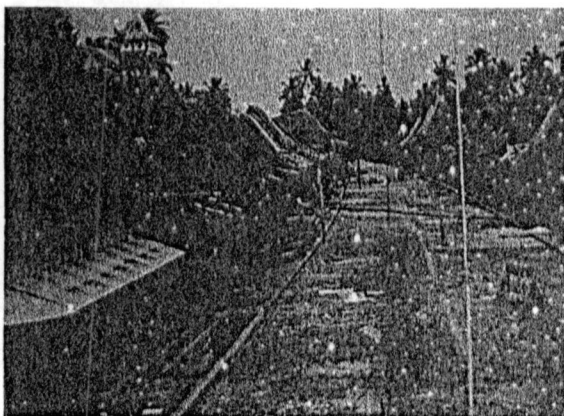


Fig.3.1.12 Loneliness and visual discomfort due to lack of public activities and gathering. But safety may feels through the 'eyes on the street' and through the sounds and smells of the residences beside.

Occupied windows oriented towards the public spaces provide the 'eyes on the street'. They create the feeling of not being lonely. The sounds of the people at adjacent buildings smells of their cooking could break the loneliness even in a street of relatively less occupation. Noise sometimes feels safety but even silent sometimes feels uncomfortable.. With the streets, that have only a pedestrian traffic rate of three or less people, per minute, per meter this feature will provide great help, as such streets will provide a feeling of loneliness.



Fig.3.1.13 'Eyes on the street'



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More encouragement of sidewalk usage also increases the sense of safety. Varying ground level uses and activities that encourage sidewalk use throughout the day and not just during business hours causes better feeling of being in a communal safe place. Good lighting is critical for safe streets at night. Adequate lighting that emphasizes significant street features; walls, street signs, mailboxes and obstacles etc. are critical to the actual physical safety as well as the feeling of being safe at night.

COMFORT

The physical comfort and the psychological comfort influences the quality of the street in various degrees. The physical comfort a street provides is more important in countries with varying climatic conditions, than the tropical countries, of which the

climate is more forgiving. The street will only be functionally at times where the uses can use it without feeling physically uncomfortable. Unbearable or even just undesirable physical conditions could easily keep the people away from an otherwise grand street.

The street if it provides warmth in the winter and the coolness in hot days will be more pleasant to be associated with rather than a street where cold prevails on winter and the summer makes you feel uncomfortably hot. Psychologically this can be done up to certain amount by varying the visual environment. For example, use of more water architecture and cool colors in hot dry climatic conditions make minimum the adverse effect.



Fig.3.1.14 Obtaining the psychological comfort by using more water architecture in hot dry climatic conditions.

The streets could protect its inhabitants from the coldness of winter by letting the sun have maximum dominance by letting the sunrays directly hit the users. In the summer archways, projected eaves and sunshades will provide the users with so much shelter. There must be fountains or street ice cream shops with a sunshade or that permits an umbrella the users to relax, when they feel so hot from a few hundred meters walk. There must be a cool place to sit or stand comfortably when unexpected friends met on the street.

In some streets, the total enclosed approach has been tried. Totally enclosed archways, although cozy in winter and shady in summer have met with failure many times than being successful. The main reason that can be sighted is the desire of



people to use free, open to sky areas outside their house. People do not like to meet people they do not know well in enclosed areas as they do not have the visual safety. Instead they are more comfortable meeting them in open areas, where there is sky above and a lot of horizontal ground for escape. This is just a mental instinct that is inherited by us from our earliest ancestors.

The most comfortable streets are the ones with plenty of shades, unenclosed and ones who prevent cold winds through a host of wind breaking elements such as bends, monuments, feel the textures of the floor to the feet when passing different areas, with no bad noise but sounds of the feet of people and may be the sound of the activities specific to that street and with no bad smells of foul water or garbage but may be a cool breeze of the sea.



Fig 3.1.15 Open sky is felt both physically and psychologically comfort in winter

LIVABILITY.

Livability is one key factor making the urban street a lively one and a communal space. It makes the street different from a channel of mere transportation. Most streets in the world are used just to make a movement from one place to another. It resulted to decrease the interaction among the people and transportation has become a task of boring. The livability of streets is basically two types. People live in

streets as it may livable and cognizant. And people live in streets as they have to live in there but gradually they themselves try to change the environment livable to them. Still the street functions as a pleasant extension of their living areas, their homes do extend in to the street, their life pattern considers the street as a part of their life.

'Its like living in the heart of the city, my wife is constantly looking out of the window. There are lot of activities men standing talking outside their house, the kids playing etc. psople sit on front steps and chat, visit other people, it's a comforting block.'

Many of the urban streets, which accommodate living, draws up the activities when the weather is fine, this is specially true of cities which do not have too much traffic and supports high population density. Also the lack of the space inside houses encourages extending their activities up to street. And some of other several factors like street is the comparatively large open space in dense urban contexts and the street is one of the major resource they sharing etc, is also motivate the use of street for living. Frame of visual in street is more deeper and dynamic comparing to the mostly constant in-house environment. Sometimes the street environment may be more comfortable than internal due to the wind channel effect of the street.



Fig.3.1.16 Use of street as a play ground

Specially children do spend a lot of their time outside on the street, the urban setting, eat up all the space for just shelter, without leaving even an inch for the garden space or backyards. In this set up the natural mischievous instincts of the children force them psychologically to take up street as their play space. They find it to be their playground; it gives them much needed experience about the nature. It makes them learn, they meet each other in the street, growing up using it as their communal space. The sun, the moon, and the wind all meet in the street, and provide them with valuable experience about the environment they live in.

The liveliness of the street is most often a factor of residential density. Once the density is high the commercial activity that occurs in the street reaches sustainable extents. Thus the commercial activity flourishes, effectively letting people to come to the street. Once the street becomes communal many other parameters that are required to make the street livable are also satisfied automatically. Even though that sort of livability is occurred by force due to the density, then people who living their try to adjust the as they preferred and to the satisfaction of their psychological imagery

Having a comfortable environment both physically and psychologically on streets, also influence the livability. Shelter from bad weather is also a much desirable factor. However total enclosure is almost as undesirable for livability as much as shelter. Most often the most welcome are the spaces that provide total visibility of the surroundings while providing shelter from harsh rays of sun in noon and from flattering rain in rainy days. Also streets with all five sensual inspirations are powerful to activate the sixth sense and they are acting as counter magnets to the area.

For the street to be more livable the usage must be mixed. It must provide as a playground for children, while being a place of interaction for the elderly. The commercial activity must take place too.

3 . 2**GREAT STREETS IN THE WORLD****BLEECKER STREET****GREENWICH VILLAGE, NEW YORK, NY**

Small-scale residential street that cuts through the heart of Greenwich Village, with many owner-operated specialty stores, restaurants, and nightclubs.



Fig. 3.2.1 Bleecker street

History & Background

Bleecker Street has been called many things - most evocatively, perhaps, the "Left Bank of America." It has also been referred to as the "breadbasket of the Village." It was on Bleecker in the early 1900s, when the New York area was America's film capital, that D.W. Griffith shot most of the outdoor scenes in his early silent films. In the 1940s, pushcarts made this street all but impassable. Cart operators were forced by law to move indoors, but the street retained its association with food, and today's Bleecker Street still contains some of the best and freshest fruits, vegetables, pastries, cheeses, meats, fish, and delicacies to be found in the city. Bleecker was immortalized in Allen Ginsburg's poetry, and musicians from Gian-Carlo Menotti to Simon and Garfunkel have paid tribute to its vitality.

CURRENT CONDITION

With its small-scale, historic buildings and creative storefronts, Bleecker Street's attractiveness and diversity reflect the best elements of this famous neighborhood.

With its activity, variety, and informality, Bleecker manages to function both as a destination, and as a neighborhood street where residents can still get shoes repaired and buy groceries. The street was defined by the continuous three story solid building blocks. But each one has maintained low scale corridors covered with different colored canopies in front of their buildings. So they could be able to achieve the visual comfort with appropriate proportions of the street as well as the buildings.



Fig. 3.2.2 low scale facades with different color canopies maintain the visual comfort among the medium scale buildings.

Parking available on one side of the street during the day and both sides at night; because the street is narrow, deliveries and doubled-parked cars serve to slow down traffic and easily accessible by numerous subway lines. The street is close to many landmarks including Washington Square Park, N.Y.U., and Sheridan Square



As a major artery running west to east, the street is walkable in that it is narrow and its sidewalks allow for good pedestrian movement. Presence of people makes the street feel safe and maintains a constant level of energy and use. Bleecker Street has a certain nostalgic charm; one can sit in open-air cafes, or a small square on the corner of Sixth Ave. and Bleecker.



Fig. 3.2.3 Open air cafes, Small squares, foods and live music.

Lined with restaurants, cafes and bars, the street is lively at almost all hours of the day. With a multitude of establishments, and many activities spilling out from buildings onto the sidewalks, which was covered with stone blocks, has break the feeling of the height of the buildings directly and has responded to the human scale. Shop windows, doors, street hawkers, brick wall texture and rich foods, cloths and fancy items etc, through shop windows can be seen at eye level. Humans are moving through but also discussing, selling buying, working or playing at sidewalks or at shops and squares. The traffic is generally lower because of that the noises of vehicles get very frequently, but footfalls, voices, some work noises most often music can be heard. The people who walking down normally can experience the smells of perfumes and smells of foods coming out of the stalis.



DOWNTOWN CROSSING

INTERSECTION OF WASHINGTON ST. WITH WINTER AND SUMMER ST.S, BOSTON, MA

Remodeled in 1979 and again in 1983, the bricked pedestrian streets threading between major department stores are the site of a large-scale, long-running vending cart program.

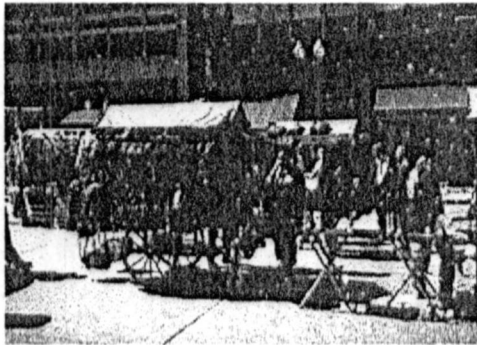


Fig. 3.2.4 Cart vender program brought life back to the street.

Located at the hub of downtown Boston's retail and transit activity and covering several blocks radiating from a central "T" stop, Downtown Crossing has always been a popular location for department stores, specialty stores, and eateries. But when the streets were closed to vehicular traffic in the 1970s, much of the pedestrian traffic evaporated as well. To bring life back to the street, the Downtown Crossing Association was established in the early 1980s to manage a cart-vendor program that controls the image and viability of the vending carts

HISTORY & BACKGROUND

Washington Street has historically been downtown Boston's major thoroughfare; in the late 19th century, its commercial importance was undisputed. By the 1970s, the area was in decline, yet it was still a major commercial center. Auto traffic had increased, but at the expense of pedestrian space for shoppers, who kept Downtown Crossing's retail engine running. Following the success of nearby Faneuil Hall

marketplace, the city initiated plans in 1977 to redevelop Downtown Crossing as a car-free marketplace, coinciding with major transit extensions intended to increase ridership and, hence, Downtown Crossing patronage.

In 1979, the new Downtown Crossing was unveiled. It boasted wide brick sidewalks, all sorts of pedestrian amenities, and no cars. However, even though a 1980 Project for Public Spaces survey found that area had become more vital and popular, it became apparent that removing cars and giving the entire street to pedestrians was not working as well as had been hoped (nor as well as at Faneuil Hall). With so much space, many areas were underused.

To maximize the use of Downtown Crossing's public spaces, PPS proposed rearranging amenities and developing a management program to sponsor activities in Downtown Crossing. The Downtown Crossing Association was formed to implement PPS' suggestions, and in 1983, the current Downtown Crossing Marketplace opened.

The Association established a partnership with a private operator to start and manage the vending program, thus avoiding expenses itself. The Association ensures that the 75 on-street vendors sell a wide variety of products, don't compete with existing stores, and are located strategically. For example, only one-quarter of the carts can sell food, and impulse-purchase products are located near entrances to the transit station. Strict guidelines control cart appearance, quality of merchandise, and return policies. Revenues are shared between the operator and the Association, and also go toward activities such as concerts

CONTEMPORARY SITUATION

Even if this is located in a heavily trafficked area downtown, near the Boston Common & Public Garden, it has very good access on foot, by bus and subway. Auto access is limited at best. A strong retail/commerce image provides a pleasant alternative to suburban-style malls. Large open ness of the place let the sun to fall in

and make comfort from the cold climate as well as bring enough light in to the place. No noise of vehicles but can hear the sounds feet touch the brick paving on the floor. Walking is interesting and comfort is good; people feel like this place is "real."



Fig. 3.2.5 Down town crossing,
A place of real

As a transit center, the area attracts pedestrians and commuters. As a retail center, it offers department stores, specialty shops, cafes, carts, etc. It is also a business/office center. As a social/recreation center, people come to Downtown Crossing on the weekends to shop, stroll, relax, and meet others. This is a place where people go with their friends or family to enjoy being in a vibrant urban setting and either actively shop or simply watch the people go by.

LAS RAMBLAS

GOTHIC QUARTER, BARCELONA, SPAIN

This series of pedestrian-oriented boulevards is so much a part Barcelona that Spaniards coined a name for its users: "Ramblistas."



Fig. 3.2.6 Las Ramblas

A tremendous variety of eateries, shops, markets, and cultural institutions can be found here, along with a huge number of pedestrians and people-watchers. About 1.5 kilometers long, Las Ramblas is really a sequence of three pedestrian-oriented street/boulevards. Its central pedestrian promenade is unique in many respects, not the least being its agreeable aesthetics (which come from its pleasant proportions, relative to adjacent development). Landscaping and provision of ample seating are two other big plusses.

HISTORY & BACKGROUND

The Ramblas are rich in tradition and history. The Font de Canaletas, an old iron fountain at the beginning of the promenade, has an associated legend: all those who drink from it are truly of Barcelona. The monument of Columbus at the waterfront end speaks to Spain's glorious imperial days. And the Ramblas itself, including the Placa de Catalunya at its head, has a secure and storied reputation as a center of high society, debate and discussion, and people-watching - so much so that it has



actually entered the Spanish vocabulary: a "ramblista" is one who saunters along the Ramblas, perhaps making a day of it.

What is now Las Ramblas used to be a riverbed; a wall there marked the limits of medieval Barcelona. By the 15th century Barcelona had expanded past this wall, and the character of the Ramblas changed. In the late 18th century, construction began on the characteristic central pedestrian promenade, which replaced a section of the city wall. By 1856, all remnants of the old city wall had been torn down and the Ramblas, by then Barcelona's main thoroughfare, looked much as it does today.

PRESENT ORDER

The street is lined with five-to-seven-story buildings, street-level display windows, and many entrances. The central walkway is, on average, 60 feet wide; sidewalks are usually less than 10 feet wide, encouraging walking in the center. A row of trees separates the central walkway from automobile traffic - two lanes on either side (plus one parking lane). Pedestrians have precedence: Cars are relegated to narrow shoulder-lanes and must at every turn accommodate pedestrians, who are free of intersections in the central promenade.

Therefore, pedestrian traffic is always high, partly because of the area's 24-hour attractiveness and partly because of the mixture of activities; regardless of the time of day, there is something to do. A huge number of different enterprises are in operation here - traditional retail, specialized vending, kiosk sales, markets and exchanges, fairs and exhibitions, seat rental, shoe-shining, eateries and pubs, entertainment, etc. There are also a number of museums and cultural institutions



Fig. 3.2.7 Having the great experience of walking under the canopy of trees sited between the two rows of buildings.

The proportion of street given over to pedestrians is quite pleasing, as is the harmony between street width, building height, landscaping, and intensity of usage. A mix of activities promotes diverse image and flexible character; Las Ramblas seen as Barcelona's characteristic, most important, and best street

Pedestrian promenade and sitting area for people watching, discussions, entertainment, etc.; retail and market space; exhibition space, festivals, bazaars, demonstrations. Restaurants, eateries, bars; cultural institutions, museums, monuments (Columbus statue, Canaletas fountain)

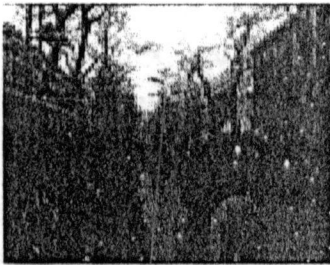


Fig. 3.2.8 Mix use of functions increase the all sensual inspiration



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Convivial mixed-use retail, eating and entertainment area promotes sociability between users. Ample seating is provided along central promenade (benches, planters), with additional seating in vicinity of cafes and restaurants. Comfortable atmosphere promotes social contact; Rambias has reputation as forum for interaction. Diversity of uses helps ensure a diversity of people.

3 . 3**STREETS IN LOCAL CONTEXT****YATINUWARA VEDIYA****KANDY**

As a sacred city Kandy has a great heritage and set of historic buildings, which have been conserved. It is the most important Buddhist religious city of Sri Lanka, because of the location of the Temple of Tooth Relic. Thus an extensive disciplinary is reflects from buildings, from streets, from people and from the city itself. The last king of the Sri Lanka called King Sri Wickrama Rajasinghe lived in the Kandy until he was arrested by the British in the Eighteenth Centaury. And it was the last capital of Sri Lanka before the period of colonial. At present it is functioning mainly as a sacred city, as a commercial and service center, a residential city and an archeological site with unique pattern of streets.



Fig. 3.3.1 High Pedestrian traffic discourage the vehicular traffic

This is Small-scale Commercial Street that is also running in front of some important government agencies, with many owner-operated specialty stores, restaurants, shops and branches of some large companies. Vehicular traffic was not discouraged by the design but it is normally not encourage due to the heavy pedestrian traffic at some times of the day. Sidewalks are paved with concrete slabs and properly

maintained. So, pedestrians feel comfortable and encourage walking but in some cases the pavement is encroached by the cyclist and street hawkers discouraging the walking. Noises of traffic at times are intense and chatter of bikes is frequent. Foot falls and voices of the people are common. High pitch voices of the street hawkers and sounds of birds and crows can be experienced frequently. The street is almost shaded with belt of trees at one side. Most of the buildings respond to the human scale but almost all contributed for a better visual entity.

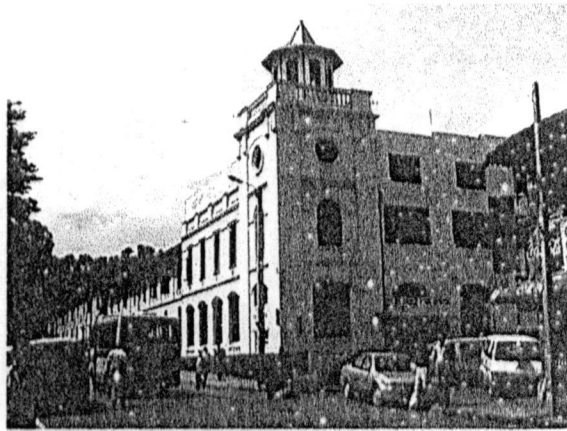


Fig. 3.3.2 Yatinuwara Veediya

People are moving most probably as groups more than one. Especially after schools clusters of students are visible on the road. People are waiting at the road rarely except at bus halts. But sometimes can see couple of people chatting beside the road.

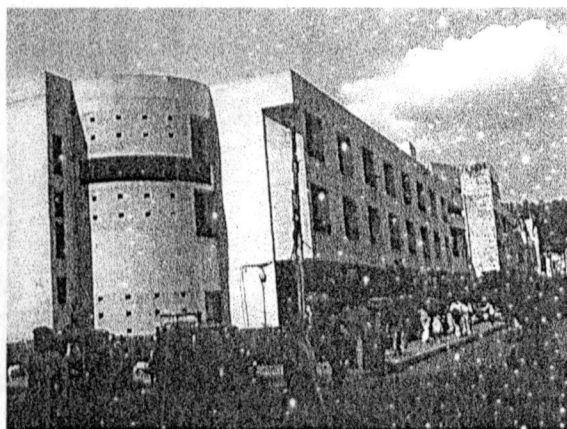


Fig. 3.3.3 Street is shaded by both buildings and trees

SANGARAJA MAWATHA

KANDY

This is one of the attractive and welcome streets at Kandy, which is connected to the Dalanda Veediya at nearby the Queen's hotel. It has about 15 feet wide sidewalk, which is at little higher than the road level. It is almost shaded with a row of large old trees planted between the street and the sidewalk and one side of the road is defined with the lake and its retaining wall.

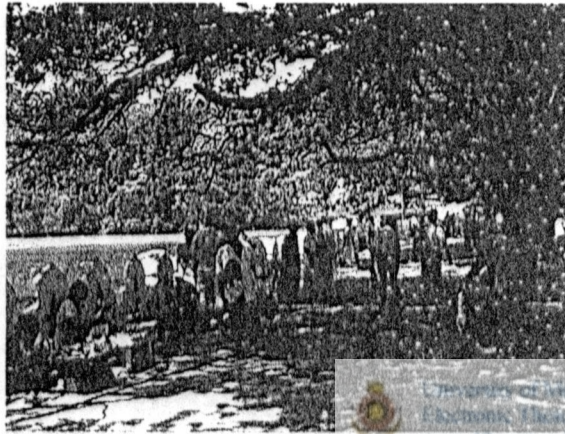


Fig. 3.3.4 People are Moving, Waiting, Chatting, Selling and buying.

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The street is not a high traffic zone but mostly occupied by the pedestrians such as tourists, devotees, visitors and street vendors. Some people use the walkway to passing through but some are waiting and chatting, tourists and visitors are standing as groups and looking around, some buy flowers and little food items while street hawkers shouting and trying to sell their products. And it is very popular meeting place where people are waiting for their friends to joint with.

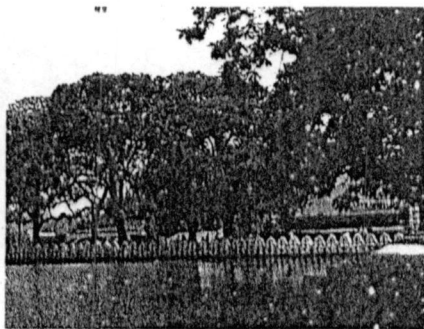


Fig. 3.3.5 One side of the street is the lake, which help to increase the psychological comfort in hot dry climatic condition

The boatyard is the other special function, which may increase the value and the population of the street. Because of that it has become attracted and memorable among both tourists and visitors of the Kandy.



Fig. 3.3.6 The view of the 'Maligawa' and the boatyard

The reflection of the Maligawa can be seen on the lake by the person who walking along the sidewalk towards the Dalanda Veediya. And a large visual open space, the Lake is at his right and side. It is both visually and psychologically comfort due to the shade of the trees and the reflected light from the lake. Cool breeze of the lake, visual richness, smells of flowers, which are being sold by the venders, and the sounds of the drums at the Temple play in the morning and evening make the place more livable.

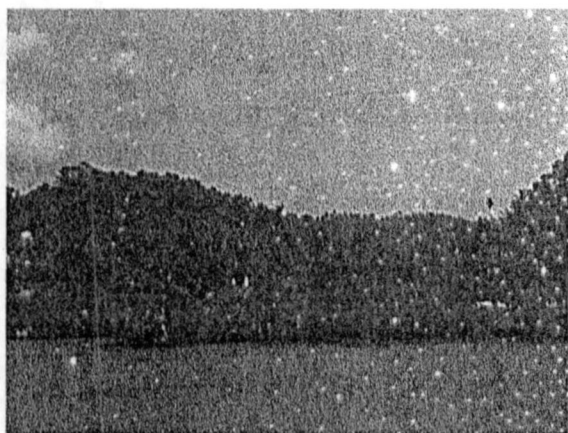


Fig. 3.3.7 Visual richness



DALANDA VEEDIYA

KANDY

Dalanda Veediya starts from the Temple of Tooth Relic and running down towards the city. Thereof lots of important and historic buildings including Dalinda Maligawa are located at this street. Queens's hotel is one of the other important historic buildings at Kandy, facing to the street. Dalanda Veediya is one of the main streets in the Kandy and also depicts the sacred quality as its name and purpose. Various other streets are connected to the Dalanda Veediya and it acts like the backbone. A part of the street close to the Maligawa bounded with the lake at one side at higher elevation than the road. The other importance of this street is the Dalanda Perahara; the main ceremony of the Maligawa is starts from this street.



Fig. 3.3.8 The dark quality of the street: increasing the sacredness of the place

This is both vehicular and Pedestrian Street. But vehicular access is not encouraged close to the Maligawa and it is inaccessible for automobiles at ceremonial season. People who visit to worship the Dalanda are walking along the walkway of the street, which is paved with slabs and shaded with trees at between the street and the walkway. The other side of the walkway is defined with the retaining wall of the lake called 'Valakulu Bamma' means cloud wall. So, people who walking can experience dynamic visual environment of the lake and the breeze blowing over it. Because of the sidewalk is built at little higher elevation

from the street, walkers feel safe as well as different angle of vision than normal which may caused to increase their devotion.



Fig. 3.3.9 Queens hotel as a important historic building facing to the street.

Smells of flower and sticks which is at the hands of the devotees and the vision of the Maligawa which is coming to appear gradually while closing to place cause to accumulate the religiousness and the sacredness of the place. The dark environment of the street due to the enclosure of trees also help to increase that feeling further more. With these changes of the environment the memory is being worked immensely and temporally transforms the visitor in to a perfect devotee.

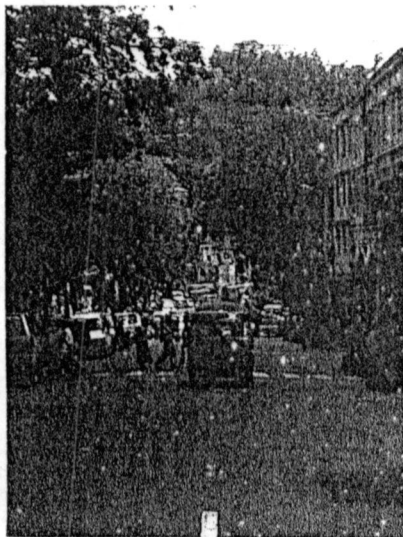


Fig.3.3.10 Dalanda Veediya.

C O N C L U S I O N

*'Streets that have life and visible street's life are like a party, we wish we could go to'*¹

The street is a dynamic place, a place, which supposes life. The conveyor attribute of the street provides its with a liveliness of its own, a true dynamic flow, which is unseen on many other places specially in the static places that is spend most of our life in, like the home or the place of work, the street provides the break, either consciously or un consciously the urban dweller encounters this changing space everyday, every time he has to travel from one location to another. Consciously or un consciously the man expects the street to be dynamic, specially the urban street. the urban dweller expects to fulfill his needs to meet with change, need to delve in to unknown, in the street

The streets that do really provide for this expectation becomes lively, becomes dynamic, a place people would like to travel through.

The streets being lively and dynamic become places where people are at more attention. The senses become more active in the street.

The study has taken the stand that any place, is to be felt rather than seen. In actual life it is only people who consciously take the time to look, to analyze who will see the space. Almost all the other passive users, who just tend to use the space does not view it. Instead the space is some thing felt for them. Space is something which stimulate vision, hearing, touching and even smelling and tasting although a lot has been written, lot of views have been formed, formulation the correlation between the visual aspects of the space and how its felts, less attention has been paid to the ability of place to stimulate the other senses.

¹ R. Appleyard, Livable streets. P. 245

In the analysis it is seen that each of the five senses has its own way of contributing to the sense of place, which is an intangible concept; the sense of place is understood to be visualization, a big picture formulated in the mind. Formulated through what a person obtain by all his senses; and formulated in our sixth sense, the mind. One comes to really breathing in the place when it is permanently registered in his or her mind; the place is felt up to the deepest innards of ones mind, when the place stimulates all the senses of the person, in a way appropriate to that particular place. Creating in our mind of the definition of a particular type of place. In other terms; the definition of a particular type of place created in our sixth sense based on all the factors obtained through the five tangible senses.

In the most cases it will be some single stunning quality of the place which would be captured in the mind to formulate the feeling of that particular place; many designers have sought after the quality; the single stunning thing that will create an immediate effect in our sixth sense; to create an inerasable imagery of the place. As one conclusion of the analysis of the formulation of imagery through the five senses; it is argued that this is not just one quality. Even though most designers are after the visual appeal of place to make it striking; it is argued in the study that it is some composite attribute of the place; a composition of what all the senses produce, which will create the striking effect of the place.

In the study effort has been taken to prove this stand through an analysis of sensual inputs in a place. How each sense obtains the characteristics of a place; and the reaction of them; and the contribution to formulating a composite visual imagery.

The street was taken as the ideal place to test the theory. Being a place with more sensual stimulation, more dynamic characteristic; the street provide a better testing ground to apply and analyze the theory. Thus the study concentrates more on what the street provides to our senses; and how it formulates the visualization of the street in the sense size.

It was to be found out that each street generates, its own characteristic; its own attributes in ones mind. Each street is unique in what it exposes to its users; providing the user with a place to be felt; a place to be breathed in. and this unique characteristic attributes to the imagery created by what one obtains through all five senses.

The analysis on the qualities of the world streets has contributed as a springboard towards the proof of the fact; the place is to be grasped in all five senses. The case studies on Sri Lankan streets; offered the chance to do a more detailed study on how each sense contributes towards the formulation of imagery of the place; street in particular in the sixth sense.



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