



**“SPATIAL PROGRESSION”;
AN EXAMINATION OF THE PHENOMENON WITH
REFERENCE TO SELECTED STREETSCAPER**

A Dissertation
Submitted for the degree of
Master of Science (Architecture) at
Department of architecture,
University of Moratuwa.

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2007

89505

Declaration

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



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This is to certify that this Dissertation has been supervised by me for 3 months, from end Sept. 2006 to end December 2006] of its development .

The work basically involved understanding the Topic , evolving the strategy for research and writing .

I understand that the Dissertation Programme had been introduced earlier but did not have any responsibility at the early stages of the Programme.



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Abstract

Architects are professionals who are actively involved in the effort of making a better place to live for the sake of the mankind. It is their responsibility to design the whole built environment, spreading their careful attention all over; inside the buildings, outside the buildings; in the streetscape, in the townscape, in the cityscape, in satisfying the requirements of the duty not only as a professional but also as a human being.

Learning the strategies can be used to produce the most appropriate built environment to serve the society in the professional carrier is a part of the studies of an architecture student. The phenomenon of orchestration of 'spatial progression' is the important and latest measure of the main stream architecture in confirming the richness. This effort is to uplift the usage of this phenomenon in the exercises of architecture and to expand its successful achievements from inside to outside.

The main focus of this study is drawn towards examining the dynamics of 'spatial progression' in streetscape as a new vision in achieving the developments in the built environment, which the man is daily confronted with, unavoidably and specially provided with a neutral ground to act freely without the impact of special responsibilities and duties.

1. Topic explanation

Spatial progression

Architecture as the art stands for the human habitation, produce compositions of spaces to create suitable environments to function specific activities. Accommodating a particular activity to carve out the meaning to be expressed, can not be done by a set of spaces and an arrangement of them. There should be a progression to attain a particular directional order with a rhythmic movement made towards the major space where the major activity is. So the spatial progression is the grammar in combining the spaces to make a better architectural product and that is the reason to give priority to the progression of space in talking about architectural spaces.

Street

Street is the connector of every space contains human habitation on earth. People can not run away from the streets intending to find another option instead of that where it exists in different formations as a corridor connecting the spaces in a house to the high ways connecting the countries far away. The street is the place where all people provided with one role to act just as a human being; the same condition for every body and to forget the things done before and has to be done.

Streetscape

The street can be identified as a space, which has and should have the contribution of the architecture by the streetscape. Streetscape is the builder of the space in a street and creates different ambiences and a variation of spatial experience of the traveler. It means the profession of architecture has the duty to create a better environment in the streetscape.

Examination

In this particular study a close and a careful look is taken over the phenomenon of 'spatial progression' and its application to architectural products. Even though it is said the phenomenon of spatial progression is limited to building designs, there are examples of streetscape where this phenomenon can be identified, which is done intentionally or unintentionally. So it is examined the way it is applied and the intensity of manipulating the required experience, which can be improved and taken as the food for succeeding meaningful street designs in future.

2. Need for the study

Observation

The man of the modern world with sophisticated life-styles and unlimited 'wants' travel through the spaces (Flow spaces) to different destinations (container spaces) to perform different activities. We often find situations where particular performance which has to come out in a particular destination or the performance as a human being is not satisfactory after completing a stressful traveling. It seems merely a problem goes with the bad vehicular and road condition responsible for the physical comfort of the user where the crucial aspects of the problem, responsible for the psychological comfort of the user is hidden.

The environment created by the man by him-self for the easement of their functions which has the capacity to impose different situations for him to perform differently. Most of the spaces created by the modern world are profit oriented. The consideration given in this manifestation is financially and functionally sound. But these environments, full of such spaces do not take the care of the people who use it and who pass it. Nowadays the most important thing for the people is to show off the power of the built structures they own and to attract people. So the observer is addressed by various expressions which are fighting to come up and at one time and which make only a noise rather than a rhythm to make the observer comfortable and contemplative. They get just a

confusion without finding them-selves that environment and feel ill. It is evident that the skills of the people are provided with a high commercial value even though the man is not the priority in this environment.

Criticality

In present day people suffering from this 'soul destroying' traveling through the space, and with little opportunities to have a rest from this stressful situation imposed to the life and contemplate in his ordinary life. The impact of this situation is visible in the life styles of the people and in their performances. The danger of this unhealthy situation is visible with the increase of neurotic people; senseless, lack of imaginary power reducing creativity and with a poor working capacity.

The architecture primarily is an art. When the relationship of the art and the human being is considered, architecture is the art which has a direct communication of the day today life of the people; hardly bound with the human habitat and become the inescapable art for the human being. And when a street is taken to account, architecture is the primary contributing factor in creating 'streetscape'. Even though the unhealthy streetscapes crucial in changing the pattern of human life and destroying the performance as human beings' it is difficult or in actual speaking no chance to escape from this unsuitable environments. This should be thoroughly considered in deigning the built environments.

3. Intention of the study

In considering the evolution of the architecture the measure of architecture changes from time to time. Earlier it is accepted architecture as designing of spaces. Within that situation the spaces enriched with required spatial qualities was the result. Later the articulation of the spaces was considered as the measure of the main stream architecture. But it is realized the jointing of different spatial qualities where the spatial and functional attributes are clear is not enough to obtain the richness of architecture.

Presently it is understood the 'orchestration of spatial progression' is the measure in identifying the success of an architecture product. It has been practicing by the present day architects in their products and also has experienced the significance of the orchestration of spatial progressing in changing the mind set and the mode of behavior of the user with a carry away thought which it makes the user contemplative as a good result of this notion.

It is almost a well established phenomenon for the building designing. The street as an important architectural space with a tight bondage with the people has to have the application of this phenomenon. The streets as the transitional ground for the man, which acts in between containers it is intended to identify and establish the phenomenon the orchestration of spatial progression to the street for the well being of the man.

4. Method for study

'The spatial progression' as the main focusing of this study a theoretical basis is produced to prove the importance of spatial progression in architecture for the perception of the human being as the well established form of art. Spatial progression is basically the movement from a space to another. This movement which is also a component of other forms of art has to have a rhythm and a meaning to distinguish the out put as an art or a noise. The play of the movement and rhythm is extracted by analyzing other forms of art which are closer to the people, to ease the understanding.

The data were collected being in a theoretical base to identify and establish the 'street' as a space and streetscape as a manipulation of architecture. It is strengthened by the study of the role of the street in physical environment for the usage of the man, but with a little chance to run off. 'Spatial progression' an orderly arranged spaces generating a rhythmic movement with a beginning, a direction, a path, a journey and a destination dealing with the streets detailed step by step to understand the proper way of activating it.

An argument was created with the studies of spatial progression within the buildings and the theoretical basis to examine and to establish the orchestration of spatial progression and its dynamics in streetscapes through selected examples. In this

examination the opinions, observations and reviews about selected examples of a peer group taken to account. The streets selected for case studies are Main streets highly used by the people with sufficient environmental qualities to identify progression of space to examine how the spatial progression is effective in creating different situations in the life of the people.

5. Scope and Limitations

The study is done to examine the way the rhythm and movement play in the experience of human being the way the streetscape becomes architecture, the way spatial progression could be related with streetscapes for the well being of the user.

A work of art is a composition of different elements in suitable amounts to become a good product and a perfect communication with the beholder can be achieved by that whole mix. The rhythm and the movement is the only component selected to see how effective in emitting symbolic expression among the aspects have to be fulfilled to gain a successful product.

The consideration mainly goes towards the major progression of the space. But when it deals with the existing streetscapes there can be only a part of the spatial progression or it can be not in the most suitable formation or the correct intensity, but something closer. So the examples are selected as segments of streetscapes or a combination of streets, with the intention to form a better progression of space can be used as a model ultimately. And also the short comings of existing progressions and how they can be developed also will be discussed. The selected examples are found locally and do not go for foreign examples. Streets can be categorized into different forms from a corridor within a building to high ways. The streets of large scale such as free ways are not selected as examples. When the selected example is a long artery running across, a segment which is often used by large number of travelers is taken for the study and the whole length is not considered. With the limited time period the study is carried on theoretical base and arguments and not gone for the methods like surveys.

The experience of architecture is essentially a personal affair depending on the readiness, the nature, and the capacity to understand the symbolic expression of the man. The study does not go to such a depth to find the intricacies of such aspects. The psychological changes caused by a progression of space are to be felt. When it is explained with the use of words it will be difficult to build the real impression inside the reader. The drawings and the photographs also bring limitations with them selves as they may not quite successful in presenting the spatial qualities holding by the actual space.



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Chapter one: Rhythm and Movement in Art and Architecture

1.1 Artistic experience and appreciation of art

Time is the factor that the motif of the human life is made from birth to death pushing over different experiences, developing the capability of analyzing the past, experiencing the present and facing the on coming future with a store of memories rich of emotional and practical knowledge. That is the piece meal process of human life learning about the outer world social, cultural, environmental and economical aspects of it, and revealing the inner life and building an own interpretation.

Art is the expression of the articulated emotions or feelings of humanity; the medium of communicating and conveying messages to the rest. The product of an artist could be an own innermost feelings or an interpretation of own or others experience, behavior. It also could be a different aspects of some thing which scarcely seen by the others. If the creation of art forms and their products is attempting to show the aspects of humanity they have to have the things, common for all the man kind. That is the way an art becomes a 'universal' attainment. And also that is the way the things deviate from art to non - art.



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Fig. 1: Stone carving, conveying message to the observer

So experiencing of an art form of a person should be a stimulation to go to the deepest point of the mind and arouse and compare with his own emotions. In further he captures the meaning or the message converged and gets an insight to the life.

“Mans’ activity consists in either a making or doing. Both of these aspects of the active life depend for their correction upon the contemplative life. The making of things is governed by art, the doing of things by prudence.” (Coomaraswamy, A, 1981, p.193)

Like wise the artistic experience a man gets is not only in the moment of the contact is made with the art, but also enjoying that experience by recalling the essence or the significance of it.

If it is accepted art as a universal attainment, the richness of the product depends on the way it is perceived by the people. That is true the response to an art has a personal bias. But the artist products consider as good over a period of time; perceived by the majority have certain qualities, capable of clutching the impulses of the observer. These qualities can be said common for all the forms of art. An art has a physical basis and a composition of elements, composition of these physical elements of an art, into a certain pattern has to have an order, progression, rhythmic movement by itself to make it an experience and to support the intuitive process of evoking the feelings. It is not merely a physical movement and a rhythm but also a rhythmic movement of psychological experience. Then only an enjoyment emerges with selected memories and imagination which almost contributes for the contemplation by the person where he is not left in delight but brought to the level of wisdom and joy.

1.2 The concept of ‘progression’

In simple the ‘progression’ is a word indicating some kind of a movement. When it comes to a work of art it is a movement through assemble of series of components or events. A particular pattern towards a direction in this arrangement of elements is obtained by the artist in order to highlighting the meaning required. It is easy to understand as neither an engine nor an orchestra nor can a sport team perform without the integrated cooperation of all its parts.

There are certain characteristics can be identified where an artist gets an ample use of to have a delightful articulation within his products. They are the characteristics such as direction, order, hierarchy and often rhythm. The directional path

focusing the climax where the major happening of that art take place. It is the thing which draws the attention of the spectator without make him wander, is a must in a good out put. It is emphasized the significance of the 'order' as an indispensable quality in any organized system and the importance of the principle of 'unity' as the main purveyor of order and 'hierarchy' as the primary means of achieving unity.

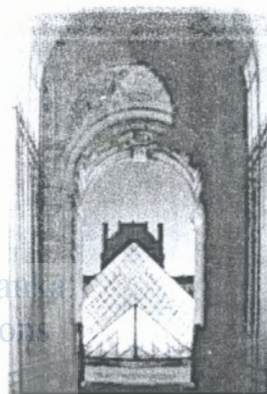
"The possession of a dictionary of words doesn't make a writer. Words have meaning only when ordered by thought." (Robertson H. 1960,)

And there should be also factors to highlight the progression, when people go through sensory experience like the change from light to shade, bright to dark, hot to cold, noise to silence, rough to smooth and from variation of sense of smell.



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Fig. 2: Progression from shade to light, dark to bright, cold to hot, ...



The preparation of progression happens by clear indication of starting and end point and the movement towards the major point. The unbroken flow of impressions as a person progress on should be continuous and harmonious. This flow of impressions could be supported by the movement of the episodes of work of art as in poetry, music cinema and etc. or by the physical movement made by the observer by himself like architecture, or that movement could be only within the mind through a series of memories created by the art forms like painting.

The cleverness of the designer makes this articulation of a rhythmic way or the orchestration, creating correct emotional impact within the observer in conveying the required message.

In all together the meaningful rhythmic movement defines the progression through the order of hierarchical components; heightening the dominance within the wholeness of the composition, where the work of art is distinguished by the noise of disorder and leads the enrichment of the work of art.

“All art is simplification: it implies the introduction of order where previously there was disorder”
(Edward, A.D., 1968, p.167)

1:2:1 The Movement

The word ‘movement’ suggest a momentum a displacement with the time which could be forward or backward, horizontal or vertical or diagonal, rightward or leftward, up or down, ascending or descending, speedy or slowly and etc. Among the aspects in emergence or a work of art ‘movement’ is very important in experiencing components it comprised of.

When the form of the movement varies as described above, the situation created also vary. The horizontal movement is comfortable for the man and to his eye and provides a chance to have a quick and safer movement than vertical movement. And the direction change is easier in horizontal movement. The growth, freedom and aspiration can be created with ascending vertical movement like the vertical movement of a tree as it grows up. Using the rise of the sun in work of art is such indication. And also the descending vertical movement implies heaviness, anger, the crushing power as owned by a water fall. Downward movements are employed in art works to indicate the things like destruction or death. The diagonal ascending and descending movements are very dramatic and often used in art forms. If a painting is concerned the movement from left to right is easy to follow where the right to left motion is stronger. The speedy movements are in use of expressing the power, happiness, anger and the opposition of that the slowness of a movement is used to symbolize sadness, fear, depression or calmness. The change in a movement in a product is capable of capturing different situations to act. Constantly changing environments in varying distance incorporate a free movement. The interrupted continuous movement, the directional change in the movement is popular among artists specially in absorbing the whole attention of the observer to the next event.



Fig. 3: Horizontal movement which comfort the man



Fig. 4: Expressing growth, freedom and aspiration in ascending vertical movement

The movement included in an artistic product is almost for the anticipation of the perception of the spectator, convey the message and to speak up to his innermost part. The creation of this motion is different from one form of art to another. In art products like cinema, drama, music inherent an own physical movement and it moves in front of the spectator and spectator needs not to change his mode.



Fig. 5: The movement of cinema, played in front of the observer

The spectator is expected to make a movement through the episodes to experience the arts like architecture and poetry. And it is different in the art forms like

painting and sculpting. The product is still and the elements of it are frozen. The imaginations of the observer aroused and motivate to have a progression through the memories stored.

As discussed earlier the manipulation of an artistic product is not only generating a movement in between the physical components. The psychological movement, by the sequence of experiences is essential in perception, generating a series of emotions. That is the reason for the movement used in art is supported by variation of qualities sensible and comprised with a meaning and a rhythm.

1:2:2 The Rhythm

The recurrence of any kind of a character; sound of movement in regular intervals makes the wholeness of it. Beat of heart, breathing, seasons, the ocean waves, click-clock of a clock, that is the rhythm so close to our lives. We can never hear the whole shape of the tune of music at once, or see the whole pattern of a dance at once, or in architecture all the episode of spatial progression in a single moment. But when the contact with the art form, experiencing is over there is something still hold in our minds; an echo in our mind some kind of a pattern we have been following; that is the rhythm owned by the artistic product we experienced.



Fig. 6: The rhythm in stone sculpture

Rhythm has a time element and movement. Basically the rhythm is achieved by the repetition and the break of repetition in any character. Even though this phenomenon is general to any form of art the attribute of rhythm differs in each art form.

The following is a personnel view of the behavior of rhythm is in art forms, which can be accepted by the others also.

- | | |
|-----------------|---|
| 1. Music | -Time signature
-Measure
-Up and down beat |
| 2. Painting | -Pattern |
| 3. Sculpture | -Recurrence if similar association of form within a composition |
| 4. Poetry | -Tonic accent
-caesura |
| 5. Dance | -Beat
-Movement |
| 6. Architecture | -Alternate of openings and volumes colonnades, arcades, etc.
(Poul Jacques Grille, 1960,P.20) |



Fig. 7: Beat & Movement

It is the thing used to achieve the pure pleasure of the product, to echo the senses and specially to emphasize meaning. It is evident that human beings, animals, plants as a creations of nature they should have stimulating effect of rhythm. Their physical, biological, activities have reflection of rhythm. So it is easy to get something absorbed to the man giving it in a rhythmic way.

1.2.3 The meaning

When a critical study is made on a thing, the components it is mode of are distinguished, the attributes owned are analyzed, the phenomenon used is studied. It is same in studying art forms. The attributes such as healing and refinement in art is discussed in broader level. All these things get neither a less significance nor a higher significance. This situation strengthens the request for a wider appreciation of art to get a better insight. That is the 'meaning' given the inspiration to the creation, the meaning is to be revealed to the world, the meaning perceived and absorbed the man, with a better insight to their lives.



Fig. 8: Pablo Picasso: Le déjeuner sur l'herbe. 1961.
Meaning attitude is embodied in the work of art and evokes feelings.

The word 'meaningful' was stressed in the early 'statements' in relation to the order of the components the rhythm, the movement which are the attributes of an art. All other attributes should have a representation of the meaning attribute. Definitely the manipulation of the wholeness within the ultimate output done by the effort in expressing the meaning by individual elements and the richness of it.

"I am for richness of meaning rather than clarify of meaning for the implicit function as well as the explicit function. I prefer 'both and', to 'either or', 'black and white' and some times gray to black and white. A valid architecture evokes many levels of meaning and combination of focus: its space and its elements become readable and workable in several"



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(Venturi, R., 1966, p.16)

In conveying the meaning possessed by arts use different and own specialized modes of communication, such as music – audio, cinema – audio and visual, poetry – oral. However the importunacy is in the efficiency of conveying meaning to the spectator stimulating his sensation and motivates the useful thinking.

"this happence because the wholeness it-self touches us, reaches the deepest level of us, has the power to maove us, to bring us to tear, to make us happy"

(Alexander, C., 1987, p.14)

1: 3 Meaningful Rhythmic Movements in Art

As discussed earlier the 'rhythm' and the 'movement' or the rhythmic movement is materials of any form of art in activating it, giving the life and tangible by the people and fulfill the intention of the artist by facilitating the communication in

between the product and the observer. But the behavior of rhythmic movement within the episodes of the artistic product varies from one form of art to another. But the necessity of the progression or the rhythmic movement and the capability of giving experience, the communication or making the man contemplative and developing their imaginary power, sensitively, creatively and comfortably of the life pattern is same to every form of art.



Fig. 9: Meaningful rhythmic movement in Drama.

1.3.1 Up-Down beat in Music.

A composition of sounds, arouse from different instruments construct the form of art; music. The opposite of that the noise is generated where a disorder of sounds is made. Therefore it is evident the sounds arranged to a pattern is a hierarchy is a necessity and the progression through this order of sounds from the beginning the rhythmic movement towards a climax and an end is essential to produce not only an ear catching but also to touch the inner mind of the spectator .

In music the unit of rhythmic movement is the beat. The simplest recurrence of an impulse in music is one-two, one-two, which any person can and grasp very easily. But they are not longer used. There are also kinds of music compositions with rhythms of placement of impulses are very profound, and the listener also has to have a thorough knowledge to understand.

Rhythm is the dimension of musical experience which exhibit the 'activity' related and it is for nothing more than perception of temporal pattern and facilitating the imaginative perception. This rhythm is simply the tones and the spacing between. In a great symphony, the repetition which the material of rhythm like the

opening cords which prepare the ear for complex adventure, and to make it more advent and to get rid from the monotony. The continuity of repetition is broken introducing certain elements.

All this rhythmic play within music composition is all to make it live to the listener and to produce some kind of a communication. On the other hand music is a more friendly form of art for the people, in their day to day activities, which can obtain a change mood in a shorter period of time. And also music is the art can be employed to give pleasure or reducing the tiredness of other activities. The rhythmic movement in music is specifically used to impose a rhythmic movement to another activity of the spectator. That is the reason to use back ground music impose a mode of behavior and a mode of thinking. So the musicians handle a responsible work in creating work of music rich of appropriate progression to suite the taste of majority or which can speak to the majority of society changing them very artistic, sensitive and creative by use of that more comfortable life.

1.3.2 Tonic accent in poetry.



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The role of rhythmic movement in poetry is also for the pure pleasure of it, to echo the sense, for dramatic effect or to heighten the meaning. Basically in poetry the rhythm is achieved by the repetition and break of repletion as same as other arts, like rise and fall of accent and unaccent of syllables. Repetition in poetry makes the musical effect and emphasizes a mood or a meaning.

In poetry the rhythm in lines achieved by 'metre'. There are regular rhythms as well as irregular rhythms in a poem. The use of both together is to make a contrast in expression of poetic thought, which lead to free verse. Natural breath, pause or employment of punctuation cause a breaker within the lines, is done in help of achieving a variety of tempo and dramatic emphasis in poems.

In some methods of poem writing the poet use end stop lines to brake the flow sounds and to demarcate the end of a verse. When it is used in every verse in a poem

it also becomes cooperation to the rhythm. Poets some times use combination of consonants to make up the reality of the meaning with the change of the speed of the rhythm, disturb of smoothness and difficulty in pronouncing.

රැගන් සුරා පිරා විඳින

සුරත තඹුරු පෙති සෙතෙතින්

(Guttala kavya-ven Waththave Thera)

The last the shows the behavior of a drunkard.

The most effective repetition is the rhythmic movement of a poem is rhyme, which act as the word ending sound. Earlier the rhyme was the most popular among the poets and afterwards tried to get rid from rhyme. There the unrhymed and false rhymes are used to breaking the monotony.

Just a set of words can not become poetry. But there is no poetry without the images created by carefully selected words. Poets then employ a suitable rhythmic movement to tie-up these words to achieve the richness. So it is true the grammar of poetry is mostly the techniques associated with rhythmic movement sounds. Most of the poets tries to touch the reality of the world and to lead the society from better to better, instead of continuous talking about beauty of the universe, by rhythmic verbalization of meaningful set of words.

1:3:3 Pictorial progression of Cinema

Cinema as and art with more life and functional qualities, and the possibility to highlight the importance by adding the most suitable seen and drawing the attention of the observer by the camera focusing, is more powerful form of art to go to the people and to communicate.

In filmic seen the motion makes the space move, while the spectator still, where it gives live experience which dramatically positioned with imaginary spatial connections for the spectator with no need to control the out side condition and with no obstacles to choose the best sequence of shoots.

In cinematic experience the spectator follows the imaginary pictorial progression and experiences it mentally. The rhythmic pattern is generated by series of hierarchical modular points or gaps. The montage theory is the thing used to create rhythmic movement. There the viewer grasps that rhythm and explore a distinct meaning by experiencing two different moving images that carefully put together. This carefully arranged progressions of scenes with required various qualities impose different moods in viewer in short period of time. It is the facilitation to convey a message to the spectator very easily.

This experience in progression is strengthen by the rhythmic push and pull, the vividness , purposeful pause, rest and haste with the support of variation of textures and movement of light and shadow and etc. And also the rapid movement and speedup actions are used to hold the spectators mind on the scene.

In cinema line, form and balance is highly used to heighten the expressive elements such as characters, objects and important spaces. And the visual progression is made with the flow of imagery in support of filmic scene where the objects and characters are composed well. And also the movements of the eye of the viewer from one object to another make it still or dynamic in the imagination of the spectator. It is the talent of the director in grouping of certain characters, spaces and other objects to compose a harmonious picture leads to make an aesthetically pleasing experience to the spectator make him contemplative.



Fig. 10: Placing of characters and objects in order to achieve the continuation of the progression

The light, shadow and colour also do a major role in cinematic progression. They are used to highlight the most important incidents in the flow of story to express distinct quality of an emotional scene.



Fig. 11: Employing the spatial and qualitative attributes to draw the attention towards the climax

These are also used to heighten the change of the mood of the character fear, emptiness or deep and happy, joy or rising and to highlight the spots in the motion image. The rhythmic progression is bounded by gradually varied colour tones; a sudden change of colour may communicate a strong distinct message. Another tactic used in the cinema is frame views as well as in art forms like architecture to emphasize the flow of progression through the scenes and the story.

Most of the experiences this art form the cinema provides the expression much more suite the reality of life, in more organized rhythmic pattern or a progression and leads symbolic manifestation to meaningful enjoyment.

1.4 The art of architecture.

Art is an expression of universality; communicating with the man and conveying messages. Generally to enable media of any kind cinema, drama, music, poetry and etc to qualify as an art form, it is necessary, that it compels with certain basic requirements such as scale, balance, rhythm and harmony in its components. It is evident that architecture also fulfills these requirements to become an art. Architecture come out as an art with the symbolic expression of the human habitation included in universality, communicating in social, cultural, economical aspects, conveying the aesthetical and functional meaning to



the user or to the observer, affecting their mode of behavior and mode of thinking. Walter Gropius wrote in 1919,

“What is architecture? Indeed the crystalline expression of noblest thoughts of man, his character, his creed, his religion” (Gropius, N.L., 1984:86)



Fig. 12: The art of human Habitation

Architecture is the only art encompasses all human psychological needs – privacy, security, identity, aspirations, self expressions in perception as well as the physical needs – shelter and bodily comfort in using it

“Man must more than a consumer, even a tasteful consumer of other peoples product. According to psychiatrist Matt Du Mont “the extent to which a person can influence his environment will determine his ability to perceive him-self as a separate human being” (Robbert Sommer, 1972, p. 59)

The architecture possesses artistic qualities but it faces practical problems as well when designs are made. And also it is referred as a ‘silent art’. In that occurrence an invisible control is made on the spectator, making them speak or silent, making them wait and move, making them static or dynamic. Experiencing it transmit the feelings from one to another and transform mans’ pain, pleasure, sadness, joy or happiness.

Primarily architecture is spatial experience. Space represent a hollowness which can contain tangible and intangible and visible and invisible things and provides an experience exterior as well as interior which is not facilitated in other forms of art. But it gets the cooperation of other arts also to achieving certain environmental qualities. So it

is possible to perceive an architectural product by all the senses like, seeing, touching, smelling, hearing.

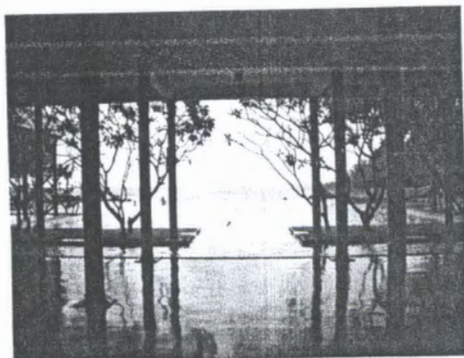


Fig.12: Architecture is harmonising tangible and intangible, visible and invisible things together

The opportunity of other art products is that the beholder is able to get away from the experiences he or she dislike such as not going for a movie, switch of the radio when disturbing music is played or they can shift from one art to another very easily; like reading instead of watching the television. But people have to live with architecture and tightly bound with experiencing the built environment. We can hardly make a choice instead of that. But we can have a change from the environment we always confronted with even though that is also not a thing can be done frequently or easily. So indeed architecture is 'unavoidable art' which people can't run off from. On the other hand the architect does not get the total freedom other artists enjoy but has to listen to the clients' intentions also. And also he has to draw attention to the outside condition also in designing.

"We may, if we like avoid all but glimpse of painting, switch channels at the first step of ballet, choose to read no poetry, but architecture, as has often been said, is the unavoidable art. It is not only scattered all over the landscape but also likely to stay there a long time. We not only see it often but we also use it; it has been built for purpose"

(Abercrombie. S, 1984, 7)

This in - escapable quality in architecture can be used for life enhancing and mind purifying of the people as well as can make them feel sick and also make them sick physically and psychologically. That is the reason for the architecture to have an authoritative attachment instead of its artistic sensation. The necessity to make a better

place to live, enhancing the lives, purifying the minds and make them contemplative manipulate a profound, refined and most intimate art from in architecture.

1.5 The rhythmic movement and the sequence of spaces.

The early studies reveals the space is the component plays in the art of architecture in producing environment for the well being of the man. The things we manipulate to function different activities are the space. There a set of spaces are given a sequence and a meaningful rhythmic movement to accomplish the needs of the human habitation.

1.5.1 The concept of space.

The environment, we live in is a mixture of spaces of various kind; spaces as large containers or small spaces as contents; space itself does not give an idea about "how large is it?", and the limitation of it. As Meiss Von (1990) explains, a space can be defined as a hollowness which can accommodate tangible and intangible, visible and invisible things. Over a long period of time people such as philosophers, psychologists, architects and planners have tried to come out with the exact meaning of the 'space'. R. Arnheim reveals in one of his books about a 'spontaneously plausible' notion of space, which most of people think of.

".....a space as a self contained entity, infinite or finite, an empty vehicle, ready and having the capacity to be filled with things" (Arnheim R., 1977,P.9)

Then what is the 'space'? And it indicates the perception of space should not merely touch the surface but should go to the depth. As Tuan Y. states,

"Space is an abstract term for a complex set of ideas" (Tuan Y., 1977, P.36)

It can be true that the notion of 'space' or that complex set of ideas, vary with the percipient, with his or her sensitivity and the experience, because according to these, stimulation in human mind varies.

“It is an experience of the sense of sight and sound, of touch and heat and cold a muscular behavior, as well as of the resultant thoughts and strivings”

(Arnheim R., 1977,P.4)

The ‘space’ exists around us, in the form of enclosure or exposure; the sky, sea, mountain, trees, living beings and built environment has to obtain even impending ideas of the real meaning. Then ‘space’ is some thing we can feel or sense, rather than a rigid entity with highly defined boundaries. It means human mind understand or feel the atmosphere of one space but the boundary is merged. But the visual sense of the space is given by some kind of a boundary made by it’s elements and the qualities it’s volume scale, light, colour and texture provided. The way a person feels and mentally identifies a space, depends on his sensitivity, social and cultural background and past experience.

“Yet it is inherently formless. It’s visual form, quality of light, dimensions, scale, depend totally on boundaries as defined by elements, of form.”

(Ching F.D.K, 1979, P.108)

As stated earlier, if we refer to an abstract form of complex set of ideas as a space, what is the thing called a ‘place’? The intension of a place should be an entity of the environment, specifically arranged for a certain function with clearly marked boundaries. The relationship between ‘space’ and ‘place’; is a supportive and sharing nature in interdependency.

“The idea ‘space’ and ‘place’ require each other for definition; from the security and stability of place we are aware of the openness, freedom and threat of space and vice a versa”

(Tuan Y., 1977,P.16)

And also he says,

“Place is a type of object, place and objects define space giving it a geometric personality”

(Tuan Y.,1977,P.17)

So then place in two ways, as a container of space or as a component within the space; do the duty of giving some kind of a demarcation or some sort of a skeleton to the space.

How ever, the space or the place acts in terms of confirming the existence of human being, and their activities. According to use of them space change the basic qualities necessity to manipulate a particular function.

1.5.2. Definition of Architectural Space

‘Architecture’ consists in the societies of the world as a form of art, such as music, drama, paintings; and which plays with the spaces in terms of a source of feeling, and a conveyer of some kind of a message, as the other forms of art do. The difference is the play of ‘architecture’, come on to the stage only with the role of the human being, and their mode of activities.

“Architecture is art, not science therefore the intellectual ideas in architecture are impossible without the emotion of the artistic experience.”

(Van de Van C., Companion to Contemporary Architectural Thought, 19)

Architecture as the art of the ‘space’ creates demarcation to the limitless space and makes the space meaningful. Space being a major source of emergence of feelings or moods in human mind and architecture as the creator of space can affect the human life. It implies the movement of a person, and the physical direction, within a meaningful space has the impact of architecture and architecture becomes the emotional stimuli of the person.

“As space begins to be captured, enclosed, molded, and organized by the elements of form architecture comes in to being” (Ching F.D.K., 1979, P.108)

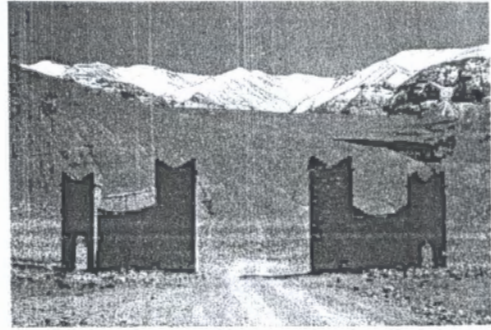


Fig.13: Bear space is given a meaning under the association of architecture

The whole review is the architecture should be a meaningful and a purposeful creation. A piece of architectural product is evaluated by quantitative and especially the qualitative attributes contained so as the way of satisfying the physical comfort and the psychological comfort of the user. The design has to flow in relation to the functional aspect of it, user as well as their behavioral pattern, the context the product belongs to.

“From the out side architecture is not alone. Surrounded by other buildings, by landscape, or by un occupied spaces; a work of architect depends in all it’s visual dimension- size, shape, texture, colour, spatial orientation, etc, - upon it’s environment.” (Arnheim R., 1977, P.93)



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So the final image of the architectural space, with its responses and its quality enhancing factors should be the suitable environment required which encourages the function rather than discourages.

1.5.3 The attributes of Architectural space.

‘Experiencing an architectural space’ implies the capturing of the qualities owned by that space. The spatial quality generated within a place, naturally or done by the man to encode a specific meaning is different from space to space or place to place. This difference comes out with the way the elements are arranged in a space and the intensity

of usage of certain qualitative characteristics such as light, colour, texture and etc. to enhance the meaning of the particular place. Thus the attributes utilized in generating various spatial qualities can be distinguished as spatial attributes and the qualitative attributes.

1.5.3.1 Spatial Attributes.

There are three main attributes which are in determining the succession of a space created. These are

- Centrality
- Enclosure
- Continuity

The environment what we are living is not consists of the space, but several. Manifestation of the flow from space to space facilitates by these three attributes owned by each space. The intensity of them may vary from one to another in order to change of the speed of the movement in between. The impotency is clear the spatial progression of any place is primarily initiated with these three attributes center, enclosure and continuation. On the other hand availability of these characteristics is crucial in discouraging the spaces coming out with the qualities of a coffin.

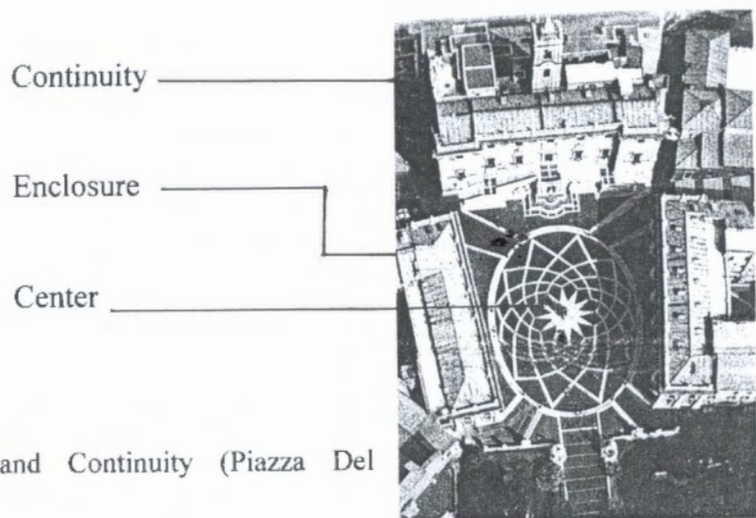


Fig.14: Center, Enclosure and Continuity (Piazza Del Campidoglio)

(a) Centrality.

Centrality is the factor that the spatial stabilization and its locality is take place. It is the focal portion of the whole space. Going away from the center is closing to the less prominent situation.

Centrality is the thing producing the stage for the priority, the objects most prominent in the context and the events playing the main road. The rest is placed in to a hierarchical order as gradually going away from the centre.



Fig.15: Centrality

(b) Enclosure



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Enclosure is the definition of the boundaries of a specific place. It can be an architectural creation as a wall, a roof, or a bench and also it can be done by naturally as an example, a tree, a holder can be a enclosure of a space.

Enclosure is responsible for the openness of the space, exposure of interior to the surrounding vistas, natural lighting level, natural ventilation, and surface quality.

Mostly semi enclosed spaces represent the community in an environment, but the enclosure and the effects of the enclosure, vague with the needs of the gatherers. A place where people used to relax, mostly become an open space; under a shade of a tree, in a sunny atmosphere, with cool breeze and nice views. But lovers need much enclosure with some what darker environment for their privacy. But highly enclosed spaces are not habitable.

Fig.16: Enclosure

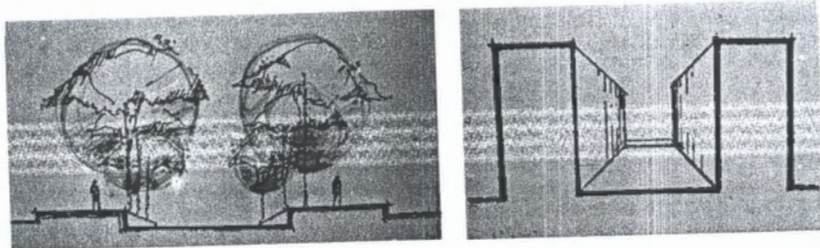


Fig.17 –the environment providing an enclosure.



(c) Continuity

‘Continuity’, word in itself implies a ‘movement’. Continuity of a space, is the connection between other near by and faraway spaces. It is helpful in manipulating a movement through the space towards the next destiny.

The net work of roads, paths, corridors, rectifies the static ness of the space. Continuity creates a connection between different functions to give different experiences and to reduce the monotony of the environment. The life of the environment generates with this continuation, in discouraging the emergence of coffin like spaces. His is the most important in creating a progression of differently dressed spaces to represent a wholeness and conveying a meaning.

Continuity

Fig18 – Continuity of the space, bringing a dynamic quality



1.5.3.2 Qualitative Attributes.

A main target in the production of an architectural product is creating meaningful spaces should fulfill the qualitative needs for the physical and psychological satisfaction of the man.

Qualitative attributes of an architectural spaces are the effects, on which are expressed in the planes of the space in architecture with the manner perceptual variables are synthesized in order to convey ideas and meanings. The perceptual variables are the visual properties of surface in a space that can be perceived and measurable.

“A feeling of relaxation can be achieved by placing familiar and likable elements in familiar surrounding; expected order; simplicity the use of small scale; placing and soft sound acceptable temperatures; soft flowing forms; lines and shapes; little contrast; soft (indirect) light; analogous colour (white – blue – green) easy movement and pleasant smells”
(Nammuni, V, 1985 : 57)

The experience of spaces has a personal bias with the way of thinking, behavior, social and cultural background of the observer. But the feelings generated should have closer similarities being all are humans.

The inter dependent attachment of space and human beings can be emphasized as ‘Spaces are the pauses, interfere in the life style of human beings an influences them changing their physical as well as psychological condition by giving different environment and feelings, vary from place to place’.

“ Human lives are a dialectical movement between shelter and adventure, attachment and freedom”
(Tuan. Y. , 1977, P.54)

That is the spatial quality, differs from space to space, and is gained by some basic properties in different amount and values which have been acting as modifiers of the above main attributes, and their association with physical attributes is essential to get the real sense of the creation. As the scholar Ching F.D.K describes, the basic spatial

qualities of form, proportion, scale, light, etc, and their dependency on the properties of the enclosure of a space .

Properties of enclosure

- Dimensions
- Shape
- Configuration
- Surface
- Edge
- Openings

Qualities of space

Proportion

Scale

Form

Definition

Colour

Texture

Pattern

Enclosure / Light
View



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(a) Dimensions- Proportions/ Scale

‘Proportion’ is to discuss about the space its length, breath and height or the volume of it; the relationship between them. This quality is capable of making the space balanced, exaggerated or depressed

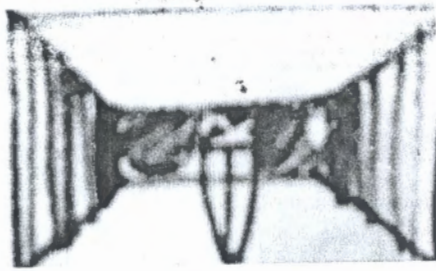
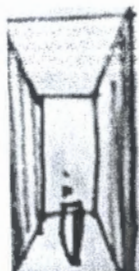
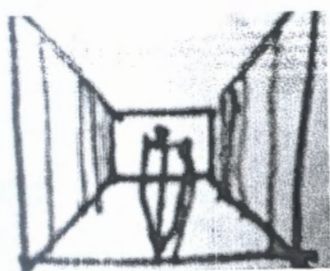


Fig19 - Space' is balanced exaggerated and depressed by its proportion

‘Scale’ of a space is determined in relation to the human scale. In simple words, scale is comparing the size of the space, with the normal size of a human being as small, medium or large

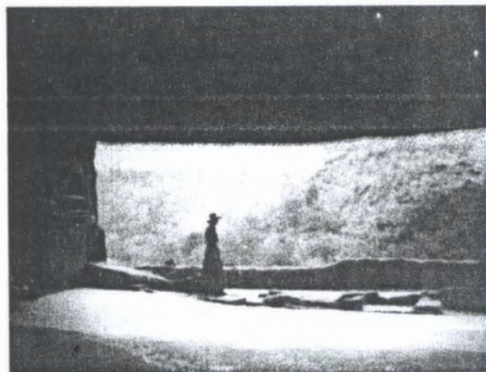


Fig20-Scale of the space in relation to human scale.

Proportion and scale are interconnected and main properties of a scale, responsible for the attraction of outsiders and for their behavior within the space.

Eg: The interior of a church of large scale and proportion, gives the impression of power, sacredness to the visitor which makes them behave well. And an ‘Ambalama’ is where we see a contrary behavioral pattern.



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By changing the proportion a space can be made a small scale one or large scale one. Therefore the scale and proportions play a vital role in creating a specific spatial quality within a space. Proportion gives a directional quality to the space. That means the shape of the space can be assessed in terms of horizontality or verticality.



Fig.21 - Fine scale and proportion giving the real image of a gathering space

b) Shape – Form

Form is the primary character of volume. When any one think about an architectural space the form of space place a dominant role. The elements of form are articulated in an orderly manner defining the volume of space.

Form is mainly determined by the size and shape of enclosure planes or the elements, which are used to define the space, as well as inter relationship of planes and the surface character of these enclosure planes.

Size is the actual dimension of form. Shape is the principle identifying characteristic of form. It results from the configuration of surfaces and edges of form. Therefore it can be said that the shape is the primary property of a plane.

Form may be the result of basic geometrical shapes. They are square, cube, triangle, pyramid, circle or sphere in shape. But apart from that manipulating the planers in a different way can create different spatial forms. Then its gives different spatial qualities.

Extra ordinary shapes or forms or more rigid forms do not go with the function of gathering. But the form internally or externally can be use to exaggerate the spatial progression of the space, dynamic quality of the space, in it's flexibility.

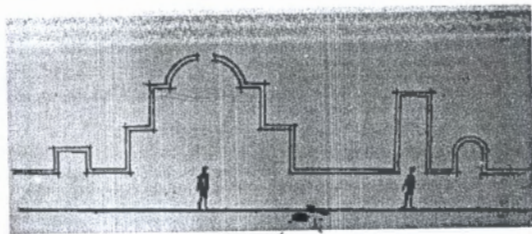


Fig.22 – Form in creating different spatial qualities

(c) Configuration - Definition

Configuration or the definition is referring to the manner of arrangement of the space and its boundaries. The quality of the arrangement realizes the pattern of function going to be held there.

Eg: A set of chairs facing one direction, implies the environment for a meeting. And few chairs arranged in a circle facing each other, implies the informal company of group of people

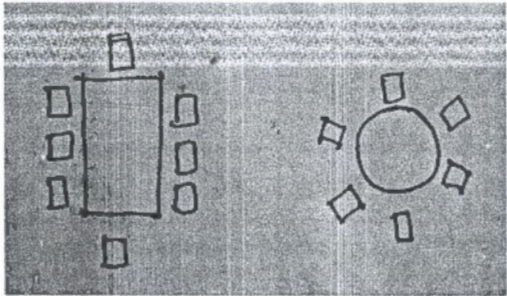


Fig. 23 – Two types of chair arrangements for a formal and for an informal activity

This can be used to indicate the direction of the spatial progression and movement and pauses of it.



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(d) Surface – colour

Regarding the surface of a space, colour appears as the emphasis of it, which affect the visual weight, scale and the live ness of the space. On the other hand, colour is an inducement for emotions, and it communicates with the human mind and evokes our feelings.



Fig.24 – Deliberate and Symbolic use of colour

Colour is comprised in the significance of a good architectural composition. This gives the meaning, the absence of colour is materialize a reduction of the spatial quality. And also the inaccurate colour use may cause unexpected situations. For all these, the colour effect of anything is control by the intensity (strength or weakness') and the tonal value (lightness or darkness)

Colour can not be experience in isolation because there is an inapplicabile connection between materials and colour. Therefore colour changes with the texture of the surface. A space can be made to appear large or smaller and cooler or warmer by introducing different colour for an example, it is accepted that a small room can be made to appear lager by giving it a pale colour. An object can be made to appear lighter or heavier and bearer or distant according to colour that has being apply to it.

Not only the colour is used to emphasize the surface character or the textural effects but also to articulate the inter relationships of spaces and make the architectural composition more significant. It is generally recognized that certain colours have psychological effects and that they affect people emotionally.



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Fig.25 –colour enhancing the progression of space

(e) Edge – Texture and Pattern

Texture' or the 'pattern' is another thing responsible for the condition of the surfaces of a space mainly affects the tactual and light reflective quality of a space. And the texture – roughness or smoothness even just the appearance provide an impression to the visitor about the space.



Fig.26 - 'Texture' doing a major part in Progression

In the space, texture can be the rectifying or completing factor of scale and proportion to suit the human dimensions. Pattern is the regular repetition of an arrangement of lines, shapes and areas of colour on enclosure planes. It also may result in the repetition of arrangement of openings, framing or panels or the intersection of the vertical lines of supporting columns as bay divisions. Patterns also can be created by the manner in which the materials are used such as bonding of brick work, the joint lines of facings or paving etc.

Further it is used to enhance the quality of the space. It also emphasizes the direction of a space such as verticality horizontality and it directs the path to related spaces. Another thing is that colours and textures modify patterns. To a distant eye a small scale pattern may appear as texture.

(f) Openings –Enclosure/ Light/ View

These are the characteristics, which are very significant of a space. The live ness of a space almost has the direct compel of these factors. So as the attraction or the distraction of people to the space depends on that.

Enclosure comes in to being in order to define the space providing with limitation and the boundaries. The thing, which has the right to control openness of the space, exposure of interior to the out side, amount of light comes in, views the space receive, is enclosure. The mostly functional spaces as community spaces are semi enclosed spaces. And also higher the openness, the more the attraction for gathering.

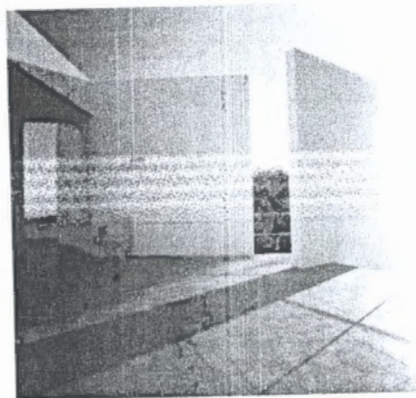


Fig. 27 – The play of the enclosure in the space.

Light and dark are the symbols of life and death and the variation in between. Spatial quality in architecture is gained by the proper light and shade combination. Good installation of light gives fine contrast of space and the containing object and evades the monotony, and side light is the best in this. The distribution and intensity and the illumination level of elements, vague from space to space to cater the required atmosphere and the spatial progression.



Fig28 - Different lighting levels creating the festive atmosphere of the space and spatial progression .

People's attraction normally goes towards the views they get or the vistas, which are very pleasing. Purpose of the architectural space suggests a way the space has to be exposed to these vistas, by the enclosure of it. A nice view is capable of keeping human being calm and cool. A view is a stimulation for the directional movement of spatial progression.



Fig.29 – 'View' employed in spatial progression.



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The built environment is a creation of man as projection of his abstract idea into nature. In that Endeavour, architecture is accepted as the 'art of space'. Architecture can be termed as any change in the environment, with or without a built structure, which is consciously done for the sake of the well being of the human kind. It harmonizes many things into one. The tangible physical forms and intangible space within, the visible physical form and invisible human feeling included in it.

“Where all the things tangible and intangible, visible and invisible are in balanced harmony among them – selves and with the rest of the world, constituting a useful and mind elevating whole, then this whole is architecture.”

(Anthoniades, C.A. 1980:18)

The street is an essential component in the creation of the built environment accommodating the accessibility and the movement of the man, his goods and vehicles. In that sense the street is an important space of human habitation which should be undertaken by the harmonious balance of the built environment. The streetscape is the build able, and alterable physical aspect of the architecture in generating the space of the street, and adding a meaningful spatial quality. The face of the street the streetscape in its own architectural identity is taken to discussion for further clarifications.

The in-escapable quality of architecture as well as of the physical and socio economic function of the street is identified. It is the quality can be used for life enhancing and mind purifying of the man. On the other hand it is also the quality makes them feel sick or makes them sick; physically psychologically. That is the reason for the streetscape, in that means the architecture to have an authoritative attachment in spite of its artistic sensation. An effort is made to understand the necessity to build a better place to live, enhancing the lives, purifying the minds and make them contemplative within the essential nature of the street.

2.1 The street path and Road.

The first appearance of the path ways happened with the beginning of the mankind on river banks, valleys, mountains which gave the references. And because of they almost depended on the natural environment, they did not need any specific physical demarcation from each other and their activities. The path was the support for the mobility of them with a heist amount of physical and visual connections an either sides. Today also the word 'path' is referred to the access ways which are small in width, facilitating pedestrian activities with a high amount of visual and physical links. And the traveler is very much comfortable in enjoying the freedoms experiencing the environments pass by without having a powerful axial attention of where it leads to.



Fig.30 – Earlier there were not special demarcations. Path was just a support to the mobility

With the development of the human habitation, when the demarcations emerged to separates the places, strips of lands were separated for the purpose of mobility. This strip of land used as an access way has to be followed by the other as well to become a street, because the street are social institutions, which is given the name and the function by the community. The street can be identified as an access way with visual and physical not as pathways but in a sufficient level. In a street the speed of the movement and the strength of the attention only along the axis towards the destination is comparatively less, allowing the traveler to have a satisfying experience of visual and functional environment on the either sides.



Fig.31 – Streets with more pedestrians activities

The types of streets begin from the alleyway as the smallest and vastly classified up to the concept of highways. According to that the road is a form of street which connects two places which is much wider and priority is given for the vehicular movement rather than pedestrian movement. The attention of the traveler draws away through a powerful axis along the road while giving lack attention to the physical and visual component found along.



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Fig.32 – Road with a powerful axis along the out

There are three groups of words which suggest three different ways of considering a street.

1. Terrace, row, arcade, embankment or gallery display the way in which the street is physically constituted by its context.
2. Path, track, parade, promenade and malls, all of which are connected with ways of proceeding on foot.
3. Highway, artery, thoroughfare, related entirely to vehicular traffic and to legal and engineering matters it involves.

On the other hand the term 'High Street' or 'Main street' is name used to suggest the long distance route passes through a settlement. When an artery comes near to a settlement a town or a city the axial power decreases and the traveler is provided with much more an opportunity to experience the surrounding. This is commonly used by the British and the Americans. Sri Lanka was colony of British and has that influence.

2.2 Functional and social characteristics of the street.

The role of the street within the built fabric and social activities has a clear impact on the form of the built environment. From the point of view of the society the street has different interpretations. The street is the theatre where the public play their role of real life while rushing for their needs. The duty of the street goes further away from the physical aspects. It reaches the links of the human and the built environment. So streets are having different interpretations with the values of the human nature. Though the function can be considered as a physical aspect with reference to the path, socially it has a better value by being a space.

2.2.1 Physical aspects of a street.

In considering the function of the street it is the physical element provide pedestrian and vehicle movement from one place to another. The accessibility emerge with the street designed is for the development of the areas and sustain with goods and services, with social, cultural and economical relationships.



Fig.33 – Streets pedestrian as well as vehicular circulation

The engineering aspect of the street is concerned it is only for the efficient movement of traffic. In tracing the route also the easiness and the time factor is concerned. They are designed to arrive at a place in the shortest period of time, thinking just the physical aspects of street rather than aesthetics of that.

2.2.2 Social aspect of a street

Definitely a street is a social fact. It can be analyzed in terms of the social, cultural and economical purposes. It has become the symbol of social esteem, because it is a place serving a group of a community or even outsiders not only a person. A street has distinct boundaries despite acting as a communal thoroughfare to other areas.

The social contact happens at the street and supports the interaction among the members. Freedom to walk around, look around is a very useful guide to the civilized quality of an urban area. Admiring the scene or talking to each other makes social interaction. Also street provides an extra space for the surrounding urban space and perform range of activities, including commercial, industrial, residential, recreational and etc.



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Thus the street allows creating a communication network to link variety of groups together, where the social order and a discipline is manifested through the society. As we move along the scale of social organization and technology, specialization in other areas of life is reflected in growing specialization of the street.

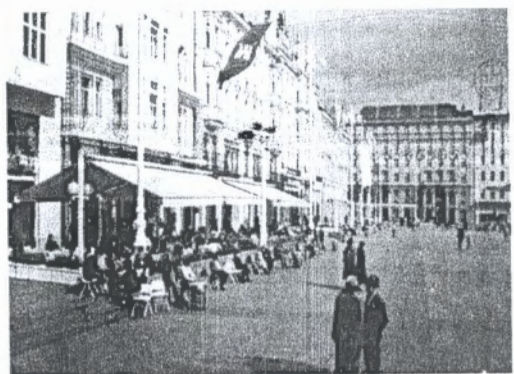


Fig.34 – A place for social interaction

An increase in number of institutions create across cutting web of social relationship that helps to knit society together; at the same time increase of organization and social structure creates more and more private and exclusive institutions. This development is too reflected in the street with the emergence of the street and later of specialized work areas; separate residential zones, and streets used only for commercial and entertainment purposes.

“Development of stratified class system further specializes the streets, creating separate neighborhood for different classes within the city. Streets that serve different classes reflect the classes they serve by nature of their amenities and by the difference in their daily, weekly, monthly, and yearly rhythms”

(Levitas, 1978, 232)

It is evident that the streets reflect the social aspirations of the people it contains and the streets depict the deferent classes and the hierarchy of the social relationship. Therefore the street is not only a mere object, which is used to take people from place to place. It has a greater meaning with an inseparable bond with the social life and the activities of the people.



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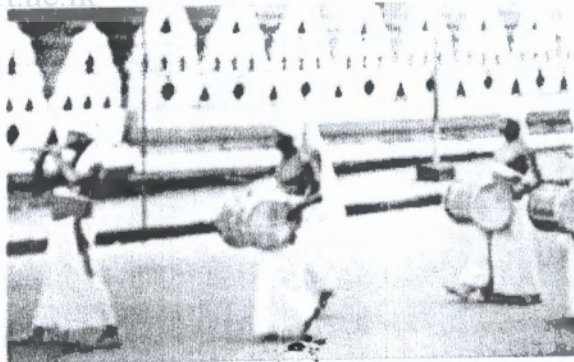


Fig.35 :Space for different performances

2.2.3 Qualities of an access way.

The visual analysis of the components found along is needed to identify or experience a journey. It implies that a journey would be a spatial experience. In further the visual stimulation provided by the either sides of a street is important for the comfortability of the traveler. The intensity of the different characters stored in the each portion of the length of these streets and the contribution of the built mass to visual stimulation makes a meaningful rhythm for traveling. That in the manipulation of the spatial progression. In building this spatial progression, with the inherent ambience, there are some characteristics in the streets which can be used to achieve the required spatial quality, in the progression. For case of the study these qualities are categorized in order to understand the complex compositions, which the streets represented.

(a) Trees

The effect of trees adds an definition and a meaning to a streetscape . They are an essential part to the streetscape for the physical comfort ability by providing the shade and visual pleasantness by that psychological healing.



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Fig.36: Trees inproviding physical and visual comfortability

In our local context particular trees has a historical value as well as a cultural meaning embedded in them. They provide enclosure, define houndaries, food for the passer by and create special atmospheres.

Fig.37: 'Bo' tree of Kalutara providing an identity to the town



The tree canopy works as a filter of lighting to gets shade to the street. It is also important in separating the pedestrians and the vehicles.

The trees grown on the streets are also in support to generate the episodes of the spatial progression. That is to say, the trunks and the canopy together provide an enclosure, which is transparent but a distinct edge. The tree trunk gives the effect of columns in building to the street. And also light and shade controlled by the trees helps to manipulate the progression.

And a significant character understood is the trees can be used as the filter, which reduces the bad effect of unhealthy built environments to the user of the streets.



Fig.38: Trees as a filter in front of unsuitable streetscape

(b) Special design features – details.

The features like gates, fountains, benches, paving, light posts, sign hoards, detailed walls and canopies add a different quality to the street and improves it. These can be used either to highlight among the others or to have a repetition of the progression, or in breaking the repetition.

As an example in the Kandy city the ‘Walakulu Bamma’ which runs through out the pavement of ‘Dalada Weediya’ shows the historical and cultural significant embedded in the city. And given an identity to intensify the importance of the particular street.



Fig.39: ‘Wallakulu Bemma’ Dalada weediya
Kandy



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(c) Accessibility

This is the most primary and the major purpose of streets to support the mobility of some one from place to place. This mobility is not just moving through the streets. People must be able get into the streets with ease.

Accessibility is also a matter of public access at places along the street, by intersection or crossing streets or public ways. The variation of the activities of the streets depends on this type of accessibility. So the accessibility of a street is a good parameter to distinguish different zones or areas in a city and support the progression with variation.

(d) Density.

Density of a street is also can be divided into different kinds as the building or other elements, activities and different or land uses. The density of buildings add a variation to the enclosure of the progression and also capable of controlling the movement and pause of the progression. The density of land adds a variation. And the density of activities is increased. It also increase the liveness of the environment.



Fig.40: Densification of functional and social aspects of an urban context

(e) Diversity of built forms.

It is considered the variation or the building types. If it is in the same progression of streets it has to act within the wholeness of that particular progression. They provide different proportions of enclosure and the original street line creates different magnitudes of pauses along the spatial experience along the street. When the physical diversity goes up the social diversity also goes up.



Fig.41: Absence of a suitable diversity is Monotony

The diversity of a street can be divided into different kind, including physical and social diversities.

“When there are more buildings there are more contributors to the street, more and different participants, all of whom at interest more buildings likely to mean more building owners. Each with an economic and a social stake in an responsibility for the street. They will do things differently in the first place and maintain and modify streets differently as time passes. ” (Jacobs A.B. 1993:297)

(f) Slope.

The slope of the land where the street goes along is capable of changing the experience of the observer. When there is a decline of the slope the visual angle of the observer is widen and the perception of the environment become richer. The gradual incline of the slope direct the attention of the observer towards one event or an object. It is used in the path ways leading religious places.



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Fig.42: 'Sigiriya' is rich in manipulating different experiences with the play of levels



(g) Parking.

The automobiles seems to pollute the quality of the environment, but it is an essential accommodating the parking of vehicles for better function. Parking affect the accessibility of the people. People with automobiles like to park close as possible to their destination; they prefer directly in front and the merchants want them too. In considering this issue the governments produce several guidelines.

As a solution parking buildings are introduced. But sometimes the shop owners orient their shops toward parking without considering the near by streets. Another solution is the basement parking. The wider openings of them also affect the rhythm of the street and the pedestrian movement.

(h) Contrast.

The contrast is increasing the noticeability of building apart from others to point out the functional differentiation. The contrast is also used to change the character from start to street. In change of the shape or size or regularity, colours the contrast can be achieved.



Fig.43: Contrast with the use of colour

The important thing is in having a contrast to the environment should be within the wholeness of the spatial progression. Contrast can be used to heighten the quality of some episodes of the progression. As an example to highlight the quality of the climax it is used a contrast environment in the final transformation which can be an intermediate climax or an intermediate connector.

(i) Time.

Some one can argue that a good street with a diversity of activities and to be special than the others that they have to be old. There is a truth in that fact that when a street is exposed on to the social existence and when it has evolved with the culture, society and the environment; it will gain a sophistication and a well tempered and cure streets in the end. And it is a must to have a harmony with old and new. The basic format

of a street has to be laid in the early stage of its beginning to generate a good environment with time it generates and modifies new identity and character.



Fig.44: The combination of new and old

2.3 The street and their contribution to the man

The streets may evolve not purely through a single settlement which connects them to each and out side world. When the cities are concerned, cities have gained from streets and streets have gained from cities ; the relationship is a deep rooted and knitted very strongly with the social and cultural values of the society. In simply saying streets are the physical element which facilitates the mobility of people and commodities and also the social, cultural, economical values.

The relationship in between man and the street is a very significant rather than just providing space for traveling. Street is the neutral ground placed in-between two destination of man which provides a major transition. In further in a destination a person is imposed with different kind of roles to act. As an example a peon working in an office obeying to others and doing all the works of them. After the office after he enters the start he starts a process to be neutral at the end he has to transfer his mindset to be the base of a family, the role a husband and a father.

The street becomes a neutral ground for every body because the serving attitude is same for the every one. In the street there are not specific relationships among people other than all being humankind. On the other hand this is the most important responsibility of the street transferring the mindset of the people who use it while giving



them inspiration to achieve a richness in their lives, rather than providing access from place to place.



Fig.45: The neutral ground for the people- the street

2.4 The street as a space

The street is oftenly taken for the consideration in functional and physical aspects of it. It is as a livable space capable of affecting the mode of thinking and the mode of behavior of the user; be a major transformation for the user is not considered or neglected. In that sense the designing of streets as a space consists of a sequence of smaller space also has not come to the action as a must. That is indeed the reason the traveling becomes an uncomfortable action in the day to day work and specially the utter usage as a neutral ground with a major transition for the people is not sufficiently molded.

2.4.1 The concept of 'container' space and 'flow' space.

It is stated in the early discussions the architecture is the art of hollowness which can be filled with things. It generates a terminology a 'container' to refer to the space we are talking about. The space is conceived by the average man as a self container having the capacity to be filled with other small spaces, places objects, living beings and their activities.

The concept of 'spatial container' is used to describe a space enclosed by continuous walls with openings, smaller, in relation to the walls. That is to separate the inside and outside. This space which emits as a 'container' enclosing the void within and has a certain activity of function. That is to say they do not generate a specific behavioral

pattern or exert any influence of its own, may be having boundaries.

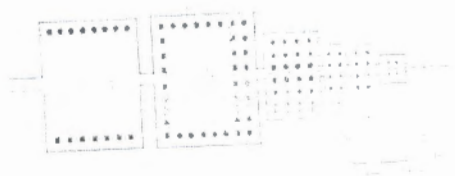


Fig.46: The concept of space as a "container" enclosing the void within

Such an abstraction makes no sense in considering the spatial relationship as occurring in day to day architecture and consider space as the creation of existing objects and behavioral patterns. There the conceptual frame work in defining the space turns into two basic forms 'spatial containers' and 'spatial flow paths.'

"The notion of the space as a container, that would exist even if was completely empty is also reflected in the Newtonian assumption of an absolute base of reference, against with all distances, velocity, speed, etc. geometrically it corresponds to a system of Cartesian co-ordinates of an eternal frame of reference"

(Arnheim, R. , 1977: 10)



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The 'Flowing space' or space as a flow path is the most recent concept, originated in the world of architecture. And the extensive use of this notion is found from the Eastern countries in their built forms. Le Corbusier wrote in 1923,

"The purpose of architecture is to move us."

(Genius loci: towards the phenomenology of architecture, 1984)

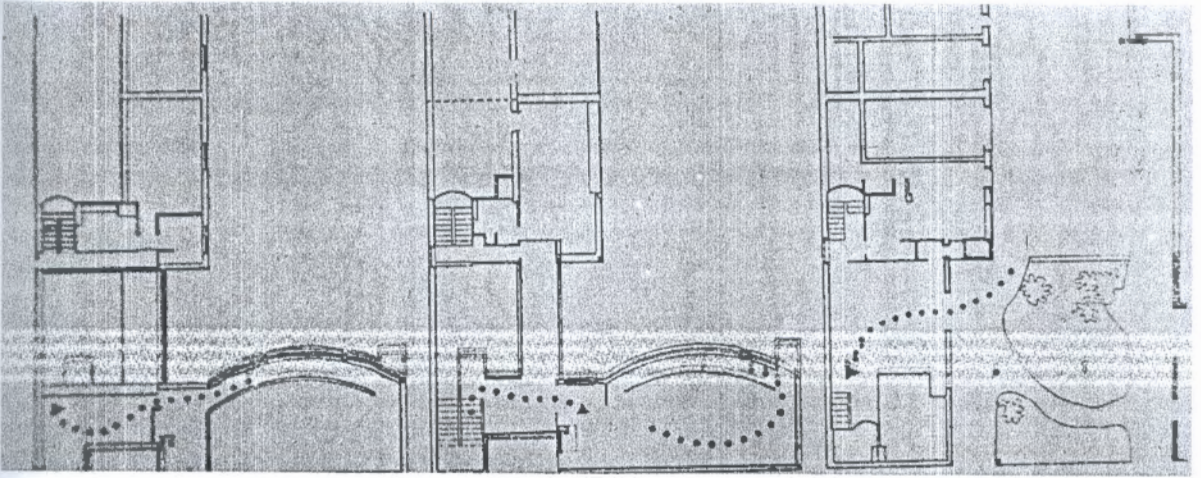


Fig.47: Progression through a flow path

The impact of the spatial quality on the observer or the user is much more powerful in flow space which do not under go for the substantial changes when the objects acting as generators. According to Jurgen Joedicke, there are eight basic forms of spatial formation.



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Fig.48: (a) Axial space with progressively increasing spatial density



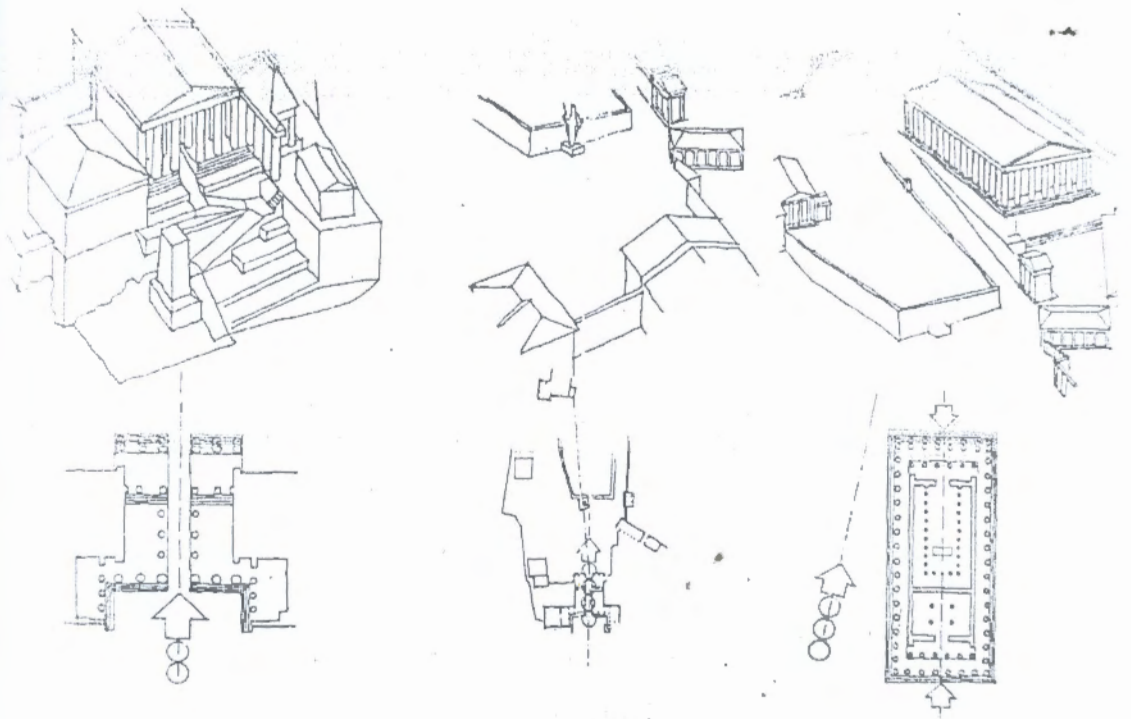


Fig.49: (b) Axial building set out in non axial space



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Fig.50: (c) Centralized space with spatially articulated transitional element in front

Fig.51: (d) Directional space with the building as an enclosure to the space of the plane or directional space with different directions and spatial realms

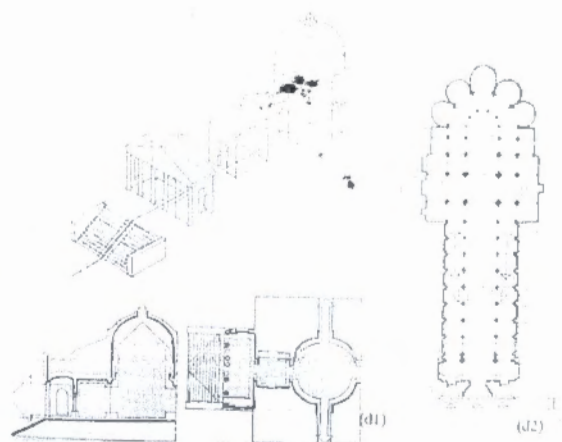
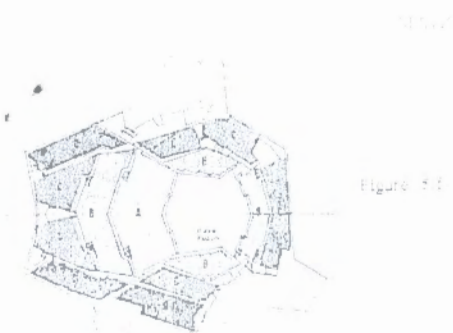


Fig.52: (e) Sequence of inter lock spaces with transitional elements linking principle rooms

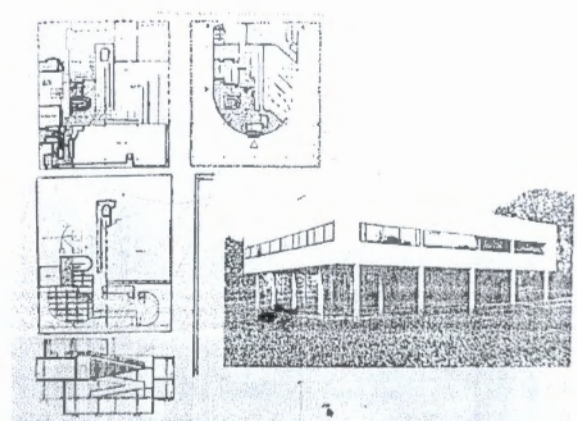


Fig.53: (f) organic multifarious space



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Fig.54 (g) Functionaly geometric space



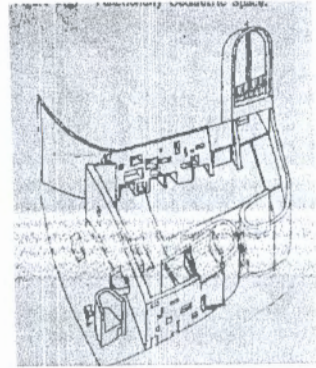


Fig.55 (h) structurally articulated spaces

The circulation spaces within a building its corridors, lobbies, galleries, halls also expressed as flow spaces defined by parallel planes.



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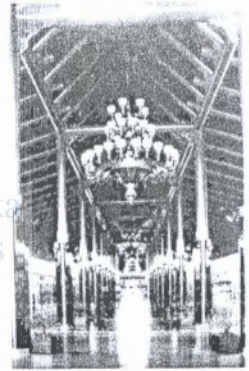


Fig.56: Flow paths inside the buildings



Fig.57 :Flow paths Outside the buildings

These type of spaces form an integral role within buildings and occupy a significant amount of spaces within its volumes, considered as spatial and functional

linking devices. It is the responsibility of flow paths to accommodate the movement of people as they move, rest or pause.

The flow spaces can be categorized into either as pass by spaces, pass through spaces, paths terminating at a space. However all these spaces contribute in creating architectural spaces serving as functional spaces. It is a conceptual thread links the major spaces with major activities in any series of interior exterior spaces together.

Pass by spaces



Pass through spaces



Terminating in a space



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Fig.58: types of Flow paths (source: Forme space and order, 1972)

2.4.2. Street as a 'space'.

It is being explained the 'Flow space' is a conceptual thread linking the major spaces with major activities in a sequence of spaces of interior or exterior where the "street" also can be included in accordance with its spatial and functional attributes.



Fig.59: Street as the conceptual thread linking the major spaces

The street is a physical entity allowing the movement of the people, the good and the machineries of them. The street it self makes people move, pause, and rest at will. The streetscape is the generator of enclosure: walling the space and carving opening, mixing the colour, texture, pattern to the space making the visual and functional connectivity in between the conceptual interior and the exterior of it where the sky and earth supportive in generating the roof and the floor. The space we experience within a building entrances, lobby, passage, galleries, hall and etc. are almost there in the street facilitating the transition from a place to another.

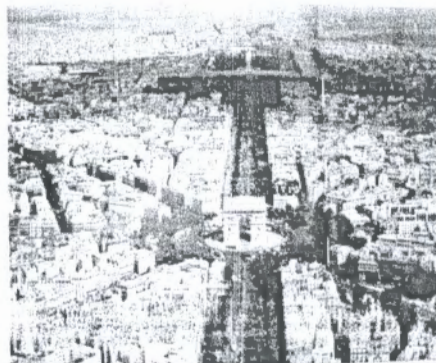


Fig.60: identifiable entrances, lobbies, passages in a street

It is familiar to the architects the play of solid-void, scale- proportion, colour, texture, pattern and form and etc. in creating architectural entities like lobbies, passages, galleries, etc. and etc. Now it is well established the phenomenon of orchestration of spatial progression which demarcates the rhythmic flow of sequence of space in building designing. If it is identified the architectural entities and their attributes of a street, the street becomes an architectural space can be designed. Definitely it is the sign of enhancing the application of spatial progression in order to manipulating much more better built environment.

2.4.3. The Architecture of streetscape.

In experiencing the environment of a street and identifying the form of the street there are number of polar qualities important such as straight or curve, long or short, wide or narrow, enclosed and open, formal or informal, scale, proportion contrast and the rhythm. The consideration of the street shows a combined representation of all of

these qualitative aspects which is the streetscape; in other words streetscape is the walling to accommodate above mentioned qualities.

In creating our own facades on the sides of a street, growing a row of trees are some of the contribution in manipulating the architecture of the streets; the streetscape. Streetscape is the builder of entrances, lobbies, corridors, intersects, terminating point within the space of the street. The streetscape holds an equal responsibility in creating the most suitable environment in any category of a street from alleyway to the concept of highway.

Some times it is said architecture is the play of **solid and voids**. Closely packed building and the public movements in a context from which the element of street architecture is produced. The voids are external and are formed by the solids. These solids and voids together generate spaces in the built environment as semi covered and covered spaces which can be used as public, semipublic or private spaces. Within the solid part of the streetscape there are linear spaces facilitating the pedestrian activities, roofed on top which is the arcade. A row of trees also produce that sort of environment in the streetscape, giving the effect of a colonnade and an arcade. All together produce an edge to the street.



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Fig.61: Solid and void interplay of built environment

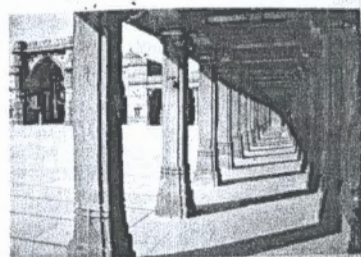


Fig.62: Arcades of the built environment

The **path** which is an element of street architecture, the channels along where observer moves created in the streetscape which can be vary from narrow linear passages to roads. **Nodes** are the strategic points of the street where observer can enter or transit from street to street. Centralized discontinued open space defined by the streetscape which perform the role of the lobby or a court yard is the called the 'square'. It forms a nodal point in the street.



Fig.63: Urban passage way leading to a node

In streetscape we find special objects can be called as '**Land marks**' with eye catching characteristics such as monument or important buildings. As we use in building architecture as psychological stimulations, 'vistas' can be used in streetscapes also as points of reference along the street for the mental satisfaction of the traveler.

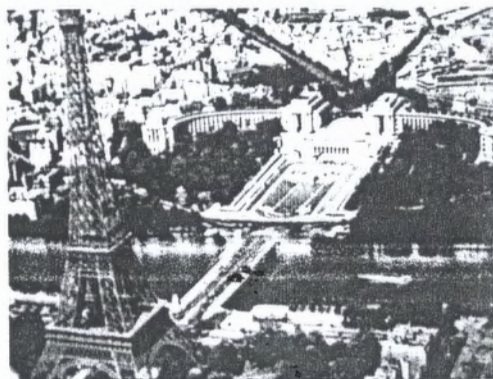


Fig.64: Land marks fore the clarity of a journey

The ultimate understanding is the street with its streetscape is a thing to be designed as we create spaces within buildings. The important phenomenon's used in building designs, specially according to this study the orchestration of spatial progression

can be applied to the street architecture. The responsibility is on the architects and planners, even when they are designing just a building, just a part, the contribution of that small segment to the wholeness of the streetscape, its hierarchical order the progression should be thoroughly considered.

2.5. The concept of progression of Architectural space.

The progression in relation to art forms is the rhythmic movement through the composition of components orderly arranged to accomplish required meaning needed to be conveyed.

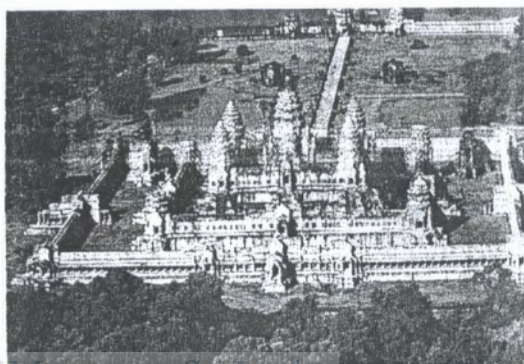


Fig.65: meaningful rhythmic movement through composition components

In architectural point of view the component playing in the progression of built environment are 'spaces'. There the harmonizing of set of spaces happens to obtain a specific meaning, a specific function of human habitation. These spaces find different roles to act with different spatial qualities in a directional order with a hierarchy and unity to achieve a wholeness to suit a particular activity.

“first place the objects must have a certain similarity, for otherwise we should be unable to recognize them as members of same group; secondly they must be suitably differentiated, for otherwise the parts would fail to express their natural difference in status, function and position.” (Edward, A.T., 1968, p: 126)

But if these spaces act without any relationship with the next, arrogantly the spatial drama; the life of the environment will not blossom in front of the man. There the responsibility of the main spatial attributes comes out as the primary initiator of spatial relationship and the progression of the space. The center represents the priority of

element and activities a space is given when the placement of other objects and activities away from the diminishing value of the hierarchical order. In that diminishing the continuation is created, clearing the path to the next space with a rhythmic movement. The qualitative attributes of the space scale and proportion, form, light and colour, texture and pattern and etc are used in right proportion to mould the spatial quality a certain space have to have in the contribution to the spatial progression; a meaningful journey. Enclosure supplies the base to the qualitative attributes to play their role.



Fig.66: the character molded on the enclosure by the qualitative attributes



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Thus within a wholeness, spaces flow into one another, making a rhythmic movement, where there is a beginning, a path, a journey towards a climax where the meaning of that composition is highly illuminated. The journeys made by an observer along this progression of space, absorb the essence of the meaningful, rhythmic movement of the experience. And personalization of this specific experience to find his own rhythm inside, and go for an own interpretation for the succession of his life.

Chapter three: The concept of Spatial Progression; an examination of selected examples (case study)

The street as a three dimensional architectural entity contains a series of spaces, the orchestration of spatial progression should be a definite application. Kevin lynch has termed this rhythmic movement as a sense of progression in the streets.

“Observer seems to endow a path with a sense of pointing or irreversible direction, and to identify a street with a destination toward something, the path should support this perceptually by strong termini, and by gradient or directional differentiation so that it is given a sense of progression.”

(Kevin, Lynch, 1960:P;6)



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Fig.67: the sense of progression in access ways



This study will provide an insight to see the effects of the spatial progression in street, and contributes to enhance this phenomenon in streets, by own designs. And this will be a motivation for further studies in the creating a better environment in the streets specially with the utter usage as a neutral ground which manipulate a major transition to the person travel from a place to another.

3.1 The concept of ‘spatial progression’ in streets

The concept of spatial progression is an important phenomenon, of utilizing the richness of a streetscape. Intensity of the spatial progression, owned by a particular streetscape is capable of deciding the success of experiencing the streetscape, experiencing the town it belongs to and by that affecting the ‘mind set’ of the traveler.

The sequence of spaces composed in the spatial progression of a street makes traveling a directional rhythmic movement, pauses, and accelerations of the movement, "speed reduction and etc., where the traveler psychologically experience that sequence of incidents. When that experience; vibrant variation transferred to an inner movement and when it compared with the own rhythm of the traveler that traveling finds a meaning, by that psychological stress is released and the physical stress is forgettable.

The main episodes of the spatial progression approach, entering, have entered, intermediate connectors, the intermediate climaxes and the consolidation we find in buildings can be applied to built fabrics and also can be found in the existing streetscapes intentionally or unintentionally done. These progressions have been come out in different formations and to suit different functions of the built environment as follows.

3.1.1. Spatial progression as a 'Pattern'

A professor of architecture Alexander, Christopher has developed his own complex mathematical formulae, which can be used by all the others who involved in making better place to live. It is described the fundamental nature of the task of making towns and neighborhoods, the in between linkages, houses gardens and etc.

"These patterns of events are always interlocked with certain geometric patterns of the space. Indeed as we shall see, each building and each town is ultimately made out of these patterns in the space and out of nothing else: they are the atoms and the molecules from which a building or a town is made."(Alexander, C. 1997)



Fig.68: the patter added to the space by the geometric form of the buildings

There are patterns of events that have been associated with the pattern of the space. The total pattern of the space and the events together is an element of people and their culture; it is invented by culture, transmitted by the belongings of that culture and merely anchored in the space. For an example some group of people are used to watch the world go by, sitting in the porch. To facilitate that action it is essential to raise the porch above the level of the street or the canal, and porch should be wide enough, and open for the people to sit and watch.

In this situation the language produced in the built environment is called a 'pattern' in the book of 'pattern language'. In further there are 253 numbers of patterns have identified by the Alexander C. which one can create an infinite variety of combinations. These patterns are connected in to an order to begin with a large scale for regions and towns, then through neighborhoods, clusters of buildings, rooms and alcoves and create the wholeness of a particular environment.

"It is truly whole, not fragmented, and its parts are also whole, related like the parts of a dream to one another, in surprising and complex ways."



University of Moratuwa, (Alexander, C. 1997, p.14)
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The usage of network of language is by using the sequence of events going through the patterns from larger to smaller. When we read through a sentences, which connects the groups of patterns to one another, can get an overall view of the whole language. In that we can choose the patterns suitable for our projects. The learning of that gives a practice to join the patterns in buildings, streets and cities and every where, and the output can become poems in the hands of an architect.

3.1.2. Spatial progression as a 'serial vision'

Gordon Cullen, the author of the "The concise of Townscape" describe our built environment as full of dramatic events. There are various interrelated events where the public participation happens in different formations. Different elements in the environment such as buildings, trees, water, traffic, and advertisement and etc. are woven together with many kinds of people organized together. In the combination of all

together, to be a support to each other it has to be organized to manipulate a series of visions, to make a successful experience and evoking feelings.

The generating of emotional reaction for the environmental stimulators happens in three ways. They are concerning optics, concerning places and concerning contents. In his view the concerning optics suppose a person is walking through a town along a straight road at the far side of which another street leads out and bends slightly before reaching a monument.

“We take this path and our first view is that of the street. Upon turning into the court yard, the new view is revealed instantaneously at the point of turning and this view remains with us whilst we walk across the court yard. Leveling the court yard we enter the further street. Again a new view is suddenly revealed although we are traveling at a uniform speed, the scenery of towns is often revealed in series of jerks or revelations. This we call “serial vision” (Cullen, g, 1975, p-09)

In such an effort creates a progression through the elements of a street, where an impact is made on the emotions of the traveler and the human mind reacts to the visual difference. As an example when the street and the courtyard come to the mind at once, a vivid contrast is felt and the town becomes visible in deeper sense in the sequence of serial vision. There are two kinds of views employed in manipulating the serial vision. That is the existing views and the emerging views. That happens with sense of position of the body of the observer.

In this concept, the spatial progression as a serial vision a pedestrian or a diver feels the whole environment as sequence of exposures and enclosures of constraints and relief. The interplay of ‘here and there’ do a big job in the notion of serial vision in obtaining the orchestration of spatial progression in the built environment.

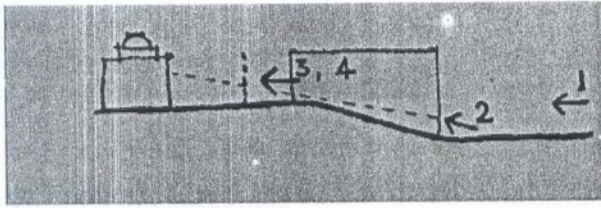
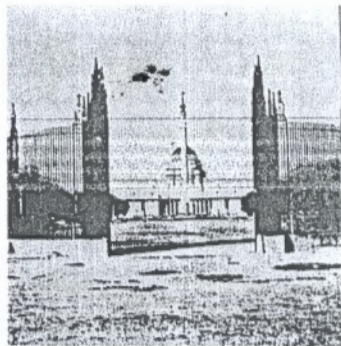
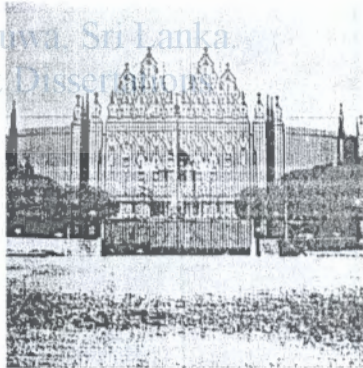


Fig 69: Serial vision of ‘Rasthpathi Bhavn’ in New Delhi

(This building is reached by a ramp. Traveling along the ramp through a central vista wer see two secretariats in full, but the ‘Rasthpathi Bhavn’ comes into the view gradually. The mystery culminates in fulfillment.)
(source :The concise townscape) .



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3.1.3 Spatial progression as an ‘interrelation of elements’.

‘The image of the city’ book of the reputed architect Kewin Lynch, deals with the perception of movement continued through the elements.

“Moving elements in the city, and in particular the people and their activities, are as important as the stationary physical parts. We not simply the observer of this spectacles, but our – selves a part of it, on the stage with the other participants. Most often, our perception of the city is not sustained, rather partial, fragmentary, mixed with other concerns. Nearly every sense is in operation and image of the composite of them all.”
(keywin Lynch, 1985, 13)

The image of a street or its town or the city is built by the observation and the mental image built inside the traveler. That image is included with patterns of relation of the objects to each other and the relation in-between the object and the observer. The important thing is these element should have a particular meaning for the observer, practical or emotional. For this image about a street or a city or an any built environment has to have some qualities such as open ended to near by environments, adaptable to changes and communicable to other individuals.

The study of the image ability of Lynch is made in several cities of America, and the attention was drawn towards the elements: paths edges, districts, nodes, and landmarks. It is important to note that in the process of design, interrelated of elements is important in making spatial progression meaningful. It is the duty of the designer to give perceivable clarity of direction.

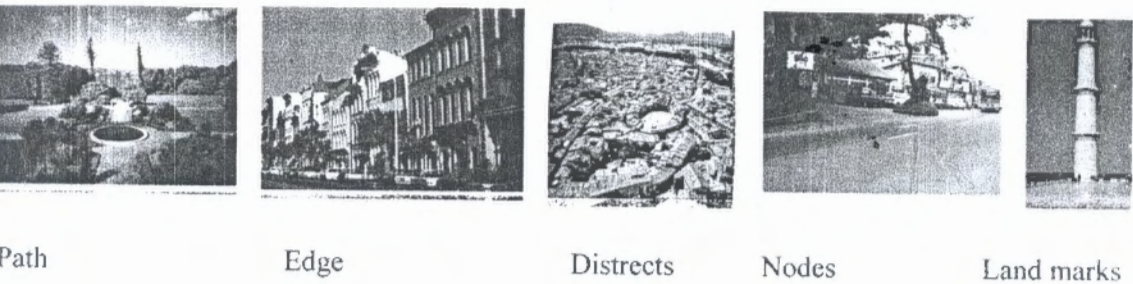


Fig 70: inter relation of elements to form a spatial progression

3.1.4. One way 'Spatial progression'

As mentioned early, the spatial progression is a phenomenon of spaces arranged to a certain order, giving priorities to places of different functions and which is felt by the observer who passing through that sequence of episodes. In different situations according to the hierarchy have to be captured by the progression of spaces, according to the significance have to be obtained by the climax or the destination, the form of the spatial progression changes.

The one way spatial progression, in its simple expression gives an idea about the 'direction' of the movement owned by the particular progression. The spatial progression of a street in a city could be different to a spatial progression of street leading to a specific location with a special function. For an example a religious complex provides a significant destination and a necessity to highlight the direction towards the final destination. Such a progression of spaces towards its' climax, gradually increase the importance of the places in its' hierarchy to enhance the quality of the climax and terminates its' journey after reaching the climax.

In the 14th century; in the Kandyan period of Sri Lanka a new concept of urban pattern is practiced specially in the Gampola and the Rathnapura valleys. Village shrine complex of Emmbakke is one of examples, where a progression path leads to a podiam with the 'devalaya' where the focus of attraction is intended to.

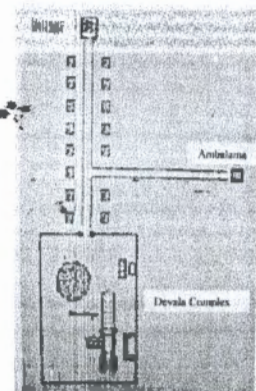


Fig 71 Temple village of 'Ambekka'
(Source: SLAJ, Vol.100:7)

Before entering to the progression path belongs to the shrine the spectator is exposed to a rural landscape with paddy fields and the dwellings of the villages who serves the 'dewalaya'. The entry to the religious progression path is demarcated by a "Thorana". This structure is constructed with the intention of creating a difference between the religious land and the rural residential land.

The street then starts from the 'thorana' has a gradual incline as it reaches the main focus of attention which is the 'Dewala' and the temple complex. The progression path of the temple village of Embekka which leads to the central podium containing the temple and the 'Dewalaya' changes its character from place to place gradually to enhance the quality of the shrine.

This particular pattern of the different elements create a spatial progression, which is felt by the observer on his arrival to the temple complex and that kind of a spatial progression could be known as 'one way spatial progression'. It has given the prominence to the act of arrival, and the exit is rather not highlighted. In this particular instance, the climax become the central point of attraction' because the climax contains a very significant function for the public. The arrival is considered as the most important episode in the experience of the spatial progression.

3.1.5. Two way 'Spatial progression'

The way we feel a space in a spatial progression of a building or any where outside a building, is a result of a comparative analysis, which happens mentally. Cullen, G. refers to three concepts that he feels, are important ways in which are visual reactions to an environment is stimulated.

"Our reaction to the position of our body is in its environment. It means, for instance, that when you go into a room, you utter the unspoken words, *I'm outside it, I'm entering it, I'm in the middle of it*" (Cullen, 1990: 9)

Ching, F.D.K. convey the same idea, but there he relates it to the time too.

"The path or our movement can be conceived as the perceptual thread which links spaces of a building, or any series of interior or exterior spaces together, since we

moved in time through a sequence of spaces. We experience a space in relation to where we have been and where we anticipate.” (Ching, F.D.K., 1996)

This same idea could be applied to a city, town or streetscapes belongs to them, where there is a definite and identifiable boundaries exist.

“Once the town can be divided into identifiable spaces that are either in, not in, entering or leaving it becomes possible to talk of ‘Here and There’ (Couch, 1990: 118)

Therefore the sequence of spaces of a town and its linkages can be experienced by the environment, and the image which it generates in the mind of the observer. It could be strengthen by colour, shape, arrangement, and etc. of the urban fabric.

In a city or a town in almost all instances which exists links it self with the other nearby city or the town creating a chain of interlink organism. Therefore the city could be experienced in the most general way referring to a linear arrangement, in two directions.

Two observers who approach the town from the possible two opposite directions experience the town in two different ways; meaning the entrance to one could be the exit to another, the sequence of episodes has a similar stimulus upon the observer. This makes the spatial arrangement of a city to organized in a way to provide optimum experience and the understanding the city to observers traveling both directions.



Fig 72: Two way spatial progression of streets

3.2.1 Orchestration of spatial progression in Streets

An assembly of series of spaces according to a particular function, to take place. The effort in assembling this sequence of spaces is not just for a visual satisfaction but for total emotional experience that a person encounters when moving through that sequence. The succession of this total experience lies on the conveying of a meaningful message, and effectiveness of conveying it. To achieve this, the spaces should be orchestrated in a particular pattern, with a directional sense, a clear indication of starting and terminating points, order of hierarchy with the progression of rhythmic movement manipulated.

In giving this sensory experience of progression towards a climax a major, the deliberate manipulation of spaces with the most suitable qualities at different stages plays a role to facilitate the spatial orchestration. These qualities would make different sensation at different episodes of progression, gradually reaching a climax experience it as a whole. In here the correct order and the articulation in a rhythmic way: both are very important. Further this is an orchestration of spaces to create a certain progression, so that one is oriented towards required direction with the correct emotional impacts which convey the correct message. The meaning representing in architectural products is not same as other form of art. The meaning expressed in other forms of art is some thing that exists, in architecture we find encoding of meanings. Hence the built environment created becomes meaningful, with meaningful spaces, for the people to behave, accommodate and feel comfortable with psychological impact.

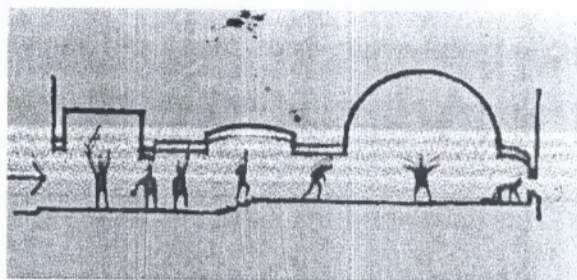


Fig 73: The play of different volumes and shapes strengthen the articulation of spaces.

It is an opportunity to make a greater effect on the observer with their closer experience of architecture.

Manipulating characteristic of the spaces becomes the architects' method of determining various aspects of on the experience of an observer. It is his interest in patterning some aspects of observers' experience. It takes into consideration the nature of experience, which is most useful in further the architects' goal. The most important thing is when a new addition is going to be built in the existing built environment the existing progression of spaces, has to obey the old arrangement, being responsible not to violate the richness of that.

The progression of spaces is given the life with movement generated. It is not something mechanical like the smooth floor of water within a good plumbing system, but a sensitive manipulation. Instead it directs towards a new kind of architectural space, which unfolds visually as the visitor progresses. The pathway the spatial progression takes place can be handled in a formal way or in an informal way. The formal arrangement of the path represent a symmetrical and direct axes, while the informal arrangement of the movement may be control through shallow turns rather than at nodal points.



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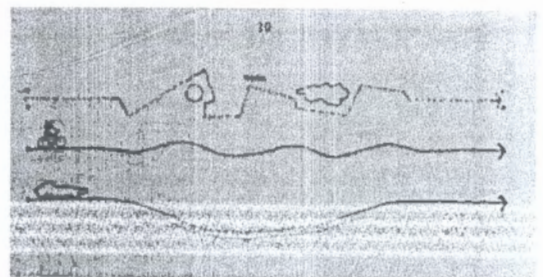


Fig 74: The different ways of manipulating the progression path.

The journey consists of a beginning from which the spectator is taken through a sequence of spaces to the destination, what ever the control of the rhythmic movement. The movement through the sequence of spaces, the path consists of a variety of experience so that the observer can turn, pause, stop and rest at will changing his pace and direction to absorb the optimum usage of the journey and the satisfaction. That optimum usage of the journey brought out by the sequence of spaces can be separated into episodes which can be clearly identified in a successful orchestration of spatial

progression. And also there are sub principles supplying the foods to strengthen the spatial progression as illustrated by following topics.

3.2.1 The components of spatial progression

These are the episodes comprised with the suitable spatial qualities in accordance with the responsibility in giving the correct impression to the beholder. The main path of this spatial experience being with a starting point with the glimpses of the major space and its activity and culminate at a climax the main space. Even though it is said the climax and the main space as one there will be situations these two are separated. As an example a path leading to the sea beach ends up at the main space the beach and the unreachable horizon as the climax. An in an arrangement of spaces there may be spaces of secondary importance which may have secondary paths of spatial progression leading away from the main path of progression.

How ever these components are connected to one another smoothly, rhythmically and meaningfully to facilitate the orchestration of the spatial progression even though they are separated for the easy study. So the each individual spatial quality is not generated by their own constituents only but it is also affected by the way the other two spaces connected in either sides.

Fig 74: The identification of the components in a spatial progression in st. peters Rome.



(a) Approach

The approach is the first experience of the entering process of any spatial sequence. It is the beginning where traveler gets the first impression conveyed about the meaning of that traveling and the unseen climax. It could be any kind of view of a built

form or a natural element, present in this space which accelerate the movement making the approach. As a flow space this is the space where the persons mind is prepared to accept the climax and the things happening there and as well as orientate him towards the specific direction of the progression. This is not only the roadway culminates at a specific building, it can be an approach to the progression path leads to a religious shrine complex, or an approach way to housing scheme or various districts such as administrative, commercial and etc, or an approach way to a town ship or to a city or to a village.

“Prior to actually enteing a building interior, we approach its entrance along a path. This is the firsat phase of the ciculation system, during which we are prepaired to see, experience and use the building spaces”

(Ching,F.D.K., 1945, p. 248)

When it comes to the buildings when it comes close, from the periphery to the building it is called building approach. There are three types of as frontal approach, oblique approach and spiral approach. But it is not possible to use them widely in other approaches like to a city center.



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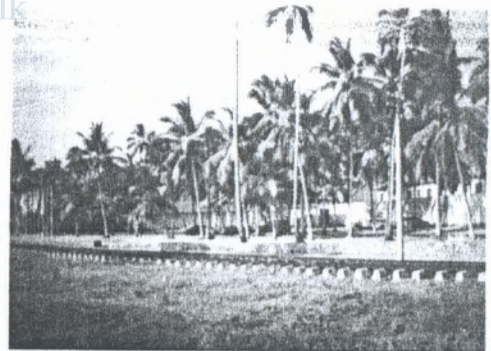


Fig 75: Approach way to the Blue Water hotel
designed by Archt. Geffry Bawa

Frontal approach

Most effective and formal approach leads directly to the destination. And the importance of the destination is highlighted.

Eg. To a religious place.

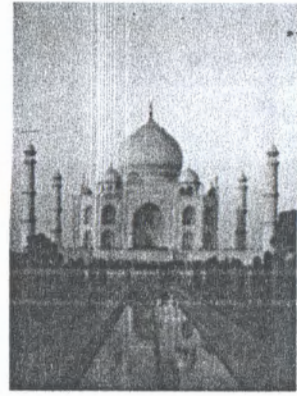


Fig 76: Frontal Approach of Taj Mahal, India.

Oblique approach.

This enhances the effect of perspective view of the entrance. The importance to the destination is not highlighted.



Fig 77: Oblique Approach



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Spiral approach

This prolong sequence of approach emphasizes view of the destination by moving around it. The importance given to the destination is less than frontal approach.

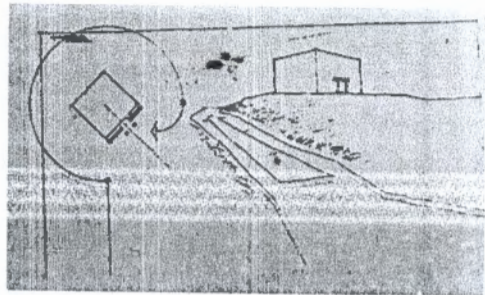


Fig 78: Spiral Approach

(b) About to enter

This is the space found in between the approach way and the point of entry. It is also can be identified as a part of the transition of an entrance, which provide cues to the specific feeling of entering. The difference of the shape and the approach way are connected to this particular space can make a big impact to the person experience it. According to that the directional sensation may differ, like in piazzas, forecourts, flight of steps and etc.

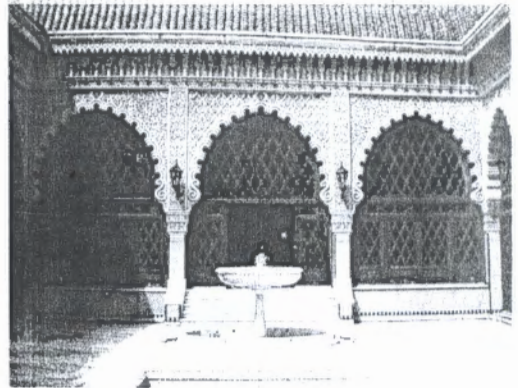


Fig 79: Fore court as manipulating the sensation about to enter

(c) Entry sensation

This is the uplifting quality of entering to a specific place. That is the main transitional point of the spatial progression. When the travelers feels it naturally a change in the behavior emerges.

The way the space is defined by the enclosure indicates the desired quality of the specific spatial progression giving an introduction of the thing happening inside. In further there will be an automatic transfer of 'mood' and 'mode behavior' with the differentiation of the volume, enclosure, texture, light and other spatial and qualitative attributes.

Eg: In buildings flight of steps portico, verandah colonnade.

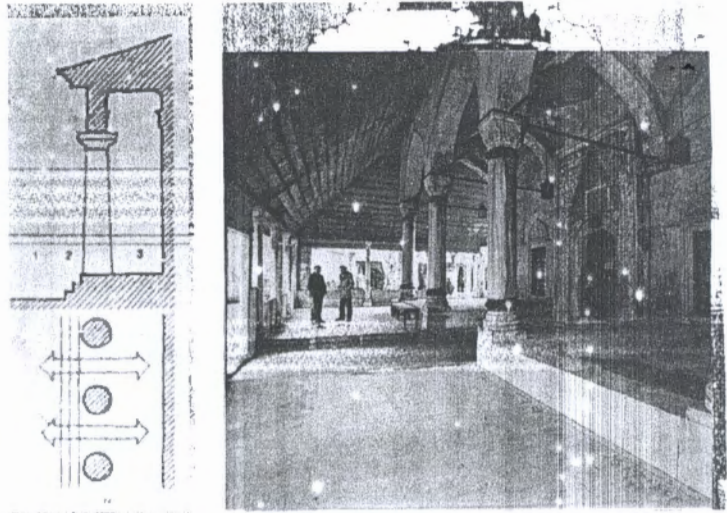


Fig 80: Linear transitional space

If it is considered in relation to a street this environment quality can be generated with the things like rows of trees or light posts, tightly connected streetscape, a bridge With an open space.

(d) Having Entered

This act as a well defined space where the traveler gets the feeling of some kind of a pause in the spatial progression. This feeling of a pause is the feeling of having entered. This is the environment acts as the lobby which generates rest of the movement which could be the main path only and with other secondary paths, to the main space.

The space facilitating the entrance is provided with the principles of spatially articulated transitional elements forming a link between inside and outside in the spatial progression. The means of articulation an alternation of spatial breath and spatial constructions, of high and low, connecting and separating, so one that correctly oriented understand experience transition.



Fig 80: Entrance lobby space

(c) **Intermediate connectors.**

The linkage in between the spaces found from the entry point to the main space is facilitated by these connecting spaces. Intermediate connectors are the spaces enhancing the movement other than anything else bringing the spectator from one place to another.

So it should be very directional, may be linear in space with either sides enclosed or semi enclosed or either sides open. The linear quality may be facilitated with regular and irregular shapes. The form, scale, texture, the manner in which they are connected to the other spaces of the progression path, generate the required sensation in the particular space. The usage of the spatial attributes may vary in order to obtain the meaning of the building.

In a building these connectors can be corridors. And in a street the quality of a connector can be created with row of trees on sides, tightly packed streetscape with repetitive elements and etc.



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Fig 82: A connector

(f) **Intermediate climaxes**

The lobby spaces in certain intervals along the connecting spaces prior to the major space. Those spaces provide cues, in specific meanings gradually, or take one's mind in opposite direction.

The journey through this orchestration of spaces is provided with pauses or rest points, indeed in the intermediate climaxes. And specially it is these intermediate climaxes which provides 'splendor' of the main space or the climax. In a street the nodes, promenades and etc can be the intermediate climaxes.



Fig 83 An intermediate Climax

(g) The final transformation

This is the immediate situation or the movement before the destination, main space or the climax. An intermediate climax or an intermediate connector can get the place of the final transformation. Most often enhancing the quality of the climax and possess a big difference in the spatial quality or heightening the same experience one had while progressing.

With in this transformation the mind-set of the traveler is prepare to receive the glory of the oncoming climax. And also the end of the transferring process provide a specific condition for the required meaning. For this purpose the situation is correctly formed by the fully contrast to the immediate climax or harmonizing with the others. The proper handling of proportion and scale, volume the; textural effect the light and shade, colour make the required transformation for the immediate climax.



Fig 84 the final transformation to the independence square

(c) The climax

The journey of the spatial progression, after saving the traveler with different experiences in different episodes finally arrives at a destination. This is the focal point of the whole progression which represent the major purpose and the meaning of that whole arrangement of environment. Climax become the ‘ore space’ which has the direct influence for the necessary meaning of the built environment. All the attributes of owned by this main space is in contribution to full fill the responsibility of the climax being the highest achievement of the particular progression of the space, generally the climax as the center of interest, becomes the largest space in the sequence.



Fig 85 Climax

(i) **The consolidation.**

The most significant experience of the journey of spatial progression is the experience gets from the climax. The highest motivation of the action as well as of the emotion has happened. So the next experience has to be the resting of the mindset in the termination of the whole journey where the print of the consolidation of the whole experience happens. This situation is called consolidation where man is detached with the experience of the spatial progression and providing a start for the contemplation which goes toward collecting an inspiration to the life of the traveler.

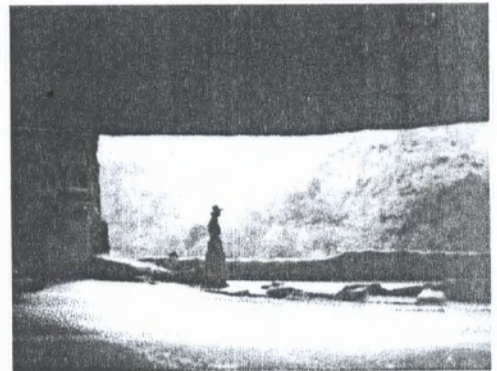


Fig 86:onsolidation after reaching the climax



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3.2.2 **Sub principles of orchestration of spatial progression.**

The rhythmic movement from space to space in the spatial progression to acquire the meaning to be expressed must be done with the skillful use of the sub principles; ‘here and there’, ‘this and that’, push and pull’ and similarity between beginning and end and the relationship in between all these principles.

(a) **Inter play of ‘Here and There’**

The interplay of ‘Here and There’ illustrates the way of relating the body to it’s environment. This is the experience of sense of position. The generating of inside, that is separate from outside. It is being aware of knowing where others are. Then same thing exists in between small and large, safety and danger, enclose and exposure, light and dark.

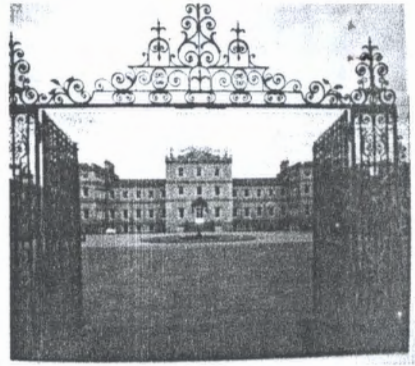


Fig 87.The inter play of Here & There

That means the absence of 'here' terminates the presence of 'there'. We feel 'here ness' where we are, because of the 'there ness' we are not stopping at one place, it always leads or connected to another place. This interplay some times can be clearly demarcated and distinguishable, and some times the spatial connection in between make them inseparable. The sub principle of here and there can be created by a small level difference and same times limited to a 'Framed view'. The relationship of 'Here and There' can be illustrated dividing in to some categories. This principle is widely used in manipulating the motion of spatial progression.

The first category shows the interplay of 'known here' and 'known there'

1 .Change of levels

This is the emotional reaction to the comparing of self to the play of levels. Below level produce intimacy, inferiority, enclosure and claustrophobia and above level give exhilaration, command, superiority and exposure.

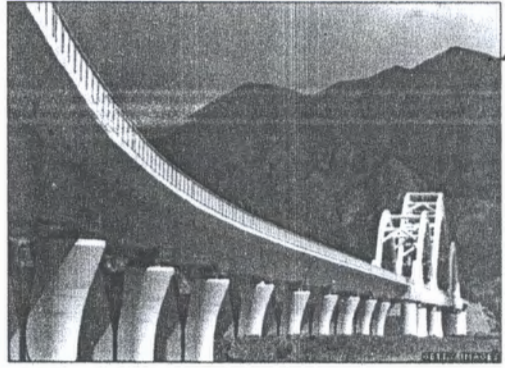


Fig 88. Above level in giving superiority

2. pin pointing

The highlighting of a patch of the built environment by illuminating is called pin pointing. This can be done with the use of light, through pointing the figure. It is not just pointing, but arouses the feelings.

3. Netting

In this devise the sceneries of faraway brought into our own environment by framing it.



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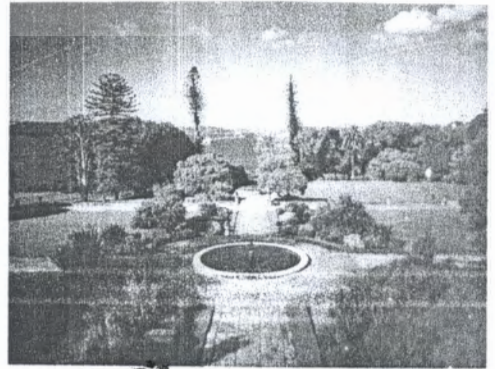


Fig 89. Framing to bring distant water body forward

4. Division of spaces

This is more similar to netting. Any linear extension like division is taken to an optical division of a line into here and there. It should be by dissecting the angle of vision into two roughly equal parts.

The second category of the relationship of spaces is concerned with the interplay between a 'known here' and 'un known there'.

1. Anticipation

When some one's curiosity is aroused to see and meet the thing in reaching the end.

2. Infinity.

The device is used to capture the sky. It can be done by truncation.

Or else it can be done by the visual substitution of a person, path of travel by using different levels, climbing up, followed by a flat plane or platform, followed by a sudden drop.

(b) The notion of 'This' and 'That'

In the dramatic progression of the space, the notion of 'this' and that is a very valid fact. The usage of this principle is used to identify the position of an object in relation to the place. It can be said 'this and that' refers to point the objects in the places of 'here' and 'there', and also it can be refers to the objects in the same place 'Here' or 'There'

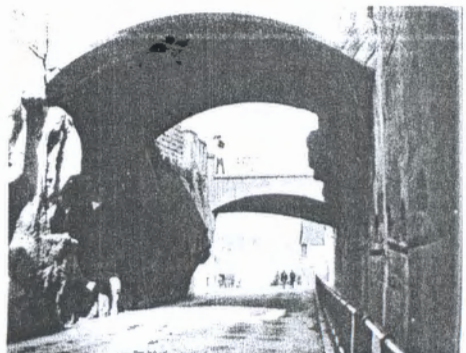


Fig 90. This in here and That in there

(C) 'Push' and 'Pull'

The concept of 'pull' and 'Push' is very effectively acts in a sequence of spaces in manipulating the progression from one place to another. When the pushing happens with the attributes of a space the action of pulling by the attributes of the next space grab the observer to it's own territory. If we analyze the 'Pull' factor it is the visual interest, or else a sensory stimulation which draws the traveler towards 'there'. Generally the 'push' factor denotes directional sensation, and enclosed sensation, which pushes the traveler from 'here' to 'there'. It is clear when a particular spatial progression is analyzed the 'pull' factor of one place become the 'push' factor for the next movement, toward the impotency placed beyond. However the 'pull' factor can be accentuated or emphasized by the factor which is more effective.

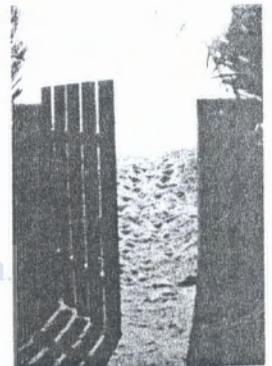


Fig 91. Glory of the distant space is a pull



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(d) Similarity between beginning and end

The main space or the climax is the space of characterizing the meaning of the particular progression of the space and the qualitative expression of that. At the start of this section it is discussed this should be glimpses of what is happening in the major space, for the traveler to be aware of that and getting ready for the experience on coming. There the efficiency of conveying a particular idea and the perceiving of it can be increased in this format.

3.3. Case Studies

3.3.1 An examination of the 'Main street', Mawanella; along the Colombo-Kandy road.

3.3.1.1. Introduction

Mawanella is known as a linear township emerged in the Colombo Kandy main road. It is found as a bigger and important township along this road. Earlier Mawanella was little hamlet surrounded by mountain range and it became a bazaar. A bigger transformation of the development of the town happened with the involvement of the Britishers and their introduction of plantations to the surrounded area, and the Colombo Kandy road development.

The meaning of the township as the commercial and transportation hub in the area still valid with the functional aspects of the township.

The organization of the townscape, the access ways, built fabric, architecture and all are in the contribution to facilitate the main function of the town, the commercial and transportation aspect. For an instance the old shop house is a popular element in this context which make the pattern.

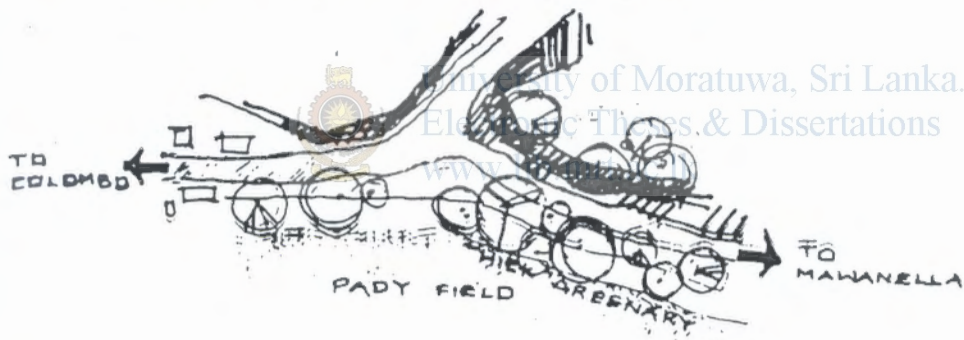
The linkage of the Mawanella town and the surrounded area mainly happens by the support of the Colombo Kandy main road. There is a higher amount of travelers passes this township daily along this segment of that main artery which is called the 'Main street' within the town area. That is the reason to select this road for the study instead it has a progression of space in to a satisfactory level.



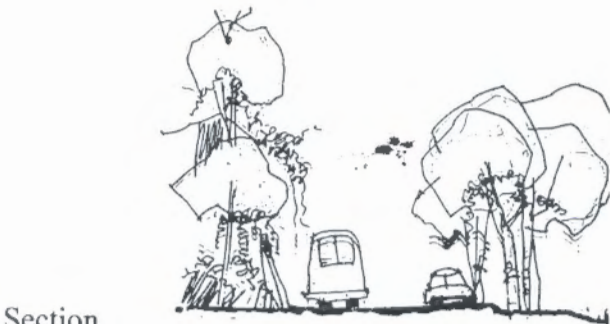
Fig 93." Soorasaradiel Gala" as land mark



The approach to the Mawanella township begins at the tightness where the Colomho Kandy road runs through a huge rocky earth bank, recently where the by pass road to avoid the town area starts. The sharp bend created newly for the safety of the traffic is a supportive factor to the traveler in experiencing the approach. This sharp turn to right, slow down the movement and breaks the monotony had before as getting ready to observe the on coming episodes of the spatial progression.



Plan



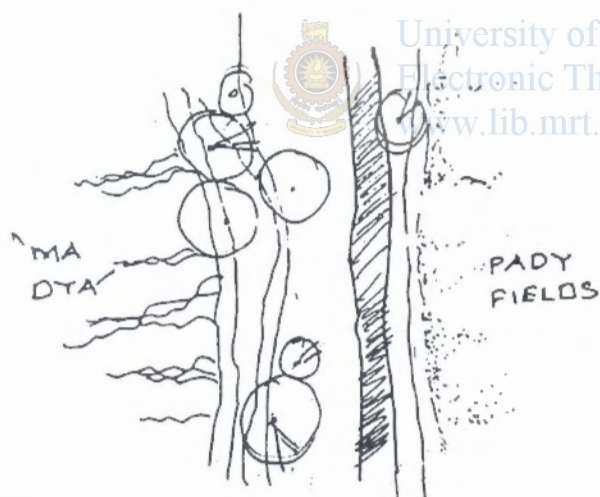
through the road and the rocky earth bank

Fig 94. Approach to the Mawanella town

This tight spatial quality of the enclosed space is suddenly released to open space one side the view of the river 'Ma oya' other side the paddy fields, an absence of the buildings or a break of the built fabric. The traveler is made silent with the change of the enclosure, the sun light flourishing and the cool breeze. The attention of the observer is drawn towards the start of the built fabric of the Mawanella town with the view of the 'young buddhist association Mawanella'..



Fig 95. View of the 'Ma Oya' at the absence of the built fabric



Plan



Fig 96. Silence at the openness, at the beginning of the built fabric

It is the spatial arrangement which demarcates the end of the spatial progression to the person coming from Kandy to Colombo, While providing an approach to the person coming from Colombo. Above mentioned open space relaxes the mind-set

after enjoying the progression of space of Mawanella town area. And the tightness of the spatial character pushes out the person to a normal built fabric keeping a full stop to the experience given. The view found, in the slope towards Kegalle; the mountain peak 'Soora Saradiel Gala' is the point of **consolidation** which make the traveler contemplative about the experience had.

(b). **About to Enter**

The quality of the space where we feel that we are about to enter, the immediate defined space to the entrance, act as a part of the transition of an entrance. The gradual densification of the buildings on the either sides of the road decrease of the natural elements focus the attention towards the entrance. There is a reduction of void spaces, and rhythmically the buildings are getting close to each to form continuity in the enclosure towards the entrance. Produce the sensation of urbanity which the observer is going to experience.

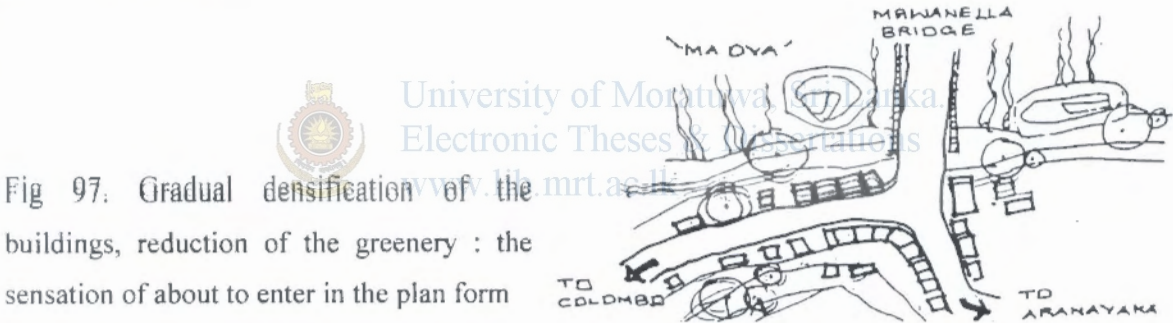
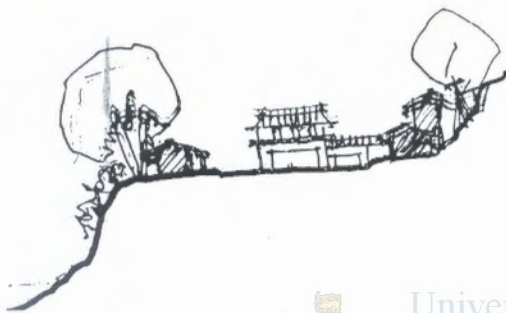


Fig 97. Gradual densification of the buildings, reduction of the greenery : the sensation of about to enter in the plan form



Fig 98. Section along the road, the rhythmic densification of built forms towards the entry

The whole arrangement of the built environment focuses the old two storey shop house as the major element of the built fabric of the old commercial townships the screened view of it define the entrance, emphasize the meaning of the Mawanella being a commercial a transport hub of the area. This object is found in the naturally lighted up environment which pulls up the attention of the spectator. The gradual inclination ends up at the node, adds the view of the entrance part which enhances the quality of the entrance environment and the feelings generated in the mind of the traveler. This is the point the approach environment which is more natural and the urbanity found after entering is connected and allow a change of the mind set of the traveler.



Section across the road

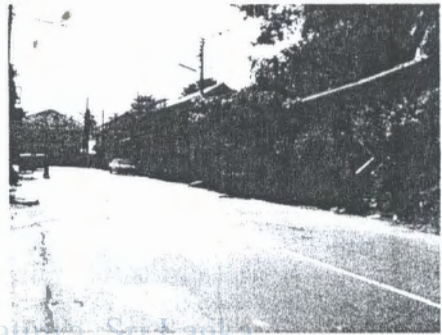


Fig 99; The view of the Two storey shop house demarcating the entrance to the town of Mawanella.

(c). Entry sensation

The exact position of entering to a built form always inherits an uplifting quality which is manipulated by its volume, light and shade, colours and texture and etc. The bridge of Mawanella which an ancient value as a brick structure with use of arches which is built by the British's facilitates the action of entering. The large volume of the open space well lit up on either sides and on top produce the main transition of this particular spatial progression. It is a big difference of the spatial quality comparatively to the environment of about to enter and the environment found after entering. It separates the township of Mawanella from the exterior, while the heavy railing of the bridge leads the traveler towards the town center.

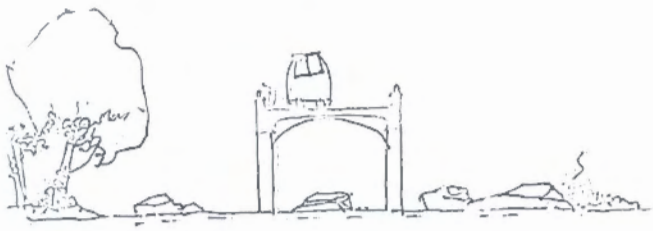


Fig 100. the uplifting spatial Quality of the 'entry sensation, of the spatial progression towards the Mawanella town

The beholder grasps the spatial quality, and imposed reduction of the speed of the movement physically and mentally which stands for the change in the mood and the mode of behavior of the traveler, while generating a movement towards oncoming built-up area.

In the consideration of the traveler from the other side; from Kandy, receives this particular spatial quality of the bridge along the river as an **false climax** in the detachment of the experience of progression of Mawanella townscape.

(d.) **Having Entered**

This is the transitional space which produces cues between exterior and interior and entry or parts of the spatial sequence. This is most probably a space like a lobby which manipulates a brief pause physically or mentally.

Entering to the Mawanella town from Colombo side, the end of the bridge signs the feeling of having entered. There is an open lobby like space which is not well organized. The traveler is pushed over quickly to the connector which moves the traveler towards the climax. But that charm environment is supportive to calm down the senses of the observer after experiencing the uplifting quality of the entry sensation, and make more attention to the climax.

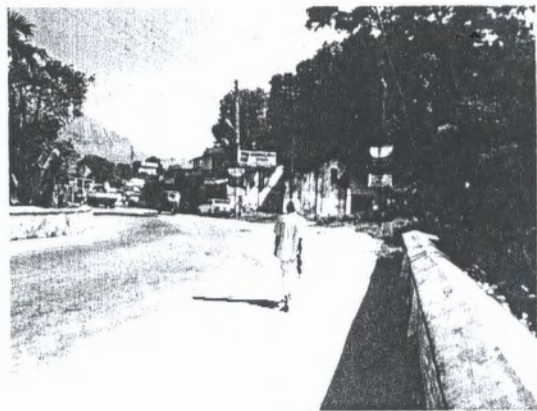
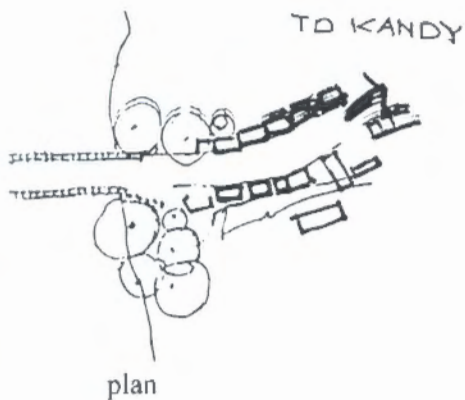


Fig 101. Having entered

(e.) **Intermediate connectors and the Intermediate climaxes before the climax.**

The journey from the entrance to the Mawanella, to the climax of it is a sequence of exposure and enclosure of constraints and relief. The movement towards the climax is made with pulls and pushes. The intermediate connectors of the main street of Mawanella are made of closely packed shop houses with little differences to one another. The repetition of this unit provide forces for the movement along the required direction while producing an edge and an enclosure while controls the light and shade, texture, colour and etc, to produce variation in the spatial quality in the sequence of spaces. From the beginning towards the major place along this connectors the public activities also increases.



Section across the road

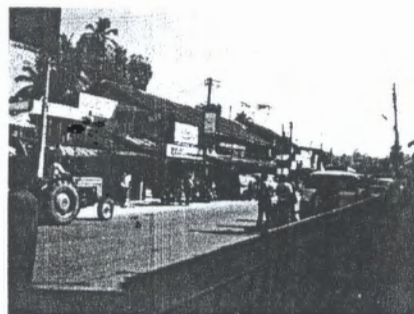


Fig 102. The repetition of the shop houses in creating the intermediate connectors

The one and only intermediate climax found in this progression before reaching the climax is the node where the Hemmathagama road is connected to the main street. There is a conceptual lobby made by the built fabric, where the commercial and transport activities take place as same as in the climax in a low intensity. The exposure manipulated with the widening of the road as well as the pedestrian work and the set back of the buildings enhance the lobby like spatial quality, specially the larger space left in front of the building of co-opacity, has become very useful in heightening the quality of this pause of traveling which is intentionally or unintentionally done.

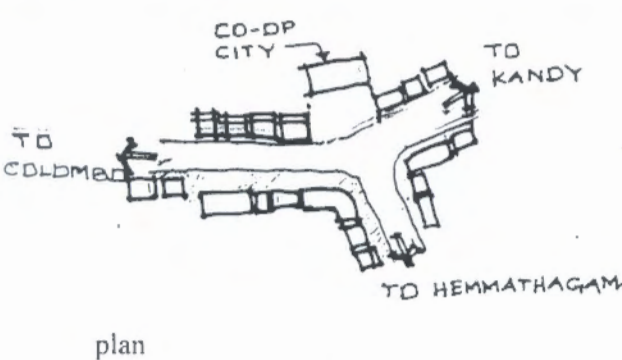


Fig 103. The node, the Hemmathagama road is connected to the main street create the intermediate Climax

Fig 104. The set back of the Co-op City building as a support to the intermediate climax.



This is also another false climax the travel found while going out from the spatial progression, after experiencing the main space, thought the connectors.

(f). **Final transformation.**

This is the immediate environment before the climax which makes the transition to the climax from the rest. The spatial quality created could be a contrast or heighten the experience have been getting.

In the Mawanella town ship is a place comprised of shop houses. But when it goes to the connector space immediately before the climax the building type changes to one story shops, connected to one another very tightly without leaving voids. The humble manner of the built structures and the spatial quality produce an enhancement to the climax and the full focus is pushed towards no where but the climax. In this connector when we moves from Colombo side to Kandy side the view of the clock tower and the Buddha statue together comes closer and closer indicating we are about to enter the climax we were searching for within this spatial progression .

Fig 105: Cross section of the Main Street at the Final Transformation with the low scale single storey shops and the view of the clock tower



Fig 106: Low scale single storey shops creating the Final Transformation



This is also the situation where the traveler gets a relief after experiencing the glory of the climax when coming from the climax when coming from the Kandy. It is same as the Micheal Jacksons 'Uh' in his songs.

(g). Climax

This is the focal point of the entire process which is the most important space, the main space, climax or else can be called as a “core space”.

Town center which is a large open space where lots of commercial and transport activities take place. The clock tower and the Buddha statue is the anchor of the climax in this particular spatial progression. The all shop fronts in the periphery of the major open space looking over the center of the space. There the attention is drawn towards the center and made it a focal point. The low scale buildings have given the enclosure as well as the priority to the city center the open space, while the bigger buildings just providing an enclosure. Newly built two storey building on the right side of the Main street acts as the spine to the climax. There are also buildings with 3 or 4 story's which supply a back to the climax. The bright sun shines up the all objects within the exposure of the climax in highlighting the proud ness of it.

Fig 107: The climax at the plan form

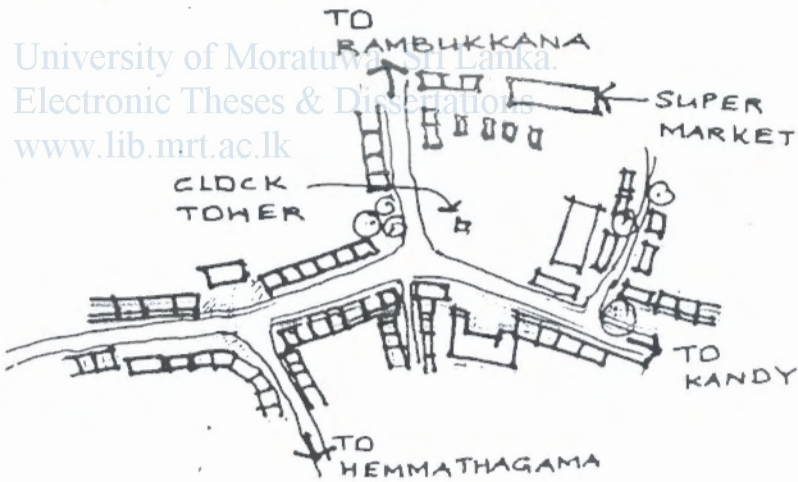


Fig 108: The clock tower with the Buddha statue anchoring the environment of the climax

Fig 108: The enclosure built by the shops in manipulating the focus to the center of the climax



Fig 109: A spine is made to the climax by the buildings of the other side of the main street



The scale and the proportion of the open space, the enclosure of it and is much more close to the human habitation and it is comfortable to the user and traveler pass by to get an accommodation for their activities and for their emotions, and to have a pause to a conceptual rest. The experience of the climax at the town center of Mawanella manipulates the same sensation to the traveler coming from Colombo side as well as from Kandy side. The curvature of the main street of the climax reduces the speed to a lower level of the movement of the traveler pass by and gives the opportunity to enjoy the glamour of the space.

The enclosure
of low scale shops

the anchor
of the clock tower

the spine
of tall buildings



Fig 110: Section across the climax

(h) **False climaxes and the connectors found after the climax.**

The connector starts from the town center of Mawanella is accomplished with a spatial quality which generates much more relief rather than constraints. At the beginning there a tightness created among the enclosure of the streetscape by two or three buildings compresses the feelings of the observer suddenly and released to the above mentioned environment which reminding an experience similar as the 'Micheal Jacksons' 'uh' of his songs. And this is also the final transformation to traveler coming to the city center from the other side.



Fig 111: Exit from the climax

The enclosure of this space contains two storey buildings or no more than three to four floors. But there is a looseness of the pattern. The street edge defined by this enclosure is located at a larger distance, where more open land has being left which heightens the exposure of this whole space. It is the spatial quality carries out further the glamour of the climax passed without letting fade. The helpness of the environment for the movement as a connector is low Again when the traveler is close to adapt the journey through this particular episode, the distance from the street to the building edge decreases and give a feeling of the departure we are going to accepted.



Fig 111: the openness of the connector carrying the glamour of the climax further



At the end of this connector there is a smaller false climax which is created by the node where the by pass road again connected to the main street. The richness of this space is not that much admirable, being an open space demarcating another interval of this spatial progression.



Fig 112: False Climax at the by pass connection

Then again the road gets narrow to form a connector in the spatial progression which leads to the end of the experience. The solidness of the streetscape is gradually affected by the increasing the number of voids joined in between. The enclosure to the movement of the space is gradually replaced by the greenery and the scattered built structures. The brightness what we had earlier is merged with the shade of the tree canopies.



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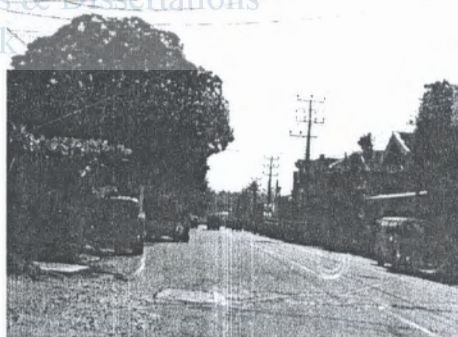


Fig 113: The increase of the voids, greenery and shade of the connector towards the exit of the spatial progression

When the traveler coming from Kandy is considered these episodes become the intermediate connector and intermediate climaxes and even the entrance to the journey towards the climax. In that way the experience the traveler provided with is not satisfactory as the experience produced in the journey from the Colombo side to the town center. And the spatial quality should be developed in order to obtain optimum satisfaction through the journey.

(i) **The consolidation**

Ultimately the road reaches the end of this spatial experience through its progression. Where we find an open space which takes the observers eye to the scenic view of the ‘Alagalla’ mountains range, same as we found in the approach which consolidates the whole experience and push out the beholder from the progression of space with a carry out feeling.



Fig 114; Consolidation , the environment defining the exit of the spatial progression of the Mawanella township



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Fig 115; The view of the Alagalla mountain range at the Consolidation



It is said by the author, T.S. Eliot in his book ‘the historical sense’, ‘what we call the beginning is often the end. And to make an end is to make a beginning. The end is where we start from every phrase and every sentence is an end and a beginning’, that is to say this place is the starting of the episodes of spatial progression as approach to the traveler coming from Kandy.

3.3.1.3 The experience of the streetscape and the concluding remarks.

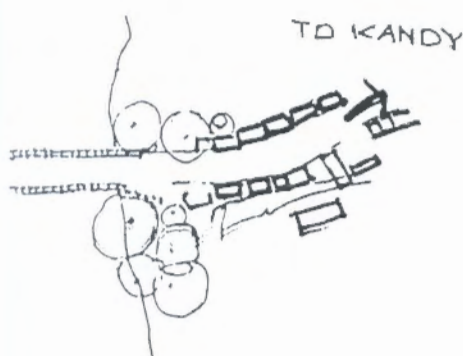
When the whole experience is examined the progression of space does not terminate at the climax focusing towards a consolidation point without having a highlighted continuation after the climax. As general to all townships a 'two way spatial progression' exists with the township of Mavanella. In further there is a rhythmic progression through the episodes; approach, about to enter, entry sensation, have entered, intermediate connectors and climaxes and the linkage of the climax and the end of the spatial progression, the consolidation is movement through another set of episodes: false climaxes and connectors. In this situation the traveler coming from the other end of the street here from Kandy also get the episodes or some of them have to be found before reaching the climax. However the sequence of spaces arranged to a hierarchical order in creating an orchestration of spatial progression with the support of serial vision, the major and the interconnection of elements and the pattern of built forms to fulfill the main function in the township of Mawanelle to experience the meaning of a commercial and transport hub coming from the olden days.

a. **Traveling from Colombo to kandy along the Main street of Mawanelle.**

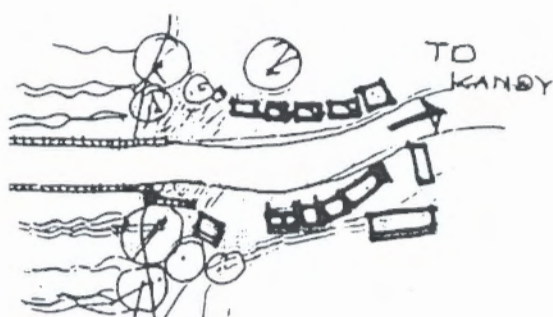
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The episodes of the progression from Colombo side to Kandy side all together taken to the consideration reveals a shortcoming of timing in between the intervals. That means the length of the space of one episode where the observer travels through sometimes little bit shorter. When the traveler is traveling by a speedy vehicle he unable to grasp the full experience and the real sense when he moves quickly from one component to another. It does not mean the components are not fulfilled with the required spatial quality.

The experience of 'Having entered' is not comparatively rich in the spatial quality needed. The openness of the river bank is not utilized well. The shop houses have created the streetscape so closed to the street edge, without having the set back in order to create a lobby like space to carve out the feeling of having entered.



Existing situation



Developed situation

Fig 116: the existing and the developed situation at the sensation of the 'have entered'

And there is looseness in the pattern of the elements of the components found after the climax. In other words there is a tendency of coming up buildings with some what different languages which produce some kind of an affect to the wholeness of the entire progression and also have some kind of an affect to the rhythmic movement.



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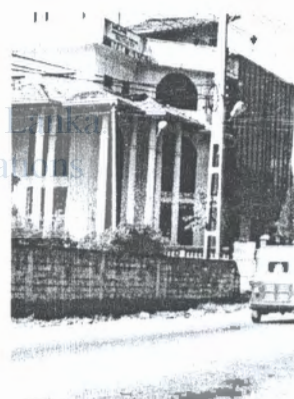


Fig 117: Emergence of the buildings of different languages

(b) Traveling from Kandy to Colombo along the main street of Mawanella.

The variation of the components of spatial progression, from the one to the other is lacking which is different in the other progression part started from the other end at the Colombo side.

But with the densification of the built structures, decrease of the voids support the increase of solidness of the streetscapes. It is the manipulation of some kind rhythmic continuation of the movement in a hierarchical order towards the center the

imax the Mawanella town. That is the basic formation of orchestration of spatial progression. The framed view of the 'Soorasarwediel Gala' direct the movement towards while informing them now they are in Mawanella.



Fig 118; Soorasaradiel Gala directing the movement

The intermediate climax such as the junction where the by pass road is connected to the Main street, is given a look of attention by the streetscape. It may be because of it being new addition to the environment. Also the new construction coming up without considering the existing context and the episodes of building the main progression is not seen even, to contribute.

The arrival to the climax gives the same richness of experience as stated earlier. But after the climax the other smaller climaxes and the other connectors connecting the exit of progression through the old shop houses and the consolidation with the view of the 'Soora Saradiel Gala' is satisfy the traveler in his perception.

3.3.2. An examination of the approach to the city of Kandy from 'Old Peradeniya road' along 'Dalada Veediya' to the sacred area

3.3.2.1. Introduction

Kandy is a city we find with an importance secondary only to the city of Colombo with a significant historic value. Even though we are referring Kandy as a city, it is only a major town found in the county. The importance of this city is strengthened by being the last kingdom of Sri Lanka owning the temple of tooth, central administrative town of the central province and a concentration of educational institutes and other facilities and serving not only to the central province but also to near by areas. In all of these aspects, the historic value and the sacredness with the tooth relic temple is the most prominent attachment to the city of Kandy.

The arrangement of the city, the access ways, built fabric, the architecture and all that have been created in order to enhance this primary function and let other functions secondary and nourished by the glory of the primary function of the city. In this situation it is not hard to realize the main progression path relevant to this study is molded to lead the traveler towards the experience of the historic significance of the city.

The Colombo-Kandy road is the main artery carrying the highest percentage of travelers to the city. In that the arrival of the travelers to the city of Kandy smoothly happens through a comfortable and subtly organized streetscape which is spontaneously developed, and which also has an ancient value being the progression path used for 'Randoli' procession of the day time going for a the 'Diya Kepingima' ceremony at Gatammbe, which is a combination of old Peradeniya road and the 'Dalada Weediya'

After entering to the plane of the view of hillocks of the central province, passing the great entrance 'Balana', a subtle rhythm of the streetscape with old shop facades still existing and the residences, in Kadugannawa, Pilimathalawa, Kiribathkibura, Peradeniya towns and in between found. These are the townships found along the Colombo – Kandy road towards Kandy which are humble in appearance, in the scale and proportion of built structures are more familiar to the people. There are also similarities in the pattern of the streetscape such as existence of the shop houses. This rhythmic pattern is broken by the Peradeniya bridge over the Mahavelli river found in this route.

At Peradeniya town the Colombo kandy main road gradually gets little bit narrower with the tightness of the streetscape, marking a bottle neck enclosure and meets the Gampola – kandy road with similar characteristics. It is surely a comfortable push towards the bridge the beginning of a new approach.

Fig.121: The comfortable push of the built fabric and the natural setting towards the approach to the city of Kandy in the plan form

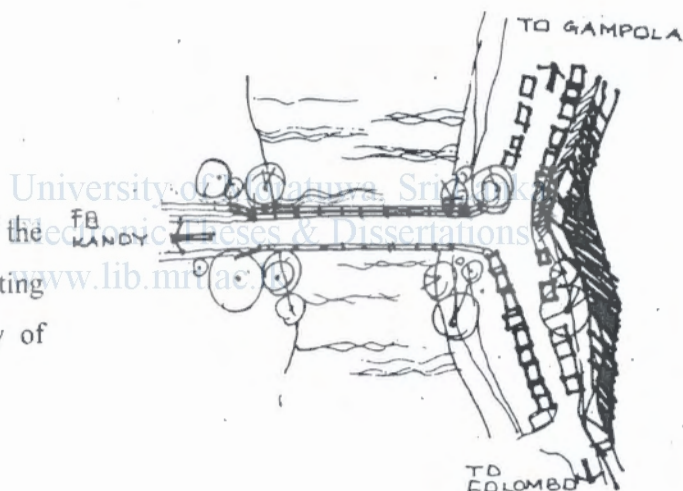


Fig.122: The bridge of Peradeniya as the beginning of the new approach



The view of the bridge, the huge magnificent open space with cool air and flourished with sun light, the over coming grand greenery breaks the monotony of the traveler makes him aware of what he is going to experience. From the higher exposure to the enclosure of the row of trees, from the bright sun to the shade of tree canopy pressures the movement of the traveler to the front along the approach way.

The journey from approach to the entrance is also has spatial qualities in making constraints and relief which promote the movement. Traveler finds special land marks the Peradeniya botanical garden and the temple of Gatambe, with an indication that we are on the way to the city of Kandy and close to it, and the wholeness of the entire journey the grandness the discipline has been facilitated there.

Fig.123: The greenery enhancing the movement of the approach



Fig.124: Peradeniya botanical garden in adding a richness to the journey with a symbolic representation of the grandness of the destination



Fig.125: the temple of Gatambe being a land mark



Fig.126: Section across the approach way



(b) **About to enter.**

When the continuity and the order of the approach way with its grandness and disciplinary with well grown trees and the kandyan and post independence era architecture starts to decline by emergence of a huge open space away, and the buildings running away from the street creating a mouth to a huge spatial void.

The earth banks and the pattern of the fence of near by building complex direct the movement toward the entrance. The gradual change of the tree canopy enclosure to a semi enclosed space, shady comfort to a brightly lit space indicate the traveler that he is going to be exposed to a contrast space. The canopy of the temple tree seen far away gives a directional impact and a message about the street we a going to enter.

Fig.127: The gradual change of the tree canopy enclosure to a semi enclosed space, shady comfort to a brightly lit space

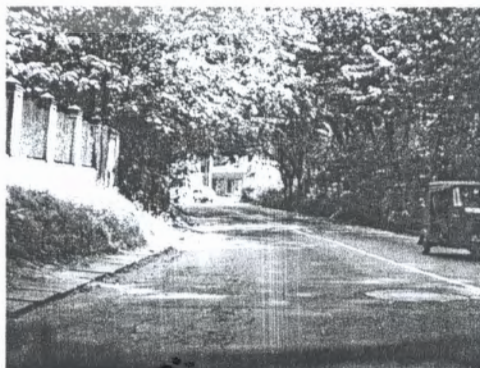


Fig.128: The earth bank and the fences lead the movement to the forecourt of the entry



This Peradeniya road, Gannoruwa road, the Heerassagala road children's park at the middle creates a fore court to the entry to the city of kandy. There's the place the traveler is given an opportunity to choose the road, the old Peradeniya road or the Viliam Gopallawa street to go to the city center.

(c) Entry Sensation.

When the traveler gradually reaches the center of the larger intersect of roads, the center of the massiveness of the exposure built by the Children park and the playground of the Peradeniya Mahanama school, absence of the buildings in the visual axis definitely produce a motivation, an upliftment of the feelings to accept a major transition of the particular spatial progression.



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Fig.129: Uplifting quality of the entry environment with the exposure at the node.

But suddenly the traveler gets confusion in choosing the next episode of the spatial progression. Even though there is the spatial progression of entry sensation for certain extent, the meaningfulness is lacking. It does not imply the entering to the access leading to the ancient kandyan kingdom, the city of the temple of tooth.

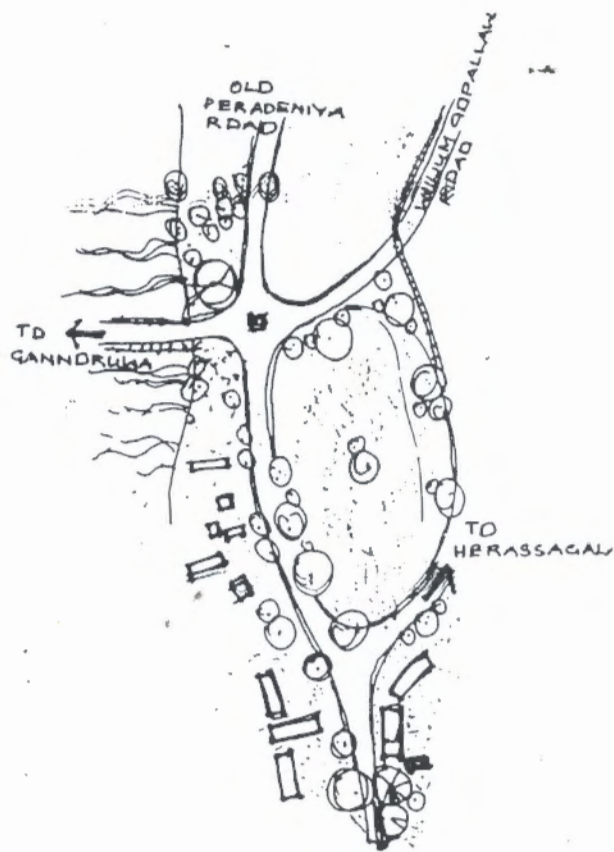


Fig.130: entry environment to the old Peradeniya road in the plan

(d) **Have entered.**

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This experience given to the traveler is vague. There is a lobby like space provided an enclosure by the greenery with a 'Bo' tree on one side and parallel to the Mahavelli river and other side an earth bank, a comfortable level of light which could be developed to mark with a meaningful message where we are going for the traveler entering the street as a pull to escape from the exposure and to have a rest from the uplifted feelings. The appearance of the army barrack in the streetscape also destroy the spatial quality of the entry.



Fig.131: the environment which can be developed to enhance the sensation of have entered

(c) **Intermediate connectors and Intermediate climaxes.**

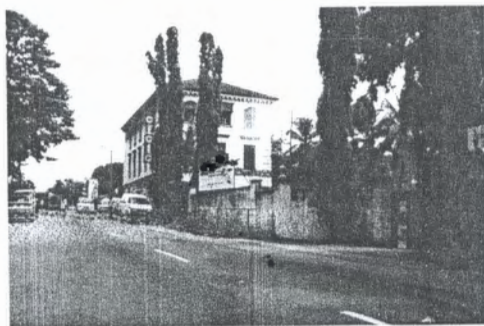
The linkage between the entrance and the city center of kandy along the old Peradeniya road is almost a connector with smaller, intermediate climaxes. The rhythm of this connector is made out of the built mass and the voids in between with the support of the greenery.

The built mass along this is this is comprised with kandyan, colonial period, post independence period and as well as the present day architecture, with maximum height of four storey. At the beginning the streetscape is built with built structure and trees together. Voids are comparatively higher in the streetscape. The scale of the buildings are comparatively higher and the variation of the building type is also higher. When we go further the number of voids the association of greenery and also the scale of the building gradually reduces and the buildings gradually reduces and facilitate the movement with a rhythm.

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Fig.132: Comparatively high void spaces, greenery in between the large scale building forms in the streetscape at the beginning.

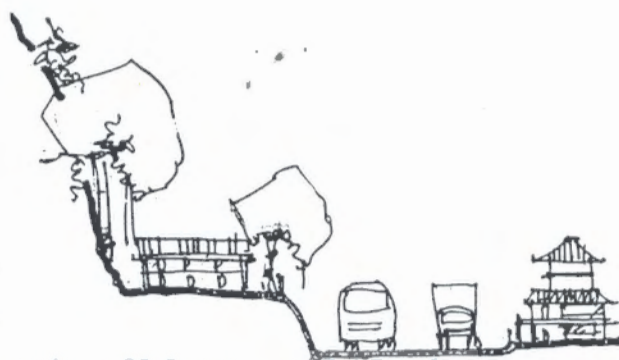


Fig.133: buildings of different periods



In the early part with the variation of built forms with having lack of relationship to each other, the streetscape become distractive to the traveler for a certain extent and slow down his movement. There are some places where the trees stands before such unsuitable structures and reduces the effect to the traveler. But the sequence of spaces with solid and voids in the streetscape make a bean like space in the street which pushes the traveler to the front. Also the mountain back gradually release his control when the traveler goes forward, and it is also a push factor . The old Peradeniya road being in the valley of in between the and the Hanthana mountain region also promote the movement.

Fig.134: a section across the early part of the old Peradeniya road in the mountain valley



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The first intermediate climax we meet is in front of the 'girls' high school' and the Vihara Maha Devi college kandy where the street divides into two making a road one to the Good shed where the bus stand is. It is also the point where the street architecture differs to the earlier had. The character is given to this space because of the node, not because of the contribution of the streetscape.

Fig.135: the intermediate climax at the node in front of the 'viharamahadewi' college



It is said the pattern of the streetscape is changed. Two or three storey small scale buildings become the major element of the streetscape, even though they belong to different period. The employment of the kandyan roof in some building, even thorough it is suitable for the own structure or not or it is bad or better in street architecture has become a symbolic representation of the climax. The appearance of the greenery in the streetscape gradually diminishes. The solidity also increases.



Fig.136: the streetscape comprised with small scale two or three storey buildings connected tightly to one another of the intermediate connector



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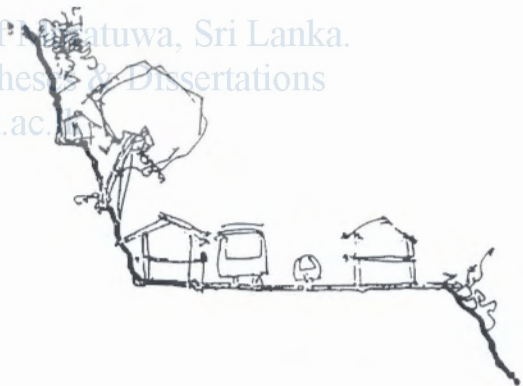


Fig.137: Section of the intermediate connector leading to the main space

The shady path earlier had gradually transferred to the sunny areas. Urban rush emerges, and pedestrian involvement is also increases. Thus a certain pattern is created to draw the attention and the movement towards the main space. To add a comfortable variation there are breaks of the pattern in some intervals with the use of scenic views and some building with different architecture as an example the view of the 'Hindu Kovil' which also supportive to the rhythm of the streetscape.

Fig.138: scenic views found in enriching the experience of the connector

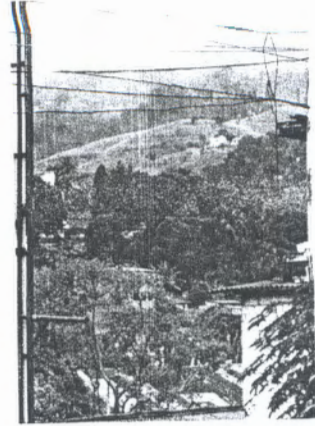


Fig.139: Breaks in the repetitive rhythm of the streetscape



(f) **Main space.**



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In this particular spatial progression we find the situation where the 'Main space' and the 'climax' separate. The main space of the town is the open area around the old clock tower the enchanting together in its grandness and being the focal point. The whole built structures, the road network, the green patch obey the centralized situation there will the scales proportions spatial arrangement and the extravertedness of all of. So the beholder finds his pause physically and mentally after traveling a long time.



Fig.140: section through the main space around the clock tower

Not only the spatial aspect but also the functional aspect supports to the space act as the main space. This is the place where a higher percentage of people coming to the city gather to get transport facilities to the other areas of Kandy and to get their commercial activities fulfilled.

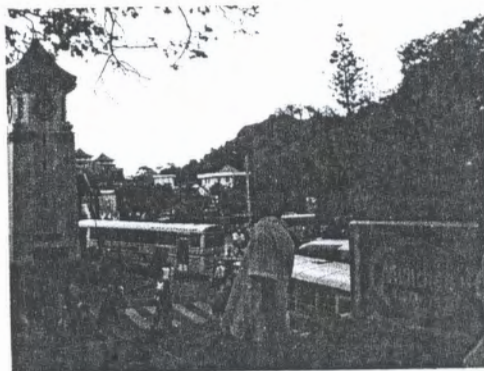


Fig.141: the main space of the city of Kandy where lots of transportation and commercial activities happen

(g) Final transformation.



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Fig.142: 'V' shape mouth absorbing the traveler to the final transformation of the spatial progression



The "v" shape mouth, the disciplinary architectural quality of the streetscape in 'Dalada Veediya' and the openness of the promenade of the Torinton shopping complex, transfer the pause at the main space to a brief pause by grabbing the attention of the traveler. And there is a continuation of the movement generated.

The space created there is totally contrasted to the other spaces found before in the spatial progression. The streetscape is built totally out of colonial architecture, which manipulates a rhythmic movement for the traveler in its arches, lines of opening vertically as well as horizontally. A conceptually perfect wall grand and



disciplinary with its repetitive arcades, colonnades, moldings of the facade is created on either sides which direct the traveler towards the climax with out disturbing. The height of the facade walling the corridor, narrowing the path making tightness makes a comfortable push towards the major experience of this progression.

Fig.144: British period architecture making the contrast



Fig.145: Repetitive features of the streetscape enhancing the movement



The street architecture is totally contrast other architecture at the climax and enhances the quality of the climax. The spatial quality created totally different the mood of the traveler is set to receive the glory of the climax. 'Dalada Veediya' is indeed the final transformation in this particular spatial progression.

(h) Climax

This is the place where the glory of the whole Kandyan kingdom from the ancient days is consolidated. The lake which is surrounded by the sacredness and the grandness of the temple of tooth, and 'Devala' complex, the architecture of Kandyan kingdom with its proud, the mountain back drop, reveals a great story of the Sri Lankans.



Fig 146: The temple of tooth and the 'Devala' complex at the climax

The whole spatial arrangement and architecture around the climax is to enhance the quality of this major space. The dominance of the spatial quality in the hierarchy of the spatial progression is well established by the arrangement, elements and architecture of the climax. The size, the quality indicates the experience and the feeling of grandeur, ceremony and nobility by being in an informal manner. The streetscape running towards the climax makes a centralized effect there.



Fig 147: The physical arrangement to enhance the quality of the climax

Fig 148: The shade for the physical and the mental comfort of the traveler



The walls of this space provide an intraverted quality which is in order to get the observer understood, the proud of the place, without disregarding him or her. Shady path ways, undisturbing streetscape running at the boundary, the coolness added by the lake, the sun shine create an opportunity to have pause in the mind, a holly feeling in side the traveler. An opportunity to contemplate and to find them selves in that wholeness.

(i) **Consolidation.**



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The enclosure of the climax direct all the forces physical and spiritual to the center of the climax. It means all the attention flows to the comfortable view of the water make the visitor rest at will physically as well as mentally with an opportunity to be contemplative. That is the final consolidation which turns the attention of the traveler to the way he passed to arrive at the climax with a carryout thought which takes him from delight, wisdom to joy.



Fig 149: The water in making the consolidation and making the observer contemplative

3.3.2.3 The experience of the streetscape and the concluding remarks.

When the perception of the whole experience is expanded to an analysis, it shows this is almost ‘one way spatial progression’ rather than a two way spatial progression which most of township own in connecting from one to another. It is because of the powerfulness of the climax to get the whole attention terminated at the climax without leaving any eye catching episodes further to have a continuation. On the other hand there is no powerful spatial progression and all of sudden arrives at the climax for the traveler coming from other side.

The beginning and the ending episodes of this particular spatial progression are in a visually satisfying level which is strengthening by the serial vision where some short comings in some middle episodes of the progression. Special the entrance environment is in a stage which has to be improved. The arrangement of road network has affected the spatial progression of this street. For the well functioning of the traffic coming to and goes out from the junction the Gannoruwa road and to newly built ‘Wilium Gopallawa Mawatha’ is given the attention. It has reduced the priority given the old ‘Peradeniya road’ which had earlier. The army barracks also a physical and visual disturbance for the traveler.



Existing situation



improved situation with a gathering space with the openness, a symbolic representation of the final destination

Fig 150: the existing and the improved situation of the environment to enrich quality of have ‘entered’

The entry environment of the old Peradeniya road can be developed to an open space lobby, clearing the unnecessary bushes and open out the view of the Mahaweli river framed by the 'Bo tree' existing. And there will be a counter weight to the openness produced by the play ground of the Mahanama college and the entry will be comfortable for the traveler. Adding a monumental structure represent the place where this road leads to is important to obtain a meaningful journey towards the climax.



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Man travel through 'flow spaces' to container spaces to perform different activities. The well condition of the 'container space' as well as 'flow spaces' primes man to perform at his optimum in a particular environment or else as a human being. So it is the responsibility of an architect to design both the 'container and the 'flow spaces'. The 'flow space' it-self a legitimate architectural entity with a language and a meaning. The language of a flow space is the orchestration of different ambiances, the built mass in a progression. The orchestration of this 'progression in space' is well understood within the buildings and same is not true of building layouts (master plans). A proper spatial progression effectively contributes to create a good 'mind set' of the traveler and by that increasing the human sensitivity, creativity and the working capacity. This study therefore proposed to examine and establish the concept of "spatial progression" in relation to streetscape design and demonstrate its dynamics through selected examples.

At the beginning a theoretical basis was generated to establish the necessity of meaningful, rhythmic movement in architecture; the orchestration of spatial progression in architecture, and its contribution in streetscape. There the importance of the street is taken to account as 'flow space' with the role of connector and the role as a neutral ground between the spaces where man is differently compiled. (Ref. page 44 – 46) Secondly it was supposed to examine the play of the phenomenon of 'spatial progression' in relation to existing streetscapes and do a survey to find its success with the use of the traveler and their sensitivity, creativity and working capacity after completing a journey through a streetscape where the act of this concept of spatial progression is satisfactory comparatively to which it is unsatisfactory.

As stated earlier presently in the field of architecture there are architects who successfully experienced the play of spatial quality and its orchestration in the built mass in progression. Specially it is reputed the most of works of Archt. Bawa G. (Light House hotel - Galle, Triton hotel – Ahungalla, etc and etc)are rich in spatial progression and other architects like Anjalendran, C. (SOS children villages – Galle) are popular in using this concept of spatial progression in Sri Lanka. And also the new architects also

keen in exercising the spatial progression within their production of buildings, within the premises for the sake of the function and the user. Specially there was not a need to carry on the studies on experience of orchestration of spatial progression and the ambiances of spaces within the buildings where it is done enough.

With the limited time period the above explained studies of orchestration of spatial progression with the required ambiances of individual spaces within buildings done by the other scholars were very helpful in creating an argument, being in the theoretical basis to examine and to establish the concept of spatial progression and its dynamics in streetscapes through selected examples. The survey with the use of the traveler also became a tough task to accomplish and was ended up with opinions, observations and the reviews about the selected examples of a peer group who is capable of verbalizing the experiences taken.

When the study of existing situation of streetscapes in Sri Lanka is taken as a whole, it is clear the phenomenon of 'spatial progression' already exists in different intensities in most of streetscapes found. It is true that one can not say there is not. There are the episodes of spatial progression where the spatial characteristics required are included, in the street environment as same as it is vitalized inside the buildings. So it is evident that the affect also same in changing the mind set of traveler, evoking the feelings accelerating the capability of capturing the expressions and the movement of built environment, getting inspirations and find their own moment and self expression. This transition happens, eases the orientations to the functional aspects of the container space he or she reaches or the destination, a higher performance and further there will be thing left by capturing the symbolic expressions inside the mind of the spectator to contemplate with a possibility to increase the sensitivity and creativity. Indeed it is the fault of the designers who creates the elements of a streetscape without enhancing the existing progression of space or they destroy the meaningful rhythmic movement of a street by introducing unsuitable built structures with unsuitable languages and the particular ambience of the place is not taken to account.

The examination of the case studies reveals the spatial progression of a street with a specific destination could be ended up as 'two way spatial progression' as most of towns inherent (Eg. Main street Mawanella) or else as 'one way spatial progression' (Eg. Kandy – from old Peradeniya road, 'Dalada Weediya to sacred area of temple of tooth). The episodes of spatial progression are some times distinguishable and in some instances there is only a gradual change of characters of the streetscape in order to make the progression of space and the episodes are inseparable. But the distinguishable nature of the components of spatial progression is more effective in charging the experience of the traveler and changing the mind set. The manipulation of orchestration of spatial progression happens in a combination of 'serial visions' as stimuli in the journey, the 'patterns' of components in relation to the social and functional aspects of a street and the 'interrelation of elements'; paths, edges, districts, nodes, landmarks in the continuation from episodes to another rhythmically and meaningfully. There it combines the theories of Prof. Alexander C. (spatial progression as a pattern), Cullen, G. the author of the book 'The concise of Townscape' (spatial progression as a serial vision) and Archt. Kevin Lynch (spatial progression as an interrelation of elements)



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The success of the methodology used in this examination is clear in understanding the essentiality of spatial progression in architecture as in-escapable art, in clarifying the street as a flow space and streetscape as architecture, in identifying episodes of orchestration of spatial progression in streets and in arguing affect of the spatial progression of streetscape to the psychological satisfaction of the traveler. The measuring of effects of change of the sensitivity creativity and the working capacity of them is lacking in this particular study.

Finally it is well understood a good progression of a space within a street, ease the work of an architect designing the building environment of the destination. The effort to be taken orient the user to fulfill the purpose of a particular place by the architect is reduced by introducing or enhancing the spatial progression of streets. The times taken to the procedure of psychological and physical transition, to suit the activity of the place become very small after completing a progression of a space within streetscape. It is an important strategy in considering the decreasing of the plot size available and the increase

of the tight spaces in the present world where the architect is supported with less opportunity to let the user exposed to a long approach and a satisfactory progression within the building. So it is beneficiary for the architects, get them-selves involved in designing the street environments. It is architects' duty to have a subtle control of the forces such as 'push and pull', 'here and there', 'this and that' and etc which make the rhythmic movement through the components of spatial progression in street environment to obtain the most suitable tempo in the series of experiences of the user and making an emotional impact.

Definitely there is range of study areas opened out with this study to go further. As an example the forces comprised in the orchestration of spatial progression as explained in the above paragraph could be taken as a single study area to examine in detail which will be very important in developing the built environment. The completion of this particular study is further extended to another study with the limited time period. New studies have to be carried over the surveys of finding the psychological and behavioral changes after completing a journey through a well established orchestration of spatial progression streets comparatively to the streetscapes used where a satisfactory spatial progression is not available to measure the success of it. It will be definitely for knowledge of the professionals in their effort to build a better place to live for the sake of the psychological as well as physical well being of the human

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