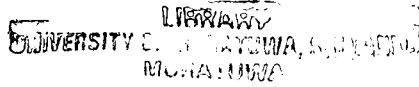


TRANSITION IN THE CITY
USE OF THE PRINCIPLE OF UNITY TO CREATE A RESPONSIVE ENVIRONMENT



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A DISSERTATION PRESENTED AS SUBJECT
TO THE FACULTY OF ARCHITECTURE
UNIVERSITY OF MORATUWA SRI LANKA
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MASTER OF SCIENCE EXAMINATION IN ARCHITECTURE

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ABSTRACT

Transition is a place where the world reverses it self. It is the beginning of an experience and the end of another experience. If we were sufficiently rapid and remarkable transition would be the most evocative point of all evanescent ambiguous and moving. Between two extremes transition takes place which is distinguished to be the zone of transition in the transition zone the character of a district will gradually and smoothly be diversified into the character of an another district.

A city is aimed to become a unified whole in the final picture of it. Transition therefore is needed to equalize the different characters and arrive at a unique character with a unitary expression. It of course will make the city a responsive environment that also is visually comfortable. Transition therefore plays a vital role in unifying a city. The city experience then will become a meaning and delightful owing to transition.



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TOPIC EXPLANATION

Living in a built environment is obeying the complex juxtaposition of patterns and the built fabric. These patterns maintain characters that are unique to the place. Namely they are activity pattern, spirit of place, architectural style etc. Man identifies these patterns and rectifies them in the wholistic development of the context. The observation identification rectification and creation of patterns are adjusted to suit a humane framework emphasizing that creation is for man. This is called a responsive environment. Man is a well-composed and most suitable part of the built form, which reflects the built form itself and its quality.

In this framework, the responsive environment as the ultimate creation of man plays a vital role. He, in practicing, makes his physical environment is most prominent which steps beyond the physical meaning. The concept of unity arises where there is a prominent pattern, that expresses its meaning as a unique place. This creates the man and environment and in the mean while the basic need for the responsive environment, the common theme is generated. Therefore it is seemed that a city as a collection of places could be made a responsive environment with a wholistic picture or a unified whole. Therefore a responsive environment is a place that caters, the thinking, needs and bias of human being by way of built form.

As a city is not a static experience the greatest experience of it is obtained from moving from one unique character towards another. This may raise a simple question the answer is may not be simple. It demands a lot of research, survey and study. The question is that what are the possible ways in linking these possible characters together. Taking the 'bull by the horn', it is stated that to make its inhabitants psychologically comfortable an urban transition is demanded to make a city a unified whole by striking the equilibrium, of both the characters unifying them. This simply is a process of changing from one character to another, as good urban architecture always is applicable and responsive to man.

CRITICALITY AND IMPORTANCE

The transition as an in-between zone, which links two different, characters smoothly. Therefore transition plays an important role, in an urban situation in making. It a unified whole maintaining the identify of unique characters.

In the Sri Lankan situation this is more critical. However, unfortunately it is architecturally ignored especially at the most critical situation. In a various portions of the city unitary character is exploited, however it is ignored in transition as a most evocative point to arrive at a unified experience. Therefore the physical and spatial possibilities in making the movement along the city a unified experience is betrayed. This deprives us of the possible most comfortable visual and psychological transition in making a city a responsive environment.

In this context, the issues that arise, in making a unitary character of transition are examined in order to identify the possibilities of exploiting their solutions in urban situation. The principles, which are known to us, form the background for this, could be used for suitable applications. Further the maximum productivity by the application of these theories and methods to practical situations are

expected. Finally, the final intention is to arrive at urban design guidelines with the help of possible illustrations. Thereby it is expected to unify diversified urban characters meaningfully by means of transition. Those guidelines, which form the framework or the basis for urban design, could be used in preserving most evocative and important qualities in transition. A transition has two extremes that pose two overriding qualities. The maintenance enhancement and creation of them in a transition will establish a more delightful city experience by means of transition.

METHODOLOGY

This will be an in-depth study analyzing of practical situations, with a theoretical base. Throughout the study transition, unity and responsive environment are used as keywords, which determines the basic area that should be subjected to study. The framework composed by them will highlight the achieving of a unitary character in a city by way of transition.

What is a city the constituents of the city, How will a city be made a responsive environment? What are the prevailing unity principles that can be used in making a unified transition and its inheriting characters. That questions arise in unifying a city and finally, with possible illustrations their nature, their existence in a practical situation and thereby the role of transition in a responsive environment linking it as a unified whole will be determined. And finally a guideline will be made. In other words the study will be analytical. To identify extremes, commercial and residential zones are studied in most cases. By applying them in to situations with deviations a comprehensive study is expected.

SCOPE AND LIMITATIONS



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For a transition extremes are a must. Colombo City is selected to facilitate identification of extremes. Under many limitations four areas are selected and they represents different patterns and the change of unity accordingly. Namely the selected areas are Fort to Pettah, Kollupitiya to Town hall and Slave Island. These are all couples of extremes, which makes the study a success. Finally the study is exploited which cover various parts in a complex and a meaningful manner.



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CHAPTER ONE
CITY- A RESPONSIVE ENVIRONMENT

1.1 THE CITY IS ...

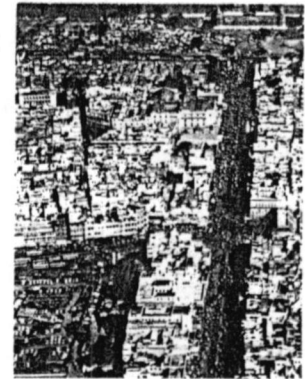
The simple stimulus "city" generates a mental image of a certain place. This place consists of buildings, which are organized compactly in a limited area, and active people. A city is a growing entity and it changes in the context of time. This process of continuous change and growth may require centuries. In this context it is highly possible to interpret a city as a living organism. It becomes evident that the concept of the city is based on the common framework of human behavior. In other words it can be stated that despite the varying buildings characteristics, the fundamentals of a city responds to a behavioral pattern specific to human being.

In a good city form there could be components such as physical, social, functional, cultural, historical and organizational and they represent form, space, people, activities, behavior and spatial organization. These components are composed to create a harmonious city giving a character to the same.



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These components contribute in achieving characteristics such as complexity and variety to the cities physical arrangement. It is observed that people relate to associate their physical environment. Further they tend to organize their physical environment to a particular spatial concept of the social group they represent at a particular time. Similarly in the formation of the city in and maintaining spatial relationships of the city according to the functional needs, the activities of the city may be influenced. These activities in different levels and scales add diversity to a city and determine the overall functions of the city.



Cities were agglomeration of buildings and of people - the bond between them evolved and sustained through time [fig: 1]

A city links the history, the present and the future. All these components together represents the spatial organization of the city and a cohesive entity is created by order, hierarchy, continuity and unity thus making the city a unified place. All these factors are common to the concept of the city. Therefore a city is a live place which could be compared with a living organism.

"A city ought to be like the human body and for this reason it should be full of all this gives life to man".

[Shute, John; 1956:45]

1.1.1 CITY STRUCTURE

Buildings, or physical built structures become the background for people living in the city. The structure of the city is a product of many envelopes, which have evolved over a period of time. Structure of the city consists of physical forms, or extensive physical arrangements of buildings, districts, roads, paths, edges, natural resources etc. As well as these moving elements man also plays a vital role in the city structure. However a good city structure strike the balance between man and physical form. 'A City must be seen as living organism not as a museum' {AJ Journal; 95; 41}

'Stones make a house, houses makes street, and streets make a city, city is stone and city is people's but it is not a heap of stone and it is not a jostle of people'

[Jacob, Bronowskp; 1973: 81]

The physical structure is the order of built form. Buildings are the most important part in the physical structure. It is the container of people. The rest is the supporting physical form for the functioning of the building. This is the structure, which continues the formation of a city. Paths and streets also are very important which people tend to observe the city moving along them. As they move, the edges marked by the buildings demarcate the boundaries and phases. With these, a character could be recognized.

Consequently, the physical structure of the city gains a clear appearance that varies with the mixture of building functions, variety and type of building. This reflects the function of the city, its inhabitation with its structure.



A city – the optimization of dynamism and livability
'The 'restless' movement'
[Fig: 2]

1.1.1.ATTRIBUTES OF A CITY

Being in an urban context means, being in an environment, which is dominated by man made environment. Therefore an urban context is where intensely planned, highly dense built up organization catering to variety of activities are located within a limited area.

The physical component here generates and overall visual picture contains of fabric and objects. These as a whole define spaces, which are linked allocating movements. The Nolli map is a good method of understanding this principle.

a) OBJECT

Objects in general are elements, which overwhelm their identical characters in the context of a closely knitted building group. They even are clearly identifiable from its context. Therefore an object is comprehensible as an element and it is basically closed and finite. Thus an object is partly opposite to the wholistic characters of a fabric such as repetition of similarities etc. Therefore it is

conspicuous that an object highlights a certain degree of continuity and in the same time, it breaks the continuity to a certain degree contributing to a discontinuity.

In this context an object inherits a city with its own specific meaning under its own identity to the city structure. Hence, an object contributes to the hierarchy of the city, thereby generating a hierarchy among spaces. The commencement of a spatial experience and the response to movement will be taken into the consideration under spatiality of objects.

b) FABRIC

The most synoptic form that expresses similar characters and which is seen as a common unit which is a collection of a large number of elements is termed as a fabric. This is a homogenous structure where characters of individual elements are not clearly seen, yet such parts and elements will be sufficiently closed.

However a fabric does not repeat a façade or it does not create monotony. It is a difference and a variety of single buildings, which inflects each other and which is ordered. In this context a single building well suits the other, while generating grouping or sense of cohesion by interaction. As it holds such characters a fabric is a constituent which has no continuous breaking. If where necessary provides the city something, which gives an image of continuity, with expansiveness and stretching infinity.



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Objects in the fabric giving hierarchy and order [Fig; 3]

c) SPATIALITY AND SPATIAL ORGANIZATION

Rudolf Arnheim states that a building charges energy and it depends on the nature of the facades, the proximity of surrounding buildings and the infinitely variable density of that space. Von Mies further developed this idea in his spatiality of objects.

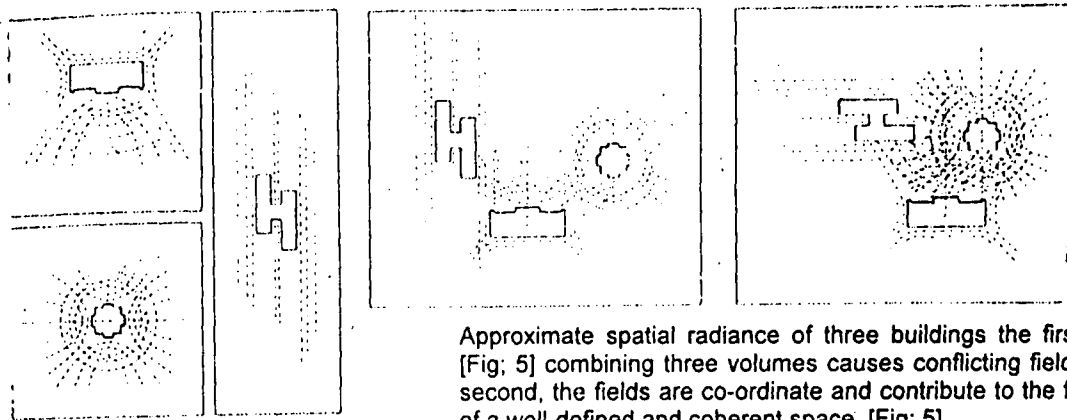
"A concentric object at a point which has several equivalent axis of symmetry emits a spatial radiance of equal intensity in different direction rather like a light house".

[Miess, Von; 1990: 93]

In this context an object defines a more or less precise field around it. Entrance of the field of influence of an object building is the beginning of a spatial experience. Further, the spatiality of objects reaches its peak when it is pierced, when it can be crossed thus linked observer to the elements in the environment beyond the object. This implies that entry to an influencing field of an object building makes the user entered to the influencing field of an another building. This implies that as to where, the spatiality is to be changed, it could be achieved by changing the facade, details and vise versa.

Therefore the appropriate creation of spatiality directly influences the spatial organization which a being perceives. On this basis it could be stated that the combination of fabric and object goes beyond visualization maintaining a spatial continuation. The rectification of the physical structure of spaces therefore enhances the dynamic quality. The ordering principle of these or the combination of few spatiality, achieves a fresh quality. All these as a whole connects spaces into a correct hierarchy, contributing to the visually and spatially meaningful order.

A spatiality an object
'A' of the spatial experience
(Fin. 4)



Approximate spatial radiance of three buildings the first layout, [Fig; 5] combining three volumes causes conflicting fields. In the second, the fields are co-ordinate and contribute to the formation of a well-defined and coherent space. [Fig; 5]



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1.2 BUILDINGS IN THE CITY

Buildings in the city may be an object or a fabric as discussed above depending on its function. Their expressions regulate human behaviors. It may make man stop or move and it contributes to sorrowness, happiness, authoritarian nature etc. Therefore the buildings are considered to be major elements in a designed cities as illustrated in Urban Design Street and Square by Cliff Moughtim

1. The city or town is visualized as an open landscape into which buildings have been introduced as three-dimensional object.
2. City or town where public spaces that is the street and squares appear to be carved out from an original block of material.

In the blue print of urban architecture, buildings are the positive solid elements and spaces are the general background against which they are seen. In the other way of looking at the city, space itself is the positive element with three-dimensional properties and the buildings two-dimensional facades framing the space. This indicates that buildings are the prominent part, which brings character to the space, hence contributes in developing human emotions that gravitate towards different portions in the city.

1.2.1 VARIETY OF BUILDINGS

The city is a place where different functions and human activities are located in according with the hierarchy of human preference where buildings create variety in their appearances. The scale, skyline, facades and relating character and its relation to other buildings vary from place to place. With their group values buildings create visual variety and sometimes it steps beyond the visual.

The diversity of new opportunities brings variety in to city, which is expressed by the built form. Buildings signify the built form when art is used to express variety. Variety of life pattern, variety of architectural functions is depicted in the built form and the diversifying living nature is expressed in it. There are crucial variations in the city life such as public and private. In these two people behave in two manners. These types of behavior are anticipated and facilitated by buildings and it is evident in their physical arrangement.



Variety of buildings gains visual richness [Fig: 6]

1.2.2 GROUP VALUES



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In considering the group values of buildings a group may comprise a collection of structures, that have certain common features such as general scale, plot widths, and common architectural language which sits harmoniously together. They may form a series where each building is similar to the preceding one and therefore possible as a part of an overall plan and of similar character.

[Tugnutt, A & Robertson, M; 1987; 105]

Therefore, in a city there may be many building groups, which performs similar functions, as it is the function that generates the character. On the other hand it is easier to create group values, in buildings which perform the similar functions. However the building group is not a mere repetition.



The smallest entity generates a perfect rhythm in experience the city [Fig: 7]

It is an acknowledgement of buildings, by height, proportion, details, skylines and characters. Taken separately, these buildings, give the same experience. Therefore, a building group provides a similar experience with varieties when an observer passes by. By means of this spatial experience a building group is connected to another group, providing with a sequential experience akin to a chain. This sequence has a formal character derived from the architecture of each of the

component. In other cases the entire street can effectively perform as a group with each side having similar characteristics to reinforce a sense of unity. Therefore group values create a sense of belongingness and provide it with continuity. This implies that it determines to a certain extent the direction of a group. In the movement through a city, this expression generates a different meaning in different portions of the city.

1.3 URBAN CONTEXT AS A UNIFIED WHOLE

In any architectural space, there are some fundamental attributes associated with it. These attributes are the principle purveyor contributors of the inherent spatial meaning to urbanity, and together they form the existent of any urban space. They are the center, the enclosure and the continuity.

1.3.1 CENTRE (PROXIMITY)

This is the reference point of understanding the space, which is the utmost important fact. Man has since then, thought of the whole world as centralized, to reach the centre it self entails experience, interactions, journeys and goals.

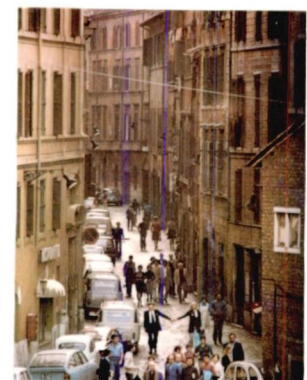
Centre while in ideal urban situation designates a destination marks the starting point or the beginning. It is by being there that man refers himself to other surrounding spaces. Thereby it essentially carries a sense of attachment with it. It is the reference point of man's spatial experience. And this attachment provides a perfect beginning for harmonic relationship with the triangle of man- his existence space and whole space broadly.



Centre-the reference point of human experience [Fig: 8]

1.3.2 ENCLOSURE

Enclosure makes an internal part in mans spatial experience which brings meaning in to the space. In this instance the enclosure is rather a quantitative creation which essentially brings out a qualitative spatial experience and it can be a visible entity or rather invisible creation presenting the desired sense of enclosure. In urban situations building facades streets and squares, are the major man made elements of physical enclosure, and they form a great variety of built structures as meaningful spatial entities.



Building facades form a variety of spatial enclosures [Fig:9]

The buildings along its enclosure create the sense of movement and continuity, an important role to be performed by enclosure, Whether it is intangible, tangible, visible or invisible, large or small.



1.3.3 CONTINUITY

Perceptually as a scheme any path is characterized by its continuity. Whereas the place is determined by the proximity of its defining elements and eventually by closure, the path is imagined as a linear succession. [Shults; 1991: 22]

Continuity in the very word implies path. When there is a path, there is the beginning to this path, a sense of direction, comment and the destination. Continuity is common to all forms of mans' spatial experiences. If enclosure creates a gap the sense of here and there, the movement continuity bridges the gap ensuring coherent whole rhythmically. Continuity is also experienced as having a character of its own. In certain urban situations continuity has the function of being an organizing axis for elements by which it is accompanied, while the goal, is relatively less important.

Building facades of streets creates enclosure and continuity [Fig: 10]



Siena
Fabric of space enclosure and continuity-creates harmonic and rhythmic movement [Fig: 11]

1.4 CHARACTER OF THE CITY

What is it that make one town from different from the next, that what the user or the resident feel he is at home and gives the visitor a new experience in each town. This illustrates the character through people and events, local activities and architecture etc that contributes the towns' identity. The streets path and square the most important element that brings the character to the towns as it allows people to move and experience through quality of the space. Roy Worskett further illustrates this.

'Local activities also give character to the different functions, streets will create visual characteristics. Residential streets will obviously be different from the shopping street. Detailing on buildings will reflect the activities and scale of particular place'.

[Worskett. R; 1969:140]

Therefore a city has different characters from public to private with a greater range. The commercial and residential nominate these two extremes, which basically affects the human behavior. For that, the street patterns, spaces, built scales, building characters skylines, colors etc used in different ways, to achieve a character to the inherited function. Therefore functions are considered as the main determination of character and geography, site conditions and regulations alter it.

Hence, the component of character of context as discussed in the initial part of this chapter became intense and unites to form a single idea that generates a strong and distinctive pattern to the context. Character of one place in many senses is identified as a tangible attribute, which gives an identity destructive spatial quality peculiar to that particular place to make it different from all other places.

1.4.1 ORGANISATION OF MASSES

Massing and spaces helps to organize the sequence of urban form, laid out to a geometric arrangement within their interaction to one another to make unified whole while the significance of the buildings the voids, the spaces link together forming the urban context seen as one entity. It is this image of totally and coherence created by organizing fabrics, objects and spaces.

a) CENTRALIZED ORGANIZATION

A centralized organization is a stable concentrated composition that consists of number of secondary spaces groped around a large dominant central space. The central unifying space of the organization is generally regular in form and large enough in the in size to gather number of secondary spaces. The secondary spaces of organization may be equivalent to one another in function, form and size and create an overall configuration that is geometrically regular and symmetrical about two or more axes.

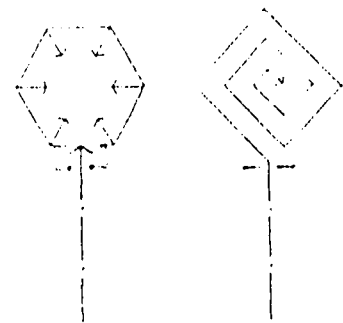


Fig: 12

The secondary space may differ one another in their form or size as a response to their individual requirements of function, relative importance of context. This differentiation among the secondary spaces allows the form of a centralized organization to respond to varying conditions of the site.

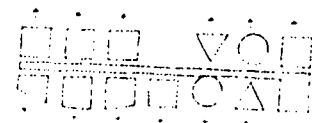


Fig: 13

b) LINEAR ORGANIZATION.

Linear organization in urban context consists essentially of a series of spaces either be directly related to reach other or linked through separate and distinct linear spaces. It usually consists of repetitive spaces, that are alike or that differ in size form and function. Their characteristics length, linear organization express a direction, beginning and end with signifying movement and growth. The form of a linear organization can relate to other form of context by linking and organizing them in to two different contextual identities or surround enclosing them within the field of characteristic space.

c] CLUSTERED ORGANIZATION

A clustered organization uses proximity to relate its space to one another. It often consists of repetitive cellular spaces that have similar functions and share common visual trait such as shape and orientation. A clustered organization can also accept within its composition, spaces that are dissimilar in size form and function but related to one another by proximity and visual ordering devise such as symmetry or an axis. Because its pattern does not originate from a grid geometrical concept form of a clustered organization is flexible and can accept growth and change readily without affecting its character.

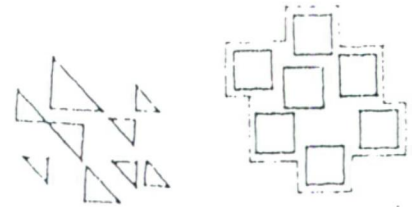


Fig: 14

d] GRID ORGANIZATION

A grid organization consists of urban spaces in relation to one another in repetitive modular units of spaces, regulated by three dimensional grid pattern of context. Power of grid pattern results from regularity and continuity of its spaces and masses. Grid pattern also has qualities of continuity, growth expression and proximity.



Fig: 15

1.4. 2 ACTIVITY PATTERN



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An urban situation is a place, where lots of activities remain with interaction among each other. Depending upon this activity pattern architectural spaces and buildings are erected. Therefore the character of context respond to the activity pattern giving it an identity and meaning to complete a quality of activity pattern, patterns are generated making changes in the city life. This in a secondary stage has an effect on the character.

".....Some streets and districts have distinctive air through being devoted to one particular usage. The concentration of an activity in one located has always been an urban feature as well as its being good for trade that like business should Cluster together" (Tugnutt. A, and Robertson. M; 1987:48)



Spaces in the city response for various activities {Fig: 16]

Similarly many urban settings could be identified as response to the activity pattern. This provides space for urban setting to derive a meaning. In making a city a livable dynamic entity. A complex pattern for the urban context is made with different activities.

1.4.3 SPATIAL PROGRESSION

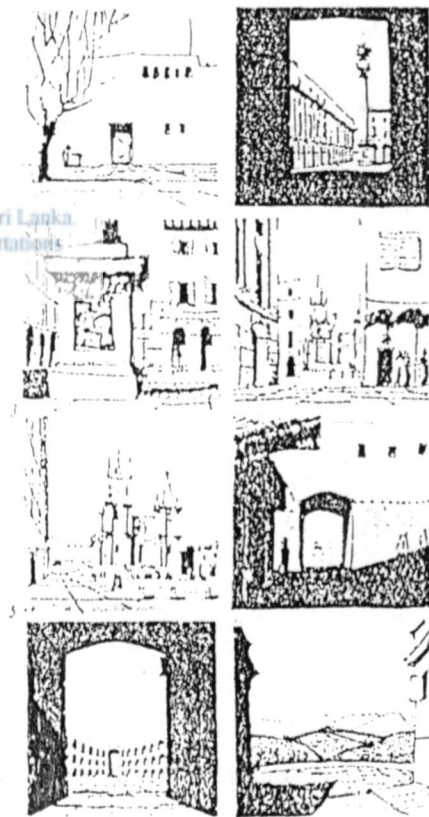
In the most simplified manner of explanation a spatial progression is the connection of a number of spaces to arrive at a meaningful experience. In this case, a single-space prologues the consecutive space. Therefore it provides a meaningful experience as a link or chain that steps beyond its own architectural significance.

"Since we move in time through a sequence of spaces, we experience a space in relation to where we've been and where we are anticipating going"

[Ching, D.K; 1977:246]

This guides, but to perceive along with the movement in the preparation of a series in the city and how to organize the physical structure in between. This principle is evident in most of historical cities, Where buildings and other physical objects are used to achieve the desired effect. In most cases buildings and fresh spaces are provided to create a pause by means of punctuations. This change in all most all times acknowledges the desired movement. In which case visual links and architectural continuity are used in plenty. In this context it is evident that a city is designed emphasizing movement pausing one element there by conceiving the other.

The scenery of the town is presented to the observer not as a constant evolving motion pictures, but more like a series of clips or snapshots of memorable events of the town. Such type of human perception is termed as a serial vision, which connects spaces and physical structures meaningfully. This intern connects physical form into a hierarchy creating a track through spaces thus producing a flow of harmonic experience.



The experience of moving through urban spaces. [Fig: 17]

1.4.4 SPIRIT OF PLACE

Space in many cities is assigned with values of its spaces. This is manifested in creative works, which expresses the space and creates a desire to visit and revisit them. They share the common belief that there exists a special uniqueness and identical place.

'These commonly accepted and unique quality a spirit of place reduce. Three attributes based upon aspects of existing natural environment cultural expression, sensory experience.'

[Garnham H.L ;1985:7]

This spirits make a cohesive pattern in response to the given area. The major component of identity hence could be summarized as

- | | |
|--------------------|--|
| 1. NATURAL SYSTEM | Physical features and appearance.
Examples land form, vegetation,
surface features |
| 2. CULTURAL SYSTEM | Human activities and functions and
their interaction in public spaces,
circulation systems in place etc. |
| 3. VISUAL SYSTEM | Appearance of context, views, focal
points, context in spatial definition
such as enclosure, continuity etc. |



Spirit of place -San Marco Venice
{Fig: 18}

1.4.5 ARCHITECTURAL STYLE AND CONTINUITY

Different portions of the city will be allocated for different functions in the formation of the city and they express different architectural characteristics and styles accordingly. Architectural style in particular context, visualizes its history, craftsmanship, aesthetic value, peoples attitudes etc. Patterns in this particular condition can be identified as style in facades treatment and ornamentation. Factors such as solid to void ratio vertical and horizontal rhythms, roofscapes, quality of detailing and use of materials were used to enhance pattern of architectural style in urban context. This raises the question if a city is as such, owing to the identification of extremes in the movement a city may not be a single entity.

Therefore, to experience the city in an easy perception, a group value should show out a smooth transformation of architectural character to another Architectural character of city and should be identified as a continuation of the previous, yet maintaining the identity of each individually. In this sort of continuation the urban context could be made meaningful by changing the character rhythmically. The most appropriate combination of this spatial sequence, visual appearances and views makes the entire city a single entity continuing its own architecture, making a pattern. It is



noted that the architecture of a city, in one end acknowledges the other end maintaining a certain gradient of relationship. Such a city becomes a responsive environment essentially, facilitating the movement of man thus becoming livable.



Architectural style in a context is an indicator of history, people's attitudes and aesthetic value [fig: 19]

1.5 THE RESPONSIVE ENVIRONMENT- A NEED OF UNITY

"In human terms however, urban design should be an attempt to satisfy the needs and aspirations of the inhabitants of any community in response to their visual and psychological environment".

[Gosling.D & Maitland B; 1984:141]

As a city is a place designed for man, it should respond to man. On the other hand man should respond to the city. A responsive environment is a place where an associated set of buildings is located according to the spirit of place, architectural style, nature and activity of its setting. Therefore associated sets of building are the ones, which carry certain characteristics to show relationships between them. These building have to be located in such a manner, it would maximize the degree of choices, which vary in accordance with the place and movement along places. For an instance, in residential city inhabitants may demand various choices as opposed to a city center or a commercial city. The choice rather can be of use of same place for different purposes as seen in a commercial setting or of serial vision.



A Responsive environment- a cohesion between the building and the setting [Fig:20]

Making a city a responsive environment, has become a complex process, as the city is experienced not in a static manner, but dynamically. In other word the entire city should charge a meaning to the human mind not by easy perception.

The final goal of such a city is the cohesive and harmonic picture that is associated with unity. In Christopher Alexander's words a responsive urban context as grouping whole featuring piecemeability in unpredictable ways coherent and full of feeling always. He further says that the

whole is coherent, it is truly whole not fragmented, and its parts also are whole related link the parts of a dream to one another in surprising and complex ways. It implies that unity is not either monotony or chaos of the combining element and overall character of the context. Therefore, associated with variety, unity holds the major role in such a setting.

In Amsterdam, significant varieties in design are observed. The plot widths, window sizes and positions vary. However sufficient common features are maintained to establish a sense of unity. In all times, these relationships are contained within the limits of unified wholeness of the context. In such a situation the settings themselves automatically become responsive and maintain a unitary character. Providing the inhabitants with a visual richness of environment. Hence, it is obvious that the fine balance between unity of its varieties result in harmony and visual richness. Therefore a responsive environment inevitably provide its users with an aesthetic dramatic setting enriching their opportunities by maximizing the degree of choices through the patterns available to them in discussed above. These buildings reward esthetical pleasant while obeying harmony and hence depicting cognitive and abstract expression.

Therefore isolated buildings or spaces don't exist in a responsive environment. They are combined with each other and with man, to make a unified and livable city. Therefore expansiveness, continuation of fabric and caring about how things work together or the proper harmonization of the patterns of activity, architectural continuity etc, has become essential features of such a setting. These buildings acknowledge their interrelationship, functions and the context depicting certain sensitiveness in accordance with the principles of unity. Not only the physical need of being, but also psychological need are fulfilled by these qualities evoking his emotions.

In this sense a responsive place also is a good urban fabric which, pose "oneness" with visual richness, therefore maximizing the degree of choices available. This implies that unity becomes one of the major factors, which makes a city a responsive environment.



The need of unity to make a responsive urban setting [Fig; 21]



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CHAPTER TWO
UNITY IN ARCHITECTURE

2.1 UNITY IS...

Any idea expressed in any medium must a 'priori' be full and complete. It cannot be composed of scattered elements with no relationship with each other the haphazard collection of such scattered element always represent a weak and incomplete idea. This is common to all artistic creations such as creations of nature, poetic, and also to a single sentence. It must express a complete and pure idea as a total by maintaining the correct relationship between the gaps of the sentence the rhythm of poem etc. Similarly the full realization of an idea in architecture and urban design must express complete unity.

"All serious architecture aims at an effect of unity"

[Cliff Moughtin; 1992: 32]

Unity is the first and most important of basic design concept in the grammar of architectural compositions. In the simplest sense what is meant by unity is the quality of 'oneness' in a composition which is created when the proper relationship between elements of a building or in a building composition as a whole is achieved. Unity is the quality of 'oneness' that is considered to be essential in the smooth functioning and the easy perception of an idea, or the conception been expressed in a particular built form.



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In another point of view, unity is the pacifying of contrary forces, balancing of opposites. With itself, it carries a sense of 'holding together' a smoothing effect on which all the disjointed multitudes are bound with each other and with the rest of worlds and, constitutes a well-composed whole. In forming unity every single component finds its rightful place and the due identity. Then the component as well as the composition shine out and become meaningful.

A biological process governs unity. This has been identified as human perception. Interpreting the perception, a psychological stimulation is finally arrived at which process is called 'a process of perception'. In a psychological point of view following is the way by which unity of a composition is identified.

1. The first is the sensation or the awareness of the objects in their sensory features such as , colors pictures, numbers , texture, mass , bulks etc.
2. The second is the intuition. The arrangement of such sensation into pleasing shapes and patterns that is to say the awareness of objects in there spatial and temporal order with arrangement.
3. The third is called the intellect that interprets the type of object and the type of details as such that the object begins to acquire a meaning.
4. This is the stage of perception, that is arrived at an effortless and spontaneous manner, which take place when the arrangement of sensation correspond with the previous experience, and knowledge.

[Louise Dunn Yochim: 1967:25]



Unity – expresses a complete idea [Fig: 22]



Unity- the quality of 'oneness' [Fig: 23]

In this process of perception the expressive qualities are considered to be belonging to certain wholes in human experience. Human psychological structure is such that such wholes in his experience are perceived as well organized unified entities. Therefore, unity has a composing function, which also performed as combining and relating of plurality of elements, to arrive at 'oneness'. This is far more clearly identified in Gestalt psychology.

".....that the perceptual principles serves to organize the parts of the whole, thereby avoiding redundancy, conflicts, self contradiction all those deficiencies that would prevent the work from been truly itself and fulfilling the various psychological and physical functions.

[Rudolf Arnheim; 1977:110]

This means in the absence of perceptual principles that governs the whole the unity of the composition might be harmed and such wholes will be perceived as been crippled or disordered causing visual discomfort.

'We close our eyes to protect them from harmful light. A similar biologically elementary responses make us turn off out spontaneous effort to organized the world around us when we confront overwhelming disorder"

[Rudolf Aruheim; 1977:176]



Therefore unity is an important and fundamental necessity of all artistic creations, Visual interest or variety, rhythm or a track of vision are essentially in many instances. However, even among such varieties, there must be a unitary character in overall composition. This facilitates smooth perception as a single entity and generates a meaning. In this sense unity is a quality that compromises of visual varieties gaining esthetical pleasure, yet discouraging the variation of two elements clearly serving as a composition. [Fig; 24]

Unity in city context ... Irrespective of general architectural form whether the city is composed of buildings sitting in space or spaces formed within building mass urban design aims at a cohesive and unified composition. [Cliff Moughtin; 1992. 64]

This implies that in a complex situation like a city, it is difficult to apply unity in the simplest and purest sense. In the city environment unified experience plays a major role, unity an urban design is dependent upon the form of the layout adapted and the consistency with which it is developed. In the city scale design there are five broad techniques used in achieving unity.

1. Landscape can be used to unified and other wise disparate group of buildings
2. the use of simple geometric shapes for buildings may lead to unified composition
3. the right angle is effect to as unifying discipline in large developments
4. Buildings can be arranged about a series of accesses and sub accesses.
5. Urban space itself can form the basis of an urban design discipline.

As it is revealed in chapter one the dynamism of a city which makes it's experience an interconnected collection of events makes it almost impossible to prevent the emergence of haphazard arrangement in the psychic, unless there is a certain unitary character. Similarly the absence of visual variety owing to the monotonous environment created by obvious unity also should be prevented. This implies that a city is a fine balance of both these extreme conditions. This is evident in historical cities far more clearly. In the parts of a historical city, visual differences are marked as old and new chronologically, and the function is expressed by characteristics to a considerable level. In the meanwhile they are designed in such a manner creating of clear sense of totality.

2.2 PERCEPTUAL PRINCIPLES THAT GOVERNS UNITY

The principles of Gestalt psychology of perception are basically used in determining unity. Other than that there could be instances where the architectural theories of Trystan Edwards etc are used. All these principles bring into light the manner by which an observer perceives different elements of an entity structured as a coherent whole. With these principles the design strategies to unify a composition could be identified and the way by which unity is arrived at using these strategies could be explained.

2.2.1 THE PRINCIPLE OF PRAGNANZ

The term pragnanz means literally something akin to goodness. According to this principle, any configuration is perceived in such a way, to make it appear as simply clear and comprehensible as possible. In the process of this simplification, the object to be perceived is compared with a certain 'stable' normal form towards which our perceptions and memories tend to lean, that is to say, that when viewing slightly distorted or broken images, that closely resemble the stable forms, the tendency is to perceive them as through they are stable forms, example, broken circles tend to be perceived as complete circles, an ellipse, which is in some respects similar to circle is perceived more nearly circular etc.

[Louise Dunn Yochim; 1967: 28]

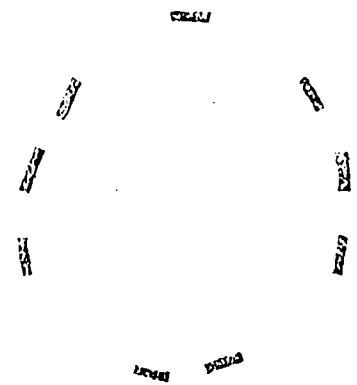


Fig: 25

2.2.2 THE PRINCIPLE OF FIGURE AND GROUND

When we perceive an object, or stimulus, one part tends to come forward while rest seems to remain in the background. The part, which stands out it, referred to as 'figure' while rest of the stimulus pattern is called 'ground'.

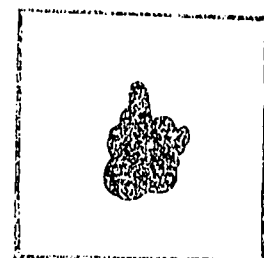


Fig:26

"Gestalt psychologist regarded this tendency to see objects in terms of figures on a ground as a pre requisite necessity before the principles of prägnanz could come in to operation. From the general view point of perception leading to the simplification and stabilization of the stimuli presented to and the brain, it is clear that the figure and ground plays an important role in helping us to structure the world we see".

[David canter; 1947: 53]

Although the tendency is to perceive an object as figure in ground, except special conditions it has to be perceived in situations where adjacent areas also have the potential to act as figures. When all the objects that tend to be figures are equal in strength a rivalry is created unless they can be coordinated to build up a larger whole. But very frequently in many compositions some objects tend to dominate while others act as sub ordinate ground. Therefore, it could be said that parts of a composition should, either be co - ordinates to build up a whole or they should be related by explicating the sub - ordination or the hierarchy, in order to avoid a rivalry that may harm the unity.

[Rudolf, Arnheim ; 1977: 69]

Plan of the Rome by Giambattista Nolli
Which based on figure ground theory
[Fig: 27]



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2.2.3 THE PRINCIPLE OF SIMILARITY AND PROXIMITY

When a configuration can not readily be seen as one figure there is a tendency to group it perceptually on the basis of such things as proximity and similarity. So that for instance, is not perceived as a totally random array of dots and dashes but rather as groups, the similar stimuli being grouped together or the stimuli close together being perceptually grouped together.

[Canter, David; 1947: 34]



Fig: 28

2.2.4 SYMMETRY, REGULARITY AND CONTINUITY

As mentioned earlier according to the principle of prägnanz, a configuration is perceived by a process of simplification. Certain properties of a configuration are simplified by this process. One of

such properties is symmetry, regularity and continuity upon a configuration where it can be described as possessing these properties. In other words, a suggestion of symmetry, regularity etc greatly facilitates our perception of a particular configuration as a unified entity.

2.3 EXPERIENCING UNITY

There are two fundamental ways of experiencing the unity of an artifact depending on its nature and complexity.

1. Painting in two dimensional - can be seen at once.
2. Architectural creation in three dimensional - may not allow it to be perceived at one rather its total image is constituted by the partial views taken from different points and angles.

In architecture it could be noticed that efforts have been made to compose a total image of building which could be fitted in to the visual field from a considerable distance. This is seen in formal architecture where the front facades of the building can be seen at once. But the three dimension of architectural whole often makes it impossible to apprehend the total image by looking at it from a single point. This is the basic difference between the experience of painting and an architectural whole. Therefore to perceptually construct a total image of a piece of architecture views from different points are a must.

By unifying an architectural composition a single idea or a conception is generated quite comfortably. However the question that arises at this particular point is how the meaning of work of architecture is to be apprehend by an approximate image acquired through the limited capacity of human mind. Such a limitation is not rare at all, it operates in the creation and understanding of complex structures everywhere. Experience shows that accumulation of partial insights are good enough approximation to make the structure whole together even though the totality of its aspects transcend the approximate human grasp that make it possible to distinguish between structures that are truly integrated and others that are not.

In a city environment buildings will be organize in a compact manner creating a fabric with groups' values. In such a situation, buildings are perceived as two-dimensional faces in relation to a single point. Yet with the movement these continuous two-dimensional facades are experienced in a three dimensional perspective.

In this type of a situation an overall unified experience is generated. But, moving towards a goal an observer will perceive building details at certain point creating few partial views parallelly. For an example an observer may arrive at image of York Street as a commercial setting. And thereafter a colonial setting separately. The juxtaposition of such images will generate the total image perceiving the presence or the absence of unity.



In the experience, building appear as surfaces rather than mass [Fig; 29]

Irregular layouts most probably will create chaos. Gibbered suggest the technique is to derive plan types suitable for any orientation and place to them right angles to each other,.... By which a complexity of views close by buildings in all directions is created. This may be the most easiest way of experiencing unity , by means of a three dimensional perspective.

2.4 STRATEGIES TO ACHIEVE UNITY

A perceptual principle itself orders a composition thus achieving unity. In other words perceptual principles also are unifying the overall composition. However it is essential in the city scale to derive unifying strategies in such a manner so that unity is experienced along with the movement by the perceptual principles, as a city is a composition of an enormous number of buildings with group values in the fabric level.

2.4.1 PRIMARY STRATEGIES

The primary strategies that are discussed below are used to seek the help of a strong and powerful regulating device. This may have the ability to facilitate the organizing and composing of the diverse elements preventing problems and achieving unity in a wholistic sense.

A) COMPOSITION OF MASSES

It is obvious that, the composition of masses of building are embodied in the physical setting itself, as even the novelty in a form is also a need of having some locality of the site or of the site or of having some kind of spatiality among other buildings.

Solid void ratio also depends on the wall-opening ratio. When all openings are more, fenestration is also give expression of lightness. If have less number of fenestration, it also gives an expression of 'heaviness' or 'grandur'.

Orientation of buildings is essential in giving order to context. Haphazard orientation of buildings creates left out spaces and chaos, while orderly arranges buildings create meaningful space. Also natural edges like waterfronts backdrop needs proper orientation of give homogeneity to whole context.

Method of designing built scale and proportions give enclosure and necessary continuity to the urban context.[Fig:30]

b) REPETITION OF SIMILATIES

This is derived from the third perceptual principle of proximity and similarity. The proximate composition of buildings and the generation of relationship by the coordination of possible similar elements make the said composition be perceived as a single entity. In such coordination unity could be achieved by preventing the possible rivalry of elements by a specific placement. These similarities could be in their size, shape or particular characteristics that could provide different visual effects.

"A form produce combining similar elements can be called a group form. A group form may be a one having generative parts with their own linkage or it could be a whole in which system and units are integrated"

[Robert Venturi: 1977:46]

This provides urban facades with unity and it also guides to continuity or sequential experience. [Fig:31]



b) REPETITION OF PROPORTIONS AND SCALE

This also is an another manifestation of repetition of similarities. Good composition is a harmonious composition, to recapitulate is dependent upon achieving unity through the use of proportion. The use of proportion can visually unify the multiplicity of elements in an architectural design by having all of its parts belonging to the same family of proportion.

[Cliff Moughtin; 1992: 58]



Fig: 32

The relationship may not be immediately perceived by a casual observer, but the visual unity and the order they create can be sensed, accepted or even recognized through a series of repetitive experience.

In the case of proportion it rather is a subtle and abstract sort of similarity that relates the parts. Proportions govern the dimensional relationships between building elements or a building group by using equal ratio of dimensions, which is derived by the size and character etc, achieving the proportional unity. Buildings are perceived by man in relation to human scale. This implies that buildings, which are relating to human scale, will be perceived as a much positive unified whole. In addition, the usage of proportion in relation to human scale will enhance unity.



Fig:33

d) RHYTHM - REGULARITY AND CONTINUITY

Rhythm of various components of a buildings or a building composition is a very essential factor in gaining 'oneness' and visual appropriateness, which is a pattern imposed by the mind of user. The great dancer moves rhythmically to the music both controlling and controlled by the motion a carried along experience. Rhythm in architecture has similar properties. Rhythm in architecture is a product of a grouping of elements of emphasis the internal accent and direction. It is the sense of movement achieved by the articulation of members making up the composition.

[Cliff Moughtin; 1992:56]



Siena, perceives a pulsating rhythm and continuity at city scale. [Fig: 34]

A rhythm could be maintained by two methods. Repetition is a form of rhythm as much in architecture is extremely simple principle of compositions, which tends to give a sense of coherence. In this case the absolute repetition provides regular rhythm which leads to monotony. But visual richness is achieved by varieties of correct proportions. Rhythm is felt both horizontally and vertically such as an arcade that enhance and unify the movement in cityscape by achieving continuity. A group of buildings could be the best and the smallest entity which, generate a perfect rhythm in experiencing a city.

e) PUNCTUATION AND INFLECTION



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In some compositions an axis is used as a device to create a sequential experience in unification. This could be shown in objects that are used consciously, which shows extremities.

"A thing must have boundary for otherwise it could not become an object of contemplation at all it could be quite nebulous".

[Trystan Edwards; 1926:36]

The boundaries of an urban fabric are derived by punctuation. In the meanwhile it produces a significant change at the beginning and at the end. This merely is a provision of a particular sequence and a single experience rather than a continuous and regular series of events. Thus providing the street with an esthetical pleasure, by breaking the proper gaps and providing a direction.

"Punctuation has a special importance as an element in the concept of unity".

[Fig:35]



Punctuation in this context is a special form of indication of inflection in the city context. Both punctuation and inflection are bound together with many implications regarding the creation of wholeness to the context by governing the most appropriate relationship with each other.



f) **DOMINANT BINDER**

Human eye in the absolute sense is in search for regularity and continuity of a configuration. It may under certain circumstances gravitate towards a major element, which is referred to as a dominant binder that contributes drastically to the regularity and continuity of the entire composition. They are dominant element and consistent pattern

i) **DOMINANT ELEMENT**

This is the major element of composition that acts as a device, which binds the composition together. For an example two different urban fabrics could be bonded together by using the dominant binder providing a sufficient continuity. The dominant major element by its dominance facilitates the perception of the diversity of different elements in relation to its presence by fixing attention. A unity is created in a composition when all these diverse elements are properly related to the major dominant element by resolving duality.



Church spire –a dominant element of the fabrics [Fig: 36]

ii) **CONSISTANT PATTERN**

A consistant pattern usually imposes order in to a plurality of different element in order to strengthen the coherence between them. These achieve similarities in different elements providing continuity. This may be an overriding color or a texture etc. according to Robert Venturi this represent a circulation construct the constant binder, which is usually the major order of the structure.

h) **BUILDING LINE AND SKYLINE**

It seems that there are similar effects, in achieving unity by skyline and building line.

“Skyline provides an identifiable image more powerful than any other elements and also evoke a sense of place. Skylines are composed of a series of individual objects and their forms and scale directly contribute to form the skyline while the architectural style also influence enormously.”

[Altoe, W; 1981:43]



Skyline according to the principle of pragnance



High rises-no conformity of sky line [Fig: 37]

Continuity of skylines gain unity to a context while different roof styles and cornices details of buildings can create visually pleasing skyline avoiding monotony. Therefore roofscape also can be designed in a way so that it creates interesting skyline visually gaining unity.

Similarly building line to the figure ground principle provide unity to a particular group of buildings providing continuity. As the building density is critical in perceiving them as figures against grounded,... In such a case it is important to put up building in a critical density.

2.4.2 SECONDARY STRATEGIES

Secondary strategies shape up the unity of a urban situation up the finest level which is already unified by primary strategies. Unity may be achieved through the use of one main local building material, the repetition of roof pitch eaves and ridge details of the constant use of similar windows and doors [Cliff Moughtin; 1992:33]

a) FACADE TREATMENT

According to the perceptual principle, of unity the sizes, numbers and location of doors and windows provide a character kept in the critical distances. Similarly composition of proportion, rhythm and repeating of the similar units provides a consistent pattern in unification.



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By inflection the molding, balcony railings, valance board, grill patterns, with each other and with other buildings unity is gained. This type of ornamentation provides a visual richness in addition to unity.

Conformity of roofs and facade treatments- unity [Fig: 38]



b) MATERIALS, DETAILS, TEXTURE AND COLOURS

Materials, finishes, textures and colors of buildings in proximity should vary within a range so that the buildings could be perceived as a unified, yet individual buildings that forms a group. This provides visual unity by acknowledging each other through consistent pattern. The contribution of this consistency to unity is manifested in Bath, which is a one building material town, another reason why it represents a great unity of expression.

c) ROOFSCAPE

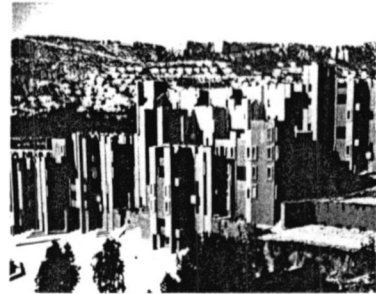
Roofscape highlights the strategic skyline, thus generating continuity. On the other hand it performs as a dominant binder unifying the character.

2.5 UNITY IN RESPONSIVE ENVIRONMENT

A final picture of responsive environment in harmony, which is generated by the finest interaction of unity with visual variety in the environment, is always anticipated by the man. Therefore a harmonious picture of environment must include visual richness and aesthetics to satisfy man by means of responsive environment. The architect must always be aware of the critical constraints such as monotony by obvious unity and transition etc to create a united responsive environment

2.5.1 UNITY OF ITS VARIETIES

The architects of contemporary period are been subjected to severe criticisms, because of the simple and obvious unity they achieve in their building for the sake of expressive purposes. Thus going into such an extreme, creating boredom and monotonous architecture.[Fig: 39] In the city context this has become critical because of the absence of the theme responsive environment which is anticipated by many.[Fig:39]



"The general tendency of the eye is to be pleased with variety rather than monotony".[Robertson, H; 1955: 68]

Therefore variety is the crucial factor especially in the city context. A city may be richly provided with the variety of physical appearances offering various experiencing choices. In ancient proverb this criteria is termed as "Veritio delectat".

Robert Venturi states "...messy vitality over obvious unity, include the non sequitur and proclaim a duality he favors elements which are hybrid rather than pure, distorted rather than straight forward, ambiguous rather than articulated, boring as well as interesting and so on It must embody a difficult unity of inclusion rather than the easy unity of exclusion"

[Robert Venturi; 1977:22]

This is not to be read as a rigid perception, for uniform, building heights in street design. Indeed some of the most charming medieval streets are composed of facades, which are quite irregular. Such irregularities however often vary between part of a storey or two storey at the outside. When kept within this range of difference a unity of a street seen is maintained and monotony avoided. [Cliff Moughtin: 144]

There for the triumph of unity over the chaos, or the victory of order is the conditioned of aesthetic success both in architecture and urban design.

It must embody a difficult unity of inclusion rather than the easy unity of exclusion. Note the difference between old and new[Fig:40]



2.5.2 UNITY AND IT'S BEAUTY

Architecture is an artistic creation. It creates an esthetical pleasure. The final goal of architectural creation is unity. It is conspicuous that unity is based on the concept of beauty. Man tend to perceive visual objects as unified entities and the perceptual principle preserve the unitary character of an object, in the point of view a psychologist. Architect and others concerned with aesthetics have also stressed the prime importance of unity and its relationship to the concept of beauty.

[Fig: 41]



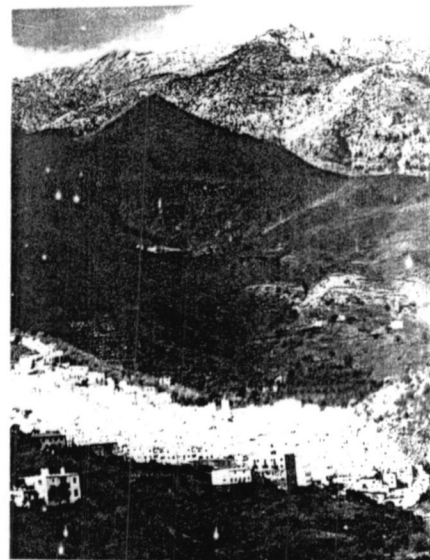
Trystan Edwards in his book of architectural styles has formulated as set of three principles. Each of them is helpful in making coherent elements in relation to beauty. These are identified as a principle of grammar in Architecture, of which's main function is to create a coherent unified whole.

1. Art must be a one thing or an assemblage and not a duality or a division.
2. This emphasizes the units of the thing and separates it from the surrounding.
3. Secures the subordination of parts to the whole and also establishes the relation of a whole, to what lies outside it. The presence of this principle which by taking in to account the existence of one element by the other creates a regularity and continuity in what is surrounding.

As explained, it is important that the beauty of unity to be linked with past experiences in identification and thereby to search for unity in composition, the above principles are been named as number, punctuation and inflection. According to Trystan Edward these could be applied to buildings in any given style and to the styles of architecture. In so far as the principles are compiled with to the same extent is the quality of beauty, is manifested in a design whenever the principles are violated we have ugliness

According to this point of view beauty of a building is subjective and it depends on the capacity of the artistic mind of the spectator. However in the dynamics of architectural form Rudolf Arnheim explain 'beauty as the demand for harmony and good proportions, but does not tell us what kind of forms harmonized and proportioned nor does the insistence on neat workmanship. Physical function does not sufficiently determined, form and no such determination explains why a visible kinship should result between function and expression the meaning of beauty as I hope to indicate emerges only if we understand beauty as a way of perfecting expression'.

[Rudolf Arnheim; 1977:256]



Aesthetic pleasure of unity-
a psychological soothing
[Fig: 42]

In the city context composition is made much larger by adding continuous individual facades. In such a condition the beauty is dependent upon, the single building, Micro context and Macro context. It is expected to discuss the way by which beauty is created by means of unity in the case studies.

2.5.3 CONSTRAINTS TO ACHIEVE UNITY

In his famous book *The Dynamics of Architectural Form* Rudolf Arnheim explains how the recognition of constraints help in creating an interesting visual unity in the perceptual whole. It is evident that this is applicable to a single building and large entities such as a city too. It is also evident that, this is far more critical in an urban situation.

In the city context when the fabric is determined by the function, group values with different characteristics maintain unity. The characteristics of the context also are determined by different patterns discussed in chapter one. Hence one place has one character as opposed to an another making the city delightful.

This fulfills the need of unity and demands variety to prevent from monotony. In such a group value, basic psychological and architectural principles could be used deriving aesthetics. However a city as a large and complex entity, the characteristics of it basically determined its verities. However for the city to become a responsive environment it is needed to make a unified whole as a final picture. A single character obviously is unity, which expresses its theme as a composition. Yet it is quite hard to unify two different characters. The transition of characters hence are needed to change from one character to another without disturbing the individual characters keeping visual variety and expressing a clear idea of itself to the observer. Therefore **TRANSITION** is very critical and important feature in an urban context as it acts as a constraint to achieve unity as a responsive environment.





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CHAPTER THREE
THE TRANSITION – AN EQUILIBRIUM BETWEEN TWO SEGMENTS.

3.1 TRANSITION IS....

The term transition can be basically defined as the change from one place or state or out or set of circumstances to another. (Encyclopedia Britannica; 1138)

Transition in the city brings in to light the connection between extremes such as physical characters, patterns etc, in order to identify a transition identical opposites or partly opposites should have been perceived by human senses and according it is clearly expressed that previous experience is a must for one to identify a transition. Therefore transition in most cases does not clearly show a definite margin. Instead it adapts characters from both the portions. Therefore, transition is a compromise area intern of combining qualities and characteristics, which is partly dependent and partly independent upon both extremes. It allows a gradual or sudden change between the two. "The transition from one domain to another, is also a critical design problem in structuring the city... We must not forget the gateway and the important of making in some way the entrances of all out towns, out suburbs, out districts..." [Norburg- Schults; 1971:56]

Districts are that part of city which holds one character. Such a space properly formed results a particular behavior and the character is dependent on the behavior. To adapt from one event to another or to adapt from one character to another time and stance is needed. Therefore, demarcation of these changes, or the transition, is one of the most important. This is further explained by Christopher Alexander, "while people are on the street, they adapt a style of street behavior, when they come into a house they naturally want to get rid of this street behavior and settle down completely in to a more intimate, spirit appropriate to the house. But it seems that they cannot do this unless there is a transition form one to the other, which helps them to lose the street behavior. The transition must in effect destroy the momentum of the closeness, tension and distance which are appropriate to street behavior before people can relax completely.

[Alexander,C; 549]

The physical appearance of the city is the best method to convey this message, by means of various strategies to give a unified experience, which however breaks within a whole journey. Mies describes

"The transition as places in which the world reverse it self"

[Mies, Von; 1990; 73]

Transition in the city context possesses a two way process, which is in accordance with human movement. They may be a beginning of the character or they may be the ends of the other character.. It is a common and uncommon, a continuity and a discontinuity. Therefore transition acts as an equilibrium medium that act as the points which are organizing in custom the never ceasing flow of event and character through his experience.

"If we can be made sufficiently rapid and remarkable the transition is the most evocative points of all evanescent ambiguous and moving" [Lynch; 1972:47]

The transition point is most impressive character, that conceive one character by emphasizing another, thereby acknowledging the both, then the different functions. According to this the fabric

changes, to gain a smooth transition physically and psychologically. The only way by which the integrity of street can be perceived in the city of towers is by making clear transition from high to low buildings. In essence to separate building types are needed within one envelope. 'A low type that respond to the street level public realm and high-rise level that steps back to accommodate private needs above the city'.

[Cliff Moughtin; 1992: 39 – 41]



No transition



Clear transition from low to high rise buildings [Fig: 43]

Therefore transition has a guide that modify people to attain a change or transition between different spatial experiences. It acts as an 'in between' zone, which provides a prelude, and entering to new situation then adapts behavior through physical environment by conditioning his psychic. Therefore, transition is a conditioning zone. For an example two kind of architectural characteristics, expression and behavior is needed, in a transition from commercial setting to a residential setting. Transition deviates human emotions from a public life in to a more defensive and private life style when he experiences such a change in building function. Therefore the transition is arousal regulating, and sustenance for the adaptation of human being in to different spatial experiences.



Absence of transition- No 'conformity' between them [Fig: 44]

3.1.1 TRANSFORMATION WITHIN TRANSITION

'Spatial meaning can be indicated by sharp walls or either sharp breaks or by gradient or transition'

(Rappoport, A; 1982:181]

A transition occurs as a change from one condition to another in two methods. That is it may form either a smooth gradual change or a sudden drastic change between two different experiences.



a) SUDDEN OR DRASTIC TRANSFORMATION

A sudden transition arouse an excitement giving the user unexpected transformation. In which case the gradual adaptation of human mind will not be applicable. The smooth continuation of one character is broken instantly by emphasizing and another event". It is said that forcing one to abrupt change form one experience to another established a psychical and psychological separation between the two setting'.

[Booth K Norman; 1988:65]

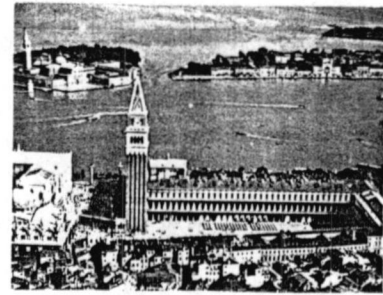


Fig: 45

Therefore this kind of a transition has no transition zone. It emphasizes the axis to direct into more exiting space enhancing an interest of progression, but without a special reason this may become meaningless. For an example sudden transition to residential from commercial. it is stated mainly such certain activities are carried out in specific place, at a specific time characteristic behavior patterns for those settings can be identified . When a change between such two setting are abrupt the change that occur may be incompatible with ongoing behavioral pattern. So there is a tendency, for the former behavioral pattern to repair at a different time and place within the later creating a very successful and appropriate condition.

[John Lang; 1973: 93]

b) SMOOTH TRANSFORMATION

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Transformation in some cases may be subtle. One may be lead though a sequence of spaces that provides a complete change in use and mood in such that the transition is almost imperceptible sometimes the transition is powerful.

[Sidmonds, ormsbee, John; 1988:203]

The gradual transformation is used to transform the user psychic smoothly form one character to another. This adds new experiences or circumstances starting from spatial progression in architecture while continuing previous character at some level. In such a situation the psychical appearance of building are smoothly changed facilitating the experience of a city as a unified whole. But in this unity, a discontinuity is also indicated, that is used to gradually forms from the behaviors without any conflicts. However in this phenomena the gradual transformation creates a new rhythm continuity etc. Yet it acknowledges the previous experiences and it provides in a dynamic zone at the fields of two characters interfere. The user also has to adapt into the transformed event or circumstance, by means of the 'transition zone'. [Fig: 46]



3.1.2 ROLE OF TRANSITION

In the city context transition is sometimes an end and in other times the beginning of a character demanded by various situations. In the spatial experience the role of transition is prelude and equilibrium functions of two extremes. The harmonious picture of experience is gained by the city by transferring one character to the other merging with the other by balancing the opposites of the city.

The city is a place where movement gives the great experience. Either sudden or smooth would the spatial experience be the role of transition can be summarized in to two aspects in broad terms as physical and physiological. The role of physical transition is to control the user behavior directly. The psychological aspect of transition directly changes the behavior of user. By these roles, links or separations between two or more realm in the existential space by providing psychical or visual transition is create.

3.2 TYPES OF TRANSITION

By the manner of occurrence in the city context, transition could be distinguished in to three types. functional, chronological and built to unbuilt

Function based transition occurs between identical functional zones, by merging both the characters. A variation in the use of replication of parts of an existing group that forms new character is the idiom of transition. For an example a historic fabric may be replicated in modified terms could form a transition. In the same manner character of built area would be transformed in to an unbuilt areas character. Analyzing the above aspects that is the way of the occurrence of transition they could be divided, in to two types, named as

1. Physical transition
2. visual transition

a) PHYSICAL TRANSITION

The physical transition spaces are used to transform the user physically in to another event or movement. It almost entirely deals with the Three-dimensional form of the space. The user physically perceives such transition when he is in the said space. That could be a doorway, steps, slopes, curves etc. [Fig: 47]



b) VISUAL TRANSITION

Visual transition zones occurs by way of landscaping or by providing vistas, to transform the user in to a particular set of circumstances. To experience a visual transition, it is not a must to be present at the said space. Visual transition could even be perceived by an outsider by way of movement.

3.2.1 FUNCTION AS A GENERATOR OF TRANSITION

Transition occurs between two extremes. These extremes always are place character, event or act etc. In the city context as a dynamic entity the functional zones are clearly identified taking there through their characteristics, event, acts etc as an indicator.

In the city level, the functions, which are, clearly seen, could be public, semipublic, semi private. These could happen in commercial, industrial, institutional and residential zones that are discussed in chapter one. This is further developed by Kevin Lynch, with his ideas about the districts. The need of transition is indirectly emphasized in his studies, as a district is a single character entity. This makes the study easier. The following map is studied, which shows a clear transition based on the city structure, with clearly identifiable three zones. Namely they are the highly compact commercial center, mixed residential zone and the more relaxed residential zone. The compact commercial area shows their non-static nature and public life. The main vehicular and pedestrian network area requires a different design approach to that of the quiet residential street where the need for privacy and defensible space should be provided for. Therefore, the transition between these two is needed to make a barrier and also a certain kind of continuation shown by mixed residential area, which is a conditional zone of behavior, of the observer. This indicates the need of changing from high scale more expressive transparent building to the humane scale, closed calm environment with a zone which mixes these two. This is far more applicable to city context, like Colombo where the residential and commercial settings are available at hands distance.



1. The inner city, still dense and consistent-the commercial centre
4. Mixed residential and commercial area
5. The residential areas

Figure ground plan of Goteborg
Source Finding lost spaces: 182
[Fig: 48]

Accordingly one city portion inflects to another portion and thus one extreme to another. The character of these extremes is shared by each other in accordance with unity principles. Finally the unified totality of city can be explained as.....Transformation within the transition is a different kind of experience. It occurs in relation to the spatial aspects. All transformations are intended to real movement represent directions which unifies a number of spaces among themselves and often related to the larger totality. [Norburg-Shultz,; 1971; 46]



Commercial character



Residential character [Fig: 49]

3.3 ARCHITECTURAL CHARACTERISTICS AND ITS RELEVANCE

In the city structure there are two functions of transitions; which are expressed by architectural characteristics. Namely they are the prelude function and the equilibrium function. The architectural character of the transition zone is not that the two extremes nor is a totally different one. Therefore, the relevance of transition in the character of a city should be discussed

3.3.1 TRANSITION AS PRELUDE

The transition from one realm to another is a critical event. That is why the entrance is given a great importance during the history of Architecture. [Norburg -Shultz; 1971: 50]



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The transition as an entrance, which in the city context steps beyond lateral meaning. The entrance, receives the significance in mans' world that is intended to experience. It provides a prelude to the forth-coming activity and experience placed in between different characters or spheres etc. Transition also has a similar function in the city context.

The experience of a man is determined by the physical appearance. Similarly transition also has such a conditioning by means of physical elements such as fabric, objects space articulation etc. Therefore the psychic also contributes in creating an entrance or out as a prelude or an end. This occurs along with the change of one character identically for the proper operation of this factor, any city portion must keep its unity as a single entity. Human mind is adapted to such characters. Thereafter the unitary character changes. This changing nature of character is clearly identifiable as an entrance. For that appropriate scale, mass composition, proportions ornamentation, surface treatments etc can be used by discontinuing the preceding one but with a creation degree of continuation. "Although there was at the bottom little similarities in out aims the work of two of uses was lumped together, judged and described by one quality obviously common to the whole it, to newness". [Van de Velde]

The newness of that portion hence add an entrances quality by changing human mind to new state, which including the next event is a beginning of another event. This can be further described by simple example. The text ends with a fullstop, at the same time a new sentence begins. The connection between the two texts depends on the manner of handling the language and meaning.

The grammar of architectural transition has same functions. It is the end of one text, beginning of another text. A scenario common to the both. Therefore the discontinuing and the continuing nature of itself acts as a prelude to another portion itself, in accordance with the unity principles discussed,.... Encounter a new approach all the spaces are synthetic totalities, where it is impossible to single out individual units by inflecting a bounding surfaces created new continuity starting horizontally and vertically, the dynamic zone where the fields interfere are used for movement in particular for entrance. [Norburg- shultz; 1971: 63]

3.3.2 TRANSITION AS UNIFICATION

The final picture is a city, a harmonious environment with unity and variety. The architecture of one functional group, and its character, is kept in a unity of their own as a group, with their similar demanding expressions. Florence and Siena are the best examples for such a unity, when it comes to proportions, scale etc, which always tally with the principles of unity. With a transition identical groups are properly connected to achieve unified whole and therefore a transitional zone act as a proper equilibrium position.

'A river may be said to separate and unified simultaneously, it divides the land but also defines a space which is common to both shores, the unifying effect is visually strengthen by it'

[Norburg- Shultz: 1971:53]

This kind of portions at the some time breaks the duality and makes the duality. Through that the ultimate goal of such a transition perceive the connectedness of being and concomitant pleasing of being in unity with one self by multitudes of building elements and space being and concentrated of one pint to achieve the unification (Guranis wishes for an integration expresses new psychological synthesis which unifies traditionally distinct characters)

This process is not terminating. It acts as a chain. One character could always make a transition with another character again and again with another. Therefore in such a case all transitions are Architecture thus provide a convincing synthesis of two fundamental aspects of architectural composition separation, unification, articulation in fact always consists in the interaction of those two aspects, spaces masses and wall elements are separated to express the fact any buildings consists, of different parts functionally or symbolically determined. As these parts however are Part of an organism they must be unified by continuity, repetition, interdependence and interpenetrating. {Norburg- Shults : 131}

3.4 IMPORTANCE OF TRANSITION FOR A RESPONSIVE ENVIRONMENT

Transition is a very emotional urban experience. This physical and visual experience influences the behavior pattern of man. In other words, it provides behavioral cues for the meaning and appropriates behavior. It adjusts human behavior suitable for certain physical situation or condition with clear straightforward meaning. The other is that it denotes basic information about the type,

function, and activities linked or separated, character of place etc, with the help of cues provided which communicates. The totality or the group meaning of both visual and physical transition makes the user be in a situation, which is comfortable and dynamic. The outcome of this would be the psychological aspect of transition, facilitating the perceiving of physically bonded milieu and the non-physically bonded milieu.

The other importance of transition is that it acts as a filling medium between opposite functions to balance them and arrived at equilibrium sufficiently. Therefore the two extremes perform as one, and the city structure maintains their unity by a gradual transition. There arises the importance of responsive environment, it's final picture as a harmonious one with unity of its' varieties. This provides legibility to the environment with its varieties kept as groups. The special spatial and visual order is provided not only by its inhabitants but also by visitors.





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CHAPTR FOUR
ANALYSING THE TRANSITION IN THE CITY OF COLOMBO.

4.1 INTRODUCTION

The experience of moving within the city is a one, which is in unequal with heterogeneous spheres, with different patterns such as architectural continuity, spirit of place, spatial progression and views etc, which give the character to the city. However it is important to perceive a city as a unified whole, With varieties. The method of manifesting primary design strategies such as repartition of proportions, similarities, punctuation, inflections etc are discussed, in accordance with unity principles to arrive at a responsive environment. It easy to apply these in to small building groups yet hard to create unity in a transition in city scale, which brings into equilibrium different characters practically. But comparatively in medieval or historical towns the buildings are tightly compacted and then also it is easy to make a cohesive building pattern, which comply with unity principles such as figure ground, pragnanz, the principle of similarity and proximity etc and for the perfect use of strategies. Seina and Florence may be the best examples available. Maintaining a transition is easy in such a context. But in Sri Lankan context such conditions are hardly seen. The importance of transition still prevails as an important need to let the city feel as a whole.

Hence it is important to derive the methods and strategies which are applicable to Sri Lankan situations. Analysation of the theories and its applications are combined together which is needed to make most suitable guidelines to Sri Lankan situations. For that few selected examples in the City of Colombo are examined in order to find out the ways by which the discussed strategies are used to create a responsive environment, a physically and qualitatively unified whole.



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4.2 BASIS FOR SELECTIONS

Since transition is a change from one extreme to another extreme different characters are needed. Therefore few contemporary urban context are selected with many limitations among widely accepted urban contexts which have qualitative identities in variety of levels. Since they are still available and since the behavior of man drastically changes in the context of the selected transition few definite transitions from residential to commercial, namely Fort to Pettah, Town Hall to Slave Island, Slave Island to Java Street and Kollupitiya to Borella. In selected examples the maintenance of different degrees of residential and commercial characters are concentrated. Ultimately efforts are made to derive urban design guidelines to make city a unified whole. As a result, the study becomes one of the most communicative analysis efforts that are made to build the relationship between the factors mentioned below.

1. Analyzing the context and the participation of individual building for the appropriate pattern to create unity in particular situation.
2. Identify the extremes and their strategies to achieve unity as a whole.
3. The changing use of these strategies in transition zone as a filling medium.
4. Summary of correlation of established examples to derive guidelines to be used in urban designs.

Colombo Downtown Texture Plan



Map of Colombo [Fig: 50]

4.2.1 COLOMBO FORT TO PETTAH

Colombo Fort gains Ground as a very special place in the context of Colombo City owing to its rich architectural heritage. The colonial architectural character organized in to a grid iron pattern enrich the immediate context. As the area is designed in to a common basic theme, York Street could be nominated as a specimen that expresses identical character of Colombo Fort.



Map of Fort and Pettah
[Fig:51]

Kandy Road is one of the major entrances to Colombo; and the Chatham Street lies in the axis of it. The Chatham Street clock tower as an initial landmark creates a unified sequential experience towards the Fort and it terminates at the York Street. It can be identified that York Street constitutes pattern of linear organization with high commercial usage and the rich architectural style with grand character. The open spaces seem to appear as they are carved out of a solid mass. It maintains critical plot coverage contributing to a unitary character by making a complete form. The four to five storey high skyline and the continuous building line helps to hold them together.



The clock tower creates a unified sequential experience
[Fig:52]

The simpler proportion repetitions of similarities, texture, door, window detailing maintains an identity, unifying the context and generating group, values as the best and the smallest entity it generates a perfect rhythm in experiencing the city. The unity of its variety is seen in the small ranges perceived at once. A spatial unity is maintained in an overall cohesive and harmonic experience keeping the similarity of ground level details, to the maximum possible level. Especially in the grand scale

arcade with the facade appearance and with the sufficient sense of enclosure and continuity, provides for more active behavioral patterns making it a responsive environment. In other words the entirety forms a dynamic commercial urban setting.

The Seylan Bank, Nations Trust Bank and the Grindlays Bank are identified to be infills of a latter period. Seylan Bank and Nations Trust Bank identifying the skyline and Building line creates responsive facades. The Grindlays Bank harms the visual and spatial unity being an insensitive approach which, is not a product of the proper identification of potentials and the behavioral patterns of the context. However the rest expresses finely a high commercial setting representing one extreme end of a city environment, which is need for a transition.

In the end a single storey high residential environment where the buildings merge with the ground is found as the other extreme of transition. This group of buildings acknowledge finely to the human scale surviving as a far more relaxed and serene environment within the city.

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With variations dragging of perfect rhythm, proportions, and group values-make cohesive entity. [Fig; 53]



Continuous mass of buildings. Note the use of Pragnanze theory. The grand scale dynamic entity. [Fig: 54]



Grindlays bank -non responsive approach. [Fig; 55]

The continuation of building line and the skyline makes it an identical group showing a common character. The dominating roof, small windows, more closed solid appearance comply with the architecture of a residential area. However an inflection is not seen in windows building plays a partly individual role in the context. However the similar plot widths, horizontal rhythm and the color range individually and wholistically tally with the human sense and need. Therefore a uniformly pleasing setting which overlaps with the desired residential functions is created.



The termination of grand character at a large open space- end of one character. [Fig; 56]

A low commercial setting and an open land are seen linking the identified extremes. The rich and grand architectural character terminates at the sea front suddenly. Then starts a low commercial function zone. It comprises of small shops, shop houses oriental cafes etc. Between these two there exists a blank area which is opened to the sea. Unfortunately this area today is covered by a tall monstrous blank wall. It covers the celebration of the ocean from the street. Without the situation would have been much more exciting. Without the it visual connection with the ocean the street is deprived of the possible excitement.

There starts a new architectural character immediately after the gap. The facades are comprised of two three storey high, low commercial buildings. Yet the other side of the road is still covered by the blank wall owing to the presence of this there exists certain retardation and an affective discontinuation of the transition, without the blank wall would have been much better. Then of course the presence of harbor would have been a consistent pattern that creates unity.

The other end of the linear organization is the three storey high, low commercial setting. It also represents a single portion of the city because of the continuation of building line. Yet most of the new buildings are lightweight. This in a way is the opposite of the grand character. However this quality is diluted by the emptiness and the infinity searching quality and the experience of the open space seen immediately before the Colombo Central Super market building, . However it maintains the rhythm and the comparatively new experience. Yet this could not be identified as a real and pure building group. The building material and colors the solid void ratio etc creates chaos rather than a visual variety owing to the non-inflecting nature of them. Even though this is visually unpleasing the continuation of skyline, creates urban environment with slight sense of unification.



The clock tower- axial arrangement; continuation of experience by punctuation [Fig: 57]



The three to four storey regular skyline and building line makes a group. Start of different character [Fig: 58]



Three to two regular skyline makes a group [Fig: 59]

The rhythm of the movement is broken at some instance because of the discontinuation of the building line and skyline. However in a wholistic picture a four to five storey skyline is seen which comes down to a height of a single storey making the environment far more humane with the experience. This provides evidence for the fact that the continuation of the skyline and building line responding to a unitary experience makes the rest secondary. However the absence of ocean, damages the transition from Fort to Pettah to a severe level. With the presence of the ocean the Sea Beach Street is imagined to be the best transition that take place with a minimum intensity of built fabric.



Breaking the rhythm of the continuity [Fig: 60]



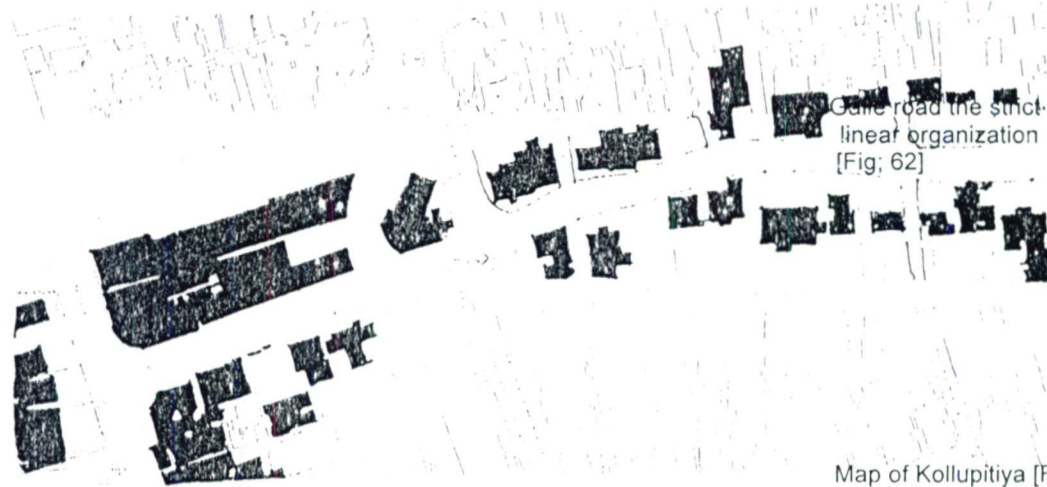
Reduction of skyline makes a residential environment by reducing dynamic character [Fig: 61]



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4.2.2 KOLLUPITIYA TO BORELLA THROUGH TOWN HALL

The identified extremes of the transition are Kollupitiya, Town Hall and Borella. Their characters consecutively are commercial, institutional and commercial. Which represent activity pattern, spirit of place and activity pattern as the prominent patterns.



Kollupitiya the linear organization is a town that contributes drastically to the commercial character nominating the initial part of Galle road. Similarly it holds an axial connection with Dharmapala Mawatha that runs up to Town Hall.

Therefore Kollupitiya provides complexity and variety to the physical appearance of the Galle road integrating activities derived by the commercial character and the relaxing character of the Galle Face Green.

Architectural style of Kollupitiya is derived from the prominence given to the linear organization and activity pattern. Most of the buildings in the ground level merge activities with the road and adapts a transparent quality derived by openness thus expressing commerce. The fabric is affected by the creation of self-conscious buildings, which are designed to become complete forms with no relationship to the fabric. These buildings depreciate cohesiveness



The self-conscious building within the more ground than figure. [Fig: 64]



The skyline makes the dynamic entity humane. The B.O.C Merchant tower a silent member [Fig: 65]

among buildings. However the presence of regular skyline and the humane scale makes the context be perceived as a single entity. This provides a dynamic character to the setting. The skyline to an extent unifies the area despite the presence of individual buildings rather than a fabric.

[The skyline is perceived by man at a two to three story height. This creates a sense of unity in the experience. However this replicates a residential rather a commercial in scale.]

The 'round about' in front of Liberty cinema is not clearly spatially defined by buildings, loosening the spatial unity. Soon after the break, starts a façade of residential buildings, which are turned in to commercial buildings, despite the loose of spatial unity. The dominance of buildings collapses at this point. Such a change breaks the visual and spatial unitary image of human behavior in movement from a dynamic entity to a relaxed setting. This area thereafter, maintains the density taking prominence over the junction.

Most the buildings form groups of two to three maintaining a two storey skyline. This represents the end of character of the city and the beginning of another character. The building group only has a nominal value. However there seems to be a lesser value, in the repetition of proportions, similarities, inflection of details, openings, which should be seen in-group values. All these are maintained to an extent by the regular sky line that blends with the nature, the same plot widths and horizontal rhythm. Accordingly at Dharmapala Mawatha nature is given the dominance, behaviorally the transition guides the consecutive phase. Most of the buildings are located rhythmically and isolately, the landscape continues it and creates a sense of enclosure, and proximity. The character that is demanded by a more relaxed residential setting. Though the buildings are located separately the facilitation of nature makes them perceived as a single entity where the unification of built to unbuilt plays a major role. This is further enhanced by the spatial unification. There appears few middle rise buildings in the Dharmapala Mawatha. However as it set s back from the road and because of the presence of trees, the negative effects on unity by them are minimized.



Changing the character of buildings and spatial environment the building merge with the nature, change the activity. The buildings without unity.[Fig: 66]



The tree line continues the building line creates enclosure [Fig: 67]



Town Hall; the spatiality of object demanded, to create a unified space [Fig: 68]



Map of Town Hall. [Fig: 69]

Dharmapala Mawatha is not properly defined at the Town Hall node and the Viharamaha Devi Park. Town Hall building is a focal point in the area and all other built fabric and spaces were organized around it radially, being with the physical system, cultural interaction and visual identities consists of spirit of place.

Even at the close proximity at the Town Hall the character experienced previously is seen. The buildings pose more commercial facades which are glazed and the rhythm is vertical. There are large number of trees and an enormous number of open spaces. The Town Hall performs as a dominance binder. All these together is changing the behavioral patterns of man. The buildings that face the town hall in Dharmapala Mawatha are set back and isolated which do not form a fabric. But they individually give prominence to the town hall.

Town Hall Building as major focal point, all other built fabrics, objects and spaces were organized around it radially, being with the physical system, cultural interactions and visual identities consists of spirit of place. Dharmapala Mawatha that connects with Kollupitiya defines one edge of the Town Hall node. The rest of the built fabric pose a more disciplined physical appearance making the Town Hall prominent as an object, this contributes a character visually to the spirit of place demanded by an institutional setting.



Heyles building a successful a new approaches to achieve unity [Fig:70]



The buildings merge with nature, residential character trees provide sufficient enclosure and continuity [Fig: 71]

The buildings provide the setting with a simple facades and two- three storey high skylines. The decrease of plot widths and the vertical rhythm creates unity by variety, contrasting with the open node. However a fabric derived by an architectural style, which is disciplined, calm and uniform is arrived at by means of rhythm, proportions, and detail, colors textures and monolithic facades not only the institutional buildings but also in the commercial buildings.. This affects the discipline and controlling of human activities and behavior. The junction where all these roads meet is a place where the sense of enclosure leisure, because the buildings are not in close proximity. However, a link is maintained with next step of spatial sequence by the architectural style that provides punctuation.

This is an extension of the Town Hall or prologue to thesequence discussed. It provides an essence to the more prominent open landscape pattern.

Towards the Borella side the spirit of place is perceived, and instead the transition that take place of Kollupitiya to Townka Hall reverses itself, when the Dharmapala Mawatha extends up to Borella side and when it reaches to Boreilla the facades gradually change in to a commercial appearance.



The buildings begin to appear commercial (fig:72)

4.2.3 TOWNHALL TO SLAVE ISLAND

The Town Hall is a node, with a radial arrangement. Institutional buildings such as the town Hall 'Dawatagaha Palliya' etc is seen there. The prominent architecture of the area is derived from the institutional building.



Map [Fig: 73]

The spirit of place of the Town Hall node consists of cultural interaction through visual identities in the radial paths. Buildings are located exceeding the critical distance that creates cohesiveness between buildings.



The group value with disciplined institutional character.[Fig:74]

Therefore the distances of the buildings, making the buildings isolated reduce the figure against ground ratio. This is enhanced by the undefined street edges and the gaps between buildings. The spirit of place is reduced by reducing the spatial unity, when bonds people with it in behavioral pattern. There is no continuous building line. But the appropriateness of the skyline retards the negative effects. The Town Hall is given prominence on the appearance and the organization of buildings making the spirit of place a priority of the area. The buildings are always shorter than four storey height. Small building groups are found with group values. Similar plot widths, disciplined and authoritarian architectural character is expressed not only by institutional building, but also by commercial buildings. The monolithic facades do not give prominence to the entrance. Yet the non-decorative architectural language of new



Heyles buildings- harmonizes context- makes unitary appearance [Fig: 75]

buildings give variety and visual richness with the unitary appearance.

Heyles Building provides continuation and flow of spirit of place towards union place. It is the starting point of unitary continuation. However a regular skyline is absent at the place. The Dialog Building and the Carmart are located without a cohesive bond between them. Especially the Dialog Building is an insensitive approach to the to the context that violates the skyline and the building line,. As a result it does not suit the spirit of place. The rest are single storey high commercial buildings with the dominating roof that contrast with the junction.

A changing character is nominated in this portion without a proper continuation of rhythm. The entry to the Vauxhall Street is a place where definite linear mass organization is visible. The building mass along the road is two storey high. Occasionally, this is violated by three to four storey high buildings. However the overall picture is maintained properly. The compactness of the area results in building group. However the inflection between adjacent buildings are lesser. The windows and doors possesses, they're own expressions being unable to arrive at a unitary expression. Yet the continuity and the sense of enclosure of the buildings defines a fine unified space for human activities. The usability of buildings to maintain their own expression and the opaqueness of the building results in a dull and non active space instead of a live urban space. This intern has produced a commercial setting with less dynamic appearance. With its solidity dominating roof and small windows. The warehouses enhance this feeling. The repetition of same facade creates monotony resulting in a dead environment. The 'Satosa' and the Fraud Bureau Building stand out from the general fabric as landmarks. But their response to the creation of the visually pleasing environment and its contribution to visual varieties are negative. They are brutal in appearance and break the character, which is continued through the street.



Breaks the continuity and spirit of place. [Fig: 76]



The broken skyline. [Fig: 77]



Continuos skyline and building line with sufficient enclosure makes a unified space. [Fig: 78]



The unifying space- yet a non responsive environment-the monotonous appearance [Fig:79]

negative. They are brutal in appearance and break the character, which is continued through the street.

The skyline of the area gradually descends to become the same of a residential setting. The human scale of the building has made the experience far more perceivable. The horizontal rhythm of the building and dominating roof unify the context as the part of the ground. This lays the foundation to a proper activity pattern. The lesser numbers of openings and their small delicateness, achieve what is demanded by a domestic setting. Therefore buildings apart to be groups despite the non- successful group values. The transition of this area is easily perceived by human sensation. The feeling of transition from four to five storey height well-organized and expressive architecture in to a single storey high humble architecture is conspicuous. This brings in to light very clear smooth changing picture minimizing the effect of shortcomings. It is more powerful than the chaotic situation present at certain places. Therefore changing from one character to another which is the basis of transition, and finally the beginning of new character is evident. Yet this physical transition is not properly backed up by means of activities

Owing to this the street and the transition has become dull. Activities have not merged because of the presence of warehouses dehumanizing the space. However the warehouses are humane in scale. The plot widths are not maintained in a proper manner.

Owing to this the rhythm at some instance is vertical and horizontal in the rest. Finally an opinion developed as mere architectural transition without the proper merging of responsive patterns may not result in a good transition.



The building group. [Fig: 80]



Break of skyline and building line [Fig: 81]



The group of residential building. [Fig: 82]

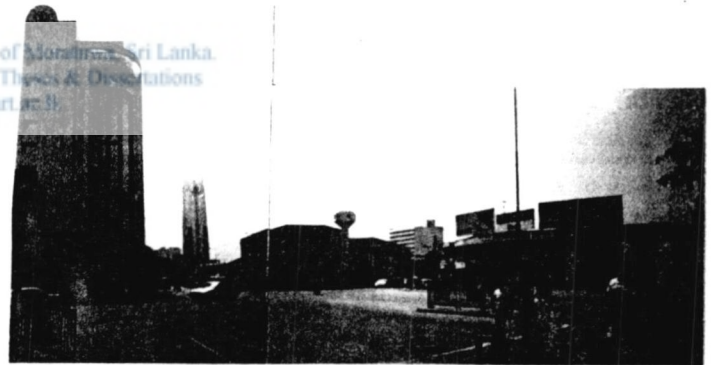
4.2.4 SLAVE ISLAND TO JAVA STREET

All the examples discussed up to this point had sufficient distant to form a transition. The Slave Island to Java Street example is selected in order to examine the way by which close extremes maintain their identity.



Map of Slave Island. [Fig: 83]

Slave Island is a radial organization with a higher building density. The junction is situated in a very busy context housing various dynamic and low commercial activities. Most of buildings are two to three storey high, yet a regular building line is not seen. The maintenance of building line creates a sense of enclosure and the space has become, a place, where a lot of low commercial activities are seen.



The buildings in the junction. The broken skyline. [Fig: 85]

The general plot widths of the new development are similar and a vertical rhythm is maintained. But the proportions of the facades, details, openings, and repetition of similarities are not powerful enough to let a cohesive and unified picture grow such as in Fort. But some buildings namely Manning Mansions, Nawa Loka Hospital and the Church contribute to the harmonized picture of place. This suits the commercial setting.



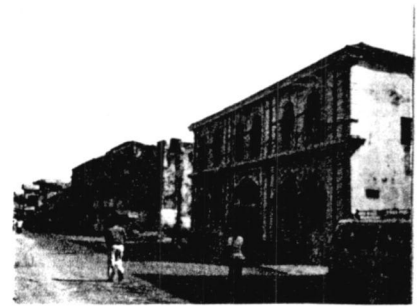
The skyline building line and rhythm integrated with human activities.[Fig: 86]

The C.I.C Building and the commercial Bank has not responded to the setting and thus creates visual ugliness, it does not respond to the skyline, solidity etc and creates a break in the unity. However the built environment has dominated the area. The corner building smoothly moves the user in to a sub street of which's end is a residential setting. There seems to be a transition between these two extremes. The transition starts with the Rifle Street. However it still is a part of the junction. The transition in this case is entirely consists of masses, which are properly organized as opposed to other selections. The expressive, low commercial character is shown by the three storey high buildings. The facade to the street at some instances comprises of glass and steel. There could even be total glazed facades. Even with the varieties, the skyline is regular. The varieties of itself do not inflect each other and could be read as one entity. It creates visually unpleasantness at the first sight. Yet in the three dimensional perspective the skyline is powerful enough to let the street facades be seen as the single entity unifying the area. The character of this place is derived from the maintenance of solidity of ancient buildings at the junction. When compared with the building height plot widths are small and contributes to the vertical rhythm. These two are quite different from the junction. However the other side of the street contributes to the urban experience maintaining its solidity.

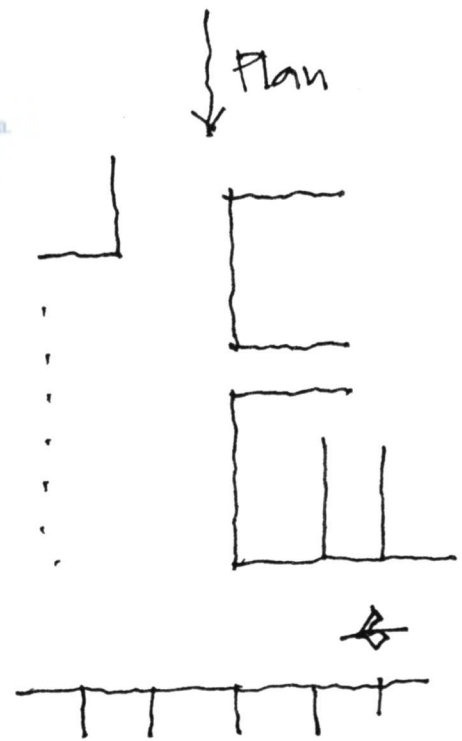
When the Java lane is entered at the vertical rhythm gradually turns in to a horizontal rhythm maintaining, solidity and building height. This creates a relaxing character. The ground level details become much human and so the junction. This thereafter gradually changes in to a two storied residential setting, this is more humane in scale and is an enclosed one. A distinctive fabric is composed by the said dense, two storey high building mass. It houses a rhythmical and a regular skyline. Therefore the open space is unified by a continuous sense of enclosure developing it as a community space.



Unity over chaos. [Fig: 87]



Vertical rhythm begins to become horizontal [Fig: 88]



Broken building line-less enclosure, break the unity [Fig: 89]

The buildings form a group of building where the plot widths are small and the rhythm is horizontal. Despite the two extreme ends the street is a smooth transition that takes place to both side. In this example, it is seen that the built fabric is very powerful and strong. It plays a vital role in the transition. The smooth transition of built fabric has caused various street activities enlivening the street, which is very specific to the Java Street



Residential area-the change of activity pattern and the architecture.[Fig:90]



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CONCLUSION.

In this study it is aimed to explore the ways by which unity is maintained in transition in a given urban situation. A city is a collection of an enormous number of place specific and unique characters. A unique character is an entity that is capable of providing a unitary expression. Such a place with a unique character is termed a district. It is comfortable to unify a district when it is taken into consideration as a separate entity. Yet, the unification of a city as a whole is far more complex and hard. Therefore in this study efforts are made to explore the principles by which A city is unified as a whole.

The medium by which the above mentioned unique characters are harmonized is identified to be a transition, a filling medium in the city. It therefore is the most critical point in city design. It is similar to a river that divides the land into two shores. Though divides it also maintains a certain relationship between the two shores.

During the course of this study few urban design principles are identified to be unity generators in transition. In addition few design strategies are identified to be supportive to the above said urban design principles. The first is the theory of *pragnanz*, which describes the way by which a composition is arrived, that is perceived by man in the most simplified manner. The second that is the theory of figure and ground explains the manner by which most appropriate and livable responsive open spaces are created among a building composition. The theory of *pragnanz* is facilitated by the next, which is named as the theory of similarity and proximity. In achieving the above-explained theories few design strategies are exploited. Namely they are the maintenance of a regular building line and skyline, punctuation, inflection, composition of masses, facade treatment etc.

The applicability of these theories are understood in the examples studied in the course of study. In the first case, Fort to pettah there was two identifiable characters at the two extremes of the transition. In the said example, The perfectly maintained grand character is interrupted at the close proximity of the harbor. In the example of Kollupitya to town hall, natural elements such as trees and open spaces plays a major role of transition. The negative effect of the presence of a lesser number of built masses is rectified by the nature in this example. In the case of town hall to slave island, the institutional character and the residential character make the extremes. In this example a very good physical transition is present. Yet the building function, namely the ware houses function has de humanized the area making the transition dull and the environment a non-responsive. In the final example discussed that is at the Java Street a fine contribution to the transition is made by the physical. The organization of masses is according to the blueprint of urban architecture.

According to the analysis it becomes clear that organization of masses becomes the primary crucial pattern of the urban transition as most of the man made spaces are contained in physical masses even a smallest reference point. The best examples would be the Java street and the York street. In the York street case, the masses form a solid out of which well-defined open spaces are carved out.

This leads to a sudden break of the rhythm and hence a sudden transition too. In the Java Street, organization of masses is well exploited creating a very good transition.

With the analysis it becomes conspicuous that the presence of clear extremes is essential for a transition. It is favorable if the extremes do differ from each other drastically. The identification of such extremes facilitates the proper creation of an urban transition. Within such an identified extreme there will be a whole lot of patterns. Some of the patterns will be less prominent, while one will be the most prominent which provides the place with a unique character. This pattern will generate a unitary character in the place. This pattern that generates the unitary character should be the overriding in a smooth transition.

These patterns will be clearly shown by the architecture of the area in concern. For an example, in the York Street a high commercial, dynamic activity pattern is experienced. On the other hand in the town hall node the spirit of place is seen as the prominent pattern. In most of the residential settings a calm and quiet "serenity" is experienced. This concludes that in any type of a transition a common theme is available in generating a unitary character. Similarly these examples show that this common theme also varies with the place.

Basically unity principles are used in each transition to an extent. For an example in the York Street almost all of these principles are exploited. It provides the street with an almost perfect unitary character. Yet in the Vauxhall Street, the theory of *pragnanz* only is used. In this context it is evident whether to use one or more principle and the selection of the most appropriate unity principle or principles is up to the designer according to the nature of the transition.

In designing in accordance with the unity principles the following set of design strategies could be used. This would be a far more contextual approach in urban designing where the organization of masses should be given due consideration.

BUILDING LINE AND THE SKY LINE.

The building line and the skyline is clearly sensed in any kind of an urban transition. To the architectural character of any place these contribute drastically. Therefore the building line and the skyline must be maintained in the most suitable manner to arrive at a good transition. For an example in a commercial setting the building line is very hard and clearly maintained. But in a residential setting the building line and the skyline becomes a soft and non-continuo. In the transition the height of the skyline should be maintained properly.

CENTER, ENCLOSURE AND CONTINUITY.

In the discussed examples, the unification is clearly felt whenever there is center, enclosure and continuity. Without these, the transition becomes much loose and almost non-existent. For an example in the Java street example the finest transition sensed terminated as soon as the centrality,

sense of enclosure and the continuity is loosened in front of the slave island railway station. Therefore it is emphasized that these should be maintained in any kind of a transition at least with the help of natural elements such as trees.

EDGES AND FACADE TREATMENT.

With a hard edge man will behave accordingly with the built environment but with a soft edge he will not. The designer must be sensitive enough to select the most suitable edge for the appropriate transition. The roof seen to the facade becomes a dominant element, which unifies the area. The solid to void ratio in the facade should be determined by the two extremes selected.


The expression of the façade also contributes in determining the human behavior.

ACTIVITY PATTERN.

The importance of activity pattern for a transition is emphasized in the Vauxhall street example. Without the proper merging of activity patterns the transition has become dull and inhumane. Therefore it can be stated that without the human participation a transition zone will become a non-responsive environment.

In an urban design people and the physical environment moves together. Therefore it is stated that urban spaces have a responsibility to interact positively with human existence. Accordingly, the need of unity among man made environment arises and this has close relationship with existing physical qualities, patterns, inherent to the context. In this context, the formulated set of guidelines eventually facilitates the maintenance of unity in transition thus creating a responsive environment. With these guidelines even a chaotic transition could be unified to a considerable level.

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