

# REDESIGNING LOST SPACES: AN EXAMINATION OF RESTRUCTURING PUBLIC SPACES WITHIN THE URBAN CORE

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Kinkini Fernando

M. Sc. - Architecture - Year Two
Faculty of Architecture
University of Moratuwa

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#### Introduction

#### Observation

It has been observed that there is a noticeable change in the evolution of urban areas in contemporary urban design. Places all over are becoming similar, losing their significance in identity and their appearance. The quality and the meaning of spaces change with time acquiring new meanings or becoming functionally obsolete. Thus, there has been a decline of the public realm which is considered to be the most important social aspect of the urban context. Mobility and communication have increasingly dominated public space, which has consequently lost much of its cultural meaning and human purpose. On the other hand, 20th century urban renewal interventions have further resulted in the emergence of lost place. The radically changing economical, political and social structures brought about the enigmatic issue: the haphazardness in to the living structures, and can be highly experienced especially in urban entities. The exceptionally varied dimensions of this complex issue delivered enormous amount of unfavorable, inhumane spatial forms in to the living cores thus making the living entities, most unlivable spatial entities for human habitation. The redesigning movements brought about by designers did not do justice in improving the dilapidated urban environment but instead worsened the situation at some instances. This situation can be seen in the global context as well as locally.

#### **Topic Explanation**

Lost space is the left over unstructured landscape at the base of the High-rise towers or the unused sunken plazas away from the flow of pedestrian activity in the city lost space are the surface parking lots that ring the urban core...they are the no mans land along the edges of freeways that no body cares about maintaining much less using. Lost spaces area also the abandoned water fronts, train yards, Vacated military sites and industrial complexes that have moved out of the suburbs for easy access. They are the vacant blight-clearance sites-remnants of the urban renewal days- that were, for a multitude of reasons never redeveloped – Trancik (1986:3)

We need to reclaim these lost spaces by transforming them in to opportunities for development......existing public plazas, streets, and parking lots that are presently dysfunctional and incompatible with their contexts can be transformed in to viable open spaces-Trancik (1986:5)

Public spaces are the socio- spatial components of the city which makes the city alive. They can be seen in various forms. In most instances these are open spaces, lake fronts.

The urban core is the socio-spatial center of the city. The functional capacity of the city depends on the strength of the urban core.

#### The need and intention of the study

The importance of redesigning lost space is unquestionable as it is doubly important in terms of economy as well as generating viable public spaces.

Public activity enhances the urban fabric as it is public activity that makes places. The place making within the city livens its character and enhances the structure of the city. Desolate public spaces in most instances have become dead spaces rendering the urban fabric weak. Most lost spaces can be identified as a viable opportunity in creating public spaces. Taking the Sri Lankan context the need of functional public space is seen as essential.

Most of the lost spaces become visible within the urban core due to haphazard development, in turn weakening the urban structure itself. The ability of converting these lost spaces and making them functionally viable public spaces can be seen as an opportunity in strengthening the urban fabric as well as strengthening the socio-spatial relationships in the city. Various urban design interventions have been/are undertaken in order to minimize the formation of lost spaces in the city which in most instances do not result in achieving its goal due to various reasons.

The main intention of this study is to create a frame work in which Lost spaces can be redeveloped using a theoretical basis as well as a background study and to apply this framework in to urban design interventions that have taken place in Sri Lanka with the aim of redesigning lost spaces in order to make them functional public spaces and make an attempt in identifying key aspects that have to be addressed in making such applications viable. In this respect it is also intended to discuss conceptual revitalization programs that have been proposed in order to achieve the same goals and to discuss their potentials in realizing these aims.

#### Scope and limitation

Urban revitalization concepts are dependent upon a countries economy. Most economic policies tend to misrepresent Architecture thus within the scope of this study economic constraints are not taken into consideration. Similarly politics is seen as a regulator in urban design within the scope of this study political intervention is not taken into consideration as well. Urban public spaces can be categorized in various methods'. However within the scope of this dissertation public spaces studied are Streets, Squares, Waterfronts, and Open spaces.

The main limitation in formulating this study can be seen as the security situation prevailing in the country. Restrictions posed as problematic when obtaining photographs of case studies which lay in the high security zone. Though the ability to take photographs within the echelon square was hindered, a photographic study was done along the perimeter of the square making it feasible in studying the relation ships which the buildings within the square have amongst them.

The ability to discuss the broad scope of the dissertation theme was limited due to time constraints.

#### Method of study

This dissertation is formulated as a theoretical study which is then justified using case studies. The theoretical frame work is based upon major urban design theories. The first chapter deals in studying the spatial and social attributes of positive space and its identity in the public domain and concludes in deriving a definition for lost spaces. The second chapter goes on to identify the main causative factors resulting in the evolving of lost space and its characteristics. This chapter goes on to identify the potentials of redesigning these lost spaces. The third chapter explores these theories and makes an attempt in formulating a base for a comprehensive framework towards redesigning the lost spaces.

The fourth chapter acts as an amalgamation of the above three chapters ending this trajectory in making some concluding remarks in achieving the aims of this dissertation.







Chapter One

Positive Space Vs Lost Space



#### Preface

Within the present day urban context, it is somewhat difficult to grasp the notion of what positive space really is due to the fact that in most instances its existence is blurred. Taking this into consideration the first chapter of this dissertation deals in studying the spatial and social attributes of positive space and its identity in a public domain.

The fully awareness of the positive space makes way towards the ample comprehension of the negative space which in the context of this dissertation is lost space.

#### POSITIVE SPACE VS LOST SPACE

#### 1.1 Positive urban space as a "place" - A definition

#### 1.1.1 Perceiving Positive space

'This is difficult to grasp, because, in our time, urban space has become negative......the leftover.....after buildings are built. However, in all cultures which produced great cities and buildings, space was understood as a positive thing created by the buildings'. (Alexander, 1987:63). He goes on to explain a vision which has defined the life and activity of an urban space, must be embodied in a physical design to create positive urban character.

A positive space is perceived as a 'place' in an urban context. A place is a centre of action and intention. According to N.Schulz (1971:19) a place is a focus where we experience the meaningful events of our existence. Positive space is a place where particular activities are carried out, or places of social interaction such as public piazza. The place is always limited; it has been created by man and set up for his particular purposes. The actions, in fact, are the only meaningful in relation to particular places, and are coloured by the character of the place. Martin Heidegger declared that "'place' places man in such a way that it reveals the external bonds of his existence and at the same time the depths of his freedom and reality". (quoted in Relph, 1977:1)

Fig: 1.1 Places reveals the external bonds of Man's existence and at the same time the depths of his freedom and reality.



All these definitions indicate that a positive space comes in to existence with a human component essentially involved. People are social beings. They appreciate the company of their acquaintances and human beings and enjoy presence of others. However this appreciation tends to differ noticeably from one to another and from culture to culture. The positive place plays as important role in day-to-day lives of human beings helping their activities take place.

According to the Greek philosopher, Aristotle, place is defined as a dynamic field with directions and qualitative properties. Positive space is essentially an active space full of life in it self as well as helping to create dynamism with adequate connections with its outer context and embodied, with essential spatial qualities which strengthen its image and character of its particular urban context. Positive spaces encompass a number of characteristics.

First, it includes the "locale". In this sense place refers "the use of space and settings for interaction, the settings for interaction in turn being essential in specifying its response to the context. Although places do not determine human action, they do provide a contextual setting which helps to structure and give meaning to human action.

# University of Moratuwa, Sri Lanka 1.1.2 Attributes of Positive space onic Theses & Dissertations www.lib.mrt.ac.lk

The term "responsiveness" could be identified as social and physical attributes in an urban environment, which are interwoven to create an urban space. Responsive urban space is a place where human values are linked to the activities and place

#### **Physical Attributes**

Physical attributes of a positive space can be either a built environment or a natural environment. Built environment consists of all man made structures which contribute to the making of built fabric. 'The built environment, like language, has the power to define and refine sensibility. It can sharpen and enlarge consciousness. Without Architecture, feelings about space remain diffused and fleeting' (Tuan, 1977:107) thus place seize intangible qualities which evolves through time. Durrel, in a partly serious caricature of environmental determinism, argues that human beings are expressions of their landscape and their cultural productions always bear the unmistakable signature of place. In short, the spirit of

a place lies in its landscape. (quoted in Relph, 1976:30). Place implies a geographical space which is inherently physical. This means that a place is associated with particular smells, images, textures, sounds and visceral reactions. A city such as San Francisco is recognized by its unique setting, topography, skyline, odors and street noises. (Tuan, 1997:18). In this sense of place evokes pleasant imagery for human beings. This imagery causes specific biological, geological, and seasonal references which define a place and make it different from other places. As such, place is intimately connected with landscape in its most physical sense. A place is a combination of both natural and built properties. Landscape is an intricate, intimate intermingling of a physical, biological and cultural features which any glance around us displays. In this way, place is also defined by Architecture, commercial signs, bridges, and a host of other human-made artifacts.

#### **Social Attributes**

Humans by nature are social beings. They enjoy communal gathering, and living in as a society, where a unique set of cultural values are involved. The differences in attitudes, aspirations and other cultural inequalities results differed behavioral patterns and life-styles. Thus development of different atmospheres in human settlements is evident creating unique arrangements in each situation. In this sense, the shaping of the built, the un-built, and the landscape will be mostly suited and reflect the qualities of a coherent context, resulting from natural needs of the society as a whole.

Place is not only context, but also the human interaction which takes place within the context. A positive place helps to structure human interaction. This human interaction may be different from place to place and thus help to define each location and its sensuality. In this way, place would solidly be grounded in human relationships. The way things are done in different places may be perceived as different while still being consisted with large sense of cultural identity. Society is formed, and common values affirmed, through the shared use of public places. When everyone turns their house to face a street or public space, they are by the act valuing community hence making an investment in those spaces that individual become a community. This function of the public realm is the most primitive and fundamental ways of societies have been created. Public spaces are thus designer's common ground in both geographical and a spiritual sense. The idea of a town or city is really indistinguishable from the idea of the society. If one lacks a consensus on an organizing structure of the place, it is mainly because he lacks

an organizing structure for the society as a whole. As designers one's concern should be with human development of the place as a goal in itself. But in present context architecture and urban design are very offen censures as inhuman and repressive due to the failure of designers to realize the social components, activities and their relationship with the space. They have created social spaces without concerning the social aspects and as such urban social spaces, which could draw the attention of people, would have not been the ultimate result. The need of the modern society is to create impressive symbols of identification as comfortable places to meet and to organize community life. The relationship between the community and place is indeed very powerful one in which each reinforces the identity of the other, and in which the landscape is very much an expression of communally held beliefs and values and of interpersonal involvements. Wagner (Relph, 1976:34) in a summery explains the relationship between created place and community which exist in all cultures.

"Communal undertakings bring together the families of a place for common ends: to apportion lands among families, provide water and other utilities, make and maintain roads, erect public buildings, create burial grounds, establish shrines and places of worship. The settlement lives in communal efforts despite the several separateness in the harbour, and the acknowledged common fate and identity have their own expression in symbols and other display".

University of Moratuwa, Sri Lanka.

It is obvious that every person has deep physical and emotional association with a place where they were born and grew up, where they lived and had particular experiences. This association seems to constitute a vital source of both individual and cultural identity and security, a point of departure which we orient ourselves in the world. "An individual is not distinct from his place: he is that place" (Gabriel Marcel)

#### 1.1.3 The Identity of Positive space

Identity is phenomenon that evades simple definition, although some of its main characteristics are apparent. The identity of something sometimes refers to a persistent sameness and unity which allows that thing to be differentiated from others. Such inherent identity is inseparable from other things. Kevin Lynch (1960:6) defines the identity of a place simply as that which provides its individuality or distinction from other places and serves as the basis of its recognition as a separable entity.

Albert Camus(cited in Relph, 1977:47) identifies three components of identifying a place, the physical setting, the activities and the meanings. The three fundamental components of a place

are irreducible one to the other, yet are inseparably interwoven in our experience of spaces. If one consider places only in terms of their specific content, they present remarkable diversity-one in which common elements are not readily apparent. Furthermore, our experiences of places are direct, complete and often unselfconscious; if there are component parts, there are experienced in the fullness of their combinations. How ever, from a rather less immediate perspective one can distinguish elements, bound together but identifiable nevertheless, that forms the basis material out of which the identity of place is fashioned and in terms of which our experience of places are structured. Identity is a basic feature of our experience of places which both influences and is influenced by those experiences. What is involved is not merely the recognition of differences and the sameness between places-but also the much more fundamental act of identifying sameness in difference and it is not just the identity of a place that is important, but also the identity that a person has with that place, in particular whether being experiencing it as an insider or as an outsider.

#### 1.1.4 Positive Urban Public spaces

Urban space is a dimensional enclosed space, which is composed of planes, and the space contained. The three enclosure planes contributing for the urban space are the ground plane, the overhead plane and the wall plane. These are identified as streets, canopies or the sky, the buildings and open spaces on the either sides of the street respectively. The above components linked together and create certain spatial attributes in order to transform a streetscape to a meaningful and livable urban built environment. In an urban space the way in which the environment has formed is important for the setting of a new individual building as well as the manner it will contribute to the urban built environment in order to form a responsive built environment. These enclosures will create spaces, which are specific to a locality where each space as a "place" takes the identity through the degree of enclosure.

According to Steven Peterson cited in 'Finding lost space'; space is a conceivable volume and anti space is an inconceivable volume, "space can be measured: it has definite and perceivable boundaries; it is discontinuous in principle, closed, static, yet serial in composition. Anti space, on the other hand, is shapeless, continuous, lacking perceivable edges or form" (cited in Trancik: 1986:61)

Fig: 1.2

An illustration for positive space

Piazza Del campo, Siena

Piazza contrasts with the surround

Dense fabric giving the spatial character,
and the configuration of Streets

reinforce the structure of the Open space



Fig: 1.3

An illustration for 'Lost space'

Las Vegas strip, Nevada.

Along the strip buildings are not registered
In space and are randomly scattered.

Open spaces lacks structure and simply
the areas left vacant after construction.



As the study has to be focused on urban public spaces it is important to review on basic components which built up the urban environment. Urban place could be defined as enclosed and humanized urban spaces. Thus the most essential component of an urban place, for it to exist and function, is the necessary inclusion of the human factor, which belongs to different social, cultural groups and adds life to host places presenting them with unique identities of their own.

Schulz determines the urban level relating to the activities of man and his built environment emphasizing the importance of the identity of the place. "On the urban level we find structures which are mostly determined by man's own activities, that is, by his interaction with a manmade environment. On this level, therefore, the basis form is what could be called 'our place'." During his development the individual discovers a structured whole which he share with others and which more than anything else gives him a sense of identity. The primary quality of the urban image, therefore, is the single identifiable place. To satisfy this condition, the settlement ought to have figural character in relation to the landscape. The principles of enclosure and proximity of the constituent elements, therefore, are of prime importance.

According to a review of precedents Transik identifies three important components of successful urban space.

The three dimensional frame; defines the edges of the space, the degree of enclosure, and the characteristics of spatial wall such as transparency, opacity, openings, and surface ornamentation determines the character of space

The two dimensional pattern; defines the treatment and articulation of the ground plane such as its materials, texture and composition.

Objects in space; elements such as sculpture, water features, trees or focal points defines the memorable place

#### Definition of urban public space

"The character of urban public spaces is freedom of action and the right to stay in active".

(Spiro Kostof- The City Assembled)

Fig: 1.4

Positive urban public space...



Urban cities have very dynamic and varying qualities where people live work and enjoy their social cultural relationships. Kostof further explained that the purpose of forming urban public places is to create a place which one is free to use, as against the privately own realm of houses and shops. Urban public spaces are areas arranged for the purpose of providing space or set for meetings of the society. The fact is well displayed in cities of every age by having provisions for open places that would promote social encounters and serve conduct of public affairs. On the other hand, urban public spaces have been considered as a destination or built stage for interaction and ritual behavior. The activities with ritual behavior such as festivals,

celebrations, riots, public execution etc. have been hosted in special social spaces. These spaces have been chosen to commemorate communal activities that had come in to existence.

Hence the urban public spaces can be defined as open, publicly accessible, dynamic spaces, which allow free movement and interaction among its users, and spaces where the experiences feel that they are a part of that and they belong to that. Thus urban public spaces are essentially social spaces of a city. The streets, public squares, and parks as public spaces of an urban city give form and structure to the drama of communal living and let the free flow of human movement. It is the base platform where community meets and exchange their differential values. These spaces are halts to the more settled places and communication channels for home life. These places link different activities and spaces thus functioning as important linking spaces. An urban public space provides sense of belongings to the urban dweller as an essential space. Therefore a positive urban public space would facilitate an urban city as giving life and generating essence of place.

#### 1.1.4.1 Streets as a public space

"Streets and their sidewalks, the main public places of a city, are its most vital organs. If a city's streets look interesting, the city looks interesting: if they look dull, the city looks dull." (Jacobs.Jane. 1961:39)

Fig:1.5

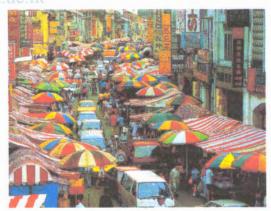
Street: the public living room of the city

Petaling Street, Chinatown

Kuala Lumpur, Malaysia

The area makes a good impression on people
It is sometimes crowded, but remains

comfortable



The role of the street is one of leading us from one place to another. The street always has a beginning and an end, and its purpose is one of guiding one's movement, either back and forth on a grid, or to an articulated endpoint. The directionality created by the street is, therefore, a factor of its various levels of continuity.

Street can be loosely defined as a public road in a city, on each side: a public parcel of land adjoining buildings in an urban context, on which people may freely assemble, interact, and move about. The street can be as simple as a level patch of dirt, but is more often paved with a hard, durable surface such as cobblestone or brick; portions may also be smoothed with asphalt, embedded with rails, or otherwise prepared to accommodate non-pedestrian traffic.

"'Streets should be for staying in, and not just for moving through, the way they are today." (Alexander, C. 1977:590)

Fig:1.6
Street is the public parcel of land where

people may freely assemble, interact and move about.

Central pedestrian promenade- Las Ramblas, Series pf pedestrian oriented boulevards Is so much a part of Barcelona.



The street in addition to being a physical element in the city is also a social fact. Traditional streets conceived as positive exterior space of richly varied uses in which functional and social activities gathered.

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Streets can be analyzed in terms of who owns, uses and controls it; the purposes for which it was built and it's changing social and economic function. It also has a three-dimensional physical form which, while it may not determine social structures does inhibit certain activities and make others possible.

Street provides a link between buildings, both within the street, and in the city at large. As a link it facilitates the movement of people as pedestrians or within vehicles and also the movement of goods to sustain the wider market and some particular uses within the street. It has the less tangible function in facilitating communication and interaction between people and groups - thus serving to bind together the social order of the polis, or what in current parlance would be called the local urban community. Its expressive function also includes its use as a site for casual interaction, including recreation, conversation and entertainment, as well as its use as a site for ritual observances.

The street reinforces people's social aspirations. The street however is also a common area which serves a group not just one family: the types of neighbors are important in this quest for self-esteem. As a space serving a group it is to some extent a closed social system. It has distinct boundaries despite acting as a communal thoroughfare to other areas.

Streets according to their linking quality serve as arcades, building thoroughfares, and bridges.

"Arcades—covered walkways at the edge of buildings, which is partly inside, partly outside play a vital role in the way that people interact with buildings........ Wherever paths run along the edge of buildings, build arcades, and use the arcades, above all, to connect up the buildings to one another, so that a person can walk from place to place under the cover of the arcades". (Alexander, C. 1977:590)

Positive streets consist of three-dimensional frame, two-dimensional pattern and objects to provide focal points of interest. Movement is the essence which generates live ness in streets. 'Streets provide us with the essential freedom of movement on which city life depends. They make and reveal the city'(Tranck, 1986:70)

## University of Moratuwa, Sri Lanka. 1.1.4.2 Square as a public space Theses & Dissertations

An urban square basically defined as open (four-sided) area surrounded by buildings. Squares and parks at the end of a street will give the immediate impression of reaching a space for many people, a space for interaction. The meaning of the movement leaves the impression of emptying out into something, into a qualitatively different place which surrounds and concludes the focused movement, providing 'calm'.

Fig:1.7

Piazza Del Campo, Down town Sienna, Siena, Italy, one of the most romanticized place... unique by its perfect 'entity'.

In this great exterior living room, one can Perceive everything as an organic part of the whole..

all buildings surrounding the space .forming a livable square......



Public squares mainly contribute to strengthen the social life of a city. The urban squares were given a greater importance in historic cities such as Rome and Venice. In these cities the architecture of the urban squares were dominated, elevated and has given a strong identity on the urban fabric to become prime public spaces in cities. It was intended to provide space for varied activities and leisure. The well defined urban spaces including urban squares, continuous urban fabric and the dynamic social life style of the Romans become the main themes of the Roman city design. The concept of city design in Rome was based on a system of enclosed spaces linked with streets and avenues. The squares were arranged to fit with this system and they become part of the total urban space. They were neither too small nor too large for the purpose of functional needs of the city population. The enclosures of these squares were architecturally treated to strengthen the symbolic meaning and given identity to the place to facilitate liveliness of them. As stated, the distinction between positive space and anti space has more to do with finite boundaries which are a primary element of good urban space. According to Sitte's principles, emphasizing importance of urban space as enclosed entities, enclosure is the most significant. He figured out convincingly for the beauty and positive visual and psychological effects of enclosed space in cities, for the importance of the enclosure skin, and the careful placement of objects in space.



The water fronts were mainly occupied with public spaces thus having its intimate relationship with water. The whole spatial system was inter-linked, spatially, visually, functionally etc. One understanding character is that possibility to have urban spaces so accessible to the pedestrian. They were linked up with through alleyways, bridges and small public spaces. The architectural response towards waterways was at a higher degree. The buildings, one after another, define the canal; they are its edge; they grow out of the water. There is a great physical variety, but it managed to express the physical wholeness. The composition of the

The elements of buildings composed to provide visual as well as spatial relationships between indoor and outdoor environments.

buildings in terms of scale, height, detailing, rhythm, gently curving facades always harmonizes

with the water environment.

Venice is a fine example of a great waterfront development and as a premier canal city, still functioning to its very best with the changing functions of the city. Its strong built form sustains and can bears any change, as well as it can adapt to the changing situation.

Venice is the magical, mysterious city on water located in the islands on a lagoon formed from sediment brought down by three ancient alpine rivers. it was fashioned by its unique character of lagoon location, maritime trading and the cultural independence.

Because of its strategic location on the most important trading routes, the Venetian Republic was developed as a powerful centre in the Mediterranean.



Fig:1. 8 the bridge of sighs in Venice, bridges link the physical separations

ity of Moratuwa, Sri Lanka. nic Theses & Dissertations

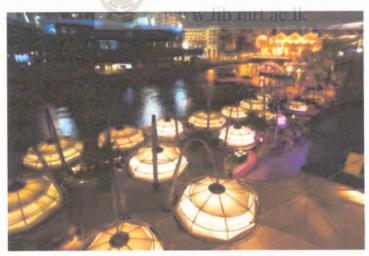


Fig:1.9 Dramatic redevelopment of the river front district of Clarke Quay in Singapore. Costing €45.3 million, this mixed-use scheme, developed by Capitaland, has transformed the area into a vibrant and attractive destination. Integral to the projects success was the architect's and engineer's ability to manipulate the site's microclimate using a sophisticated shading/cooling system. This system, embedded in the roof, enhances both the project's visual ingredient and it's environmental agenda. 'What is interesting is the addition of a single roof acting as a visual icon has succeeded in attracting people back to Clarke Quay.'



Fig: 1.10 what is interesting is the addition of single roof acting as a visual icon that has succeeded in attracting people back to Clarke Quay.



Fi: g1.11 Clarke Quay in Singapore at night

#### 1.2 'Lost space' defined

'In all cultures which produced great cities and buildings, space was understood as a positive thing created by buildings' (Alexander, 1987:63) But in today's cities urban space is perceived as a vacuum which does not contain much life in it. In such a city, public spaces have lost their dominance and 'place' in the built fabric resulting in an anomalous life style of people.

The lost space differ from positive space is due to its diluted physical and social attributes Every modern city has an amazing amount of vacant, underutilized land such as acres of abandoned industrial lands, rail road lands, train yards, vacated military sites and non responsive built up and vacant river front lands etc due to the migration of people and industries to the periphery leaving declining the urban core/ urban centre. The twentieth century urban development led designers concern over developing isolated built objects such as high risers which do not connect with the surrounding context resulting in large unstructured landscape at their base and creating unused sunken plazas away from pedestrian activity in the city.

Fig: 1.12 lost spaces around east Beira, Colombo,

Abandoned ware houses, non responsive built fabric, non developed rail way lands and open spaces result in lost speces around the lake.



Over the past decades, rapid growth of technology and economic developments resulted in changing patterns of employment, living and industrial activities leading to further establishment of lost spaces. Increased mobility enabled retail and commerce to locate even further away from urban core. In contrast to the vibrant and congested streets of past, modern down town streets appeared empty of people and activity.

High way developments caused relocation of millions of settlements from the city core and left over acres of parking lands and no man lands along the edges. Hence the connectivity between districts diluted and residual areas between districts loosely composed as commercial strips with no positive contribution to edge or defines the surrounding context to create meaningful places. This segregation of urban form resulted in deteriorated public spaces without life and in need of rebuilt because they do not serve their intended purpose and causing decline of urban core.

Fig: 1.13 Ariel view of Los Angeles

Along the edges and under

The elevated high ways acres of unstructured lost spaces created



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Fig: 1.14 Los Angeles
Unstructured spaces at
the base of the high risers

Modern architectural space has come to be that of individual buildings conceived and constructed in isolation. In comparison to the attention lavished on these individual buildings the nature and experience of the spaces between buildings has been left over for chance, resolution in what's termed as 'space left over in planning' (Brett cited in Relph, 1976:23)

Hence the traditional qualities of urban space have been lost. The spaces in between isolated buildings become vast and formless, without the coherent structure of historically evolved streets and squares. This is due to the usual process of urban development implemented during last century, which considered buildings as isolated buildings and seldom thought of urban space as an exterior volume with properties of scale, character and proper linkages with other spaces.



Fig: 1. 15 Model of ancient Rome, in traditional city public spaces carved out of the private built fabric.

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Fig: 1. 16 Aerial view of Piazza Navona in Rome The public space has structure & meaning



Fig:1. 17 Aerial views of Houston, Texas: space left over in planning
Individual buildings unrelated in scale and architecture stands out as objects among unformed space creating
Left over spaces which does not have structure and meaning



Chapter Two

Lost Space: Causative Factors, Characteristics and its Potentials



#### Preface

Most of the 20th century urban developments resulted in various anomalies in the urban context. In this respect one can observe that lost spaces/under utilized spaces deteriorates the physical and social fabric of the city. This chapter identifies the main causative factors resulting in the evolving of such space and their characteristics. The chapter goes on to identify the potentials of redesigning these lost spaces in order to integrate these forsaken parts of the city and regenerating them in creating a cohesive urban fabric.

### LOST SPACE: CAUSATIVE FACTORS, CHARACTERISTICS AND POTENTIALS

#### 2.1 Implications of development of contemporary urban space

"In today's cities, designers are faced with the challenge of creating outdoor environments as collective, unifying frameworks for new development. Too often the designer's contribution becomes an after-the-fact cosmetic treatment of spaces that are ill-shaped and ill-planned for public use in the first place' (Trancik:1986:01) According to Trancik, the usual process of urban development treat buildings as isolated buildings sited in the landscape and not as part of the larger fabric of streets, squares and viable open spaces resulting in ill shaped and ill planned public spaces. This is due to absence of designer's focus on three dimensional relationships between buildings and spaces and real understanding of human behavior. Humans reject this kind of city in which people are hindered from making contact with each other even though they are facilitated with functional-utilitarian conditions. This interaction between members of the urban community can only be achieved when the urban structure itself fulfills the needs of the community.

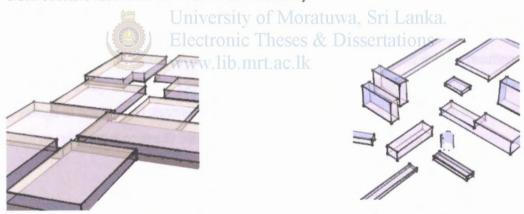


Fig: 2.1 An illustration of traditional city form

Spatial structure of traditional city directs movement
and establishes orientation, fragmentary and
confused structure of modern city creates disorientation

Fig:2.2 An illustration of Modern city form

Urban development has evolved in a less than reasonable manner since the beginning of the twentieth century. Rationalism and functionalism urban design concepts have lead the designers to neglect the real needs of the inhabitants due to paying attention on functional aspects of the development of built environment. Hence the application of such concepts led to disappearance of the street, traditionally an essential element in the city and a socio-

environmental phenomenon of immense value. Its departure has driven people apart and disconcerts the functioning of the city itself.

The ideology responsible for this state of affairs corresponded with those economic, industrial and consumption aims which forecasted that improved environment and economic condition would facilitate people's mobility. But the improved situation led to more functional, fragmented and large scale inhuman structures resulted in further aggravation of the problem of lost space in the urban core.

Contemporary urban space as stated earlier is closely related to the almost universal acceptance of the Functionalist approach of Architecture and Urban Design which was based on ideals of pure forms and unrestrained, flowing space in contrast to traditional urban form. It originated in the 1920s and dominated design stance in to the 1950s evolving as a response to criticism and changing conditions. Functionalism envisions the city as a collection of uses to be accommodated such as residence, work, leisure and the traffic systems which serve them. In premature functionalist thought the city was characterized as a machine, later thought as a complex organism and as a network of community centers linked to central core. As cited in American Urban Architecture; a functionalist city is equitable, that is everyone benefits from adequate sunlight, fresh air and access to open space. The functionalist theory treats residence, work, and leisure as discrete elements Hence activities could not mix resulting in zoning as a key element in city. Critics of functionalism that given prominence to object buildings as isolated and discrete elements often neglect the desired human scale and it do not posit any element of continuity between the building and the urban structure.

Fig: 2.3 the functionalist grid over traditional urban form
Le Corbusier, Plan Voisin, Paris, France, 1925
Illustrates the contrast between traditional density
and the urban design of modernism
(image source: Finding lost space)



'Without any conscious intention on anyone's part, the ideals of free flowing space and pure Architecture have evolved in to our present situation of individual buildings isolated in parking lots and high ways' (Trancik, 1986:21) Schulz describes this problem as the new settlements spatially do not posses enclosure and identity and usually consist of buildings freely placed within a park like space, streets and squares in the traditional sense are no longer found and resulting in a scaffered assembly of units. Hence distinct figure-ground relationship (the theory of figure-ground is explained in detail in third chapter as an underlying principle of integrated spatial design) would not exist. The continuity of the built fabric is interrupted and the buildings do not form effective urban gathering spaces. As cited in Trancik, the functionalists believed a relationship between platonic solids and human happiness which become a concept behind most of the artistic movements in the early twentieth century. The functionalist grid was better explained and illustrated by the Dutch painter Piet Mondrian as the purified facade and the geometry of solids linked to a preoccupation with regularized ground plane which is a system where elements could plug-in. These functionalist concepts from the early of the century had a major influence on urban design till 1970's. Even to day one witness disciplined geometry of flat surfaces intersecting at right angles which contrast with the lines of nature and humans resulting in uncomfortable environments to live in. These problems of urban design today cry for careful attention in reshaping the physical and social environments, by attaining the characteristics of traditional cohesive city form of design effective urban city form.

'The scale of our habitat has changed form "living-side-by-side" in houses to "existence" in layers, one above the other in large scale high-rise blocks. The concept of streets, city squares and the entire traditional pattern of cities have been scrapped.... The unity, diversity and liveliness to be found in cities, and also city dwellers, have been exchanged for the soulless monotony of featureless housing units, awkwardly sited amidst dreary streets, or strung along highways in ribbon developments. People living there seem to have become estranged robots, the slaves of the consumer society, rather than folks who still regard all men as brothers'.. (Living cities, 1984:1)

Fig:2.4 modern living in large scale Monotones featureless housing apartments, Hong Kong



# 2.2 The causative factors of Lost space

There are various factors that have contributed the emergence of lost spaces in an urban context and are illustrated as follows.

#### (a) Changing functions of the city

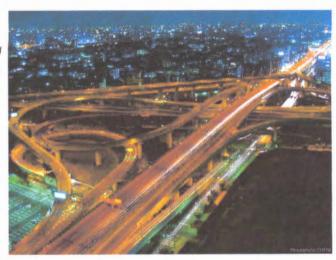
Changing economic and political structures followed by change of social structure is one of the main causes of urban lost spaces. With the expansion of the economic and social structures of the city, humans seek for new ideals and life styles in to the mainstream of living. As a result another, community and technology replaced the original concept of city development and social life style. Along with the development of particular stances, the functions of the cities changed from trade to industry, and developed in to commerce and service based information era resulted in these changes to be manifested in physical and social structure of the city. This change had major effects on industrial sites, railway sites, water spaces and military sites. These spaces were abandoned due to the transformation of social and physical structure of the city gradually deteriorating due to absence of activity and usage becoming most neglected spaces in an urban core. Change in function resulted in most structures of these sites unusable and undesirable in physical form extronic Theses & Dissertations

# (b) Increased dependence on automobile

With the introduction of the automobile, the spatial structure of the city tainted and caused highways, thoroughfares and parking lots to become predominant urban spaces, diminishing the role of urban squares, and streets. Most of the urban land in contemporary cities devoted to parking and movement of automobiles hence mobility and communication have increasingly dominated public space, which has consequently lost much of its human purpose. Because of this buildings become separated, encompassed by vast open areas without social purpose. Urban renewal programs on highways implemented to advance economic growth resulted in relocation and deterioration of previously flourished social spaces, creating huge waste lands. Hence the automobile became a tool of isolation. The street which was an urban social space before drastically changed its spatial structure in to major arteries which do not posses any social meaning as a public space. The high ways cut through the city resulted in neighborhoods and districts no longer to be interacted and has undermined the diversity and richness of urban

public life. Development of land based transportation systems caused reduced importance on water based transport and made urban water fronts abandoned as most of them occupied ware houses for storage hence became neglected urban spaces.

Fig: 2.5 development of high ways resulted In loss of human dimension in urban space



#### (c) Attitude towards functionalist stance

Another contributory factor of urban lost spaces in contemporary urban design is the attitude of spatial designers towards functionalism derived from modern movement as stated at the beginning of this chapter on implications of contemporary urban space. This movement is basically initiated on abstract ideals for the design of free standing buildings without considering the importance of its response to the important street space, squares and open spaces. Hence the spaces between the buildings become residual spaces. Urban designers being influenced by the modern movement abandoned the principles of urbanism and human dimension of outdoor space established in traditional cities. Functionalism, which had laid ground work for our loss of traditional space, become infatuated with efficiency. Modernist thoughts developed the urban form towards solid, omament-less, machine like masses and this became an 'international style' which suggested the buildings in several locations of the world to have the same characteristics disregarding the locale. As such without any conscious intention on urban space, the ideals of free flowing space and purism in Architecture have evolved in to this present situation of object buildings isolated in car parks.

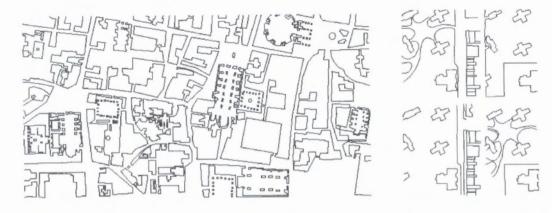


Fig: 2.6 fragment of a map of Rome

In proportion to the map buildings appear to be positive forms that defines street spaces. Urban squares, courtyards and major Spaces within important public buildings read as positive elements seen against the surrounding building mass the predominant field is a dense continuous mass, allowing open space to become figural voids.

Fig:2.7 Sr. houses, New York the predominant field is void in most modern cities

#### (d) Pervasive changes in land use

The change of economical, political, social structures, followed by the changing physical structure of the urban core accompanied inevitable change of land use. Hence relocation of industries, obsolete transportation facilities, abandoned military properties and vacated commercial and residential buildings have created vast areas of waste lands and underutilized spaces within the urban core.

# (e) Implementation of Unplanned Urban Renewal Schemes

Recently operated inconsistent urban renewal programs have further downgraded the urban context. Most of these programs were planned as an answer to the urban issues only at micro level while disrespecting the macro situation. On the other hand most of them ignored and rarely corresponded to the socio-spatial structure of the context. Ignorance of the social component resulted in loss of human dimension in new planned areas.

'These closely allied approaches to planning were well intentioned, if ultimately misguided, responses to urban decay' (Trancik, 1986:12). The inclination of these renewal plans was to promote human welfare through the segregation of land use in to differential zones and

minimize density of ground coverage. Hence high risers are designed as to reduce ground coverage and building density leaving acres of unplanned lands behind its base. The historical edge defining built fabric was destroyed and discrete land use zones emerged for separate functions violating these functions to be integrated. Thus discrete districts segregated living space from working space. Hence urban areas no longer accommodated physical and social diversity excluding the variety that gave life to the traditional city, and that therefore were no longer truly 'urban'. Isolated super blocks formed and closed off historic streets, drastically affecting the scale of the city. Urban renewal schemes substituted functionalism for spatial order and failed to recognize its importance on social function.

'Zoning was drafted to protect citizens under the slogans of 'health, safety, and welfare, as perceived by the planners, the result has been cities subdivided in to homogeneous districts separated by traffic arteries'. (Trancik,1986:17)

Under urban renewal the preservative framework of public space consisting of street, park, and commons were lost in non-city of isolated objects.

(f) Privatization of public space

University of Moratuwa, Sri Lanka

The dominance of private enterprise over public space has also contributed significantly to lost spaces in urban cities. The city of collective spaces has been transformed in to a city of private icons. Many of these private enterprises developed based on profitability ignoring the spatial and visual appropriateness to the city fabric. The overall city form tends to transform in to vertical city to cater to the high demand of floor space, diluting the cohesiveness of the built form. The continuities of streets are broken by ill placed buildings and use of varied materials and contrasting façade styles (as competing for attention and image) caused in confused environment violating city's wholeness. This is in contrast to the historic city composition, which integrated the designs of squares, parks and other spaces with the design of individual buildings. In today's cities this integration is violated and each element controlled by different private organizations which their interests more segregated from public welfare resulted in lost of the unity of the total environment. On the other hand various development proposals were implemented separately without overriding plans for public space. The institutional neglect of the public realm led to general lack of interest in controlling the physical form and appearance of the city creating left over spaces all over the city.

# 2.3 Spatial characteristics of Lost space

As described in previous chapter, urban lost spaces are negative spaces in nature and they contain several spatial characteristics in terms of physical, social, environmental and psychological contexts of their continuation as a catastrophe to the coherence of urban built fabric. The lost space emerges due to loss of its identification in terms of its physical and psychological contexts. Loss of physical identity means the detachment of constant contact of physical and visual experience of the space. Loss of psychological identity loses its meaning as a space based on its use and the purpose and loses its spirit as a memorable feature. The lost space in an urban setting always remembered by the people as a physically lost, socially rejected, psychologically meaningless and environmentally petulant space. These negative attitudes evoke no positive feelings towards the space.

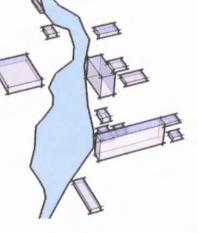
# 2.3.1 Physical characteristics

#### 2.3.1.1 Non-responsive urban form

A lesson one can learn from traditional pre- industrial cities is that the exterior space should be the force that gives definition to the Architecture at its borders, establishing the enclosure or building edge of the urban space. The open spaces should be carved out of building forms as continuous flow linking interior and exterior spaces there by giving shape to the public openings. Hence the urban form creating the place should respond to its context in giving a desirable character and meaning to the place. Non-responsive urban form is often ill defined, freely floated and segregated from the context violating its role of achieving coherence and meaning of an urban space.

Fig:2. 8 non-responsive urban form to the context water space become a lost space due to absence of three dimensional

definition to the space



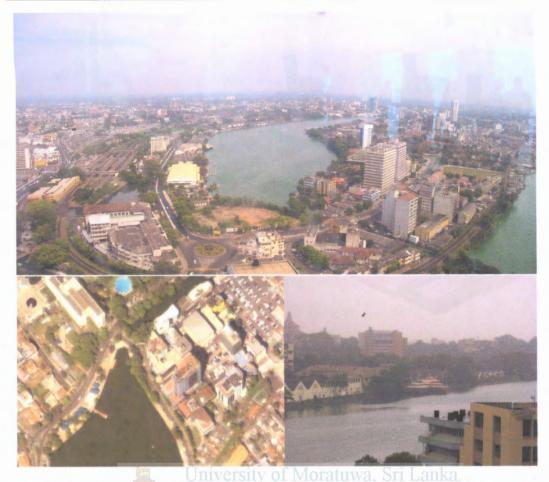


Fig:2.9 Lost space; water front Beira lake, the water space is totally neglected in terms of physical use, visual appreciation and social integration, there are no linkages with the inner areas, other than foot paths for shanty dwellers. The whole space exists in isolation, the building forms do not allow permeability hence acting as physical as well as visual barrier to the macro context.

The predominance of the vertical built form resulted in leaving lost spaces at the base of high risers with less response to the context at street level. Hence streets and squares of modem cities rarely have either the unity to create positive characteristics or the flexibility to accommodate the varied activities of the traditional street.

Fig: 2.10 Houston, Texas, USA,
When buildings are principally vertical
there is inadequate ground coverage
and the intentional shaping of exterior ground
is virtually impossible, leaving lost spaces
at the base of the high risers



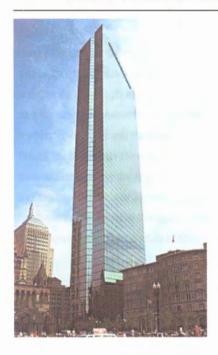


Fig: 2.11 John Hancock tower, Boston,
Massachusetts, from a distance the tower is an
exquisite building. At street level it is less desirable
without significant transitional elements, the
building simply disappears in to the ground and
makes no acknowledgement of the public

surroundings

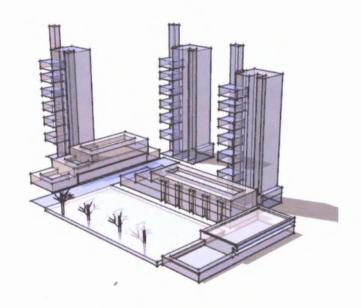


fig:2.12 sketch illustration of Peabody terrace

tower is an Cambridge, Massachusetts
less desirable terrace is impressive from distance and also
tts, the effective at ground level.
round and transitional levels accommodate the vertical towers
ublic to human scale and create a network of streets and
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Non- defined urban space / Gaps in spatial continuity

Defining of a place in terms of physical setting or by activities is a necessity to sense it as a positive urban space. Lost spaces are of ill defined spaces in living entities. Hence loss of spatial continuity of edge defining elements would be a significant physical character of such places. As stated earlier, an urban space should define in terms of its three dimensional spatial volume.

# Fig:2.13 Las Vegas Strip, Nevada

Buildings are not registered in context and randomly scattered, gaps in spatial continuity failed to give the structure of urban spaces resulting in left over, lifeless spaces along the strip.



# Fig:2.14 Piazza Del Campo, Siena, Italy

One of the most effective urban Spaces in existence, its strength as a space stems from the contrast between the dense mass surrounded buildings and the open piazza Piazza contrasts with the surround defined fabric giving the spatial character, and the configuration of Streets reinforce the structure of the Open space (image source: World Architecture images)



# Isolated physical elements / Absence of proper linkages .

A positive space needs to contain relationships of physical, functional and visual, with the surrounding context of the living entities in order to ensure its identity and its continuity. Lost spaces exit in total isolation with the urban fabric having no positive relationships in terms of physically, functionally and visually. Lost spaces do not contain with absolute definitions. Hence these environments become hidden in the environment and their operation is in isolation to the other functions. This solitary function generates and delivers enormous issues affecting coherence of the built fabric. Following diagrammatic illustration, depicts the difference between three formal types of urban space. In compositional type, perimeter edges to open space are not considered as important as the building objects, themselves.\(^1\) linkage between buildings is implied rather than overt, and reciprocal tension is a product of the positioning and shaping of free standing objects. Linking elements are static and formal with insignificant contribution to define the open spaces. Hence the spaces around objects become lost and life less.

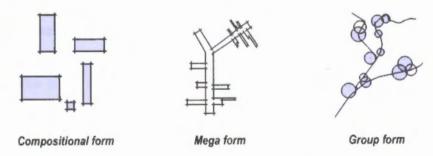


Fig:2.15 Types of spatial linkage; compositional form in contrast with mega form and group form

Compositional form caused the emmergence of lost spaces due to absence of linkages between buildings, spatial linkage is implied rather than overt and is typical functionalist planning method of city development. (source: Finding lost space)



Fig: 2.16 it is hard to grasp the feeling of Water body due to the absence of proper linkages and non responsive urban form around Beira Lake.

# 2.3.2 Social Characteristics



# 2.3.2.1 Loss dimension of human participation

'The human being, by his mere presence, imposes a schema on space.....he notes its absence when he is lost.......' (Tuan Y.F.1977:36)

Human dimension is a prime constituent of a positive urban space, and it is the fact that it is lost in the situation of negative spaces. When a place has lost its human dimension, it tends to become anti space in a living community and highlights its existence as an environmental hazard in the urban structure. Humans experience the urban space in varied levels. More commonly his experience about the city is limited to his home, work place, the space of the streets and open spaces. Streets will become most important urban space where he often encounters a complex mix of vibrant activities, views, smells and the contact with others. Hence his experience of the city would be limited to these spaces which define the public realm.

#### Decline of public realm

The public realm is the life of any living city where greatest amount of human contacts and interactions take place. It consists of all the elements of urban fabric which the public have direct physical and visual access. Hence it extends from the streets, parks, squares of a city in to buildings which enclose and define the characteristics of them.

In most of today's cities, one can witness a decline of this domain especially at the core where significant amount of lost spaces piled with rotting rubbish, polluted, or congested with vehicular traffic with no allowance for public access, littered spaces and poorly maintained built spaces exist. Most of the buildings do not have a welcoming image as to the non responsiveness to the context including humans. Hence due to the functionalism approach in city development the quality of human life style has declined. Further it can be observed that the dominance of private enterprise has taken over the emphasis on public realm of the city significantly contributing to lost space in the core. The enterprise culture has defined its non responsibility over the public realm as they tend to consider them only rather than ignoring its implications on others. The result had been the appropriation of public space for private expression. Large part of human activities that occur at cities happens at the realm of its public spaces. But the modern city dweller is forced to create a social life on personnel, controllable territory instead of engaging in a communal existence of the public spaces. As a consequence, individual perception and attitude towards the use of urban public space have been radically altered resulting in most urban spaces to becoming life less voids and ignoring design and maintenance

#### Disregard of human scale

'Urban areas exist for human beings. They do not exist for cars, or Lorries or big constructional projects' (Tibbalads, 1992:39). Designing for humans must engage with appropriate human scale. If people are not comfortable with the space in terms of the desirable scale to perform activities, psychologically they feel the incompatibility and feel the difficulty of adapting to the space.

Fig:2. 17 Denying Humanized scale

High risers often have minimum contact

With the ground plane resulting in

Absence of human participation making the

Spaces at its base 'lost' or underutilized.



Fundamentally, a comfortable human scale environment is one related to the scale of pedestrians, not for the moving vehicles. On the other hand buildings are evolving vertically more than spreading horizontally due to the demand of more floor space in the city core. The grater the height the more ground space is required for light, air and traffic, resulting in increased vertical stacking of floor area instead of horizontal land coverage. Vertical forms often disregard the scale of human in accordance with the attitudes of functionalism having

surrounded lost spaces in cities. Hence attempts of redesigning lost spaces should primarily concern on achieving pedestrian oriented urban forms which have adequate permeability with surrounds.

Fig;2.19 Manhattan, USA

High risers disregarding the human scale and the context



'The form of new buildings can also be a problem in the pursuit of the goal of an appropriate human scale. They are large and slab like. They block pedestrian movement denying them from interacting with each other. We've got to find ways of making new urban environments permeable- encouraging a fine grain of pedestrian movement through building. Flexible attitudes by building owners need providing public access on to or across their land.' (Tibbalds,

1992:41)

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Fig:2.20 unfriendly street level designs discourage human interaction – edge defining buildings of streets should respond to the human movement.

#### Restricted pedestrian movement and access

To day our streets are filled with auto mobiles and there is hardly any space for the pedestrian to use them freely and safely. With the development of the city more and more high ways were constructed and all of them filled by motor car traversing the access for the pedestrians thus declining the bonds of social interaction between them. This lead to create dull, lifeless places in urban areas, further undermining the social and commercial role of the traditional street. It is important to have access to a place all throughout the day, because people engage themselves in their routine activities at different times of the day. Human interaction takes place at different scales and in different places. Tibbalds( 1992:58) emphasizes the accessibility of place to every person of the society. It he aim- as opportunities for change occur, should be to create a barrier free urban area, one where people can easily see and get any where they want to go and where a person pushing a pram or obliged to use crutches or a person pushing a wheel chair can go around as easily as every one else.

## 2.3.2.2 Anti-social activity space

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Activity of a place is a major determinant in generating meaning of an urban space. Events, persons, characters and object are among stimulators of human senses, where they would suggest the idea of the space and helps to gain and evoke emotional senses and attachment to the place. If these events, humans, characters and objects of the space are of irrational nature, the space becomes an ominous and consequently loses its dimension. This is the typical character of lost spaces and they are commonly occupied with anti-social activity. Its presence would be problematic to the coherence of the spatial structure of an urban space. Due to this nature of the lost space it is leaning towards, emergence of anti-social and criminal activities and further supported by its physical nature. Theses result in further segregation of lost spaces with other areas.

# 2.3.2.3 Psychological characteristics

Lost spaces perceived as meaningless spaces. Meaning of a place is totally of an experience, which is generated from the activity, sense of place and the experience filtered through subjective variables such as personal bias attitudes, cultural attitudes and their values.

According to Missingham, meaning of a place refers to how a person feels about the physical setting or the activity associated with it.

Meaning of an urban space is essentially arrived by human intention and experience subjected to people's reaction to physical setting and functional aspects. Hence lost spaces do not satisfy either of these conceptions. Their activities, the behavioral pattern, physical setting and the character are negative in nature. Hence they become a 'meaningless space' where humans reject to act or play.

Tuan (1977:140) cited as '......in the absence of the right people and things, places quickly drained of meaning so that their lastingness is an irritation rather than a comfort.'



# 2.4 Lost space: Potentials of redeveloping as creative urban in fills

In this study, it has been defined, the importance of positive urban spaces as a social and physical space and the major causes of its decline in the modern city. As designers what really matters is to identify its potential to redevelop as a dynamic urban space through transforming negative characteristics to positive, there by generating catalytic reactions which initiates other developments to rebuild the coherence of the city. Existing dysfunctional elements of modern cities such as dull public plazas, non- pedestrian oriented streets and dead parking lots can be transformed in to viable open spaces

As cited in Trancik (1986:19), 'we need to reclaim these lost spaces by transforming them in to opportunities for development: infill and recycling can incorporate such residual areas in to the historic fabric of the city......The history of city design shows that exterior urban space, if conceived of as figural volume rather than structure less void, can reverse the unworkable 'figure-ground' relationships between buildings and open spaces in the modern city' (Trancik, 1986:18). As he suggests, it is vital to reconsider the traditional pre-industrial spatial model, to get lessons of redesigning lost spaces.

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What should have to be highlighted is that the importance of responding to the exterior space as the prime force which generates Architecture at its boarders, establishing its character. Hence separations of urban elements do not exist as all the individual elements will be integrated with exterior public space defining its edges and establishing the meaning of it. Therefore restructuring of urban space needs to consider the principle of enclosure that gives open space its definition and connection, creating positive linkages between spaces regarding that the human's perception on an image of and reaction to a space is largely determined by the way it is enclosed.

It is important for any political institute or for urban designers to recognize that a successful city does not exist solely with individually designed good buildings but designing of out door spaces is equally or may be principally important in redesigning intervention. Designers must carefully understand the underlying principles of spatial design and initiate, strong policies for spatial design accompanying with the political institute. In such intervention public must essentially get involved in order to take part in shaping their surroundings. Hence designers should create site plans that become generators of context and buildings that define the exterior space rather than displace it. These development strategies should aim the attraction of people back to the

lost space of urban core. These lost spaces could be developed as; 'enterprise zones', or transitional commercial and recreational developments which should essentially include community development programs as well. Hence the political institutions can easily allocate necessary funds through private investors.

In any city redevelopment program as designers and Architects that one should not forget the fact that 'no building stands alone', that is any intervention should look back the history of the place and be aware of the context. These two forces will shape the urban context and produce a coherent city where each building is stick to the urban glue as no single element could survive without the dependence of each other.





#### Preface

Within the course of urban study history there have been various breakthroughs in theories of designing lost spaces. This chapter explores these theories and makes an attempt in formulating a base for a comprehensive framework towards redesigning the lost spaces into urban catalysts in generating positive catalytic reactions.

#### REDESIGNING LOST SPACES

# 3.1 Aims of redesigning Lost space

Aims of redesigning lost spaces lies with the attempt of using city wide connections, using contextual properties, and using existing pattern of an urban space as tools for restructuring urban coherence and guiding new development in desired directions. Such planning can also be a powerful means of stimulating new invest. The positive space which shaped by the environment should in tern shape its context, such as the introduction of new element causes a reaction that modifies existing elements in the context and existing urban public space of value are enhanced and transformed in positive ways without damaging its context.



# 3.2 Approaches of redesigning Lost space

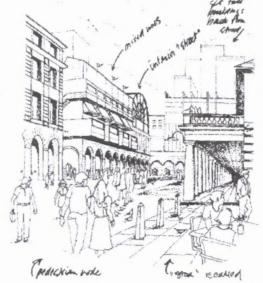
#### 3.2.1 Critical reactions against Isolated Spatial Design

As mentioned in previous chapter, the functionalist thinking of urban designers had great impact on our entire public exterior environment and has contributed to the current problems of urban space. In order to redefine those underlying principles of formal expressions of urban space, certain movements more towards in to integrated approaches as critical solutions to the problem of urban space have been formulated and experimented by various scholars and designers. These are implemented and they guided the new developments of the city as predominant trends in urban design in the twentieth century and are briefly as follows.

#### **Humanist stance**

In 1950's group of European modernists attempted to redefine the functionalist stance to readdress the modern movement's failure to take account of human needs and values. The published document of Team 10 primer out lines the group's philosophy and affitudes about place designing oriented according to disciplines of existing community context. These humanist designers attempt to respond to urban context and the user needs and redirect the course of modernist thinking. The humanist position is not as clearly and comprehensively formulated as the functionalist. Rather it is a collection of intentions, techniques and design ideas offered by diverse group of proponents. Humanist approach focuses more in to examine the impact of small scale elements on day to day experiences rather than planning of large scale zones.

Fig: 3.1 Humanist vision perceive city at a Micro level: humanist qualities are suggested in the visual variety, attention to small scale, depiction of people engaged in activities and annotations trough which the designer 'scripts' the place (source: American Urban Architecture)



'There is no logic that can be superimposed on the city. People make it, and it is to them, not buildings, that we must fit our plans' (Jacobs, 1958:160)

Humanist planning seeks to realize and enhance preexisting and underlying social structures. Humanist design is likely to be described with a set of sequential drawings depicting a user's perception of the place and conveying a variegated visual character or with a diagram of behavioral patterns. (Logan, Attoe, 1994). Logan, Attoe further explains that humanist designers expect the inhabitants of a city to 'appropriate' the environment and make it their own. The humanist thinking identifies the best way of planning is to observe the people using it in present context and identify its strengths and designing to reinforce them.' There is no logic that can be superimposed on the city; people make it, and it is for them, not buildings, that we must fit our plans. (Cited in Logan, Attoe, 1994).

Hence decision making is not set by the master plan but on incremental interventions. Logan and Attoe further explain that the humanist designers more over advocate a mixed use of the urban environment. Functional zoning are not the norm: instead activities and elements overlap and are interwoven so the 'drama is released, for example where as functionalist streets are principally for automobiles, humanist streets are domesticated and become 'livable' places for people. Humanist believes that if the present city is satisfactory, the 'future form of city' would not change or differs from the present context. Any changes that are needed will be patterned more often on elements of existing neighborhoods and districts than on new concepts. Humanist urban designs finds lessons in the past, among them they have borrowed the features that make places visually more appealing such as kiosks, bollards, granite pavements etc.

However humanist stance also has its weaknesses in urban design. Critics say that humanist do not consider the large-scale issues and overall needs of the city. The incremental planning of humanist stance can create problems in the workings of the larger urban system. Although houses may be designed according to the real needs of the inhabitants, but housing is a system that needs comprehensive approach at micro level.

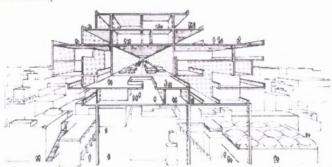
#### The Systemic stance

The systemic approach emphasizes large-scale elements of urban design and seeks an overall order for the urban place. Its team 10 proponents2 asserted 'comprehensibility' as an overriding value'. (Smithson 1965:48). Systemic theory accepts urbanization and increasing societal complexity as inevitable. The key to successful urban design in a complex world is organizing the underlying systems, not individual buildings. This concept could be seen as a further evolution of functionalist theories. This approach gives priority to large-scale urban ordering. For some designers the main task is to achieve clarity in transportation systems. For other designers the urban structure results from a physical support to which detachable units are added. This would be practically necessary due to the demands of vehicular traffic, the dependency of modern life on communications, and the need for the rapid, continuous production of building elements. The systemic stance ensures that areas do not have to be cleared for rejuvenation to take place. Functionalist theory presupposes a clean state, but systemic theory proposes that linear systems of movement and of new construction be woven in to and around existing structures. Hence instead of conceiving of the urban fabric as a collection of building masses, systemic design treats it as a dynamic web of connections. Systems are conceived as able to grow and change incidentally without compromising the underlying order.

Fig: 3.2 A new urban structure imposed

Upon an older fabric

(image source: American urban Architecture)



As cited in Logan, Attoe, (1994) most proponents of systemic urban design accept obsolescence as a fact of modern industrial civilization. Although they believe that the underlying urban system remains intact, they assume that its elements are added to or replaced in a continuing program of improvement. Modern transportation and modern industrial production, in particular, have made large parts of the city of the past obsolete. Because future

needs and circumstances will also differ from those of both the past and the present, the very parts that constitute the city must be disposable. Nonetheless, even with the changes necessary to encounter obsolescence, the urban frame work will remain as the structure, the system within which changes occur.

According to critics, systemic design ignores the validity and workability of established physical and social fabrics. Systemic solutions do not necessarily improve on the past. They uproot existing patterns and introduce alien ones.

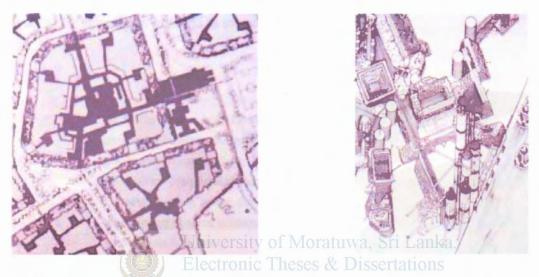


Fig: 3. 3 Typical layout of a systemic design, dark areas are 1. a.c. lk links. (Source: Concepts of urban design)

Fig: 3.4 Plug in city by archigram Interchangeable parts linked by transportation systems

#### The formalist stance

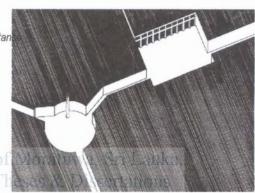
Formalist approaches are those value particular archetypal or universal configurations most often consist of axial organizations and static spaces or in terms of urban elements streets, squares and public monuments that structure the urban fabric.

The formalist stance lacks the forward looking idealism of other theories that assume that a better way of doing things can be found if we abandon inadequate archaic methods. Instead formalism argues that satisfactory patterns for accommodating human needs and nurturing the spirit exist in our cultural and urban heritage.

The formalist doesn't see the past as a better time to which one should return but maintains only that traditional solutions contain ideas that work and that these ideas carry with them the ingredient of memory that new urban spaces inevitably lack.

Formalist urban design is also criticized for being conceived largely with aesthetic matters and only incidentally with real matters. 'Urbanism can no longer submit exclusively to the rules of gratuitous aestheticism' (Attoe, Logan 1989:16). It is functional by its very nature. According to Jacob Jane, there is a quality even meaner than outright ugliness or disorder, and this meaner quality is the dishonest mask of pretended order: achieved by ignoring or suppressing the real order that is struggling to exist and be served'. (Jacobs, 1961:25)

Fig:3.5 The ideogram for the formalist stand distinguishes between public realms and the anonymous urban fabric, the former comprising familiar urban forms like the square, avenue, and monument and elemental architectural treatments like the arcade. CTSILY Of (source: American Urban Architecture)



As discussed, it was evident that each approach had its positive answers to the problem of isolated spaces as well as negative solutions which further resulted in life less or rejected spaces. But each one had their identical positive reactions against the functionalism. In developing new and effective solutions these positive attributes need to be considered in redesigning the lost spaces in to more viable positive urban spaces minimizing the negative

effects. Hence it is vital to point out the positive reactions of each approach as a summery.

Humanists attempt to respond to the urban context and user needs to redirect functionalist thinking of ignoring the context including the public domain and user perception of place. They focus in to create places visually pleasing and tried to follow the traditional city design concepts.

Systemic approach more oriented towards organization of lines which connects the part of the cities to create linkages between urban elements. It accepts urbanization and increasing societal complexity as inevitable. Linear systems of movement and of new construction be woven in to and around existing structures and treats the urban fabric as a dynamic web of connections retaining continuity.

Formalist stance tries to reinstate the memory of a place which derives through the traditional context and culture that new urban spaces inevitably lack on account of maintaining traditional solutions.

The first chapter illustrated various aspects and variations of positive urban space. Historically relevant public spaces which flourished with positive spatial attributes and which had positive connections with the context are also discussed in the afore mentioned chapter.

It is vital to take lessons from these historically positive out door environments and other positive public spaces to derive practical solutions in a comprehensive way in redesigning modern problematic spaces: lost spaces. However as a universal solution, these explorations would not be practically successful in all cities (Application of European Urban Design theories on tropical, Asian contexts). The differences would arise due to variations in economical, political and cultural backgrounds. However one should not ignore the fact that the innate spatial needs of humans tend to be similar to a certain degree in any context.

On the other hand due to impacts of globalization, similarities exist in urban situations, urban design interventions and urban renewal strategies all over the world. The embracing of the "international style" lead to the creation of Architecture of global homogeneity, resulting in similar contexts and similar urban predicaments.

Hence, the study would focus on universal theories of redesigning cities which Trancik(1986:97) formulated will be taken in to as the basis, and arrive at a frame work of solutions which act as basic tools in re-structuring lost spaces, and make observations according to the framework in redesigning lost spaces within the local context.

#### 3.2.2 Principles underlying integrated spatial design

Critical reactions against formalist inhuman approach, redirects the urban designers towards contextualize urban design and on creating memorable places to retain its sense of place. These approaches should principally focus on implementing deliberate urban design interventions, which would be embedded in to existing structure, without giving a feeling of alienation. Hence integration of positive aspects of each stance would be a better solution in restructuring lost spaces. Transik, in his writings of urban design theory explains three theories of urban design to be integrated together in order to find better solutions, as they covers almost every action towards better intervention in redesigning lost spaces. Figure —ground theory would determine the spatial order, existing pattern of solid void relationship which in turn to be used in redesigning the spatial anomaly to reinstate coherence, while linkage theory applies on providing linkages to further strengthen the urban structure towards achieving woven urban web/fabric to solids and place theory determines the contextual response and the meaning of place in creating sprit of place.

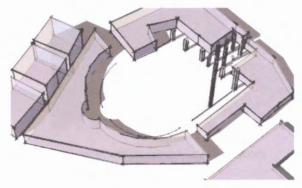
'On the basis of research in to the evolution of modern space and the analysis of historic precedents, three approaches to urban-design theory can be identified: (1) figure-ground theory: (2) Linkage theory: (3) Place theory. These theories differ significantly from each other, but taken together can provide us with potential strategies for integrated urban design' (Trancik, 1986:97)

#### 3.2.2.1 Figure-ground theory

Each urban environment has an existing pattern of solids and voids. Predominant field of solids and voids creates the urban fabric and is interpose by object buildings and spaces such as landmarks, open spaces which provide focal points within the structure. According to the exploration of Trancik, this approach to spatial design is an attempt to control the relationships of urban fabric by adding to or subtracting from or changing the physical geometry of the pattern. He further elucidate that the objective of these manipulations is to clarify the structure of urban spaces in a city or district by establishing a hierarchy of spaces of different sizes that are individually enclosed but ordered directionally in relation to each other.

The illustration of this phenomenon is clearly depicts in the aerial view of ancient Rome, where the city is been defined as system of solids and voids. (Fig). As explained in chapter one and two, this view depicts that the denser building coverage than the exterior space give structure to the public opening in creating positive voids. That is the open space is carved out of building mass as a continuous flow linking interior and exterior spaces. Hence the positive voids are more figural than the solids that define it.

Fig 3.6: pesitive voids are more figural than the solids that define it, in order to achieve this form on the exterior the perimeter of blocks must be well erticulated to configure the exterior voids.



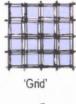
Trancik Further states the fact that without this critical land coverage, the spatial continuity would be impossible. Figure- ground relationship in Nolli, is one of overall coherence featuring a mesh between the block pattern and individual buildings.

Fig: 3.7 Nolli map, Rome, the building coverage Is denser than the exterior space, thereby giving Shape to the public openings- creating positive voids.

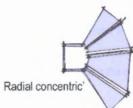


Figure-ground reveals the collective urban form as a combination of patterns of solids and voids that can take on many configurations. Most cities are built from combinations of these patterns as well as through the juxtaposition of larger and small patterns. Hence the figure-ground plan reveals the composite patterns of street space and characteristics of districts.

Fig:3.8 Typological patterns of solids and voids, solid, void relationship formed by shape and location of buildings







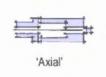








Fig 3.9: Boston, Massachusetts, illustrates built pattern. The form is organic, with strongly defined neighborhoods, problems of linkage between these districts and to the waterfront are major design issues.

Figure ground theory further points out that when the urban form is predominantly vertical instead of horizontal shaping coherent urban space is next to impossible. Vertical buildings cannot give spatial structure to the environment hence the figure ground map is the single building and the connective block is missing. In order to achieve form in the exterior, the perimeter of spaces and blocks must be well articulated to establish out door rooms. The easiest way to achieve positive voids is to work with horizontal building mass where the structures have more coverage than the surrounding field, where conceptually, the space is carved out of the mass.





Fig: 3.10 Boston harbor, in 1800s it became a prosperous port over forty wharves and twelve major ship yards. The fine architecture of the harbor front closely reflected the form of wharves, creating homogenous linear fabric along the water's edge; due to urban renewal projects this context has been severely changed. Although buildings them selves were often of high quality, they rarely respond in the overall form and configuration to the existing spatial context.

As cited in Trancik(1986:p), the architect Alvaro Aalto sates. 'Problem of spatial design as one of connecting the form of the building to the structure of the site, or of twisting and turning the building's facades to create positive exterior space'. In his designs for public buildings: Saynatsalo Town Hall and Riola Parochial Church, he tried to hold the overall composition together by creating outdoor courts or large piazzas which forms the centre or the focal points to the structure.

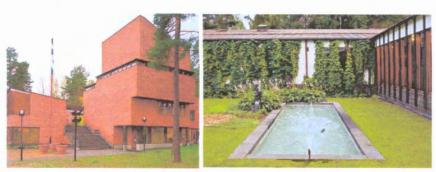


Fig: 3.11 Saynatsalo Town Hall, by Alvaro Aalto: public building with many functions of local council and library works, the building is meant to be used by ordinary people as well as for administrative tasks. The architect wanted the building to be extraverted also. Hence he create a hierarchy in building forms, the council chamber is on the highest level to present authority. The main factor describing the building is the courtyard; Aalto meant it to be a place for people hang around.

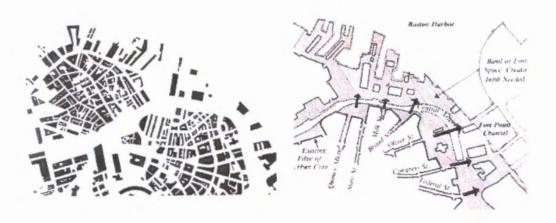
Gaps between the buildings allow access to the courtyard, from which all the buildings are entered, up flights of steps, and also allow views towards distant lakes and the penetration of the low northern sun.



Fig 3.12: Riola Parish Church, by Alvar Aalto, at Riola, Italy, 1975 to 1978, the shape of the church itself is an asymmetrical basilica with asymmetrical vaulting through which light, directed especially towards the altar, enters the building. Galleries were dispensed with, but the choir area was extended to compensate for their absence. The front wall of the church can be opened so that the forecourt serves as an extension to it."

Trancik points out that Aalto's figure ground concept for individual or small groups of buildings can be applied to urban design on a large scale city.

How ever in practice this figure ground relationship should always be kept in mind as a conceptual guiding principle in city design. As an example, in the Case of Boston, the figure ground analysis reveals a pattern of compact districts, strong internal structure but problems with linkage between them, especially the linkage between city core and harbor front: each developed independently, without sufficient linkages. A close inspection of street plan on figure ground layout, a pattern of concentric streets emerges parallel to the water and cut through by radial finger streets is revealed.



Boston; severance of the water front from city core. Both sides of the central artery, the diagram indicates

Key points in black arrows where linkages need to be

Established between finger streets and the water front.

Boston's center needs a clarification of solids and voids. On the other hand Boston's more compact, dense fabric has figured the structure of the form and purpose. Hence restructuring of urban spaces must followed towards creating a frame work of continuous, well defined streets, squares and blocks strengthening the figure ground relationships preserving historical geometries and make them more comprehensible. To connect the city core and waterfront, the street system of core must require modifications, including extension of finger streets urban to water front to create pedestrian links and visual corridors.



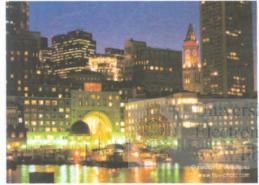




Fig:3.15 Rowes Wharf redevelopment, continuous public access to the water's edge is a crucial urban design principle in Boston's redevelopment process as to improve the connection of water front development with the city core, this project consist of 10000 square feet of public space, ground floor retail, and a water taxi terminal.



Fig 3.16: GIS map of Colombo, illustrating lack of integrity In development of port area with the surrounding core



Fig 3.17 proposed plan by "CESMA": Regional
Structure Plan For Western Region Mega polis – 2030,
illustrates improved Connections and integration of
development towards Port city trough improved public
functions and accessibility



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#### 3.2.2.2 Linkage theory

Linkage theory involves the organization of lines that connect the parts of the city and design of a spatial datum from these lines relates buildings to spaces. According to Trancik (1986:107), in spatial design, the determinant line of force on a site would provide a similar kind of datum from which a design is created. This spatial datum can be a site line, directional flow of movement, organizational axis or a building edge. Together they indicate a constant system of linkages that are to be considered when proposing additions to or changes in spatial environment. As cited in Trancik, in investigations in to collective form. Furniniko Marki discusses factors that go in to the creation of a frame work of spatial linkages: 'Linkages is simply the glue of the city.'

Urban design is concerned with the answers of making comprehensible links between discrete things. As a result, it is concerned with making an extremely large entity comprehensible by articulating its parts. In modern movement approaches in city design linkages are implied rather than overt, linking elements are static and formal. In functionalist rigid applications there is no logical way of establishing a centre. Marki (cited in Transik,1986) defines three different formal types of urban space.( chapter two , fig). In compositional form, individual buildings are composed on a two-dimensional plane. This spatial organization is typical to functionalist planning where physical linkages are not defined or weak. Mega form depicts a spatial organization where linkage is physically imposed and structures are connected to a linear frame work in a hierarchical, open ended system. Group form results from an incremental accumulation of structures along an armature of open space, where linkage is naturally and organically evolved. Marki illustrates group form with images of the Japan agrarian village. 'group form is characterized by a consistency of materials, a wise, often dramatic response to topography, deference to human scale, and by sequences of spaces defined by buildings, walls, gateways, and spires.' (cited in Trancik,1986:108)

Fig 3.18: street is the armature that unifies the community. Individual buildings can be added or subtracted without significant injury to the basic organization.

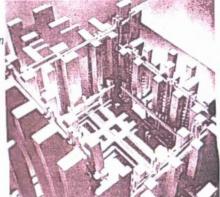
(source: Finding lost space)



In all three formal types, Marki stresses linkage as the controlling idea for ordering buildings and spaces in design. According to Trancik, from Marki one can learn that there are several methods of organizing coherent spatial relationships under the theory of linkage in urban design. Leading exploration of structures has been generated by linkage theory and it was highly popular in the design thinking of 1960. In 1970's Expo 70, designed by Kenzo Tange, held in Japan displayed a complex of linked futuristic structures connected at various, levels by an extensive circulation system. The scheme for horizontal linkages between isolated high

risers developed by the Regional Planning Association and published in 'urban design Manhattan'. Although the connections were effectively created, it had the problem of containing exterior space. It failed to create positive exterior spaces and the order of spaces.

Fig: 3.19 the scheme of horizontal connections between High rise elements- Regional Plan Association (image source: Finding Lost space)



Another experiment on conceptual theory of linkage theory has been carried out by Peter Cook. (Cited in Trancik, 1986:110). He designed a lattice like framework of intersecting tubes of services including escalators to maximize the connection between elements. Prefabricated units could be plugged in to this frame without disturbing the horizontal movements. However in these experiments, proposing linked structures, the environment becomes a diagram of movement systems. High technology and machine like buildings dominates the search of spatial opportunities. Hence studying the connections and circulation systems is extremely important in understanding the spatial structure in Ed Bacon's 'guidance of the revival of Philadelphia' urban redevelopment project illustrated the using of city wide connections as a tool for reinstatement of coherence and guiding a new development in desired directions.

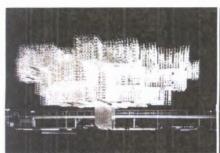




Fig: 3.20 Expo 70, designed by Kenzo Tange



The centre of the area, the Festival Plaza, was covered with a giant polyester roof on a framework of steel pipes - 103 meters wide, 292 meters long, fixed to the floor and held 30 meters up by only 6 pillars. The outstretched welcoming arms allowed the

visitors to climb to the roof zone of the plaza in which additional

exhibits were also placed.

In accordance with Trancik's explanations on redevelopment of Washington D.C, it is evident that Major Pierre L'Enfant's master plan in 1791 was clearly based upon improving linkages within the formal grid by adding critical diagonals. The vision behind the new development was to design a new capital for a new nation of improved connections between the government and the public. The designer got influenced from the late French Baroque, with its tradition of broad axial relationships, symmetrical balance, and super imposed order. The end result was not as positive as intended due to the formation of triangular districts (as a result of carve out straight diagonal boulevards from the functional grid) where residual gaps appeared to be occurred in both grid and the diagonal system.



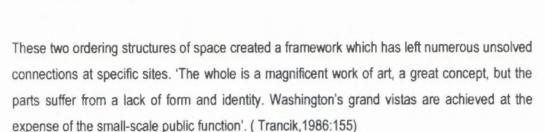
Fig:3.21 Plan of city of Washington, D.C., 1791designed by
Pierre L' Enfant,

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Washington was laid out with a monumental master plan intended to symbolize its role as the heart of the new nation sweeping diagonal boulevards cut across a grid of secondary streets creating grand vistas and linking public monuments (source: Finding Lost space)

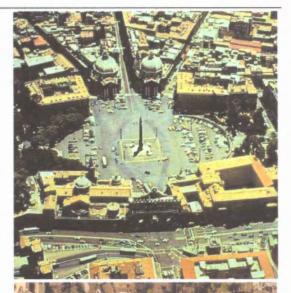
#### Fig:3.22 diagram of major vistas

The entire structure is governed by these vistas, established along boulevards connecting important places such as White house, US capital, and Washington monument.. (Source Finding Lost space):



### Fig:3.23 Piazza Del Popolo, Rome

The configuration of the buildings reinforces The structure of open space, resolving Irregularities in the geometries and clearly defined edges



#### Fig 3.24: DuPont Circle, Washington

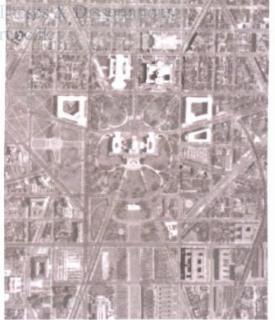
In L' Enfant's plan called for a formal treatment Of intersections where the diagonals converge such as DuPont circle, most of the buildings edging the circle were partially built, the aim would be to capitalize on the divergent geometries by inserting new buildings and formal landscaping





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Fig 3.25: lack of configuration of monumental open spaces by edge defining buildings of Washington, D.C.



The challenge in restructuring these incomplete but important monumental spaces was to take the maximum advantage on these two contradictory geometries by inserting new developments to define the open space and improve the identity through formal landscaping as done in Piazza Del Popolo, Rome. In doing so designers pointed out that the necessity of maintaining

the open spaciousness and strong linkages of L' Enfant's monumentality and at the same time provide enclosed, well formed spaces for human activity. The following master plans illustrate various urban design interventions of Washington which had considered these issues of redesigning these residual spaces.





Fig:3.26 capital master plan, 1982

Tried to strengthen the linkages and structure of solids and voids. The master plan illustrates how a hierarchy of enclosed public spaces can be linked to the primary

spatial order. (source: Finding Lost space) Fig:3.27: capital master plan- revised, LTSSETIATIONS important aims of restoring urban spaces. it proposes new infill building forming squares strengthening the linkages alone main axis. Also provides a hierarchy of more intimate enclosed spaces connected to the primary spatial structure. The plan responds to the the special character of Washington.

The study of redevelopment of Washington, D.C, reveals the fact that the strong diagonal linkages require a definition along its edges to define its character and reinstate the overall structure. At the same time the structure lacks density and building coverage of figure-ground to provide the hierarchy of spaces needed in successful urban structure. Hence the monumental character and important public buildings and the strong linkages have given the designer a frame work of redeveloping the spaces.

### 3.2.2.3 Place theory

'The essence in place theory in spatial design lies on understanding the cultural and human characteristics of physical space' (Trancik, 1986:112),

Space as described in previous chapters is a bounded or purposeful void with potential of physically linking things. It becomes a 'place' when it is given a contextual meaning derived from cultural substance. A space have it's define character according its social and physical characteristics, such as material substance, shape, texture, color and more of cultural associations. Any human needs proper places to develop themselves, their social lives and their culture. Hence a place needs to be read in its intangible, emotional content more than its physical configuration to evoke feelings. Architecture as the art of producing spaces must respond to and if possible, enhance environmental identity and the sense of place.

As schulz's(1980) states; 'a place is a space which has a distinct character. Since ancient times the genius loci or spirit of place, has been recognized as the concrete reality man has to face and come to terms with in his daily life. Architecture means to visualize the genius loci and the task of the architect is to create meaningful places where he helps man to dwell'

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Trancik points out that the role of an urban designer should be not merely to manipulate form to make space but to create place through a synthesis of the components of the total environment including the social and the goal should be to discover the best fit between physical and cultural context and the needs and aspirations of contemporary users. The most successful design of places often stems from minimal interference in the social and physical setting instead of radical transformation.

'This ecological approach to design aims at discovering with the intrinsic qualities of a given locale and is opposed to the internationalism advocated in the modern movement.' (Trancik,1986:115). Designers should determine what the configuration wants to be within the existing setting and in deference requirements. In most recent city development approaches, often failed to create a concept of place that respond to the social, cultural and physical environment. The basic constraints of the site were ignored. Hence fragmental evidences from past are disappeared or missing in the process.

# 3.3 Frame work for redesigning Lost Spaces

In exploring the three underlying theories of spatial design, it has been identified that each theory consists of an approach of layering elements of an urban context. According to Trancik(1986:124), application of each theory alone would create non spatial, non experiential or isolated urban situations. Hence integration of vital aspects of each theory would formulate a comprehensive frame work of redesigning lost spaces in achieving more spatial, experiential and cohesive urban structure. The frame work consists of main vital aspects that each theory addresses, in earlier discussion such as place theory's signification of the importance of responding to context, linkage theory's signification of importance of connectivity of urban space towards enlivening lost spaces, and the figure-ground theory's signification of controlling the overall urban fabric through changing its social and physical geometries.

### 3.3.1 Response to the context

It has been analyzed that the phenomenon of response is a major concern and a prime criterion, which need to be incorporated in to the process of redesigning lost spaces. It is been evident that almost all the lost spaces are non-responded by the physical and functional settings where that has become a major factor for them to exist as lost spaces.

Positive response is a prime criterion involved in the process of transformation or redesigning lost spaces in an urban context where its vital presence ensures its inspirations in making and remaking places. Configurations, compositions, as well as psychic aspects as orientation, enclosure and territory, are outcomes of careful articulation of response to a place.

Response can be in form of architectural and functional where both have a considerable impact on redesigning lost spaces and it is vital to look in terms of different dimensions of their positive manifestations in the process of rejuvenation.

#### 3.3.1.1 Architectural response

Architectural response becomes a prime way of responding to a negative space, where architecture becomes the catalyst in rejuvenating such a space as it conceives with such a power.

'......Architecture must respond to particular characteristics of the place where it is located'.

(Farmer B,1993:73)

In other words, a place should responded by its architecture. Therefore, architectural response can be regarded as the tool in the creation of a place. Architecture deals with creating places through architectural spaces. Architectural space becomes the prime tool which the different atmospheres could create.

Scott G. (1914:227) explains the significance of the architectural space, 'to enclose a space is the object of building: when we build we do but detach a convenient quantity of space, schedule it and protect it, and all architecture springs from that necessity. But aesthetically space is even more supreme, the architect model in space as a sculpture in clay. He designs his space as a work of art: that is, he attempts through its means to excite a certain mood in those who enter it'

With respect of responding through architecture, a lost space can be transformed in to an architectural space, and that will conceive with the potential for being a place.

Fig 3.28 Model of Prague with main thoroughfare as an architectural space

the spatial atmosphere of the space depends on the articulation of the spatial volume, along with expressions of the enclosures, their colour texture, effect of light, ornamentation of elements ets. The enclosures of the space are rows of building facades.



Architectural space is significant due to the fact that it includes with the richest and complete means of expression, and it creates spaces not just decorative but is capable of being used. In creating an architectural space, the architectural response to a space becomes the major concern.

The aspects of responding to a place involves with several concepts such as order, unity, proportions, symmetry, balance, rhythm, harmony and contrast. Effective composition of all contributes to shape and define the architectural space.

#### (a) Order

Creating a specific order is a one way of responding to a place through architecture and could be an utter important factor to consider on, in the process of revitalization of lost spaces, where it consist of generating a great impact on a context.

According to Venturi. R. (1966:46) 'A valid order accommodates the circumstantial contradiction of a complex reality. It accommodates as well as imposes. It thereby admits University of Moratuwa. Sri Lanka. control and spontaneity, correctness and ease, improvisation within the whole.

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Fig:3.29 physical order has the ability to evoke strong images and provides a quality of a place.



## (b) Unity

Unity through the architectural response is another major factor that can be incorporated in to the process of redesigning lost spaces. Unity emphasizes the belonging-ness of a place, and architecture is the most effective way of expressing the quality of 'unity'. Even when no two buildings are similar in character, a cohesive environment is achieved, despite their individuality. Hence 'unity' can be considered as the first and most important of the design concepts in the architectural composition in redesigning lost spaces. According to Alberti, 'variety is without a very great beauty, in everything when it joins and brings together in regular manner things but proportional to each other (Moughtin.C, 1992:44). A grouping effect is achieved from these heterogeneous elements by having partially common characteristics. In order achieve the 'effect' it is necessary to identify the underlying patterns. Such patterns lie hidden amongst the arrangement of windows, their positions on the wall, their proportions, building heights, storey heights, prominent horizontal or vertical divisions such as distances between the columns etc. among those most important factors which introduce remarkable design unity is the sky lines, spacing between buildings, building lines, massing of building form, location and treatment of entry way, proportions of windows, doors and other features, finishes and textures shadow patterns from massing and decorative features, building scale and landscaping if any.

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Fig:3.30 windows, doorways, bays and pediments of these homes share similar proportions that link the buildings although each is composed differently, the different designs also share a common approach. Each is an arrangement of vertical elements and together in horizontal bands.

(Source: Fundamentals of Urban design)



Fig:3.31 Standard Chartered Bank, Fort

An attempt towards unity, having few motifs at ground level can pull the street and place together.

#### (c) Scale and Proportions

Scaling and proportioning is another tool that can be utilized to procreate impressions by responding to a place through architecture. The correct scaling and proportioning become a prime concern in creating various visual qualities to generate meaning to places, and another important affair that can accommodates in to the process of redesigning lost spaces through the architectural response. Donation of public spaces in their scale and proportion, manipulate the punctuation of movements, highlights the dominance in activities, maintain unity and diversity and stimulate rhythm and laying the background in expressing various meanings an generating the identity of places.

#### (d) Harmony

The word harmony means the appropriate orderly or appropriate pleasing interaction of the elements in a whole. This orderly combined built environment becomes not only visually pleasing but beautiful as well. As Alberti cited in (1992:44), 'in music, when the bass answers the treble, and tenor agrees with both, there arises from that variety of sounds a harmonious and wonderful union of proportions which delights and enchants the senses'. He further states that the beauty to be a harmony of all parts, in what ever subject it appears, fitted together with such proportion and connection, that nothing could be added, diminished or altered but for the worse. In contextual architecture harmony plays a major role to create a cohesive environment. To be in harmony doesn't necessarily mean to look alike, and also when building on street need not always copy or reproduce the type of existing fabric, to blend with the context. Harmony plays a major role in the creation of well integrated spaces. Orchestration of effective proportioning and scaling of buildings and their elements could establish harmonized spatial atmospheres.

#### (e) Rhythm

Rhythm is the mode of changing expression and ideas, which is another important factor to incorporate in redesigning lost spaces through architectural response. This is the outcome of grouping elements of emphasis, intervals, accent and direction. Articulation of members makes up the composition. Rhythm imposed a pattern in mind.

## (f) Symmetry

Symmetry mans the identical disposition of elements on either side of an axis. This is an important aspect in creating harmony and unity, visual balance, and to emphasize a centrality to important spaces and buildings prominence. Vitruvius's conception about symmetry as cited in (1992:51), 'symmetry is a proper agreement between the members of the work itself, and the relation between the different parts and the whole general scheme. Another aspect, which goes parallel with symmetry, is balance. Balance could be formal or informal i.e. symmetrical balance and asymmetrical balances both are necessary in composing'

#### (g) Contrast

This quality of the environment can be termed as a dialogue between two extremities or two different completely opposite situations. According to Von. Meiss, 'Contrast serves to give an immediate and unambiguous identity to two formal systems; which leads to mutual reinforcement without necessarily resorting to explicit hierarchy'. Miess. V(1990:44)

Contract in forms and anti-forms that is of buildings and spaces, of streets and squares or soft and hard landscape is necessary to reduce monotony, achieve dominance, change the pace and direction etc. it provides great pleasures as well as its extreme creates disorder and confusion.

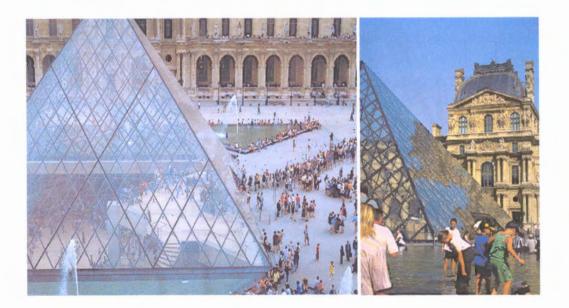


Fig: 3.32 Contrast has provide richness and order to a dull environment - Grand louver, Paris

#### 3.3.1.2 Functional response

Functional response is the other major concern in responding to a place and is another important phenomenon that could be incorporated in to process of redesigning lost spaces. Function defines the kind of behavior and social contacts most appropriate to a place. It could foster a sense of well being and encourages contact and connection. Functional response has a great impact in making and remaking spatial entity, where function itself defines and generates a meaning to the spatial entity. A function can respond in two easy. Actual performance of a function can be mono or multi function. Imposing the most appropriate function in to a space, it can recreate the lost atmosphere in terms of its utility and meaning. Therefore, positive response of a function may exert strongly in influencing in the conversion of a negative space in to a positive space.

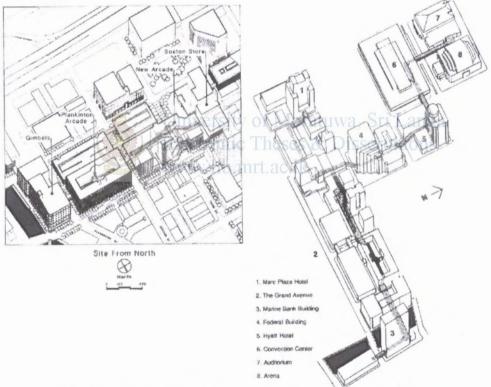


Fig: 3.33 The Grand Avenue, Milwaukee, the urban revitalization project, Its first, crucial, project was to remold and reshape the image of downtown which had been declined over pest years due to the emergence of suburban retail shopping. The vehicle would be an innovative center city shopping complex incorporating the best features of suburban shopping complexes with the vitality and richness of an urban center. First, it proposed the construction of a retail complex called the Grand Avenue, which would both recall Grand Avenue, Milwaukee's historical retail/commercial artery (now Wisconsin Avenue), and offer an interior place, a semipublic realm better than that found in any suburban shopping center – an appropriate functional response would improve the spatial meaning of declined urban space. (source: American Urban Architecture)

A function may consist with a symbolic representation. It can either be direct as in the design of monuments or in the form of expression as in religious buildings or as a by product which gives clues to the nature of the society. By allocating the most important and glandular sort of buildings and spaces housed with important activities, symbolizes the importance of the space. It expresses the dominance or the importance of the place. There are several aspects one should consider on responding functionally to a place. The assessment of prevailing demands for functions would be useful in determine the appropriate function to the place. The background of situational components such as the culture, economy and locational characteristics would shape the function. Finally identifying the right mix of functions that a particular place should contain in order to activate positively would be important in functionally responding to place.

## 3.3.2 Establish and strengthen to achieve positive linkages

Linkage as discussed previously, is another important strategy involves in redesigning lost spaces. It implies a connection between buildings and spaces to wards a cohesive environment. These relationships of spatial integration ensure sense of belongingness to an entity, which is another spirit lost in situation of negative spaces. A 'place' could not exist in an entity as an isolated element. If a space is isolated in terms of physically, functionally and visually, it will not experience by any body and will not be a positive space or a 'place'. There should be a mutual exchange of interference among places and spaces to exist as interwoven in the spatial entity. This can be achieved in terms of effective creation of linkages among them. Linkages of a place could be one or more: where more will be the links stronger as physical, functional and visual. A combination of these will create stronger links.

#### 3.3.2.1 Physical linkage

Physical linkage represents the connection of two or more physical entities. Physical linkages can be direct and indirect, where direct linkages demands the visual factor as a stimulator while indirect demands the psychological factor as a stimulator. A combination of these two creates a stronger relationship among spaces.

#### 3.3.2.2 Functional linkage

Functional linkage is other criteria with respect of linking spaces if spaces are functionally linked up in an organized manner, more effective will be the function of the whole and this bone signifies their belongingness to each other in making the whole.

#### 3.3.2.3 Visual Linkage

Visual linkage, which would be the most important linkage, will have a great bearing on the above two. With presence of visual links, humans tend to feel the sense of place. Considering lost spaces, the vital presence of visual linkages becomes unavoidable. Visual connections bring complements to spaces.

## 3.3.3 Controlling the relationships of urban fabric

Controlling situations, including adding to, subtracting from, changing the environments would be prime strategies involve with the living entity. To satisfy the unlimited human aspirations, he tries to change and control his environment. With the development trends radical changes to the living structure appears. This change can be range from actual change to sense of change and mostly associated with transcend of present conditions. Considering redesigning lost spaces, the basic exercise of change associated with changing meaning, in terms of function and the physical setting of the place.

#### 3.3.3.1 Change the meaning of place

While the prevailing situations of lost spaces are of meaningless or conceive with negative impressions, hence change of the meaning becomes a prime criterion in revitalizing of lost spaces. Change should be the stimuli and the guidance of the revitalization process where it will be based on the change that is expected from the atmosphere. Meaning is s 'psychic' function, depends totally upon experience. It is not merely the experience generated from activity and location, but also the experience filtered through subjective variables such as personal, cultural attitudes and values. Change the meaning of a place involves with change in the activity, physical setting or both. Meaning of a place has several dimensions depending on

the base for its origin. It may be consist with perceptual meaning which related to sensory cues, symbolic meaning related with culture and religious background, functional meaning related to public realm, breathing space, transitional space etc. and associated meanings.

#### 3.3.3.2 Change the function

According to the previous discussion, activity of a place has a major impact on its existence and continuity as well as its meaning. As described the in chapter two, lost spaces always contains negative functions, which in turn could spoil the meaning of the context. The negative spaces exist due to its inability to change its function according to the changing attitudes of the city. Hence they retained as its original function where it was no more effective and gradually incorporated with anti-physical, anti-social, anti-environmental activities. According to Relph, place is the centre of activities which a person experience. What we describe as a place is its activity, if the activity of a place represent something injurious, contemptible, obviously the place becomes hideous and leaves it to abandon. Hence in order regenerate effective positive spatial body, currently exist in the mode or insensible and neglected fully or partially, must stimulate by the change of activities. An activity of a place has different dimensions, such as, the physical activity which satisfies the physical needs, psychological activity, something satisfying the psychological demands of people and the social activity which maintains the social interaction of the place. A change of an activity involves with three aspects such as adding new functions to enhance the original function. Subtracting what is undesirable from the original function, finally completely change the original function of the spatial system.

## 3.3.3.3 Change the physical setting/geometry

Lost spaces obviously consist with unpleasant and undesirable physical settings. Hence change of the physical setting is essential. The change involve in change of the physical geometry or the change of the spatial quality. Day C (1990:10) explains the impact of a setting to manipulation, 'environment can be used to manipulate people; because we so readily take our surrounding for granted and rarely bring them to full consciousness.'

A physical setting consists with forms and spaces and their relationships. The articulation of the physical setting in order to create the required meaning could follow the concepts involved in architectural response. Change cannot exist in isolation where the other strategies have an impact on this as they involve with a kind of a change.



**Chapter Four** 

**Experiencing Redesigning Lost Spaces in Contemporary Urban Situations** 



## **Preface**

The fourth chapter is used as experimentation for the applicability of the framework derived in chapter three within the Sri Lankan context and emphasizing the need for such urban interventions, the framework is seen as a prologue in limiting the formation of lost space as well as in future restructuring of lost spaces

#### EXPERIENCING REDESIGNING LOST SPACES

## 4.1 Insight of Urban Development in Sri Lanka

The planning, designing and construction of towns and cities in Sri Lanka has been a continuous process for centuries. Ancient Sri Lanka boasts of magnificent cities such as Anuradhapura, Polonnaruwa, Sigiriya, and Yapahuwa. Writings of ancient times describe the beauty and function of these cities in glowing words. It can be aptly concluded from such works that our ancient towns and cities had been designed and laid-out with the highest objectives of social and economic organization and in keeping with the ideals of aesthetic balance.

Physical plans have been prepared for Colombo since colonial times. The first attempt was made by Sir Patrick Geddes in 1921, confining the planning area to Colombo City Boundaries. The main concept of the Plan was to make the City of Colombo "The Garden City of the East". The tree lined streets (Bauddhaloka Mawatha) and the grid system of roads in Cinnamon Gardens are legacies of the Geddes Plan which still provide the most sought after residential areas in the city

More recently in 1948, the Government invited Sir Patrick Abercrombie to prepare a regional plan for Colombo and its surrounding region, covering an area of 220 square miles. The region included the capital city, the adjoining built-up urban area and a considerable extent of rural country in the periphery.

Abercrombie's Regional Plan and his proposal for the development of the Colombo Metropolitan area were subsequently amended according to the decisions of the Central Planning Commission in 1957, to carry out the planned development of satellite towns within the region in order to accommodate the overspill of the people from crowded city area. It was felt that Abercrombie's plan was not adequate to accommodate the rapid changes taking place in the urban areas, especially in Colombo and its surrounding sub urban areas. The Government sought UNDP assistance to mitigate the perceived problems. This was the beginning of a build up of a consensus on the necessity of a Master Plan for Colombo and its environs.

# 4.2 Urban revitalization of Echelon square

## 4.2.1 Historical overview of Echelon square, Fort

Colombo, the capital city' of Sri Lanka, is the heart of an urban area of almost 1.3 million people. The city owes its growth and importance to its harbor, which successfully attracted the Arabs, Persians and in more recent years, the Portuguese, Dutch and British. Hailing a history which dates back even before the Portuguese period, the fort area then known as 'Kolom Thota' was the largest port in the country. Within the colonial period this area evolved into a fortified city which now is seen as a historical edifice in its own right. The original fort was built by the Portuguese. Thereafter modified by the Dutch it finally succumbed to the British.

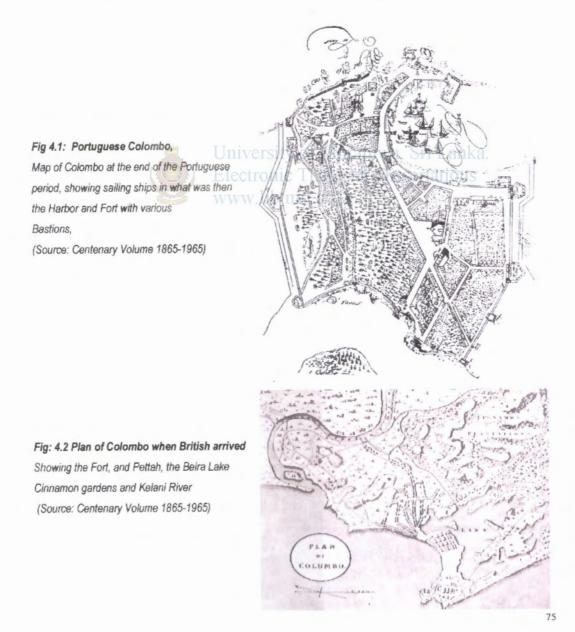




Fig:4.3 Colombo harbor was then



Fig 4.4: Golombo harbor was then



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Fig: 4.6 Old Colombo, York Street shows a bustling street scene



Fig 4.7: Hong Kong bank and the clock

The grid iron street patterns, the existing ramparts and the old colonial buildings boasts of a rich maritime heritage which now has become the distinctive character of the area. The British road network systems and town planning has given fort an energetic outlook in terms of linkages and plot coverage. However the placing of the military barracks within the Echelon Square resulted in a rupture of the cohesiveness of the city, which has lead to the separation of this land mass from the urban fabric.

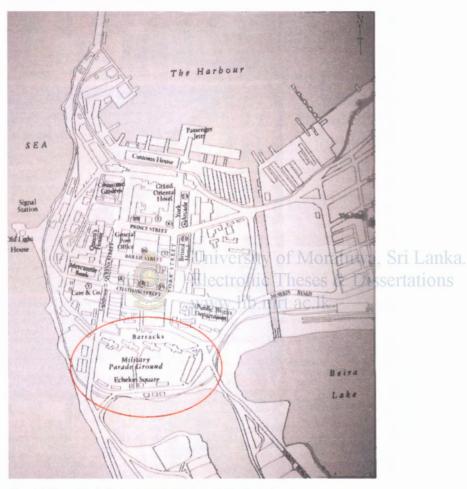


Fig: 4.8 Map of Fort, Colombo - At the turn of the Century

Depicting the Military Barracks at Echelon Square site

# Historic living core of Fort



Fig: 4.9 Millers Building, 1906 York Street



Fig: 4.10 Tall and imposing
Gaffoor Building – Leyden Bastian Road



Fig: 4.11 Tall and imposing
Gaffoor Building – Leyden Bastian Road



Fig: 4.12 York building York Street

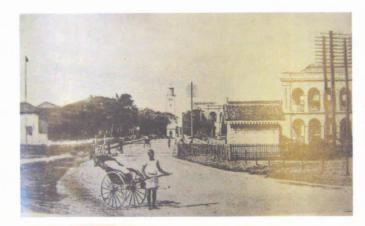


Fig: 4.13 Queen street (south) at the beginning of the century with the barracks on right (Source: Centenary Volume 1865-1965)



Fig 4.14 view of Colombo in 1905, the building in the right fore ground has been replaced by the Ceylinco house, the barracks are seen in the back ground (Source: Centenary Volume 1865-1965)

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Fig: 4.15 barracks, as seen from Galle Face



Bordered by Lotus Street, York Street on the east, Chatham Street on the north and the Prince Street (now Janadhipathi Mawatha), the Echelon Square is now synonymously known for Sri Lanka's high rise zone. Echelon Square was first established as military barracks to house the army and later occupied by army and police barracks, a playing field and some government offices. The clearly defined Echelon Square which housed the military barracks is seen as body with loosely packed building blocks with spaces in-between, and with no clear linkages with the city.

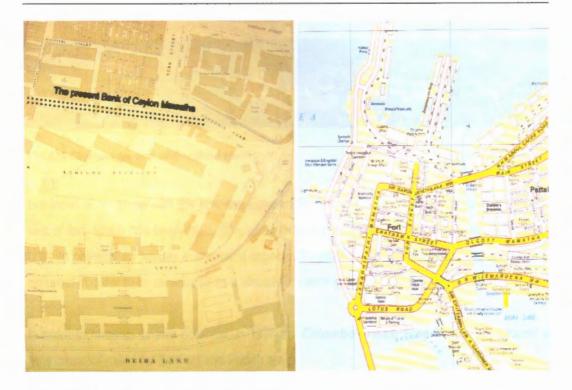


Fig:4.16 The present Bank of Ceylon Mawatha which links the Fig 4.17: Road map of Fort city is absent in the previous layouts. In this diagram drawn in 1955, the military barracks are visible as a group of loosely packed buildings oriented in defiance to the traditional grid iron buildings.

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### 4.2.2 Redevelopment strategies adopted

The potential which Echelon Square holds in establishing linkages between fort and Pettah combining with Chalmers granary is enormous. Chalmers Granary known as the racket court in the British period was one of the major public spaces of the region. At present it has become an underutilized space with dilapidated buildings within a commercially significant plot of land. It can be pondered upon whether that Chalmers granary suffers this fate due to the insufficient functional linkage between echelons square.



Fig: 4.18 Chalmers granary - along Baron Jayathilaka Mawatha, Twin towers at the background



Fig: 4.19 Chalmers granary: underutilized space

Bordered at an angle with the sea, the Echelon Square holds much potential as much as the rest of fort, which has been itself, developed in taking its setting and its character considering both its physical as well as economical aspects. Therefore it can be seen that the area has a potential in order to be developed as a visually interesting and organized environment.

In order to harness its true potential, in 1978 the Colombo Master Plan Project introduced a new proposal made for the Fort and Pettah areas.

In this proposal the main objective was to upgrade fort and Pettah in order to establish a cohesive urban fabric. With this aim three main areas were identified to be redeveloped.

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  1. Echelon Square | Flectronic Theses & Dissertations
- 2. Lotus center (Chalmers Granary) mrt ac 1k
- 3. Marine drive

As stated in the proposal, the Fort was expected to be utilized and expanded using its present functions. Land there which was underutilized such as the echelon barracks and marine drive area, was to serve primarily as office space and the marine area to become mainly a housing area. To the west of Pettah the Chalmers granary area was to be transformed into the Lotus Center.

A combination of public and a wide variety of commercial activities were to be implemented within the Lotus Center as response to the needs and potentials of the tens of thousands of Sri Lankan's who come daily to this location by bus and by train.

The development of Echelon Square offered the city of Colombo with an exceptional and exigent opportunity. The government agreed to make this key site available for development by private enterprise due to its inherent locational benefits.

The proposal projected new open space, a site area for a new office building and a new boulevard to separate the area into two parcels. The major potion of the project where land that was to be completely cleared is south of the new boulevard. This area was to contain the major bulk of the new office and the commercial development. The smaller parcel to north was proposed to be selectively cleared and appropriate new commercial and office uses were to be encouraged under strict standards and controls. This was proposed in order to preserve and protect the new Echelon Square development.



Fig 4.20: Land use plan of Echelon square – before the implementation of master plan 1978 Credits: UDA

The aim of the project was to provide office space for 10,000 employees and a new retail complex. The plan illustrated the urban design concept for the area. Briefly a major tower building was to be located on the axis of York Street and a rectangular slab building on the western edge of the site. Both these structures were to be in access of 20 stories in height and they were to be reserved for prestige office space. The new boulevard plan shows three smaller buildings. These buildings would have been below 15 stories in height. On the south an area were to be reserved for a new shopping complex on two or three levels which could have been developed either as a unit or by different clients.

The improvement of the circulation system would have allowed bus passengers to move in to the centre with minimal friction. The pedestrian level upon which the structures were to be situated would have provided access to the separate buildings free from traffic and create open spaces for use and enjoyment. And also the open space would have been graced with fountains, trees, and plants.



Public platform / main pedestrian area

Fig: 4.21 Master plan proposal 1978

Credits: UDA

Because land is precious in the central area the project had been devised in a series of levels devoted to specialized uses. The lowest level, 10 feet contained service facilities as well as parking space for automobiles. These functions were separated from each other. This area is only partially underground, thus natural ventilation would have been possible.

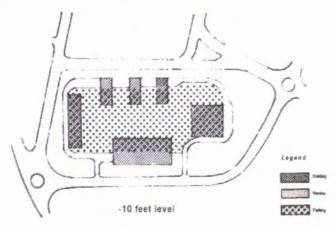


Fig: 4.22 proposed development – at -10 feet level for service facilities and parking

Credits: UDA

In the proposal the next level begins two and a half feet above ground and was to be devoted nearly exclusively to parking. It was envisioned that as the plans were to be further developed, other uses were to be included on this level, including space for offices and retailing. Above these two levels was the main pedestrian area, the site was to provide for approximately 1000 to 1500 car spaces, depending on the final total office space used.

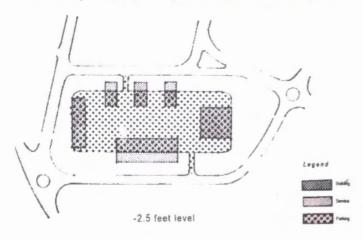


Fig 4.23: Proposed development – at -2.5feet level for parking, retail activities and offices
Credits: UDA

The artist's sketch shows the proposed new echelon centre as it will be seen looking northward towards Colombo's harbor. This new skyline was to replace the low building on the site. A significant amount of open space was to be kept on the ground level for use by those who are employed in the centre and for shoppers and visitors who will frequent it.

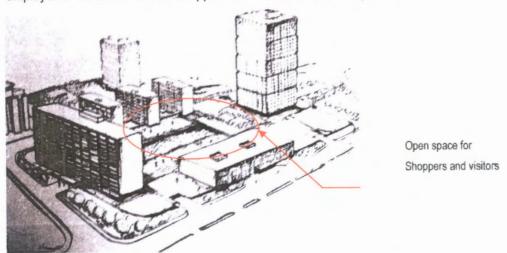


Fig: 4.24 artist's sketch depicts the proposed new echelon centre of master plan 1978
Credits: UDA

#### 4.2.3 Echelon square in present context

The existing development grants a certain amount of justice to the vision of the 1978 Colombo proposal in certain aspects.

The implemented scheme has no series of levels instead the land has been divided into several blocks in which four multi storied buildings have come up. Namely, The 37 storied World Trade Center twin towers, 32 storied Bank of Ceylon head quarters building, 13 storied Galadari meridian, and the 19 storied Hilton Hotel.

The sites developed individually hence making the option of sharing resources un-viable. The linkages among the buildings are also not very well established. Thus, creating a block of individual building which does not functionally respond to each other. The proposed integration of the Dutch hospital into the development scheme can not be seen either. The buildings have been created as icons due to the relevance of corporate image, thus the response to the historical character of the area has been neglected in this perspective.

In taking the form of the Bank of Ceylon tower into consideration it can be seen that the response to the context is minimal. Given the fact that the site is naturally facing the north-south axis, the potential to orient the building facing towards the broader sides has been neglected and instead has used a cylindrical form alien to the context in terms of the physical fabric as well the environment.

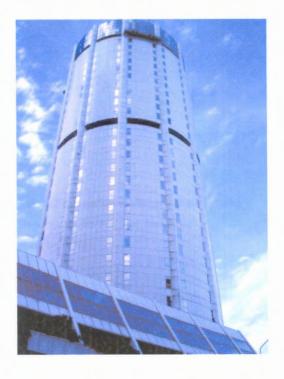


Fig 4.25: The Bank of Ceylon tower- the corporate image of isolated buildings occupied the square violating the proposal's idea of public space

One of the major outcomes of the proposal is the boulevard which creates a path way in order to improve linkages with the city. This boulevard is now known as the Bank of Ceylon Mawatha. Earlier a linkage from this site area to the Fort and Pettah was unavailable.

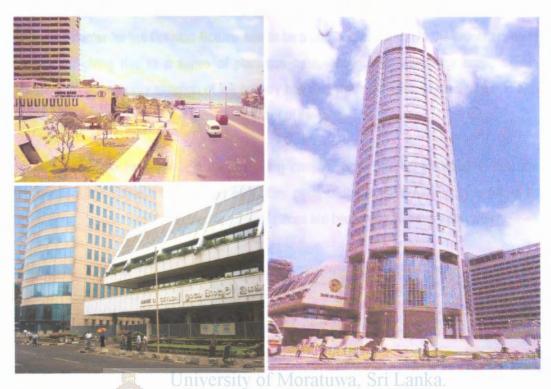
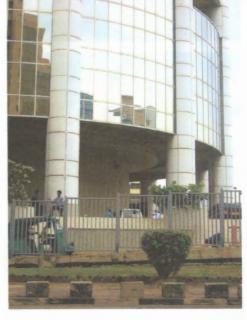


Fig 4.26: Turning from Janadhipathi Mawatha to Bank of Ceylon Mawatha Sertations

The proposal aims in changing the meaning of the space generating new functions that would create more opportunities in order to enhance the vicinity as well as to improve public participation.

Fig: 4.27 exterior spaces/ arcade of the building do not respond to the street, hence less public movement



The Proposed pedestrian links were not implemented resulting in low movement of people in and around the vicinity. This is heightened by the introvert attributes of the functions within the buildings (e.g.- banking, office, hotel functions, etc.) A common platform for pedestrians has not been created in turn giving rise to the urgent need of a public space within this area. The proposed center for the Echelon Square was to be a public space which in the present context is lacking, giving rise to a sense of placeless ness. Though not within the scope of this dissertation the security situation of the country has also made the area lifeless, which in turn has become a major barrier for the development of the area.

Taking the whole proposal and the prevailing context, what can be identified is that the connection that Echelon Square has with other parts of this area is lacking in terms of its attraction for public hence the need for public spaces are beckoning evermore prevalently.

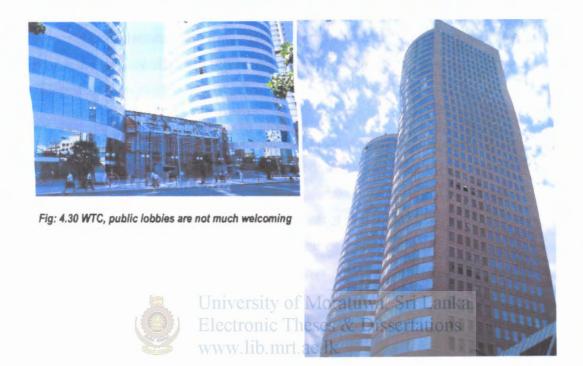
Fig: 4.28 Echelon square seen from Galle face grounds
Isolated buildings not responding to each other, absence of possible linkages.





Fig: 4.29 contrast between old and new

Though the practice in eliminating lost space is to minimize the isolation derived from functionalism, it can be pondered upon whether Echelon Square is an embodiment of that same stance. However the proposal itself is seen as a landmark in changing the past negative character of the site and transforming it into an area in making itself an edifice which would become a stimulant in the re-development of Colombo.



#### 4.2.4 Conceptual Design Interventions

The main aim of development proposals presented after the 1978 scheme was to render a definition of urban redevelopment to Fort as a whole as well as to Fort in relation to rest of Colombo.

Most of the development proposals for the fort area done by the government authority consist of zoning various activities which would lead to a monotonous character of places. This issue violates the essential stipulation of urbanism it self, due to the lack of variety in activities as well as functional connectivity between zones.

Detailed development proposal (Redevelopment of Colombo Fort, Sri Lanka) in 1996 carried out by Architrave Charted Architects in collaboration with Harris and Kjisik Architects of Finland and William Lim Associates PTE of Singapore undertakes a new vision in redeveloping Fort as "An Urbanity for the New Millennium" which consists of several key design concepts in order to create an integrated Urbanscape with primary attention given to the public arena.

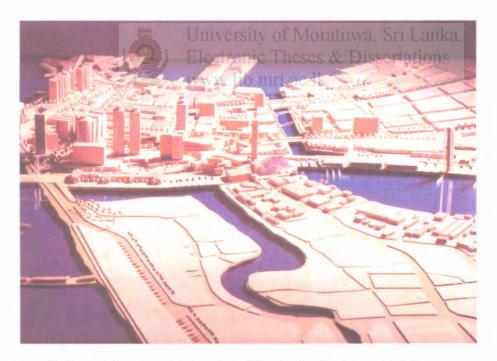


Fig 4.31: The model showing the master plan's vision of 'cultural environmental city'

Credits: Urbanity for the New Millennium, 1996

"To achieve this goal Colombo must evolve not merely as the elementary requisites of office space, communications and Transport but also a unique cultural environmental setting as the worlds leading financial centers have done: New York offers its cosmopolitan and effervescent lifestyle, Paris its fine urban setting and JOIE-De-VIVRE, Tokyo its traditions and Technological magic, Colombo has clear potential to create a world class cultural environmental city: the lifestyle possibilities offered by its water fronts both sea and lake, historic urban fabric, rich mix of functions, traditional and contemporary culture, tropical climate and landscape must be seized to create a financial center of distinctive and unrivaled character" (An Urbanity for the New Millennium, 1996)

One of the main focuses of the proposal was to create a continuous web of public spaces connected with each other, defined pedestrian paths and landscaped green connectors. A new business axis in order to promote commercial activity is created through a short line extension of cooperate offices along Beira lake, on a direct visual axis with echelon square.

The Echelon Square in the proposal noted as "CORE BLOCK" is enclosed by Janadhipathi Mw., Chatham Street., York Street., and the Bank of Ceylon Avenue. It consists of the traditional business district, the conserved Dutch hospital (similar to the area taken to be developed in previous 1978 proposal) traditional retail shopping areas on Chatham and York Streets and a network of intricate lanes of hospital street and canal row that were a decade or two ago the lively scene of street life in Colombo.



Fig: 4.32 Chatham Street, 1870 Lively scene of street life, two decades ago (Source: Centenary Volume 1865-1965)

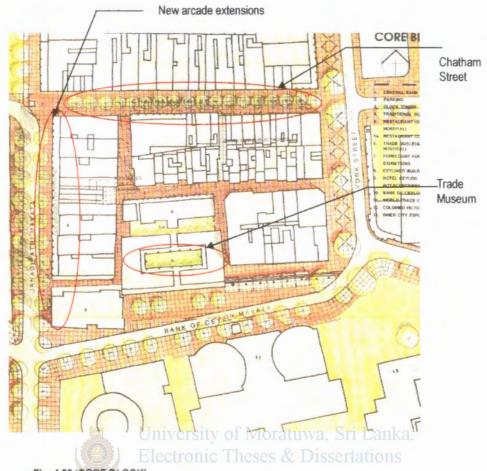


Fig: 4.33 'CORE BLOCK' WWW.lib.mrt.ac.lk

Credits: Urbanity for the New Millennium, 1996

The proposal indicates the position of the traditional business district to be consolidated by arcades of a dignified scale, broad pavements and formal planting along Janadhipathi Mw. as a clear response in terms of architectural character and functional character ensuring its sense of place.

"The addition of arcades will take place by forward extension of buildings up to a common building line i.e. The line of existing arcades" (An Urbanity for the New Millennium, 1996)

It further reinstates the heterogeneous built character preserving its identity. In order to achieve lively street life, individual buildings will be allowed canopies extending over the side walk up to Janadhipathi Mw. This can be seen as an attempt to "Humanize" the street and enliven the linkages in between. The continuation of the built fabric and the essential linkages have been

further extended to the opposite side of Janadhipathi Mw. by proposing new arcades for both existing and new buildings of the Central Bank.

"The contrast between new and old is one of the distinct attractions of Colombo which is more clearly manifested in the core block than in anywhere else in the Fort. We propose that the charm of this contrast be exploited to create a memorable and attractive setting for the traditional business district." (An Urbanity for the New Millennium, 1996)

In the proposal the Dutch hospital is reused as a Trade museum, and it is defined for its exhibition purposes on the extended forecourt. The rear block of the museum is reused as a restaurant. This entire block can be thought of as a public setting which takes out the existing functions of the Echelon Square buildings and facilitates them.



Fig: 4.34 The Old Dutch hospital is proposed to be used as a Trade Museum with an extended forecourt for Trede activities. The edaptive re-use of the old buildings would Integrate the old with new, strengthening thefunctional linkages

Credits: Urbanity for the New Millennium, 1996

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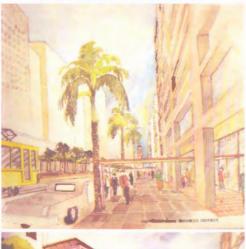
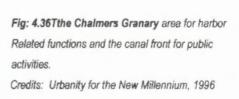


Fig:4.35 proposed traditional business district is to be merged by arcades, broad pavements, and formal planting along Janadhipathi Mawatha creating pedestrian friendly environment Credits: Urbanity for the New Millennium, 1996



The proposal it self can be seen as an exercise where in the architectural meaning of the place is ensured and enhanced. In the adoptive reuse strategies used, functional relevance is secured and augmented.

Taking this proposal as a whole, the essential qualities of humanist attempts of creating places which is the practice of traditional city design concepts as well as concepts in creating visually pleasing places are identified.

As a conclusion to the development of echelon square it can be stated that reinstating the memory of place which derives through the traditional context and culture that the new urban spaces lack and combining new construction into and around existing structures, treating the urban fabric as a dynamic web of connections retaining continuity, any proposals made, should accept urbanization and increase in societal complexity as inevitable.



a, Sri Lanka. issertations

Fig 4.37: Aerial view of Fort

Any attempt of redesigning should respond to its historic living core, emphasize its functional linkages with Pettah, creating cohesive public environment The proposal it self can be seen as an exercise where in the architectural meaning of the place is ensured and enhanced. In the adoptive reuse strategies used, functional relevance is secured and augmented.

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a, Sri Lanka. Issertations

Fig 4.37:Aerial view of Fort

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# 4.3 Beira Lake redevelopment

#### 4.3.1 Historic overview

By 1518 the Portuguese had built a fortress in the area of the present day Colombo. Later to protect themselves they dug a trench to separate the fort from the mainland. In 1522 Beira Lake was created by the Portuguese in an effort to repel the attacks of a local ruler, a strategy that was successful in that case. With the creation of the lake the city was protected on all sides, South and East by the lake and North and West by the sea. Although the native population was not able to take over the fort, it succeeded twice to drain the lake using canals. The San Sebastian canal which still exists today was one of them.

Both Dutch and Portuguese used the potential of the lake in their battle strategies. The Portuguese used the lake to transport their defense material and the Dutch used it to transport their soldiers and break through enemy grounds. The Portuguese fortifications were badly battered and they were finally moved to higher grounds. The low lying ground became vacant following the displacement of the defenses and was flooded as far as Kaymans Gate. During that period the lake was connected by a navigable canal system to the Kelani and Panadura rivers.

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In the first half of the 19th century Beira Lake was much larger than it is today it was used for boating related work activities as well as for leisure. On the banks of the lake villas were located in the most salubrious conditions when compared to the fort accommodations. The shores of Beira Lake were also the site of various recreational activities such as party's, concerts, theatre, balls, etc. During the early period it was the center of commercial life as well as a leisure resort.



Fig: 4.38 The lake and Slave Island, From the glacis,

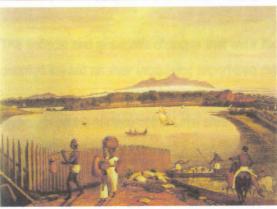


Fig: 4.39 Adam's Peak and the lake of Colombo, from the Galle barrier



Fig. 4.40 Colombo Lake, turn of the century

Credits: Glimpses of Colombo



Fig: 4.41 Colombo Lake, turn of the century Credits: Glimpses of Colombo

The numerous canals facilitated communications with the various water bodies surrounding Beira Lake which was considered to be an advantage and made the Lake an integrated feature in the life of the citizens of Colombo.

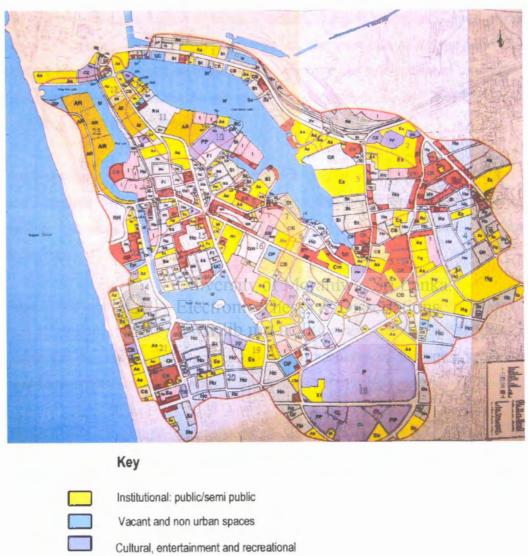
Various areas near the Lake were charming sites with greenery, walking paths and spaces for children to play. Today, these sites no longer exist due to changes in land use that took place over the years. For example, the open space known as the "Racket Court" is now the home of the dilapidated buildings of Chalmers Granary.

The political and economic changes that were brought about by independence were basically oriented toward an ever increasing export-free market economy and this has lead to important impacts on the Beira Lake environment. Over the years, many activities have contributed to encroach on the surface of the Lake area. Among the activities, the port activities, including the setting up of warehouses and of a boat yard in the East Lake area, the occupation by squatters of some stretches of land around the Lakes, and the road development and situation of parts of the Lake have all contributed to reduce the surface of the Lake over the years.



Fig 4.42: Aerial view of Beira Lake

Today, Beira Lake is the centre of various conflicting uses which include domestic, industrial, commercial, tourist and religious activities. Subsistence fishing, recreational activities, boat repair activities, the washing of vehicles and livestock, the dumping of garbage as well as the disposal of laundry and waste water into the lake, are among the many conflicting use that exist around and in Beira Lake. In many instances, these uses contribute to the deterioration of the Lake's water and surroundings.



Institutional: public/semi public

Vacant and non urban spaces

Cultural, entertainment and recreational

Commercial / banking and allied

Commercial

Transport utilities

Manufacturing industries

Residential

Fig: 4.43 Existing land use of Beira Lake and its environs

Credits: Beira lake restoration study, UDA

#### 4.3.2 Beira Lake in present context

The Beira Lake is one of the most distinctive landmarks in the city of Colombo. It is in four parts as East Lake, West Lake, Galle Face Lake, and South west lakes and spreads on a considerable area of the city center (Approx. 400 acres). Within the lake several islands are located dotting the vast expanse of water.

The city structure was controlled by trends of radically changing technological developments occurring in the outside world. The impact to the city was enormous, as it is the prime focal point of communication with the world outside. With the fast development of commercial, Economical, Physical structures as well as the transport system, the lake itself has lost its dominance as an important feature.

The Water-Space of Beira is neglected in terms of its physical use, visual appreciation, and a social integration. There are no linkages with the inner areas, other than footpaths for shanty dwellers. The whole space exists in isolation in terms of its physical, functional and visual application.

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Rows of buildings, mostly mundane and often unclean in combination with boundary walls, form a continuous visual barrier around the lake. Lines of warehouses continue to disfigure the boarders of the lake. The unattractiveness generated from boatyard buildings, shanties and recent developments add to the further disfigurement of the enchanting waters.

Prevailing physical setting does not foster a sense of well being and totally discourages the contact and connection with the lake in terms of the physical, social and visual employment of the surrounding.

It is in the form of ill-defined and non-defined space, as buildings and spaces along the waterfront have not responded to the lake space and will not frame a meaningful experience as an impressive urban space.

In most situations buildings respond to the space as a backyard or rear space. Their architectural expression, feature, composition and functional arrangement of buildings, ensures negative attitudes toward this lost space.

Activities along the waterfront completely make the space. Some activities are accompanied with antisocial, anti-economical backgrounds where as others such as warehouses, industries and shanty community are symbolized as expressions of waste depositors. A small part of the space has been captured by the modern developments. Also due to the security restrictions some parts of the lake has become unapproachable to the public.



Fig: 4.46 buildings along Beira- D.R Wijewardane Mawatha, acts as physical as well as visual barriers between water space and the city.



Fig: 4.47 Ware houses continue to blight Borders of the lake, the Ceylon shipping Lines buildings on the North east shoreline of the East Lake



Fig:4.48 overcrowded, ramshackle buildings on the island of south west lake

# Beira and its positive spaces





Fig:4.49 attractions of Beira, steel bridge acts as a transitional space

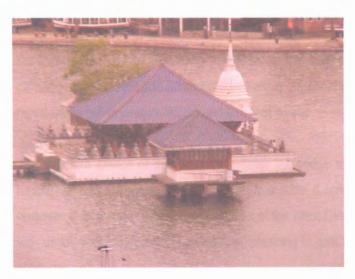


Fig:4.50 the Seemamalakaya , inherent waters natural quality of serene

The result of the modern movement approach in designing buildings is the creation of 'objects' which are emerging in isolation without considering the surrounding space. Buildings along Navam Mawatha are the isolated functionalist buildings which don't respond to each other as well as the one that don't have any links among them.

The overall "Water Space" is not properly linked with the city's physical form and activities, in making a coherent urban structure. It can be seen as a spatial element operating as lost space in the urban fabric.

Yet, with all this, Beira waters still hold true to the axiom that "Water as a landscape material has its own very special qualities of change, movement and a variation under the play of wind and light which set it apart from all other materials" (Thornley, 1979).

Within the Beira Lake four zones can be identified.

#### Galle Face Lake

This lake is bordered by the Presidential Secretariat building and the new Defense Ministry Headquarters The cascading vegetation on the retaining wall of the Hilton Sports Centers forms a verdant screen for its sports complex. Theses & Dissertations

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#### West Lake

It is a pity that the interesting journey along the connecting canal from the East to the West Lake cannot be experienced by the general public owing to high security in the West and Galle Face lakes.

The northern stretch of the West Lake is abutted all along its western side by the backyards of the Ministry of Defence and Army premises, for the most part ill-kept and untidy, with regular garbage heaps, debris and other eyesores along the shoreline, including numerous wastewater pipes jutting out at chaotic angles and different levels.

The southern stretch of the West Lake (after the bridge near Elephant House) benefits from having a road (R.A. de Mel Mawatha) alongside it, creating a linear reservation which, however, is in a state of neglect. The banks of the West Lake all need stabilization and together with untidy vegetation, cry out for detailed planning to give them strength and an orderly urban character.

#### South-West Lake

The south west lake is seen as mainly and overcrowded area with ramshackle buildings coming up.

### East Lake

Lines of old warehouses continue to blight the borders of the Lake. Certain high-rise buildings, being slab-like and aligned parallel to the Lake, constitute a barrier to some important view lines.



#### 4.3.3 Implemented redevelopment strategies

The long-established Rowing Club and the Army Messes, appears to have made a sustained effort to use the vast potential of the lakes and their banks The Rowing Club manages to have a three lane 1000 m competitive rowing course which is not completely straight (although it should be) due to sunken barges obstructing the way.

Attempts to use part of the East Lake for sailing were apparently abandoned owing to unsuitable wind conditions, and although the Trans-Asia Hotel has a floating restaurant it seems to have given up its padalos and pleasure boats owing to the polluted water.

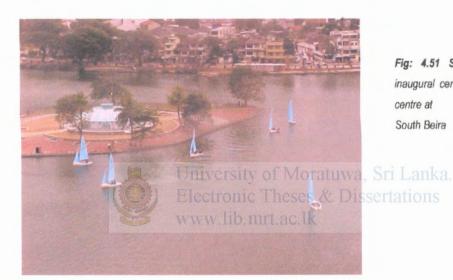


Fig: 4.51 Sail boats on the inaugural ceremony of exhibition centre at

South Beira

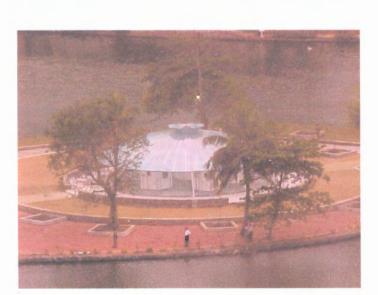


Fig: 4.52 steel dome- an exhibition centre on water

Attempts have been made in order to develop Beira as water based recreational zone. Seema Malakaya is located in this area as well. The Existing Island alongside the Seema Malakaya serves as a focal sub center of the Beira Lake and houses a steel dome which is connected to the land via a steel cable bridge. This provides a metaphoric link between the city and the water body.



Fig: 4.53 Old Seemamalakaya before it collapsed in 1954



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Fig:4.54 Echoing the tranquil theravadic reflections

The spiritual quality of the serenity of the Beira water body is taken In order to embody the Theravadic teachings and present a tranquil environment. Seema Maalakaya is a part of the Gangarama temple which hosts the annual Navam Perahera which starts from the Seema Maalakaya itself. During this period the Perahera Mw which abuts south Beira comes alive with the festivities though the built fabric doesn't respond to such activity.

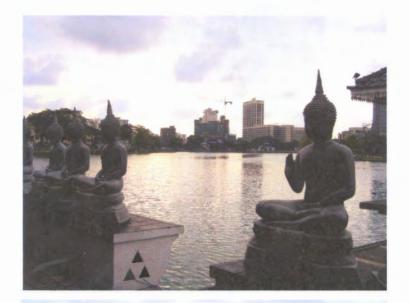


Fig: 4.55 serenity of Beira water body, embodying within the design

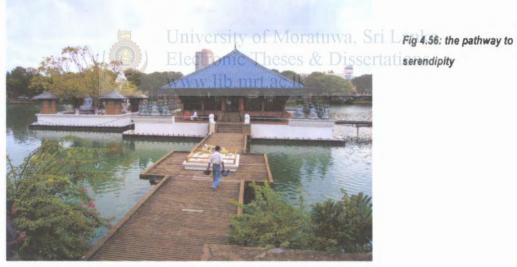




Fig: 4.57 endless with the Water space



Fig 4.58: steel experience -the way to the exhibition centre



Fig 4.59: places to relax

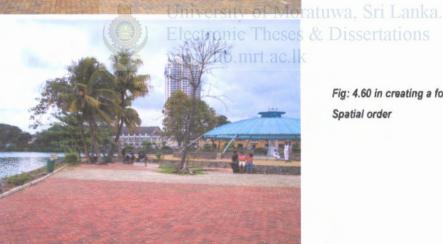


Fig: 4.60 in creating a focus to establish Spatial order



Fig: 4.61 water's edge with responsive structures

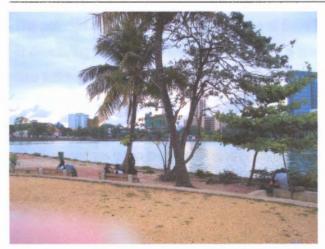


Fig: 4.62 responses to the user needs A personal territory in a public space



Fig: 4.63 established physical as well as visual linkages to maintain continuity

The potential that the Navam Mawatha edge of Beira holds has been taken into consideration in developing the previous site which embodied a dilapidated character in creating a block of new buildings. Various architectural institutions intervening in its development has given rise to a set of isolated building of varied character. The function of the entire development can be seen as commercial and trade where in they do not respond to the water context. This development has taken place as a result of shifting commercial activity from the busy Pettah.



Fig 4.64: pedestrian space obstructed by steel fencing discouraging public interest on place.

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Most of the buildings tend to grow vertically as tall slender structures except for a small number of horizontally implemented buildings at the first stage of the development. The development does not depict any expressive quality due to the monotonous scale of the buildings which doest not form any hierarchical relationships. In this absence of clear variation among the buildings, wholeness and coherence are not achieved. The buildings do not define the public space in any way. May be this is due to the fact that the function dominates it, hence creating vast deficiencies in community functions in the area. The most inspiring central area did not emerge from the buildings but from the un-built land left over in development that is presently used as car parks. Since the buildings are blind towards the location they are route-less and it does not heal the environment. The small pavement tends to restrict pedestrian movements and due to this has rendered the area lifeless.

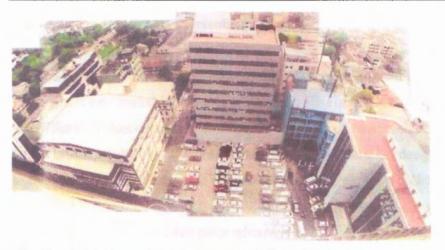


Fig: 4.65 surprising larger wholes- the centre car park- life less inner court

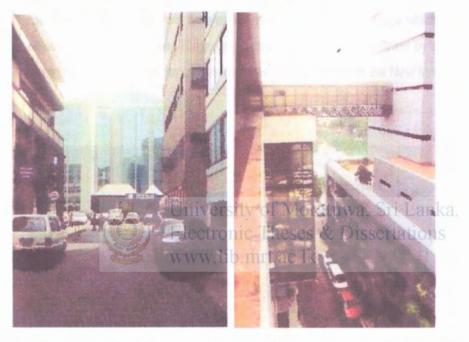


Fig 4.66: violation of the pedestrian space by Fig 4.67: functional linkages with the neighbor vehicles



Fig: 4.68 isolated buildings with no possible linkages – clearly depicting cheracteristics of 'functionalism'

### 4.3.4 Conceptual Design Interventions

Detailed development proposal (Redevelopment of Colombo Fort, Sri Lanka) in 1996 carried out by Architrave Charted Architects in collaboration with Harris and Kjisik Architects of Finland and William Lim Associates PTE of Singapore undertakes a new vision in redeveloping Beira as "An Urbanity for the New Millennium" which consists of several key design concepts in order to create an integrated Urbanscape with primary attention given to the public arena.

"Beira place development takes place advantage of the natural level difference between the site and the street level. Three levels of parking are proposed within the level difference. The upper level of Beira place will be a open theatre with a floating stage which could be used for festivals and performances. The edge of the amphitheatre is defined by a five story curved building and a tower block for commercial use." (An Urbanity for the New Millennium, 1996)

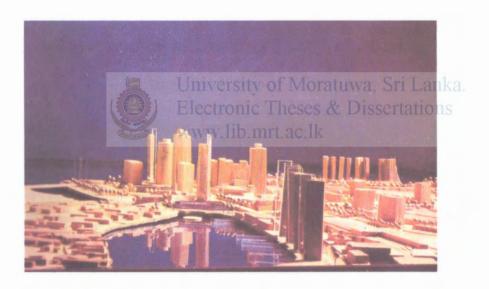


Fig: 4.69 Beira Place development- open theater with floating stage, responding to the function Credits: Urbanity for the New Millennium, 1996

The Green City challenge and Waterscape network Colombo, Town Planning game and Master plan study carried out by the Dieter Magnus and GOETHE institute Internations in collaboration with UDA, SLIA and other relevant Government authorities done in 2002, adopts a humanistic approach in making a urban development proposal for the revitalization of the urban area between the Beira lake and the harbor.

The main aim of this proposal was to create a continues uninterrupted green landscape from the Beira lake to Galle face green and continuing towards the sea with new shady avenues focal points and rest areas. The proposal, rather than concentrating on the usual linear planning and perceptions, gave consideration on a cypermetic mode of town planning. One of the major proposals made was the new canal between south and east Beira Lake with new jetties on the way up to the harbor as a utilized network improving linkages connecting green spaces in the urban scape.

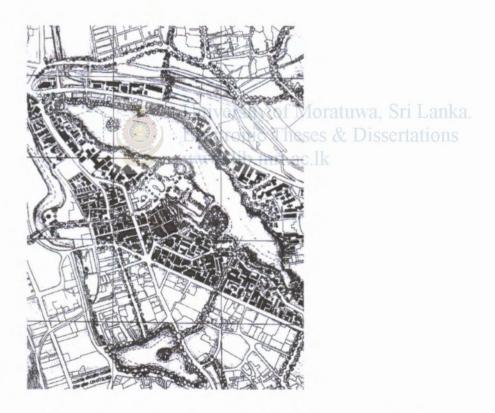


Fig: 4.70 continues uninterrupted green landscape- linking east Beira and south Beira
The Green City challenge and Waterscape network Colombo-2002

Similar to the GOETHE urban proposal the Region structure plan for Western region Mega polis 2030 – development guide plan for Colombo core (CESMA) adopts a Green Finger concept where open space and environmental areas are planed into the green connector system with improved pedestrian friendly concepts in built-up areas for ecological enhancement in order to provide relief from the built environment.



Fig 4.71: View of Colombo's central

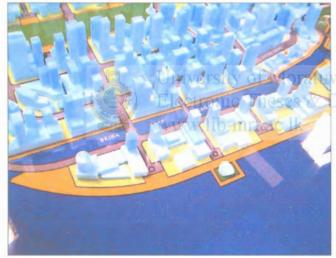


Fig: 4.72 zonal heights control along proposed beira lake canal, less height of buildings Edging the water front in maximizing the Views of the water space

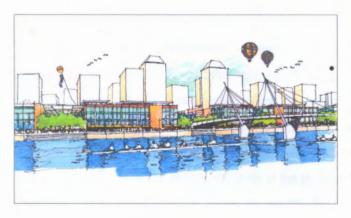


Fig: 4.73 The facades fronting major arterial roads shall be treated as main building elevations. Façades fronting water bodies (canals, lakes, and beach) shall be treated to relate to pedestrian promenades / malls etc.

### Conclusion

The socio-spatial bonds in the contemporary urban society are declining. Urban spaces are becoming less momentous, they have lost their uniqueness. The interrelationship of people and places are parting, enforcing deterioration of the public realm, resulting in the injecting of lost spaces in the locale. Historically cities were meant for people. Within the city the most important elements were streets and squares, which were later invaded by contraptions of modern science such as the automobile, eliminating the human aspect form these spaces. Functionalist ideas, international styles of architecture, globalization, makes many urban places similar in material and form. A sense of "dwelling" is often lacking, in that the wholeness of place has become fractured.

The study is seen as an attempt which seeks to identify the concepts and definitions of positive urban spaces as against the causes for the formulation of negative spaces. It investigates the adverse factors which results in urban lost spaces in the contemporary urban context. The study further focuses on the relationship of man to the public spaces, its activities and spatial attributes, and how he perceives it as a place, in order to determine the 'negative character' of a lost space in terms of the built fabric, the streets, squares and the water fronts.

The study makes an attempt in figuring out and researching along European spatial theories developed to redesign the lost space, and makes a further attempt in formulating a frame work for redesigning lost space. This in turn is applied to the Sri Lankan contemporary urban situation where a considerable attempt has been made during recent years for the

development of lost spaces.

The echelon square redevelopment is seen as an urban revitalization intervention in restructuring a historically dilapidated site which used to house military barracks. This development was conceived as a project where the main focus was aimed in creating a public center. However the result of the revitalizing project was a group of isolated buildings which did not respond to the context much. The afore derived framework is used as a guideline in making observations as to what the lacking elements of the revitalization project were. Using the same framework, it is again used in order to identify the strengths of conceptual redesign interventions made in order to rectify the weaknesses of the echelon square development.

One of the best examples as a green open space and as a water body in the heart of Colombo, Beira is seen as a historically relevant iconic public space. Even though presently in a dilapidated state it clearly presents a potential in being developed as one of the main recreational public gathering spaces in Colombo.

In conceiving Beira as a developed public space one of the main aspects that should be given consideration is establishing linkages between the water space and the existing context due to the fact that the expressive qualities in the water space can be used in order to enhance the character of the public space. This can be seen as absolutely relevant since the water space is physically and visually isolated. But in an urban restructuring intervention if only focusing on the establishing of linkages is done, it would create Non-spatial, Non-experiential urban situations. Hence, any intervention should also attempt in responding to the context and controlling the physical social geometries. If this procedure is practice accordingly it will moderate the context in turn.

In American Urban Architecture Wayne Attoe and Donn Logan goes on to describe an urban catalyst,

"A catalyst is an urban element that is shaped by the city (its "Laboratory" setting) and then, in turn shapes its context. Its purpose is the incremental continuous regeneration of the urban fabric" – Attoe and Logan (1992)

Thus in concluding it can be seen that an urban catalyst essentially derives from the context and the designers aim should be not only to develop a positive urban space but to create a living entity which shapes its context by way of modifying the existing context, transforming into positive values and reinstating the coherence of the city fabric.



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