

AN ANECDOTE: PAST. PRESENT. FUTURE.

By

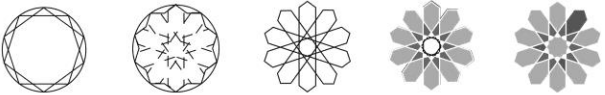
MUKHBIT FAWWAD BUBERE.



University of Mumbai

2017

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from Final Year B. Arch of AIKTC School of Architecture and was carried out in college under my guidance.

Sign of the guide:

Name of the guide: Prajakta Wadwalkar

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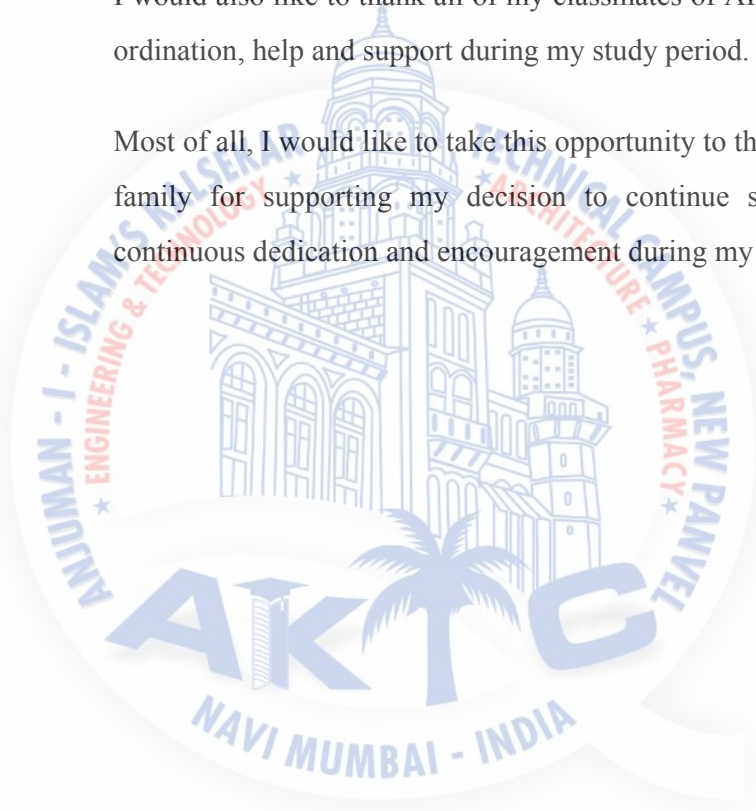
ACKNOWLEDGEMENT

I would first of all like to thank my guide Prof. Prajakta Wadwalkar. She has given me immense guidance and support throughout my thesis study.

This thesis was an enjoyable work to complete for many ways. It was pleasure to be able to complete such a research with the support of all my AIKTC SOA teachers, their help made it easy to finish this task.

I would also like to thank all of my classmates of AIKTC SOA for their co-ordination, help and support during my study period.

Most of all, I would like to take this opportunity to thank my parents and my family for supporting my decision to continue studying and for their continuous dedication and encouragement during my entire study.



ABSTRACT

Every city has a certain identity. It may get buried by intensive development and expansion of the city but it lies unseen in the streets, buildings and its culture and it has a story to tell. The most visible source of our history is the Buildings and the Structures left behind by our Predecessors. Kalyan is no exception.

A Century of industrialization & technical advancement brought forth rapid urbanization in the entire country, and more so near the metropolis such as Mumbai, Delhi, Calcutta etc. The city of Kalyan – Dombivali, owing to large urbanizable zone and its proximity to greater Mumbai forms one of the important urban agglomerations of Maharashtra state. . The smooth rail connectivity to greater Mumbai and being an important junction enabled a lot of influx of population, depending mainly on Mumbai for livelihood. The population influx lead to a tremendous pressure on the existing public services fabric of city. Thereby altering the fabric and making it like other characterless cities on the central line.

Recently the smart city proposal surveys and mapping stated that Kalyan has a lot of potential into its long water front and that the city lacks Recreational and Public places. The City Development Plan aims to be “*AN ECOFRIENDLY, HIGH-TECH, CULTURAL CITY*”.

The Thesis aims at Revitalization and Activation of pockets within the Durgadi fort premises and its surrounding to focus on To provide an intervention which constantly responds to the surrounding and finds a way to inhabit itself all round the year and focus on interpretation of the multilayered history and culture of the city and to act as a catalyst to increase interaction, educate & empower the local Communities

The intervention aims to provide infrastructure needed for all age groups. It aims towards an inclusive approach wherein communities interact, integrate and prosper. It tries to create a social connect of the people to the Creek. The purpose of the project is to portray and create awareness amongst people about the Glorious multilayered history and culture of the city and its predecessors and why it needs to be conserved. And to provide a common Socio-Cultural platform to the people of the city to boost social harmony, interaction and a firm base to empower the local communities.

It aims to be a point of cultural and social interaction where artisans showcase their Art, Authors hold court, where children are regaled, where people gravitate to be informed, entertained, and enlightened.

“The fort, being a landmark adjacent to the creek testifying the glorious history of the city, if reinvented in its Physical and Geographical Characteristics can enable activation of certain spots in and around it, which acts as a catalyst with an inclusive approach wherein communities interact, integrate and prosper thereby retaining the cosmopolitan nature of its.”

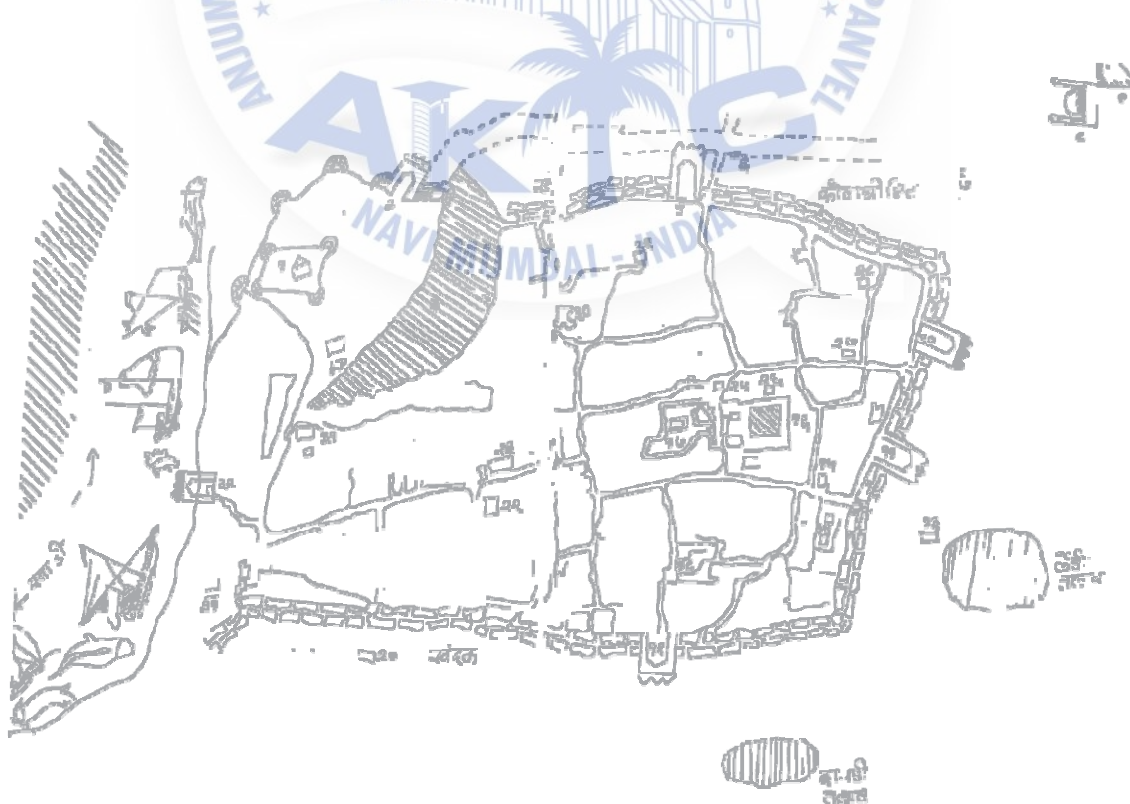
The study has done through literature reviews and Intensive informal interviews, which helped in to identify precedent cases. The studied cases of precedent examples lead to formulate the performance criteria that help to evaluate the existing situation and to formulate the design guidelines which goes beyond mere problem solving but looking beyond into the social-cultural-economical aspect of the Communities.

Key Words: Revitalization, Activation, Catalyst, Community Public place, Activities, Social Harmony,

INTRODUCTION

Every city has a certain identity. It may get buried by intensive development and expansion of the city but it lies unseen in the streets, buildings and its culture and it has a story to tell. The most visible source of our history is the Buildings and the Structures left behind by our Predecessors. Kalyan is no exception. It is one of the historically and culturally important cities of the Konkan region of the coastal belt of Maharashtra. It is a Historic city on the Ulhas Creek in the central MMR.

Kalyan appears in nine Kanheri inscriptions which from the form of letters, have been, attributed to the First century, Second Century, Fifth or Sixth Century. According to the Peripelus (247AD) , Kalyan rose to importance about the end f the second century of the Christian era. In the Sixth century, Kosmas Indikopleustes (535 AD) mentions Kalliana as one of the five chief trade marts of western India, The seat of a Powerful king, with a great trade in Brass, Blackwood logs and articles of clothing. About a hundred years later (640 AD), Kalyan has been identified by Hiwen Thang as the Capital of Maharashtra which is touched on the west by a great river.

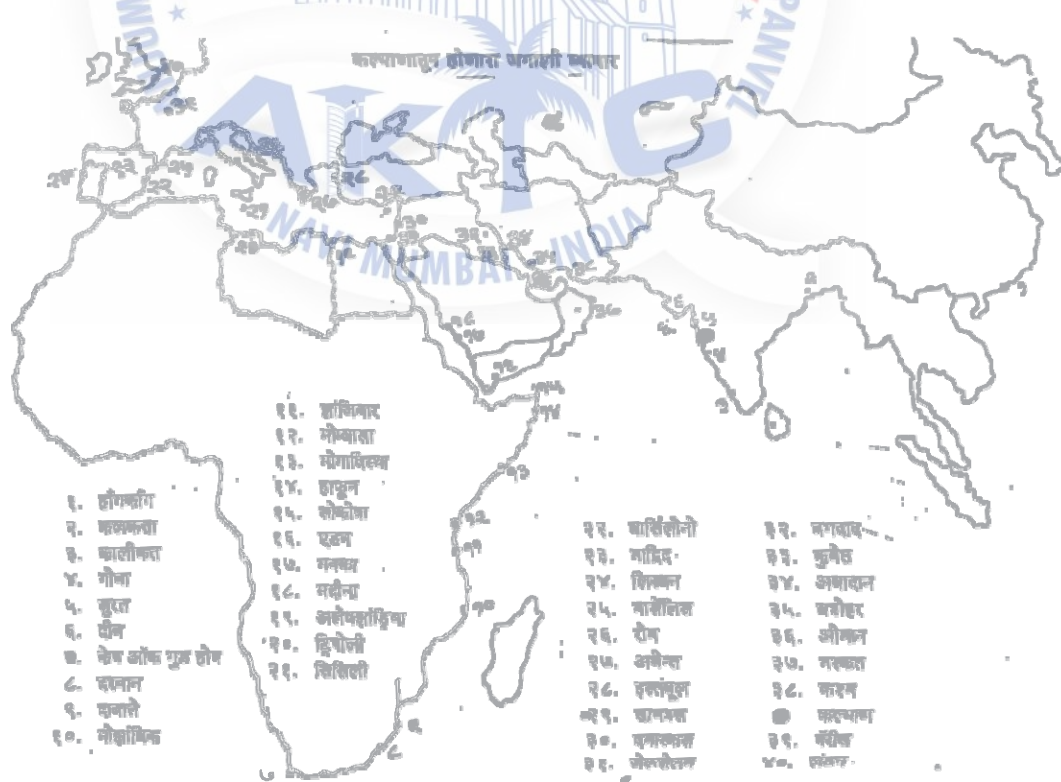


Map 1 :Old map of Kalyan showing the city wall, fort, creek.

It is a Gateway to past. A strange time warp, Old quarters merge seamlessly with the gleaming high-rises in a loop of space and time. Tongas plying outside the railway junction retain an old world charm in a Sprawling Dormitory town. It is a city where glam and orthodoxy both co-exist without any guilt. Scratch it and beneath the characterless commuter town, you find history breathing like a dormant spring. It is the city for the best encounter with the rolling centuries trapped in the layers.

Over the centuries, the port city of Kalyan has been ruled by Deccan sultanates, the Mughals, the Portuguese, the Marathas and the British, with each subsequent dynasty leaving an indelible imprint on its built form. But in the last two decades, these historical buildings have been slowly replaced by apartment blocks making Kalyan indistinguishable from the string of characterless commuter towns on the Central line.

Kalyan played a crucial role in medieval age and modern times, as it was a natural port, and one of the five chief marts on the western waterfront, it attracted people from everywhere. Its surviving monuments and Fort are a vital link with the past. Most of them is badly neglected and the commoners not aware of its own rich culture and architectural heritage are saddening.



Map 2 :Old map showing international connectivity to Kalyan.



The town of Kalyan was surrounded by a stone wall commissioned by Nawab Mohtabar Khan, the minister of Aurangzeb and completed in AD 1694 during the reign of Aurangzeb. The total length of the wall was about 2123yds, 33ft wide and 20ft deep ditch surrounded it. Under English the wall was pulled down in 1865. The town wall had eleven towers and four gates and enclosed an area of seventy acres, the four main gates were. Adhar gate, Ganesh gate Panvel gate and Bunder gate. In the North-West corner, the Fort rises in a small flat topped mound about 15m high. on the top of the mound, on the west crest which is 30m high from the river is the prayer wall or the Eid Gah (64fs x 13fts x 7 fts). Under the Marathas, a Durga temple was built opposite to the prayer wall which gave the fort its name Durgadi Killa.

The short sea passage made Kalyan creek a favorite resort for refugees and settlers from Gujrat and also from the south Kokan. Of Muslims ascendancy [1320-1700] traces still remain in present Kokni Muslim population of Old Kalyan and perhaps in the class of Hindu writers known as Kayasth Prabhus. A considerable number of Sonars, who claim to be Daivdya Brahmans, settled in Kalyan during the Portuguese conquest of Goa in 1510. Of Maratha power the chief relics are of Brahmans [priest] of the Kokanasth and Deshasth classes. The Parsis and the descendant of Arab and Persian Muslims the Koknis in old Kalyan still form separate and well marked community in looks and features. Majority of the Parsis have migrated from Kalyan. These facts point out the wealth of Kalyan city.

Begginig from BC 200 with the early Hindu dynasties to Mohammadans and Portuguese rise, Kalyan has witnessed lots of upheavals .Maratha and British rule brought architectural and social changes in its fortunes. From being a small colony to a large modern city, Kalyan has a rare fascinating past buried in its various locations. Initiative can revive this link with the vibrant lost centuries that surge like the tidal waves in the lost labyrinth of Time. The Agra road divides the city of Kalyan into two prominent zones the Old Kalyan and the New Kalyan. The Old city of Kalyan has many prominent wadas, a Fort, Old houses, Manor, Narrow lanes, Bazaars, Temples, Masjids, Agyari, *Fasil* (town fortification), the traditional Tongas which gives a peep into the glorious history this city has had.

Urbanization began with the opening of the railway line and has indeed ruined the city's glorious history. In 1855 oldest Municipal Corporation was established. A Century of industrialization & technical advancement brought forth rapid urbanization in the entire country, and more so near the metropolis such as Mumbai, Delhi, Calcutta etc. Kalyan Dombivli, a twin city & being close to Mumbai, the economical capital of the country, is no exception and has shown extraordinary and worth mentioning progress along the same lines. An important satellite township of Mumbai city and an important railway junction. The city of Kalyan – Dombivli, owing to large urbanizable zone and its proximity to greater Mumbai forms one of the important urban agglomerations of Maharashtra state. But due to rapid urbanization and high growth rate, is facing various problems, that a very rapidly growing city with its limited resources has to combat with.

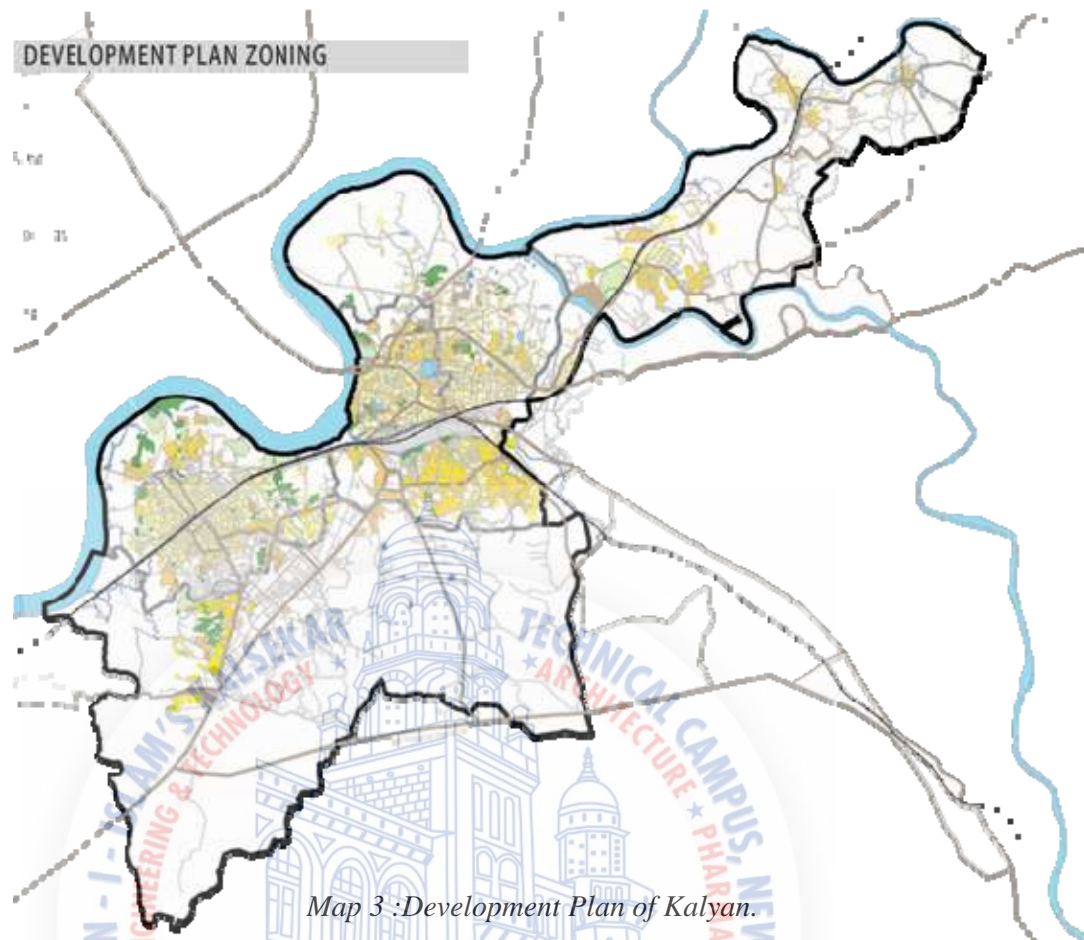


Fig 1 :Showing Population influx for the KDMC.

The smooth rail connectivity of the city to Thane and Greater Mumbai has enabled a lot of influx of population, depending mainly for livelihood on Mumbai and surrounding areas. During the last twenty five years, a steep growth in the population of the city is observed due to availability of ample job opportunities in Mumbai & surrounding industrial areas like Thane & Navi Mumbai.

The population factor lead to the shortage of all public services creating enormous pressure on the existing system. Severe traffic congestion on almost all major roads is observed. Inadequate public spaces for people in the city has lead to deteriorated social life. Inadequate parking space for vehicles in the old city and stations area is also adding to the traffic congestion.

The City Development Plan in its SWOT analysis Report has observed a potential in the 32 km long waterfront that the city has. It states that Kalyan lacks Public Recreational Facilities and infrastructure. While other Cities like Thane and Navi Mumbai do possess that assets.



Map 3 :Development Plan of Kalyan.

The above mentioned factors that are

- 1) *The subtle death of the Architectural history of the city by rapid characterless buildings.*
- 2) *The crunch and lack of recreational and public infrastructure viz. Parks, Plazas, Public Utilities.*

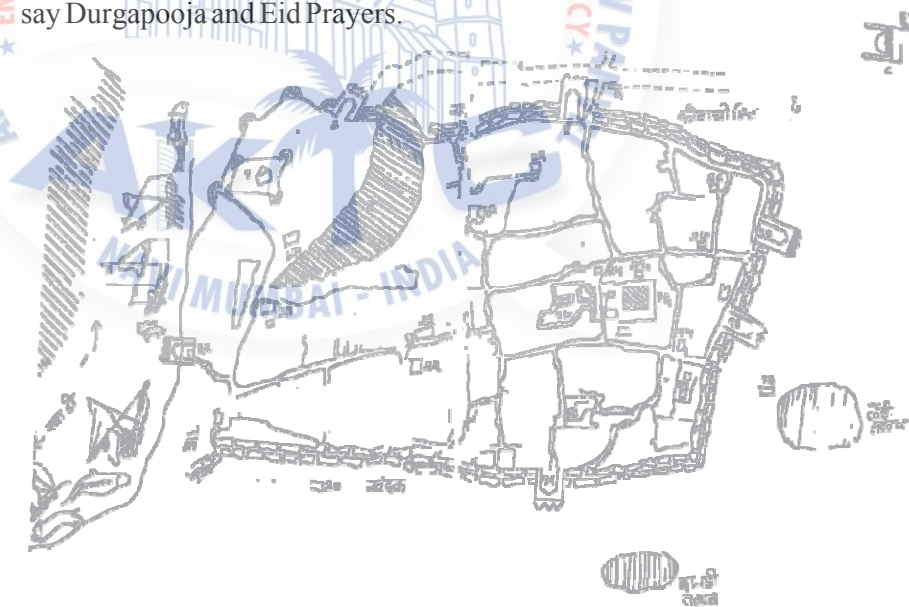
Lead to the selection of site which has Durgadi Fort, a landmark which testifies the glorious history of the city and is on the banks of Ulhas creek which gave the city its identity and is the only point where the city interacts with the water.

The site (Durgadi Fort) is located on a very busy Node which connects the four important parts of the City. To its North, it has the Khadakpada Area (An emerging residential hotspot). To its East, it has the Railway station area and the city. To its South, it has Durgadi Fort and the Maratha/ Mughal Precincts. To its West, it has the only access from the city towards Mumbai, Bhiwandi. And the Ulhas Creek Fore fronting the Site. The site is the only point where the people of the city interact with the creek.



Map 4 :Map of Kalyan showing the Site and roads.

Under the Mughals, the city of Kalyan was surrounded by a Stone fort wall by Nawab Mohtabar Khan Alamgir (1629-1694) during the reign of Aurangzeb.. In the North-West corner, the Fort rises in a small flat topped mound about 15m high. on the top of the mound, on the west crest which is 30m high from the river is the prayer wall or the EidGah (64fs x 13fts x 7fts). Under the Marathas, a Durga temple was built opposite to the prayer wall which gave the fort its name DurgadiKilla. Presently the fort is used mostly for the religious purposes say Durgapooja and Eid Prayers.



Map 5 :Old map of Kalyan showing the city wall, fort, creek.

Later as the city expanded, the fort walls had to be demolished to pave way for roads and other infrastructure. to the north of the Fort was the Ganesh gate. which later was used as Ganpati Visarjan area. As the city grew, the area was developed into a planned- stepped jetty with ancillary recreational activities such as Ferrv rides. Gardens etc.

HYPOTHESIS

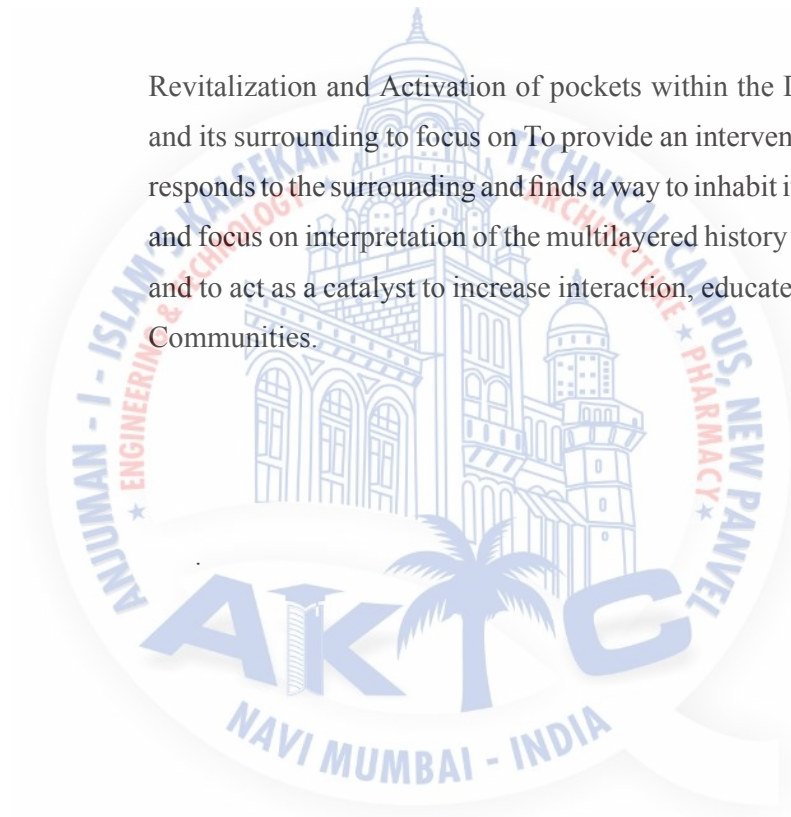
“The fort, being a landmark testifying the glorious history of the city, if reinvented in its Physical and Geographical Characteristics can enable activation of certain spots in and around it, which acts as a catalyst with an inclusive approach wherein communities interact, integrate and prosper thereby retaining the cosmopolitan nature of its.”

The area around the Fort i.e. the Ganesh ghat is in a constant use for a varied activities jogging, cycling, recreation, leisure etc. While the Fort is being used in for specific Religious or Festive days. The thesis aims at acting as a catalyst merging them together. Wherein the intervention provides Infrastructure needed for all age groups. It aims towards an inclusive approach wherein communities interact, integrate and prosper. It tries to create a social connect of the people to people.

The City has ruined its Historical past. The idea is to dig back into it. Bring it to the fore front. Give people one more reason to be proud of their Predecessors. It was the Ulhas Creek that brought Kalyan its glory and identity as a major port on the Western Waterfront before it being eclipsed by the onset of Thane and Bombay by the Britishers. So as to connect the people of the city to the creek.

AIM

Revitalization and Activation of pockets within the Durgadi fort premises and its surrounding to focus on To provide an intervention which constantly responds to the surrounding and finds a way to inhabit itself all round the year and focus on interpretation of the multilayered history and culture of the city and to act as a catalyst to increase interaction, educate & empower the local Communities.



OBJECTIVES

- The objective is to present the city with a platform that is reminiscent of its past, catalyst to present and blooming in future.
- To provide an intervention which constantly responds to the surrounding and finds a way to inhabit itself all round the year.
- The whole purpose of the project is to portray and educate people about the Glorious multilayered history and culture of the city and Predecessors and why it needs to be conserved. And to provide a common social platform to the people of the city to boost social harmony, interaction and a firm base to empower the local communities.
- To be a point of cultural and social interaction where artisans, poets, authors hold court, where children are regaled, where people gravitate to be informed, entertained, enlightened and also provide a unique experience making it easy and enjoyable for customers to shop at such places.

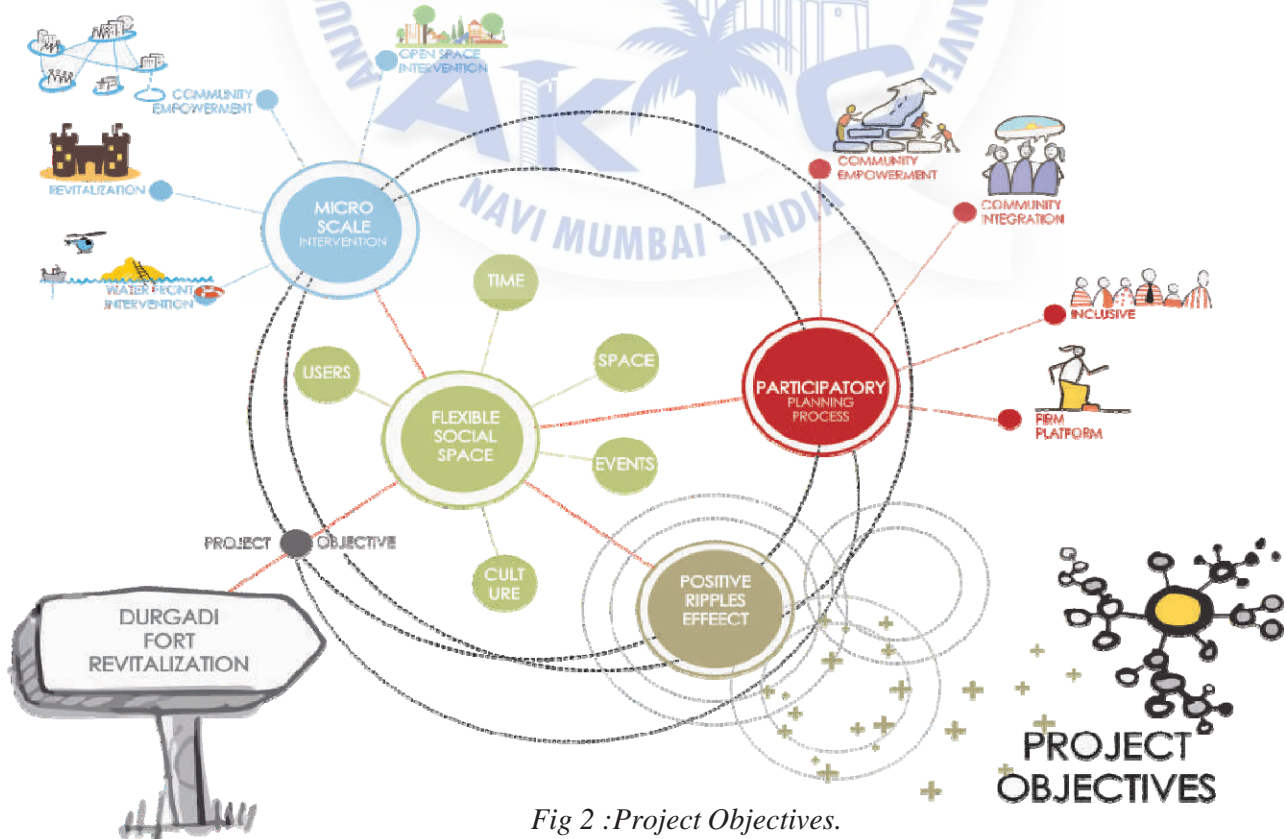


Fig 2 :Project Objectives.



METHODOLOGY FOR CASE STUDIES

LIST OF CASE STUDY

LIVE CASE STUDY

- Sabarmati Ashram Museum, Ahmdebad .
- Sabarmati Riverfront Park , Ahmdebad.
- Sanskriti Kala Kendra , New Delhi.

NET CASE STUDIES

- Superkilen Park, Copenhagen.
- Fort Mc. Henry Education and Interpretation Centre, Baltimore.
- Pombal Castle Visitors Centre, Pombal, Spain

BOOK CASE STUDY

- Phaneo Science Centre, Wolfsburg.
- Deer Valley Rock art Centre, Arizona.
- M.U.S.A.C., Leon.

SELECTION OF CASE STUDIES, WHY?

THESIS TOPIC

“The fort, being a landmark adjacent to the creek testifying the glorious history of the city, if reinvented in its Physical and Geographical Characteristics can enable activation of certain spots in and around it, which acts as a catalyst with an inclusive approach wherein communities interact, integrate and prosper thereby retaining the cosmopolitan nature of its.”

CONCERN

The built intervention needs to respond to a varied palette of functions. The intervention is built on a permanent site, but the environment around them continues to change as other buildings around are redeveloped or replaced, streets change, neighborhoods change and so does the program and function of the structure. Hence the program needs to be flexible enough to respond and accommodate the requirements of the users and the built structure too needs to respond to its surrounding context and to insure a way to inhabit itself all around the year which in turn would ensure interaction between the people and Fort, Social harmony and empower the local communities throughout the year.

SITE

Durgadi Fort, Kalyan

CASE STUDIES

Conclusion drawn from the interviews is that *there is a need of an intervention which increases interaction, portrays the history and culture of the city and acts as a common social interacting platform which boosts social harmony, interaction and empower the local communities where local Artisans display their work, poets, authors hold court, children are regaled, where people gravitate to be informed, entertained, enlightened.*

These required different examples of Precedent case studies taking different parameters are discussed above the interviews.

The cases studied cater different problems in different contest with different scales e.g:

1. **Urban Parks** like Superkilen and Sabarmati Riverfront Park.
2. **Interpretation centers/ Visitors centers/ Museums** with **Fort / old / stronger elements** present like Fort Mc Henry Interpretation Centre, Pombal Castle, Visitors Centre, Sabarmati Ashram Museum.
3. **Art Centre/ Science Centers** like Deer Valley Rock Art Centre and Phaeno Science Centre, MUSAC, Sanskriti Kala Kendra.

Essential academic steps conducted during the case study are simply pointed out as shown below.

1. Preliminary stage:

A. Collection of data and information relevant to the project.

- A. From various government and non-government authorities.
- B. References from library and Internet.

B. Case studies

- A. Live case studies
- B. Book case studies
- C. Internet case studies

After collecting all the data from the preliminary stage, the proposed requirement of the design was formulated based on all above studies.

C. Site Visits

- a. Site Analysis
 - a. Site parameters/ field visits and study
 - b. Data required for site planning shall be recorded diligently.
 - c. Soil investigation
 - d. Assessment of locally available construction materials.
 - e. Functional parameters relevant to the design according to the user requirement
- b. External and Internal Communication.
 - a. Planning and design parameter deals with planning code and design code.
 - b. Climatic analysis
 - c. Traffic flow analysis
 - d. Weather, fire and damp resistances
 - e. Thermal and sound insulation

2. Secondary stage:

A. Planning

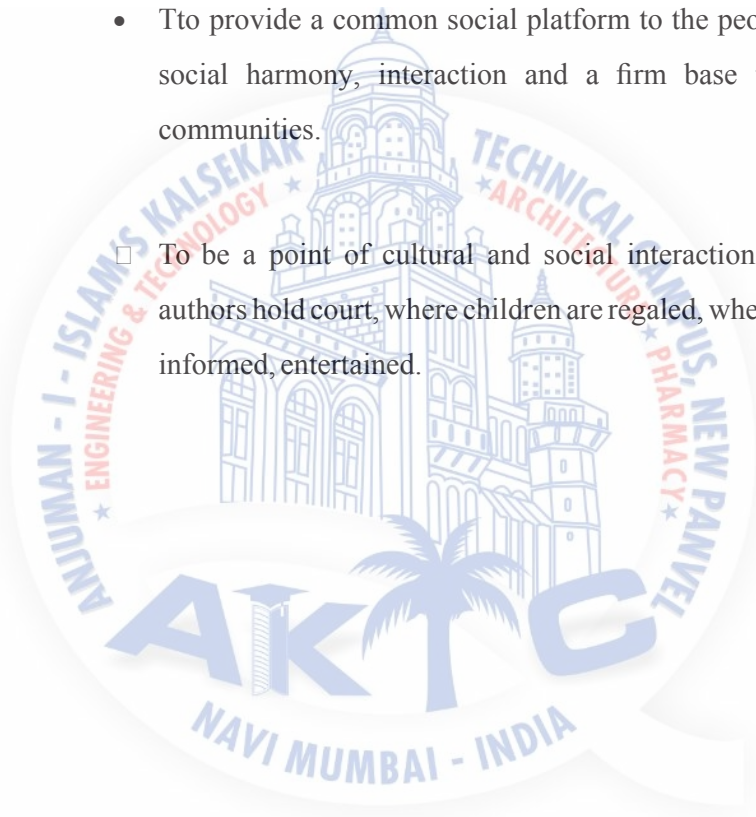
- a. Development of master planning
 - i. Conceptual planning of site.
 - ii. Traffic management and parking
- b. Conceptual design of building
 - i. General layout of building as per requirements

B. Building

- a. General layout/arrangement
- b. Architectural plans/elevations/sections
- c. Perspective views/model.

SCOPE OF THE PROJECT

- Revitalization and Activation of pockets within the Durgadi fort premises and its surrounding to focus on to provide an intervention which constantly responds to the surrounding and finds a way to inhabit itself all round the year and focus on interpretation of the multilayered history and culture of the city and to act as a catalyst to increase interaction, educate & empower the local Communities.
- Tto provide a common social platform to the people of the city to boost social harmony, interaction and a firm base to empower the local communities.
 - To be a point of cultural and social interaction where artisans, poets, authors hold court, where children are regaled, where people gravitate to be informed, entertained.



LIMITATIONS

- The project requires a site with an existing historical focal point to be able to generate that connect of the present to the past.
- The project aims at Participatory design, targeting the socio cultural economical lifestyle of the people it is important to involve the locals in terms of what they expect out of such project.
- It has to be observed that there is no tilt shift of the design towards any culture, religion, community, as the design aims to build up socio cultural harmony, thereby rendering the space equally open to all.



LITERATURE**REVIEW**

THE DIFFERENCE

BETWEEN SOCIAL AND
PUBLIC SPACE

A social space that is generally open and accessible to people is called a **PUBLIC SPACE**. Roads (including the pavement), public squares, parks and beaches are typically considered public space. To a limited extent, government buildings which are open to the public, such as public libraries are public spaces, although they tend to have restricted areas and greater limits upon use. Although not considered public space, privately owned buildings or property visible from sidewalks and public thoroughfares may affect the public visual landscape, for example, by outdoor advertising. Recently, the idea of Shared space has been put forward to further enhance the experience of users in public space partially used by automobiles and other vehicles.

Public space has also become something of a touchstone for critical theory in relation to philosophy, (urban) geography, visual art, cultural studies, social studies and urban design. The term 'public space' is also often misunderstood to mean other things such as 'gathering place', which is an entity of the larger concept of social space.

One of the earliest examples of public spaces are commons. For example, no fees or paid tickets are required for entry. Private owned malls are examples of 'private space' with the actualization of being 'public space'.

A **SOCIAL SPACE** is physical or virtual space such as a social center, online social media, or other gathering place where people gather and interact. Some privately owned and regulated social spaces are town squares or parks are public places; others such as pubs, websites or shopping malls.

Henri Lefebvre emphasized that in human society all 'space is social: it involves assigning more or less appropriated places to social relations....social space has thus always been a social product'. Thereby social space becomes a metaphor for the very experience of social life - 'society experienced alternatively as a deterministic environment or force (*milieu*) and as our very element or beneficent shell (*ambience*)'. In this sense 'social space spans the dichotomy between "public" and "private" space...is also linked to subjective and phenomenological space'.

**LITERATURE
REVIEW**
THE IMPORTANCE
OF SOCIAL SPACE.
Emil Kresl

People gravitate toward people. It's human nature to seek human interaction, yet it is also natural to feel like you just need to get away from other people for a while.

What perhaps is not fully understood is that, broadly speaking, there are really two kinds of public space, and a healthy and happy community should have a balance of both of them. A key element in finding that balance is understanding how people might choose not to socialize while they are in public. For those of us who design and build neighborhoods, towns, and cities, it's important to understand the distinction between *obligatory social space* and *voluntary social space*.

The Difference Between the Two Spaces

Obligatory social space provides people with little to no choice but to interact with other people, while voluntary social space allows people to have a variety of options for how they interact, including not interacting at all.

Obligatory social space is the lifeblood of a great city. It is one of the many benefits that come with increased density. A light-rail car where passengers must share a small space is an example, as is a crowded city street where people walk shoulder to shoulder and vendors call out to passers-by. That type of activity that surrounds urbanites on a daily basis is essential for safety, commerce, and to a degree social well-being. Without reprieve from that energy, however, many people operating in that public space find that it becomes exhausting. Obligatory social space may be inherent in dense, vibrant cities because of the activity and culture that lure people to those cities, but it is essential that a counterbalance be provided.



Fig 3 :A street as an Obligatory Social Space in Colorado.

In Boulder, Colorado, 9th Street where it meets the campus of the University of Colorado is a bustling obligatory social space, bringing in tremendous revenue for the city and drawing international crowds seeking a rich cultural experience. Photo courtesy Catherine Cich.

The release valve is not solitary confinement or isolated domesticity permanently drawing the blinds, securing the doors, flipping on the television. Rather, the counterbalance to obligatory social space is voluntary social space, where people may or may not participate socially on varying levels while still being out in the open. An example would be a hiking trail where you can take a walk alone, sit on a bench reading a book, meet a fellow dog-walker, or organize a group for an outing. Voluntary social space is the complement to obligatory social space, and without it a backlash results. People who can experience public space only as a place where they are forced to interact with other people will ultimately seek a means of retreat.



Fig 4 :A Voluntary Social Space.

The mixed use development of Mueller in Austin, Texas, transformed a sea of asphalt that was once an abandoned airport into a community with an abundance of green space and trails for residents, providing them with the balance of voluntary space within close proximity to Austin's downtown and The University of Texas campus. The City of Austin is currently developing a 'Town Center' within Mueller that will offer retail and commercial areas all within easy walking distance of homes and parks. Photo Emil Kresl.

Great cities provide both types of spaces. New York City contains some of the densest of obligatory social spaces — sidewalks and subways teeming with people. Without Central Park and hundreds of other city parks, it would not be the great city we know today. That type of public space — a public park, where an individual's decision to socialize is left up to his or her personal discretion — is essential for a healthy balance in a community.

That does not necessarily mean providing vast expanses the likes of Central Park for achieving that balance. As William H. Whyte points out in the film *The Social Life of Small Urban Spaces*, the way people use small plazas in dense urban areas shows how much they enjoy simply being alone while still in public. As he eloquently put it, "The most sociable plazas also have in absolute numbers the greatest numbers of individuals." Even a parklet (a park created from parking space) or a fountain can be voluntary social space.

Urban Sprawl — the Result of an Imbalance

When cities do not provide enough voluntary social space, the result is a backlash that manifests itself in urban sprawl.

It is common to point to the automobile as the culprit for the sprawl that engulfed mid-20th century America, but it is important to look deeper for the motive. In *The Crabgrass Frontier*, Kenneth T. Jackson writes of the advent of car culture in the United States: "Automotive families had neither to wait nor walk. New possibilities in shopping, living and working were opened." While the car may have been the weapon, it wasn't the motive. Automotive mobility alone was not the cause of flight from cities. There must be a motivating factor to desire automotive mobility in the first place and, in addition to bigotry and other forms of cultural ignorance, that motivating factor was an inadequate balance of social spaces.

Suburban flight was driven not so much by a desire for more private space, but by the need for a reprieve from the obligatory social space that dominated many 20th century American cities. With no access to social space where one does not feel the crush of other people, the tendency is to try to manufacture an environment that acts as a counterbalance. But a backyard surrounded by a privacy fence is a private space that cannot address the human needs associated with public space, such as the need for social interaction. The ideal advanced by Jane Jacobs was not limited to New York City's West Village. In *The Death and Life of Great American Cities*, Jacobs tells of how "A good city street neighborhood achieves a marvel of balance between its people's determination to have essential privacy and their simultaneous wishes for differing degrees of contact, enjoyment or help from the people around."

The suburbs and exurbs are an attempt to suppress chaos. Such communities strive for order and control. Historically, many suburbs have been nothing more than bedroom communities, strictly private space developments capitalizing on the ramifications of an imbalance of social space in a city. Eventually, disconnected and isolated retail and commercial space would consume much of the suburbs as well. For some people, in the absence of any other venue, these retail and commercial areas served as social space. Social interaction, however, was not the primary objective of these private spaces, and some communities began to add public space.



Fig 5 :A lack of Public Space in Suburban area.

As shown in this image of Jefferson Parish (suburban New Orleans), suburbs often mean an absence of any public space in which people can socialize. In areas like these, socializing would be limited to retail and commercial space — a controlled, monitored, and supervised space in which those who occupy that space are expected not so much to interact as consume. Wikimedia photo by D.B. King .

For the most part, that allowed for public space in suburbs, the objective was voluntary social space. It was hoped that the voluntary social space, like the private space in those communities, would be tidy, predictable, and assiduously arranged. A dispassionate environment free of chaos often gives the misleading impression of security because the uniformity and homogeneity mean that anything out of that order is easy to spot and therefore, ostensibly, easy to remove. This type of environment has an appeal for many, but to realize such a goal also means the suppression of creativity, the degradation of diversity, and the end of happenstance — all things that are essential to progress, innovation, and culture.

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Obligatory social space is essential to provide that community with the tools to grow culturally, emotionally, and economically, and in turn provides the benefits of dense living such as a reduced carbon footprint, a more active lifestyle, affordability, social activity, and more time to spend with friends and family due to less time spent driving.

A community that balances that obligatory social space with voluntary social space can instill in its residents personal, emotional, and spiritual well-being. This balance, it is important to understand, can come in many different forms and many different ratios, and results in an endless variety of healthy communities from small towns to big cities.

Personal Technology as a Means of Escape

Ineffectual escape from obligatory social space comes not only in the form of physical retreat, such withdrawing into the private spaces of suburbia. There is a more subtle kind of escape that planners must be especially aware of. While an exodus of residents and businesses is an obvious indication that there may be an imbalance of social space, many residents who live in an imbalanced community may not have the option to move away, or it does not occur to them that they have such options. That does not mean that they are unaffected by the imbalance, and it does not mean that all is well.

Personal technology has enabled a new level of social avoidance and escapism. Just 30 years ago, when people found themselves in an obligatory social space, it was literally obligatory to not only interact with other people who shared that space, but to interact socially. In so doing, people developed a certain tolerance and ability to socialize, often with people from different cultures and backgrounds who had different ideas and beliefs.

Today, however, there is a crutch. Handheld game systems, iPods, smartphones, iPads all of them enable people in an obligatory social space to retreat. Generally speaking, someone from the Great Generation on a bus or in the waiting area of a doctor's office has no qualms about chatting with other folks in that space, but younger people in that same space will often find it awkward or threatening if spoken to.

The effect will be an enormous population that has not developed the ability to properly interact with other human beings, the results of which are already more than apparent in our divisive, polarizing politics and media.

Moreover, if a balance of social space is not provided for a wide range of people, behavioral problems and all their societal ramifications will rise, as people somnambulate through their lives as an unhealthy means of coping with the imbalance.

Conclusion

It is imperative to provide spaces that are public and yet do not make people feel captive or cornered. Offering this type of space can help people learn how to interact comfortably with one another and not feel the need to retreat. Obligatory social space requires the complement of voluntary social space where people can socialize on their own terms and not experience social interaction as something forced upon them.

At Cheonggyecheon, a public park in Seoul, South Korea, the daylighting of an urban stream formerly buried by a heavily used road transformed that city and its inhabitants by creating a vein of voluntary social space running through the community. New York City's High Line public park turned an abandoned and dangerous space — an elevated freight rail line — into voluntary social space above the hustle of the city. On the suburban end of the spectrum, Lakewood, Colorado transformed a failed shopping mall into a vibrant downtown center connected to existing neighborhoods, bringing much-needed energy and commerce to that town through the creation of obligatory social space.



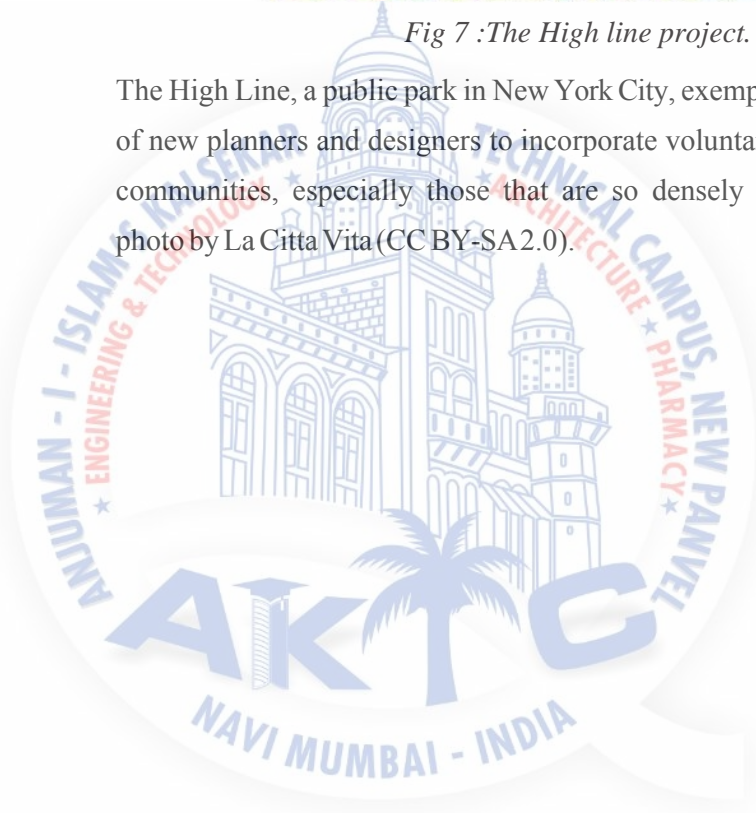
Fig 6 :A bustling public space in the center of the city.

The public park of Cheonggyecheon in Seoul, South Korea, is the release valve in a heavily developed city. It is a literally a river of voluntary social space surrounded by a figurative sea of obligatory social space. Wikimedia photo by Kyle Nishioka .



Fig 7 :The High line project.

The High Line, a public park in New York City, exemplifies the determination of new planners and designers to incorporate voluntary social space into our communities, especially those that are so densely developed. Wikimedia photo by La Citta Vita (CC BY-SA2.0).



LITERATURE REVIEW

APATTERNLANGUAGE.

MOSAIC OF SUBCULTURES

As written in the book, the relation of the urban land to open country forms the basic structure of a city. The most important structure, within the broad strips of urban land, must come from the great variety of human groups and subcultures which can co-exist there.

“The homogenous and undifferentiated character of modern cities kills all variety of life styles and arrests the growth of individual character.”– quote from the pattern language.

There are three possible alternatives that can be compared in which people may be distributed throughout the city:

1. Heterogeneous Cities: here, the people are mixed, irrespective of the lifestyle and culture they belong to. This appears to be amusing but actually it is not. It diminishes the substantial variety, seizes most of the differentiation, and brings in conformity. It brings down all the life styles to a common denominator. Which should be heterogeneous now seem to be homogenous and dull.



Figure 8 Source: The Pattern Language

2. The most basic and banal forms of differentiation – race, economic status are the support of the people, in a city made up of ghettos. The ghettos are still homogenous on the inside and disallow a substantial variety of lifestyles to emerge. Isolated from the rest of society, the people in the ghetto are usually forced to live there. They are unable to evolve their way, and often intolerant of ways of life different from their own.



Figure 9 Source: The Pattern Language



3. New ways of life can develop in a city which is made up of a large number of subcultures relatively small in size, each occupying an identifiable place and separated from other subcultures by a boundary of non-residential land. People have a choice of kind of subcultures they wish to live in and experience different ways of life. Since each environment nurtures mutual support and a strong sense of shared values, individuals can grow.



Figure 10 Source: *The Pattern Language*

The people who live in metropolitan areas have a weak character. The similarity and lack of variety among the population who live there causes weakness of character, these are simply two sides of the same coin: a condition in which people have relatively homogeneous selves. It is stated that

Character can only occur in a self who is strongly differentiated and whole: by definition, a society where people are relatively homogeneous is one where individual selves are not strongly differentiated.

Living according to the ideas of life which have been set down by others, it is so easy, to bend your true self as per the conventional way, to hide yourself in demands which are not yours, and which do not leave you full. It seems clear, then, that variety, character, and finding your own self, are closely intermingled. There will be ample variety of character, in a society where a man can find his own self, and character will be tough and strong. In a society where people have difficulties finding their own selves, people will seem homogeneous, there will be less variety, and character will be fragile. If it is true that character is weak in metropolitan areas today, and we want to bring the change in it, we should first understand how the metropolis has this effect.

There are obviously many ways of solving the problem. Some solutions will be private. Others will involve a variety of social processes including, certainly, education, work, play, and family.

The book also gives a feasible solution which involves the large scale social organization of the metropolis.

The solution is this. The metropolis must contain a large number of different subcultures, each one strongly articulated, with its own values sharply delineated, and sharply distinguished from the others. But though these subcultures must be sharp and distinct and separate, they must not be closed; they must be readily accessible to one another, so that a person can move easily from one to another, and can settle in the one which suits him best.

This solution is based on two assumptions:

1. A person will only be able to find his own self, and therefore to develop a strong character, if he is in a situation where he receives support for his idiosyncrasies from the people and values which surround him.
2. In order to find his own self, he also needs to live in a milieu where the possibility of many different value systems is explicitly recognized and honored. More specifically, he needs a great variety of choices, so that he is not misled about the nature of his own person, can see that there are many kinds of people, and can find those whose values and beliefs correspond most closely to his own.

There are a few present arguments put down in the book to show that the articulation of subcultures is an ecological matter and that distinct subcultures will only survive, as distinct subcultures, if they are physically separated in space. First, there is no doubt that people from different subcultures basically need different things of their environment.

Do everything possible to enrich the cultures and sub-cultures of the city, by breaking the city, as far as possible, into a vast mosaic of small and different subcultures, each with its own spatial territory, and each with the power to create its own distinct life style. Make sure that the subcultures are small enough, so that each person has access to the full variety of life styles in the subcultures near his own.

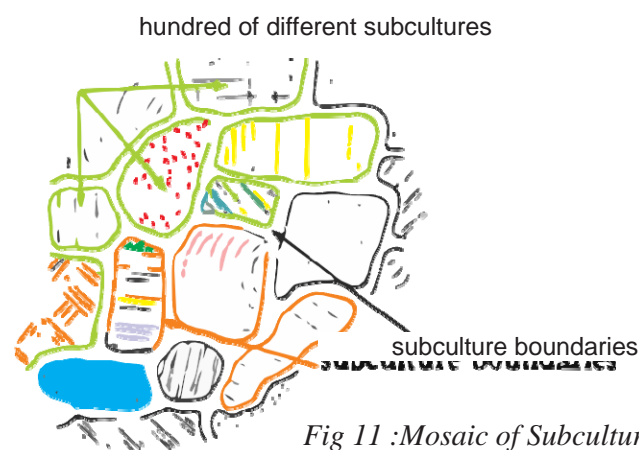


Fig 11 : Mosaic of Subcultures.

LITERATURE REVIEW

A PATTERN LANGUAGE.

SACRED SITES It is stated that every region and every town, indeed all of neighbourhood, there are certain special places which have come to symbolize the area, and the people's roots there. These sites may be natural beauties or historic landmarks left by ages past. But they are an essential in some form.

People cannot maintain their spiritual roots and their connections to the past if the physical would they live in does not also sustain these roots.

Informal experiments in our communities have made us believe that people agree, to an astounding extent, about the sites which do embody the relation between the people and the land and to the past. It seems as though "the" *sacred sites* for an area exist as objective public properties. If this is so, it is then of course essential that these specific sites be preserved and made important. In an agreed and widespread sense, destruction of sites which have become part of the public consciousness, must certainly create gaping wounds in the communal body.

Traditional societies have always acknowledged the significance of these sites. The sites of special pilgrimage, rivers and bridges become holy; a building or a tree, or rock or stone, marked by the mountains, takes on the authority through which people connect themselves to their own past.

It is therefore concluded that the *modern society often ignores the psychological importance of these sites. They are bulldozed, developed, changed, for Political and economic reasons, without regard for these simple but fundamental emotional matters; or they are simply ignored.*

The book states two efficient ways to preserve these.

The following two steps are required to be taken-

- 1) In any geographic area large or small ask a large number of people which sites and which places make them feel the most contact with the area; which sites stand most for the important values of the past, and which ones embody their connection to the land. Then insist that these sites be actively preserved.
- 2) Once the sites are chosen and preserved, establish them in a way which intensifies their public meaning. We believe that the best way to intensify a site is through a progression of areas which people pass through as they approach the site. This is the principle of "nested precincts."

It is noted that a garden, which can be reached only by passing through a series of outer gardens, keeps its secrecy. A temple which can be reached only by passing through a sequence of approach courts its able to be a special thing in a man's heart. The majesty of a mountain peak is augmented by the difficulty of reaching the upper valleys from which it can be seen; the beauty of a woman is intensified by the slowness of her unveiling; the great beauty of a river bank—its rushes, water rats, small fish, wild flowers—are violated by a too diet method; even the ecosystem cannot stand up to the too direct approach—the thing will simply be gulped.

We must therefore build around a sacred site a series of spaces which slowly intensify and congregate on the site. The site itself becomes a kind of inner sanctum, at the core. And if the site is very large—a mountain—the same method can be taken for special places from which it can be seen—an inner sanctum, reached past many levels, which is not the mountain, but a garden, say, from which the mountain can be seen in special beauty.

Therefore.

Whether the sacred sites are Large or small, whether they are at the, entry of the towns, in neighbourhoods, or in the deepest countryside, establish ordinances which will protect than absolutely so that our roots in the surroundings cannot be violated.

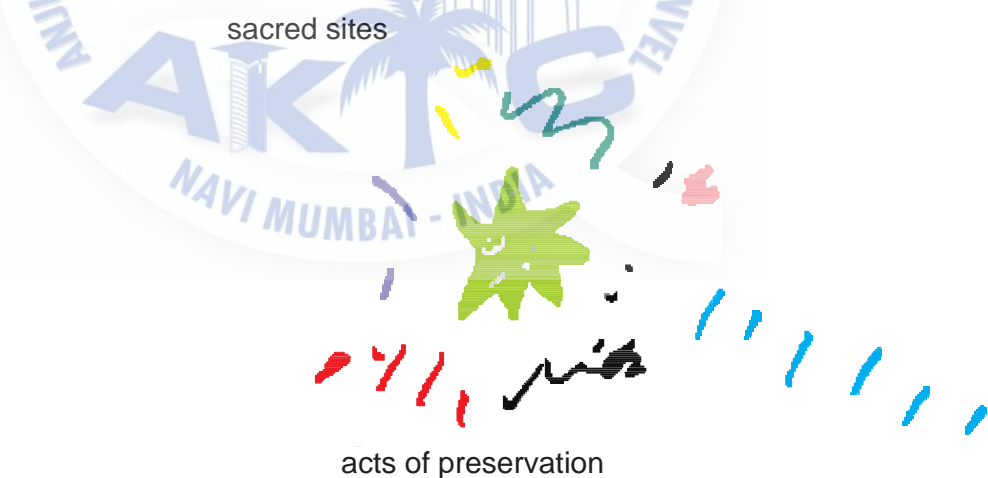


Fig 12 :Sacred Sites.

Give every sacred site a place, or arrangements of places, where people can relax, enjoy themselves, and feel the presence of the place. And above all, guard the approach to the site, so that it can only be approached on foot, and through a series of gateways and thresholds which reveal it slowly.

LITERATURE REVIEW

A PATTERN LANGUAGE.

ACCESS TO WATER Water has always been precious. Among the special natural places covered by Sacred Sites, we single out the ocean beaches, lakes, and river banks, because they are unique. Their preservation and proper use require a special pattern.

People have a fundamental desire for great bodies of water. But the very movement of the people towards the water can also disturb it.

Roads, freeways, and industries ruin the water's edge and make it so dirty or so deceitful that it is practically inaccessible; or when the water's edge is preserved, it falls into private hands.

But the need that people have for water is vital and intense. (See, for example, C. G. Jung, Symbols of Transformation.) The problem can be solved only if it is understood that people will build places near the water because it is entirely natural; but that the land direct proximity to the water's edge must be preserved for common use.

To this end the roads which can destroy the water's edge must be kept back from it and only allowed near it when they lie at right angles to it. The width of the belt of land along the water may vary with the type of water, the density of development along it, and the ecological conditions. Along high density development, it may be no more than a simple stone promenade. Along low density development, it may be a common parkland extending hundreds of yards beyond a beach.

Therefore when natural bodies of water occur near human settlements, treat them with great respect. Always preserve a belt of common land, immediately beside the water. And allow dense settlements to come right down to the water only at infrequent intervals along the water's edge.

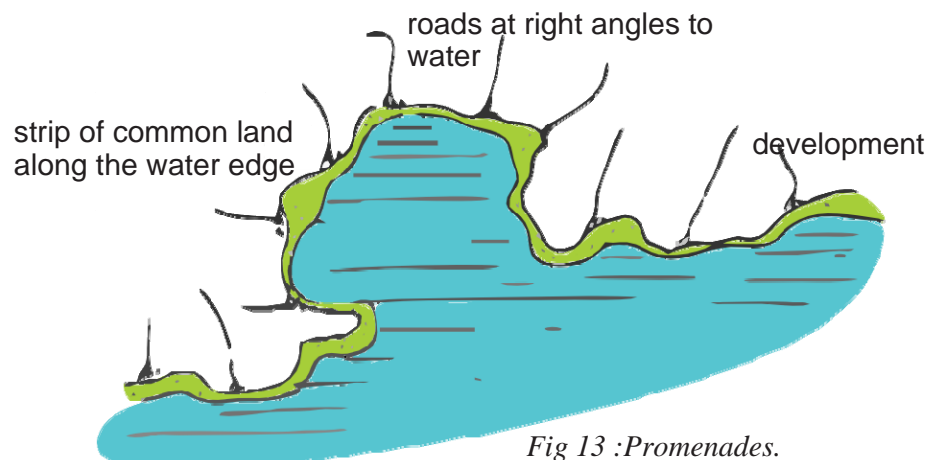


Fig 13 :Promenades.

The type of water and the ecological conditions is different for different widths of the common land. In one case, it may be no more than a simple stone promenade along a river bank a few feet wide. In another case, it may be a swath of dunes extending hundreds of yards beyond a beach. In any case, do not build roads along the water within one mile of the water; instead, make all the entry roads at right angles to the edge, and very distant. If parking is provided, keep the lots small.



LITERATURE REVIEW

A PATTERN LANGUAGE.

PROMENADE

Assume now that there is an urban area, subdivided into subcultures and communities each with its boundaries. Each sub-culture in the mosaic or subcultures, and each has a promenade as its backbone. And each promenade helps to form activity nodes along its span, by generating the flow of population which the activity nodes require in order to survive.

Each subculture needs a centre for its public life: a place where you can go to see people, and to be seen.

The promenade is common in the small towns of Italy, Spain, Mexico, Greece Yugoslavia, Sicily, and South America. People visit these places walk up and down, to meet their friends, to gawk at strangers, and to let strangers gawk at them. Throughout history there have been places in the city where people who shared a set of values could go to get in touch with each other. These places have always been like street theatres' they invite people to watch others, to stroll and browse, and to wander.

In Mexico, in any small town plaza every Thursday and Sunday night with the band playing and the weather mild, the boys walk this way, the girls walk that, around and about, and the mothers and fathers sit on iron-scolled benches and lookout. In all these places the beauty of the promenade is simply this: people with a shared way of life collected together to rub shoulders and approve their community.

The fact is that the kinds of promenades where this promenading happens are not common in a city, and they are especially uncommon in a spreading urban region. But experiments by Luis Racionero at the Department of Architecture at the University of California, Berkeley, have shown that wherever the possibility of this public contact lost exist, people will look for it, as long as it is close enough. Racionero interviewed 37 people in several parts of San Francisco, living various distances from a promenade, and found that people who lived within 20 minutes used it, while people who lived more than 20 minutes away did not.

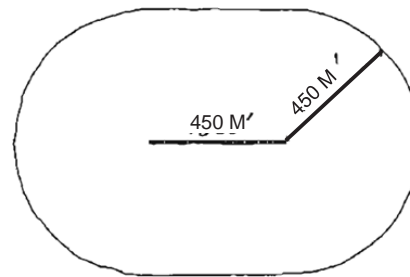


Figure 14 Promenade's Catchment area

	Use the promenade	Do not use the promenade
People who live less than 20 minutes away.	13	1
People who live more than 20 minutes away.	5	18

Table 1 :Promenade's user's analysis.

It is possible that if the promenade is within 10 minutes or less, people will use it often perhaps even once or twice a week.

This area contains 320 acres. If we assume an average density of 50 people per gross acre, then there are 16,000 people in the area. If one-fifth of this population uses the promenade once a week, for an hour between 6 and 10 p.m., then at any given moment between those hours, there are some 100 people on the promenade.

We see then, that a promenade 1500 feet long, with the catch basin we have defined and the population density stated, should be able to maintain a lively density of activity., provided that it is not more than about 6 metre wide.

I want to emphasize that a promenade will not work unless the pedestrian density is high enough, and that a calculation of this kind must always be made to check its feasibility.

The preceding figures are meant to be illustrative. They establish a rough order of magnitude for promenades and their catch basin populations. But we have also seen successful promenades for populations of 2000 (a fishing village in Peru); and we have seen a promenade for 2,000,000 (Las Ramblas in Barcelona). They both work, although they are very different in character. The small one with its catch basin of 2000 works, because the cultural habit of the paseo is so strong there, a higher percentage of the people use it more often, and the density of people on the promenade is less than we would imagine—it is so beautiful that people enjoy it even if it is not so crowded. The large one works as a citywide event. People are willing to drive a long distance to it—they may not come as often, but when they do, it is worth the ride—it is exciting—packed—teeming with people.

We imagine the pattern of promenades in a city to be just as varied—a continuum ranging from small local promenades serving 2000 people to large intense ones serving the entire city each different in character and density of action.

Another question answered in the book in regard to the characteristics of promenade is as follows

Finally, what are the characteristics of a successful promenade?

Since people come to see people and to be seen, a promenade must have a high density of pedestrians using it. It must therefore be related with places that in themselves attract people, for example, clusters of eating places and small shops.

Further, even though the real reasons for coming might have to do with seeing people and being seen, people find it easier to take a walk if they have a "destination." This destination may be real, like a coke shop or cafe, or it may be partly imaginary, "let's walk round the block." But the promenade must provide people with a strong goal.

It is also important that people do not have to walk too far between the most important points along the promenade. Informal observation suggests that any point which is more than 150 feet from activity becomes unsavoury and unused. In short, good promenades are part of a path through the most active parts of the community; they are suitable as destinations for an evening walk; the walk is not too long, and nowhere on it desolate: no point of the stroll is more than 150 feet from a hub of activity. A variety of facilities will function as destinations along the promenade: ice cream parlours, coke shops, churches, public gardens, movie houses, bars, volleyball courts. Their potential will depend on the extent to which it is possible to make provisions for people to stay. Widening of pedestrian paths, planting of trees, walls to lean against, stairs and benches and niches for sitting, opening of street fronts to provide sidewalk cafes, or displays of activities or goods where people might like to linger.

Therefore:

Encourage the gradual formation of a promenade at the heart of every community, linking the main activity nodes, and placed centrally, so that each point in the community is within 10 minutes' walk of it. Put main points of attraction at the two ends, to keep a constant movement up and down.

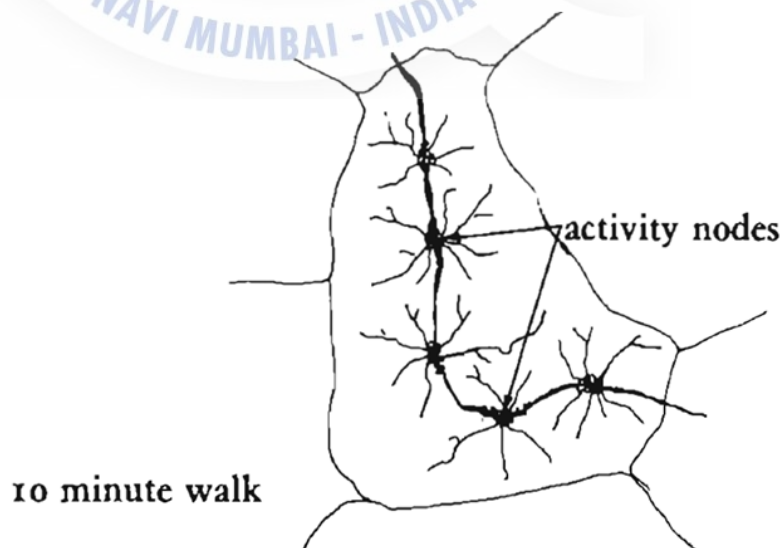


Figure 15 : Promenade's Activities Source: The Pattern Language

No matter how large the promenade is, there must be enough people coming to it to make it dense with action, and this needs be accurately calculated. The promenade is mainly marked by concentrations of activity along its length certainly, some of these will be operating at night and somewhere on the promenade there will be a concentration of shops. It might also be suitable to include carnival and dancing in the street in very large promenades.



LITERATURE REVIEW

A PATTERN LANGUAGE.

ACCESSIBLE GREEN

At the heart of neighbourhoods, and near all commercial societies, there need to be small greens. Of course it makes the most sense to locate these greens in such a way that they help form the boundaries and neighbourhoods and backs.

People need green open places to go to; when they are close they use them. But if the greens are more than 500 metres away, the distance overwhelms the need.

Parks are meant to fulfil this need. But parks, as they are usually understood, are rather large and widely spread through the city. Very limited people live within 500 metres of a park.

Our research suggests that even though the need for parks is very important, and even though it is important for people to be able to nourish themselves by going to walk, and run, and play on open greens, this need is very faint. The only people who make full, daily use of parks are the one who live less than 500 metres from them. The other people in a city who live more than 500 metres away, don't require parks any less, but distance discourages usage and so they are unable to nurture themselves, as they need to do.

This problem can only be resolved if hundreds of small parks or greens are dispersed so widely, and so profusely, that each house and each workplace in the city is within 500 metres walk of the nearest one.

In more detail: The need for parks within a city is well known. A typical example of this awareness is given by the results of a 1971 citizen survey on open space conducted by the Berkeley City Planning Department.

The survey showed that the great majority of people living in apartments want two kinds of outdoor spaces above all others:

- (a) A pleasant, usable private balcony and**
- (b) A quiet public park within walking distance.**

But the critical effect of distance on the usefulness of such parks is less well known and understood. In order to study this problem, we visited a small park in Berkeley, and asked 22 people who were in the park how often they came there, and how far they had walked to the park. Specifically, we asked each person three questions:

- a. Did you walk or drive?
- b. How many blocks have you come?
- c. How many days ago did you last visit the park?

Those people who use in close proximity to a green follow a high intensity use function—it has a steep gradient and it is very sensitive to increasing distance. But those people who reside far from a green appear to adopt a low intensity use function (indicated by a shallower gradient), and their behaviour is not as thoughtful to distance. It is as if those people with ready access to a green display a full, free receptiveness to it, while people far away have lost their awareness of it and have suffered a reduced understanding to the pleasures of the green—for these people, the green has ceased to be a vital element in their neighbourhood life.

* Actually, within 500 metres radius people are able to satisfy their need for access to a green, but a greater distance seriously hinders their ability to meet this need. This inference is rather unexpected. We know that people who are close to a green go to it fairly often, presumably because they need the relaxation. The people who walk more than 500 metres from the green also need the relaxation, probably. But in their case the distance prevents them from meeting their need.

It seems then, that to meet this need, everyone - and that means every house and every workplace—must be within three minutes of such a park. One question remains. How large must a green be in order to fulfil this need? In functional terms this is easy to answer. It must be large enough so that, at least in the middle of it, you feel that you are in touch with nature, and away from the hustle and bustle. Our current evaluations suggest that a green should be at least as much as 60,000 square feet in area, and at least 100 feet wide in its narrowest direction in order to meet this requirement. Therefore:

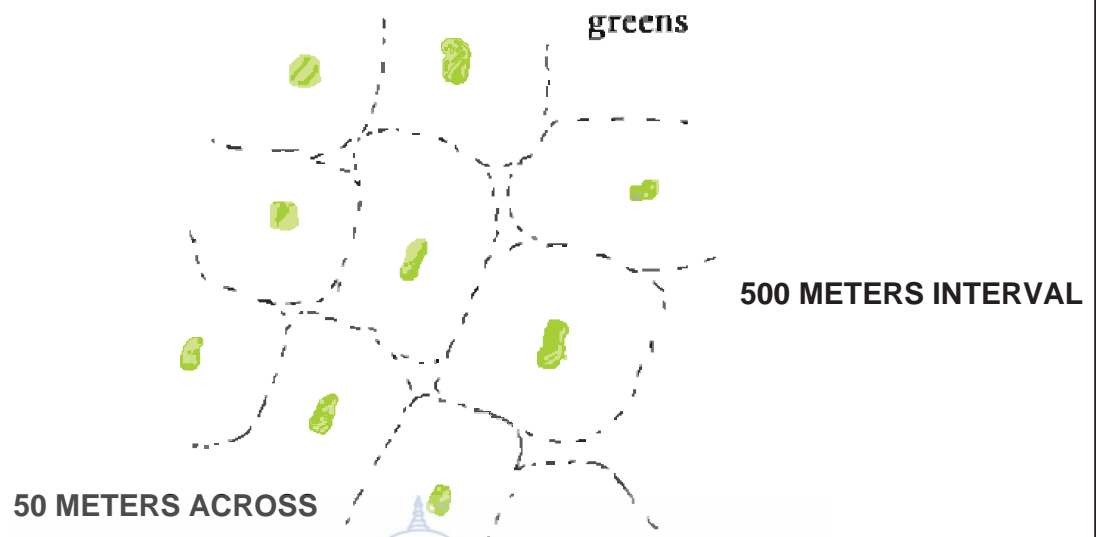


Figure 16: Accessible Green, Source: *The Pattern Language*

Build one open public green within three minutes' walk —about 750 feet--of every house and workplace. This means that the greens need to be uniformly scattered at 1500-foot intervals, throughout the city. Make the greens at least 150 feet across, and at least 60,000 square feet in area.

Pay close attention to old trees, look after them, shape the green so that it forms one or more promising room-like spaces and surround it with trees, or walls, or buildings, but not roads or Cars; and perhaps set aside some part of the green for special community functions.

LITERATURE REVIEW

A PATTERN LANGUAGE.

HIGH PLACES

Most rooftops in the community are no higher than four stories, about 40 or so feet. However, it is very important that this height limit be interrupted, just occasionally, by higher buildings which have special utilities. They can help the character of the small public squares and they can give individual identity to their communities, provided that they do not occur more frequently than one in each community.

The instinct to climb up to some high place, from which you can look down and survey your world, seems to be a fundamental human instinct.

The tiniest hamlets have a dominating landmark usually the church tower. Great cities have hundreds of them. The instinct to build these towers is certainly not merely Christian; the same thing happens in different cultures and religions, all over the world. Persian villages have pigeon towers; Turkey, its minarets; San Gimignano, its houses in the form of towers; castles, their lookouts; Athens, its Acropolis; Rio, its rock.

These high places have two distinct and complementary functions. They give people a place to climb up to, from which they can look down upon their world. And they give people a place which they can see from far-off and align themselves towards, when they are on the ground.

High places are equally significant too, as places from which to look down: places that give a spectacular, complete view of the town. Visitors can go to them to get a sense of the entire area they have love to and the people who live there can do so too—to review the shape and scope of their surroundings. But these visits to the high places will have no freshness or excitement if there is a ride to the top in a car or elevator. To get a full sense of the majesty of the view, it seems essential to work for it, to leave the car or elevator, and to climb. The act of hiking, even if only for a few steps, clears the mind and pre-pares the body.

As for distribution, one of these high places for each community, high enough to be seen throughout the community. If high places are less frequent, they tend to be too special, and they have less power as landmarks. Therefore:

Build occasional high places as landmarks throughout the city. They can be a natural part of the topography, or towers, or part of the roofs of the highest local building—but, in any case, they should include a physical climb.

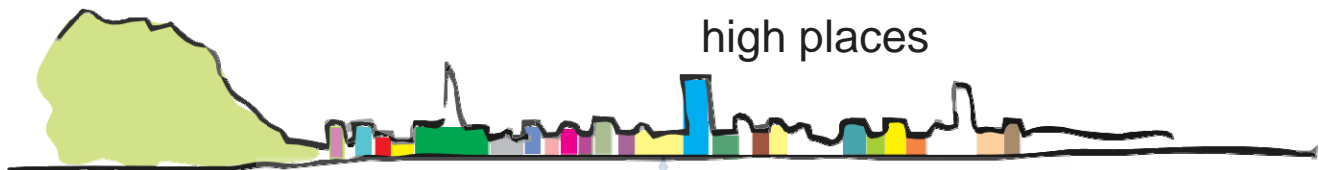
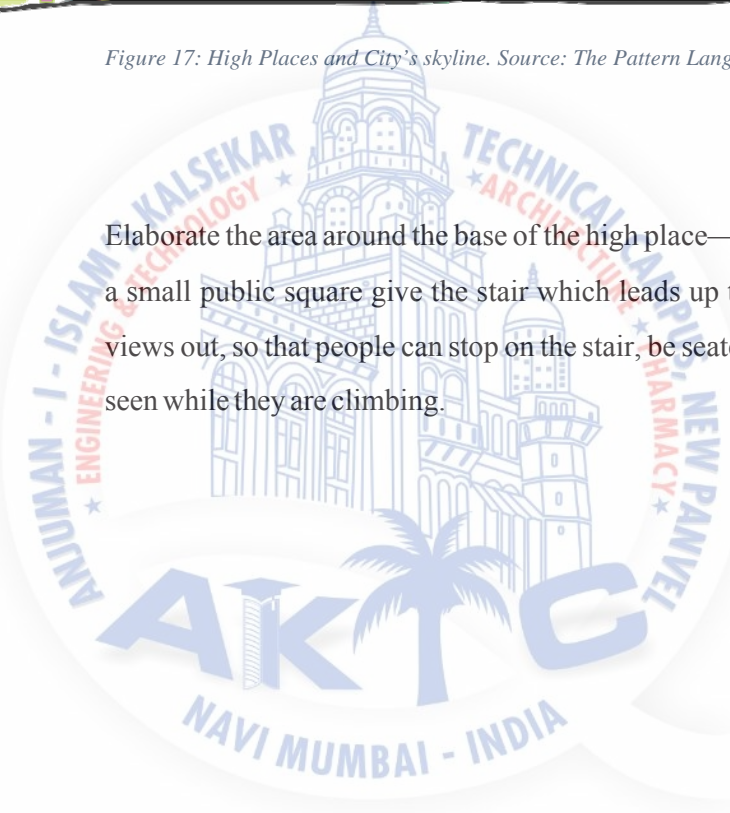


Figure 17: High Places and City's skyline. Source: *The Pattern Language*

Elaborate the area around the base of the high place—it is a natural position for a small public square give the stair which leads up to the top, openings with views out, so that people can stop on the stair, be seated down, look out, and be seen while they are climbing.



PLACEMAKING

What if we built our cities around places?

LITERATURE

REVIEW

PLACEMAKING

Project for Public Places

WHAT IS PLACEMAKING?

Placemaking invites people to collectively reinvent and reimagining public spaces as the lungs of every community. Strengthening the connect between the places and people they share, placemaking refers to a collective work by which we can shape our public realm in order to increase shared value. More than just projecting better urban design, placemaking lets creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution.

Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody -Jane Jacobs

Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody

-Jane Jacobs



Public spaces at the Cross road

Public spaces are naturally multidimensional. Successful and actual public spaces are used by many different people from different communities for many different purposes at many different times of the day and the year. Because public spaces breeds so many uses and users—or fail to do so—they are also where a staggering cross-section of local and global issues converge.

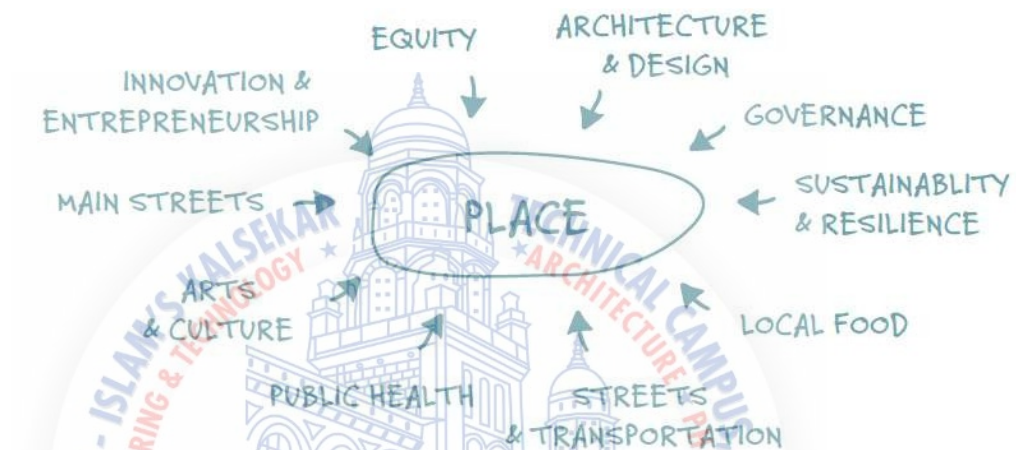


Fig 17 : Factors affecting a public place Fig 12 : Sacred Sites.

★ Public space is for negotiating the interface between our dwellings, our businesses, our institutions, and the wider world. Public space is how we get to work, how we do our daily activities, and how we get back home. Public space is where nearly half of heinous crimes happen. Public space is where policing ensures safety for some but not others. Public space is for commerce, or for gathering, playing, and bumping into one another. Public space is for portraying our outrage and our highest dreams, as well as for laying the most boring and dead utilities and infrastructure. And when we permit it, public space can be a base for creativity, expression, and experimentation.

In short, public space is where so many triumphs and tragedies of the commoners play out. And that's why getting it right on target matters.

The ten issue areas where placemaking can have the most influential impact are:

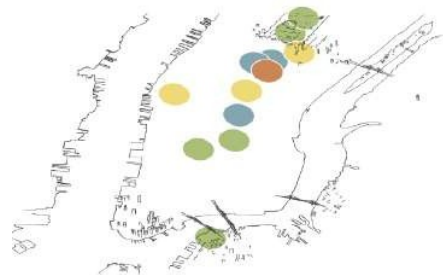
- *Equity & inclusion.*
- *Streets as places.*
- *Architecture of place.*
- *Innovation hubs.*
- *Market cities.*
- *Place governance.*
- *Sustainability & Resilience.*
- *Rural communities.*
- *Creative placemaking.*
- *Health.*

POWER OF 10+

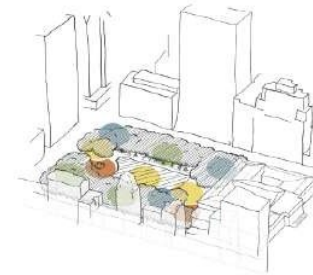
How Cities Transform through Placemaking.

To be successful, urban settlements need destinations. They need destinations that give an image and identity to their communities. But they also require strong community destinations that allure people. A destination might be a main street, a downtown square, a museum, a waterfront, a park. Cities of all sizes should have at least 10 destinations where people want to be present. What makes each destination a success is that it has multiple destinations within it.

For example, a small square needs at least 10 places: a café, a children's play area, a place to also sit, somewhere to meet friends, a place to read the paper or drink a cup of coffee, etc. Within each of the places, there should be at least 10 things to do. Overall, these activities, and destinations are what make a great city. We call this big idea the “Power of 10+.”



City/Region
10+ MAJOR DESTINATIONS



Destination
10+ PLACES IN EACH

WHAT MAKES A GREAT PLACE?

It's surprisingly simple.

Most great places, whether a humble neighborhood or a grand downtown plaza park, share four key attributes:

- They are accessible and well connected to other important destinations in the area.
-
- They are comfortable and project a viable image.
-
- They attract people from multiple communities to participate in activities there gather and visit.
-
- They are sociable environments in which people want to be a part of again and again
-

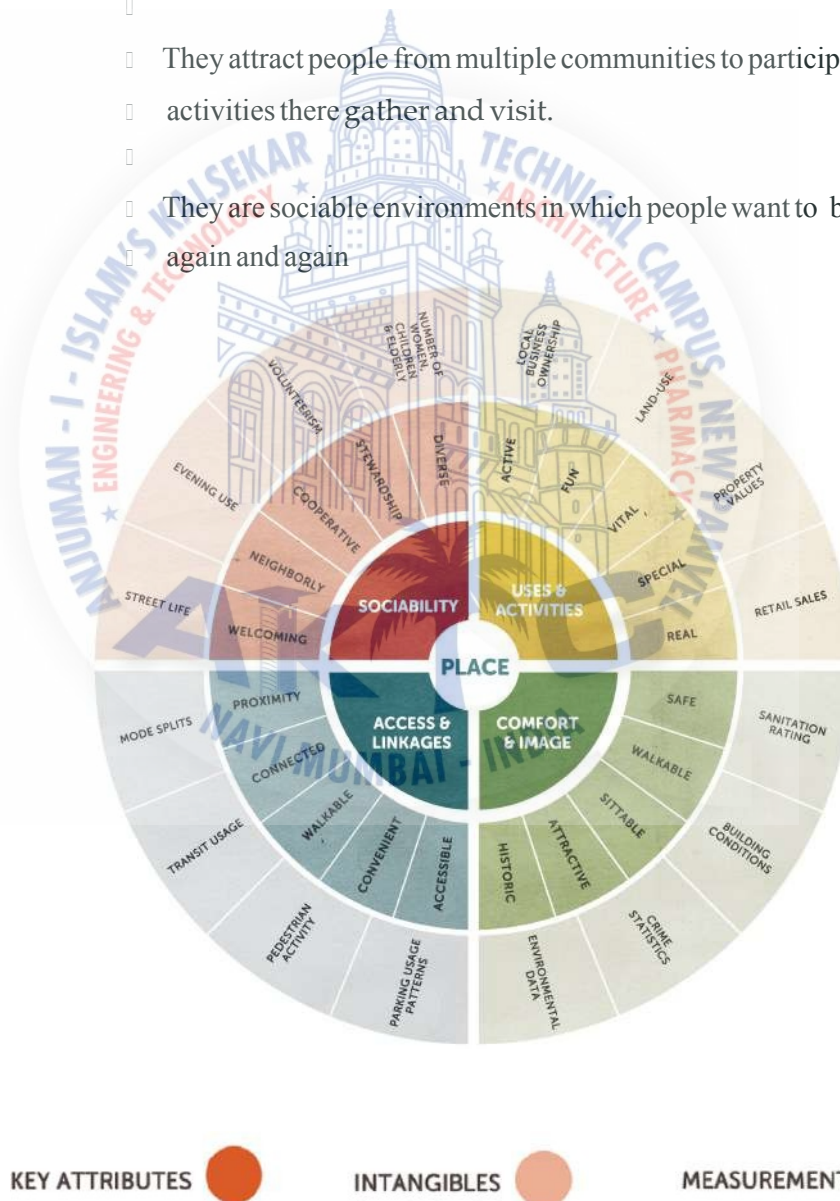


Fig 18 :Evaluating markers for a better public place.



ACCESS AND LINKAGES

PLACEMAKING

Project for Public Places

You can easily analyze the accessibility of a place by noticing its connections to the surroundings, including the visual linkages. A great public space is easy to approach, easy to get in, and easy to traverse. It is arranged so that you can see most of what activities are going on there, both from a distance and up close. The edges of a public space also play an important role in making it accessible. A line of shops along a street, for instance, is more interesting and generally safer to walk along than a dead wall or an empty land. Accessible spaces can be conveniently reached by foot and, ideally, public transit, and they have high parking turnover.

Questions to consider about Access & Linkages:

- *Can you see the space from a distance? Is its interior visible from the outside?*
- *Is there a good connection between this place and adjacent buildings? Or, is it surrounded by blank walls, surface parking lots, windowless buildings, or any other elements that discourage people from entering the space?*
- *Do occupants of adjacent buildings use the space?*
- *Can people easily walk there? Or are they intimidated by heavy traffic or bleak streetscapes?*
- *Do sidewalks lead to and from the adjacent areas?*
- *Does the space function well for people with disabilities and other special needs?*
- *Do the paths throughout the space take people where they actually want to go?*



COMFORT AND IMAGE

PLACEMAKING

Project for Public Places

A space that looks inviting and is comfortable likely to be successful. A sense of comfort includes preconceived thoughts about safety, and the availability of places to sit, cleanliness. A lack of seating is the surprising downfall of many otherwise good public places. People are allured to places that give them a choice of places to sit, so they can be either in or out of the sun at various times of day or year.

Questions to consider about Comfort & Image:

- *Does the place make a good first impression?*
- *Are there as many women as men?*
- *Are there enough places to sit? Are seats conveniently located? Do people have a choice of places to sit, either in the sun or shade?*
- *Are spaces clean and free of litter? Who is responsible for maintenance?*
- *Does the area feel safe? Are there security personnel present? If so, what do these people do? When are they on duty?*
- *Are people taking pictures? Are there many photo opportunities available?*



USES AND ACTIVITIES

PLACEMAKING

Project for Public Places

A range of activities are the basic fundamental building blocks of a great public place.

Having something to do give people an option to come (and return) to a place. When there is nothing interesting to do, a space will sit empty and bear a deserted look. That's the best parameter to measure that something is wrong.

A meticulously chosen range of activities will help a public place attract a variety of people from different communities at different times of the day. A playground will draw young kids during the day, while football courts draw older kids after school, and concerts bring in everyone during the evening.

Questions to consider about Uses & Activities:

- *Is the place empty, or people using the space?*
- *Is it used by people of various ages?*
- *How many different types of activities are happening at the same time— people walking, eating, playing football, chess, relaxing, reading?*
- *Which parts of the public space are used and which are not used?*



SOCIALABILITY

PLACEMAKING

Project for Public Places

This is the most important quality for a public place to achieve—and the most difficult one. When a public place becomes a favorite spot in the neighborhood for people to meet friends, greet their neighbors, and feel comfortable interacting with strangers, then you are well on your way to having a great place.

Questions to consider about Sociability:

- *Is this a place where you would choose to meet your friends? Are others meeting friends here?*
- *Are people in groups? Are they talking with one another? Do they talk to people in other groups?*
- *Do people seem to know each other by face or by name?*
- *Do people bring their friends and relatives to see the place? Do they point to its features with pride?*
- *Are people smiling? Do people make regular eye contact with each other?*
- *Do many people use the place frequently?*
- *Does the mix of ages and ethnic groups generally reflect the community at large?*
- *Do people tend to pick up litter when they see it?*

LITERATURE**REVIEW****FLEXIBLE****ARCHITECTURE****THAT RESPONDS TO****CHANGE**

Time and space are the two variables around which architecture is built. Evolution of building takes a period of time because the notion of spaces changes. A structure needs to constantly reciprocate with the surrounding contexts and find a way to populate itself all round the year. Strategy like this will ensure its continuance and sustainability over a epoch of time. In the contemporary context it is necessary to design spaces which sustains over a span of time. Flexibility of programs, giving rise to various simultaneous activities is the key to sustainable design.

The conceivable value in spaces can be realigned to rope in different activities or can easily be renovated for different uses. Structures have a long and abstruse life during which their parameters of use can change widely. They are mostly built on permanent sites, but the environment around them changes continuously as other structures are rebuilt or reinvented. Streets, neighbourhoods and whole cities can change character-from commercial to residential and from industrial to entertainment and back again. The way the structures are used can also alter significantly example, the structure function might change - warehouse to houses, shop to office. Even if its elementary purpose remains unmoved, the way the intent is carried out can foster beyond cognizance. As the arrangement of building facilities is the bulky expenditure supporting humanistic activities, architecture advancement and redevelopment should be as organised as possible. Therefore, the capacity to make room for change could be the most important factor to ascertain economic efficiency and operation in terms of sustainability.

All buildings can entertain some change, but most have a set number of rooms of set dimensions with fixed openings - the doors, windows and closets open and close, but little else does. Though every structure has an opportunity for some extra degree of flexibility, it requires serious efforts, hindrances and investment to release it by changing, converting or extending - usually to give yet more inflexible spaces.

So, what might a more adjustable structure be like? A structure designed for compassionate living could be one that, during its occupation, might be able to adapt from one function to another with/without changing its shape the functions/perceptions of spaces may change from time to time as and when desired by the user.

"Human beings are flexible creatures. We gravitate at our will, manipulate objects and operate in different environments. There was a time not too long ago in growth terms, when our actuality was based on our measure to move and adapt; indeed it is to this that we are not instinct. Most cultures now lead a more or less sluggish life, but it could be that adaptability & flexibility is once again becoming important in human development and that technological, social and economical changes are forcing, or at least encouraging, a new form of human existence.

Architecture that is able to create a perception of place is as important in non residential structure as it is in the residential structure. The practical advantages of adaptability in many aspects of structural provision are also needed. Where this has been accepted by clients, designers and builders, remarkable precedents for flexible architecture have resulted."

Is such responsive architecture necessary?

The world is advancing at a fast pace in every face of our lives. We all try to create a better environment for our families to grow and take over our defiance. With the global population increasing, more and more people need an urban place to live and work, yet one welcomes binding efficiency with a pleasant residing environment.

Construction techniques have always shaped the needs of society and this concept has not changed. Today's ideal is a dense city fabric; more sustainable, many believe, more pleasant to live in. Adaptability and flexibility are important features not only in the design stage but also in the operational stage of the building so the space is re-arranged.

Human psychological needs are simple: to be sheltered and to have enough food and drink. We can add this to our psychological needs: to feel safe and wanted. The success of our human race lies in our ability to adapt. Although we can manage all kinds of destitutions, a part of our success is also our deep-rooted need for change and enhancement. Like every other aspect of human realization the design of buildings is subject to continuous change, with a strong desire of making improvements. Adaptable building could be admirable in true sense of the world: full of awe- that would allow exciting different activities to occur simultaneously within the same, but changing, spaces. The requirement of flexibility stems not just from aspiration and achievability, but also from economy and indispensability.

Change continuously takes place as economic, social and cultural thrusts impacting on both building development and infrastructural needs. Society is always dynamic; human civilization has a basic tilt towards change - usually towards progress and improvements in the condition of human existence. Consequently, the impact of this on the built environment is obvious: roads are widened and re-routed; services repaired, improved and reinstated; structures demolished and rebuilt.

Adaptable buildings are intended to respond to changing situations in their use, operation or location- adapting to new uses, responding to changes rather than being dormant. This is architecture that is adaptive, rather than stagnative; transformative, rather than restrictive; is dynamic, rather than static; interacts with its users rather than inhibits. It is a design form that is innovative, cross-disciplinary and multi functional.

One of the primary obstacles hindering contemplation and application of more spaces is reluctance to depart from traditional, less flexible interior buildings. We not only need to coup this technological revolution but also ensure that physical interaction between humans is conserved and aided. Essentially we need to explore how technology and social interaction can merge together.

In urban settlements there are not many spaces provided for social interactions. Since the real estate prices are very high every individual wants to gain the maximum benefits from the land.

As a result the city art, culture and social interactions have been reduced to the lowest. People do need to get out and refresh themselves or else they will start behaving like machines. That's the main reason why people living in the urban settlement are called living robots because they have set time for every programme they perform but no time for themselves and for recreation.

There is need to develop an urban space in the city which is binded with the access to, learning, interpreting and recreation. We need a building where media is made then screened, work is created and exhibited, and people are inspired and expressive. A space where children are regaled, youths are entertained, couples are strolling.

The city will connect and learn through these vibrant meeting places, and users will be drawn back to the rich cultures they share and engaging experience. It will connect people of all socio-cultural backgrounds and generate a sense of attachment. It will teach us the tools to constantly interact, exchange views, exhibit, interpret and verify. We will no longer be robots living in a place where time is all about money but will become avant-grade hungry for human interaction and social gatherings.

To introduce flexible strategies into architectural design, it is useful to define two broad categories of flexibility: macro level (e.g. space-type) and operational level (e.g. work activities).

Flexible and responsive building needs to follow a five point strategy:

ADAPTATION

Charles Darwin said: ***“It is not the strongest of the species that survives, or the most intelligent that survives. It is the one that is most adaptable to change”***.

One of the most important lessons we can learn from nature is adaptability. It is the ability to alter changes or be changed to fit current circumstances.



Fig 19 :Examples of Adaptable creatures.

Adaptability in architecture is defined as an ability to recognize that “the future is not finite, that change is inevitable, but that a framework is an important element in allowing that change to happen.”

Adaptable buildings are designed to adjust to different functions, defined by users' activities. Buildings, while having one manifest purpose, can operate for all kinds of different functions. It is architecture that sometimes is called *open building*, with loose-fit space that can be easily harbored a later stage. The *open building* strategy is considered to be the most ascertain strategy for adaptable architecture. The process of change can be continuous throughout and ongoing, as it involves different elements to interact in the design of important space and at different times of building occupance. This process is seen as the most important aspect of adaptable architecture. The flexibility of the different layouts gives freedom for users and inhabitants to choose their own designer and freedom for the designer to create the perceived space their client needs.



Fig 20 :Schaulager (Art Store) in Bazel, Switzerland by Herzog and De Meuron, 2004, exterior and interior..

Schaulager (Art Store) in Basel is an example of adaptable building with different facilities – gallery, warehouse and educational space. Adaptable architecture also paves way for all the technological innovations that can enhance the previous installations of the building. Such flexible approaching in communication, security and other service systems allow changing layouts and functional specifications of the building. At the same time, the technological advances allow for the formation of self-optimizing structures, rather than merely compromises. Adaptability in architecture is also identified as an essential element in designing sustainable architecture.

Conserving and adaptive reuse of a structure instead of demolishing it and erecting a new one in its place contributes significantly to the environmental sustainability.



Fig 21 :A shipping container is converted into a guest house by Poteet Architects, USA, 2010.

Structures with adaptive systems use less energy, offer more habitat comfort, and feature excellent overall space efficiency than static building. Adaptable structures are designed to be changeable, with multi-purpose space, freedom of use.

MOBILITY

Mobile architecture is an architecture that symbolizes physical movement, an architecture that changes places within a time period.

“Mobility” refers to structures that can physically move from one place to another. Kronenburg describes mobile architecture as “*an architecture that rolls, floats or flies*”.

There's nothing new about mobile architecture. Nowadays, there are still a lot of nomadic tribes who take their dwellings with them. Mongolian yurts, Bedouin tents and American trailers are some examples. Many detachable structures that are manufactured commercially today are already widely used in a number of fields – in commerce, industry, military, education, health care, housing, where they fulfill their individual roles.

The benefit of such temporary structures lies in their flexibility and diversity of their aims, as well as the fact that they can be reiterated and therefore regarded as non-disposable. The fact that they are reusable means that “they can be an economic use of materials and therefore be designed with care – high quality products as per a specific need if not a specific location”. Recycling potential also provides the opportunity to experiment with changes in accordance to needs. Remotion according to specific needs is the core idea behind mobile structures all over the world. These mobile structures let us to compare and understand the effects of different local environments on society and how these produce specific needs among the people who use in them.

Primarily elucidated by the mobile home, mobile architecture presents a daring effort in promoting movement, and flexibility of place. The mobile architecture embodies many shortcomings that often overshadow its advantages. Promoted as a low-income housing option, mobile homes are typically assumed to be with low standards of living. As experienced by the typical consumption method of the mobile home – prefabrication, delivery, permanent placement – just because something *can* move, doesn't mean it is mobile architecture.

Mobile architecture that remains static is ultimately immobile and permanent.

It is also linked with the possibility of establishing temporary lodgings in acute and emergency situations; for example in calamity affected and conflict areas or in relation to wars disasters. This new direction in architecture, concentrated on creating futuristic habitable spaces in unusual environments, often affected by climate change, has the potential to excite projects and ideas that have been not thought of until now.



Fig 22 :Mobile home for 50 scientists. Halley VI Antarctic Research Station by London-based Hugh Broughton Architects, project 2005.



TRANSFORMATION

Michael Jantzen voiced his idea of transformation by specifying, ***“I want to reinvent the built environment in order to extend the reach of consciousness.”*** Transformable buildings are able to alter their form, space, appearance by the physical alteration to their structural components, outer shell or internal surfaces. This is architecture that opens, closes, expands or contracts. Introducing transforming elements to a stationary building brings about some fascinating— a building becomes kinetic at the press of a button. By a simple or more complex operation, a building changes its form and gives the impression of being alive.

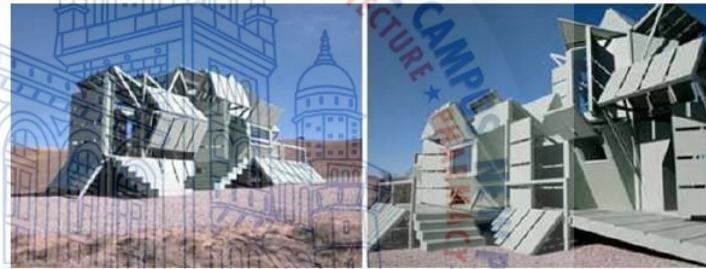


Fig 23 :Idea of unfolding, transformable modules by Michael Jantzen.

At the same time the transformation process may prove to be an obstacle. The mechanisms used to allow movement have to be reliable, structural, low maintenance and easily operable. Important features of mechanical movements of building parts are the opening and closing joints. They have to be designed thoroughly to avoid any unexpected faults. New techniques that cater to maintain flexibility and integrity over a prolonged time and new strategies employed by industries can help solve this problem.

An important additional element of transformable architecture is the ability of a structure to interact with external environment and respond to climatic changes. Roofs, windows or other elements of the facade can be opened for light or closed for any other atmospheric situations. This type of control removes the barrier that structures usually have between inside and outside, and again contributes to environmental sustainability.



Fig 24 : Bengt Sjoström Starlight Theatre, Rockford, Illinois, USA, 2003, Studio Gang Architects. An example of transforming the interior event into the outside one.



INTERACTION

Interactive architecture is a type of architecture that performs interaction between the structures, people and environment. It binds physical interaction of environment with people and interactive design, where the mind moves through abstract spaces. To a large extent, the Interactive Architecture depends on the technological system applied in the designing of the interactive building. Buildings *interact* when they reciprocates to the user's requirements in automatic or intuitive ways, and when users become participants instead of users.



Fig 25 :Adaptive Facades, the Netherlands, 2003, Kas Oosterhuis

Facades that are designed for change represent the method of designing dynamic spaces and objects capable of performing a range of pragmatic and humanistic functions. This type of architecture includes augmentations from the world of architecture, industrial design, computer programming, engineering and physical computing.

Price eventually put these ideas into practically in a reduced scale at the 1971 Inter Action Centre in the Kentish Town area of north London. The building constitutes of an open fabric framework into which pre fabricated, modular elements can be inserted and removed as required according to need.

With respect to his thesis that a building should only last as long as it was useful, the centre was designed on condition that it had a twenty year life span and was accompanied by a manual detailing how it should be dismantled. For Price, time was the fourth spatial dimension: length, width and height being the other three.

LITERATURE**REVIEW**THEORY OF FLEXIBLE
ARCHITECTURE.

Cedric Price

Cedric Price was a renowned architect whose work questioned the notion that architecture should be a static, fixed form. "To enable is the art of architecture." Exploring ideas of interactive and performative spaces, Price enjoyed a career that lasted nearly forty years. Price was able to pursue his concepts in the 1971 project 'Inter Action Centre' in North London. Designed as an open steel frame structure, prefabricated and mobile spaces could be placed or moved around, allowing a variety of activities to be performed inside. The building was designed to last 20 years in constant change, after which the building components could be disassembled and a new structure could be built.

" Planning for activities must allow for change not only in content but in means of operation."

Price is best known for his inputs to architectural theory, specifically his 1960 1961 'Fun Palace' Project. "***Choose what you want to or watch someone else doing it. Learn how to handle tools, paint, babies, machinery, or just listen to your favourite tune. Talk, dance, or be lifted up to where you can see how other people make things work. Sit out over space with a drink and tune in to what else is happening elsewhere in the city. Try starting a riot or beginning a painting or just lie back and stare at the sky.***"

The Fun Palace was an open steel frame in which stairs, modules, prefabricated walls, and utilities could be inserted. Using an unenclosed steel structure, fully serviced by travelling gantry cranes the building consisted of a 'kit of parts': pre fabricated walls, platforms, floors, stairs, and ceiling modules that could be moved and assembled by the gantry cranes. Virtually every element of the building was variable. The Fun Palace was one of his most influential projects, Although never built. The user would be responsible for the final form, which could be moved around or changed with time. Form would be a result of functional needs, allowing the building to create its own identity.

In an article, he states, "It's form and structure, resembling a large shipyard in which enclosures such as theatres, cinemas, restaurants, workshops, rally areas, can be assembled, moved, re arranged and scrapped continuously..." Price discusses the significance of architecture that remains adaptable, even as time continues to a new acquaint activities into the space. "In allowing for change, flexibility, it is essential that the variation provided does not impose a discipline which may only be valid at the time of design." In other words, for Price to ascribe a building with being flexible it must last the test of time; true adaptability could not be a fixed solution for a particular tiff in time. "Architecture must enable people to think the unthinkable."



LITERATURE**REVIEW****ACTIVITIES AND CHANGE.**

Cedric Price

In the article, 'Activity and Change,' Cedric Price declares that, "Planning for activities must allow for change not only in content but in means of operation."

I find this quote absorbing, for it makes me think of a standardize system of architecture (such as the open, steel structure) that allows for a variety of different prefabricated units, to perform differently within the open structure, interacting with one another at different times, in different ways on different places.

An expendable aesthetic requires no flexibility in by gone but must include time as complete factor. In permitting for change, flexibility, it is essential that the difference provided does not impose a discipline which may be valid only at the time of the design. It is easier to permit for individual flexibility than organisational change. Designing for activities must allow for change not only in content but also in means of operation.

This flexible accession extended to all aspects of his work. Finding brilliant and elegant solutions for everyday problems he doctrine 'anticipatory architecture', firmly believing in transient architecture designed for continual change. Price redefined the role of the architect as an agent of change, whose main motto was to anticipate that, and open new possibilities for society as a whole. Constantly challenging and questioning the accepted customs of architecture, his approach was daring and irreverent; he famously suggested that the man hoping to transform his life with a new house might be better off getting a divorce.

Every aspect of each idea was researched in detail: as if each idea was to be built. By intriguing with existing economic, political and structural networks, Price explored architecture's abeyant to nurture change, intellectual growth and social development. To Cedric Price architecture was not about the finished building but more about an ability to facilitate change in a changing world and to "allow us to think the unimaginable".

LITERATURE REVIEW

FUN PALACE.
Cedric Price

The Fun Palace was dreamed up by the visionary architect Cedric Price. Price had one of the worst designed to actually built ratios in modern architecture but he was no less influential for it. He unveiled the design for the Fun Palace in 1960. It was commissioned by Joan Littlewood.

You could reasonably claim that Price, in effect, anticipated a three dimensional sandbox game, one that has no set story, no preconceived agenda, only an environment that responded to its user's desires and whims. The most mind blowing thing of all is that Price's design called for it to be dismantled at the end of ten years and the site restored to its original state. With the Fun Palace, Price responds to social issues that go beyond the usual limits of architecture.

LITERATURE REVIEW

ARCHITECTURE AS
THEME.
Oswald Mathias Ungers

Architecture as theme talks about the theme of transformation. Formation is improbable without transformation and inversely there is no transformation that does not create new formation. 'Form is the verbalization of spiritual content,' and he called for a move away from functionalism and the use of technology for its own sake.

LITERATURE REVIEW

NOTES ON THE
SYNTHESIS OFFORM.
Cristopher Alexander

The concluding object of design is form. The form governs the programmatic clarity of the space. The form is the question and its context. It is the solution to the problem. Physical clarity cannot be gained in a form until a programmatic clarity is achieved. Adaptation must take place independently within independent organizations of variables. Organisation of complex physical object is order. Every component has two told nature It is first a unit, second a pattern. Every aspect of form, whether piece like or pattern like can be understood as a structure of components.

LITERATURE**REVIEW**

THE SIX DETERMINANTS
OF ARCHITECTURAL
FORM.

Paul Rudolph

1. First determinant of form is the environment of the building and its relationship to other buildings and the site.
2. The second determinant of form is the functional aspect.
3. The third determinant of form is the particular regions, climate, topography, landscape and natural lighting.
4. The fourth determinant of form is the particular materials which one uses.
5. The fifth determinant of form is the psychological demand of the space.
6. The sixth determinant of form is concerned with the spirit of the times.

These six determinants are important to follow in my designing of the structure because I am talking about flexibility for a building to be adaptable the selection of materials is critical. The form also needs to be functional since transformations will develop change in form which has to be taken care of. I am talking about a structure for the people which need to be self sustainable. The demand of the space is such what the people want and not what is provided to them.

LITERATURE**REVIEW**

POST FUNCTIONALISM.

Peter Eisenman

Form is to be understood by a order of fragments. A humanist balance of form and function should build a dialectical relationship. One tendency is to presume architectural form to be a familiar transformation from pre existent geometry to platonic solid.

LITERATURE**REVIEW****BEYOND HORIZONS
IN ARCHITECTURE.**

Tadao Ando

Architectural thinking is supported by abstract logic. Architecture is not a simple method of problem solving whereby given constraints are reduced to technical issues. Architectural creation involves speculating the original and essence of a project's functional requirements and the subsequent recognition of its issues. We must use technology as a tool for our project and let it not govern over the building. The real world is intricate and differing. At the case of architectural creation is the transformation of the absoluteness of the real through the transparent logic into spatial order. The elements of nature - wind, water, light and sky - bring architecture derived from ideological thought to the ground level of reality and awaken life within it.

LITERATURE**REVIEW****LANDSCAPE OF CHANGE.**

Sanford Kwinter

There is no absconding fact that transformation and novelty are the clear qualities that any theory of form would need to confront. He speaks of the revival of geometrical methods to study dynamics and the traditional changes within the system. Like landscape the form is not fixed things, but continuous metastable events. i.e. speaks of a disaster i.e. destruction of the attractor and creation of the new one. Catastrophe theory identifies that all form is the result of struggle and contest. It shows the combination of any two or more conflicting forces that may result in entirely random and spasmodic behaviour it allowed to interact dynamically.

PRECEDENT**CASE STUDIES**

SUPERKILEN PARK

URBAN PARKS

Architect : BIG-Bjarke Ingels Group, Superflex, TOPOTEK 1**Client** : Copenhagen Municipality**Design** : 2009-2010**Completed** : 2012**Site Area** : 30000 m2**Theme** :

The issue of Urban integration and cohesion of different cultures is the main motto. To attain a sense of ownership 108 objects from 62 native countries of the neighborhood residents have been brought and integrated into the design.

PURPOSE OF STUDY : TO study an urban public realm with its impact on cultural diversity and social well being.

RELATION OF DESIGN : Approach to cater to cultural diversity and multiple cultural lapping.

CONTEXT STUDY : The district of Nørrebro is known for the many riots that took place over the course of the past two centuries. Many instances of violence and crime in the area, gang activity, social problems, lack of cultural integration and the overall infrastructural disconnectedness of the area from the rest of the city has reinforced a negative image. Urban regeneration project are the many problems of the neighbourhood. the clients organised a survey of users' needs, which involved several public meetings with local inhabitants.

TYOLOGY / PROGRAM : URBAN PARK, MARKET, PUBLIC SQUARE

ZONING PLANNING : Stretching from Nørrebrogade to Tagensvej, this 750 metre long public space is made up of three main areas:

- a Red Square,
- a Black Market and
- a Green Park.
- There are 108 objects from the 62 home countries of local inhabitants, it consists of no buildings.

FORM : The city of Copenhagen is known as a heaven for cyclists with its 390 kilometres of biking lanes. Urban planners across the world are looking to Copenhagen as model for this type of urban transportation. A continuous two-lane bicycle strip connects all three squares as bicycle paths are also a dominant piece of infrastructure through the Superkilen park.

Introduction

Located in the very heart of Nørrebro, Superkilen is a kilometre-long urban park. It is the most culturally diverse and socially challenged neighbourhood of Copenhagen, Denmark. The project was initiated by the clients and is a result of a public competition for the urban renewal of the area. By the joint effort by three teams: architectural office BIG-Bjarke Ingels Group, landscape architecture firm TOPOTEK 1 and the artist group SUPERFLEX, the design was developed, the two of which are local to the neighbourhood. A unique design concept was resulted by the transdisciplinary effort that translates historical themes of the pleasure garden and the amusement park into the contemporary and urban context of Copenhagen. The Red Square, the Black Market and the Green Park are three formally very distinct zones that recreated the image of the neighbourhood quite literally which provided a better connectivity and an increased sense of security within surrounding residential areas.



Map 6 : Map of Netherlands showing Superkilen park.

Local residents were invited to propose objects as an exhibition of best practices from all over the world for the furnishing of the park. Superkilen was not only designed for, but also with the input of, Muslims, in collaboration with the broader community, given that the majority of local residents are of Muslim and/or Middle-Eastern background.

Providing the residents with the sense of pride and ownership over the park , today, the objects have taken on the role of both identity markers and cultural mediators,

LANDSCAPE

Superkilen incites play and interaction between users of various cultural and professional backgrounds and age groups. The design sheds light on the cultural diversity and its positive dimensions. The Swing Bench from Baghdad, Iraq, and the Octopus from Tokyo, Japan are two of the most visited and best-utilised objects are. The objects bring Muslims and non-Muslims in close proximity and interaction in both the cases. While swinging people of various cultural backgrounds and age groups sit literally together, without having to forcefully “integrate” with one another. Parents come into conversation while children are sliding together on the Japanese Octopus or swimming in the Moroccan Fountain, and help each other to look after their children.

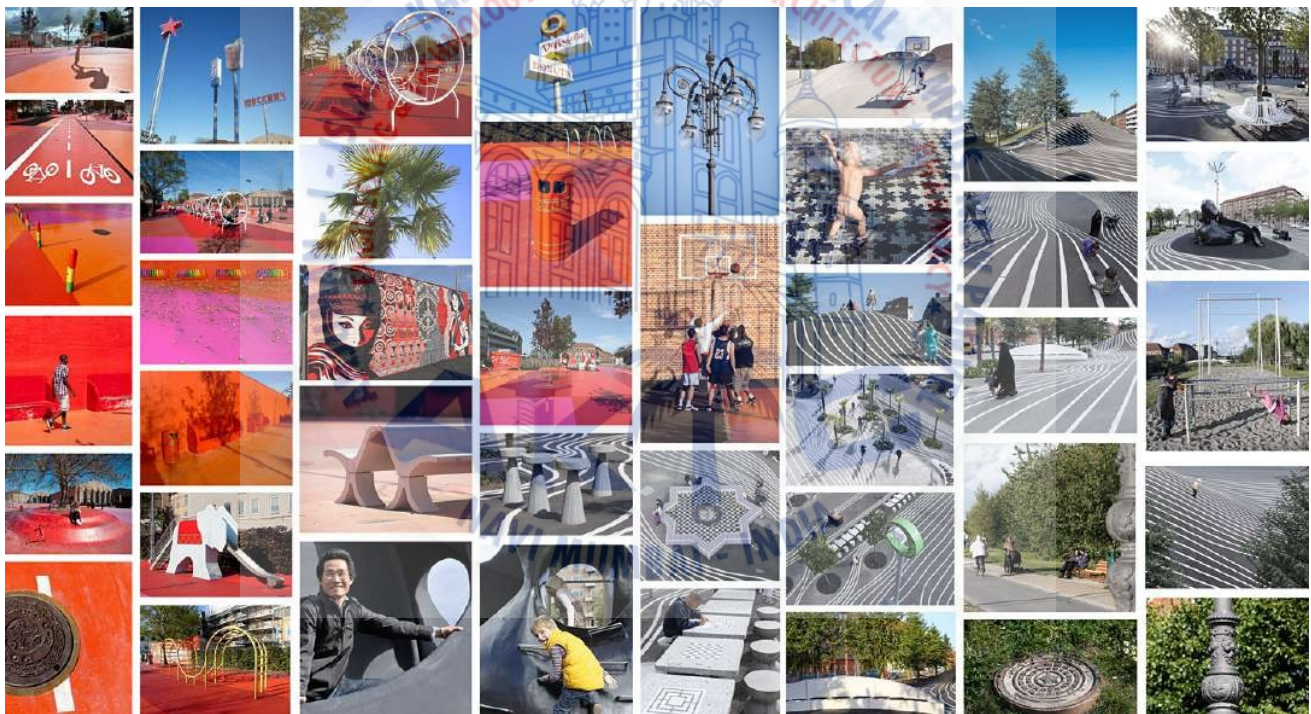


Fig 26 : 108 Objects exhibited in Superkilen park.

The landscaping concept embraces the notions of the exotic and the everyday to reflect on Denmark's state of increasing cultural pluralisation with respect to the integration of various cultures. Walking through Superkilen allows visitors to encounter something new and encounter fragments of other cultures. The park allows visitors to encounter and use these alien and exotic objects as an everyday life experience, most of the objects and vegetation in the park have been imported from other cultural contexts and places. The perception of exotic cultural artefacts into objects of everyday life is transformed through such experiences.

PROGRAMME

A History of the inception of the project Superkilen is part of a larger urban renewal plan, which includes Superkilen, Nørrebro Hallen and DSB Arealet (later called Mimersparken). As a partnership between the Municipality of Copenhagen and Realdania this plan was initiated and developed which is a Danish private philanthropic association involved in the development of many urban renewal and public-space projects. The district of Nørrebro is known for the many riots that took place over the course of the past two centuries. Many instances of violence and crime in the area, gang activity, social problems, lack of cultural integration and the overall infrastructural disconnectedness of the area from the rest of the city has reinforced a negative image. Urban regeneration project are the many problems of the neighborhood. The clients organized a survey of users' needs, which involved several public meetings with local inhabitants as a part of planning process for the competition.



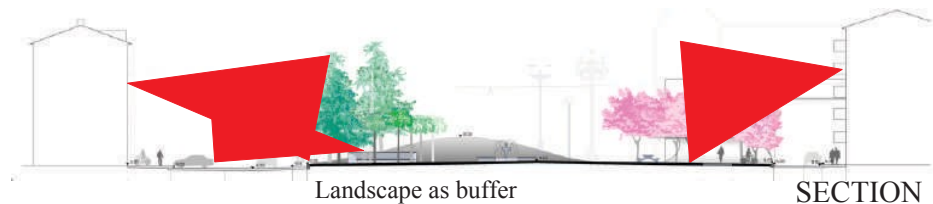
Red Square



Black Market



Green Park



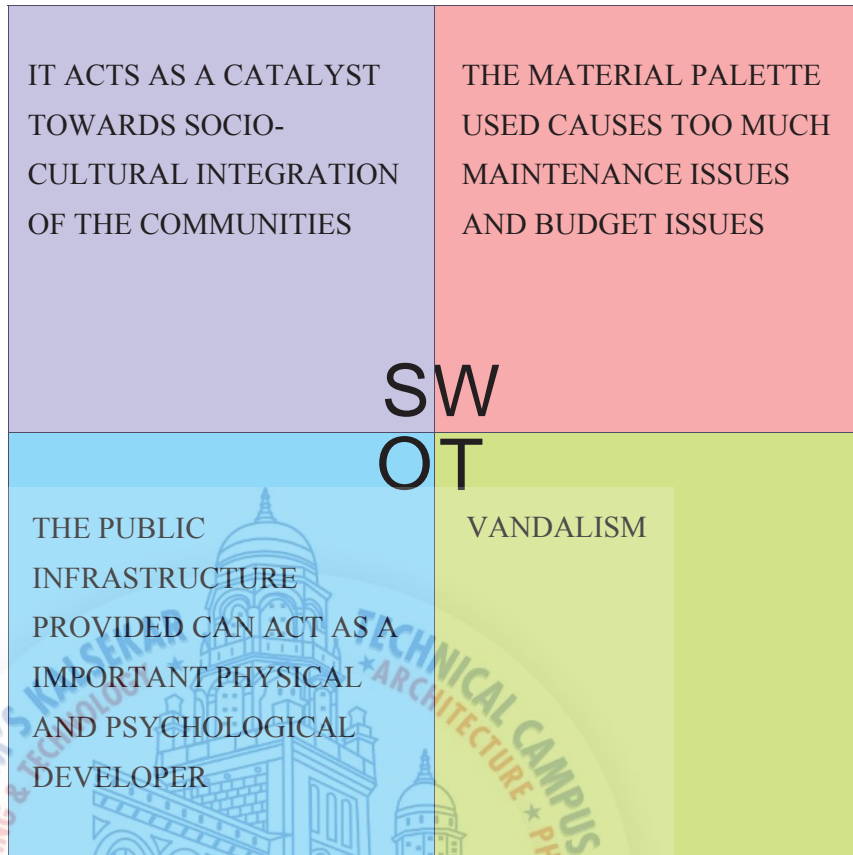
Landscape as buffer

SECTION



Creates multiple destinations

SECTION



Inference : The use of native objects from 62 different countries has created a very distinguished sense of ownership of the users with the park and has kept vandalism at bay.



SPACE	AREA m2
RED SQUARE	7000 m2
BLACK MARKET	6000 m2
GREEN PARK	17000 m2

Table 2 : Superkilen park Space Program.

PRECEDENT**Architect** : Hasmukh Patel**CASE STUDIES****Client** : Ahmedabad Municipality

SABARMATI

Design : 2009-2010

RIVERFRONT PARK

Completed : 2010 -Present

URBAN PARKS

Site Area : 18000 m2**Theme***The Park is designed as an extension to the Gandhi Ashram across the Sabarmati river.*

The Sabarmati Riverfront project is an environmental improvement, social upliftment and urban rejuvenation project that will renew Ahmedabad.

The project is being developed by the Sabarmati Riverfront Development

Corporation Ltd. (SRFDCL), a company wholly owned by the Ahmedabad

Municipal Corporation.

The project aims to reclaim the private river edge as a Public asset and restore

the city's relationship with its river. The Riverfront project presents a great

opportunity to create a public edge to the river on the eastern and western sides

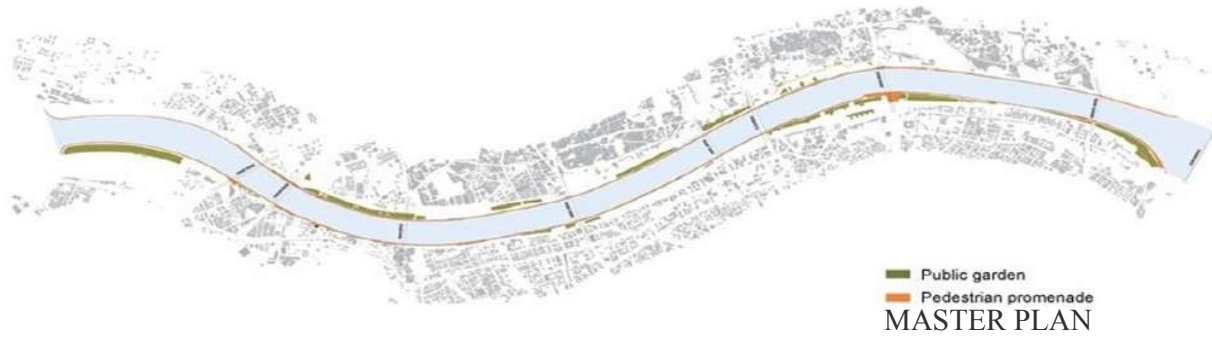
of Ahmedabad.

Objectives

1. Environmental Improvement
2. Creating network of public open spaces
3. Providing adequate public access to the river
4. Rehabilitation of the slums
5. Rehabilitation of Gujari Bazaar
6. Rehabilitation of Dhobis (Washermen)
7. Creating vibrant urban neighborhood
8. Recreational Activities

The Sabarmati Riverfront Development Project is a city level intervention. It is conceived and being implemented as a pioneering multibenefit project with significant urban transformation potential. This project is to transform the historic but neglected river Sabarmati into a vibrant and vital focus for Ahmedabad city to be returned back to the citizens of Ahmedabad.

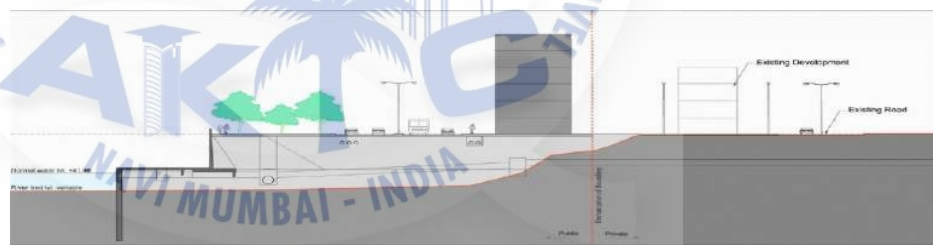
TYOLOGY / PROGRAM : URBAN PARK, WATERFRONT.



Sr	Sanctioned Land Use	Area Ha	%
1	Roads	44	22
2	Garden	27	14
3	Open Space	37	18
4	Public Purpose	29	14
5	Lower Promenade	27	13
6	Multi Use for sale	29	14
7	Sports	7	4
8	Residual (Utilities, Residential, Commercial, General, Education)	2	1
Total		202.8	



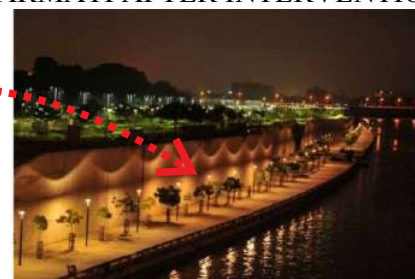
SABARMATI BEFORE INTERVENTION



SABARMATI AFTER INTERVENTION



LOWER PROMENADE



RIVER FRONT PARK





SR NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	ADMIN	TICKETING	10	PRIVATE	10
		MAINTENANCE	20	PRIVATE	10
2	THOUGHT GARDEN		500	PUBLIC	600
3	LOTUS POND		600	PUBLIC	1000
4	AMPHITHEATRE		300	PUBLIC	
5	MOUND PLAZA		600	PUBLIC	1200
6	FOOD COURT		300	PUBLIC	200

Table 3 : Sabarmati Riveerfront park Space Program.

Inference : The park acts as a good recreational infrastructure as it draws a lot of crowd due to the dense city fabric around. The river being at a lower level than the park kills the purpose of a riverfront park.

PRECEDENT**Architect** : GWWO Architects**CASE STUDIES**

FORT MC. HENRY

Location : Baltimore, MD, United States

INTERPRETATION

CENTRE

Completed : 2011

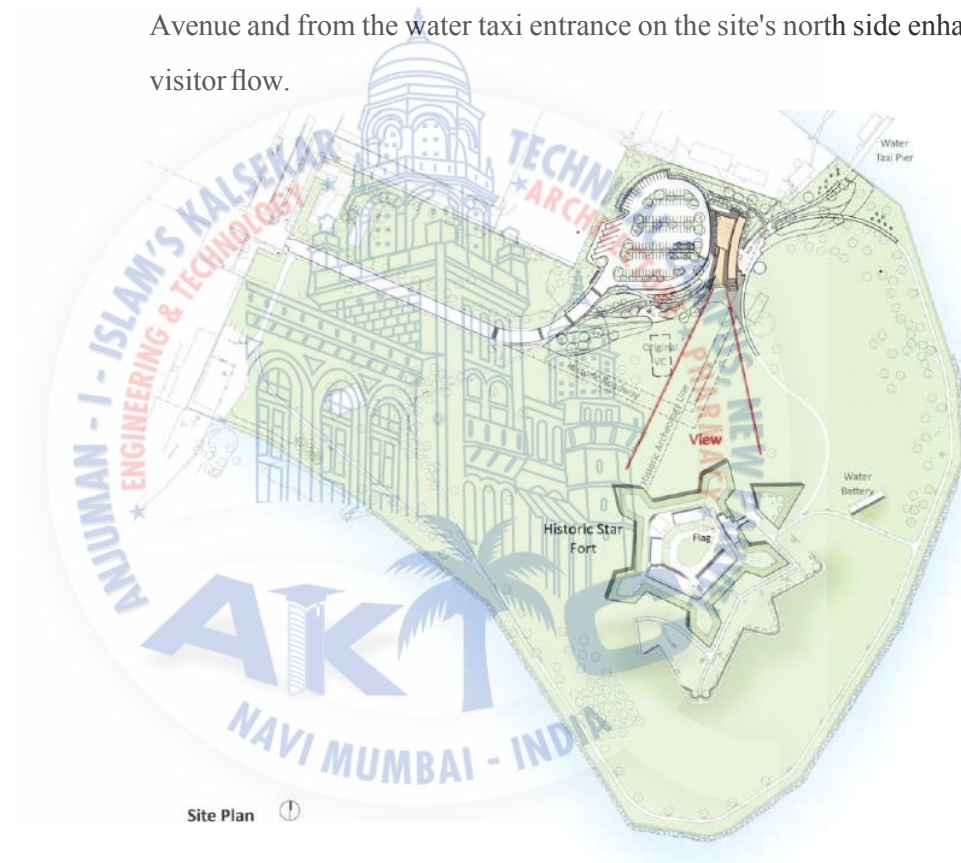
INTERPRETATION/VISITORS

CENTRES

Site Area : 45000 m2**Landscape Architecture** : Mahan Rykiel Associates, Inc.**Built up Area** : 1640 m2**Theme** :*The nation's most significant symbol- star spangled banner is the inspiration for design***PURPOSE OF STUDY** : TO STUDY THE RELATION BETWEEN THE CENTER AND THE FORT**RELATION OF DESIGN** : PRESENCE OF A HISTORIC FORT AND LOCATION OF SITE ADJACENT TO WATER**CONTEXT STUDY** : One of the nation's most significant historic landmarks, Fort McHenry National Monument and Historic Shrine is the birthplace of America's national anthem.. The Fort, the National Anthem and the flag, together and individually help us understand how the United States was created, defended, and preserved. The design team conceived the expression for the new visitor center with this context and the rich national symbols in mind.**TYOLOGY / PROGRAM** : EXHIBITION CUM EDUCATIONAL CENTER**ZONING PLANNING** : Planning of the Visitors Center is Governed by two factors, the existing parking lot and to maintain Visual Connection to the fort**FORM** : The Fort and its flag are acknowledged by the curved walls. From the west, the upward slope of the brick wall, as revealed by the receding zinc wall, directs the visitor's eye toward the flag, creating a visual dialogue between the Fort and the visitor center.

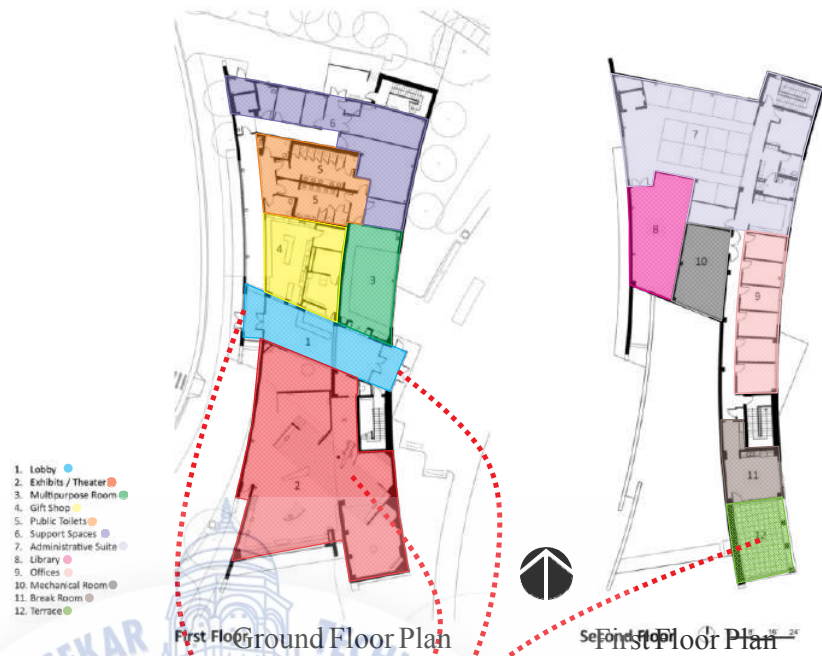
Visitor Approach & Building Location

The pre-existing parking lot, has been redesigned and enhanced & The new visitor center is positioned at the east end of the same. The Park's primary historic area has been restored by Removal of the former visitor center which was located within the Park's cultural landscape and siting of the new building outside of the original 1814 reservation boundary . An improved entry sequence along with uninterrupted views to the historic star fort has been achieved with visitors arriving from the Fort's main entrance on East Fort Avenue and from the water taxi entrance on the site's north side enhancing the visitor flow.



Architecture & Landscape

The nation's most significant symbol , the Star-Spangled Banner is primary inspiration for the new visitor center's design. The dynamic nature of the flag and all it represents is reflected by the two curved walls of the building. The position of the two wall clad in distinct materials invokes the meanings behind the flag's stripes. The thin and more delicate zinc façade expresses the purity while Brick, strong and solid, expresses the hardiness, valor represented by the red stripes, and innocence represented by the white.



The hardscape merges with the structure and acts as a Spill out



Zinc wall breaks the direct visual connection to the fort as you enter



Material contrast of Zinc and Brick



Visual Connection to the Fort

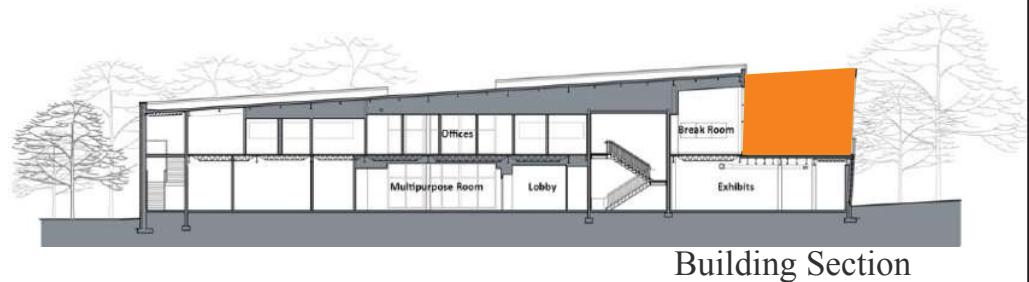
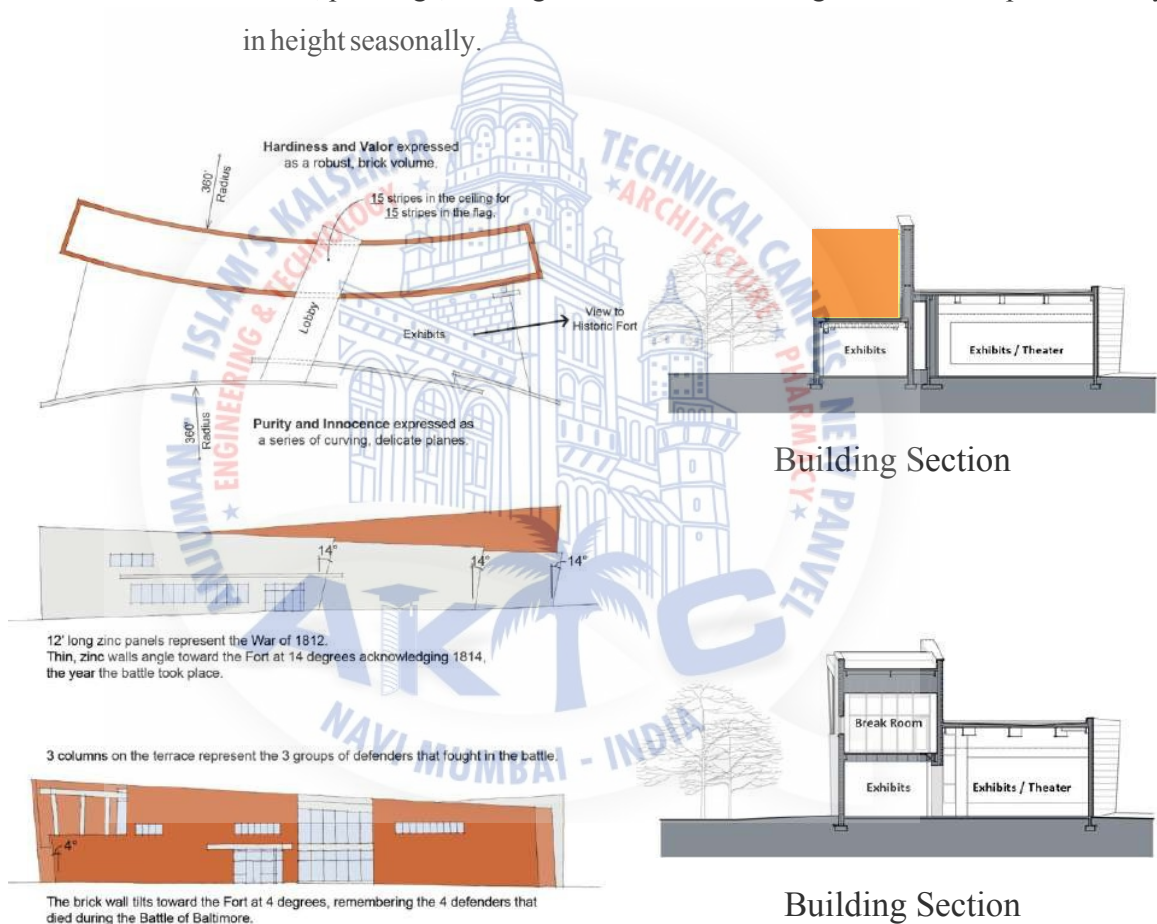


Architecture and Softscape



Architecture and Hardscape

The Fort and its flag are acknowledged by the curved walls. From the west, the upward slope of the brick wall, as revealed by the receding zinc wall, directs the visitor's eye toward the flag, creating a visual dialogue between the Fort and the visitor center. A sense of motion is created through the contrasting volumes of the walls and the gentle change of their heights in opposite directions. Landscape design, by Mahan Rykiel Associates of Baltimore further enhances this movement. The paving patterns and curved pathways extend the east and west walls into the site, while site design incorporates berms, plantings, and vegetation that mimic the gentle curves in plan and vary in height seasonally.





SR NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	Lobby	Foyer, reception	30	Public	80
2	Exhibits/theatre		100	Public	460
3	Multipurpose room		30	Public	80
4	Gift shop	Storeroom, office	20	Public	80
5	Public washrooms	Male/female	20	Public	80
6	Support spaces		30	Private	150
7	Library		30	Public	110
8	Offices	Pantry, corridors, chambers	40	Semi public	130
9	Mechanical room		10	Private	80
10	Admin suite	Corridors, chambers	30	Semi private	100

Table 4 : Fort Mc.Henry Space Program.

Inference : The material palette and the visual connect to the historic fort creates a physical psychological as well as a visual connect.

PRECEDENT Architect : COMOCO Architects

CASE STUDIES

POMBAL CASTLE Location : Pombal, Portugal

VISITORS

CENTER Completed : 2014

INTERPRETATION/VISITORS

CENTERS Site Area : 20000 m2

Built up Area : 1800 m2

Theme :

The design idea was to live up to the richness of the castle's multilayered history, without being neither offensive or subdued.

PURPOSE OF STUDY :
TO STUDY THE RELATION BETWEEN THE CENTER AND THE FORT

RELATION OF DESIGN : PRESENCE OF A HISTORIC FORT AND
LOCATION OF SITE

CONTEXT STUDY : Since the time of the Roman empire, The hill top , overlooking the valley of the Arunca river has been occupied and since then performed multiple roles and configured many spatial and social practices. It evolved to a vital defensive structure in a territorial network of military apparatus from a small provincial community, and eventually became a touristic destination and an identifying device for the region. The Architects were commissioned to design a visitor centre for the castle's ward.

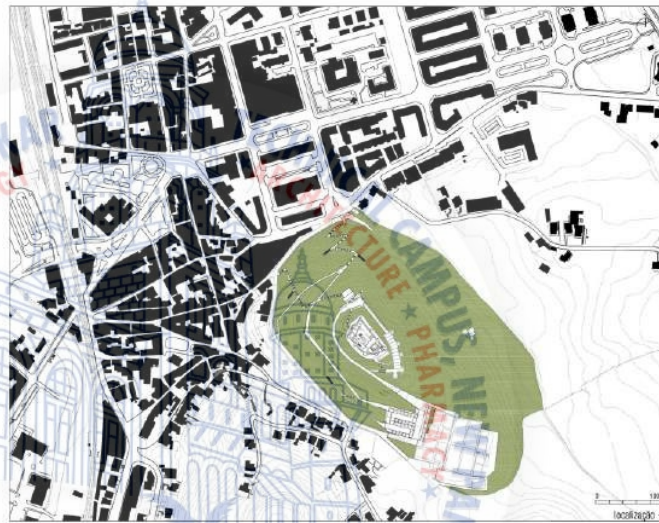
TYOLOGY / PROGRAM : EXHIBITION CENTER

ZONING PLANNING : Most of the ruins or derelicts of the past, are as parts of the collective memory that were to be critically preserve and, furthermore, to enhance, so that the users understand these artifacts, This was the drive that established the fundamental principles that guided the design approach.

FORM : The new volume was thought as an object that should embody some ambiguity: on the one hand it should seamlessly mingle with the existing features

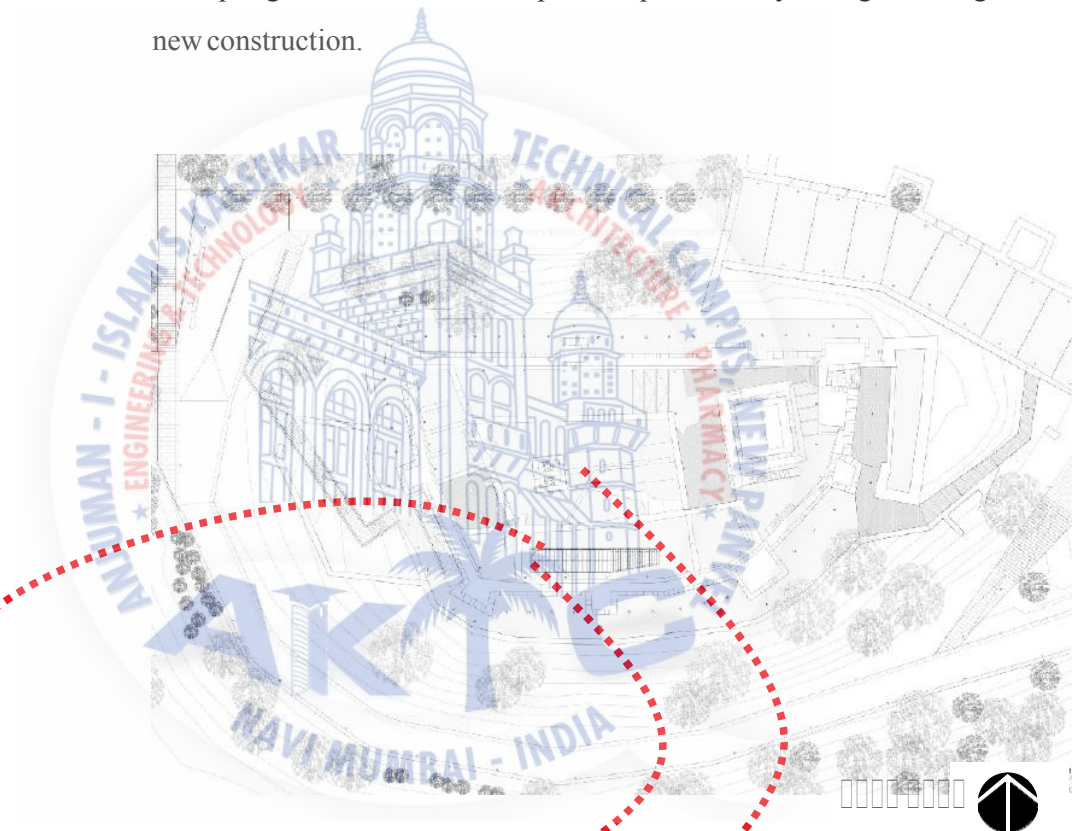
The definition of a design idea that could live up to the richness of the Pombal castle's multi-layered history, without being neither ostensive nor subdued, i.e. finding its voice among the very many built artifacts that populate that space, was the main challenge of the commission.

Most of the ruins or derelicts of the past, are as parts of the collective memory that we would like to critically preserve and, furthermore, to enhance, so that the users understand these artifacts, This was the drive that established the fundamental principles that guided the design approach.



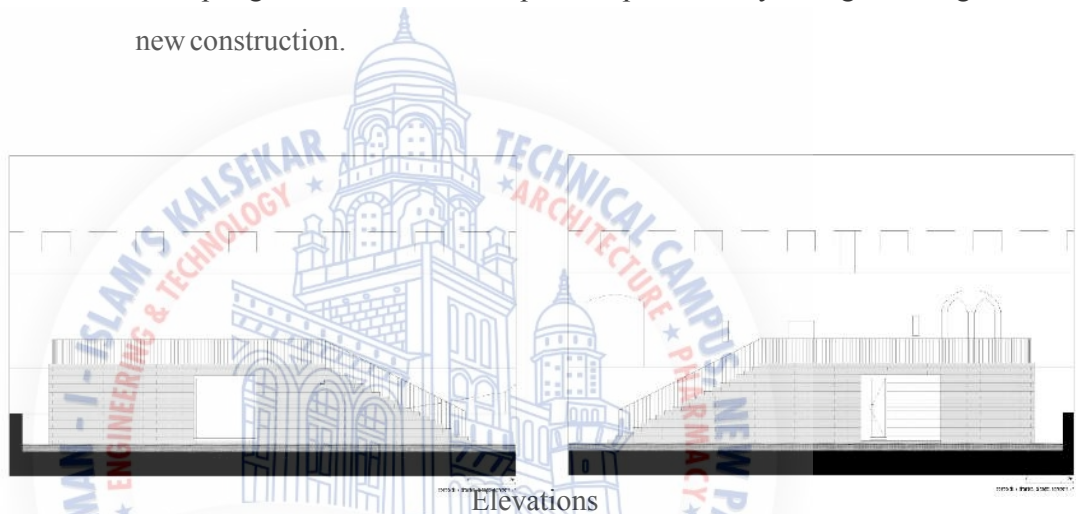
Relatively straightforward design strategy was kept for the landscaping of the castle's ward and for the revitalization of the castle's keep. The still-existing pavements in limestone cobbles were recuperated and remaining parts were filled in with gravel. Later, they designed the layout and furniture to the exhibition spaces that occupy the rooms of the tower and introduced minor changes to the railings in the cornet steel volume. Designing the new volume to accommodate the visitor centre was the main challenge. Reception for the visitors, a room to screen a virtual history of the castle and a storage area were the spaces stated in the design brief.

Introducing a new volume implied an inevitable confrontation with the existing elements that define the space, as the area of the castle's ward is relatively small (1200 m²), and populated with many elements. At any point, this circumstance became the guiding force to develop the project's main idea. The new intervention was thought as an object that should embody some ambiguity: on the one hand it should seamlessly merge with the existing features in the castle's ward, and on the other hand it should become a conspicuous new add on to the existing built structures. The architects tried in attempting to activate dormant spatial experiences by taking advantage of the new construction.



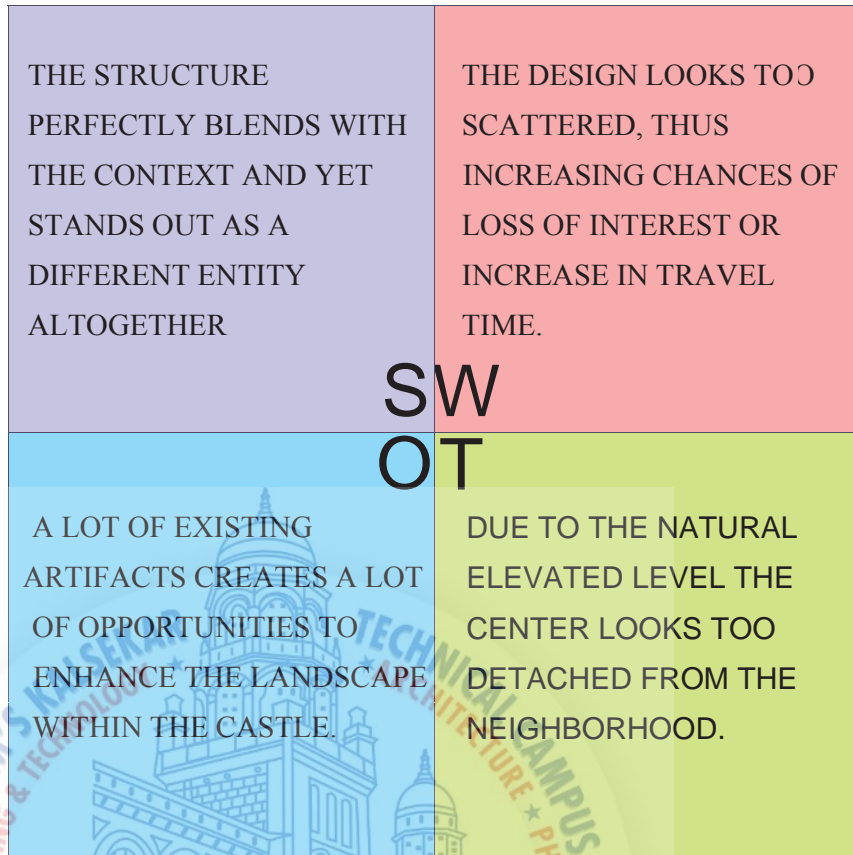
Pombal castle's visitor centre pursues a deliberate ambiguous condition between a topographical feature - a limestone monolith, and an amiable wanderer, a stranger in search of a welcoming new home to rest.

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The intervention was shaped in such a manner so as to make it a spatial device inspired by the tectonics of the castle's stone masonry, specially the stairs connecting the platform inside the castle's precinct and the design program was limited to the minimum. The new intervention creates a new platform that enables the access to the level of the 16th century Manuelino-style windows pierced on the southwest side of the castle's curtain wall. It performs as a safe haven for those looking for protection from the threat of the unknown at the same time it creates a minimal space that re-enacts the spatial experience of the castle as a device to exert control over the landscape.

The design strategy for Pombal castle's visitor centre pursues a deliberate ambiguous condition between a topographical feature, a limestone monolith, and an amiable wanderer, a stranger in search of a welcoming new home to rest.



SR NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	Reception		20	Public	25
2	Virtual Room		25	Public	30
3	Store room		12	Private	25
4	Exhibition Area		100	Public	180
5	Public washrooms	Male/female	20	Public	40
6	Open exhibition		100	Public	300

Table 5 : Pombal Castle Visitor’s centre Space Program.

Inference : The design strategy for Pombal castle's visitor center pursues a deliberate ambiguous condition between a topographical feature, a limestone monolith, and an amiable wanderer, a stranger in search of a welcoming new home to rest.

PRECEDENT**Architect** : Charles Correa**CASE STUDIES****SABARMATI ASHRAM MUSEUM****Location** : Ahmedabad, India**INTERPRETATION/VISITORS CENTERS/ MUSEMS** **Completed** : 1970**Site Area** : 17200 m²**Built up Area** : 2230 m²**Theme** :

Correa took the words of Mahatma Gandhi “I don't want my house to be walled on all sides and my windows to be stuffed. I want the cultures of all the lands to be blown about my house as freely as possible”.

PURPOSE OF STUDY : TO STUDY THE RELATION BETWEEN THE CENTER , WATER FRONT AND THE ASHRAM

RELATION OF DESIGN : PRESENCE OF A HISTORIC ASHRAM AND LOCATION OF SITE ON WATERFRONT, FLUIDITY OF SPACES

CONTEXT STUDY : IT WAS SETUP TO HONOR, INTERPRETATE AND CELEBRATE THE RICH PERSONALITY OF GANDHI JI AND ALSO TO DISPLAY ARTIFACTS USED BY GANDHI JI.

TYOLOGY / PROGRAM : MUSEUM, INTERPRETATION CENTER

ZONING PLANNING : Five interior rooms contain the collection of the museum. The rooms are enclosed by brick walls and wooden louvered screens. All five rooms are part of 6mt square module. Correa's subtle changes of the enclosure allow for variety in the modules lighting, temperature and visual permeability. A square, uncovered shallow pool is located between the five rooms.

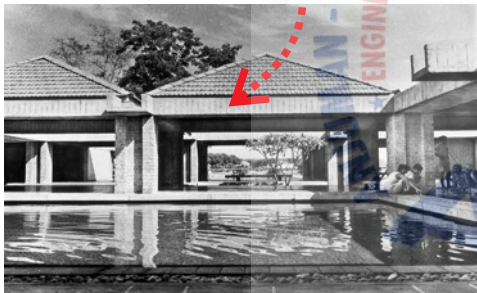
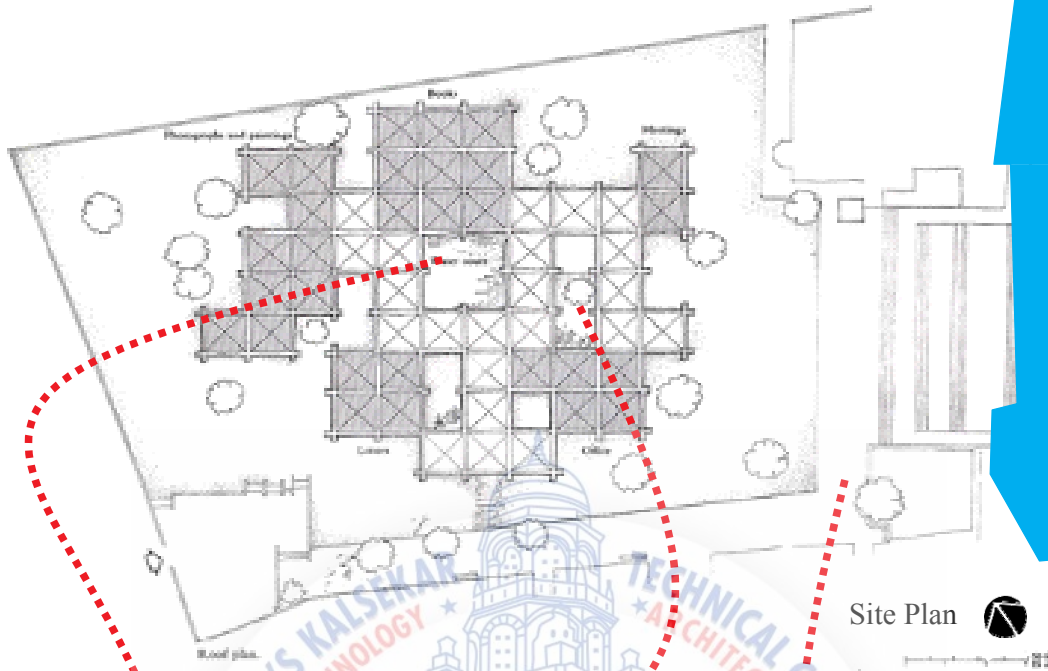
FORM : The museum uses a simple but delicately detailed post and beam structure. Load bearing brick columns support concrete channels, which are both support the wooden roof and direct rainwater.

The Sabarmati Ashram is located along the west bank of the Sabarmati River on Ashram Road, in the north of the city. It can be reached by busses heading north from the center on R C Road (Wadaj bus stop is appx. 1.5 km from the Ashram). Open everyday 8:30 to 12:00 and 14:00 to 19:00.

The site on the Sabarmati River bank is part of the larger ashram complex and is integrated into its gardens. Five interior rooms contain the collection of the museum. The rooms are enclosed by brick walls and wooden louvered screens. All five rooms are part of the 6m square module. Correas subtle changes of the enclosure allow for variety in the module's lighting, temperature, and visual permeability. A square, uncovered shallow pool is located between the five rooms.

CORREA TOOK THE WORDS OF MAHATMA GANDHI, "I DONT WANT MY HOUSE TO BE WALLED ON ALL SIDES AND MY WINDOWS TO BE STUFFED. I WANT THE CULTURES OF ALL THE LANDS TO BE BLOWN ABOUT MY HOUSES AS FREELY AS POSSIBLE BUT I REFUSED TO BE BLOWN OFF MY FEET BY ANY OF THEM."





THE CENTRAL POOL



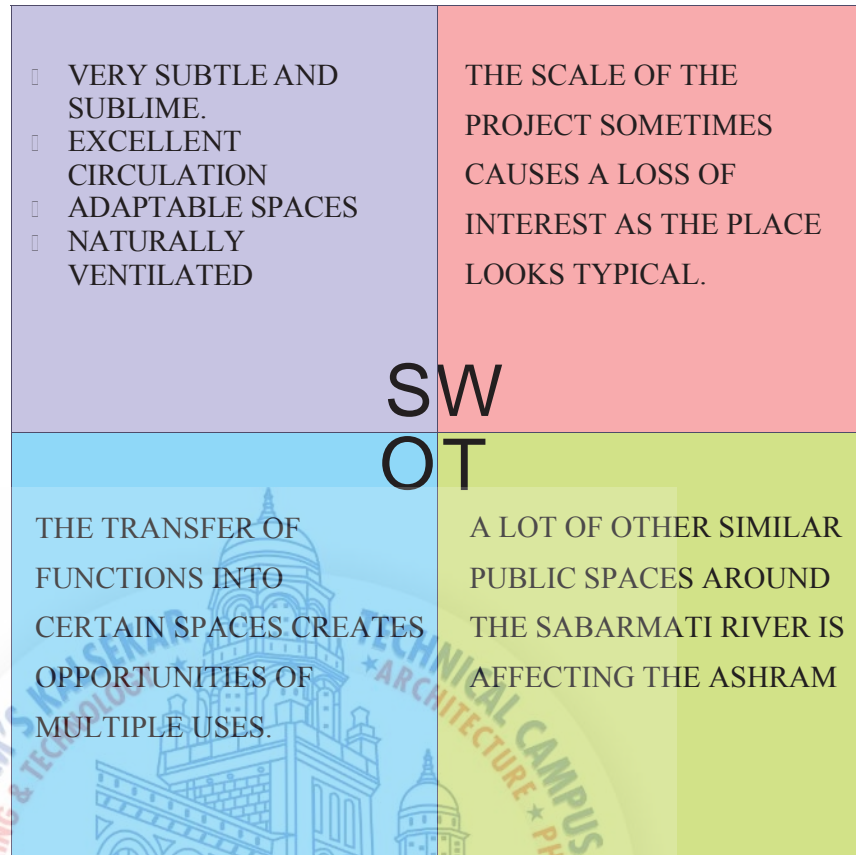
COURTYARDS



MATERIAL CONTRAST KOTA STONE - BRICK



THE JUNCTION WHERE THE MUSEUM MEETS THE SABARMATI IS ACCESSIBLE VIA STAIRS WHICH WERE BARRICADED



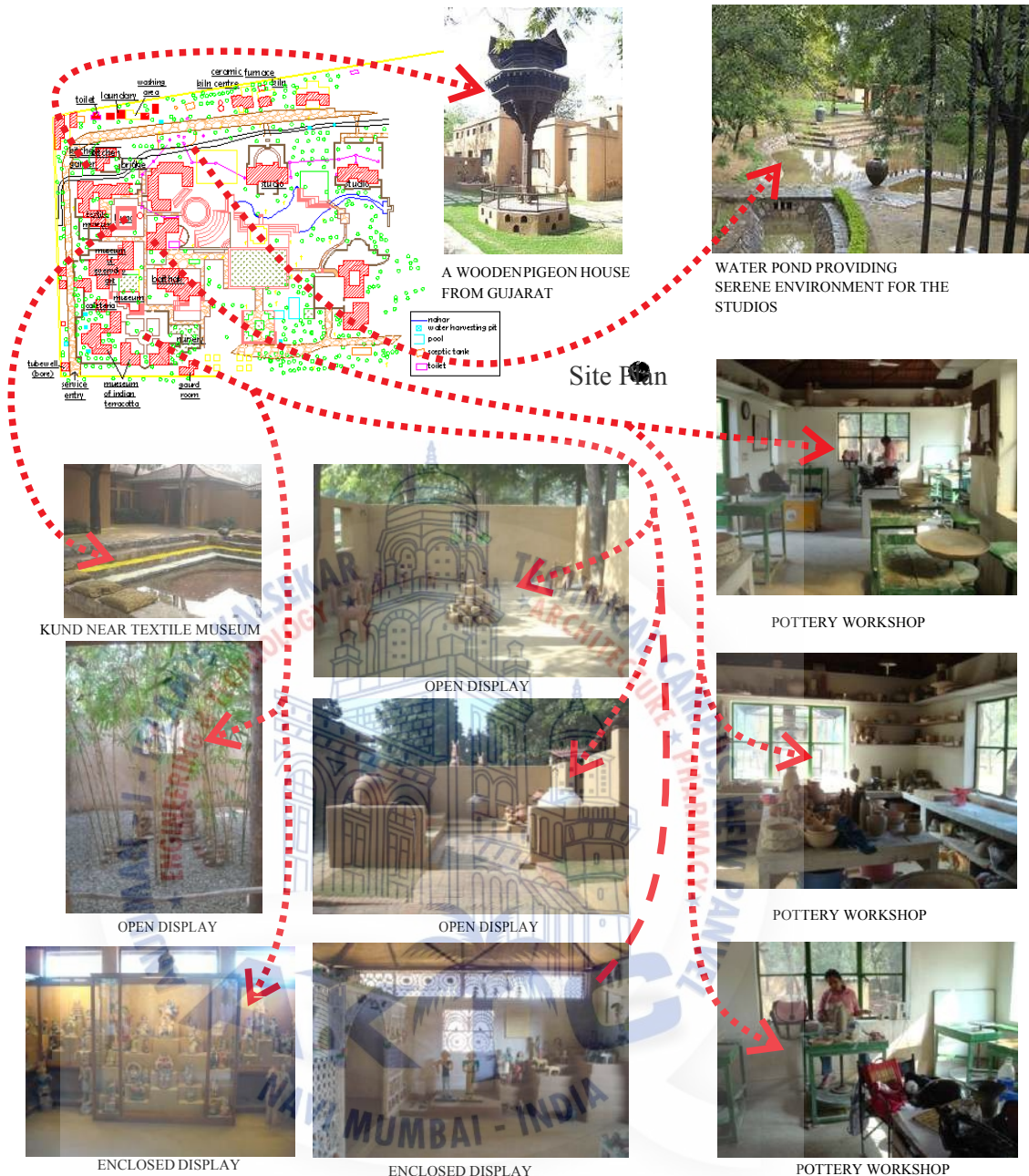
Inference : The wide and naturally ventilated circulation space doubles up as a space for temporary exhibitions or changes and adapts as per users need. Courtyards provides diffused light into exhibition areas.

SR.NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	Circulation		150	Public	144
2	Public washrooms	Male/female	10	Public	12
3	Conference room		12	Private	12
4	Exhibition Area	Letter	50	Public	24
5		Photos and Paintings	50	Public	36
6	Admin		20	Private	36
7	Library		30	Public	54

Table 6 : Sabarmati Ashram Space Program.

PRECEDENT**Architect** : Upal Ghosh**CASE STUDIES****SABARMATI ASHRAM MUSEUM****Location** : New Delhi, India**INTERPRETATION/VISITORS** **Completed** : 1970**CENTERS/ MUSEMS****Site Area** : 8000 m²**Built up Area** : 2200.0 m²**Theme** :**PURPOSE OF STUDY** : TO STUDY THE CULTURAL CENTER AND ITS CULTURAL IMPACT.**RELATION OF DESIGN** : PROGRAMME OF THE KENDRA**CONTEXT STUDY** : Sanskriti Kendra is a symbol of Sanskriti's involvement in activities relating to art, craft, literature, the performing arts, and social work. Sanskriti Kendra is, thus, a manifestation of Sanskriti's philosophy of looking at apparently different facets as parts of a larger organic whole.**TYOLOGY / PROGRAM** : CULTURAL CENTER**ZONING PLANNING** : The structures are semi-rustic in appearance, with optimum space between them for catching a breath of fresh air or strolling - but not far apart as to engender a sense of isolation.**FORM** : The design of built form in a warm climate, where between closed-cuboids and open to sky, there lies in a whole continuity of zones, with varying dimensions and varying level of protection. One steps out of the cuboid to lend oneself in a verandah from which one gravitates into courtyard and then under a tree, and onto a terrace covered by a pergola, and then back onto a balcony .

The lines between these zones are not formal and sharply demarcated, but amorphous. Subtle quality of light, of the quality of ambient air, register each transitions on our senses.



CIRCULATION AND MOVEMENT

Movement patterns are very clear
Service road runs on the periphery of the site.

DISTRIBUTION OF SPACES

1. **Public spaces** like museums & office-the governing body comes first with entry. **Sitting spaces** comes next having a little bit privacy by planting trees.
2. **Workspaces** : Studios and dormitories- a very personal spaces are away from the public spaces to avoid any kind of distraction allowing artists to work with concentration in a very natural & fresh environment.

Services like laundry, washing are placed at the end of the site away from public movement along the service road.

□ THE LIVE-WORK SCHEME WORKS VERY WELL SINCE IT PROMOTES INTERACTION BETWEEN PROFESSIONALS.

THE CENTRAL GREEN SPACE AT TIMES FEELS DEAD CREATING A VOID.

SW
OT

SINCE IT IS BASED IN NEW DELHI A LOT OF SOCIO CULTURAL EVENTS CAN BE CONDUCTED.

UPCOMING OF OTHER SIMILAR CENTERS.

Inference : The concept of an all round interactive space involving multiple Cultural disciples gives a new identity to cultural center.

SR NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	Admin		20	Private	50
		Reception	10	Public	12
		Conference room	20	Semi Private	12
		Offices	10	Private	24
2	Multipurpose room		100	Public	36
3	Studios		50	Semi Private	36
4	Residences		20	Private	54
5	Library		100	Public	130
6	Museum	Everyday art	300	Public	80
		Textile	200	Public	100
		Modern art	200	Public	
7	Event Space		200	Public	
8	Cafe		100	Public	
9	Mechanical Room		100	Private	

Table 7 : Sanskriti Kendra Space Program.

**PRECEDENT
CASE STUDIES**

M.U.S.A.C., LEON

ART/ SCIENCECENTERS

Architect : TUNON Architects

Location : Leon

Completed : 2012

Site Area : 10000 m²

Built up Area : 8000.0 m²

Theme :

The design aims at creating an open space provoking thought dialouge and understanding of art and its relation with society

PURPOSE OF STUDY : TO STUDY THE CENTER AND ITS CULTURAL IMPACT ON THE CITY FABRIC.

RELATION OF DESIGN : ADAPTABLE SPACES WHICH REACTS TO THE USER'S NEEDS.

CONTEXT STUDY :MUSAC is located in the city of León in the autonomous neighborhood of Castile and Leon. The high end museum has been built in the most developed area of the Leon with the intention of contributing their growth towards an avant-garde cultural facility within the art world, not only in Spain but also Europe.

TYOLOGY / PROGRAM :ART CENTER/MUSEUM

ZONING PLANNING : A set of showrooms and exhibitions chained allows various sizes and characteristics, each room creates a continuous, but differentiated area, which opens into the other rooms and courtyards, providing longitudinal, transverse and diagonal traversing. Five hundred prefab beams enclose a space identified by systematic repetition and formal expressiveness.

FORM : MUSAC is a building with a peculiar plant, taken from the geometry of Roman mosaics, whose originality lies in assembling two polygons, a square and a rhombus-to display a continuous surface on the plane.

Public space occupy on a concave shape to perform the activities and encounters, embraced by large stained glass, being the space where homage is paid to the city as a place of relationship between people.

Inside, a large area of continual, different spaces, merged with courtyards and skylights, forms an expressive system that communicates the thoughts shared by architecture and art: the contemporary manifestation of the changeable and the perennial, similar and difference, of the universal and the local, like an echo of our own diversity and equality as individuals.

In its size, as a one-floor building constructed with reinforced concrete walls and large white color glass outside, MUSAC aims to be a space where art is at ease and helps to erase the boundaries between private and public, between work and leisure and, ultimately, between art and life.



THE DESIGN CREATES DIFFERENT PUBLIC COURTYARDS WHICH CAN ACT AS STRONG PUBLIC PLATFORMS.

THE COLORFUL GLASS MAY CAUSE A SLIGHT SHIFT OF FOCUS FROM THE MOTIVE OF OBJECTS TO EXHIBIT TO THE STRUCTURE.

SW

OT

THE PUBLIC COURTYARDS AND PLAZA CAN BE UTILIZED FOR VARIOUS CULTURE BASED ACTIVITIES.

UPCOMING OF OTHER SIMILAR CENTERS.

Inference : The courtyards acting as spill out areas and chaining the exhibition spaces bring in a lot of adaptable spaces which can adapt as per user's needs.

SR NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	Hall		20	Public	50
2	Staff		20	Private	50
3	Office		20	Private	70
4	Educational workshops		100	Public	180
5	Public washrooms	Male/female	50	Public	100
6	Library		100	Public	200
7	Shop		70	Public	200
8	Cafe		250	Public	300
9	Multipurpose room		450	Public	600
10	Patio		50	Public	100
11	Restoration Workshop		200	Semi public	400
12	Storage		100	Private	70
13	Technical Area		270	Private	70
14	Restaurant		400	Public	500
15	Loading Storage		10	Private	100
16	Loading Area		15	Private	50
17	Exhibition Gallery		450	Public	1450

Table 8 : MUSAC's Space Program.

PRECEDENT**Architect** : Zaha Hadid Architects**CASE STUDIES**

PHAENO SCIENCE

Location : Wolfsburg

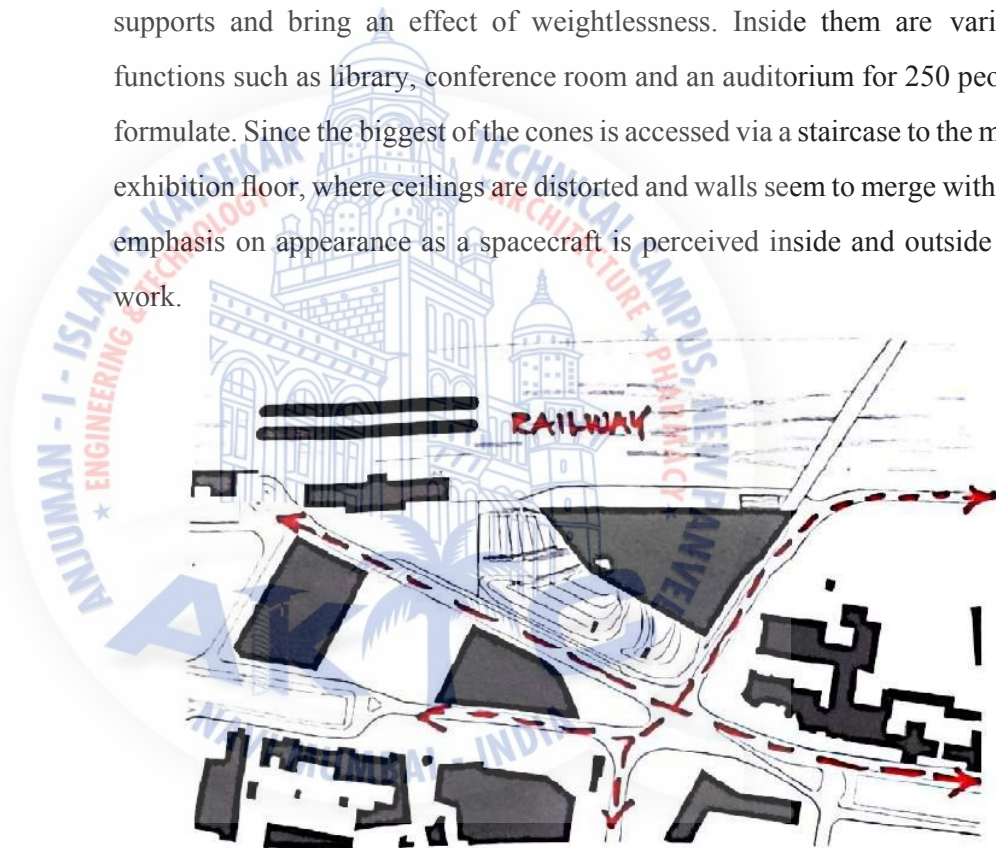
CENTER, WOLFSBURG

ART/ SCIENCECENTERS

Completed : 2005**Site Area** : 16000 m²**Built up Area** : 12631 m²**Theme** :*The design aim was to create an urban field on the ground with an object above.***PURPOSE OF STUDY** : TO STUDY THE FORM AND HOW THE STRUCTURE RESPONDS TO THE CONTEXT.**RELATION OF DESIGN** : HOW THE CITY FABRIC WAS INTEGRATED INTO THE STRUCTURE.**CONTEXT STUDY** : Situated in the center of Wolfsburg, on the ICE railway line, the Science Center is set both as the last point of a chain of important cultural buildings, by Aalto, Scharoun and Schweger, and as a connector to the north bank of the Mittelland Kanal – the Volkswagen plant and the Autostadt.**TYOLOGY / PROGRAM** : SCIENCE CENTER/EXHIBITION AREA**ZONING PLANNING** : Multiple lines of pedestrian and vehicular movement are stretched through the site, both, from the artificial ground landscape and inside and through the building, composing an interface of movement of paths. This constructional interlocking creates a uniquely close bond between the city and the structure.**FORM** : The main volume of the structure, raised high above the ground on a series of reinforced concrete cones, attains a large degree of transparency and porosity on the ground. The area beneath it becomes a new identity of urban space, a covered man made landscape with gently undulating hills and valleys, extending out into the surrounding area.

The ground below the volume fall as an artificial landscape with undulating hills and valleys that stretch around the public square. The building permits people to walk under and above by a portion of the pavement to get inside. Elsewhere, the low floor takes visitors on to a public square. Ground floor of the structure opens broad prospects, making it the context of the city, between the concrete cones.

The building does not fully occupy the land. Much stands on a public plaza with a series of large inverted cone-shaped with rounded corners that act as the supports and bring an effect of weightlessness. Inside them are various functions such as library, conference room and an auditorium for 250 people formulate. Since the biggest of the cones is accessed via a staircase to the main exhibition floor, where ceilings are distorted and walls seem to merge with the emphasis on appearance as a spacecraft is perceived inside and outside the work.

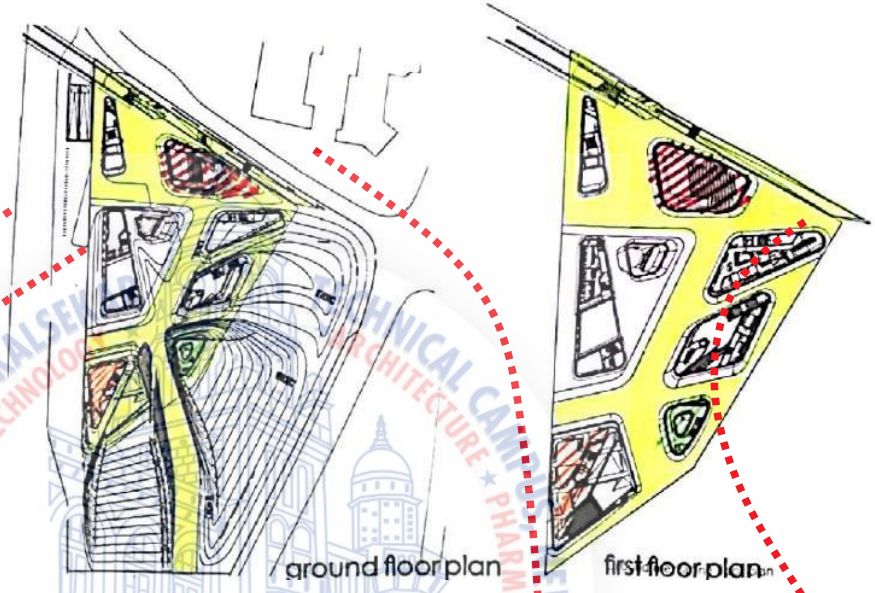


site plan 

The interior is characterized by irregular articulation of space, where there is a characterized division of planes and spaces, but sudden openings in a wall and the other empty are the referrals from unexpected perspectives. Large glass surfaces offer a panoramic view of the landscape.

The science center of the building has an area of 12,000 m². The underground parking, beneath the center, has a larger area of 15,000 m² that spans the plot.

In the main gallery area Zaha Hadid has formed an artificial crater-like landscape allowing diagonal vistas to the various levels of the exhibition scape, while volumes, which projects, accommodate other functions. The inverted cones become craters creating a link between the exterior and the dynamic landscape within.



View of the Entry through Cone



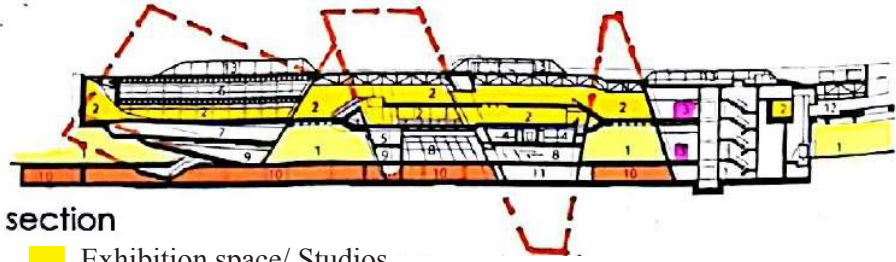
View of the bridge and structure



View of the Urban Plaza



View of the Exhibition gallery



section

- Exhibition space/ Studios
- Parking
- Laboratories

THE FLUIDITY OF FORM
ALLOWS THE USER TO
EXPERIENCE THE
JOURNEY FROM A
DIFFERENT PERSPECTIVE
ALTOGETHER.

THE EXPOSED CONCRETE
MASS LOOKS VERY
HEAVY VISUALLY.

SW
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THE FIELD OF URBAN
PLAZA AROUND THE
STRUCTURE CAN ALLOW
A LOT OF DIFFERENT
EVENTS TO BE
ORGANIZED.

LACK OF NATURAL
GREEN SPACES.

Inference : The form makes the circulation very appealing and interesting. Also the main design elements 'Cones' integrate into the structure to form structural elements.

SR NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	Exhibition Hall		300	Public	500
2	Laboratories		180	Private	200
3	Public washrooms (2)	Male/female	50	Public	140
4	Admin		30	Private	100
5	Staff room		30	Private	50
		Washrooms	10	Private	20
6	Shop		100	Public	200
7	Workshop		250	Public	300
9	Event Space		400	Public	600
10	Plant Room		10	Private	150

Table 9 : Phaeno Science Centre Space Program.

PRECEDENT**Architect** : Will Bruder Architects**CASE STUDIES**

DEER VALLEY ROCK

Location : Wolfsburg

ART CENTER,

ARIZONA ART/

Completed : 1994

SCIENCE CENTERS

Site Area : 2550 m²**Built up Area** : 800 m²**Theme** :

The building geometry works as a time machine connecting the visitors between the chaos of the suburban city to the sanctuary of natural desert and ancient art..

PURPOSE OF STUDY : TO STUDY THE FORM OF THE STRUCTURE WITH REGARDS TO THE TOPOGRAPHY.

RELATION OF DESIGN : HOW THE STRUCTURE RESPONDS TO ITS TOPOGRAPHICAL CONTEXT.

CONTEXT STUDY :This archaeology exhibition centre and 47-acre Sonoran Desert is home to the largest accumulation of Native American Petroglyphs in the Phoenix area. Open to the public for limited tours, the Will Bruder- designed facility serves as the primary exhibition space for the Center for Archaeology and Society.

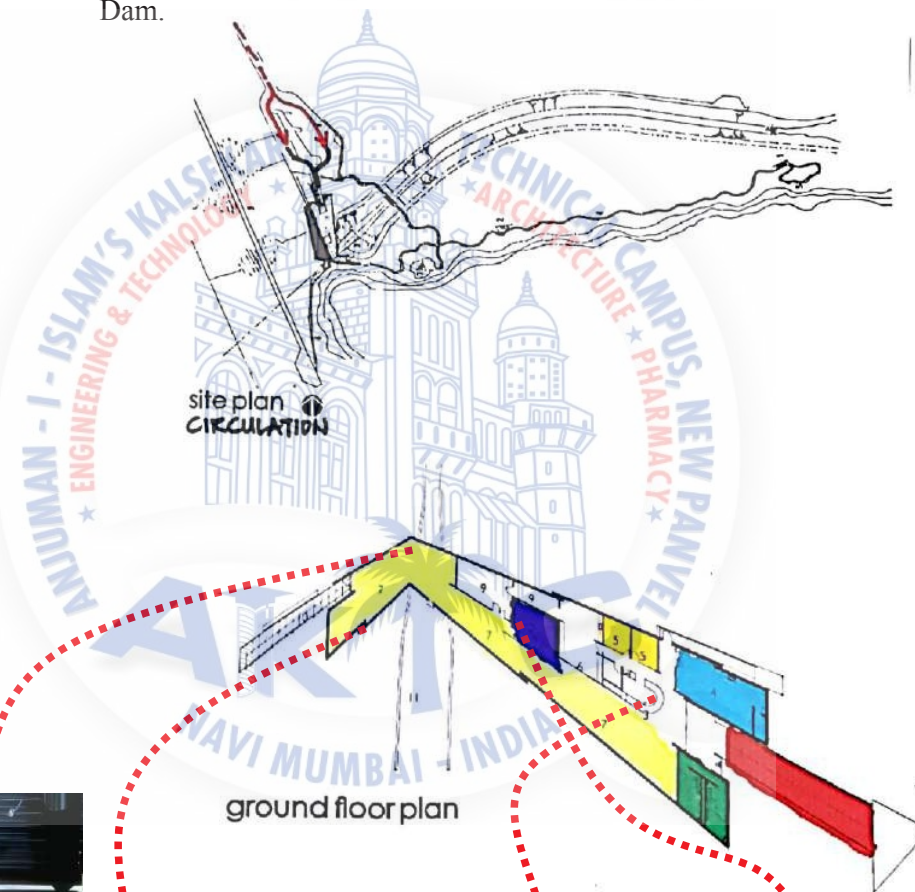
TYOLOGY / PROGRAM :ART CENTER/EXHIBITION AREA

ZONING PLANNING : The design represents a specific architectural solution using the sculptural use of precast concrete and weathering steel. It provides laboratory research, spaces for exhibitions and presentations, curatorial preservation of ideas and materials and classroom teaching related to the study of rock art.

FORM : The building's boomerang shaped plan geometry connects the visitor between the chaos of suburban Phoenix city and the sanctuary of the sheltered natural desert landscape, where over 1,500 primitive petroglyphs of native American tribes can be found.

Voted as the Phoenix Point of Pride and enlisted on the National Register of Historic Places, the Deer Valley Petroglyph Preserve exists to conserve the Hedgpeth Hills petroglyph site; to interpretate and appreciate the cultural expressions found here; and to be a center for rock art research worldwide. Continued native tribal connection reminds us to respect the sacredness of this site.

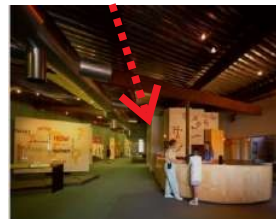
Built in 1994, this spectacular structure designed by architect Will Bruder sits over the spillway of the Flood Control District of Maricopa County's Adobe Dam.



View of the exhibition area



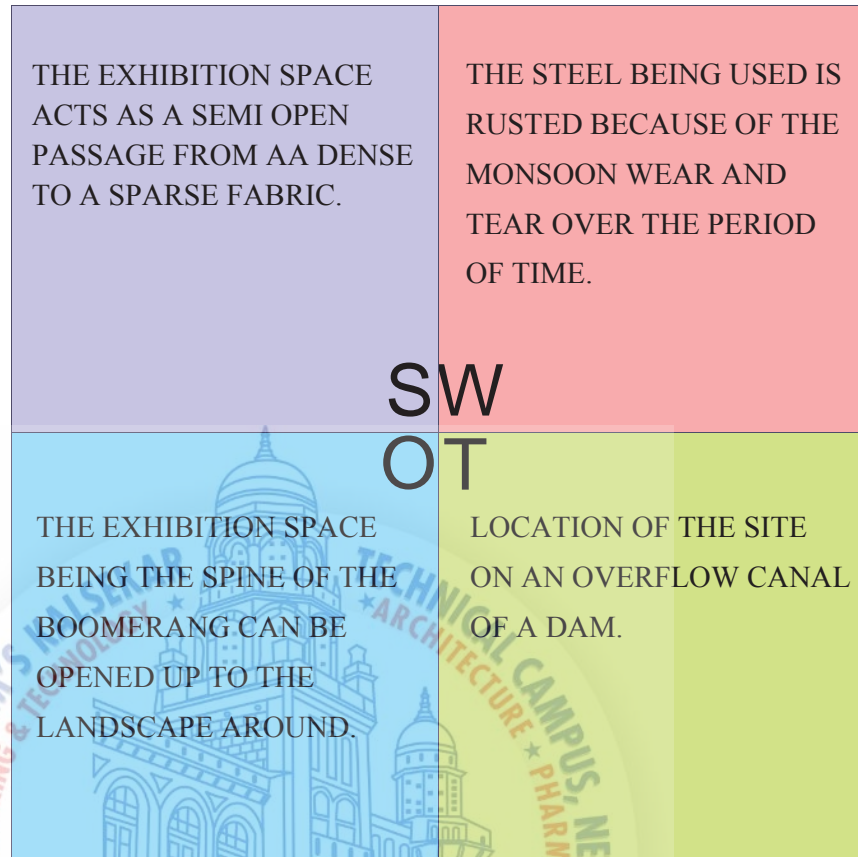
View of the structure



View of Reception



View of the classroom



Inference : Combining the major area consuming elements, viz, Exhibition and circulation drastically cuts on the footprint of the structure.

SR NO.	SPACE	SUB SPACE	USERS	TYPE OF SPACE	AREA m2
1	Entry Ramp			Public	
2	Public washrooms	Male/ female	20	Public	25
3	Reception	Counter	5	Private	10
		Storage	2	Private	20
4	Classroom	Class	20	Private	50
		Observation	2	Private	10
5	Office		4	Private	40
6	Laboratory		20	Public	60
7	Exhibition Gallery		100	Public	350
8	Video Display		20	Public	50
9	Curation Storage		10	Private	90

Table 10 : Rock Art Centre Space Program.

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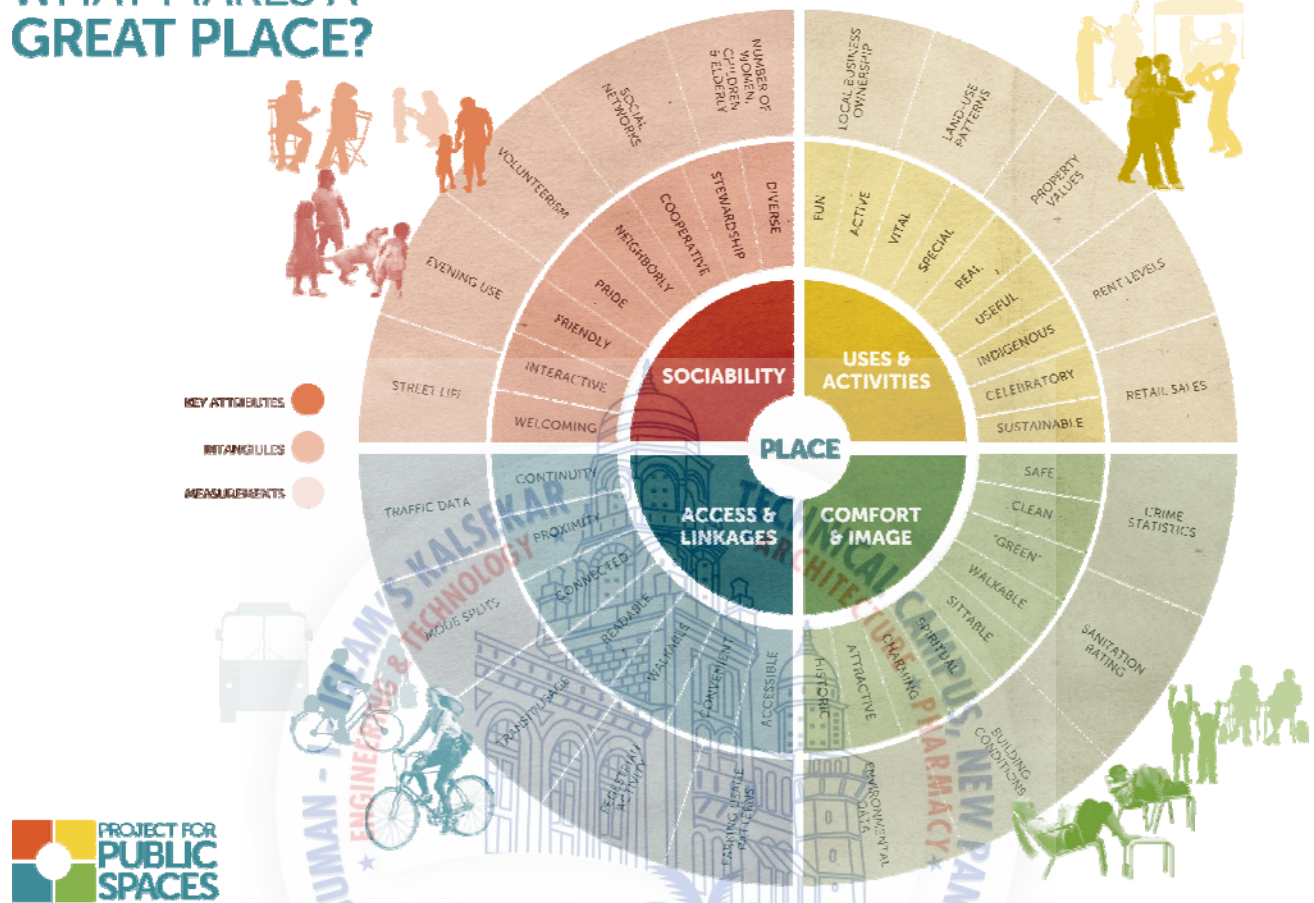
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INFERENCE

WHAT MAKES A GREAT PLACE?



	S.K.K	S.A.M.	S.R.F.P	F.M.H.	P.C.V.	S.K.P.	M.S.C.	P.S.C.	D.V.C.
SOCIAL ABILITY	3	3	4	3	2	5	3	2	3
USES & ACTIVITIES	3	3	3	3	3	4	3	4	3
COMFORT & IMAGE	3	22	3	2	2	3	3	3	2
ACCESS & LINKAGE	3	4	4	4	3	5	4	4	3

Table 10 : Comparative Space Assessment.

INFERENCE

To study and attain understanding of program to be introduced a variety of different precedent structures were studied to understand the expression of architecture and how it responds to the question as well as the context of the question.

The takeaway points from analyzing the precedent structures and comparing them are :

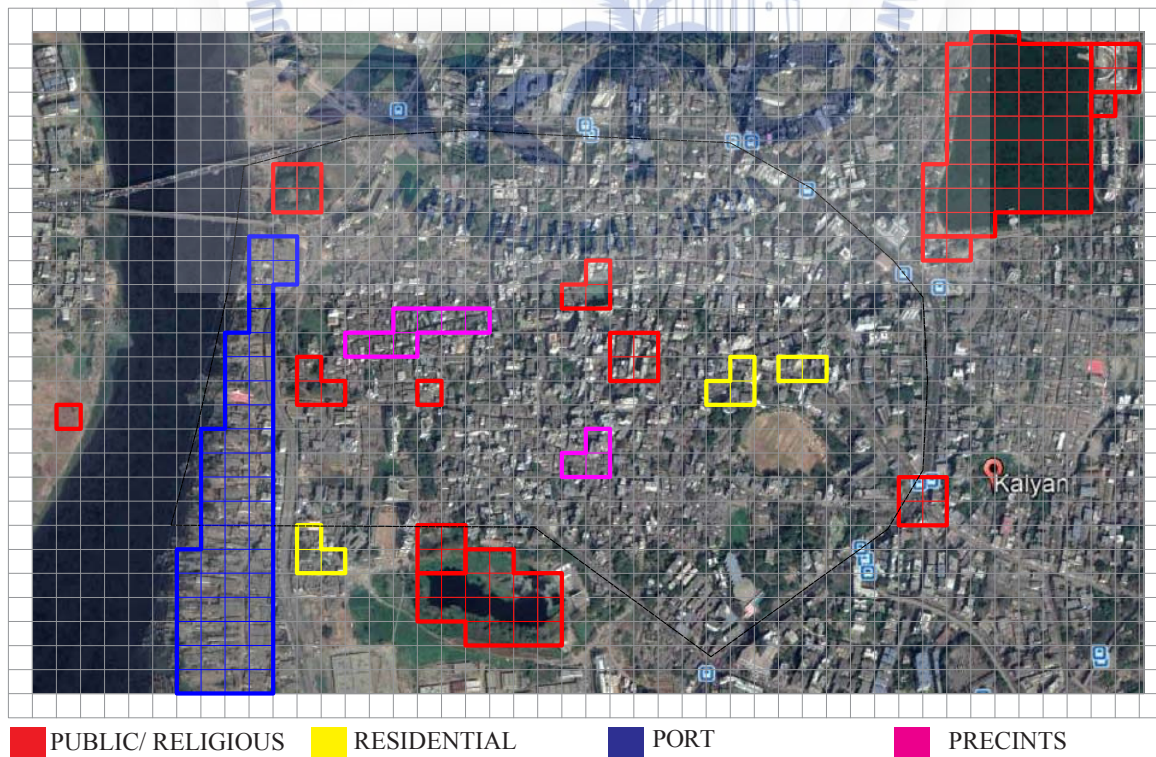
- PARKING
- ENTRANCE
- LOBBY AREA WITH RECEPTION
- AUDIO VISUAL ROOM
- ADMINISTRATION
- CONFERENCE AND MULTIPURPOSE ROOM
- STUDIOS/ CLASSROOMS/ LEARNING ROOMS
- LIBRARY
- STOREROOM
- EXHIBITION GALLERY
- STOREROOM
- WASHROOM BLOCKS
- GIFT SHOP
- CAFÉ
- RESTAURANT
- AMPHITHEATER
- PUBLIC PLAZA
- MAINTENANCE ROOM
- EVENT SPACE.

SITE AND SITE JUSTIFICATION

Every city has a certain identity. It may get buried by intensive development and expansion of the city but it lies unseen in the streets, buildings and its culture and it has a story to tell. The most visible source of our history is the Buildings and the Structures left behind by our Predecessors. Kalyan is no exception. It is one of the historically and culturally important cities of the Konkan region of the coastal belt of Maharashtra. It is a Historic city on the Ulhas Creek in the central MMR.

It is a Gateway to past. A strange time warp, Old quarters merge seamlessly with the gleaming high-rises in a loop of space and time. Tongas plying outside the railway junction retain an old world charm in a Sprawling Dormitory town. It is a city where glam and orthodoxy both co-exist without any guilt. Scratch it and beneath the characterless commuter town, you find history breathing like a dormant spring. It is the city for the best encounter with the rolling centuries trapped in the layers.

The Agra road divides the city of Kalyan into two prominent zones the Old Kalyan and the New Kalyan. The Old city of Kalyan has many prominent wadas, a Fort, Old houses, Manor, Narrow lanes, Bazaars, Temples, Masjids, Agyari, *Fasil* (town fortification), the traditional Tongas which gives a peep into the glorious history this city has had.



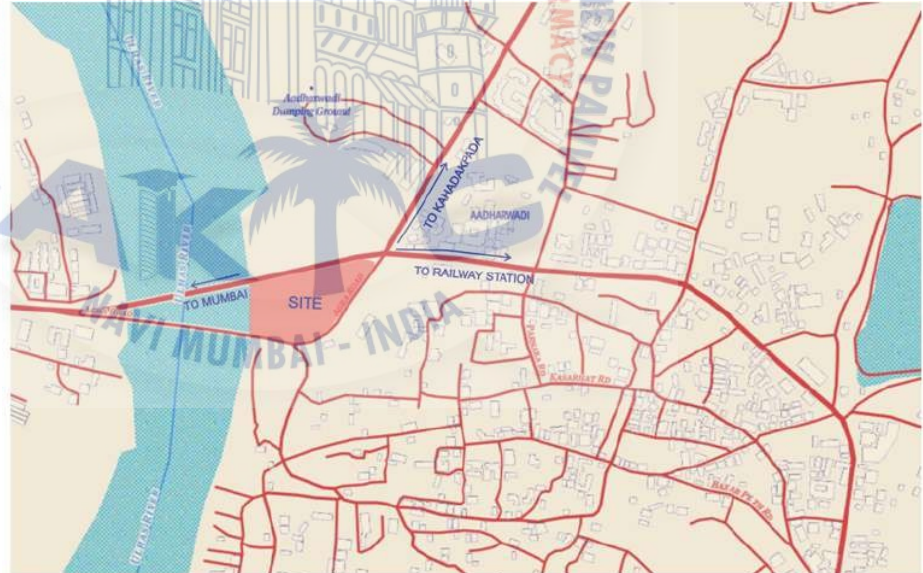
Map 7 : Map of Kalyan showing all historic buildings.

The subtle death of the Architectural history of the city by rapid rise in characterless building forms.

and

The crunch and lack of recreational and public infrastructure viz. Parks, Plazas, Public Utilities.

Lead to the selection of site which has Durgadi Fort, a landmark which testifies the glorious history of the city and is on the banks of Ulhas creek which gave the city its identity and is the only point where the city interacts with the water. The site (Durgadi Fort) is located on a very busy Node which connects the four important parts of the City. To its North, it has the Khadakpada Area (An emerging residential hotspot). To its East, it has the Railway station area and the city. To its South, it has Durgadi Fort and the Maratha/ Mughal Precincts. To its West, it has the only access from the city towards Mumbai, Bhiwandi. And the Ulhas Creek Fore fronting the Site. The site is the only point where the people of the city interact with the creek.

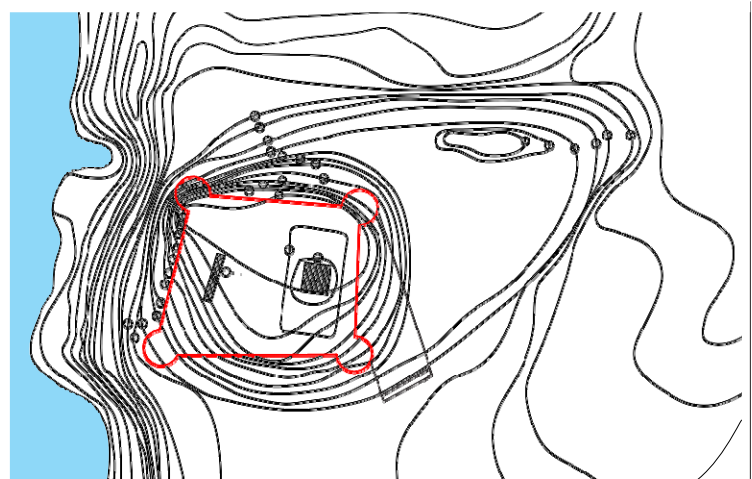


Map 8 : Map of Kalyan showing Site and roads.

Under the Mughals, the city of Kalyan was surrounded by a Stone fort wall by Nawab Mohtabar Khan Alamgir (1629-1694) during the reign of Aurangzeb.. In the North-West corner, the Fort rises in a small flat topped mound about 15m high. on the top of the mound, on the west crest which is 30m high from the river is the prayer wall or the EidGah (19.5m x 2m x 4m). Under the Marathas, a Durga temple was built opposite to the prayer wall which gave the fort its name Durgadi Killa. All the four sides of the fort face the four cardinal directions.

The fort has four Burj (Bastions) at the four corners. The eastern side has the main gate in between. At present, there are two approach staircases to the fort, but no such documentation is made that it was the same before. The fort walls are strong, built in stone, at some places the wall was demolished by the Britishers to pave way for construction of bridge nearby. Internal level of land is sloping but is as high as the fort wall.

The fort is also known as Jaladurga, which is situated on the bank of water but like Vasai Fort there is no access to the fort from the water side. The fort was built and controlled by the Marathas. Though being very small in scale, but very well located to counter the Portugese from Vasai, Durgadi fort is the first naval port and fort of Swaraj.



Map 9 : Map of Durgadi Fort.

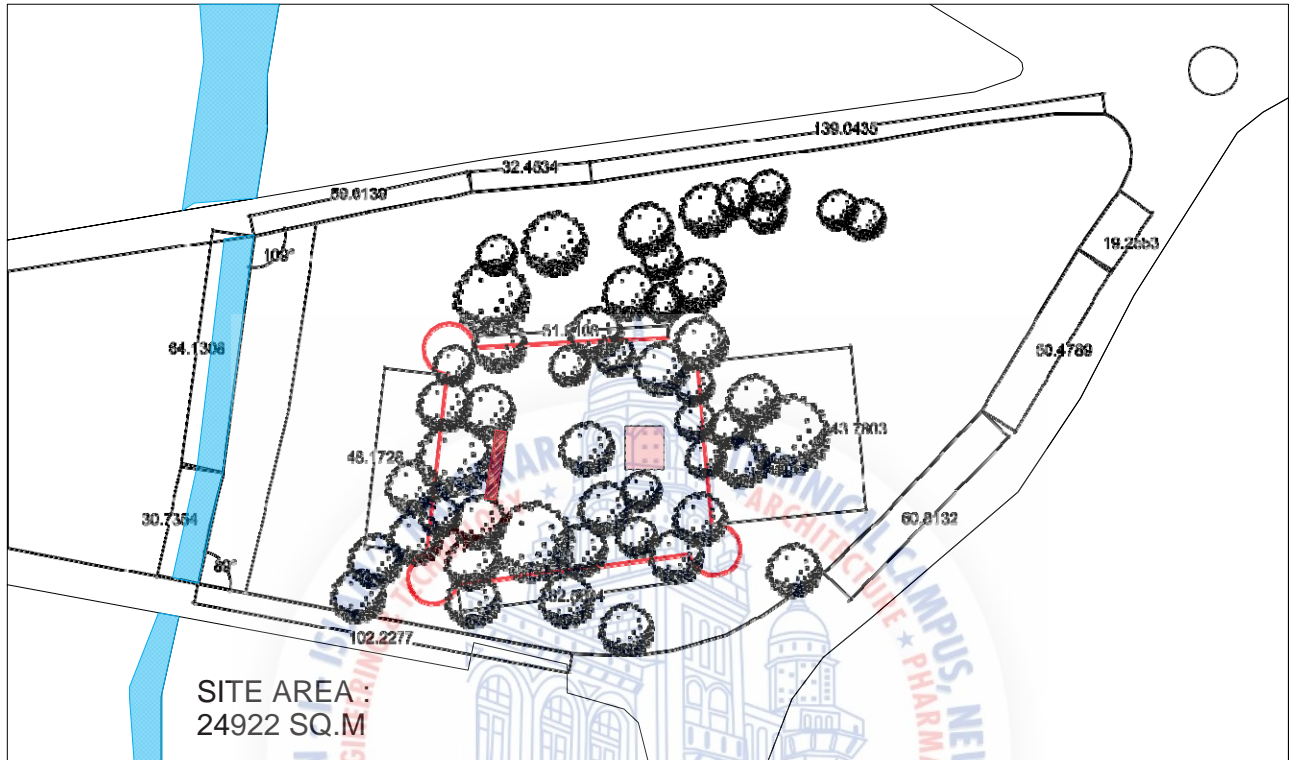
After independence of India, the fort came under Indian jurisdiction and then later in the State of Maharashtra's jurisdiction. Currently it falls under the jurisdiction of Kalyan Dombivali Municipal Corporation.

Presently the fort is used mostly for the religious purposes say Durgapooja and Eid Prayers. Later as the city expanded, the *fasil* had to be demolished to pave way for roads and other infrastructure. To the north of the Fort was the Ganesh gate. This is now, used as Ganpati Visarjan area. As the city grew, the area is developed into a planned- stepped jetty with ancillary recreational activities such as Ferry rides, Gardens etc.

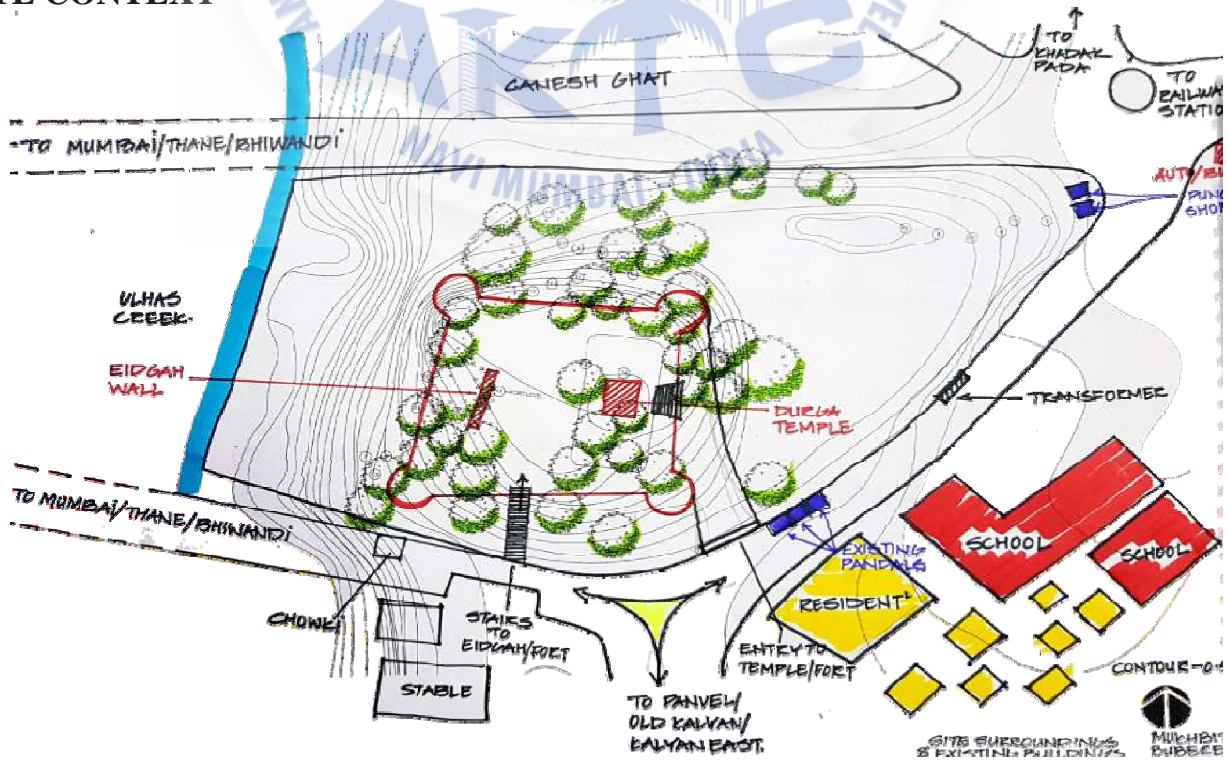


Map 10 : Development plan showing site.

SITE DEMARCATATION



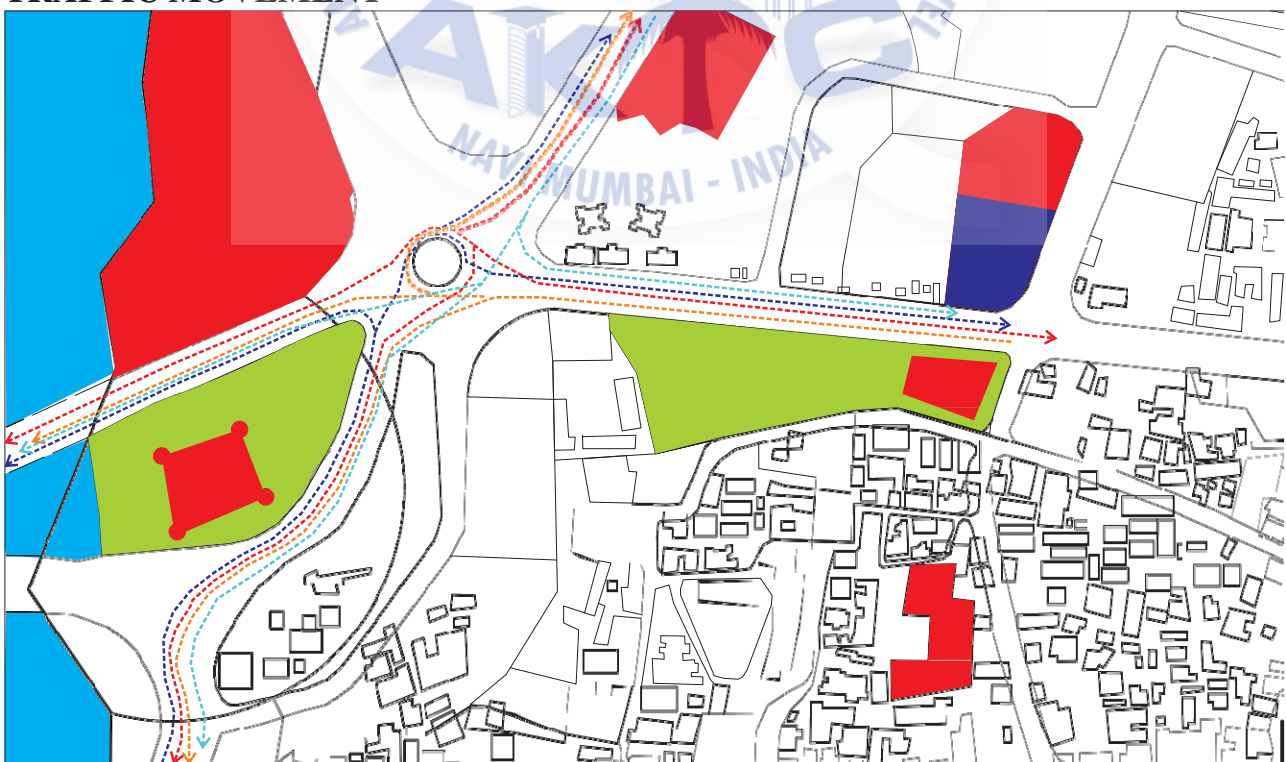
SITE CONTEXT



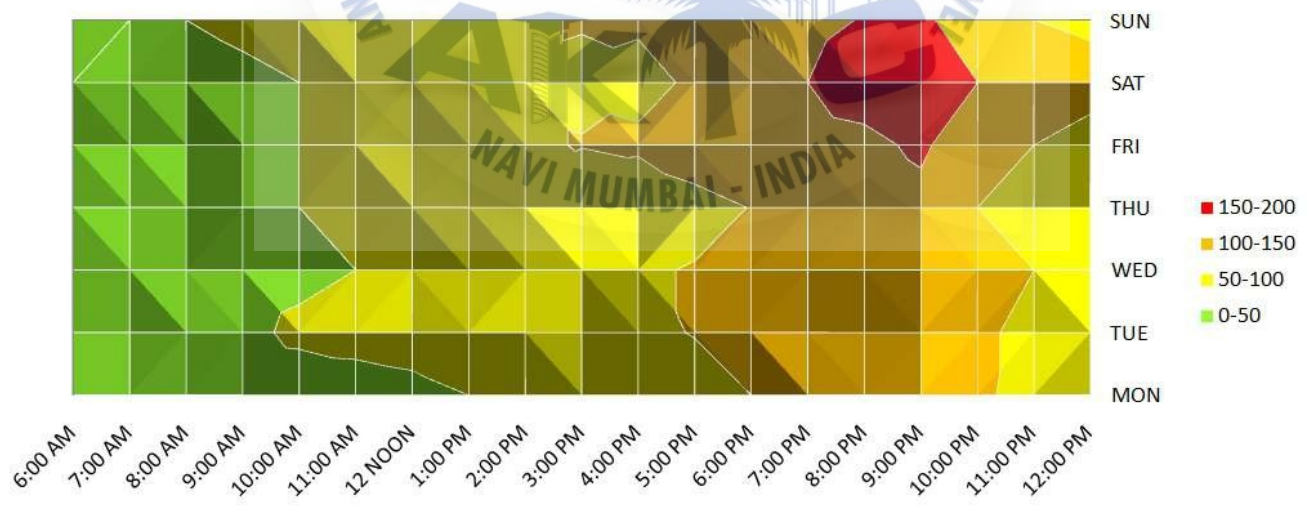
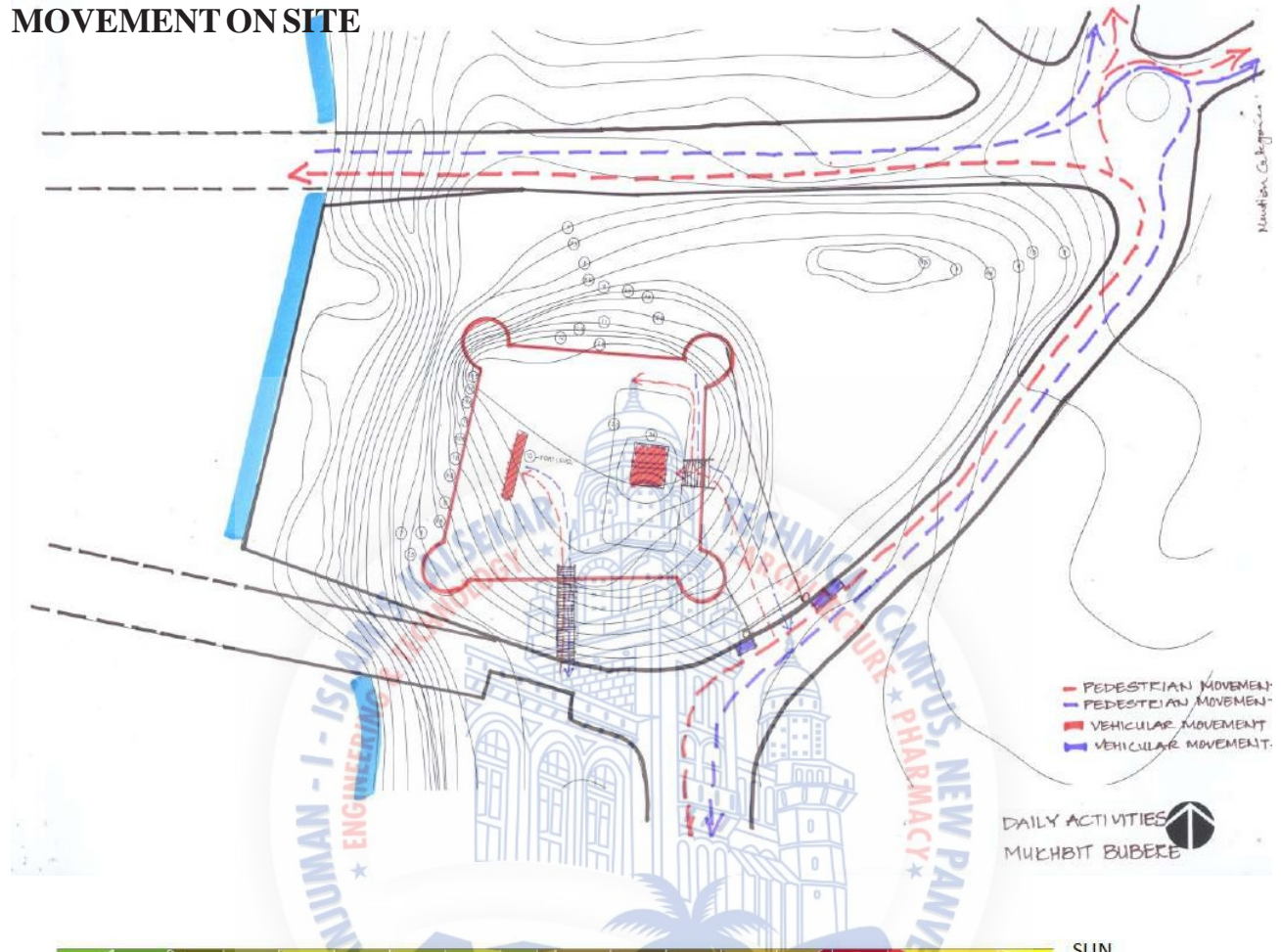
NEIGHBORHOOD



TRAFFIC MOVEMENT



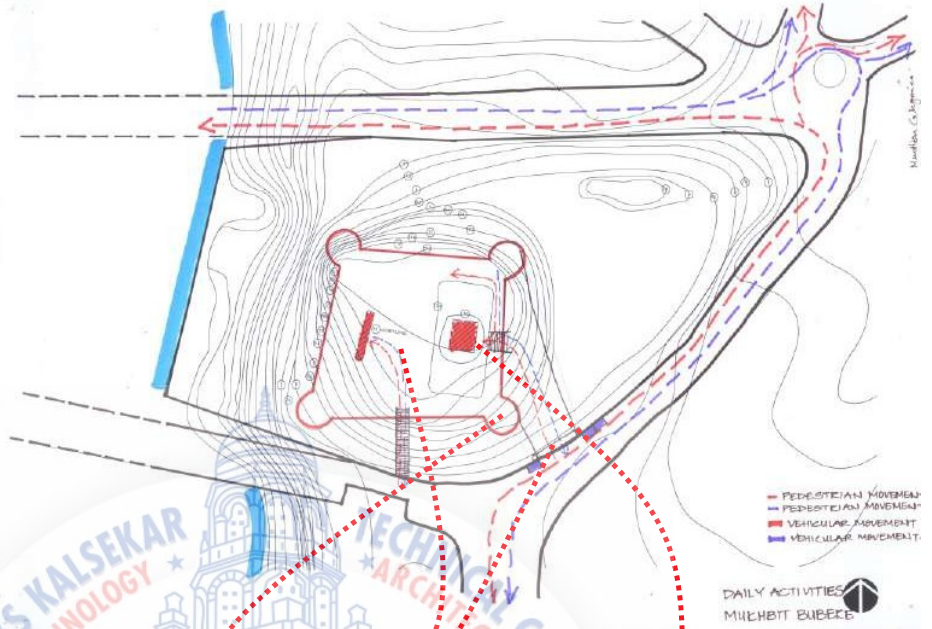
DAILY FOOTFALL AND PEDESTRIAN MOVEMENT ON SITE



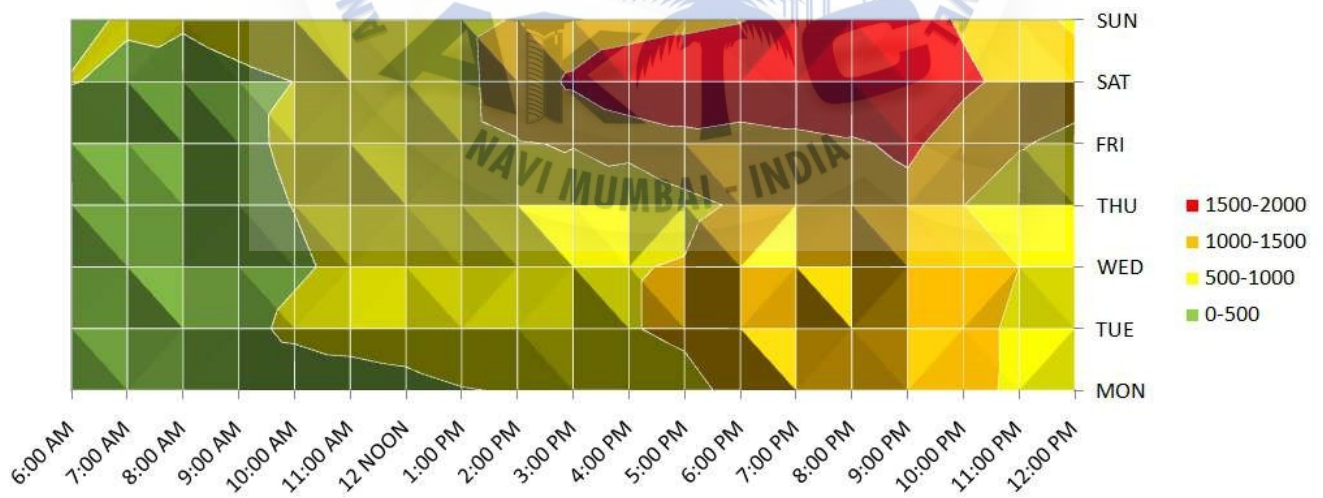
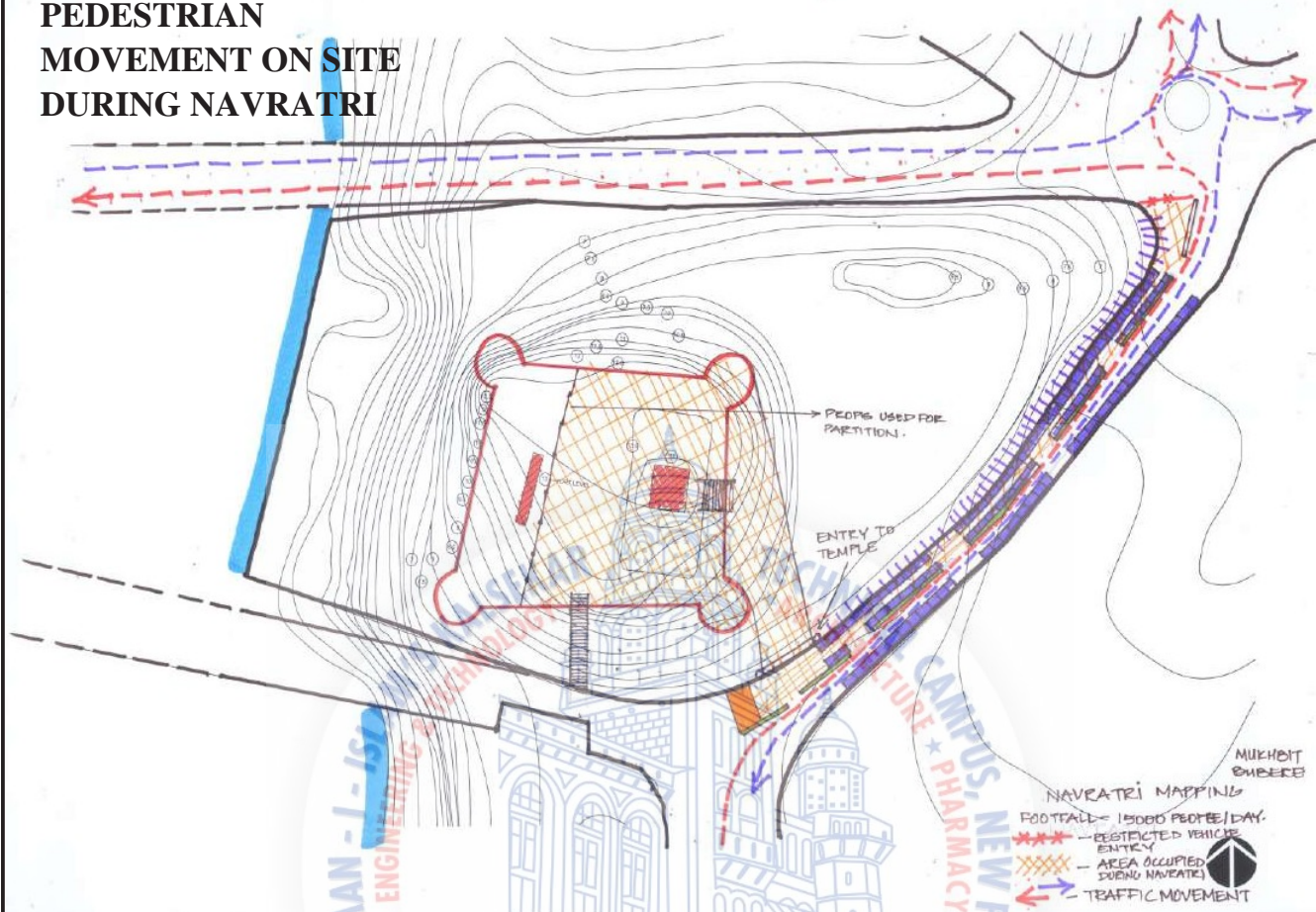
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DAILY FOOTFALL AND PEDESTRIAN MOVEMENT ON SITE



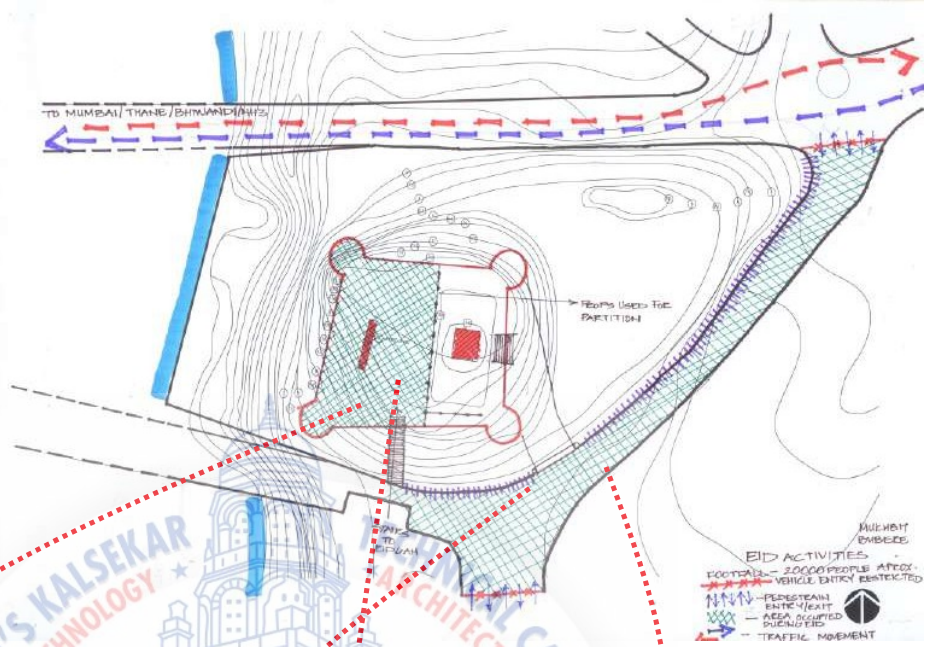
FOOTFALL AND PEDESTRIAN MOVEMENT ON SITE DURING NAVRATRI



FOOTFALL AND PEDESTRIAN MOVEMENT ON SITE DURING NAVRATRI



FOOTFALL AND PEDESTRIAN MOVEMENT ON SITE DURING EID



WHY ?

Kalyan being a historic city has had a strong influence of the civilizations that ruled the city from the Satvahanas to the Chanakyas, Mughals to Marathas and then Britishers. The most visible sources of our culture and history are the structures left behind by our predecessors. Kalyan is no exception. It is one of historically and culturally important city in the MMR, which existed from as far as first Century BC, one of the five chief trade marts of western India and an international port before it was eclipsed by the formation of Presidency of Bombay and simultaneously by siltation.

Urbanization began with the onset of Railway and deterioration situated since then. In 1885 the oldest municipality was established. A century of Industrialization and technical advancement brought forth massive urbanization in the entire country. And more so near the metropolis like Mumbai, Delhi, etc. The smooth rail connectivity to greater Mumbai and being an important junction enabled a lot of influx of population, depending mainly on Mumbai for livelihood. The population influx lead to a tremendous pressure on the existing public services fabric of city. Thereby altering the fabric and making it like other characterless cities on the central line.

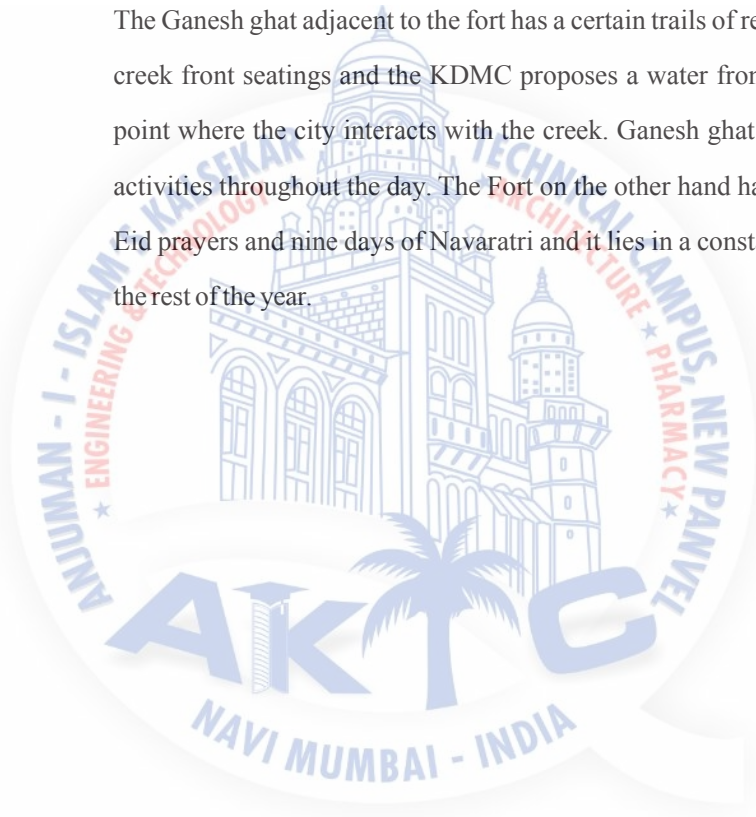
Kalyan has witnessed a lot of upheavals from the early Hindu dynasty to the rise of Mohammadans and Portugese. Mughals and Marathas and Britishers bought Architectural and social changes in the fortune of city. From being a small colony to a large modern city, Kalyan has a rare fascinating pastburied within. Initiatives like these can review the link to the vibrant centuriesurge like tribal waves in the lost labyrinth of time.

The shoot in population lead to shortage of all public services creating enormous pressure on the existing system. Inadequate public spaces for people in the city have lead to deteriorated social life.

Recently after the city being included in the smart city proposal a lot of surveys and mapping started. The surveys concluded that Kalyan has a lot of potential into it 32 km long water front. The city lacks Recreational and Public places. Each subculture needs a centre for its public life: a place where you can go to see people, and to be seen.

Each subculture needs a centre for its public life: a place where you can go to see people, and to be seen.

The Ganesh ghat adjacent to the fort has a certain trails of recreation with boating and creek front seatings and the KDMC proposes a water front park. And it is the only point where the city interacts with the creek. Ganesh ghat has a continuous buzz of activities throughout the day. The Fort on the other hand has visitors on two Eids for Eid prayers and nine days of Navaratri and it lies in a constant state of negligence for the rest of the year.



HOW?

People cannot maintain their spiritual roots and theirs connection to the past if the physical world they live in does not only also sustain these roots.

Informal interviews with various people belonging to different age groups, different genders, and different sex coming from different communities lead me to the fact that people agree to an astonishing extent about the fort which do embody people relation to their land, their culture and to the past in other words it exist as objective communal reality. But the pattern seemed astonishingly drifted from the first pattern as not all of them wanted to or had been to the fort once in their lifetime.

The common line of thought is, there is nothing which interests them or Allure them to visit the fort. Some cited ***communal tension, women's safety, and infrastructure***. The second part of interview dealt and inquired about the opinion of the people regarding what they felt about what should be done to counter the above said problems identified and what could be done to intensify the ***public meaning*** of the site.

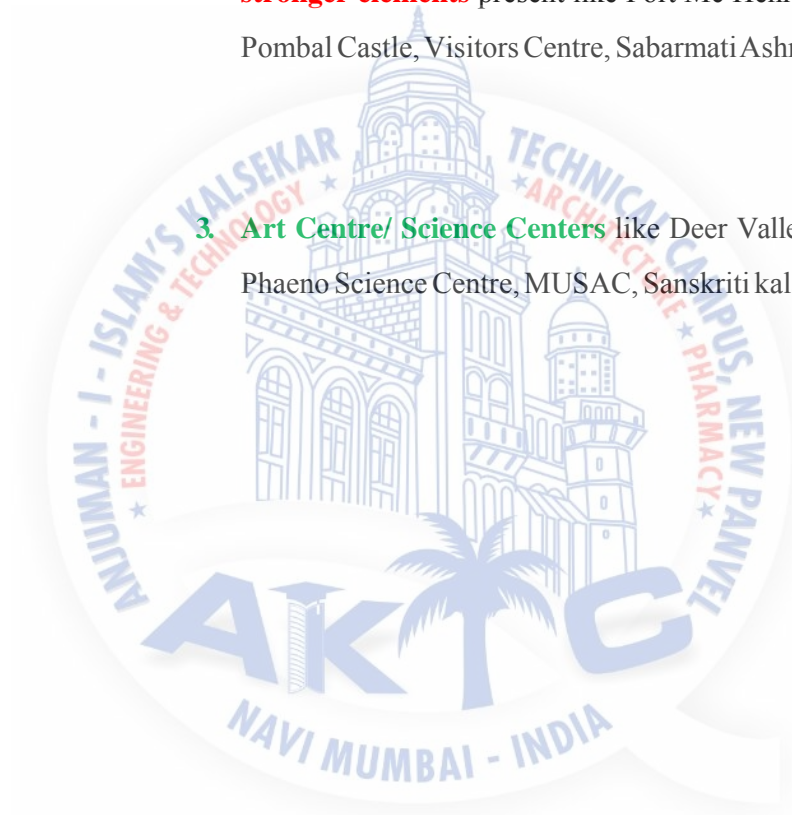
The opinions were very polarized and varied. 30% People wanted nothing to be done with regards to the fort. While remaining 70% were in favor that it needs to be addressed. From hospital to a civil court, from Museum to Park.

Conclusion drawn is ***there is a need of an intervention which increases interaction, portrays the history and culture of the city and acts as a common social interacting platform which boosts social harmony, interaction and empower the local communities where local Artisans display their work, poets, authors hold court, children are regaled, where people gravitate to be informed, entertained, enlightened.***

This required different examples of Precedent case studies taking different parameters are discussed above the interviews.

The cases studied cater different problems in different contest with different scales e.g:

1. **Urban Parks** like Superkilen and Sabarmati Riverfront park.
2. **Interpretation centers/ Visitors centers/ Museums** with **Fort / old / stronger elements** present like Fort Mc Henry Interpretation Centre, Pombal Castle, Visitors Centre, Sabarmati Ashram Museum.
3. **Art Centre/ Science Centers** like Deer Valley Rock Art Centre and Phaeno Science Centre, MUSAC, Sanskriti kala Kendra.



QUESTIONNAIRE***Questionnaire for: Site as destination******You are residents of?***

- Kalyan
- Other Neighbourhood of the City

How often you have a walk in a garden/recreational/ open space?

- Daily
- Weekly
- Monthly
- Seldom

Why do you go to these open recreational spaces?

- Jobs/works
- Passing by
- Eating or shopping
- Recreation (Walking, Jogging, Fishing, Boating)

Which part do you like best in Kalyan?

- Boating
- City Mall
- Chowpatty
- Calm & Quite Gardens

Which season do you like best in Kalyan?

- Spring
- Summer
- Rain
- Winter

Do you think there are enough public amenities in Kalyan? (Y/N)

Can you walk to the place? (Y/N)

Does the place make a good first impression? (Y/N)

Are there ample places to sit? Are seats conveniently located?

Do you take pictures? Are there many photos opportunity available?

Is the place used by different ages all time? (Y/N)

Do you visit there in group? (Y/N)

Is there a place where you choose to meet your friends? (Y/N)

Do people seem to know each other by face or by name? (Y/N)

Do you bring your friends and relatives see the place with pride? (Y/N)

QUESTIONNAIRE*Questionnaire for: People within 20 minutes of travelling distance**How often you go to Chowpatty/Durgadi Fort?*

- Daily
- Weekly
- Monthly
- Seldom

Why do you go to Chowpatty /Durgadi Fort?

- Jobs/works
- Passing by
- Eating or shopping
- Recreation (Walking, Jogging, Fishing, Boating)
- Religious purpose

Which part do you like best in Kalyan?

- Boating
- City Mall
- Chowpatty
- Calm & Quite Gardens

*Do you think there are enough public amenities in Kalyan? (Y/N)**Can you walk to Chowpatty /Durgadi Fort? (Y/N)**Does Chowpatty /Durgadi Fort make a good first impression? (Y/N)**Are there ample places to sit? Are seats conveniently located? Do people have choice to sit in sun/ shade? (Y/N)**Do you take pictures? Are there many photos opportunity available? (Y/N)**Is the placed used by different ages all time? (Y/N)**Do you visit there in group? (Y/N)**Are there choices of things to do? (Y/N)**Is there a place where you choose to meet your friends? (Y/N)**Do people seem to know each other by face or by name? (Y/N)**Do you bring your friends and relatives see the place with pride? (Y/N)*

INFERENCE

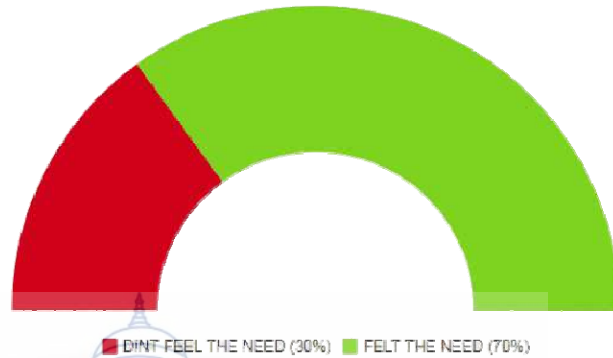


Fig 27 : Ratio of opinion of people interviewed.

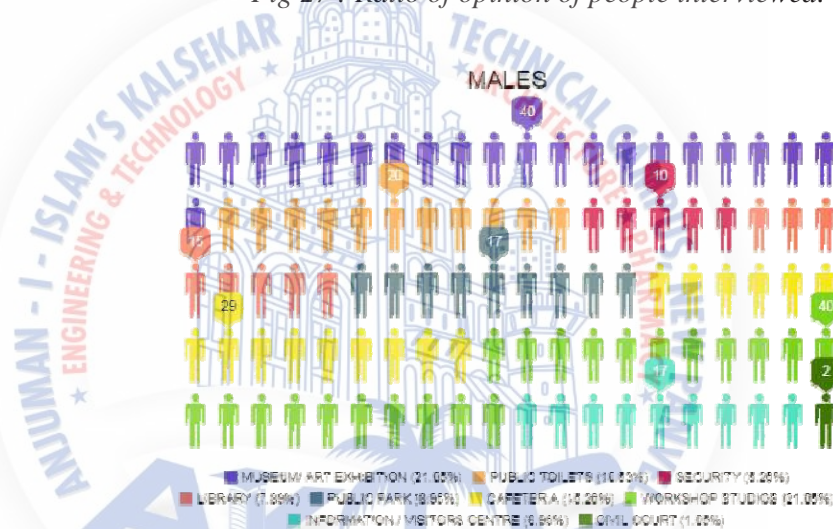


Fig 28 : Ratio of opinion of males interviewed.

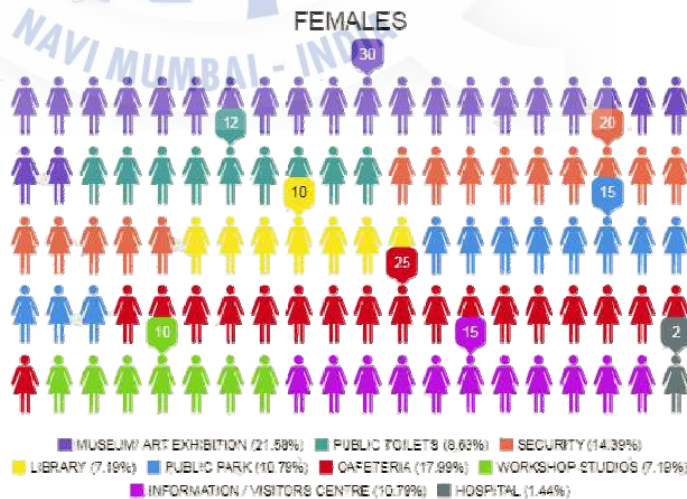


Fig 29 : Ratio of opinion of females interviewed.

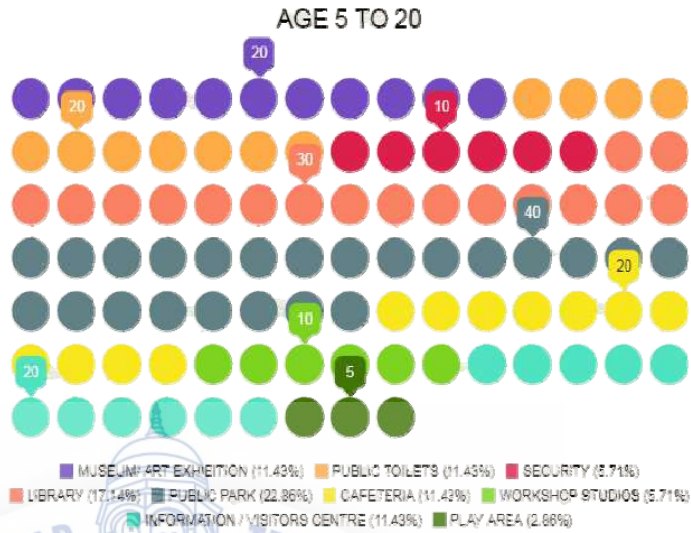


Fig 30 : Ratio of opinion of people interviewed age wise.

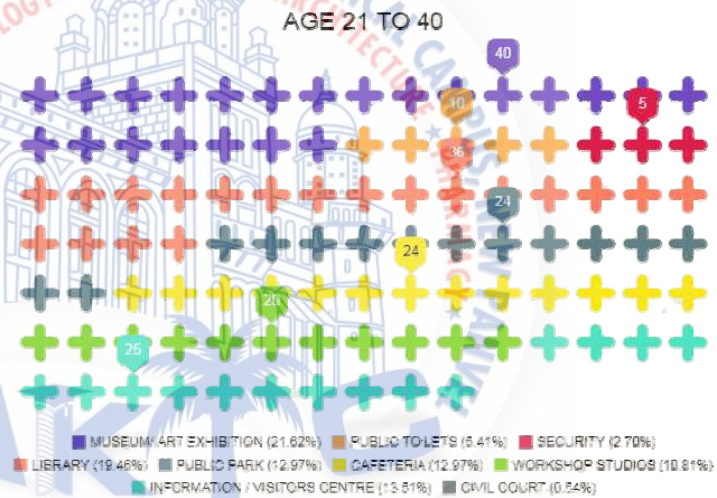


Fig 31 : Ratio of opinion of people interviewed age wise.

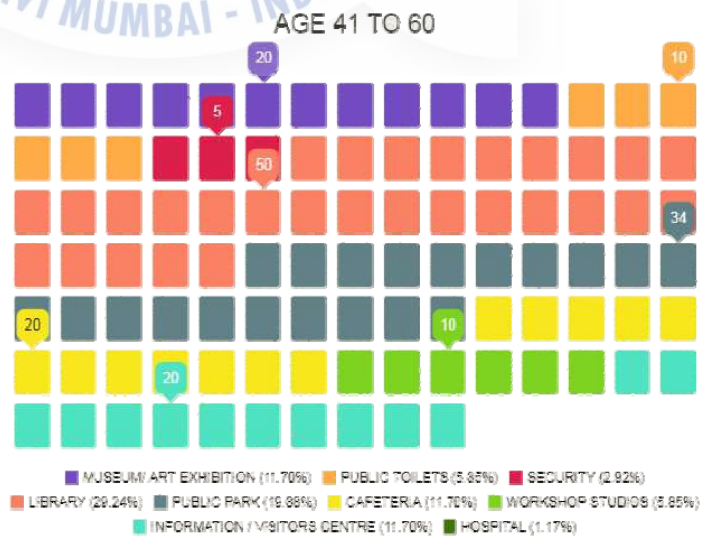
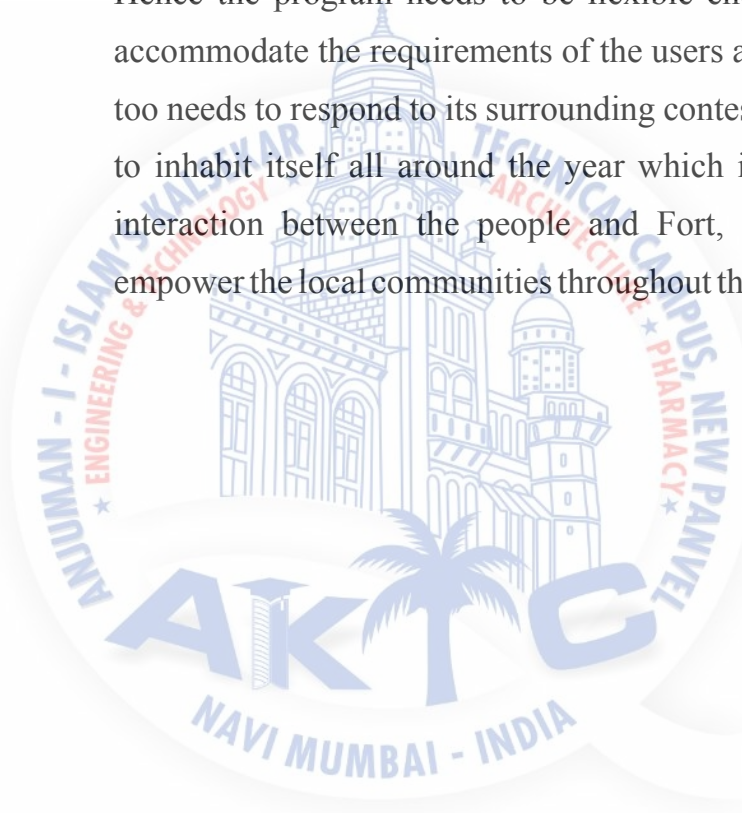


Fig 32 : Ratio of opinion of people interviewed age wise.

CONCLUSION

Thus, the built intervention needs to respond to a varied palette of functions. The intervention is built on a permanent site, but the environment around them continues to change as other buildings around are redeveloped or replaced, streets change, neighborhoods change and so does the program and function of the structure. Hence the program needs to be flexible enough to respond and accommodate the requirements of the users and the built structure too needs to respond to its surrounding contest and to insure a way to inhabit itself all around the year which in turn would ensure interaction between the people and Fort, Social harmony and empower the local communities throughout the year.



INFERENCES

	SANSKRITI K. K.	SABARMATI A.M.	SABARMATI RF.P	FORT MC.HENRY	POMBAL CSTL.	SUPERKILEN	MUSAC	PHANEO S. C.	DEER V. CENTR
PARKING	Green	Green	Red	Green	Green	Green	Green	Green	Green
ENTRY	Green	Red	Green	Green	Red	Red	Green	Green	Green
ADMIN	Green	Green	Green	Green	Green	Green	Green	Green	Green
RECEPTION	Green	Red	Red	Green	Green	Red	Green	Green	Green
OFFICES	Green	Green	Red	Green	Red	Red	Green	Green	Green
CONFERENCE	Green	Green	Red	Green	Red	Red	Green	Green	Green
A.V. ROOMS	Red	Red	Red	Green	Green	Red	Green	Green	Green
MULTIPURPOSE	Green	Green	Red	Green	Red	Red	Green	Green	Green
STUDIOS	Green	Red	Red	Red	Red	Red	Green	Green	Red
CLASSROOMS	Green	Red	Red	Red	Red	Red	Green	Green	Green
LABORATORIES	Red	Red	Red	Red	Red	Red	Green	Green	Green
AUDITORIUM	Red	Red	Red	Green	Red	Red	Green	Green	Red
AMPHITHEATRE	Green	Red	Green	Red	Green	Green	Red	Red	Red
LIBRARY	Green	Green	Red	Green	Green	Red	Green	Green	Green
WASHROOMS	Green	Green	Green	Green	Green	Green	Green	Green	Green
GIFT SHOPS	Green	Red	Green	Green	Green	Green	Green	Green	Green
STORAGE	Green	Green	Green	Green	Green	Green	Green	Green	Green
CAFÉ	Green	Red	Green	Red	Red	Green	Green	Green	Red
RESTAURANTS	Green	Red	Green	Red	Red	Red	Green	Green	Red
EXHIBITION	Green	Green	Green	Green	Green	Green	Green	Green	Green
PLANT ROOM	Green	Green	Green	Green	Green	Green	Green	Green	Green
PUBLIC PLAZA	Red	Green	Green	Green	Green	Green	Green	Green	Red
EVENT SPACE	Green	Green	Green	Green	Red	Green	Green	Green	Red
ACCESSIBILITY	Green	Red	Red	Green	Red	Green	Green	Green	Green
COURTYARDS	Green	Green	Red	Red	Red	Red	Green	Green	Red

SPACE PROGRAM

REVITALIZATION OF DURGADI FORT, KALYAN

SR.NO	SPACE	NOS	SUB SPACE	MORNING	AFTERNOON	EVENING	NIGHT	TYPE OF SPACE	CAPACITY	MIN. SIZES	AREA m ²	NOTES
A ACCESS TO THE SITE												
1	Vehicular Parking for Staff							Private	10		125	10% Surface Parking
2	Vehicular Parking for Public							Public	90		1125	
3	Security Booth	4						Public	2		8	
B ENTRANCE TO THE STRUCTURE												
1	Toileting Counter	2						Public	2		20	
2	ATM	4						Public	2		40	
3	Reception and Waiting Area	1						Public	2		20	
4	Visual Display Room	1						Public	25		35	
5	Baggage Counter	2						Semi Public	3		50	
TOTAL												
170												
C ADMINISTRATION												
1	Administrative Director	1						Private	1		25	Cabin with WC
2	PAOP Director + Waiting Area	1						Semi Public	1+15		20	Cabin and Waiting Area
General Office Area												
1	Manager	1						Private	1		15	Cabin
2	Accountant	1						Private	2		15	Cabin
3	Fund Raising Co-Ordinator	1						Private	1		12	Cabin
4	Public Relation Officer	1						Private	1		12	Cabin
5	Conference Room (Small)	1						Private	10		20	
6	Conference Room	1						Semi Public	25		45	
7	Locker Room	1						Private	20		20	
8	Working area for Staff	5						Private	5		10	Workstations
Security												
1	Surveillance Head	1						Private	1		12	Cabin with WC
2	Staff	1						Private	5		15	Workstation
3	BMS Room x 1 No.	1						Private			15	
TOTAL												
236												
D MAINTENANCE												
1	Store Room	1						Private			50	With Xerox Facility
2	Record Room	1						Private			15	With Washing Area
3	Pantry + Dining	1						Private			20	
4	Washroom Blocks	2						Private			90	
5	Staff Changing Room	2						Private	30		40	
6	Staff Locker Room	2						Private	40		20	
7	Storage Room	1						Private			50	
8	Supply, Equipment and Furniture Storage	1						Private			25	Assume outside contractor & off-site storage for large equipment
9	Landscaping Maintenance Room	1						Private	APD		50	
10	Repairing Workshop Area	1						Private			50	
TOTAL												
560												
E READING AREA												
1	Open Books Magazine Newspaper Stacks							Public			150	
2	Formal Reading Area	1						Public	70		120	Closed
3	Informal Reading Area	1						Public	100		175	Semi Open
4	Washroom Blocks	2						Public				
Audio-Visual Library												
1	VCD/DVD/VHS Stacks	2						Public			40	Closed
2	Video Viewing Centres	10						Public			25	
3	Audio CD Cassette Stacks	2						Public			25	
4	Audio listening Booth	10						Public			20	
Administration												
1	Librarian	1						Private	1		15	Cabin with WC
2	Asst. Librarian + Staff	1						Private	1+2		15	
3	Store Room	1						Private			25	
4	Locking/Unloading	1						Private			10	
TOTAL												
620												
F EXHIBITION AREA												
1	Socio-Cult	1						Public	50		100	Changing Display
2	History	1						Public	50		100	
3	Temporary Display Area	1						Public	120		300	Semi Open (landscape)
4	Washroom Blocks	2						Public				
Administration												
1	Curator	1						Private	1		15	Cabin with WC
2	Asst. Curator + Staff	1						Private	1+2		15	
3	Store Room	1						Private			25	
4	Locking/Unloading	1						Private			10	
TOTAL												
565												
G CULTURAL CENTRE												
For Work												
1	Multi-Functional Workshops, Classrooms	6						Public	30		540	
2	Seminar Hall (Large)	1						Public	200		400	
3	Seminar Hall (Medium)	2						Public	100		200	
4	Green Rooms	2						Private	5		100	
5	VIP Rooms	2						Private	5		100	
6	Projection Room	1						Private	5		100	
7	Washroom Blocks	2						Public				
TOTAL												
1140												
H RETAIL (for parcels)												
1	Temporary Fandels	20						Public	APD		5	Needs to be Modular and Light Weight
2	Temporary Eaters	10						Public	APD		5	Needs to be Modular and Light Weight
FOOD COURT												
1	(Celestial Seasonal Outdoors)	1						Public	80		140	1.7/seat
2	Formal Restaurant	1						Private	100		200	
3	Kitchen							Private			80	
4	Catering Prep, Staging Area							Private			100	
5	Unloading and Storage							Private			50	
6	Storage (Dry and Cold)							Private			50	
7	Trash Room							Private			50	
8	Washroom Blocks	2						Public			100	
TOTAL												
470												
J UNASSIGNED AREAS												
Adding Assigned Areas												
3580												
K WATERFRONT PLAZA + LANDSCAPE												
1	Amphitheatre							Public	200		1500	Multi-Functional Space For Performance
2	Therapeutic Landscape							Public	APD		APD	
3	Pedestrian Walkways							Public	APD		APD	
4	Bicycle Station	2						Public	APD		100 each	
5	Bicycle lane	2						Public	APD		APD	
6	Ebenes	10						Public	APD		100	Open area with seatings 10 each. Spread on site
7	Ben Toilets	20						Public				
TOTAL												
885												
TOTAL BUILT UP AREA												
4475												
TOTAL FOOTFALL AT SITE												
1200												
Adding Assigned and Unassigned areas												
Includes 70% from Ganesh Ghat, 70% of people on site and 15% projected population												

*APD - AS PER DESIGN APD AS PER STANDARDIS PROPOSED INTERVENTION IS BARRIER FREE. THE PROGRAM IS FLEXIBLE TO ADAPT TO THE USERS NEED

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BIBILOGRAPHY

INTRODUCTION

- **City Development Plan** - KDMC 2014.
-
- **Gazetteer of Bombay** - 1880.
-
- **Kalyan : A Historical City** - Salim Dolare.
-
- **Kalyan's Cultural History** - Dr. Shrinivas Sathe.
-
- **Forts in and around Mumbai** - B. V. Kulkarni.
-
- **Mumbai Reader** - UDRI Mumbai.

LITERATURE REVIEW

- **A Pattern Language** - Christopher Alexander.
- **Culture, Change and Character Structure** - Margaret Mead.
- **Symbols of Transformation** - C. G. Jung.
- **Flexible Architecture that responds to Change** - Robert Kronenburg.
-
- **The Importance of Social Spaces** - Emil Kresel.
-
- **Placemaking** - Project For Public Spaces.
-
- **Theory of Flexible Architecture** - Cedric Price.
-
- **Activity and Change** - Cedric Price.
-
- **Fun Palace** - Cedric Price.
-
- **Architecture as Theme** - Oswald Mathias Ungers.
-
- **Notes on the synthesis of Form** - Christopher Alexander.
-
- **The six Determinants of Architectural Form** - Paul Rudolph.
-
- **Post Functionalism** - Peter Eisenman.
-
- **Beyond Horizons in Architecture** - Tadao Ando.
-
- **Landscape of Change** - Sanford Kwinter.

BLOGS

- <http://blog.xebia.com/>
-
- <http://www.andygibson.net/blog>
-
- <http://futurecityarchitecture.blogspot.com>

WEBSITES

- <http://www.urbanzeitgeist.com>
-
- <http://www.landezine.com/>
- <http://thewaywelive.wordpress.com>
- <http://archigram.westminster.ac.uk/>
- <http://www.archdaily.com/>
-
- <https://www.pps.org/>

NEWS PAPERS

- Kalyan Monuments for Adoption. - **Salim Dolare Jan 15, 2011.**
-
- Construction boom slowly razes Kalyan's Mughal & Maratha history.
- **Nergish Sunavala & Pradeep Gupta Jul 12, 2015.**
-
- Centre to launch 'Adopt a monument' scheme for maintenance of heritage sites - **Minati Singha Sep 7, 2017**