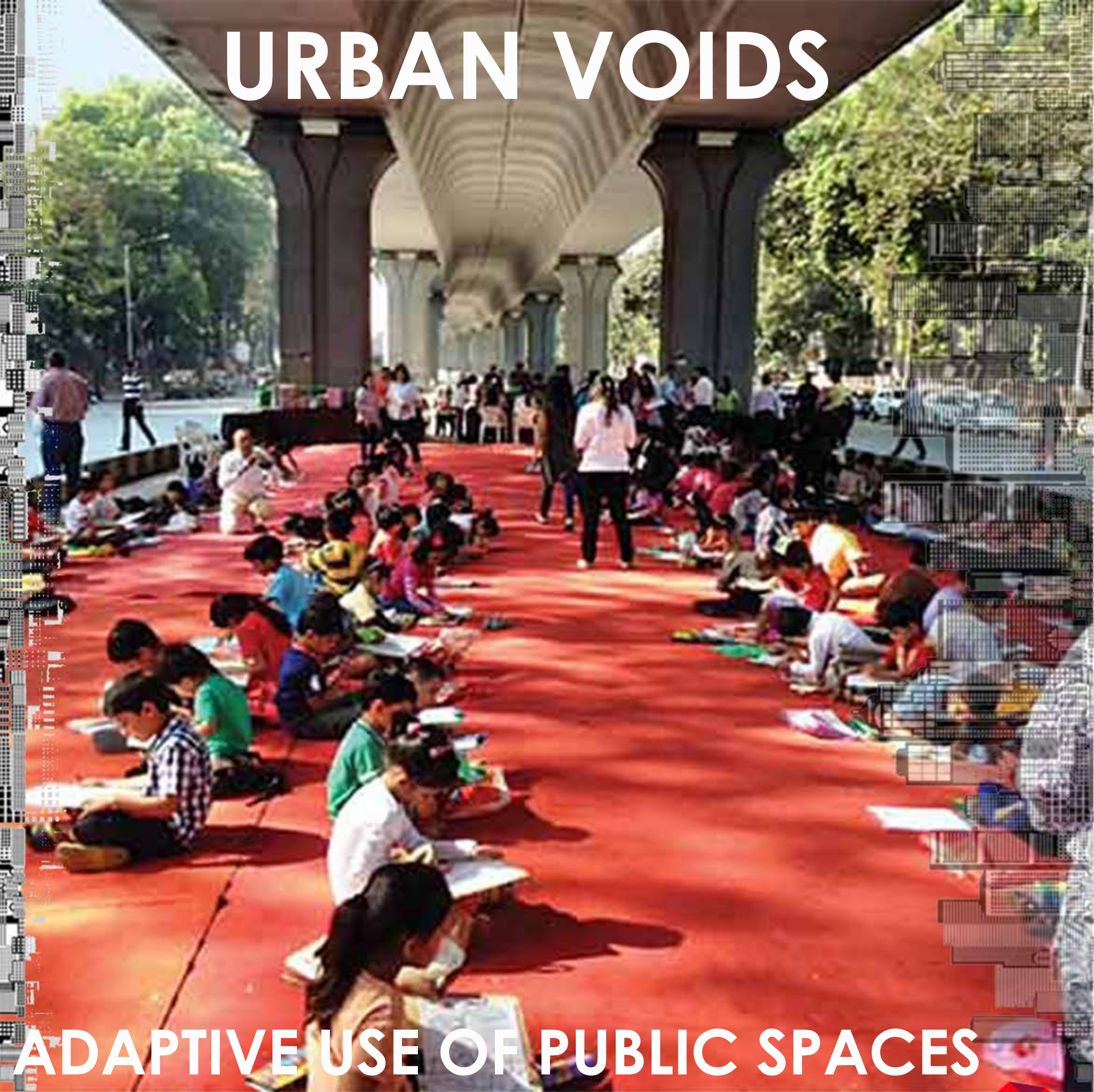


URBAN VOIDS



**ADAPTIVE USE OF PUBLIC SPACES
UNDER FLYOVERS**



-KESHAV RATHI
SOA IPS ACADEMY
INDORE (M.P.)'16 INDIA

URBAN VOIDS – ADAPTIVE USE OF PUBLIC SPACES

UNDER FLYOVER

(A DISSERTATION REPORT)

SUBMITTED BY

KESHAV RATHI

GUIDED BY

AR. NEELAM KUSHWAH

SUBMITTED TO

AR. NEELAM KHUSHWAH

AR. MONIKA SARAF



ARCHITECTURE

SCHOOL OF ARCHITECTURE

IPS ACADEMY, INDORE

RAJIV GANDHI PROUDYOGIKI VISHWA VIDYALAYA, BHOPAL

Dec. 2016

INSTITUTE OF PROFESSIONAL STUDIES ACADEMY, INDORE

SCHOOL OF ARCHITECTURE

DECLARATION

This Dissertation in subject AR 416, entitled “**Urban voids - Adaptive use of Public spaces under Flyover**” is being submitted as part of requirement for seventh semester of Bachelor of Architecture by the undersigned for evaluation.

The matter embodied in this dissertation is either my own work or compilation of others’ work, acknowledged properly. If, in future, it is found that the above statement is false, then I have no objection in withdrawal of my Dissertation and any other action taken by the Institute.

Date: NOVEMBER 30, 2016

0809AR131052

Scholar number

CERTIFICATE

This is to certify that Mr. KESHAV RATHI has submitted the dissertation report on “**URBAN VOIDS - ADAPTIVE USE OF PUBLIC SPACES UNDER FLYOVER**” as a partial fulfilment of seventh semester, B.Arch. It is also affirmed that, he has researched for one semester for preparing this Dissertation Report. And report submitted by her is original, bona-fide and genuine.

DISSERTATION GUIDE

AR. NEELAM KUSHWAH

PRINCIPAL

PROF. DR. KIRAN P. SHINDE

DISSERTATION COORDINATOR

AR. NEELAM KUSHWAH

DISSERTATION CO-COORDINATOR

AR. MONIKA SARAF

DATE: NOVEMBER, 30 2016

PLACE: INDORE (M.P.)

ACKNOWLEDGEMENT

I would like to express the deepest appreciation to my dissertation Guide Ar. Neelam Kushwah, who has the attitude and the substance of a genius, she continually and convincingly conveyed a spirit of adventure in regard to research, and an excitement in regard to teaching. Without his guidance and persistent help this dissertation would not have been possible.

I would like to thank my dissertation coordinators, Ar. Neelam Kushwah and Ar. Monika Saraf, whose work demonstrated to me that concern for global affairs and modern technology, should always transcend academia and provide a quest for our times.

In addition, a Thank you to Prof. (Dr) Kiran P. Shinde for his continuous support, encouragement and patience throughout my research. I also express my thanks to my Family members, Friends for their continuous support, encouragement throughout the journey.

Every session of the study was enjoyable and there were no stress. Thank you....

I Thank the School of Architecture, IPS Academy for granting me the permission to pursue my research on “URBAN VOIDS - ADAPTIVE USE OF PUBLIC SPACES UNDER FLYOVER”.

CONTENTS

TABLE OF CONTENTS

CHAPTER 1

-INTRODUCTION.....	1-3
1.1 Aim.....	2
1.2 Objective.....	2
1.3 Methodology.....	2
1.4 Expected outcome.....	3
1.5 Limitation.....	3
1.6 What to study.....	3

CHAPTER 2

-URBAN VOID.....	4-8
2.1 People, Place, Space.....	5
2.2 Categories of urban voids.....	6
a Planning voids.....	6
b Functional voids.....	6
c Geographical voids.....	6
2.3 Divising void typology.....	7

CHAPTER 3

-THEORETICAL STUDY FOR SOLUTION.....	9-16
3.1 Tool kit.....	9
3.2 What is placmaking?.....	9
3.3 Key principle of placemaking.....	10
3.4 What makes successful public place?.....	2
3.4 Lighter ,quicker ,cheaper approach.....	12

a What does IQC mean?.....	13
b what is LQC approach?.....	13
3.6 Making it LIGHT.....	13
3.7 Making it QUICK.....	14
3,8 Making it CHEAP.....	15

CHAPTER 4

-CONTRIBUTION IN THE PROGRESS.....	17-21
4.1 Prequalification survey.....	17
4.2 Analyzing the site.....	19
4.3 Making placemaking plan.....	19
4.4 Applying the placemaking plan.....	20

CHAPTER 5

-LITERATURE REVIEW.....	22-24
5.1 First we shape cities, then they shape us.....	22
5.2 Present problems of urban design.....	23
5.3 The social life of small urban spaces.....	23
5.4 life space and buildings.....	24

CHAPTER 6

-URBAN PUBLIC SPACES-CASESTUDY.....	25-28
6.1 Favela painting project.....	25
6.2 Urban flyover spaces.....	26
6.3 Re-Building Detroit.....	27
6.4 Redesigning Street.....	28

CHAPTER 7

-FLYOVER – A URBAN VOID.....	29-31
7.1 Why flyover	30

7.2 Negative effects –under flyover.....	30
--	----

CHAPTER 8

-CASESTUDY.....	32-43
8.1 Ahmedabad IM flyover.....	32
8.2 Mumbai- JJ Flyover.....	35
8.3 Mumbai-garden flyover.....	38
8.4 China-IT Activity center.....	40
8.5 France-AI highway-Control center.....	41
8.6 Swing bridge.....	43

CHAPTER 9

-VOID ANALYSIS.....	44-48
9.1 Public life at Ashram road.....	44
9.2 Void analysis at Ashram Road.....	44
9.3 Place performance.....	45
9.4 Challenges in the city.....	47
9.5 Issue.....	47

CHAPTER 10

-INFERENCE.....	49-53
10.1 Comparative study.....	49
10.2 Solution.....	51

CONCLUSION.....	54
------------------------	-----------

REFERENCES.....	56
------------------------	-----------

RESEARCH PAPER

1 INTRODUCTION

Urban Voids are spaces which rupture the urban fabric of a city. These are spaces which are often neglected or either forgotten spaces in the eyes of people. They are often the result of designing out of context with the surroundings. They are the result of treating planning sites in isolation regardless of urban fabric and poor designing.

Flyovers”-Infrastructural barrier or a potential opportunity for knitting the city fabric

The uniqueness of flyovers lies in its character of an overhead shelter with its generous underneath space that is longitudinal and barrier free. It is sheltered from the rain and from the heat of the sun. The term 'flyover' is used in the United Kingdom and most Commonwealth countries and is defined as a bridge that carries a road or railway over another road ("Flyover), which is a bridge, road, railway or similar structure that crosses over another road or railway. An overpass and underpass together form a 'grade separation'. 'Stack interchanges' are made up of many overpasses. A pedestrian overpass allows pedestrians safe crossing over busy roads

Amazingly, it is also free of much of the politics, land tenure disputes and real estate speculation that plague much of the developing cities today. Thus, the negative effects produced by flyovers can be reduced through careful design and more important the incorporation of the spaces below into their surrounding urban environment.

BACKGROUND

Blighted by barren landscape and left over interstices, spaces under elevated highways in India has severed from the urban fabric by rail lines and the flyovers themselves. As new flyovers emerge out of the dense framework of the city, it is highly seen that most spaces under them will be inaccessible, forgotten and become a haven for illicit activities.

This topic aims to remedy this problem. Leftover spaces under flyovers are one of the viable options for extra spaces. Now a days 'adaptive reuse' is a hot topic to be explored. Leftover spaces /voids underneath flyovers are one such type of space worth exploring, one that yields much innovation and creativity. Regenerating the leftover space under this bridge & beautifies the area as much as it reconnects the urban fabric.

1.1 AIM

The aim of the dissertation is to research ,examine and To focus on the concepts of Urban voids ,identifying and analysing the type of voids,how this voids have great potential for turning into public spaces through placemaking process space beneath the flyover or bridges ,the dead parking lots or nonreciprocal street edges are spaces which are neglected and invisible to the citizen and therefore take away citi's experiential qualities. the Dissertation will be an attempt to unearth the potentials of these spaces in context of the built environment and surroundings and prepare a placemaking toolkit for using these spaces as a strategy to increase the public realm of the city.

1.2 OBJECTIVES

The goal is to identify the problems related to the current condition of the spaces below the chosen elevated highways and develop a solution through design intervention The main objectives of this are described in the following list:

- Defining urban voids in context of Indian cities and foreign cities.
- Understanding types of voids.

- Locating and studying sites with good potential that includes more than one type of void.
- Identifying flyover spaces for adaptive use and reuse through placemaking strategies
- Studying public spaces and their constant need to cater social development and infrastructure and incorporate them under flyover spaces.
- Investigating factors affecting/influencing functionality of spaces in public realm. creating strategies/proposals to cater their context specific needs.
- Preparing a process to develop these voids.

1.3 METHODOLOGY

The mapping will aim to focus on following criteria -

a Ethnography -Who is using the public space Creating voids and how differences in types of users influence use.

b Literature review is conducted to establish the framework for the study of the spaces below elevated highways within urban environments.

c Interviews and Surveys.--What the users are doing, why they are here.

d link analysis -Arranging the layout of the task / area to influence certain behaviors.

e Observational Research. Task Analysis. -

-What people are doing in the public space, reusable spaces under flyovers , what is the order in which they engage in tasks.

To better understand when to use which method, it is helpful to view them along a framework with the following axes:

- Attitudinal vs. Behavioral
- Qualitative vs. Quantitative
- Context of Use

1.4 EXPECTED OUTCOME

Methods to identify and an attempt to unearth the potentials of these spaces in context of the built environment and surroundings

Simple solutions for voids/spaces that it could be applied on existing public use

1.5 LIMITATIONS

Case studies will be done in secondary methods due to absence of projects in the country,literature casestudy will be a major

part of study,This dissertation will only cover one of those space to examine and conclude from different variety of urban voids and public spaces in the world

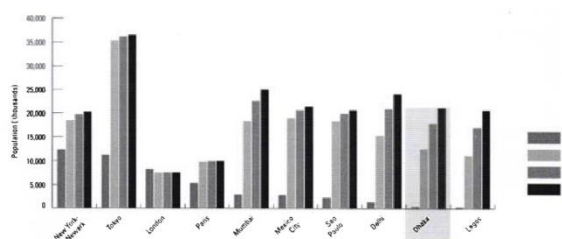
1.6 WHAT TO STUDY?

“An investigative study to assess the key factors for upgradation and adaptation of Urban voids through spacemaking strategies and public art implementation and its impressions on evolving urbanscapes ”

2 URBAN VOIDS

Urban Voids are spaces which rupture the urban fabric of a city. These are spaces which are often neglected or either forgotten spaces in the eyes of people. They are often the result of designing out of context with the surroundings. They are the result of treating planning sites in isolation regardless of urban fabric and poor designing. “Urban voids are undesirable urban areas that are in need of redesign making no positive contribution to the surroundings. They are ill-defined, without measurable boundaries and fail to connect elements in a coherent way.” (Trancik, 1986)

“The usual process of urban development treats building as isolated objects and sites in the landscape, not as part of the larger fabric of streets, squares and viable open Spaces. Decisions about growth patterns are made from two dimensional land use plan



Source: United Nations, World Urbanization Prospects: The 2003 Revision
 Note: Population in 2020 was estimated from population in 2010 and 2015 assuming that trends for these years remain the same.

Figure 2 Urban Growth in the World's Largest Cities, 1950-2020

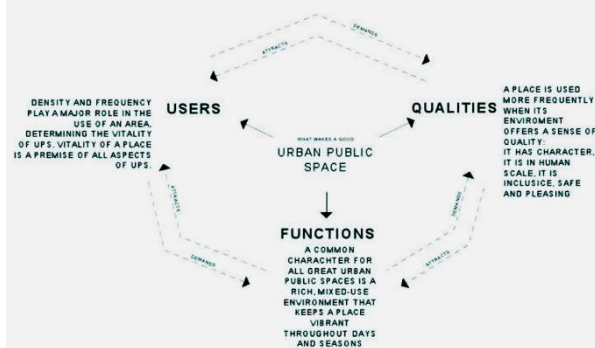
s, without considering the three dimensional relationship between buildings and spaces and without a real understanding of human

behaviour.” (Trancik, 1986) Plan designed on two dimensional plans have no consideration for public spaces or public life and does not answer the true users of the space. This is the reason why people neglect these spaces. There is a gap between how users use and perceive urban spaces and designers designing the spaces. Including the users in design process can help unfolding these various potential of voids as better urban public spaces therefore improving the quality of life.

According to Trancik in his book “Finding Lost Space: Theories of Urban Design” published in 1986 he defines five types of urban voids as degrees of openness and enclosure considering urban fabric of cities.

What Trancik is defining is different types of planning and geographical voids. These are the result due to faulty planning process and are in fact most visible in an urban area. Apart **from planning and geographical voids** there are **functional voids** which are created due to left over spaces or have become dysfunctional due to some reasons. These are also due to the process of development and treated as single dimensional entities. In our contemporary cities many spaces are left unused, dead and neglected. For example there are number of Urban Voids in between buildings, street corners which are leftover spaces which are simply used for garbage dumping or social

activities, With the increasing cost of land and fight for usable space these spaces are unutilized, underutilized or abandoned.



Urban voids ate the result of inefficient decision making, poor land management, poor coordination among decision makers and designers. In the world of expanding cities, situations such as disinvestment, suburbanisation, deindustrialisation, and out-migration have created a lot of problems in the cities. This has resulted in various spaces to be lost in the process and left unused regarding the previous original purpose of which it was built on.

In this report urban void is defined as **unused, underused and underutilized spaces**,residual spaces between individual plots

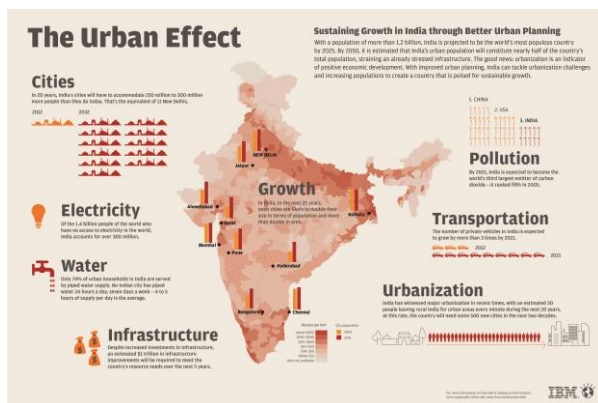
2.1 PEOPLE, PUBLIC SPACE AND CITIES LIFE

It is estimated 50% of the world's population are



living in urban areas. By 2050, this will rise upto 70% and already many cities across the world are struggling to cope with pressure from rapidly increasing population. There are challenges like poverty housing supply, pollution and poor infrastructure the cities are currently facing which is affecting the quality of life in these cities. Cities are then competing for becoming more liveable in world. Publicly accessible open green spaces is one of the factors that determines the liveability in a city. The rapid rise in the urban populations of developing countries is the catalyst for many problems and challenges. In many countries the problem of housing so many urban dwellers has resulted in the spread of large informal housing areas that are densely populated and unsafe with no proper services. Here to cope up with the huge demand dense construction is being built at record speed and common space is usually in poor quality and not even a priority.

With cities in countries like India where the rate of urbanisation is 32%, we are constantly dealing with various social and economic problems there is very little attention on



addressing quality of life in the cities. We are seeking development but we need to change the focus of development being only related to growth in economy and infrastructure but also socially. These crowded cities deal with limited urban spaces and resources and to increase public spaces is very difficult and complicated. In order to cope with these problems, a paradigm shift in conventional urban planning is needed along with seeking new opportunities and innovative ways while addressing requirement

Although the problems of cities in various parts of the world are different but the differences involved in including the people's quality of life is actually minor. The same pattern appears everywhere, that we have been seriously neglecting the human dimension in connection with urban development. In developed cities neglect owes largely to planning ideologies, rapid motorization and difficulties in substituting from a model where city life needs the active support of careful planning. In rapidly developing cities population growth and extensive development in traffic have created numerous problems in city streets. This shows how neglect has just about quenched city life in some economically developed countries and stress from development has pushed city life into extremely adverse conditions in many developing countries.

2.2 CATEGORIES OF URBAN VOIDS

BASIC CLASSIFICATION

a Planning Voids :

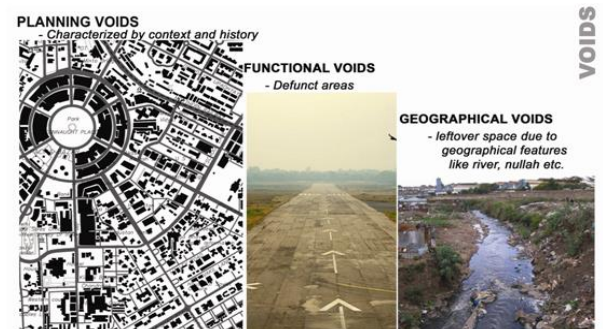
Voids created due to inefficient and improper planning processes. These are created due to planning in isolation without understanding the fabric of the city. These are most visible in our cities also can be perceived using figure ground theory.

b Functional Voids :

These are dead vacant spaces in the cities. When a space is not used like it was designed to use the space becomes defunct. These occupy precious land in the city and make the environment unpleasant.

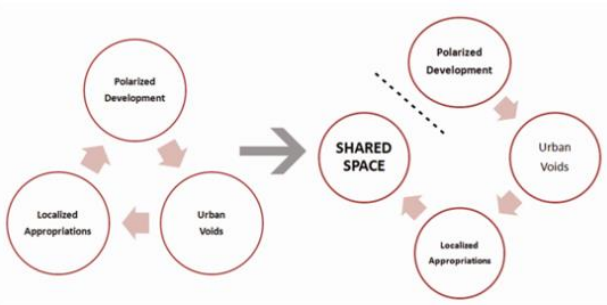
c Geographical Voids :

These area existing geographical features in the city. When the city planners and designers do not respond to these geographical features voids are created around them making the space unusable. E.g. river, nullah, etc.



2.3 DEVISING VOID TYPOLOGY

Trying to relate these types of voids to the Indian urban context and considering the concern for the potential of urban voids to contribute to the public realm, lead to devise version of urban void types, Although there are similarities between the cities of the west and the Indian cities, but there are also major differences. There is a categorization of the voids based on understanding and knowledge of Indian cities. The criteria to select these voids were ownership, the role they play in liveliness of the street, and the potential to transform.



There comes 7 categories from both the public and the private realm. The scale ranged from plot, building envelope and neighbourhood. Working more on these types, The voids occurring only in the public realm of the city, methods of intervention and change in mind.

The aim is to strengthen the public realm of the neighbourhood, voids concerning with the community and on a larger scale is taken into consideration. After refining and addition

according to scale and ownership, 4 main types of voids are:

- **Edge and Buffer Voids**
- **Infrastructural Voids**
- **Transportation Voids**
- **Large Scale Plots**

1 EDGE SPACES

NAME	TYPE	REASON	ISSUES
EDGE SPACES	Setback, Between space, Marginal Spaces, residual spaces	Indefinite spaces caused by action	Leftover Spaces Creating Dead Edges, Feeling Of Unsafe Spaces, Wasted Potential Sidewalk
EXAMPLE			
SPACE BETWEEN BUILDINGS		EDGES	

2 INFRASTRUCTURAL VOID

NAME	TYPE	REASON	ISSUES
INFRA VOIDS	Infrastructural void	Dead spaces in and around public infrastructure	Waste Of Usable Space, Illicit Activities, Becomes A Gap Within Its Context
EXAMPLE			
SPACE BETWEEN BUILDINGS		EDGES	

3 TRANSPORTATION VOIDS

NAME	TYPE	REASON	ISSUES
LARGE ROADS	Oversized Street, over-supplied street	The street supersized than requirement. Improper distribution of space, Lack Of Prior Studies	Taking large amount of space, unsafe to cross, unsafe for pedestrians, Character And Perception Of The City Is Lost

EXAMPLE



4 LARGE SCALE PLOTS

NAME	TYPE	REASON	ISSUES
GROUNDS	Parking lots, Unused Land and Abandoned spaces	Gap Between Dpr, Lap, And Implementation Lack Of Stakeholder Meetings	Create huge voids in the fabric of the city. The spaces are designed for cars not for people.

EXAMPLE



3 THEORETICAL STUDY FOR SOLUTION

3.1 THE TOOLKIT

This toolkit is for the improvement of the neighbourhood and creating public spaces using the dead spaces i.e. voids in the neighbourhood. It shows the process and steps for evolving the placemaking program and engaging the community in the process.

The role of the leader or a leadership team is very important as its main goal will be to get the community involved in the project and lobby many ideas in the process.

What the toolkit achieves?

This toolkit achieves to create a process of transforming a void into a community space. The toolkit can be used by a community, organisation, and government to:

Know what is placemaking?

- Identify the voids in the area or neighbourhood.
- Identify and define the elements to create successful public spaces.

- Create successful community places and revitalize neighbourhoods.
- Identify the opportunities and recognizing a successful place for placemaking.
- Analyse the specific void.
- Facilitate the local leaders, community and designers to work together to improve the void.
- Develop a short term and long term plan or vision to improve the site.

3.2 WHAT IS PLACEMAKING?

“Placemaking is a people-centered approach to the planning, design and management of public spaces. Put simply, it involves looking at, listening to, and asking questions of the people who live, work and play in a particular space, to discover needs and aspirations.

This information is then used to create a common vision for that place. The vision can evolve quickly into an implementation strategy, beginning with small-scale, do-able improvements that can immediately bring benefits to public spaces and the people who use them.” (What is placemaking?, 2010)

3.3 KEY PRINCIPLES OF PLACEMAKING

(Space, How to Turn a Place Around, 1991)

Effective public spaces are extremely difficult to accomplish, because their complexity is rarely understood. As William (Holly) Whyte said,

“It’s hard to design a space that will not attract people. What is remarkable is how often this has been accomplished.”

In the book “How to Turn a Place Around”, Project for Public Spaces which is the pioneer in placemaking identified 11 key elements to transform the public spaces.

a. THE COMMUNITY IS THE EXPERT:

This means it’s the community the people who are the most important valuable asset in developing the public space.

b. CREATE A PLACE NOT A DESIGN:

Many of our public spaces end up being design projects and end up failing. The goal should be creating a place for community as well as an image and not just the aesthetics of the place.

c. LOOK FOR PARTNERS: It is not a one man project, it is about the community so involving as many partners is critical in improving the place. They can be helpful in providing support and getting the project into a reality.

d. YOU CAN SEE A LOT JUST BY OBSERVING:

Observing the public space can be helpful in just identifying the problems like what kind of activities are missing or what needs to be done for a specific problem. The initial observations can tell a lot and we don’t really know what it may help in discovering about the place.

e. HAVE A VISION:

Each community individual needs to have a vision about the place. It is essential to know about what activities should to happening in the space and what and how people what the place to change like.

f. START WITH THE PETUNIAS:

LIGHTER QUICKER CHEAPER:

You cannot expect to do the right thing every time. During the initial phase experimenting with short term cheap improvements which can be tested and then converted into long term proposals.

g. TRIANGULATE:

“Triangulation is the process by which some external stimulus provides a linkage between people and prompts strangers to talk to other strangers as if they knew each other” (Holly Whyte).

Establishing a connection with various elements present in the public space can help in bringing people together.

h. THEY ALWAYS SAY “IT CAN’T BE DONE”: It’s always about encountering problems and obstacles because no one in either the public or private sector has the job or accountability to create places.

i. FORM SUPPORTS FUNCTION: The input from the community and potential partners, the understanding of how other spaces function, the experimentation, and overcoming the obstacles and naysayers provides the concept for the space. Although design is important, these other elements tell you what “form” you need to accomplish the future vision for the space. (Spaces, How to Turn a Place Around, 1991)

j. MONEY IS NOT THE ISSUE This statement can apply in a number of ways. For example, once you’ve put in the basic infrastructure of the public spaces, the elements that are added that will make it work (e.g., vendors, cafes, flowers and seating) will not be expensive.



figure-The never finished art work by childrens in small streets

k. YOU ARE NEVER FINISHED: As people’s need and the community opinions change there needs to be change in the urban environment. Having management flexibility to enact such change is what builds great public spaces.



figure-placemaking begins at the smallest scale even though cities ultimately fail or succeed at the scale of “place”,this is the scale that is often overlooked

3.4 WHAT MAKES SUCCESSFUL PUBLIC SPACES?

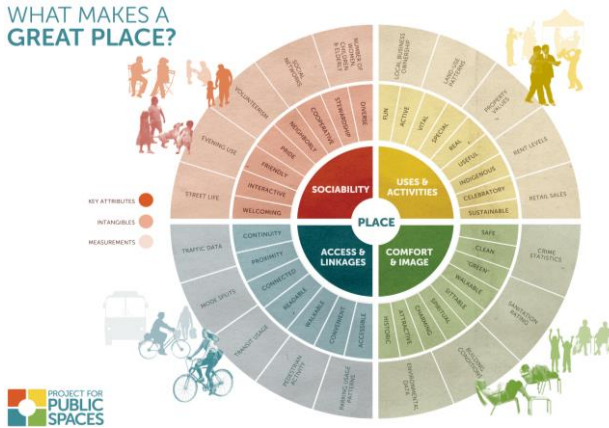


figure-the place diagram is one of the tools PPS has developed to help communities evaluate places.the inner ring represents a place’s key attributes ,the middle ring its intangible qualities ,and the outer ring its measurable data.

PPS evaluated thousands of public spaces around the world and they found out these public spaces share these four qualities: Uses and Activities, Sociability, Comfort and Image and Access and link ages. They developed this place diagram as a tool to judge any public space. The inner most circle have the main attributes on which we can evaluate the place, the ring outside are the qualitative and intangible aspects by which to further judge the place; and the outer most ring shows the quantitative attributes which can be measured.



3.5 LIGHTER QUICKER CHEAPER



figure- spaces showing LQCapprach

LQC APPROACH (Gulati, n.d.)

This movement goes by different names like action-planning, tactical urbanism, guerrilla urbanism, D.I.Y. Urbanism, pop-up projects. This is an important tool and catalyst for larger community based placemaking processes. We always struggle to do more with less.

People needs and demand for better public spaces are always high and we get stuck in the net of funding and capitalizing on local ingenuity and turn these spaces into community public spaces. Lighter quicker Cheaper can be a low cost and high impact approach to the implementation process. Interestingly the informal vending and gathering spaces are a greatest example of how cheap and quicker ideas can turn into great spaces to attract people. LQC projects can quickly transform the ideas of the community into a reality. Thus this takes less amount of time, resources and money and implemented on a short term action plan. It can be then tweaked and customised based on the community’s need and response.

a What Does LQC Mean?

i Light = Flexible and evolving according to needs

ii Quick = Fast to launch

iii Cheap = Fundamental shift from design led capital investment towards affordable programming and management solutions

b Why a LQC Approach?

- Using LQC approach will help to create and test the project on ground immediately and with direct involvement.
- They are temporary and relatively inexpensive alterations to a public space.
- Bring life and amenities to previously dead spaces in this case voids.
- Generate interest among potential investors by faster implementation.
- Establish a sense of community and sense of pride and ownership.
- It is a context based, place by place strategy to transform underperforming spaces throughout the city.

3.6 MAKING IT LIGHT

a Integrating Art

It has been observed in most of the cities that public artworks and art installations has been creating the sense of pride and can play a major role in local resident's sense of place. Community consultation and design of the public space is crucial for the success of public art initiatives. It helps in building morale of the community and help in building an identity of a place. Including local artists will boost the success of the public space.



a . Setting up for the art crawl/ b. The crowd for live music at the Supercrawl / c Food truck at SuperCrawl

b Implementing the community driven ideas

The success of the placemaking project always depends on the community involvement at every stage of the process. Remember that community is the expert. Giving the community what it needs will always make them happier. This will help build partnerships, raising money, avoiding criticism and backlash and also ensure the management and maintenance if the community is supporting and be involved.



figure -a Celebrating Ponte Guapo Isidoro /b Involving the entire community /c The finished space

3.7 MAKING IT QUICK

a Small Interventions huge Impact

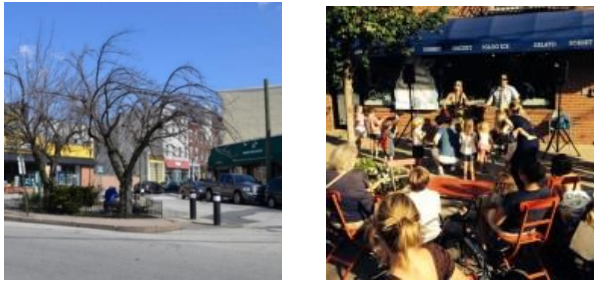
Simple additions of planter or benches in the space or painting, or introducing a community suggestion board on a blank wall are all illustrations of LQC place interventions. These are very flexible and very cost effective. During a tight budget or lack of monetary resources or permit issues the LQC intervention can activate the public space using inexpensive, ultra-light transformation or donated materials or from scrapyards.



figure-a Vacant storefronts /b Rehabbing retail one storefront at a time/c final product – active commercial env.

b Activating and repurposing:

With the advantage of using LOC approach it can be implemented very soon. So in the case of under-performing spaces it can help in temporarily transform the public space and in the process help in finding the most appropriate strategy. Communities and organizations wishing to make public space interventions will be able to strengthen their case, for both approval and funding.



a The area before activation /b The Triangle activated/
c Triangle on a sunny Saturday afternoon

3.8 MAKING IT CHEAP

a Securing diverse and creative funding sources

The participatory method of placemaking as well as the LQC method can help in the exploration of new sources of funding from the private and public domain. Lack of available funds has been the main motivation for the LOC approach. Non-conventional funding sources like crowd funding, institutions and foundations providing technical assistance can be of great help in financing the actions and plan.



a Greater Kennedy Plaza Imagination /b Center at Burnside Park /c A vision for Greater Kennedy Plaza

b Developing a management structure

Local partnerships to ensure the public space in the longer term have long lived impacts on the community. When the management plan evolves from the placemaking process organically, the project tends to be better and more likely to be preserved more.



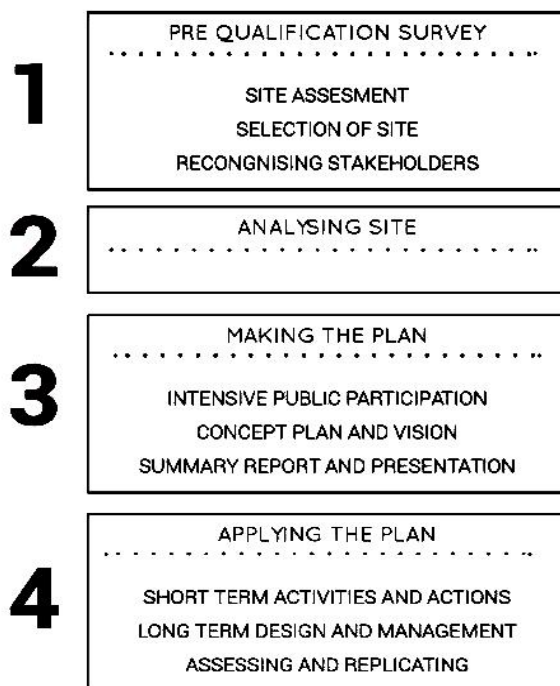
A ACTIVATE's strategic, LQC /b An alley - a vibrant public space /c Art performance breathes new life into neglected

4 CONTRIBUTION IN THE PROCESS

A process for transforming the four type of voids under study into public spaces that contribute to a better quality of life in cities. The, steps which could be took and look after are as follows:

- Learning from Case Studies.
- Devised Void Typologies.
- Studying and Analysis based on Placegame Survey.
- Selected one site with most potential.
- Identifying Issues and Challenges.

THE STEPS



PROCESS EXPLAINED ,

4.1 PRE-QUALIFICATION SURVEY

a ASSESSING THE SITE

The process starts with an assessment of the public spaces in the neighbourhood or an area. Using the mapping technique to list the important voids in the site. These spaces must be places which you think can be of great potential in revitalizing the area. Place game – Place Performance Survey can be conducted on the sites to get a better over sight on the area with the requited attributes of what makes a great public space.

Maps, plans photo or video documentation are very, helpful to gain some extremely valuable insight in the public life of the area. Identifying the areas like with underutilized spaces, corners or lack of shade or lack of safe space can be helpful in assessing the site.

b SELECTING THE PLACEMAKING SITE

After the initial assessment of the sites and learning the potential of various sites in the area it is the time to select a site for an intervention which has the maximum potential to be a public space. A space may have limitations which could affect the plan so it’s better to check out with the local authorities and local research to learn more about the place. After the selection of the site it is the

time to visit the space and look around for some-characteristics. For this it is advised to be in group or with a partner so that it does not have a skewed vision and it's better to have more ways of approach. Placemaking is always a group activity not a solo show.

c RECOGNISING THE KEY STAKEHOLDERS

Placemaking is closely related to people. So key way to initiate the placemaking project is to identify the key stake holders and get them involved in the process. Strong local partners are crucial to provide information about the place and understanding the dynamics of the public. Here are few stakeholders which are available in any site.

LOCAL RESIDENTS

The easiest way to begin the process is by engaging the people around the place. Ask them to involve their friends and neighbours. There is strength in the numbers. Long term locals will be helpful in answering the questions about the history and changes they have seen.

LOCAL STORES AND BUSINESSES:

Local shops should be pulled into the process in the early stage. Local businesses can

flourish more with the presence of a public space.

NON GOVERNMENT ORGANISATIONS (NGOS):

NGOs focusing on community development architecture, arts and culture can make perfect partners in the placemaking process. They can provide backing by giving meeting spaces, training facilities and also help during the implementation.

LOCAL COMMUNITY GROUPS: Local community groups and leaders can help a lot in dealing with the neighbourhood groups and community.

LOCAL GOVERNMENT: There needs to be the presence of local government officials and professionals so that they can facilitate the best placemaking opportunities. They can be resourceful in providing necessary facilities and means to develop the area.

EXPERTS: Skilled experts such as architects, planners, artists are important in the planning and implementation process and should be involved from the initial stage. They can help in the process by providing with practical and design expertise. Students from the same field can also be included to create innovative, fresh ideas and sketches about the place.

4.2 ANALYZING THE SITE

Several observational techniques can be used to analyse the site. This would provide us with in-depth information of public life at the site and help us in the process of designing the place better. The studies should be done more than once and different times of day and week, and also on special days to understand the flow of the place. Below are some techniques used for analysing the site:

- **Collecting the data**
- **Behaviour Mapping**
- **Counting**
- **Tracking**
- **Trade Measures**

4.3 MAKING THE PLACEMAKING PLAN

a . INTENSIVE PUBLIC PARTICIPATION

Simply by observing we can get the initial, idea, knowledge about the place. But getting into ideas to get the right activity fit for the process we need to have an intensive public participation. It is people that make places not design or aesthetics. These things matter but

the priority should be people, so that we don't have a gap between people's need and the design thereby not creating anymore voids in the area.

Placemaking workshop: A community participatory process which provide a forum for the people and the private sector to work together on creating useful ideas and programs and setting up a vision for effective execution of the placemaking plan. This includes the community meetings, workshop to discuss issues and ideas, place performance evaluation as technique to initiate the placemaking workshop.

Stakeholder Interviews: Interviewing as many stakeholders and other individuals who are concerned about the future of the area and neighbourhood.

Focus Groups: Identifying the focus groups who would play an important role in activating the public space. These focus group would help us to know the important changes they would like to see and how would they like to be involve in the process. If there are any informal vendors considering them an important focus group would help us in understanding the opportunities and challenges faced by them in providing in the area. The presence of artists in the area can also be

considered as a positive group to discuss with to know about the participation the placemaking process.

Special Workshops: Workshops during holidays and workshops targeting women, old age and children can help to dot their favourite activities and amenities they would like have in the area. Ideas can be generated which would make the space stand out.

b. TRANSFORMING IDEAS TO CONCEPT PLAN AND DEVELOPING A VISION.

Devising a concept plan out of the workshops and analysis of the site is the next step. There no need to be a technical drawings of the plan, but there can be even a hand drawn plan, with cut-outs of illustrations and pictures. There needs to be some short term improvements in the plan to make the void active, attractive and functional. Apart from it developing a vision with the stakeholders and the community will help in organizing things better. Addressing the various problems and creating an action plan to address the problems can be done using the working group.

c SUMMARY REPORT AND PRESENTATION

At the end of making the plan, a short report that summarizes the result of all the previous

done processes should be made. The report should consist the result from the workshop, vision statement, short and long term ideas, concept plan, priorities and partners that could help in implementation. A presentation with recommendations and summary to market the idea to potential partners, local supporters, political leaders, local government and community.

4.4 APPLYING THE PLACEMAKING PLAN

a SHORT TERM ACTIVITIES AND ACTIONS

Implementation is very important in the placemaking process. It is about putting the vision plan into an action plan. So keeping the group dynamics and to get quick results some ideas can be implemented quickly. These short term activities/improvements at the space can help in activating the space and convert them into great public space. The spaces could be transformed into flexible spaces with programming activities for painting, cleaning, farmers market informal bazaar, etc. These don't require much work or funding and can be easily done. These can attract a lot of people and get people together at that void which is now a public space.

Implementing a short term plan do not mean the end of the placemaking process. Remembering that these short term activities and actions are temporary and needed to be made permanent by devising a long term plan. For this there needs to be constant analysis done to identify the problems occurring during the short term actions and discuss new approaches or development. Now this can help the stakeholders to decide whether to include more stakeholders and draw more awareness regarding the public space improvements that is affecting their businesses and community now,

2 LONG TERM DESIGN AND MANAGEMENT SOLUTION

Time to make the short term plan and necessary improvements into a long term solution. So there needs to be two things to be implemented. One is the design plan and other one is the management plan. Generally the design plan is implemented and the placekeeping part is often forgotten. So it is essential to have importance of both to make great public spaces.

For the design plan it is important for the local government to be called on board along with experts from urban planning, architecture, transportation, landscape and others who can

help the community vision into a reality working plan. The results from the short term action plan needs to considered in the assessment. New funding plan, partners, regular communication between with stakeholders is needed to implement the long term design solution that reflect what people would like to see and use. Management plan will be one thing where the participation from the local government is required the most since the local government is responsible for basic services like waste collection, lighting and water. The community can manage the space and make constant readjustments according to needs to make the space work better. If the sense of place and feeling of ownership is created among the community the space can be managed very well. The best way is to have partnerships with the local opportunities available to manage the place.

3 ASSESSING AND REPLICATING

During the implementation of the long term plan or even before that this process can be implemented in other areas, neighbourhoods with similar techniques and strategies. Placemaking is success if other communities and stakeholders will implement and initiate their own placemaking projects to change their dead unused spaces into great public spaces.

5 LITERATURE REVIEW

The study and understanding of urban spaces and people in cities. Both *Cities for People* and *The Social Life of Small Urban Spaces* helps in understanding the human perception of the city and its context, *The Study of Public Life* will serve as a tool to study public life and deal with the task of designing and formulating the design and concept of the toolkit at the end of the thesis.. These relate to different challenges and tasks listed here are core of the literature review.

5.1 FIRST WE SHAPE THE CITIES, THEN THEY SHAPE US (Gehl, 2010)

“If we Look at the history of cities, we can see clearly that urban structures and planning influence human behaviour and the ways which cities operate.” This explains the

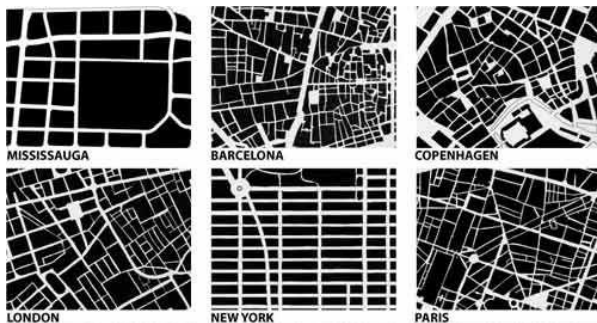


figure –mapping of metrocities all around world which has great impact on public life-public space

existence compact urban fabric of the medieval cities with their short distances, layout of main streets, public squares and marketplaces functioned as centre of trade and craftsmanship.

Finding new ways to use the space should be concern for us as in cities modern urban planning which is used as problem solving exercise without understanding the core problem. Physical planning can greatly influence the activities and usage of city space.



figure-sector –grid planning of chandigarh city-city plan

“If better city space is provided, use will increase”. The better the quality of spaces in cities the better it will be the quality of life.

Chandigarh city based on sector-grid planning with greatest architecture creations showing planned urbanism in india creates a great impact on indian context of how a grid planning of a city projects a successful liveability of a city through its spaces ,streets ,plazas, roadnetworks ,services and a geometrically scaled and proportion

5.2 PRESENT PROBLEMS OF URBAN DESIGN (Trancik, 1986)

Today designers and planners are faced with challenge of creating outdoor environments as collective, unifying frameworks for new development. Usually the effort becomes a cosmetic treatment that is poorly planned and designed for public use. This happens due to the usual process of urban development treating buildings and sites as isolated objects not considering a part of urban fabric of the city.

There is no real understanding of human behaviour or a human dimensional process in the decision taken. Therefore what develops is a badly shaped anti-space unusable and unsafe creating voids in the city. “As professionals who permanently influence the urban environment, architects have a major accountability to meet the challenge of reshaping lost spaces that have emerged in every modern city.”

“Designers of the physical environment have the unique training to address these critical problems of our day, and we can contribute significantly toward restructuring the outdoor spaces of the urban core. Lost spaces, underused and deteriorating, provide exceptional opportunities to reshape an urban center, so that it attracts people back”.

5.3 THE SOCIAL LIFE OF SMALL URBAN SPACES (Whyte, 1980)

“A city’s abundant small spaces have key impact on the quality of life. If those spaces are unattractive and left unattended people will respond and retreat from the city streets and eventually have an adverse effect on city in all aspects.”

Indian cities have now been approaching the same way as U.S. cities where the monotonous roadside clutter including highways dividing the cities has resulted in increasing unsafe spaces and cities.

When we think about cities we always think about people. People like public spaces, these places contribute to happiness, and public spaces can bring out that smile. We lack public spaces with our cities are spreading like wildfire, with its highways taking our cities This can’t be stopped without creative development to provide housing and meeting other demands of a growing population. Whyte describes that how small urban spaces work and don’t work. Places that attract people tend to be relatively free from problems.

“If we learn to take advantages of our small urban spaces, if we design new ones and repair old ones, we will improve the streets and quality of life.”

5.4 LIFE, SPACE AND BUILDINGS (Gehl, 2010)

If we want to create better cities spaces working with scale is the most difficult and most sensitive urban planning discipline. If this is neglected or fails city will decline in its quality of life.



figure-life with only public interaction and involvement

“The widespread practice of planning from above and outside must be replaced with new planning procedures from below and inside, following the principle: first life, then space, then buildings. Instead of reverse order in the planning process that prioritizes buildings then spaces and (perhaps) a little life working with the human dimension requires life and space to be treated before buildings.”

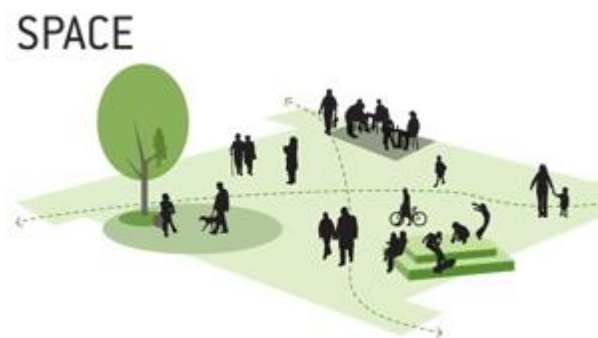


figure-life of a space with public and community interaction

This method involves introductory work that determines the character and scope of the projected life in the development. Then the agendas are prepared for the city spaces and city structure and then buildings can be placed or positioned to ensure the best possible coexistence between life, spaces and buildings.



figure-life of a space with community, social, public and infrastructure

This work expands into large developments and larger districts but is always rooted in the requirements for a well-functioning public life.

6 URBAN PUBLIC SPACES

- CASE STUDIES

The case studies studied here are small scale projects making huge difference in the society and community. Since not all big projects have impact on communities it is the small projects and small urban spaces that create vibrant cities. It is seen that the bigger the contribution by the community it is more likely the projects are going to be successful.

6.1 .FAVELA PAINTING PROJECT

How planning can transform communities

Objective: A community project aiming to address the problems of crime and poverty and reduce the negative image of favelas.

Protagonist: “Dutch artists Jeroen Koolhaas and Dre Urhahn (known as Haas&Hahn)”

Use/Purpose: Affect the aesthetics of negative looking favelas and a community art project

Places: Favelas of Rio de Janeiro

Description: The Dutch artists Haas and Hahn with the help of local people painted the



favelas of Rio with community artwork. The project is primarily funded by grants and

figure- favelas of Rio designed through community artwork

donations. The main Idea was to collaborate with the native people and create a community artwork. Being inspired by the creativity and optimism of the people, they started developing ideas for this community project in 2006. With their first painting Boy with Kite which was collaborated with the local youth in 2007. This involved training and community engagement with the local youth.

Things to learn: Community involvement and collaborations with local people in turn helping to improve the living environment in the neighbourhood. Promoting local artists and people will help to create more successful projects.

6.2 UNDER-FLYOVER SPACES

Utilizing Lost Spaces under Flyovers

Objective: Utilizing the negative and unused spaces beneath the flyovers and open it into Public Realm.

Protagonist: Urban Community initiatives.

Use/Purpose: “Transformed into creative venues for various community facilities and outdoors activities such as libraries, markets, public spaces, playgrounds, art galleries, canteens, seating areas with traditional board games, etc.”

Places: Flyovers in Cairo (Egypt), Caracas (Venezuela), Portland, USA, Zaanstad (the Netherland).



figure- a flyover coloums designed through public art / b shops under flyovers / c recreational space under flyover

Description: We deal with the problem of lack of basic urban amenities in many neighbourhoods in our cities. There is a lack of places that invite for public interactions. The under bridge spaces are a precious opportunity for local communities. (Mohamed, 2015) The importance of local community initiatives is key to transform these dead spaces happened in the cities where this movement occurred and this resulted in great urban spaces benefiting the entire community. Where in Av Fuerzas Armadas Flyover in Caracas, Venezuela was transformed into a book selling market which in turn encourages people to hangout and activate a previously dead, empty and abandoned area. This space is commonly used for playing various board games and for the people to relax.

Another space under the flyover in Koog aan de Zaan, Amsterdam. It was a restoration project to connect the two sides of town and to activate the space under the road. The town was divided into two parts due to the over road and it was treated as a blind spot by the residents as well as the authorities for over 30 years to realize it as a potential urban space. After a successful community engagement the space was redesigned to accommodate all needs of the community as well as the contextual needs where the landscape requirements to be resilient as well as climate responsive was addressed.

6.3. RE-BUILDING DETROIT

Link a Public Health Agenda to a Public Space Agenda

Objective: Transforming a little-used concrete island into a quality public space.

Protagonist: City of Detroit.

Use/Purpose: To attract visitors of all kind to the heart of the city.

Places: Campus Martius.

Description: In late 1999, PPS began working with the City of Detroit to reclaim a concrete island less than two acres in size that had historically functioned as the heart of downtown, but had been overwhelmed by heavy vehicular traffic. It was revitalizing project of the downtown during the 300th anniversary of Detroit.



The mayors vision was very strong that was to “create the best public space in the world”. The public space was designed and programmed using placemaking techniques and full community collaborations. The park resulted into new buildings being constructed and old abandoned buildings being renovated, also more floor retail opening helping the area to be active all season and all times of day.

Things to Learn: A strong vision by local government, placemaking project and proper management creates successful public spaces to activate the heart of the city. This resulted into dead spaces around the public space N to grow and generate more activities attracting more public life.

6.4. REDESIGNING STREETS

Improve streets as Public Spaces

Objective: To promote streets as public spaces by designing for people not for cars.

Protagonist: Local Government Authorities, Community Initiatives, Non-Governmental Organisations.

Use/Purpose: Open up Streets for public use, plazas, and pop-up parks.

Places: Medellin, Bogota, New York



Description: New York City streets are now undergoing redesigning by Department of Transportation to give the streets back to people in turn enhancing pedestrian safety and

providing more open space and pedestrian and bicyclist amenities. This is helping to reduce the illegal parking and reducing motor vehicle congestion also enhancing cities. The initial projects were done using lighter quicker cheaper materials to see the impact first later on applying citywide.

Medellin city has undergone the similar kind of change in the streets. Reinventing from one of the most dangerous cities in the world to a city where there is emphasis on enhancing street life. Medellin has built a transit system that connects formal and informal cities that contributes to social cohesion. While constructing the metro cable car system the city took a step to improve the neglected barrios and provided them with plazas which has ample food vendors, seating and landscaping. This has created more lively and safe visiting areas from previously being very unsafe and unattractive.

7 FLYOVER

– A URBAN VOID

Flyovers”-Infrastructural barrier or a potential opportunity for knitting the city fabric

If one whizz past on the city’s flyovers, one can feast his eyes on inviting hoardings, get lost in the haze of high-rises and get a high on life in the fast lane. But the underside of these flyovers tells a very different story. Encroached by squatters, littered with filth and dumping grounds for garbage, that’s the sight under most of the over bridges across the city. Conditions such as transportation facilities like the railways, road networks, flyovers and high ways form the basis of contemporary Indian urbanism.. However, there are vast amount of urban spaces which appear in various scales. Very common examples of such residual spaces are Railway tracks precinct, subways, skywalks and spaces below the flyovers. The flyover itself was proposed as necessary civic infrastructure. Why can’t this idea be extended below as well? What better place to open up a little room for the citizens of the city?

Although sometimes included in plans, they often constitute the indirect result of

planned building and exist in the outmost periphery of architects and planners intentions. They are phenomena that exist beyond what architects and planners normally define as their professional domain. Thus they are not the results of direct design processes, but rather secondary consequences of planning and building.

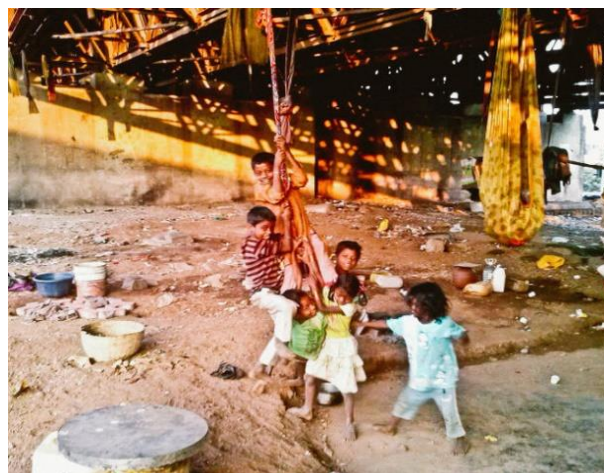


figure -slum children playing under flyovers

They often are simply neglected, become inaccessible and eventually rupture the sense of community

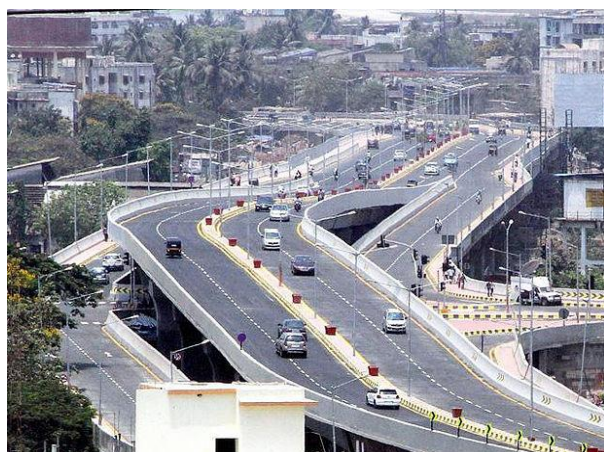


figure-flyover of a metro city under good useability

But as they are not programmed spaces created to be used in a certain way, at specific times,

by certain types of people, for a limited set of purposes they also offer opportunities to withdraw from the formal and informal control of public space to a less controlled territory. Spaces which often appear as distances to cross when taking a bus, going to the shop, school or work. It is a space to rush through on your way from train to bazaar.

7.1 WHY FLYOVER?

we see the space under the flyover as having wonderful potential. The uniqueness of flyovers lies in its character of an overhead shelter with its generous underneath space that is longitudinal and barrier free. It is sheltered from the rain and from the heat of the sun. **Amazingly, it is also free of much of the politics, land tenure disputes and real estate speculation that plague much of the developing cities today.** Thus, the negative effects produced by flyovers can be reduced through careful design and more important the incorporation of the spaces below into their surrounding urban environment.

Both flyovers and skywalks have become a highly visible feature of recent rapid urbanization. Many more projects are ongoing and proposed. Hence the construction of flyovers, however, needs to be seriously analyzed.

From planners and designers it is an appeal for :consciousness before a responsible design process can start and to work out a well thought out catalogue of what is considered to be part of an urban open space network. For concerned citizens and community groups its a request to take an active and informed part in the planning and design of urban spaces criteria with which to assess the qualities of both existing urban spaces and the design proposals for new ones.

7.2 NEGATIVE EFFECTS CAUSED BY SUCH PLANNING PROCESSES

With the construction of highways in urban areas, empty spaces result. The spaces along and under elevated highways affect the way we experience the city. They disconnect neighbourhoods, produce undesirable views, and act as physical and psychological barriers making the pedestrian experience unpleasant (Trancik, 1986).

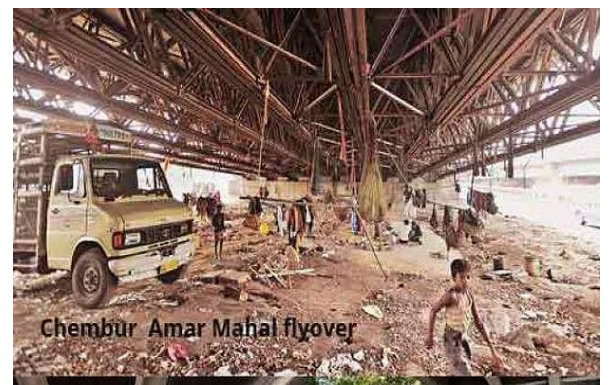


figure- chembur amar mahal flyover

Furthermore, the unclear territoriality of these spaces sometimes leads to land misuses such as dumping debris, abandoning of cars, or illegal activities. The inappropriate use of the vacant spaces under elevated highways can lead to social and economic problems in addition to being unsightly and lowering the value of adjacent properties (Halprin, 1966).

Flyovers, may solve traffic problems but in general, are considered as pretty negative elements within the urban fabric. The average traffic/civil engineered flyover is no elegant thing, and when inserted clumsily into existing urban fabric, can wreak far more havoc to communities and the general sense of place than we might initially think.



figure- uneven parkings/dhobi-ghat under flyover

They have a tendency to perceptually cut off communities, or even parts of communities from each other. There are issues in terms of getting school kids to and from the school. It is a particularly difficult area to access by vehicles, and more importantly, when we consider the vulnerability of school kids, via cycle and pedestrian modes. Typically,

flyovers have also been responsible for cutting off cities from waterfronts and recreational spaces. Such is the case with most of the flyovers in the city. The residual spaces under the flyovers and the buffer spaces around them, instead of acknowledging and exploiting these characteristic kinds of space we make them into parking lots or feeble patches of grass-no-man's lands between the scale of the region and the locality. By citing examples showing the scenario all through the flyovers of Mumbai these effects could be illustrated.

8 CASESTUDY

8.1 AHMEDABAD



Ahmedabad has a number of bridges and flyovers to increase the connectivity within the city. While the bridges are planned primarily for improving vehicular flows, the spaces under the bridge structures are left unplanned, ending up as haphazard parking, encroachments and garbage dumps. Such disused spaces degrade the surrounding areas and act as a divide in neighbourhoods. though it has taken the Ahmedabad Municipal Corporation (AMC) a whole year to plan and finalize the design for space utilization at one such over bridge. A few options have been shortlisted like setting up a vegetable market, a mini food court, rickshaw parking space and also a small library.

AMC's bridges department had carried out a survey to identify flyovers which have adequate space that can be utilised for public use. Of the nine, survey identified five over

bridges for development.-
Soni Ni Chaali over bridge, Shahibaug



railway over bridge, Jivraj Mehta Bridge, Thakkarnagar and Chanakyapuri bridges. HCP is engaged in this initiative by Ahmedabad Municipal Corporation (AMC) towards improving the urban environment and aims to humanize these transport infrastructures and reclaim the underutilized spaces under bridges and flyovers.

The proposed uses under these bridges are context specific and based on the detailed study of the adjacent neighbourhoods, on-site documentation of the bridges and general use and activity patterns.

AHMEDABAD, IM FLYOVER UNDER SPACE, STREET DEVELOPMENT AND CONSERVATION

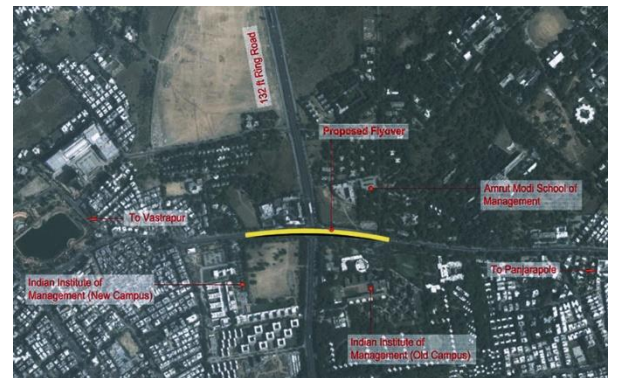
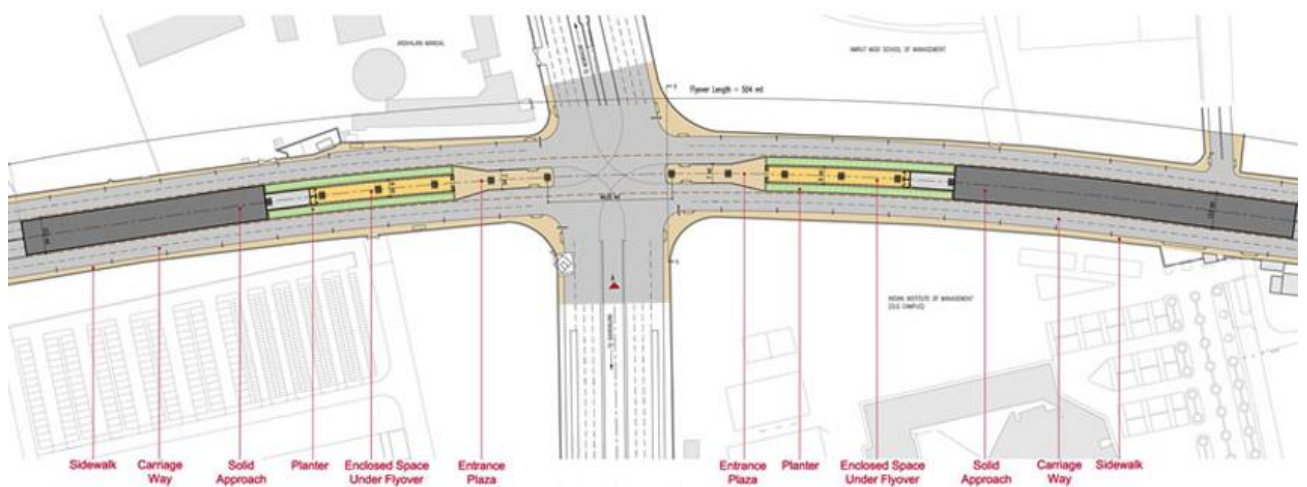


figure – IM flyover under space site plan, ahmedabad

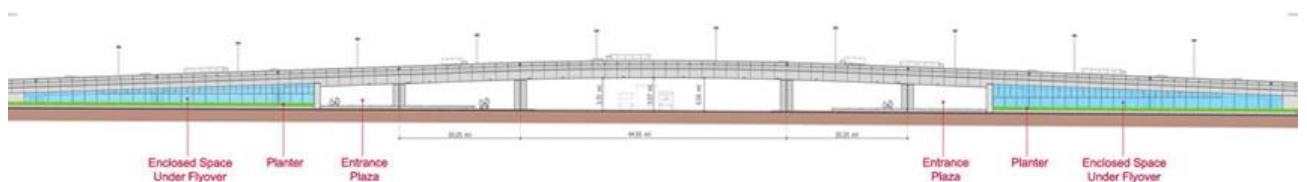


figure- view of Ahmedabad municipal cooperation flyover at IIM junction

AMC had proposed a flyover at the IIM junction due to the prolonged traffic congestion at this intersection and HCP was awarded the project for design and project management which includes city wide traffic pattern and traffic count surveys of the intersection, which lead to the finalization of the alignment of the flyover.



Plan of the new AMC Flyover at IIM Junction



Elevation of the new AMC Flyover at IIM Junction

figure – plan and elevation of ahmedabad municipal cooperation flyover at IIM junction

This project goes beyond the conventional flyover project. It includes comprehensive development of 920m length that includes the flyover (504 m).

FLYOVER SPACES INCLUDES

- Entrance plaza
- Enclosed space inside the flyover
- Planters
- Street development
- Carriage way,side way

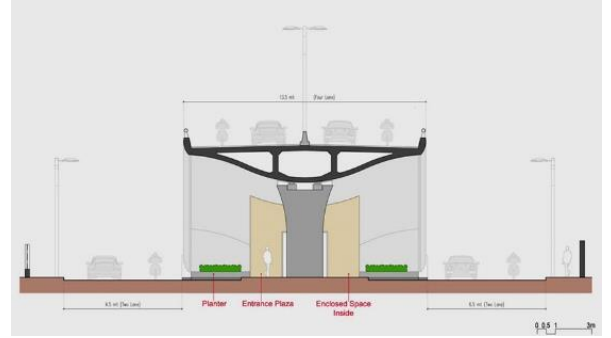


figure –section through the AMC flyover at IIM junction flyover ahmedabad durning construction

The spaces under the flyover and the complete right-of-way width. It is a four lane flyover having a total width of 13.5 m. The public space under the flyover constitutes of 1340 sq. m. of built up area.

SITE VIEWS



figure –AMC flyover at IIM junction flyover ahmedabad durning construction

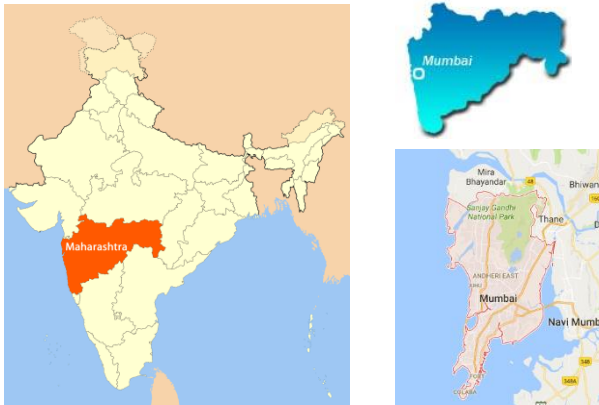


The construction sequencing of the flyover is also designed to minimize the impacts on the surroundings and on the traffic and BRTS operation along 132ft road during construction.



figures–AMC flyover - IIM junction flyover ahmedabad

8.2 MUMBAI



Mumbai known as “The City Never Sleep” has 44 existing flyovers and 16 new flyovers has already been proposed to come to reduce traffic at different location of the dream city. These flyovers provide at least some relief to the Mumbaikers. One of the best flyover in Mumbai is thane flyover. Mumbai also has one of the best bridge in India that is *bandra-worli sea-link.(Elevated express way)* After opening the city's first park under a flyover in Matunga, the municipal commissioner has directed BMC officials to come up with suggestions to beautify flyovers in their areas of Mumbai moving towards on a ecological friendly and sustainable living



Figure-matunga flyover ,Mumbai

UNDER THE FLYOVER- JJ FLYOVER MUMBAI



Making public space under the street

The JJ flyover Mumbai , runs from the Crawford Market area all the way to Byculla, jumping over some of the densest and most frantic neighborhoods of Mumbai. It is a mess of traffic above and a mess of traffic below. All accommodations are made for the car and truck,.



Figure- J J flyover , Mumbai site plan

In the mornings, informal markets spring up selling everything from *chai* to chickens, fish to fruit. Street children play games; mothers wash clothing, cook food and sell small goods in the tiny leftover spaces of intersections and traffic medians. In the evening, food stalls set up shop and laborers gather to share food and drink, some eventually falling asleep in the vacated parking spaces.

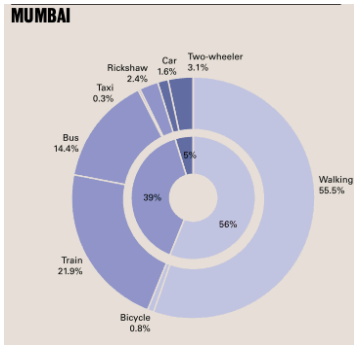


Figure - vehicular distribution ratio 2011, mumbai

The flyover is and dangerous. It considered dirty is a space to rush through on your way from train to bazaar. But, this need not be so. We see the space under the flyover as having wonderful potential. It is sheltered from the rain and from the heat of the sun. Amazingly, it is also free of much of the politics, land tenure disputes and real estate speculation that plague much of Bombay. The flyover itself was proposed as necessary civic infrastructure. Why can't this idea be extended below as well? What better place to open up a little room for the citizens of the city?

TRANSFORMING THE STREET THROUGH PLAY



figure – Street underflyover night activity jj flyover , Mumbai

What defines the character of a city is its public space, not its private space.
-Dr. Joan Clos, Executive Director, UN Habitat

PUBLIC LIFE AT JJ FLYOVER INDORE

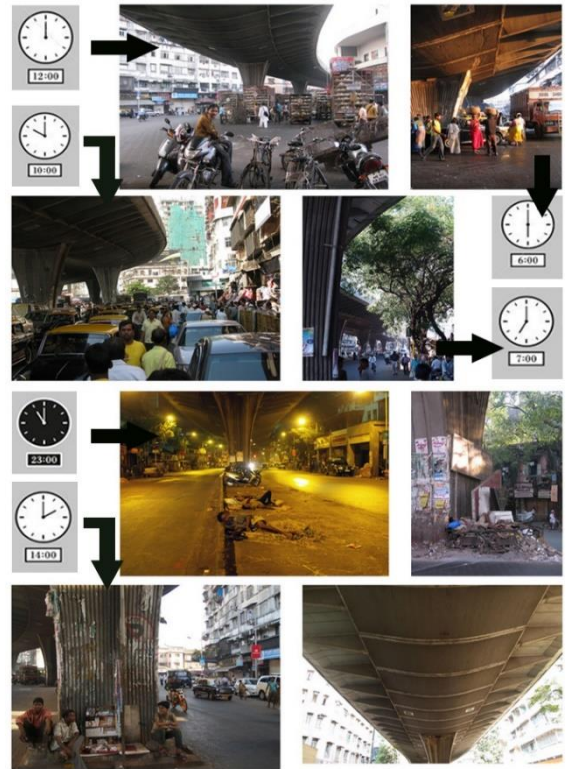


Figure-publiclife at JJflyoverat different time interval, mumbai

With a few small interventions and amenities, we believe that this patch of land could be completely transformed and that if given the chance, these slender patches of space would find a host of uses that would be constantly changing over time, responsive to collective need, present aspirations and seasonal calendar, Instead of parking.

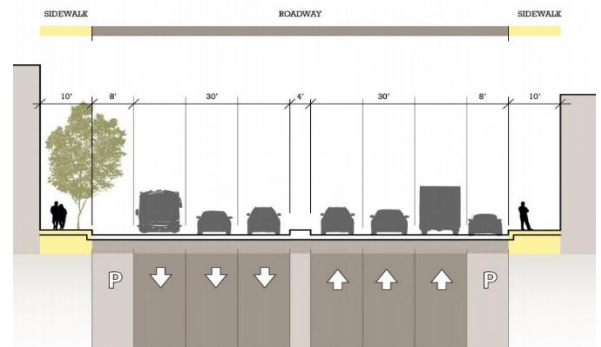
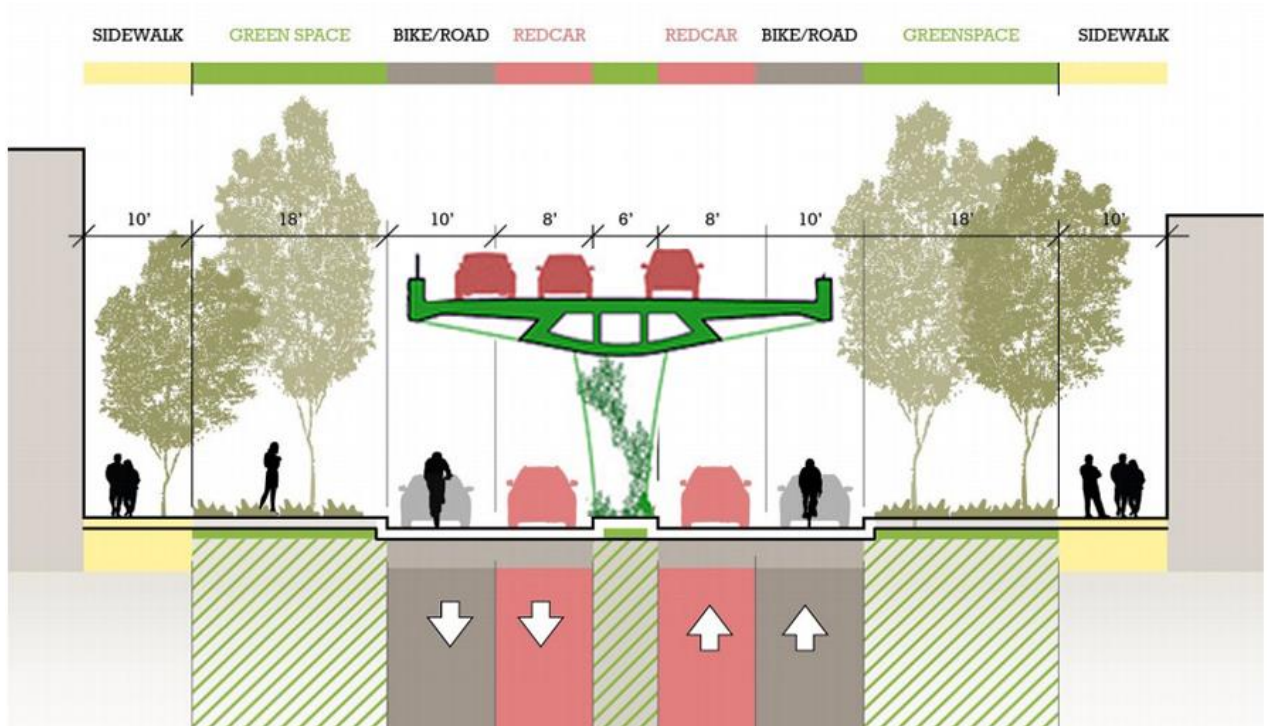


Figure- vehicle and spaced distribution ,jj flyover ,Mumbai

PROPOSAL



we propose spaces for play, street green belt for movement, shelter space community involvement, worship space and celebration.

Figure- proposed vehicle and spaced distribution ,jj flyover ,Mumbai maharashtra

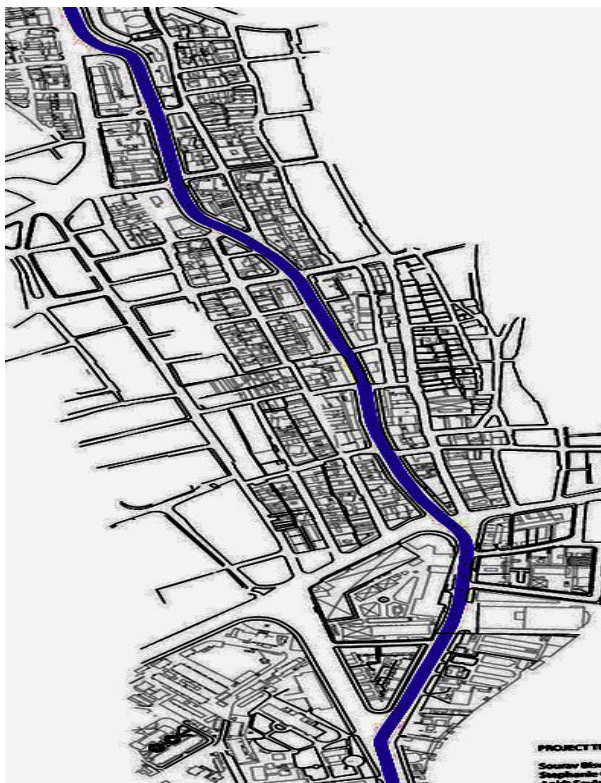


Figure-flyover network analysis ,Mumbai maharashtra

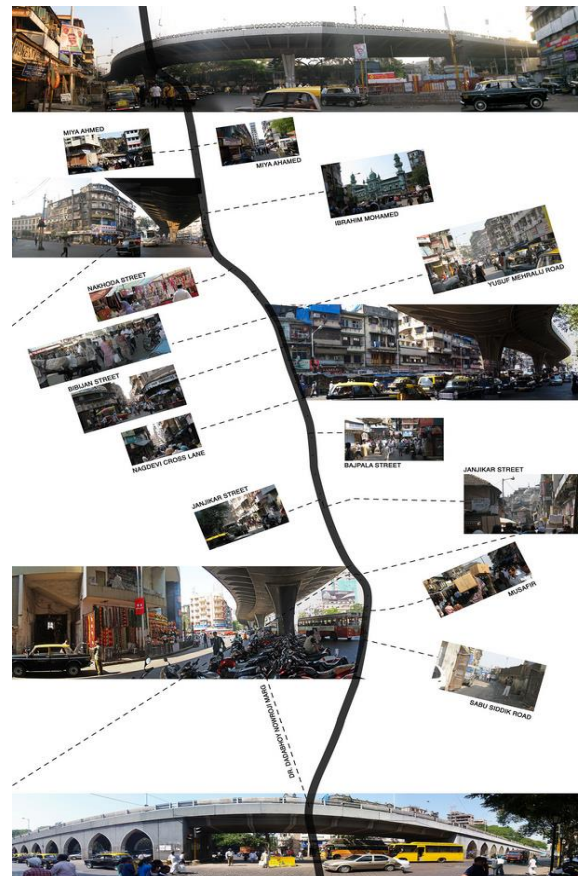


Figure - existing spaces at jj flyover,Mumbai maharashtra

8.3 MUMBAI’S FIRST UNDER – THE-FLYOVER GARDEN

The JJ flyover, runs from the Crawford Market area all the way to Byculla, jumping over some of the densest and most frantic neighbourhoods of Mumbai. It is a mess of traffic above and a mess of traffic below. All accommodations are made for the car and truck, while pedestrians are left to fend for themselves. While the flyover features prominently on all maps of Mumbai, the space beneath it is a curiously overlooked space. Open spaces below several flyovers across the city have been encroached. Still, a host of activities happen here nonetheless. In the mornings, informal markets spring up selling everything from chai to chickens, fish to fruit. Street children play games; mothers wash clothing, cook food and sell small goods in the tiny leftover spaces of intersections and traffic medians. In the evening, food stalls set up shop and labourers gather to share food and drink, some eventually falling asleep in the vacated parking spaces.

Every day, in thought and action, the inhabitants manage to bring together what was disjointed by modernist zone planning: a tremendous act of place making. The residual strips interpreted as public space offer kinds of

encounters between different groups of



inhabitants. Residual urban space can become a catalyst for transformation that would otherwise remain largely inaccessible. The space could be designed to give a sense of ownership of it to the community, it could be designed to reunify areas of the city that have been severed by urban renewal.

At a time when preserving an open space in the city is becoming next to impossible, the residents of Matunga and Dadar have come up with an innovative proposal to keep the open space below the Ambedkar Road flyover free from encroachments and illegally parked vehicles.

Graph 2. Starting travel location to open spaces

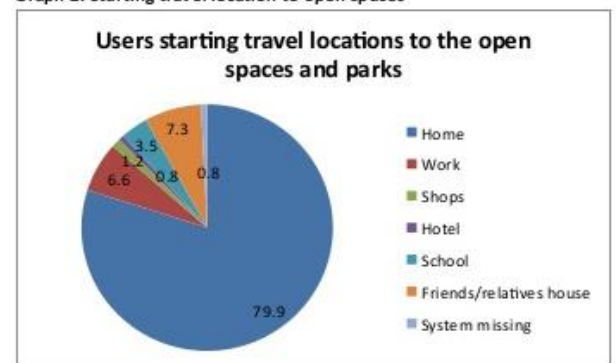


Figure-Travel location to open parks and spaces analysis matunga flyover

Residents have submitted their proposal to the Mumbai Metropolitan Regional Development Authority (MMRDA) elaborating the usage of

the open space beneath the flyover. Imagine a basketball court, a museum, a joggers' track and an amphitheatre — all below one of Mumbai's most congested flyovers.

PROPOSAL

The design submitted to MMRDA speaks for itself. It clearly shows exactly where local residents want to set up a small museum displaying old photos of the city. Apart from this, the plan also includes an amphitheater, a skating path, a joggers' track, seating arrangements for people, small flower garden and even a basketball court. Residents also want to create seating arrangements around the pillars of the flyover in addition to creating a circular track for people to walk or jog on, providing enough space for people to relax. "We have submitted different designs. The MMRDA will hopefully approve one of them, depending on what they think is feasible," said a resident.

"The MMRDA had recently called for expression of interest from those who were interested to beautify the space below flyovers across Mumbai. So we decided to take the lead and not only beautify the space but also

provide amenities for people," said Nilesh Kanakia, a resident of Matunga. "We want to save this space from encroachments and beautify it. We have already received sponsorship proposals. We are only awaiting permission from the civic body," said activist and local resident Nikhil Desai.



Figure-matunga flyover garden



Figure-matunga flyover –used for study programmes



Figure-matunga flyover used as street for jogging

8.4 CHINA

IT ACTIVITY CENTRE



Michael McCormick forum student activity centre of Illinois Institute of Technology is a combination of a very tight construction and elevated road tracks, the activity centre appears to be stuck under the track. There is a 100 years of history inner light rail went through from the base of the school which is located in the heart of Chicago. Trains passing on the light rail, there is a large area near the school that effected from the noise of the train, the steel pipes of the track near the activity centre has been wrapped up in order to reduce the noise, in this way ,it is not only to protect the building, to solve the problem but also fundamentally reshape the entire environment. Without the noise, they can better explore the potential of this base. The "pipeline" track surround has become a vital part of the centre. Figure 7 Illinois Institute of Technology https://en.wikipedia.org/wiki/Illinois_Institute_of_Technology

Because of this overhead is not built on city main road, so under the bridge land use was relatively easy.



Figure 11 Illinois Institute of Technology

Figure:Illinois Institute of Technology



Figure 8 Illinois Institute of Technology

Figure:Illinois Institute of Technology

Each element of the building is linked to just right to respond to the relationship between the site and surrounding environment according to their particular position, reorganizing the interior space. Business, entertainment, college and practical facilities, parking and so on, based on the original function for the building partition. Positive meaning: buildings are not separated from the overhead. instead of the separation, they combine the elevated road and its wrapped columns into an integral part of the building, at the same time to improve the surrounding environment. The overhead space wrapped into building space under elevated to become a part of the internal space of the

building, while the roof material implies that the elevated road's presence.



Figure 10 Illinois Institute of Technology



Figure 9 Illinois Institute of Technology

Figure: Illinois Institute of Technology

8.5 FRANCE

THE A14 HIGHWAY ELEVATED ROAD AND CONTROL CENTRE

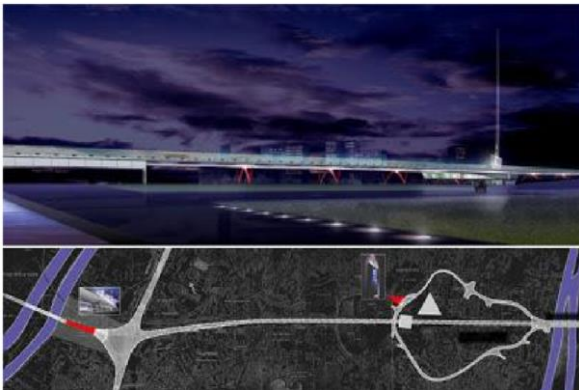


Figure: site plan and view of the A14 highway elevated road and control centre.

The A14 highway control centre is located in France city of Nanterre, Contacting Paris and the suburbs at the cross road, both sides of the elevated are parks. Builders put the highway control centre and elevated bridge as a entirety to consider, "architectural style expresses the dynamic communication of the road, the metal of housing bottom and top of the signal tower mutual echo in appearance."



Figure view of :The A14 highway elevated road and control centre

Project: Motorway bridge and control centre
 Location: Nanterre, Hauts-de-Seine (France)
 Architects: Odile Decq and Benoît Cornette
 Design: RFR Consulting Engineers

Structures: Ove Arup & Partners Length: 250m
 Bays: 7x c. 35m Overpass thickness: 1.5m
 Construction: 1996

(Quoted from"Urban traffic space Innovative Design") The original plan was to reflect a transition conception highway to the city of Paris, the transition from dark to light, from ethereal to heavy, static to dynamic, the transition from the north to the south, and from the tunnel to the bridge. therefore, this building

under the elevated road had to fully consider the integration with the surrounding environment, as well as parks and highway bridge connecting form, May be due to the high-speed road reflects the speed and vigor characteristic, Cross section of the bridge is formed from streamlined based from aerodynamic. Similarly, the architectural form also has a strong dynamic, very eye-catching red arches, office part of the building as transparent as glass box hanging on the red arches, in fact, the whole building there is another 2/3 the area was designed in the underground, so the ethereal and Conciseness of body maintains the park on both sides of the maximum continuous, Seen from a distance, the building looks like a striking cursor on this large-scale line the elevated road. has its positive effects to the park landscape, Although from a structural point of view, the structure of the building and elevated in fact interrelated. However, in the view of form the building doesn't occupied the space beneath the elevated road, but has exploited the space under the overhead in the way of hanging below it. Positive significance: municipal outbuildings, the construction and the elevated road to become one part. In order to contact both sides of the park to be not blocked by the elevated road, buildings have not contact the floor, strengthening its volley dynamic,

strengthening its volley dynamic.

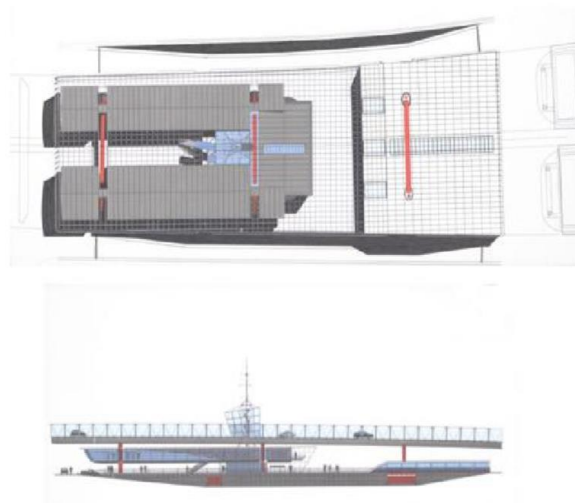


Figure-Plan and elevation of the A14 highway elevated road and control centre.



figure- section of the A14 highway elevated road and control centre.

1. To combine with the structure of the elevated road
2. Eye-catching colors construction
3. Transparent light modeling.
4. Directly linked to human activity
5. The use of elevated construction, use elevated joint as a whole part
6. Iconic buildings, eye-catching colors

8.6 SWING BRIDGE

—do you know?

Now THAT'S a swing bridge! Chinese engineers build 17,000-ton flyover section at 90 degrees so railway below could remain open... then rotate it into place.

Engineers took 90 minutes to swivel the structure into place in Wuhan City today

- A China Railway High-speed train passes beneath the rotating sector of the bridge today as engineers expertly swivel it into place
- The section was built separately so as not to disturb the busy high speed railway track beneath it
- It was the first time the unusual construction technique was used in the country
- China is home to the largest high speed rail network in the world.
- The unusual technique has been used in the UK in the past, though never before in China
- Forward-thinking engineers in China are the first in the country to have built a section of an enormous overpass and rotate it into place upon completion so as not to disturb the railways below.

A 17,000 ton part of an elevated motorway was today slowly swung into place in Wuhan City after being constructed independently beside a high speed railway track.



Figure-swing bridge rotation 0 degree



Figure-swing bridge rotation 30 degree



Figure-swing bridge rotation 45 degree



Figure-swing bridge 90 degree

9 VOID ANALYSIS

LOCATION AND CONTEXT

-ASHRAM ROAD , AHMEDABAD

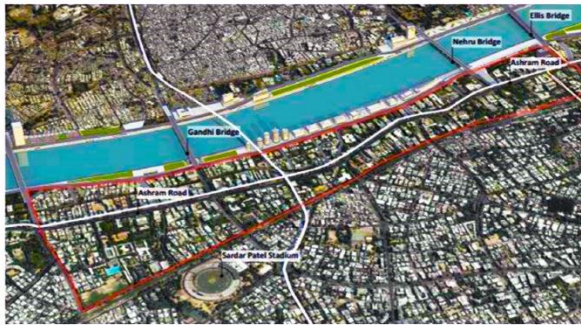


figure - Ashram road ahmedabad areal view

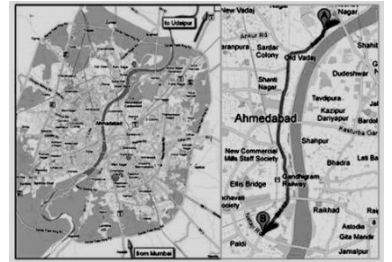
Ashram road is one the most important roads in Ahmedabad. It runs parallel to the Sabarmati River which is now being converted into a riverfront development.

It is also one of the main financial, hub of the city with major offices located like Reserve Bank of India and Income Tax office. It is well connected and located at the city centre and is on considerable improvements to improve the public life at Ashram road.

With the new additions of Flyover, Sabarmati Riverfront and implementation of new Local Area Plan the area is being in a change and a lot of development is currently happened.

9.1 PUBLIC LIFE AT ASHRAM ROAD

Ashram road is the busiest place in Ahmedabad. With the presence of commercial and office buildings it remains during the day time. You can find a lot of people on roads during the peak hours. Being one of the oldest area in the city, there are many old buildings which are small and also abandoned adding to the inactivity of the



area. Many new *figure - Ashram road map linkage, ahmedabad*

building have come up but they are made in isolation which in tend helps to destroy the public realm of the area.

9.2 VOID ANALYSIS AT ASHRAM ROAD

After the initial observations the site and some data collection. The urban voids with potential needed to be identified on the Ashram road. These urban voids types are based on the literature review. 12 voids and 4 different types were recognised which can be turned to public spaces. All the 12 voids had different character and space constraint which needed to be kept in mind while selecting the main site ,it was necessary to keep in mind that the riverfront development is an initiative to increase the public realm. But these voids were creating dead spaces which was hampering the public life of that area.

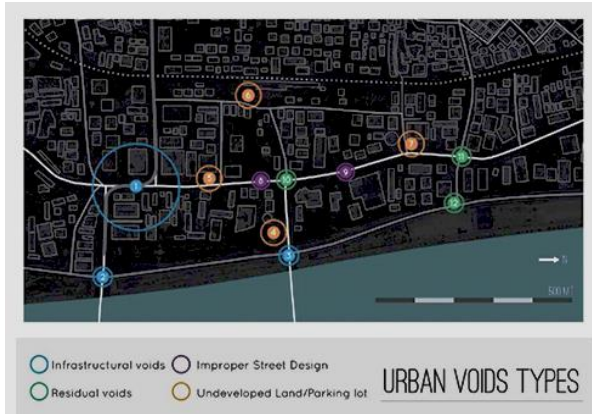


figure - Ashram road urban void categorization.

9.3 PLACE PERFORMANCE

a Evaluation

Based on a method evolved by PPS, place performance evaluation was carried on these voids, since these voids were part of the public realm. The place performance evaluation would help us in determining how these voids were functioning in the public realm.

This would also help us in determining the problems in the place and we can get some knowledge regarding how you deal with those problems. This allows quick way of knowing the good and bad qualities. The community also suggests improvements based on their common sense and intuition, observation. This can be done with highly trained professionals too. This exercise was carried with a presentation about what placemaking is and how do you do placemaking to a class of 40 people. Later they are divided in small groups

of 5-8 and they were designated the area. This also included the informal interviewing of the people.

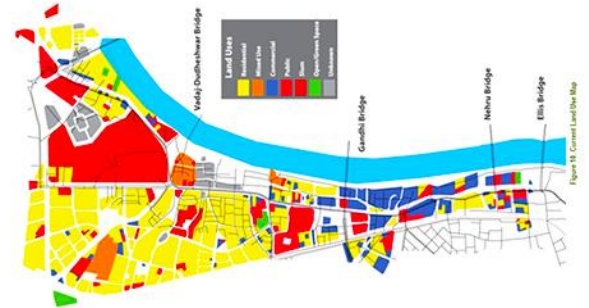


figure – land use map ,Ashram road,, ahmedabad

This exercise was carried with a presentation about what placemaking is and how do you do placemaking to a class of 40 people. Later they are divided in small groups of 5-8 and they were designated the area. This also included the informal interviewing of the people.

Most of the voids were underperforming and had problems with comfort and image. Since these voids are aesthetically unappealing it was obvious that they were not so attractive in the public realm. This added to the feeling of safety in those spaces as very few people were present in proximity of those voids. Absence of comfortable places to sit was a problem of all the voids and also is a major problem in our city's public realm

.b Selecting the site

Based on the place performance evaluation, public life study and initial observations the main site needed to be selected for the

placemaking process and to change that void into a public space. Site Selected:

Void – Space beneath the flyover.



figure – flyover ,Ashram road,, ahmedabad

c Factors considered:

c.1 Presence of Public Life: The-presence of ground floor retail and informal vendors were key reasons of the presence of public life in the area. Also with the facility of BRTS stop and an informal rickshaw stop the area was seen with number of people using the space.

c.2 Stakeholders: Nearby public institution i.e. A library and Town hall, Informal vendors and Local business can be strong stakeholders while developing the space. The day-night

facility of vendors with unsymmetrical placement of spaces under the flyover creating chaos at asram road flyover

c.3 Place Evaluation: The space is definitely underperforming in terms of performance evaluation.



figure – flyover spaces ,Ashram road,, ahmedabad

c.4 Availability of spaces :With one the largest flyover in city; the space beneath the flyover is unused. This occupies expensive piece of land in the CRD of Ahmedabad.

c.5 Flexible Setting: There exists a connection of well-connected fabric of public transport, mobility and activities

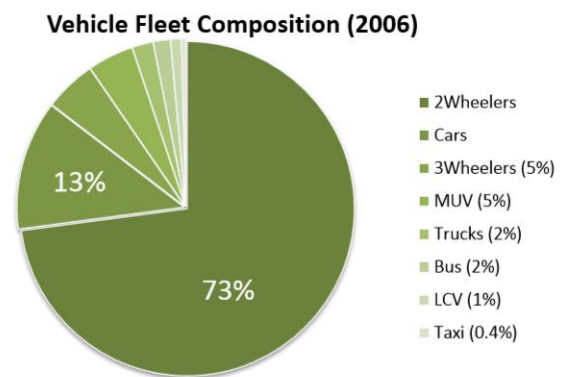


figure –vehicle fleet composition 2006- Ahmedabad, gujrat

9.4 CHALLENGES IN THE CITY

A Lack of public spaces :

Ahmedabad City has lack of public spaces. With around 0.33 sq. Mt per capita public space comparing to “World Health Organization’s 2010” standard of 8 Sq. Mt, we can easily relate the condition, of low level of public spaces in the city. Public spaces have a lot of benefits including economic, health and social pay- backs. Streets have become roads where vehicles are given utmost importance and pedestrians are neglected. In informal old city the public spaces were vital part of the public realm, we are seeing in a planned city there is lack of planning of public spaces. Builders are creating so called public spaces inside the walls which is actually a private space thereby creating gated communities all over the cities.

B Lack of Public Participation :

There is lack of public participation at both ends on government as well as the people side. Building cities is an organic process and not all techniques or recipe fits every city. Hence key to building better cities, public spaces and communities is engaging community in the process. So it’s not just the city government, planners or designer who must decide what’s going to happen in the void. It must be the citizens, people who must decide what will be happening on that space. Also the government

is disinterested in taking forward in increasing the public realm of the city, so there are very few public spaces projects in the city that promote public participation.

C Poor design of Public spaces :

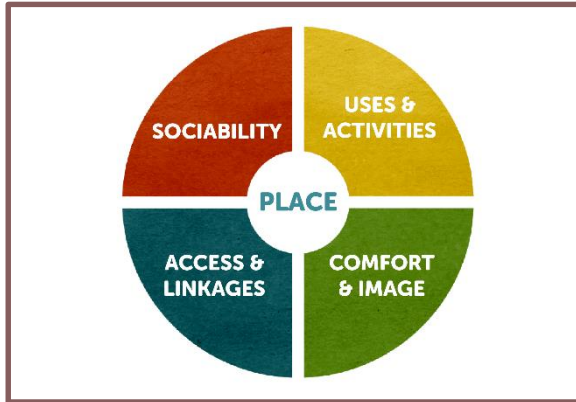
There is a gap between people’s need and design in the public spaces that is been present in the city. Poorly designed public spaces. Local needs are often neglected and planners and designers are hired to design the public realm. As a result it ends up as a design intervention. Often the issue of maintenance is untouched. These public spaces later become dead spaces as the quality is deteriorated and few people tend to visit these spaces.

9.5 ISSUES

On the Site, Analysed Based on Attributes Designed by PPS



figure – community involvement CHART-PPS



A Access and linkages



Place Rating: 2

- Zebra Crossing absent at the major junction
- The spaces beneath the flyover are cut-off from public that creates a displeasing environment under flyover.
- Lacks proper Signage's. There was a BRTS Stop on the flyover and there were no information regarding it.
- Discouraging pedestrian activity-traffic on the Ashram Road.

B Comfort and Image



Place Rating: 2

- The spaces beneath the flyover are unattractive, but at some places the presence of informal activity are creating public activity which there in makes that place some what attractive.
- The areas beneath the flyover are underutilized and adjacent the blank Walls in the surrounding streets are enhancing

- The streets are quite clean and maintained compared to less public activity.
- Despite of a presence of a BRTS stop, an informal Rickshaw stop there is no presence of proper place to sit or public restrooms.

C Activities and Uses

Place Rating: 3



- There are a lot of opportunities in the area, with the presence of informal activity around the flyover the area is lull of potential to be developed as a public space.
- The space beneath the flyover is vacant most of the time and potential activities could be expanded.
- To make the space lively there is a need to add activities to enliven the area and programming needs to be done for all age groups in evenings and weekends.

D sociability

Place Rating: 2



- The presence of people in group is less due to the lack of activities in the area.
- Though the people show evidence of volunteerism and area helpful which is a positive point which can be used as an advantage.
- Number of children and seniors and

10 INFERENCE

COMPARATIVE STUDY

BRIDGE UNDERSPACE DEVELOPMENT

Ahmedabad has a number of bridges and flyovers to increase the connectivity within the city, the spaces under the bridge structures are left unplanned, ending up as haphazard parking, encroachments and garbage dumps. Such disused spaces degrade the surrounding areas (AMC) towards improving the urban environment and aims to humanize these transport infrastructures and reclaim the underutilized spaces under bridges and flyovers to: Create well-lit, cohesive public spaces such as pocket parks, shaded seating areas, food courts, gathering spaces, plazas and play areas.



Figure-SAND PIT ,Jivraj Mehta R.O.B.

- Provide vending opportunities in dense neighborhoods through kiosks, markets and vending zones to attract the public. Vendors get a platform connected with in the road to provide market kind of facilities under flyover



Figure-MARKET.- Thakkarbapa Nagar Bridge.

- Improve overall pedestrian connectivity. Insert public facilities such as auto rickshaw stands, public toilets and strategic parking.

Instead of negative use of space and non permanent parking a provision for market is a good utilization



Figure-MARKET.- Soni-ni-Chali Bridge

- Facilitate use of these spaces by lighting, signage and waste collection. Drainage Facilities And other services plays a important role.



Figure-FOODPLAZA, Soni-ni-Chali Bridge

Improve linkages across the bridge underspaces by redesigning road intersections under the bridge. A provision of food plaza near those spaces can act as a part if remaking the ability of food space.



Figure-FOOD PLAZA AND GATHERING - Shahibag R.O.B

The pilot project shall redevelop the underspaces of four bridges:

- **Shahibag R.O.B**
- **Jivraj Mehta R.O.B.**
- **Soni-ni-Chali Bridge**
- **Thakkarbapa Nagar Bridge.**

The proposed uses under these bridges are contextspecific and based on the detailed study of the adjacent neighborhoods, on-site documentation of the bridges and general use and activity patterns.



Figure-SEATINGS -Thakkarbapa Nagar Bridge.

There are many precedents world-over of such creative use of the underspaces in cities such as London, Zaanstadt in Netherlands, Paris, Toronto amongst others. Implementation of this landmark project shall make Ahmedabad one of the first cities in India to revive the derelict pockets within the city and turn the urban “negatives” into “positives”.

SOLUTION

The different types of impacts that might be produced by the

DEVELOPMENT OF A FLYOVER CAN BE CLASSIFIED AS:

- **PHYSICAL:** includes wall or barrier effects produced by highways, increase in noise or vibrations, and shadowing effect.
- **SOCIAL AND PSYCHOLOGICAL:** this category includes changes in population (i.e., such as redistribution of population and loss or increase in population), changes in the interactions of persons or groups, isolation or separation of certain people, changes in social values, and perceived impact on the quality of life.
- **VISUAL AND ENVIRONMENT:** this category includes changes in the aesthetic character of communities.
- **LAND USE:** includes the creation or loss of land as the result of the development of a highway, and changes in land use and density.

• **ECONOMIC CONDITIONS:** the introduction of a highway in an urban area may encourage new businesses to establish in the area or cause the relocation of existing ones. It also may affect the local economy in a short-term during the construction activities or produce a long-term impact by blocking the access to businesses. Other introduced changes could be the increase or reduction of visibility to the commercial area, and changes in property value.

• **DISPLACEMENTS:** this category includes the number residences, businesses or any institution displaced within the same neighbourhood and the changes produced in the neighbourhood's character due to the displacements.

• **SAFETY:** this category is includes the positive or negative changes in crime levels, accidents and emergency response in the area where the highway is located.

HOW CAN THESE LEFT OVER SPACES BE PUT TO USE?

Anti-space, Border Zones, are usually chaotic, since they are comprised of the remnants of other uses. But these could be used to knit together the fabric of a city at a crucial border zone. Residual areas, buffer zones, vacant land do separate one zone of building from the other, but they also connect the enclaves and afford opportunities of a range of actions. These interstitial spaces can act as potential spaces for urban restructuring. They can act as public spaces which today occupy crucial components of the city, both in terms of the physical as well as social function they serve. Edges, while generally separating and isolating areas, could conversely be seen uniting space between two areas.

The space could be designed to give a sense of ownership of it to the community, it could be designed to reunify areas of the city that have been severed by urban renewal. Any flyover must not present a significant visual



Figure-figure- art work by local community



Figure- unused spaces under flyovercommunity,

Obstruction that effectively cut and similarly, must eliminate undesirable residual spaces. There are numerous examples that celebrate design and engineering, creating contemporary urban sculptures that add positively to sense of place, rather than detract from it.

Undeveloped spaces below elevated highways have the potential to be transformed into major corridors, gathering areas or recreational spaces that integrate the elevated highway and their surrounding environment. Generally, they shape the ground level where they are constructed. Sense of intimacy could be felt at which distance between the ground level and the roof are close where else openness and freedom could be felt when the distance are far apart.. The finishes under the flyovers varies in terms of the ground covering which include interlocking block pavement, paved road, earth and natural landscape.

EXAMPLES

Under the flyovers, lies an existence of a space that might differ from the rush of the above, a loose space with uncertainties and endless possibilities. Some of the examples are stated as under:

- **Instead of parking, we propose spaces for play, for shelter, for community building, for worship and for celebration.**
- **Create well-lit, cohesive public spaces such as pocket parks, shaded seating areas, food courts, gathering spaces, plazas and play areas.**
- **Provide vending opportunities in dense neighbourhoods through kiosks, markets and vending zones to attract the public.**
- **Improve overall pedestrian connectivity.**
- **Insert public facilities such as auto rickshaw stands, public toilets and strategic parking.**
- **Facilitate use of these spaces by lighting, signage and waste collection.**
- **Improve linkages across the bridge under-spaces by redesigning road intersections under the bridge.**



C ONCLUSION

Urban Voids have huge potential of improving the place and creating a stronger urban fabric of the city. Reclaiming the dead spaces by intervening could solve the perception of these spaces and thereby create better shared spaces by increasing the imageability and. comfort.

These spaces can be seen as great potential in this expensive world and exploited as urban public spaces such as public gathering spaces, pocket parks or plazas or just place for activities which make people get engaged and enhance the public realm. Efforts are needed to locate, study and find solutions to increase the public spaces in these dense contemporary cities.



1 Catalyst for public space- community ,gov. ,leaders ,NGOSA strong local leadership is required to encourage the importance of public space



2 -The process-strong vision,desier to change Vision is very important since the willinhness to change the area to context can help in creating great neighbourhoods





3- Identifying the oppourtunities

Identifying the dead spaces in the area and using the full potential of that place ,using community in the procrss helps a lot

4 -Enjoy great public spaces Key to great public spaces is people,if people are involved in creating public spaces ,we get great public spaces.

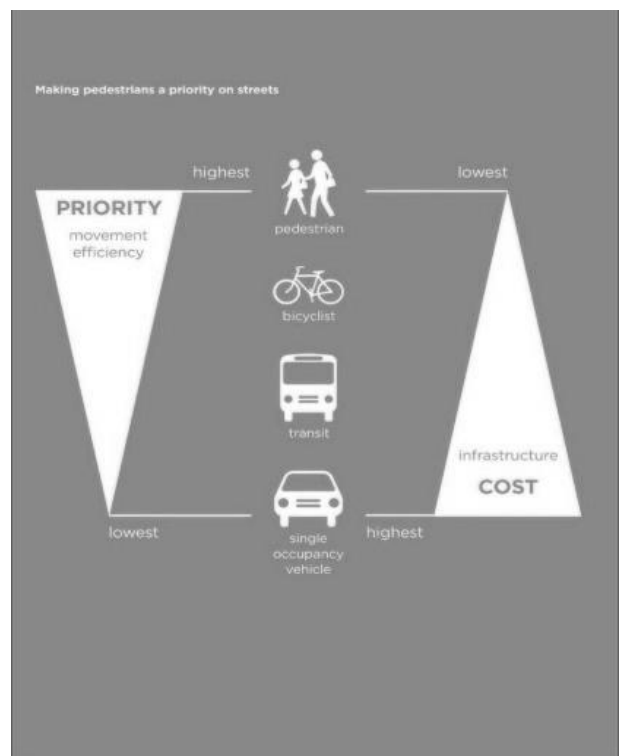
5-Transform underused spaces into exciting laboratories that citizens can start using right away and see evidence that change can happen.

6-represent an “action planning process” that builds a shared understanding of a place that goes far beyond the short term changes that are made.

7-leverage local partnerships that have greater involvement by a community and results in more authentic places.

8-Encourage an iterative approach and an opportunity to experiment, assess, and evolve a community’s vision before launching into major construction and a long term process.

9-Employ a place-by-place strategy that, over time, can transform an entire city. With community buy-in, the LQC approach can be implemented across multiple scales to transform under-performing spaces throughout an entire city.



REFERENCES

- Gehl, J. (2013). *How to study Public Life*. Island Press.
- Gulati, N. (n.d.) *Lighter, Quicker, Cheaper*. Retrieved from Project for Public Space Website: <http://www.pps.org/reference/lighter-quicker-cheaper/>
- Katarzyna Kosmala, J. M. (2012). *Favela is painting*. An UrbansparkZ/art installation of.
- Mohamed, A. A. (2015, June). *Utilizing Lost Spaces Under Flyover*. Retrieved from Cairo Observer: <http://caiobserver.com/post/121347402899/utlizing-lost-spaces-under-cairos-flyovers#.VuO50vI97IU>
- Rethinking urban voids- innovative ways to revitalize lost spaces(2016)Aamir Ansari/thesis report-cept university
- Trancik, R. (1986). *Finding Lost Space*. New York: Van Nostrand.
- Whyte, W. H. (1980). *The Social Life of Small Urban Spaces*. New York: Project for Public Spaces.
- Angela Petrou, Maria Hadjisoteriou (2014). “ADAPTIVE STRATEGIES AND URBAN IDENTITY CASE STUDY: LARNACA OIL RERNERY COASTAL ARES”.
- Nipesh (2012). *Urban Voids & Shared Spaces*: <https://nipppo.wordpress.com/2012/05/07/urban-voids/>
- City of Detroit (2012). *A Placemaking Vision For Downtown Detroit*
- Yordan Vakarelov - Simone Fracasso (2015). *URBAN VOIDS UNPACKED*. AALBORG UNIVERSITY
- Laura Pfeifer(2013). *The Planner’s Guide to Tactical Urbanism*.
- What is placemaking? (2010). Retrieved from Placemaking Chicago: <http://www.placemakingchicago.com/about/>
- Placemaking-creating a sense of place and place of sense/amit bhatiya(2011)
- Project for Public Spaces,(2015). *The Power of 10+: Applying Placemaking at Every Scale*. Retrieved from Project for Public Spaces Website: <https://www.pps.org/reference/the-power-of-10/>
- Project for Public Spaces,(2015). *What Makes a Successful Place?* Retrieved from Project for Public Spaces: <http://www.pps.org/reference/grplacefeat/>
- PPS. (n.d.). *What is placemaking?* Retrieved from www.pps.org: http://www.pps.org/reference/what_is_placemaking/

URBAN VOIDS- RECLAIMING PUBLIC SPACE

Keshav Rathi

School of Architecture, IPS Academy Indore, Madhya Pradesh, India

ABSTRACT

Existences of public spaces in cities are essentials for social interactions to take place, fostering creation of sustainable, safe and livable cities. Although public spaces are often designed for certain activities, existence of unplanned spaces and urban voids throughout the city offers abundance of opportunities. This paper attempts to focus on the concept of urban voids (leftover spaces), identifying and analyzing the type of void have a great potential for turning into public spaces through placemaking process. space beneath the flyovers or bridges, the dead parking lots or nonreciprocal street edges are the spaces which are neglected and invisible to the citizens and therefore take away city experimental qualities, thus the attempt is to unearth the potentials of these spaces in context to built environment and surroundings at urban scale and prepare placemaking toolkit for using these spaces as a strategy to increase the public realm.

INTRODUCTION

Open and green spaces have become increasingly contested grounds in the context of urban scale, public space have become scarce in dense cities where land is very expensive. There is an another problem where cities are often being designed and planned isolation during the process creating used public spaces all around the cities which in fact reflects on negligence and bad perceptions of the place .since there is no use attached to these spaces people tend to ignore these places and perceive these spaces as dead, underused, unused spaces in the cities. These urban voids are the result of inefficient decision making, poor land management, poor coordination among decision makers and designers for urban voids which have huge potential of improving the place and creating a stronger urban fabric of the city.

Reclaiming the dead spaces by intervening could solve the perception of these spaces and there by create better shared spaces by increasing the imagination and comfort. These spaces can be seen as great potential in this expensive world and exploited as urban public spaces such as public gathering spaces, public pockets, parks, plazas, or just a place for activities which make people get engaged and enhance the public realm. Research is needed to locate study and find solution to increase the public spaces in these dense contemporary cities Spaces are designed by planners on a two dimensional plan without being considering for the citizens experience and the quality of life in the city, what people really want and also without deep knowledge of citizens requirements. But the users perceive these spaces completely different from what designers perceive and hence many hidden potentials are missed out which contribute to the creation of voids.

WHAT IF WE BUILT YOUR COMMUNITIES AROUND PLACES?

As both an overarching idea and a hands-on approach for improving a neighborhood, city, or region, Placemaking inspires people to collectively reimagine and reinvent public spaces as the heart of every community. Strengthening the connection between people and the places they share, Placemaking refers to a collaborative process by which we can shape our public realm in order to maximize shared value. More than just promoting better urban design, Placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution. Placemaking plans will ensure the people perception and needs which in a way helps to transform these dead, underused and unused spaces into great public spaces.

OBJECTIVE AND SCOPE OF STUDY

The goal of the study is to define the Theoretical or Scientific research on the urban public spaces, urban voids in context of Indian cities, evaluate the public spaces, urban voids that need to be strategically regenerate and study of type of voids, Propose alternative ways to reclaim urban voids, leftover spaces.

PUBLIC SPACE LIFE

It is estimated 50 percent of the world's population are living in urban areas, by 2050 this will rise up to 70 percent and already many cities across the world are struggling to cope the pressure from rapidly increasing population. These are the challenges like poverty, housing supply, population and poor infrastructure.

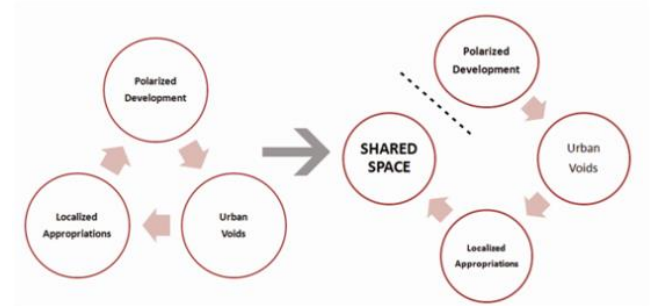
The cities are currently facing problems that are affecting the life in these cities. Public rapid growth in these developing countries is a major issue and a great challenge now a days.

Cities like India with 32 percent of rate of urbanization is constantly dealing with various social-economic problems this is a very little attention on addressing the quality of life in the cities. These crowded cities in India deal with limited urban spaces and resources and to increase public space is very difficult and complicated .The same pattern appears everywhere that we have been seriously neglecting the human dimension in connection with urban development.in developed cities neglect owes largely to planning ideologies ,rapid motorization and difficulties in substituting from a model where city life needs the active support of careful planning, this shows how quenched city life in some economically developed countries and stress from development has pushed city life into extremely adverse conditions in many developing countries.



URBAN VOIDS

These are the spaces which rupture the urban fabric of the city .these are spaces which are often neglected or either forgotten spaces in eyes of people. They are often the result of designing out of context with the surroundings. They are the result of treating planning sites isolation regardless of urban fabric and poor designing.



“Urban voids are undesirable urban areas that are in need of redesign making no positive contribution to the surroundings they are ill-defined, without measurable boundaries and fail to connect elements in coherent way.”(Trancik, 1986)

CATEGORIES OF URBAN VOIDS

Planning Voids: Voids created due to inefficient and improper planning processes. These are created due to planning in isolation without understanding the fabric of the city. These are most visible in our cities also can be perceived using figure ground theory.

Functional Voids: These are dead vacant spaces in the cities. When a space is not used like it was designed to use the space becomes defunct. These occupy precious land in the city and make the environment unpleasant.

Geographical Voids: These area existing geographical features in the city. When the city planners and designers do not respond to these geographical features voids are created around them making the space unusable. E.g. river, nullh, etc.

CHALLENGES

Lack of public spaces: In informal old city the public spaces were vital part of the public realm, we are seeing in a planned city where there is lack of planning of public spaces.

Lack of public participation: There is lack of public participation at both ends on government as well as the people side. Building cities is an organic process and not all techniques or recipe fits every city. Hence key to building better cities, public spaces and communities is engaging community in the process should be a concern on public participation.



Poor design of public spaces: There is a gap between people’s need and design in the public spaces that is been present in the city. Poorly designed public spaces. Local needs are often neglected and planners and designers are hired to design the public realm. As a result it ends up as a design intervention.

APPROACH TOWARDS URBAN SPACES - A NEED

1. FIRST WE SHAPE THE CITIES ,THEN THEY SHAPE US (GHEL,2010)

“If we look at the history of the cities we can clearly see that urban structures and planning influence human behavior and the ways in which cities operate”

This explains the existence of compact urban fabric of medieval cities with their short distances, layout of main streets, public spaces, squares and markets functioned as the center of trade and craftsmanship. There was a mutual influence between city and people finding new ways to use the space should be concern for us as in cities modern urban planning which is used as problem solving exercise without understanding core problem. Physical planning can greatly influence the activities and usage of city space Chandigarh city based on sector-grid planning with greatest architecture creations showing planned urbanism in India creates a great impact on Indian context.



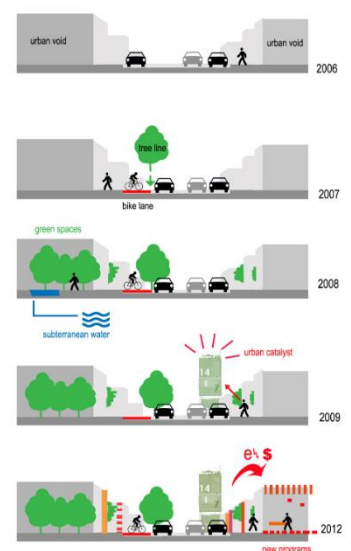
“IF BETTER CITY SPACE IS PROVIDED, USE WILL INCREASE” the better the quality of spaces in cities the better it will be the quality of life.

1. THE SOCIAL OF SMALL URBAN SPACES (WHYTE,1980)

“A city abundant small spaces have key impact on the quality of life. If those spaces are unattractive and left unattended people will respond and retreat from the city streets and eventually have an adverse effect on city in all aspects”

Indian cities have now been approaching the same way as US cities where the monotonous roadside clutter including highways dividing the cities has resulted in increasing unsafe spaces and cities

When we think about cities we always think about people .people like public spaces, these places contribute to happiness, and public spaces can bring out smile. we lake spaces with our cities are spreading like wildfire, with its highways taking our cities .this can’t be stopped without creative development to provide housing and meeting other demands of growing population ,what describes that how small urban spaces work and don’t work. Places that attract tend to be relatively free from problems.



“IF WE LEARN TO TAKE ADVANTAGES OF OUR SMALL URBAN SPACES, IF WE DESIGN NEW ONES AND REPAIR OLD ONES WE WILL IMPROVE THE STREETS AND QUALITY OF LIFE”

2. LIFE , SPACE AND BUILDING (GHEL,2010)

If we want to create better cities spaces working with scale is the most difficult and most sensitive urban planning discipline. If this is neglected or fails city will decline in its quality of life.

“The widespread practice of planning from above and outside must be replaced with new planning procedures from below and inside, following the principle: first life, then space, then buildings. Instead of reverse order in the planning process that prioritizes buildings then spaces and (perhaps) a little life working with the human dimension requires life and space to be treated before buildings.”

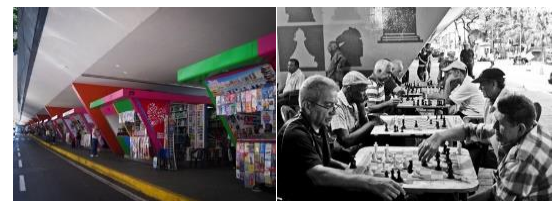
This method involves introductory work that determines the character and scope of the projected life in the development. Then the agendas are prepared for the city spaces and city structure and then buildings can be placed or positioned to ensure the best possible coexistence between life, spaces and buildings. This work expands into large developments and larger districts but is always rooted in the requirements for a well-functioning public life.



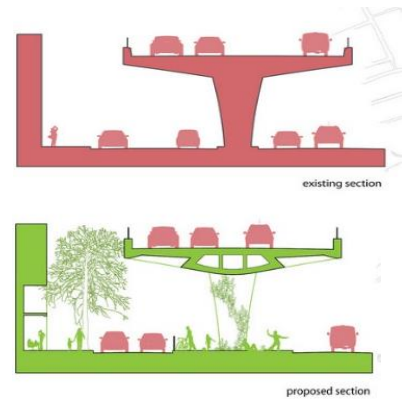
LITERATURE REVIEW

Considering Presence of Public Life, Community involvement, proper management, Stakeholders, Availability of Space, Flexible Setting are a basic need of a public space, some of the projects are being reviewed on the basis of need and flexibility of space to be reclaimed.

A-Under-Flyover Spaces- The flyover itself is a proposed necessary civic infrastructure. Why can't this idea be extended of further reuse of space what better place to open up a little room for the citizens of the city? With a few small interventions and amenities, we believe that this patch of land could be completely transformed and that if given the chance, these slender patches of space would find a host of uses that would be constantly changing over time, responsive to collective need, present aspirations and seasonal calendar instead of parking,



The JJ flyover Mumbai, runs from the Crawford Market area all the way to Byculla, jumping over some of the densest and most frantic neighbourhoods of Mumbai. It is a mess of traffic above and a mess of traffic below. All accommodations are made for the car and truck. We see the space under the flyover as having wonderful potential. It is sheltered from the rain and from the heat of the sun. Amazingly, it is also free of much of the politics **A Proposal for spaces to play, move, for shelter, for community building, for worship and for celebration.**



B-Favela Painting Project- (Use/Purpose: Affect the aesthetics of negative looking favelas and a community art project /Places: Favelas of Rio de Janeiro) Community involvement and collaborations with local people in turn helping to improve the living environment in the neighbourhood. Promoting local artists and people will help to create more successful projects.



C-Rebuilding Detroit- (Use/Purpose: To attract visitors of all kind to the heart of the city./Place: Campus Martius.) A strong vision by local government, placemaking project and proper management creates successful public spaces to activate the heart of the city. This resulted into dead spaces around the public space N to grow and generate more activities attracting more public life.



D-Redesigning Streets- Reimagining Our Streets as Places: From Transit Routes to Community Roots, can help to make way for these transformations. Taking an integrative approach to the planning, design, and management of our shared public spaces, the growing *Streets as Places* movement is helping people begin to see streets in their *entirety*: not just their function in transporting people and goods, but the vital role they play in animating the social and economic life of communities.

“If you plan cities for car and traffic you get cars and traffic, if you plan for people and places, you get people and places” –FRED KENT

ISSUES

Access and linkages: The spaces beneath the flyover are cut-off from public that creates an unpleasing environment under flyover.

Comfort and image : The spaces beneath the flyover are unattractive, but at some places the presence of informal activity are creating public activity which there in makes that place somewhat attractive and a sense of comfort.

Activities and uses: There are a lot of opportunities in the area, with the presence of informal activity around the flyover the area is full of potential to be developed as a public space. The space beneath the flyover is vacant most of the time and potential activities could be expanded.

Sociability: The presence of people in group is less due to the lack of activities in the area. *Though the people show evidence of volunteerism and area helpful which is a positive point which can be used as an advantage.

ANALYSIS

HOW CAN THESE LEFT OVER SPACES BE PUT TO USE?

Anti-space, Border Zones, are usually chaotic, since they are comprised of the remnants of other uses. But these could be used to knit together the fabric of a city at a crucial border zone. Residual areas, buffer zones, vacant land do separate one zone of building from the other, but they also connect the enclaves and afford opportunities of a range of actions. These interstitial spaces can act as potential spaces for urban restructuring .They can act as public spaces which today occupy crucial components of the city, both in terms of the physical as well as social function they serve. Edges, while generally separating and isolating areas, could conversely be seen uniting space between two areas. The space could be designed to give a sense of ownership of it to the community, it could be designed to reunify areas of the city that have been severed by urban renewal. Any flyover must not present a significant visual obstruction that effectively cuts the community, and similarly, must eliminate undesirable residual spaces. There are numerous examples that celebrate design and engineering, creating contemporary urban sculptures that add positively to sense of place, rather than detract from it.

IDEAL SPACE UNDER FLYOVER

- An ideal flyover, reclaiming a space under flyover Instead of parking, we propose spaces for play, for shelter, for community building, for worship and for celebration.
- Create well-lit, cohesive public spaces such as pocket parks, shaded seating areas, food courts, gathering spaces, plazas and play areas.

- Provide vending opportunities in dense neighbourhoods through kiosks, markets and vending zones to attract the public.
- Improve overall pedestrian connectivity.
- Insert public facilities such as auto rickshaw stands, public toilets and strategic parking.
- Facilitate use of these spaces by lighting, signage and waste collection.
- Improve linkages across the bridge under-spaces by redesigning road intersections under the bridge.

CONCLUSION

Urban Voids have huge potential of improving the place and creating a stronger urban fabric of the city. Reclaiming the dead spaces by intervening could solve the perception of these spaces and thereby create better shared spaces by increasing the imagination and comfort. These spaces can be seen as great potential in this expensive world and exploited as urban public spaces such as public gathering spaces, pocket parks or plazas or just place for activities which make people get engaged and enhance the public realm. Efforts are needed to locate, study and find solutions to increase the public spaces in these dense contemporary cities.

1- Catalyst for public space-community, govt., leaders, NGOSA strong local leadership is required to encourage the importance of public space.

2 -The process-strong vision, desire to change Vision is very important since the willingness to change the area to context can help in creating great neighbourhoods.

3- Identifying the opportunities identifying the dead spaces in the area and using the full potential of that place using community in the process helps a lot.

4 -Enjoy great public spaces key to great public spaces is people, if people are involved in creating public spaces, we get great public spaces.

5-Transform underused spaces into exciting laboratories that citizens can start using right away and see evidence that change can happen.

6-represent an “action planning process” that builds a shared understanding of a place that goes far beyond the short term changes that are made.

7-leverage local partnerships that have greater involvement by a community and results in more authentic places.

8-Encourage an iterative approach and an opportunity to experiment, assess, and evolve a community’s vision before launching into major construction and a long term process.

9-Employ a place-by-place strategy that, over time, can transform an entire city. With community buy-in, the LQC approach can be implemented across multiple scales to transform under-performing spaces throughout an entire city.

REFERENCES

- [1] TRANCIK, finding lost spaces: Theories of Urban design (1986)
- [2] GHEL, first we shape cities then they shape us (2010)
- [3] WHYTE, the social of small urban spaces (1980)
- [4] AMERICAN PLANNING ASSOCIATION . great public spaces
- [5] CHARLES,P.PLACEMAKING,creating a city of future,PPS
- [6]ROWNTREE,J. the social value of public space 2010
- [7]MAXWELL BAKER,under the bridge-utilizing covered liminal spaces ,2016
- [8]JUSTINA RAGAIŠYTE,Urban spaces converted into public spaces ,2014
- [9]AMIT BHATIA,placemaking a sense of place,2016
- [10]JUDIT BODNAR,reclaiming public spaces,2015
- [11]ANDREAS SAVVIDES,regenerating public lace :urban adaptive reuse