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Importance of Informal Spaces in Urban Neighbourhood: A Study in Navi Mumbai, Chandigarh and Ahmedabad, India

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Abstract: ***Informal spaces in different development zones in Navi Mumbai, Chandigarh and Ahmedabad were studied to answer the question of what comprises the necessary factors for the successful use of public space. Cities exist with exceedingly fragmented zones with multiple sections of spaces. There are various categories like open or closed, with one of them being informal type which greatly impacts their social surroundings. Comprehending this will entail reviewing the importance of informal spaces in the urban fabric and how the community is impacted by them. Various design factors will also be taken into consideration on their impact on the proper functioning of an informal space. Using the qualitative analysis in six informal spaces, this article will identify patterns in informal spaces in the three cities through direct observation, participant observation and interviews. The imageability will suggest benefiting the socio-cultural aspect of a community through informal spaces and the design approach adopted to achieve this.***

Keywords: Informal space; open space; social impact; user approach in urban space; informal green space.

I. INTRODUCTION

Cities are fundamentally about people, where individuals go and meet or interact. More important than the buildings are the public spaces between them. The city and its open spaces are defined by the fundamental components of culture, relation to space and unique expression. Communities have flexibility, adaptability and widespread participation. There is a relationship of trust and pre-existing social connection. By co-relating the culture and behaviour of the public spaces, individual expression can be supported and centered on identifying public spaces. The focus will be on the social and cultural structure.

A public space can be an open or a closed one. What needs to be found is if there is a requirement for a closed space among all these buildings or instead, open spaces should be preferred. This article will explore the relation between informal space and its users. It will also focus on the socio-cultural effects of informal space on a community. Along with understanding the effective use of informal spaces, it will explore how the community reacts to its design factors.

II. BACKGROUND

The cities today are fast-growing, with more and more people migrating into the city in search of livelihood. This leads to an increase in the cost of living thus leading to the expansion of infrastructure and creating an imbalance between built and unbuilt spaces. The major concern lies in the changes seen in the ratio of built spaces to open spaces. This particular article will be talking about the already existing open spaces in India, how their feature is affecting the neighbourhood and how the neighbourhood is playing a role in it. It will centre on finding if the available spaces and their elements are enough or there can be more along with the necessary factors for the successful use of public space. This will be done through different case studies, which will help understand the various and important design factors for the proper functioning of an informal space. It will also look upon how a design space can affect people socially and culturally. It will shed some light on the changes required in design and these changes will benefit a neighbourhood. This process will also help us analyse the current dependency of a community on informal spaces in cities like Navi Mumbai and Chandigarh, which are planned cities, and how they differ from sprawl cities like Ahmedabad.

III. METHODOLOGY

The research structure for the primary data is structured in seven steps (Fig 1). The first step was to visit in the morning and evening hours. Second, understanding the context, response to its specific urban environment and activities around the space. The third was to assess the design parameter and how these factors impact the way users respond to a space. Fourth, analysis of use of space by the people. Fifth, how the presence of this space has impacted the overall functioning of the neighbourhood.

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IV. LITERATURE REVIEW

To achieve urban integration means thinking of urban open space not as an isolated unit—be it a street, park or square—but as a vital part of urban landscape with its own specific set of functions. [1] Public space should be conceived of as an outdoor room within a neighbourhood, somewhere to relax, and enjoy the urban experience, a venue for a range of different activities, from outdoor eating to street entertainment; from sport and play areas to a venue for civic or political functions; and most importantly of all a place for walking or sitting-out. [1] Public spaces work best when they establish a direct relationship between the space and the people who live and work around it [1].

An open space can be anything, parks, grounds, amenity space within housing, but a community informal space includes specific places for gatherings, the ability to discuss, reach consensus and cooperate.

Cities are divided into fragments of landscapes. They are comprised of a patchwork of paved and unpaved spaces, built and vacant land, and newly developed and obsolescent and/or abandoned buildings and infrastructure [4]. This urban fabric is also described as Urban complexity.

Urban complexity is analysed as the relation between spatial form and social, economic and cultural processes [3]. The urban complexity is reflected in the community and the way it functions. The complexity of this concept involves many spheres; it is the term used to describe and theorise on not just the spatial aspect of the city but also its cultural, economic, social and political organisation [7].

A very wide range of situations may be included, like spontaneous processes of occupation of the territory, absence of property titles, self-building of houses, illegal inhabiting in contexts with rapid urbanisation, temporary uses of space, forms of self-organisation and development of urban areas at city edges, etc. [3] .

Informal urban greenspace (IGS) such as vacant lots, brownfields and street or railway verges comprise one part of this urban nature [2]. Every city has such vacant spaces, that tend to get ignored during the development process and these spaces should be utilized to create recreation areas for the neighbourhood.

But we presently lack knowledge about the estimated total quantity of IGS in our cities – a key issue, because the quantity of space likely has a strong influence on its potential for recreation and conservation [2].

V. INFORMAL URBAN SPACES AND HUMAN INTERVENTION

Whilst these spaces are constantly restructured and redefined, the focus is on human intervention, highlighting how these users reorganise and reinterpret space as citizens should have access to facilities of recreation, reset and relaxation. The section of people that need to be considered is the ones in the urban areas, who seek recreation, due to the scarcity of land in the city. Particular attention must be given to low-income families, living amid congestion, noise, a lack of basic facilities and sometimes exclusion from the social structure.

Firstly, understanding urbanisation is crucial to resolve the issues. Urbanisation is something that is happening all around the world, the kind of lifestyle and work pattern resembles from place to place. But the city planning is different in different countries. Some countries have already worked through the planning that other countries need to. The second step is to understand the characteristics of a community and how they react to an informal space. A community is adaptable and react well to flexibility, but value pre-existing cohesion.

There is a relationship of trust, ability to discuss, reach consensus and cooperate. These characteristics help us understand how they react to architectural spaces.

A progression from simple to complex activities is observed which directs the use of spaces like age group-specific facilities, outdoor and indoor facilities.

How do informal spaces play a role in this? To answer this, analysis of these points through different open spaces of Navi Mumbai, Chandigarh and Ahmedabad needs to be conducted. The three cities have different socio-cultural dynamics and different settlements.

While Navi Mumbai and Chandigarh are planned, Ahmedabad is a result of Urban sprawl. Due to this, the type of open spaces and the way they are used, change. The focus will be kept on how these spaces reflect the community and how the users react to the informal spaces.

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While visiting the informal spaces, the approach considered for observation was to start from outside to inside then again outside.

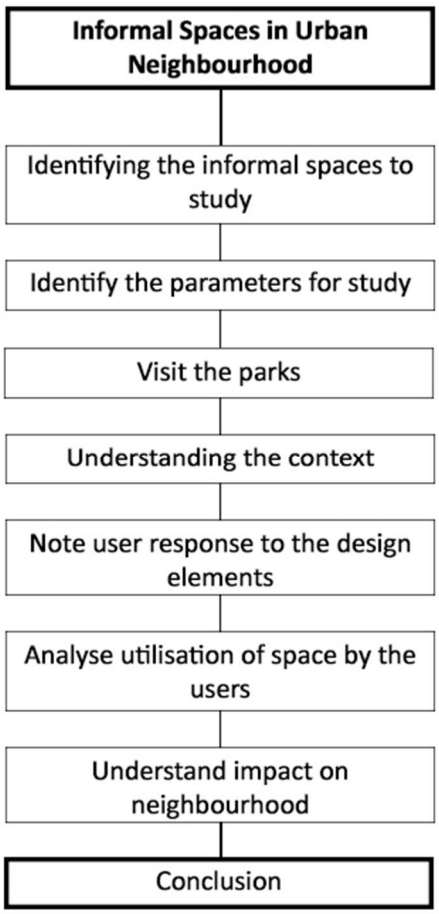


Fig. 1 Methodology (Source: Authors)

A. The Study Of Existing Informal Spaces

Interstitial, dilapidated, dis-used and marginal sites punctuate the staged and controlled official public spaces and the every- day, ubiquitous spaces of the contemporary city. [5]

One such informal space exists in Kharghar, Navi Mumbai, under the Skywalk footbridge project; This project includes 1600 m long conventionally supported foot over bridge connecting the commercial and academic areas to the railway station and 120 m long cable-stayed bridge crossing the national highway. [6]. There were a few empty plots around the footbridge. A couple of years ago the land at Kharghar Junction under the skywalk was converted into a public park, with pathways, benches, children play area. The neighbourhood lacked a proper designed informal space. This Park is a great example of how to utilize vacant space and adapt it to community needs.

Kharghar in Navi Mumbai is an assemblage of residential, educational, commercial and public spaces. The informal spaces are an integral part of the community here, due to their diverse population and lack of informal space in their housing societies. The CIDCO Sector-7 Park is an integral part of the social structure of the neighbourhood. It is surrounded by four housing societies with no open garden of their own. Thus, being a community park it is enjoyed for socialisation and relaxation. It is also accessed by other residents of sector-7, because of proper design elements like seating clusters, play pieces of equipment for kids and proper lighting facility. The children use this space as their playground as they find it extremely convenient due to the presence of parental supervision and easy access from their society compound. They feel this is a safe space for them. The women of the neighbourhood use it as a meeting place for their social organisations. Many residents prefer to use it as a gathering space for cultural organisation discussions. The senior citizens use it for their evening walks and meeting up with their acquaintances. Being the only informal space for the housing societies, the park has become an integral part of the neighbourhood's daily life and it plays an important role in their social structure.

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Another informal space in Sector-7 is the CIDCO Garden. It comprises a jogging track, a children's play area, numerous concrete benches and central open space. This park is utilised mainly for walking and exercise as opposing to the CIDCO S7 Park which was used for socialising. Sometimes, teenagers are found playing cricket or football on the open field, but this is not a regular occurrence. It is surrounded by 7 housing societies and it can be accessed from two sides. Visiting this garden has become a daily routine for many residents of neighbouring housing societies. Due to high traffic on the roads and occupied footpaths, this provides a safe alternative to the residents for walking.

The presence of multiple informal spaces in a single sector of Kharghar area in Navi Mumbai signifies how much the people are dependent on these informal spaces in their routine and they have structured their social life around these spaces.

These parks were at the neighbourhood level in Kharghar, but the next study was of Central Park, an urban park located across Sectors 23, 24 and 25 in Kharghar. Centrally located in Kharghar, it is accessible to all its residents with a small car ride. The park is mainly utilised for fitness, leisure, social and cultural events. The user group can be categorised into four; children, youth middle-aged and senior citizens. The park sees most of its visitors during the morning and evening hours. There are three entrances to the park, two along with parking and the main one with entrance complex which is usually closed but opened up for large scale social and cultural events. The garden is divided into sub-parts based on user occupancy. The open ground is usually filled with different age groups playing various sports. (Fig 2)



Fig. 2 Youth playing cricket; Central Park, Kharghar

The youth are seen majorly occupying the open spaces along with different age groups playing various sports. (Fig 4) The play area for children is completely isolated, with very little to no visual porosity, thus the constant need for supervision.

It was observed that the children were not regular visitors to this park. The most common activity people were walking which made the 1.6KM jogging track, the most used route in the hierarchy of pathways (Fig 3). Some secondary and tertiary accessed pathways are observed to be avoided by the users.

The reason for this is observed to be is its surrounding. It is indeed designed with terracotta tiles roof Gazebos with brick and granite for seating, but it is located on the rear side of the 10M high OAT, with dense vegetation, isolated, cannot be spotted easily, not in use with undefined activities thus making it a shadowed area in the garden.

The visitors were seen to prefer the open areas with less vegetation as too much vegetation blocks the view and lost sense of uneasiness.



Fig. 3 Primary Pathway; Central Park, Kharghar

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The park mostly seems deserted. There are various for this. Presence of smaller informal spaces mentioned above. Each sector has at least one open space, thus providing its residents with easy accessibility.

The scale of spaces is disproportionate to the number of users. They tend to avoid spaces with a lesser visibility and move towards spaces with more visual porosity.

Many cultural events have been hosted in the OAT of the park (Fig 4). The residents of Kharghar feel this is the cultural focal point of the zone and acts as an important factor in bringing the community closer.



Fig. 4 Socialising at OAT; Central Park, Kharghar

The hierarchy of informal spaces is a result of Kharghar being a planned city of Navi Mumbai. All these spaces were created considering the social and cultural requirements of the people. Another park that was studied is Nehru Park, Sector-22 in Chandigarh. This is a neighbourhood park quite similar to the one in Navi Mumbai.

The Nehru Park is centrally located in Sector 22, is a part of the green belt concept used in Chandigarh City. The residents of the sector, walk around the neighbourhood and use the park for relaxation and socialization. The layout is recognised to be simple and easy to access with multiple entry points. The scale of the park determines its familiarity with the users.



Fig. 5 Socialising at Gazebo seating; Nehru Park, Chandigarh

This park is mainly used for socialisation and relaxation. The primary users can be categorised into Children, youth, middle-aged and senior citizens.

Being a community park, this place has been equipped with various types of seating including gazebos and benches (Fig 5). People have fixed spots to sit with other regular users of the park (Fig 6).

There is a designated kids' area, but the use was not found to be restricted to kids owing to the presence of creative equipment (Fig 7). The children are seen playing with peers but with adult supervision. This is observed due to the presence of a park along the main V4 road of sector 22.

The presence of this space has directed a social routine to the residents of Sector22 and has become an integral part of their daily life. Senior Citizens prefer walking inside the park pathways due to lesser crowd and easier access to the location.

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Fig. 6 Youth socialising; Nehru Park, Chandigarh



Fig. 7 Children Play Area; Nehru Park, Chandigarh

The community parks in both cities have similar functions and impacts on the neighbourhood. The final park studied is Parimal Garden in Ahmedabad. This is an urban park similar to Central Park. But Ahmedabad lacks a proper hierarchy of informal spaces, unlike planned cities but it does have many urban parks and open spaces. Ahmedabad is a result of Urban Sprawl; thus, the type of spaces differs from planned cities.

Parimal Garden is considered one of the prime parks of Ahmedabad. The users are of diverse age groups. The park has been designed to accommodate various requirements of the users. All the spaces are equally utilised and have easy access. The main entrance is at the traffic junction, giving it a clear view of access. The park is used for various activities like walking, exercise, socialising, relaxation and cultural events. As mentioned, the absence of hierarchy has generated a requirement of various activities which is fulfilled by a single park in the area of Ambavadi, Ahmedabad. There are regular visitors as well as tourists. Even with its large scale, most of the spaces are usually filled.

The Youth and middle age users tend to utilize all the spaces in the garden, use all the hierarchical roads.

Youth is seen spending most of their time in the garden at pergola covered pathways and OAT that are designed around the pond. Children prefer the primary pathway that leads to the children's play area. Parents drop their kids at the play area and go for a walk. They equally seem to enjoy the gazebo seating. It was observed that the kids enjoy the interesting place in the garden which included the Play area, plant nursery and Gazebo because of its unique feature and vibrant appearance (Fig 8).

The middle-aged users essentially utilize the primary pathway and the seating provided along the route. The garden is situated in a commercial and residential mixed zone, thus most of its users are frequent visitors from the neighbourhood. But Parimal garden being one of the prime gardens of Ahmedabad, it also sees visitors from around the city as well as some tourist. These infrequent visitors are observed thoroughly enjoying each of these spaces. They also tend to expend more time than frequent visitors.

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Fig. 8 Children Play Area; Parimal Garden, Ahmedabad

The clusters of the senior citizen were recognized predominantly near the entrance. When asked reason theymentioned it eases their access to the gates and reduces their travel time. This is a user group seen to spend time over 1 hour in the garden, seen reconnecting with friends (Fig 9).



Fig. 9 Senior Citizens socialising; Parimal Garden, Ahmedabad

Interacting with the users gave the idea of the importance this garden holds to people of the neighbourhood. It's the focal point of their social interaction, a part of their daily life (Fig 10). The food stalls along the periphery of the garden have also become a crucial part of the neighbourhood identity as mentioned by the few users.



Fig. 10 Youth socialising at OAT; Parimal Garden, Ahmedabad

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VI. CONCLUSION

The importance of informal spaces in the urban neighbourhood needed to be determined in cities like Navi Mumbai, Ahmedabad and Chandigarh, due to the constantly changing dynamics of the cities. The studies carried out of the informal spaces have given a clearer picture of how a community is dependent on them. From the six case studies that were identified from three different cities, it was observed how the users react to the spaces. In planned cities like Navi Mumbai and Chandigarh, there is a hierarchy of informal spaces. Along with the scale, the functioning is also defined. The Central Park in Kharghar is on the upper tier based on its location, scale and function used for walking, sports and cultural events. The CIDCO S7 Park and CIDCO Garden in Navi Mumbai and The Nehru Park in Chandigarh are all neighbourhood level parks i.e the lower tier, mainly used for socializing and relaxation.

The absence of hierarchy in designed informal spaces is felt in cities like Ahmedabad which are a result of urban sprawl. Attempts are being made to bring change in the structure of the open spaces but finding the appropriate area is difficult in such cities.

The people of a neighbourhood depend on the informal spaces. Their social and cultural structure, their daily routine is determined by the presence of the informal space. It provides a place for the children to grow and interact. It was also observed how well-defined design factors influence the usage of space.

The hierarchy of informal spaces can be created in Urban sprawl cities also. We have to identify unused spaces like the one mentioned above at Kharghar Junction beside Skywalk and convert them into informal parks to benefit and the need of the neighbourhood.

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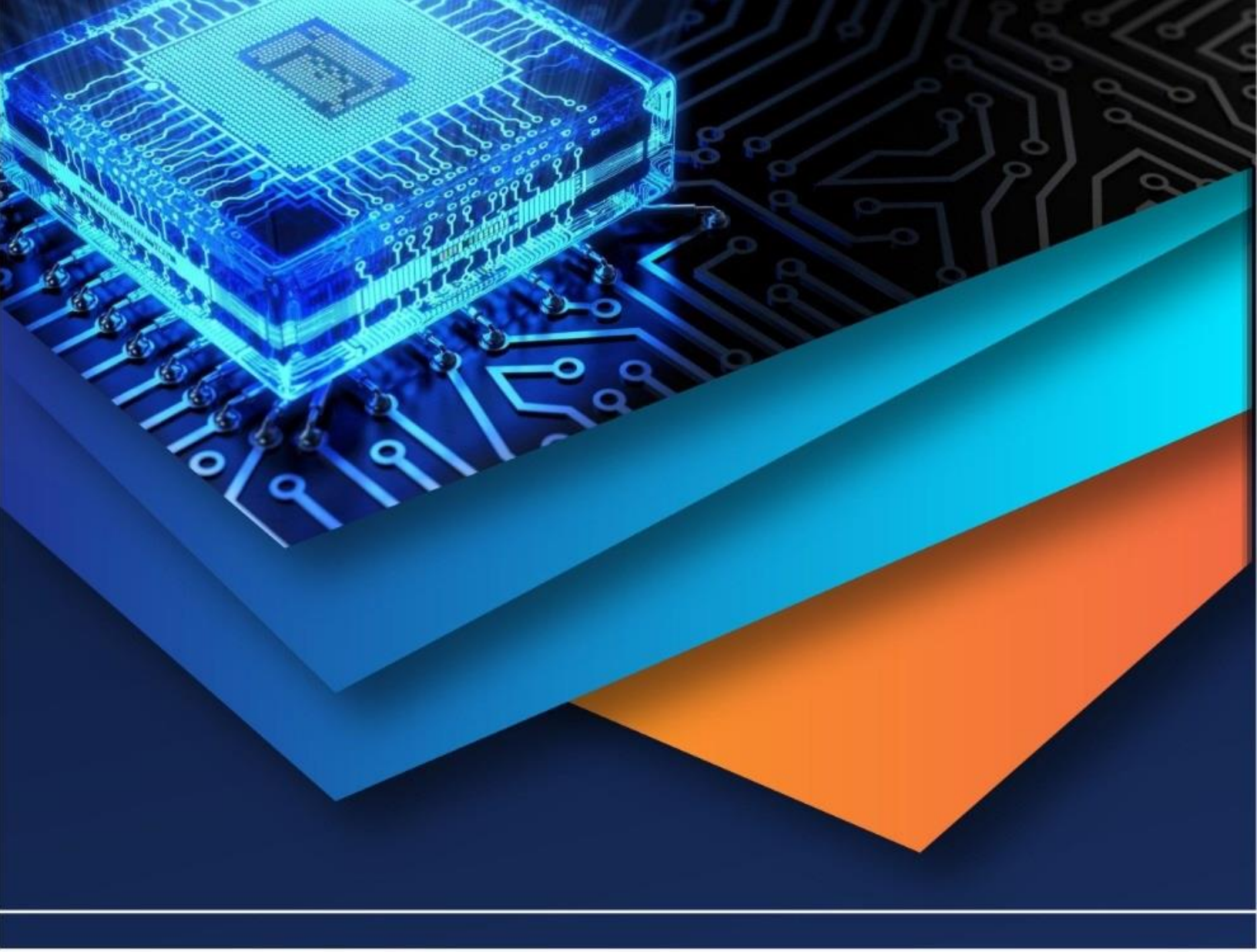
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