

TRANSFORMATION OF OPEN SPACES

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Abstract: There is an inseparable bond between man and nature. A balanced relationship of buildings and people with nature makes a place livable. The world was a natural space before human start modifying it as per needs. Cities are the product of time, but humane are inseparable from nature and civic needs. A city's streets, squares, parks have been seen as symbols of collective well-being, sites of public encounter and formation of civic culture. It nurtures the growth of public life, which is stunted by the communal isolation due to socio-cultural groups or age; here people can come together in a supportive context of mutual amusement. As these experiences are frequent, the public spaces grow into vessels to carry positive communal meanings (Carr, 1993). The denomination of world-class had visible and direct relationship between developments and growing economy, resulting in the rapid infrastructural, commercial and residential growth, and this phenomenon can also be seen in other developing nation around the world, which segregated and fractured the very rudimentary structure of the society because of ignorance and insensitivity towards local culture, climate, and region. In this paper, we are going to get the idea of different type of open spaces and its significance for the better world to live in.

1.0 Introduction

“Nature is healthy” concept goes back decades, in 1984. There is an inseparable bond between man and nature. A balanced relationship of buildings and people with the nature makes an area livable. A well-planned city is observed as an evolving composition, structures and interrelated spaces. More than the buildings, it is also the character and form of the open spaces defined, that gives a city its essential quality. (Strake, 2006) According to Catherine Dee, open space is the three-dimensional area defined by ground plane, vertical planes (trees or mountains) and the sky plane. This enclosed area is opposite of form or mass of land, defines or adapted for the human purpose. Open space can perform multiple functions like strategic functions for urban quality, promoting health and well-being, a place of safety and habitats for flora and fauna, as a visual amenity and as a community resource (Town and country planning act, 1990).

The world was a natural open space before human start modifying it as per needs like shelter against animals and the weather. This need started turning natural mountains into shelter caves 15000 years ago and it was the inception of civilization. Agriculture was the milestone of the different culture which consequences in the transformation of spaces from natural open space to cultural open space. The developed sense of civilization was the induction of settlement of the villages and eventually to cities. The traditional characteristics of villages or old cities (ratio between large open spaces to smaller buildup area) have undergone structural change and are poised to further transform under a dual stress, as the global balance of the rural-urban population shifts in favor of urban living. (Journal of Landscape Architecture, 2009). Cities are the product of time. But as human is inseparable from nature and civic needs, the requisite of designing open spaces in cities emerges. The urban practitioners also have given their views on the precise detail of the collective accomplishment across time and space, the existence of a strong relationship between urban public space and civic culture. (Amin, 2006). According to Soren Kierkegaard the time spent on open space away from polluted city can be restorative and healing. Whether running through a canyon, walking on the sunny beach, hiking through a fern-filled forest, scrambling over rocks along a creek side, watching the last few rays of the setting sun, strolling along a moonlit night, or just sitting breathing fresh clean air, being out in nature is one of the best prescriptions for overall health and encouraging healing. (Kirsti A. Dyer, 2002) The physical and social dynamics of public culture play the fundamental role in the formation public open space. A city's streets, squares, parks, and other shared quad or spaces have been seen as symbols of collective well-being and possibility, expressions of achievement, sites of public encounter and formation of civic culture. It nurtures the growth of public life, which is stunted by the communal isolation due to socio-cultural groups, age, sex or economical level; here people can come together in a supportive context of mutual amusement. As these experiences are frequent, the public spaces grow into vessels to carry positive communal meanings (Stephen Carr, 1993). With the advancement of science and technology, cities grow in parallel. In the last two decades, in the denomination of world class we have seen a visible and direct relationship between development and a growing economy, resulting in the rapid infrastructural, commercial and residential growth of cities and new towns across the country, this phenomenon also seen in other developing nation around the world, which segregated and fractured the very rudimentary structure of the society because of ignorance and insensitivity towards local culture, climate, and region. It's the time of reawakening and going back to the roots where human lives in harmony with nature. In today's context

where everything is getting commercialized and materialized and hence all habitable spaces are turning into suffocating urban areas where open spaces are constantly being ignored which in results in hampering the natural and cultural landscapes of society and turning cities to heat islands. As the globalization and increasing population does not favor in converting cities to natural space, but by conserving the existing open spaces and incorporating more such spaces in design will surely lead to a better world to live.

2.0 Definition of open space

Open space can be defined as "an area of land enclosed adopted for human purpose. In other words it is the opposite of a form or a mass, a place for outdoor activities. Open space consists of 'Vertical' planes which can be walls, mountains or vegetation that is coarsely textured and merges from the base plane which are ground (hard/soft/hard+ soft) or water (pond/river/lake/sea/ocean) to an overhead 'sky' plane (Dee, 2005). According to Town and country planning act, 1990 open spaces can be defines as land laid out for the purposes of public recreation, or as a public garden, or, or land as a disused burial ground. However, in applying the policies in this direction, open space should be taken which are important as public value, including not just land, but also areas of water such as lakes and reservoirs, canals and rivers, which offer important opportunities for sport and recreation and can also act as a visual amenity. Open space are also used as graveyards, cremation grounds, temples, churches and other human religious centers. Sometimes these spaces serve the purpose of necessity and sometimes as luxury depending on its function and use. (Town and country planning act, 1990)

There is no standard definition for urban open spaces. Several philosophers' town planners and writers describe this area differently. According to Ramachandran H, 1991 area not covered by permanent structure are open area, Tankel (1996) describes that all land & water not covered by buildings are open spaces including space & light above as well. But according to Venkatasubramaiaam (1991) the undeveloped or predominantly under developed land in an urban area which has a value for park & recreation purpose, conservation of land for historic & scenic purpose. Campbell (2001) suggested that any non-built land within the boundary of designed envelope which provides, or has potential to provide environmental, social & economic benefits to communities, whether direct or indirect. (Robert G. Putnam, 2007) According to Brisbane city council- urban open space includes parks, fields (agricultural, sports) , forests, bush lands, creeks, river/ streams/ bay/ private backyards /lawns /gardens, courtyards, attractive & safe streets, plazas & entrances to shopping centers, community gardens, bikeways & paths, spaces around libraries/art galleries/institutes and links between these elements. Chiesura (2004) took the account of the variability in open space types that these fulfill the needs and expectation of all the segments of the population. (H. Esbah). According to L.Rana ,2007 urban open areas are broadly classified into "vacant" i.e. agricultural lands, wetlands, streets etc. and "developed" land which are further divided into privately developed and publically developed lands. Privately developed open spaces are accessible to limited users and not to public on a regular basis. It may be included for qualitative analysis but not for quantitative assessment these are mostly residential, commercial and industrial. While publically developed open space is accessible on a constant and a regular basis to the public. Parks(regional, district, municipal, lawns), sports grounds, clubs, river front, historical monuments, zoological or botanical garden, institutional campuses , churches and spaces associated with transportation are publically open spaces. (NYC, 2012) Active open spaces are the open space that is used for active play like sports; exercise for example playing field, pools, courts golf courses etc. On the other hand, the passive open space is for relaxation for example lawns, temple / church yards, gardens, etc.(FEIS, 2012)

2.1.0 Classification of open space

The term 'open space' is broadly classified in three groups: Natural open space, Cultural open space and civic open space. But considering urban area, there are no natural or cultural open spaces and hence this concept is restricted only up to villages, forests and few suburbs only while civic open space can be used in context of both rural and urban areas.

2.1.1.0 Natural open spaces

Natural open spaces are the result of the division of land naturally. These are the purest form of open spaces, as they are untouched by any human interference. It can be defined as an area of land and the elements (living or nonliving e.g. Rocks, water, plants or trees) on it, that are not directly changed, altered, or moved by humans. The natural open spaces can be of many types, a beautiful picturesque mountain and valley, a golden spread of dessert, the natural water fall, a beautiful coastal area etc. Vegetation is a primary medium for defining space within landscapes, consisting of any vegetated land or structure, water, path or geological feature within and on the edges of settlements, these areas of undeveloped or previously developed land with residual natural

habitats or which have been planted or colonized by vegetation and wildlife, including woodland and wetland areas (Dee,2005).



Image 2.1.1.1 Natural open spaces- the untouched nature.

Here, river is the base plane, mountains and trees forms the wall plane and sky above is the overhead plane. Similarly, in the deserted areas like Thar Desert the ground is covered with sand and sand dunes form the vertical plane, here the vertical plane merges with the ground plane.

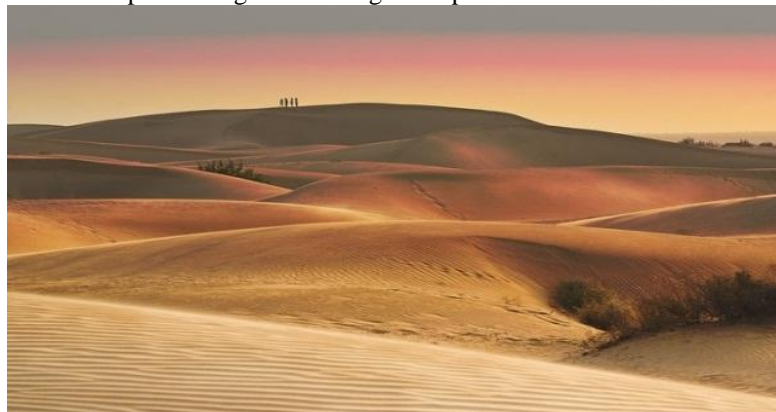


Image 2.1.1.2 Thar Desert- A natural open space.



Image 2.1.1.3 Waterfall- a Natural Open Space enclosed by dense vegetation in Amazon Forest.

A forest is a large part of land enclosed with trees or other woody vegetation. Here ground plane, wall plane and sometimes even the sky plane merges with each other due to high density and height of trees and also because of dense vegetation covering the ground. Occasionally the water fall, lake/pond or density in vegetation changes the character of planes.



Image2.1.1.4 Coastal Area, A Natural Open Space

The area where land meets the sea or ocean or a line that forms the boundary between the land and the ocean or a lake is known as a coastline or seashore. Here the merging of two different characters of ground can be observed. The wall plane is coastal area is often defined by mountains but because of amorphous amount of space the sky planes appears to be merging with the ground plane.

Before human started disturbing the nature as per his needs, the entire world was a natural open space. The earliest manifestation of human interference in nature is as old as 12,000-year-old in form of agriculture field. Agriculture field, an outcome of human need, are the earliest designed open space by the human, and growing different food in the different piece of land is the milestone of the different culture. (Strom, 2016)

2.1.2.0 Cultural open spaces

Cultural open spaces include the zones of land for growing plants/trees, vegetables, and fruits, whichever as individual allotments or as a community activity. These spaces are clearly constructed and are generally carefully maintained. These may range from large open spaces, sacred groves, conserved or protected space of cultural or historical importance, recreation areas, and well-manicured lawns found in suburban housing developments. (Langworthy, what is open space) A cultural open space is defined as "a geographic area, including both natural and cultural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or displaying other cultural or aesthetical values." (Birnbaum, 1994). Agricultural fields are the best example of cultural open spaces. Cultural open spaces are formed as the result of the culture that acts on the canvas of nature giving the space its meaning by cultural group. The cultural landscape is fashioned from a natural landscape by a culture group. "Culture is the agent, the natural space is the medium, and the cultural open space is the result" (Sauer's, October 12, 1925). With time, culture has developed hand in hand with nature, while responding to the environmental variation at regional levels. It is manifested in diverse physical forms depending upon these regional and local variations giving rise to a variety of 'cultural spaces'.



Image 2.1.2.1 Lavaux, Vineyard Terraces (Switzerland)

The Lavaux vineyard terraces is a thriving cultural landscape; it also illustrates graphically the story of power, control and protection of this extremely valued wine growing area, which contributed significantly to the

development of the village Lausanne. The Lavaux vineyard landscape is a stunning illustration that presents centuries of interaction between people and its environment in a very precise and fruitful way, enhancing the native and local resources to produce a highly valued wine that was a significant part of the local economy. (UNESCO, World heritage list, 1992)



Image 2.1.2.2 The Rice Terraces of the Philippine Cordilleras

Similarly from 2,000 years, the Rice Terraces of Philippine Cordillera is an outstanding example of an evolved, living cultural landscape that can be sketched as far back as 200 years. The fruit of knowledge handed down from one generation to other, and the expression of sacred traditions and a delicate social balance, they have helped to create a landscape of astonishing beauty that expresses the harmony between human and its environment. The Ifugao Rice Terraces epitomize the complete merging of the physical, economic, socio-cultural, religious, and political environment. Indeed, it is a living cultural space of unparalleled beauty. (UNESCO, world heritage list, 2013)

The Indian belief, that the Panchamahabhutas (earth, air, water, fire and sky) are the constituents of everything that exists, also reflect in their culture. This belief is mediated by communities through rituals, practices, beliefs, concepts, traditions, lifestyles, which future contribute in making the complete soul of the place. These indigenous communities display cultural connections with nature and give rise to unique cultural spaces.



Image2.1.2.3 Tulip Gardens in Srinagar, Jammu And Kashmir

During the 10th century in Persia, agriculture of the tulip began. The cultivation of tulip is limited in India because of environmental condition required for its growth hence, hilly areas of Himachal and Kashmir are only ideal for Tulip gardening. Depicting the Mughal culture in India this cultural space is still maintained by the cultural group generation by generation.

Similarly, the tea garden of Palampur in Himachal and Mustard field of Punjab still glorify the cultural heritage of the state. The wealth of natural features contained within cultural space is a valuable community resource, not only as the part they play in preserving the area's ancient character, but also for tourism and its contribution to the area's economy. (Langworthy, kalkaska county community center, 2003)

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2.1.3.0 Transformation of natural open space to cultural space

As already discussed, natural open spaces are purest and untouched form while cultural are open spaces with human manifestation. The transformation between natural and cultural space is basically done by conserving or preserving the area of natural open space due to some religious significance or cultural significance. The best example of such space is a sacred grove. Sacred Groves are relic forest patches traditionally protected by communities in reverence of a deity. Various cultural and religious festivals are often arranged by local people within the shrines of the Sacred Groves. Vigorous judgments relevant to the forests and natural resources of the villages are also discussed within temples of the grove.



Image 2.1.3.1 Sacred grooves in India as a cultural open

Caribbean forest is a natural form of forest without any human interventions but when forests are used for religious purpose and some minute alterations and additions are done it become sacred groves

Sacred groves of India are forest fragments of fluctuating sizes, which are communally protected, and which usually have a substantial religious association for the protecting community. Hunting and logging are usually strictly prohibited within these patches. (Gadgil, 1975) In India there are more than 13,900 sacred groves out of which, 5000 sacred groves are in Himachal Pradesh, 2000 are in Kerala, 1600 in Maharashtra, 1424 are in Jharkhand.(Wikipedia)



Image 2.1.3.2 Tea Garden in Palampur, Himachal Pradesh

2.1.4.0 Civic open spaces

Civic spaces are an extension of the community. After they work well, they serve as a platform for our public lives. Civic spaces are the open spaces usually in the form of parks, squares, market places and other soft paved or hard landscaped areas, function in their true civic role, a space where celebrations are held, public interact with each other, social and economic exchanges take place, and different cultures mix. They are recognized and valued in their cities and towns as places with their individual distinct essence that relate to and nurture the larger community and bring the public together. Civic spaces places contribute to community health, environmentally, socially, culturally and economically. They not only enhance the civic realm not only aesthetically, but also provide a sense of character and a forum for social activities. These assets and opportunity these places offer people to enjoy relax and enhance community livability. (projectforpublicspaces) Most of the Indian cities are the product of time. The history of India includes the prehistoric settlements and societies in the Indian subcontinent; the blending of the Indus Valley Civilization and Indo-Aryan culture into the Vedic Civilization.



Image 2.1.4.1 Hampi market at Vijayanagara

Medieval era (8th to 18th century CE) the Vijayanagara Empire was based in the Deccan Plateau region in South India. The Hampi market- a civic space at the heart of the city, was same as Roman forum or Greek Agora.

In India, during 1615 to 1947, British colonial architecture influenced the architecture of Kolkata, Mumbai, Delhi and Chennai. The concept of urban spaces as places for recreation and leisure started to evolve during this time. For example, the pedestrian street is converted into mall road in Shimla containing a church, town hall, theater, hotels and restaurants, which results in social places for public gathering



Image 2.1.4.2 urban-square a civic open space

Shimla was the summer capital of India during British Rule, hence the strong impact of colonial architecture can be observed in Shimla. The Ridge road in the heart of Shimla the capital city of Himachal Pradesh is a large open space, a hub of all cultural activities of Shimla. It is situated along the Mall Road, which is the famous shopping center of Shimla.

The concept of open spaces is evolved with time and is still evolving according to the need of plants, animals, humans and their surroundings. The physical and social dynamics of public culture play the fundamental role in the formation public open space. Urban public open spaces help in creating a visual communication considering all public. A city's streets, squares, parks, and other shared quad or spaces have been seen as symbols of collective well-being and possibility, expressions of achievement, sites of public encounter and formation of civic culture. It nurtures the growth of public life, which is stunted by the communal isolation due to socio-cultural groups, age, sex or economic level; here people can come together in a supportive context of mutual amusement. As these experiences are frequent, the public spaces grow into vessels to carry positive communal meanings (Stephen Carr, 1993). With the advancement of science and technology, cities grow in parallel. In the last two decades, in the denomination of world class, we have seen a visible and direct relationship between development and a growing economy, causing in the rapid infrastructural, commercial and residential growth of cities and new towns across the country, this phenomenon also seen in other developing nation around the world, which segregated and fractured the very rudimentary structure of the society because of ignorance and insensitivity towards local culture, climate, and region and hence, the natural open spaces are being ignored and destroyed.

The traditional characteristics of the Indian cities have undergone the structural change in the recent past and are poised to further transform under a dual stress, as the global balance of the rural-urban population shifts in favor of urban living. (JOURNAL OF LANDSCAPE ARCHITECTURE, 2009)

3.0 Character of public open space

A public open space needs to be user-friendly and comfortable in terms of climate, physical activities and amenities. Spaces providing the opportunity to enjoy good weather and adequate protection from bad weather not only helps people better health condition but also attracts them to spend quality time with friends and family and hence, provide a space for civic interaction.. (Rose Susan, *RABARE*, 2009)

Urban parks with well-maintained vegetation act as physical filters help in reducing air pollutants such as sulphur-dioxide and nitrogen oxide. They also reduce the rate of ozone production and help in capturing dust and volatile organic compounds. Healthy environment not only results in better and longer life but it also helps in stress reduction. There are multiple active and passive uses of open spaces, active use such as jogging, yoga, picnic, evening playing or often to admire natural aesthetics and nature, and passive use such as meditation relaxation spaces. (Dr.Sarya)



Image 3.1 Citizen performing yoga at central park Jaipur

Urban open spaces promote the idea of ecologically sensitive towns and cities by providing wildlife corridors and are havens for many animals, birds, wildflowers. Parks contribute to land reclamation by establishing trees and woodlands on the many derelicts and degraded lands in urban areas; it is an inexpensive option for improving the appearance, enhancing their ecological value and making them available for recreation. (Susan, 2009)

4.0 Public open space and urban sustainability

The public open spaces are environmentally sound as they provide ecological corridors and connect mankind with nature. It's not only aesthetically pleasing but also provides better health. These areas are functional in both social and economic manner. as we know the sustainability is " to meet the need of present generation without compromising the future generation to meet their needs of resources", public open spaces conserves the present spaces and ecological conditions and also serves the function of revenue generation and a place of social interaction.

5.0 Conclusion

It's time for reawakening, to get back to our roots where people live in harmony with nature. In this era where all places are turning into urbanized polluted area, it's a need to have open spaces and several green pockets where a citizen can breathe. In urban areas, these spaces become the public spaces and are being used for public interaction and social gathering. These open spaces not only results in environmental benefits but also social, political and economic benefits. And so they are the backbone which keeps a city people life healthy and socially stable. So it is important to reduce changing these spaces to build mass in order to achieve sustainability.

6.0 Reference

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