

An exploration of the historic core along Lake Pichola in Udaipur

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Abstract

The aim of this study is to develop an appreciation of the historic core along the eastern edge of Lake Pichola in Udaipur, which is a result of its unique climatic, social and topographical context, to chart the changes to this context, to draw attention to past patterns and to learn from them in the hope of influencing future developments. The objective is also to understand the forces that have influenced and underpin this development, examine its existing state and highlight key concerns. The study is limited to the historic core along the waterfront and its related structures along the eastern bank of Lake Pichola in Udaipur. The study demonstrated that the historic core along the lake front is a result of evolution that has been guided by dominant determinants such as its socio-economic hierarchy/structure, political and religious factors, climate, availability of materials and technology. The overall form, settlement pattern and the massing of buildings in Udaipur are dominated by its physical attributes and in consonance with the topography and landscape, and ordered by the generative force of its land form and the lake. It is, however, subject to severe developmental and environmental pressures as a result of intense tourism related and commercial activities, unwarranted and haphazard building activities, continuous neglect of residential properties, some of the historic fabric and surviving artefacts, and poor infrastructure. If this trend were to continue, the problems will intensify causing serious threat to this valuable environment, its urban spaces and exquisite edifices. Preservation of this waterfront, which plays a decisive role in solving critical urban, social and economic problems in this city, is vital. The main issues identified for consideration in this context were the preservation of existing traditions, conservation, sensitive and participatory planning and design, appropriate organization of street activities, continued adaptive reuse of buildings, provision of infrastructure and administrative structures to deliver the project, and creation of awareness and understanding amongst the local community.



1 Introduction

Udaipur known as the city of lakes is in a bowl-shaped basin located on the eastern flank of the hilly Aravalli ranges in Southern Rajasthan (Western India) at 1893 feet above the mean sea level. Udaipur's distinctive features of the lakes, its geographically secluded position due to the natural enclosure formed by the surrounding hills and the altitude, and its rugged terrain created favourable site conditions for the medieval settlement in terms of natural defence, micro-climate and opportunities to develop itself. Hence Maharana Udaisingh moved from the old capital of Chittorgarh and founded Udaipur in 1559 A.D. The lakes in Udaipur form important infrastructure, provide visual structure, orientation cues, and lend visual/ psychological relief in its hot dry environment (Naik, [2]).



Figure 1: Palace and residential terraces overlooking Lake Pichola.

Cues from the topography led to the positioning of the main city-palace of Udaipur, the seat of political power, at the highest level on a rock mass that overlooked lake Pichola on its eastern edge (Figure 1), in the South-West direction of the city. Religion was the other powerful force that was physically manifested in Jagdish Temple built further down from the palace on a large mound (Naik, [2]). With the appearance of the lake and the palace which was the major controlling element of the city, by the end of the 16th century, a cluster of population grew around the palace in accordance with the need of the ruling family and people in general, and the religious and aesthetic needs of the time. Over time, the residential fabric expanded to either sides of the lake with several new additions and insertions, a process that still continues. This growth gradually led to the development of a township which was structured in such a way that all major streets led to the palace complex and that it could be located from any point in the city due to its prominent higher location.

The heritage fabric of the city presents an excellent example of harmony between its natural elements (water and water reservoirs, mountains, dense forests, fauna in the wild and perennial rivers in Aravalli hill ranges, abundant natural landscapes-green open spaces, gardens and wildlife) and man-made

elements (lakes, lakefronts, gardens, streets and squares, fort walls, historic monuments such as the forts, the gates ('pols'), palace complex, havelis, pavilions, historic temples and religious structures, the ruins and archaeological heritage, the streets and streetscapes and clock tower, the community structures and old residences and the water reservoirs). Water is important to the life and culture of Rajasthan and has led to rich practices of water harvesting and water storage/conservation reflected in the development of considerable variations in the forms of water structures - Ghats, deep stepped basins, step wells and baories. Amongst Living Cultural heritage, the performing and visual arts including painting and sculpture, folk, tribal art and handicrafts are significant. This unique environment along with the Rajasthan pageantry of colour, festivities and traditional way of life accumulate to become the incredibly rich heritage that is "Udaipur".

2 Aims and objectives

The aim of this study is to develop an appreciation of the historic core along the eastern edge of Lake Pichola in Udaipur, to chart the changes to this context, to draw attention to past patterns and to learn from them in the hope of influencing future developments. The objective is also to understand the forces that have influenced and underpin this development, examine its existing state and highlight key concerns.

3 Methodology

A study was initially undertaken as part of the author's Diploma research dissertation in 1992. However the site was revisited in 2006 and further investigations were carried out subsequently. The study is limited to the historic core along the waterfront and its related structures along the eastern bank of Lake Pichola in Udaipur. Field survey by the author comprised of detailed observations, examination and documentation of its physical aspects, activity patterns and environmental conditions. Text, data, maps and drawings from secondary sources were systematically collected and analysed. An in depth analysis and interpretation of the physical aspects of the historic eastern edge of Lake Pichola was undertaken to understand the overall architectural arrangement and its constituent parts, their uses and meanings in this context and to formulate a critical appraisal of the environment.

4 Findings

4.1 Water and architecture in Udaipur

Giving an account of the procession of Udaipur, Col. James Tod remarked: "A more imposing and exhilarating sight cannot be imagined than the entire population of the city thus assembled for the purpose of rejoicing the countenance of every individual from the Prince to the peasant, dressed in



smiles. Carry the eye to heaven and it rests on a sky without a cloud; below is a magnificent lake, the even surface of blue waters broken by palaces of marbles, whose arched piazzas are seen through the foliage of orange grove plantain and tamarind; while the vision is bounded by noble mountains, their peaks towering over each other and composing an immense amphitheatre” (Sen, [3]). ‘Architecture, through its forms and materials, is the medium that connects or separates people and water’ (Gurjar, [4]). Lake Pichola in Udaipur has been most instrumental in the development of its historic core and indeed the entire city. Historically, the lake and its geographically secluded position provided the most ideal setting for the medieval settlement in terms of natural defence and opportunities to develop itself. The lake makes profound influence on the environment by bringing about favourable changes to the micro-climate in a region where people are faced with low humidity, scorching heat and glare. Magnificent developments along the edge and within the water mass of Lake Pichola comprise of an array of diverse structures/rich collection of monuments and spaces that create a distinctive architectural composition and environment along the lake (Figure 1). The built environment demonstrates effective use of the cooling quality of water. The mirrored surface of the lake reflects its surroundings in the water, increasing its visual scale and prominence. Harmony and coherence in the visual composition of the different elements that together form the lakefront is enhanced due to the reflective properties of the lake.

4.2 Land use

Mixed land-use along the waterfront can be classified as one which includes the palace complex, residential, commercial, religious and institutional uses. Although, the social/political climate of the formative years led to definitive patterns of land use and hierarchies in the built form, they have diluted due to changes over time. However, certain influences still remain.

4.3 Built form

The historic area along Lake Pichola achieves its sense of place through its distinctive organic order, density, vernacular architecture and a built form that is recognizable as a singular entity. Built form in Udaipur is a result of evolution that has been guided by dominant determinants such as its socio-economic hierarchy/structure, political and religious factors, climate, availability of materials and technology (Jain, [1]). The overall form, settlement pattern and the massing of buildings in Udaipur are dominated by its physical attributes and in consonance with the topography and landscape, and ordered by the generative force of its land form and the lake. The built form is also an evidence of additive layering of forms through building work that has taken place over a period of long time bringing together diverse functions and exhibiting distinctive traits/styles (Figure 2). In general, the form of the city is somewhat rectilinear and is set on the eastern slope of the hill, with the palace at the crown of the hill.





Figure 2: Additive layering of the built form.



Pavilions along the lake with the palace in the backdrop



Temples along the lake



Haveli at Gangaur Ghat



Gangaur Ghat

Figure 3: Lake Façade and its elements.

Large scale primary religious and administrative institutions operate at the level of the entire settlement. They stand out as main elements against the pattern of the fabric and add structure to the area. The city palace and the lake palace, icons of the city, are a representation of the power and grandeur of the bygone era. Commanding the city skyline by occupying the most secure and highest location in the city, and the palace and the fort symbolize the dominant position of the royal seat, and reflect the feudal social structure of the medieval state. The dominance of the palace complex is accentuated by its scale at the southern edge

of the ghats. The scale is however, broken down with the appearance of temple shikharas and compact clustering and terraces of dwellings within the residential area towards the north (Figure 1).

The palace complex and its massive walls, havelis, temples, ghats and gates, pavilions and dwellings descend down to the water and lend a powerful linear edge to the lake on its eastern edge (Figure 3). The waterfront is also lined with a number of other structures in the form of an isolated cenotaph and domed pavilions known as chattries that functioned as memorials in immediate proximity with the water. Besides, there are pavilions and palaces such as 'Jagmandir' and 'Jagnivas' that are sited within the lake. Behind this edge lies a linear yet fluid clustered organisation of dwellings along narrow streets within the dense residential fabric.

4.4 Façade

Continuous façade is formed along the river due to the positioning of various institutions, the relationship between them and the retaining wall. The elevation is dominated by the towering palace and fort walls but is also characterised by temple shikharas and domes over chattries and pavilions which are intricately carved with geometrical and floral patterns. The most prevalent feature in the elevations of all buildings is the cusped or peacock arch supported by balustraded and fluted columns which is characteristic of Rajput decoration. Extensive use of arched elements in the doorways and windows, use of sandstone and whitewashed walls in all the havelis, residential properties and temples help to achieve a visual coherence along the water's edge. Other repetitive elements such as recessed/projecting windows, colonnades and arcades, overhangs, brackets and balconies have been extensively deployed to provide visual link to the lake and benefit from the micro-climate it creates (Figure 3). Windows are used as decorative features particularly when used with screens to offer privacy and reduce solar gain and glare.

4.5 Streets and squares

The street pattern was laid out to provide accessibility and create natural drainage on the hilly terrain. Depending on the usage, a hierarchy in the street pattern is observed in the area. The principle streets identified were bazaar streets with higher concentration of activities that were large in scale, connecting important nodes, punctuated by small and large chowks and landmarks, and led from city gates and culminated at the palace. The secondary streets are those that contain commercial as well as residential uses and the tertiary streets are those that lead to houses. The linear form of the street is generated by the compact terraced form of houses. Routes between nodes that are marked with prominent structures are mainly lined with shops that might be of interest to the tourists granting it a particular identity of a tourist quarter. The eastern edge of Lake Pichhola is approached via some main arteries, a series of secondary and tertiary streets and from the palace complex. The dense built mass is made porous by narrow winding streets and squares (chowks) playing a powerful role



in the visual structure of the area and providing relief to the compact urban form (Naik, [2]). Chowks or nodes are identified by important structures, their varying scales, and the activities they support. Engendering a strong sense of community and identity, individual houses of a particular community come together to form narrow streets and at regular intervals these streets meet to form a chowk within the residential quarter. These chowks and cul-de-sacs are extremely private spaces shared only by houses within the community.



Figure 4: Havelis converted into hotels.



Figure 5: Residences with shops on the ground floor.



Figure 6: Gangaur ghat activities.

4.6 Activities

Emergence of the palace dictated activities in the past that were of political and administrative nature. Pavilions adhering and within the watermass were later built for recreational purposes by the royals and hosted cultural performances, religious festivals and celebrations. Over time activities in the area have changed considerably as now the palace complex and the lake with its floating structures serve to be the main tourist attractions for the city. With the advent of tourism, many of the palaces, havelis and residential properties in the area have been converted into hotels (Figure 4). Ground floors in residential properties have been converted into shops that sell tourist related items (Figure 5). The local community continues to use water for daily utilitarian purposes at the ghats (Figure 6). Besides, bazaars and festivals are also celebrated on the ghats.

4.7 Existing state

Udaipur is a classic example of an Indian city where long decline of the waterfront environment, historic fabric and surviving artifacts is evident. This is due to several centuries of continued abuse and decay, lack of awareness/respect amongst the local community and tourists, developmental pressures, and inappropriate management of intense tourism related, religious and domestic activities. Currently, this historic precinct is under alarming pressure and if this trend were to continue, the problems will intensify manifold causing serious threat to this valuable environment, its urban spaces and exquisite edifices.

This land-water interface at Lake Pichola is one of the most important architectural assets of the city; it contributes to the image of the city, it forms a backbone to the community and is the primary economy and activity generator for the city. With the advent of tourism, commercial activities have penetrated into the historic core. It is evident that adaptive reuse of buildings of merits and consequent investment in them has generated revenue and resulted in upkeep of properties. However, within the residential district, this change in use is fast altering the character of the streets and its traditional pattern of lifestyle.

INTACH have undertaken listing and documentation of important heritage sites and monuments in and around Udaipur on the same guidelines as those of UNESCO. Important historic structures are already being conserved. However, these do not include other buildings or precincts of special cultural, traditional or socio-economic significance that are also worthy of preservation. Buildings, which are not of particular religious or historic relevance, have been ignored by the local community as well as authorities and stand in poor condition as a consequence of continued neglect. Building surfaces have not been maintained and are vulnerable to vandalism. Decorative elements of the facade have been damaged and covered with posters and graffiti, causing further clutter (Figure 7). Large scale hoardings and paintings are displayed on/across monuments, rocks, trees, parks. Due to lack of resources, living conditions of many residential properties owned and inhabited by poor families have not been maintained and are in various states of deterioration causing dilapidation (Figure 7).



Figure 7: Visually decaying - Hoardings, graffiti, electric poles and open drains.

Growth in tourism has led to tremendous increase in vehicular traffic causing air and noise pollution, and severe congestion along the access routes that were primarily designed for pedestrian use. Streets are also congested with stray animals and encroaching shopkeepers and hawkers. The area suffers from poor infrastructure and marginal inward investment resulting in lack of amenities, inadequate and highly unhygienic utility services and absence of an appropriate disposal system causing significant amount of litter and presenting a visually

decaying picture (Figure 7). The general quality of the environment is very poor due to obnoxious smells from open drains and wastes of all sorts. There is a tremendous growth in motorized vehicle, physical and visual congestion. Awareness campaigns about environmental issues, sanitation and health have been conducted for the local community in the recent past. However they have failed to bring about change in peoples' attitudes.

It is evident that several new insertions and unlawful/unsafe additions and alterations that are not sympathetic to the scale and traditional vocabulary of the area have been built over the years. Ruins have been built over or used as a source of building materials reflecting lack of respect for the past and vision for the future. Views to historic monuments have been obscured by new structures, electric poles and wires. High rise concrete structures are jostling incongruously against old lime-mortar havelis and buildings (Figure 8).



Figure 8: Unsympathetic new insertions.

Some examples successfully incorporate the traditional vocabulary of architecture in the new buildings; evident particularly in large hotels. There is evidence of use of cusped arches, balconies and whitewashed walls in new buildings in an attempt to amalgamate with the existing built context. However, the approaches adopted in the residential buildings are mere attempts at mimicking building elevations without a deeper understanding of the building type, form, orientation, internal organisation of spaces, and its implications on neighbouring properties or indeed the already stretched infrastructure. The local authority has failed to monitor such adhoc and haphazard developments.

5 Conclusions

Udaipur, a historic city, appears to have survived pressures of socio-economic, commercial and industrial growth and today lends itself as a very important tourist city with a peculiar charm, extensive history, and outstanding architectural and cultural heritage. The magnificent developments along the edge

and within the water mass of Lake Pichola in Udaipur comprise of an array of diverse structures and spaces that create a distinctive architectural composition and environment along the lake.

Built form in Udaipur is a result of evolution that has been guided by governing determinants such as its socio-economic hierarchy/structure and cultural context, political and religious factors, climate, availability of materials and technology. Its incremental development, overall form, settlement pattern and massing are dominated by its physical attributes and in consonance with the topography and landscape, and ordered by the generative force of its land form and the lake. 'A strong relationship with nature persists in the manner in which it structures the settlement, the linkage pattern, the positioning of institutions, religion and rituals. The unified image of the city is in effect a conglomerate of several smaller entities that are constantly changing and adapting to the needs of the time and place' (Sen, [3]). The historic core, however, is subject to severe developmental and environmental pressures as a result of intense tourism related and commercial activities, unwarranted and haphazard building activities, continuous neglect of residential properties, some of the historic fabric and surviving artefacts, and poor infrastructure. If this trend were to continue, the problems will intensify manifold causing serious threat to this valuable environment, its urban spaces and exquisite edifices.

Gospodini, [5] says that 'in the era of globalization, the relationship between urban economy and urban design, as established through out history of urban forms, is getting reversed: while for centuries the quality of urban environment has been an outcome of economic growth of cities, nowadays the quality of urban space has become prerequisite for economic development of cities; and urban design is consciously used as a means of enhancing the development prospects of cities'. Given this argument, preservation of this waterfront, which plays a decisive role in solving critical urban, social and economic problems in this city, is vital. The strategy must embrace preservation of existing traditions, conservation of historic structures, sensitive and participatory planning and design, continued adaptive reuse of buildings, considerable improvement to infrastructure, appropriate re-organization of street activities, and management of building activity in the area.

References

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