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RESEARCH PAPER

Analytical Study of Built Environment in Historic and Contemporary Housing Societies of Lahore

[1]Farah Jamil [2]Dr. Saima Gulzar * [3] M. Ilyas Malik

1. Assistant Professor, School of Architecture and Planning, University of Management and Technology Lahore, Punjab, Pakistan
2. Professor, School of Architecture and Planning, University of Management and Technology Lahore, Pakistan
3. Assistant Professor, School of Architecture and Planning, University of Management and Technology, Lahore, Punjab, Pakistan

| ***Corresponding Author** | saima.gulzar@umt.edu.pk |

ABSTRACT

The research is focused on the transformed built environment based on the typologies of historic and modern spatial layouts. Cities have always been termed as constantly evolving physical areas that constitute a characteristic environment through their ordered spatial configuration. This research was carried out following the descriptive, comparative and analytical approach. The characteristic of the traditional historic cities is embedded in the cultural routes which are based on their social system. The fundamental principle of spatial configuration is unity, simplicity and functionality of the space according to the interdependence among community. The modern developments followed new patterns in city planning to accommodate the large population with communal utilities and public services. Modern attitude gave emphasis to the material considerations and focuses on the individualism, commercialism in addition to functionalism that disconnects the communities. The difference in the spatial configuration of the selected historic and contemporary societies of Lahore concluded the adoption of modern concepts in the contemporary societies.

| **KEYWORDS** | Built Environment, Contemporary, Historic, Housing, Pattern |

Introduction:

Built environment of the residential area is reflective of the hidden design layouts philosophy. The spatial planning and layouts depends on number of factors including social, economic, political and environmental (Nadeem and Hameed, 2005). All these factors were involved in shaping the specific layouts from historic times. Therefore, the observed shift in these major factors has totally transformed the built environment of the modern societies (Ezdi, 2007).

The paradigm shift in social and cultural norms is one of the major contributor in the reshaping of the layouts from interdependence to disconnect. The simplicity of the layouts is replaced with the complexity in spatial layouts that needs to be understood with the other factors of economic and political in nature (Zeynep, 1999). These all parameters shifted the spatial layouts that formed the overcrowded built environments with ecological instability.

The modern housing society's layouts are more commercialized due to scarcity of land and to achieve maximum economic benefits. Further to that nuclear family system, the growing trend transformed the whole culture of these societies with the concept of individualism. This is also reflected in the deserted open spaces with heaps of garbage etc.

The main focus of the study is to analyze the built environment of historic and the modern spatial layouts to understand the existing scenario of disappearance of cultural routes and the disconnection at the community level.

Literature Review

Cultural and social beliefs based on religions contribute towards the formation of the special character of the cities in the past (Abu-Lughod and Janet, 1987). Lapidus reported that historic cities represents special social, cultural and historical identity that provides the basis of development of a community distinct from others (Lapidus, 1973). Urban pattern of historic cities usually spanned from the Atlantic to the Indian sub-continent. In city planning there are typical architectural features by which the city is distinguished. According to Ibrahim the most important feature is the placement of religious centre and other important features were the commercial and administrative buildings which were usually made around the central symbol of the city i.e. the grand mosque (Bonine, 1987). From the commercial center, streets and road networks spread out to have divisions of the city into quarters for the inhabitants to live in peaceful and secured area, where dead-ends and streets were blocked by gates. Fakhimzade inferred that this privatization of space forced the pattern of the city to segregate into private space and public space (Fakhimzade et. al, 2016).

Saoud reported that the golden era was during thirteenth and fourteenth century, it began to decline in the nineteenth century because of the industrial revolution and many of the historic cities experienced wide spread disease and famine followed by the transformation in their social and economic life. Even the architecture of the cities was also affected as shown in figure 1, 2 and 3.They eventually lost their original architectural character and cultural identity (Fück, 1955). The evolution of the built environment with the socio-cultural change also travelled to our part of the world and transformed the concepts accordingly.
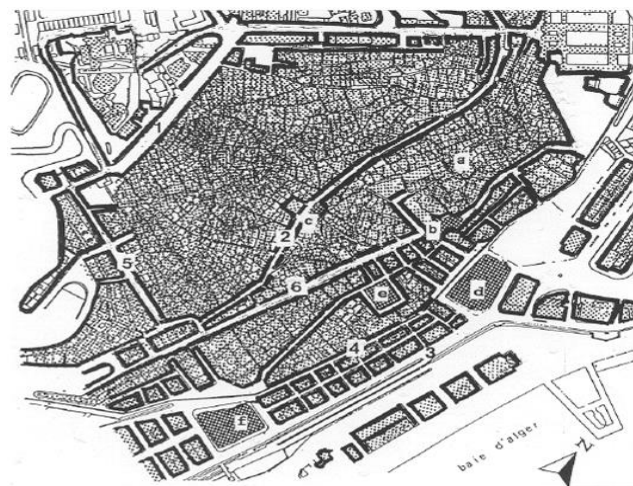

Figure 1: Traditional historic city of Algiers,
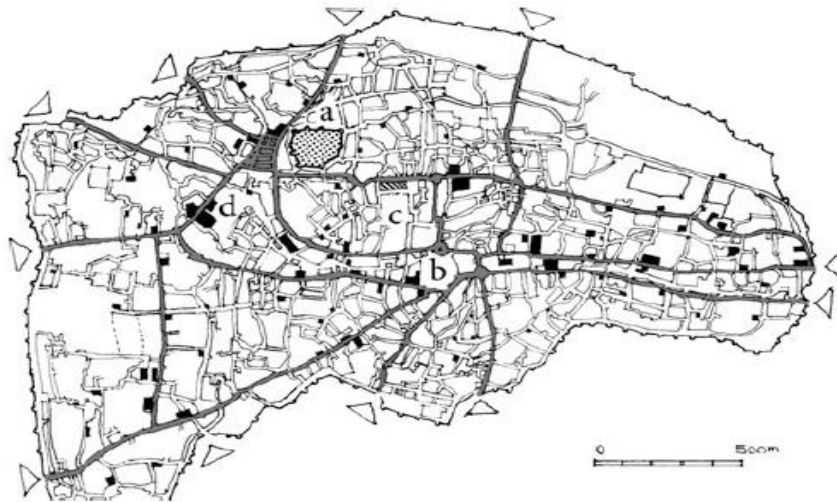https://muslimheritage.com/uploads/Islamic%20City.pdf

Figure 2: Traditional Old city of Bukhara. Source: Urban Structure in Islamic Territories by Mahmoud Tavassoli
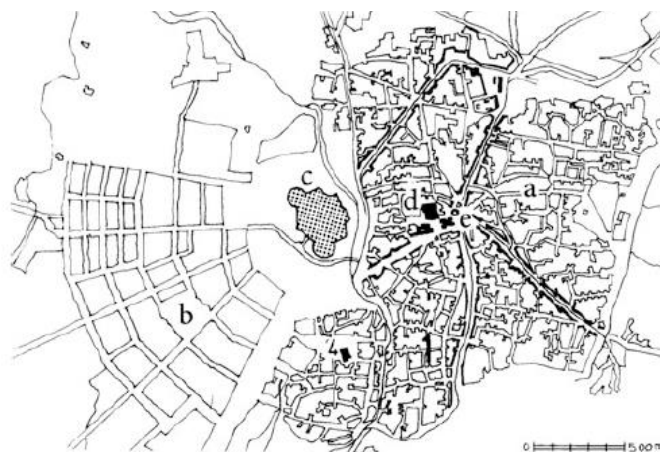

Figure 3: Traditional old city of Samarkand. Source: Urban Structure in Islamic Territories by Mahmoud Tavassoli

Material and Methods

This research was carried out following the descriptive, comparative and analytical approach. The descriptive part has been fulfilled with a study of literature through libraries, documents and books related to research topic of neighborhoods, neighborhood centers as well as brief review on the background of neighborhoods in an historic city and the world. The common design models involved in defining some concepts of global neighborhoods were also studied for comprehensive and comparative analysis. Three residential neighborhoods of Lahore were selected in which primary focus was to examine the physical or planning factors contributing to the society development, quality of life and the respective built environment.

As stated by Baqir Lahore a cultural city of Punjab has a long history of development and is representative of both historic and modern neighborhoods with the passage of time (Fück, 1955). Lahore comprised of old historic part (Walled City) and new

modern part (Extensions to Walled City) that has developed with the passage of time in the south and south east directions as in McGee as shown in figure 4 (Gharaybeh, 2015) . Walled city is one of the oldest societies of Lahore built on the elevated ground. It was surrounded by 9 meters high wall with thirteen gates as shown in figure 5. WAPDA Town Cooperative Housing Society, an urban gated community comes in the new modern part that forms extensions to the old historic core of Lahore as shown in figure 6. NESPAK Cooperative Housing Society is also one of the gated societies that followed modern pattern of urban planning. According to Nadeem these societies were developed in the era of 1981-2000 in which maximum societies from the Lahore Development Authority (LDA) were sanctioned to fulfill the housing needs for the increase in population as shown in fig 7 (Nadeem & Hameed, 2005).
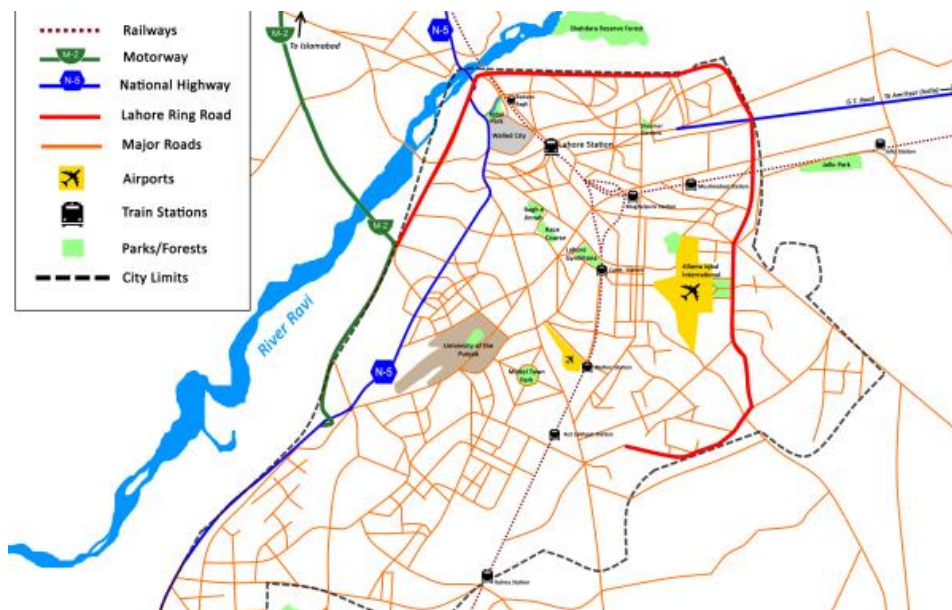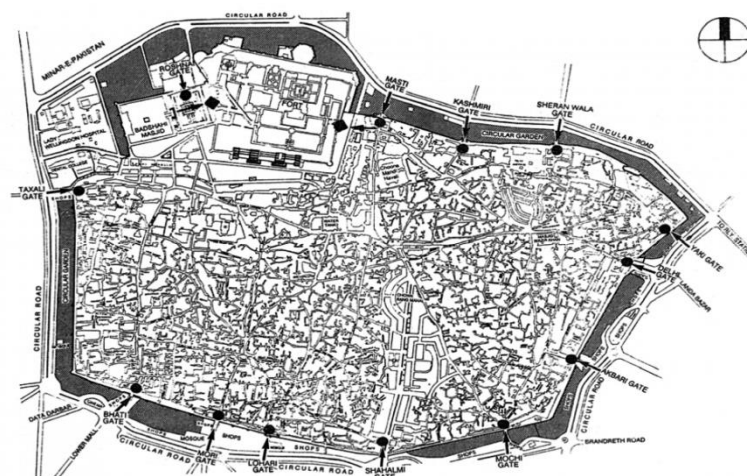

Figure 4: Map of Lahore Source: http://travelsmaps.com/map-of-lahore.html

Figure 5: Map of Walled city Lahore, Source: https://www.google.com.pk/Lahore map
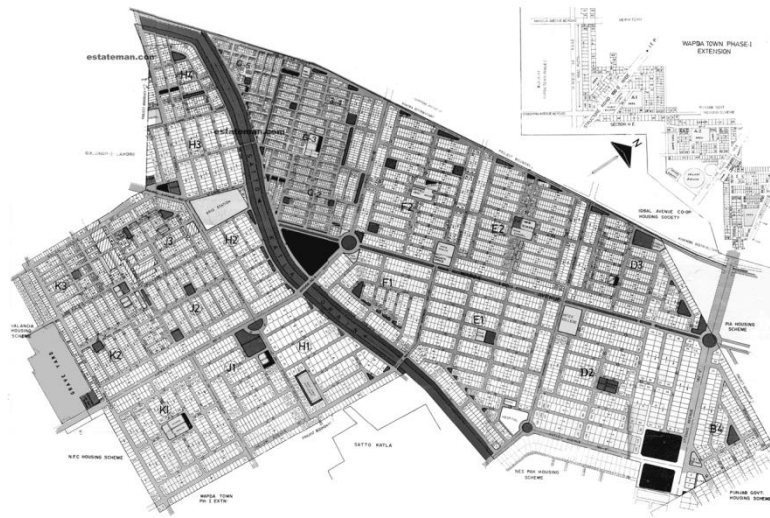
Figure 6: Map of Wapda Town cooperative housing society, Wapda town society office
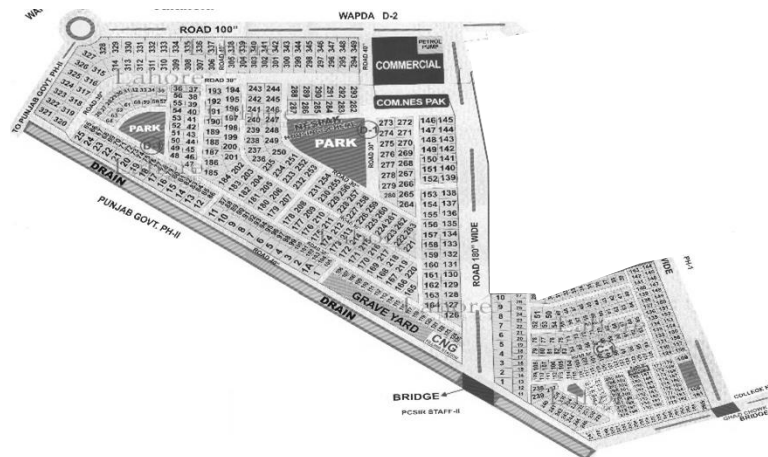

Figure 7: Map of Nespak employees' cooperative housing society, NECHS society office

Results and Discussions

The physical and morphological characteristics of the Historic Walled City and the two contemporary Housing Societies, WAPDA TOWN (WECHS) and NESPAK HOUSING SOCIETY (NECHS) in Lahore were analytically studied to study the evolution of their built environment. The residential district Walled City dates back to Mughal Era and the two contemporary housing neighborhoods were developed 30 years back under Co-operative Housing Societies Act for the employees of Water and Power Development Authority (WAPDA) and National Engineering Services of Pakistan (NESPAK) in the south eastern part of Lahore.

Walled City being located on a hillock with controlled gates and boundary walls all around had role of a citadel. It enjoyed proximity of River Ravi, Lahore Fort and the grand Badshahi Mosque. The green belt all around the city contributed to maintain the ecological balance of the city's environment. Whereas the WAPDA Town and NECHS are located on flat land and a natural sewage and surface water drain passes through these settlements. The natural features have caused the segmented settlements pattern.

The Walled City shows the typical features in city's planning concept where mosque placement at a central location was the main feature (Gharaybeh, 2015). Public spaces separating the markets/shopping areas have easy accessibility adjacent to mosque although through narrow approaches. Generally mosque exists on axis of connections and center of activities. Masjid Wazir Khan is typical example in Walled City representing this concept of planning. However the contemporary planned societies lack such characteristics. Mosques are placed in a scattered manner in different blocks as per requirement and as per different sects. Mosques are not the major nodes or landmarks in these societies/settlements. There is no shopping market adjacent to mosques in these societies but these are provided separately along main roads or in designated areas in different blocks as shown in figure 8.

Common features of historic culture are found in the Walled City neighborhood. It has high density because of extended family units within the same land area. Gender privacy is also one of the main characteristics of these cities. The houses are built on central courtyard concepts. There are sub-neighborhoods or mohallas based on ethnicity, race, religious sects or castes and people prefer to settle in their related groups. This grouping emerged from close association, strong ties and informal alliances between groups of people who have common feeling and attachment for their neighbors and neighborhood.
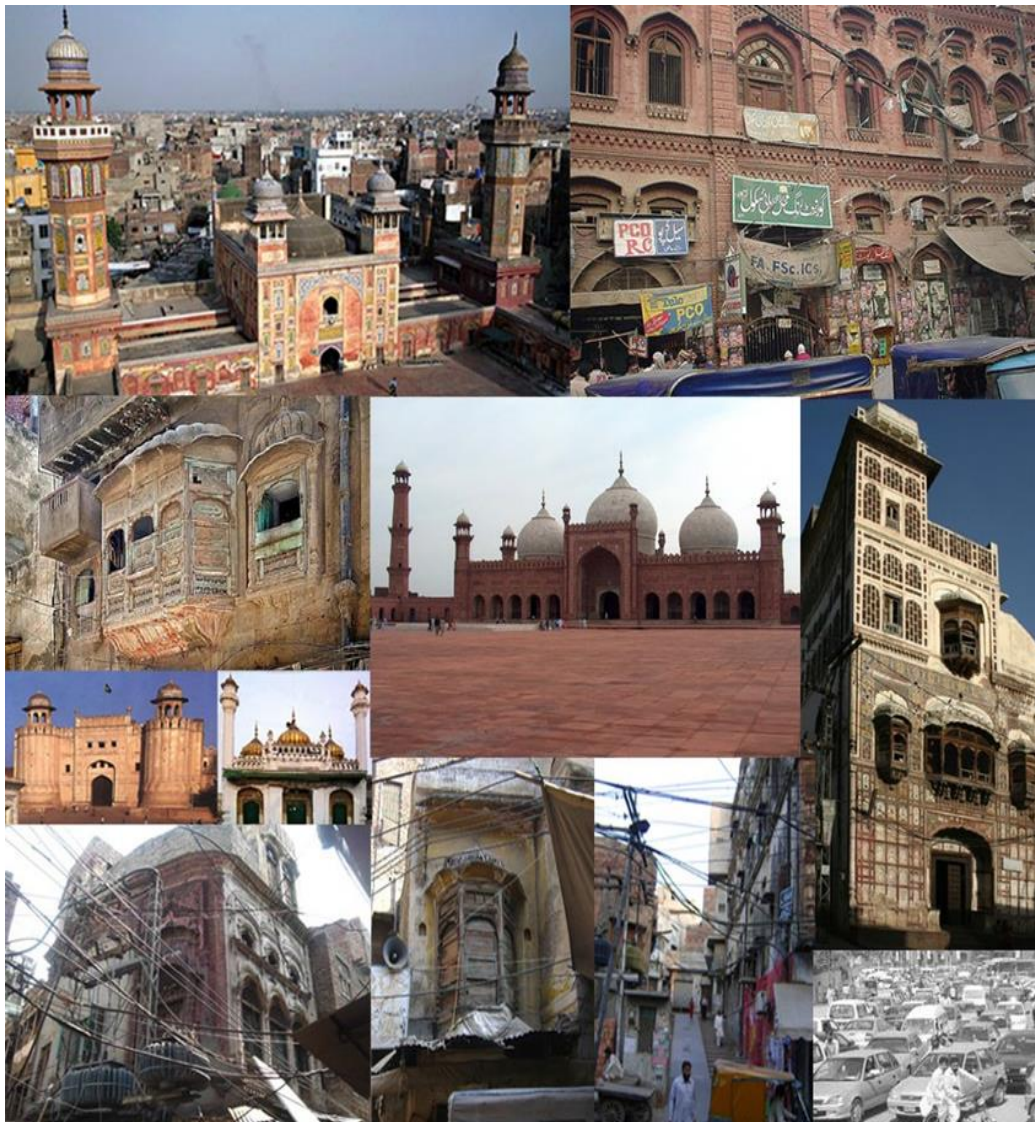

Figure 8: Built environment of Walled City Lahore

Figure 9: Built environment of WAPDA Town cooperative housing society

In WAPDA Town and NECHS being the modern societies, an opposite situation was observed. There is low density because of single family units. Concept of privacy is also not significant in private or public spaces. Co-gathering is commonly found in various activities of life. The houses have compact designs with open spaces in front and rear sides. In these contemporary neighborhoods, commonalities among resident's socio cultural values have lost their importance and the grouping in residential neighborhoods is found in their financial ability and/or occupational or financial status. In these societies, due to lack of deep commonalities among residents, sense of place and belonging and social cohesion have been so poor that guarantee for long residency in same neighborhood does not exist. There is no agglomeration on the basis of ethnicity, race, religion and religious sects and caste. In fact these are settlements for immigrants from all over the country. In terms of social cohesion and close association, in most of the cases people are not aware about the whereabouts of their next door neighbors. There is lack of social interaction even between blocks of different categories of plots or house sizes as shown in figure 9 and figure 10.

However in Walled city we found formal administration system as per the government's administrative laws. Similarly the contemporary neighborhoods have formal administration along with local management committees elected/formed under Cooperative Housing Societies Act.

Historic cities in the past were mainly having commercial activities at limited level adjacent to mosques (Bonine, 1987). The Lahore Walled city shows similar example with a hierarchy that small shops are provided in squares serving the daily needs but specialized commercial activities are concentrated in bigger bazaars. These bazaars are named

accordingly as per the activity or items sold there like Shah Almi Bazar (general items) Akbari Mandi Bazaar (grocery items), Azam Cloth Market and Sua Bazar (gold jewellery) . These Bazars serve the needs of whole city and not only the neighborhoods are these located. The commercial areas in the modern societies have been provided at designated spaces and in quantity as per LDA byelaws. These commercial spaces are scattered/fragmented block wise. As these designated commercial areas became insufficient with passage of time to serve the needs of these neighborhoods, residential buildings along the main roads started converting into commercial use. It had easy access for the passer-byes and a profitable option in terms of rent and value increase of the property for the owners of plots/residents along the main roads. But this phenomenon of land use change has destructed the built environment of these communities. It has created disturbance in the traffic flow, caused traffic jams due to on road parking and made pedestrian movement unsafe. It has increased air and noise pollution in residential zones. The business activities in such areas are mixed up and there are no specialized business activities on a particular road as we found in Walled City. A restaurant can be seen next to a mechanic's workshop and a boutique next to a milk shop which shows a haphazard, uncontrolled development based on personal need and greed.

The Lahore Walled city was planned on a concept as a gated community with boundary wall all around and controlled entry/exit through 13 gates which were closed at night or when required for security against the external attacks. It had an introvert planning providing no trespassing for linking to other settlements. WAPDA and NECHS neighborhoods have extrovert planning and allow trespassing to adjacent neighborhoods of NFC and Valencia Towns.

A major road (180 feet Right of Way) constructed as per LDA structure plan after establishment of these societies has created barriers between different blocks of these societies. That has reduced the pedestrian movement and social cohesion and association among the residents of different blocks. Planning flaws are obvious in this regard because futuristic issues were not addressed at earlier stage. However these societies can be called semi- gated communities because of the security control at properly built gates and defined boundaries with adjacent neighborhoods.

Figure 10: Built environment of Nespak Housing Society (NECHS)

In Lahore Walled city like many other historical Cities, there are narrow and winding streets meant for pedestrian movement only. Access for animal drawn vehicles is available to limited areas mainly squares and public spaces. Walking distances are reduced due to interconnected streets all over the area. This provides an opportunity of face to face contact with people around and an awareness of the surrounding situation to the residents. A hierarchy of streets exists in the form of main, secondary streets and cul-de-sacs to access residential quarters and public spaces. The road/street patterns of modern neighborhoods are the outcome of the arrival of automobiles which has brought fundamental changes in the shape of urban spaces and planning concepts. WAPDA Town and NECHS have linear pattern of roads with minimum width of 30 to 40 ft Right of Way. Streets are laid in grid iron form with cross and T- junctions to ease out the motorized traffic for access to public and residential areas. Pedestrian movement in these Societies has minimized due to longer distances and lack of footpaths along road sides.

The Architectural vocabulary of the Walled City, Lahore represents the traditional elements, social attitude and weather conditions of the region. Central courtyards, narrow windows, carved door panels and balconies are visible features. In contrast the WAPDA town and NECHS represent mostly the western architectural style in residential as well as public buildings. Use of big glass windows, industrial materials instead of natural/organic materials is popular. To beat the invited heat inside the buildings due to more glazing, mechanical methods of environmental control have been used. Architectural style of buildings has no harmony as seen in Walled city.

Certain facilities like playgrounds, cemeteries, major commercial areas are provided outside the boundary wall of walled city which is surrounded by a wide vehicular road. Whereas all facilities including cemeteries, parks and playgrounds, water supply system and commercial facilities are provided within the societies in the modern neighborhoods.

Conclusions

The spatial configuration of Historic Walled City of Lahore followed the fundamental principles of unity, simplicity and functionalism generated through the traditional perspective like in historic cities all around the globe. The modern spatial configurations are mainly generated from socio-economic principles rather than socio-cultural perspective like in historic Walled City of Lahore. The spatial configuration transformation of built environment from historic to modern societies has changed the overall character of the communities to meet the challenges of the modern world. This rapid evolution of the built environment is generating the common model around the world. The novelty of the individual society developed over the years based on their own cultural and traditional is being lost. This phenomenon in Pakistan has created the present scenario of the search for the architectural identity.

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