TRANSFORMATION OF URBAN STREETSCAPE
CASE OF MALLESHWARAM, BENGALURU

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ABSTRACT

Urban streetscape can be defined as the collective appearance of all buildings, gardens, pedestrian paths and landscaped features along a street. The aim of this research is to study the transformation of the urban streetscape in Malleshwaram. The main objectives are to understand the various building elements in the local context of Malleshwaram in Bengaluru and to analyse the different building typologies on 15th Cross Road, 4th Temple Street and Sampige Road in Malleshwaram. Buildings on this street have undergone a transformation in terms of façade treatment, scale, material usage, form and typologies over the last 3 decades. The traditional streetscape has given way to a blend of both old and modern buildings. Here, the local architectural features that have upheld the identity of the neighbourhood are also getting deployed.

Keywords: *Urban Streetscape, Transformation, Building Typology, Facades*

1. INTRODUCTION

'Streetscape' refers to urban roadway design and conditions which impact the street users and the residences. It is the important factors that help in representing the city's culture globally. For any city, the streets are a reflection of its cultural and traditional values (Gupta 2021). Streetscaping is the decisive factor in a city's progress. Components of urban streetscapes are sidewalks, street corners, trees and landscape strips, planters, benches, lighting, trash receptacles, signage, public art, residences, etc. (Rehan 2013).

This study will show the residences in the streetscape and their heights, façades and materials. Globalization and urbanization resulted in public space being continuously transformed. This process of transformation develops a continuous change in perception and socio-cultural meanings to public spaces like streets. Political, economic and infrastructure changes have led to the transformation of the built forms and public spaces like streetscapes (Khatavkar & Chinappa, 2021).

The paper shows the study of the transformation of the urban streetscape in Malleshwaram. The main objective was to understand the various building elements in Bengaluru's local context, that is, in Malleshwaram and analyse the different building typologies at 15th Cross Road, 4th Temple Street and Sampige Road in Malleshwaram. Different design elements in the buildings are identified and analysed to examine the reasons behind the transformation.

Malleshwaram which is in the north-western part of Bangalore, is one of the oldest neighborhoods in the city. The name 'Malleshwaram' has been taken from the Kadu Malleshwara temple located in the area which is built in Dravidian style. Malleshwaram was built at the foothills of Kempegowda Watch Tower and Palace Guttahalli. Initially forest land, it was transformed into a suburb when the plague hit Bangalore in 1889.

The neighbourhood is characterized by streets laid in a grid iron pattern with ten main roads running north-south and seventeen crossroads running east-west. Malleshwaram was first imparted into eight blocks based on caste (Nair, J., 2018, p.xxvi). The areas selected for the study are Sampige Road and 15th Cross Road, 4th Temple Street which have residential, commercial and mixed-use buildings (see fig. 1).

Figure 1: Plan of Selected study areas in Malleswaram
(Source : Authors)

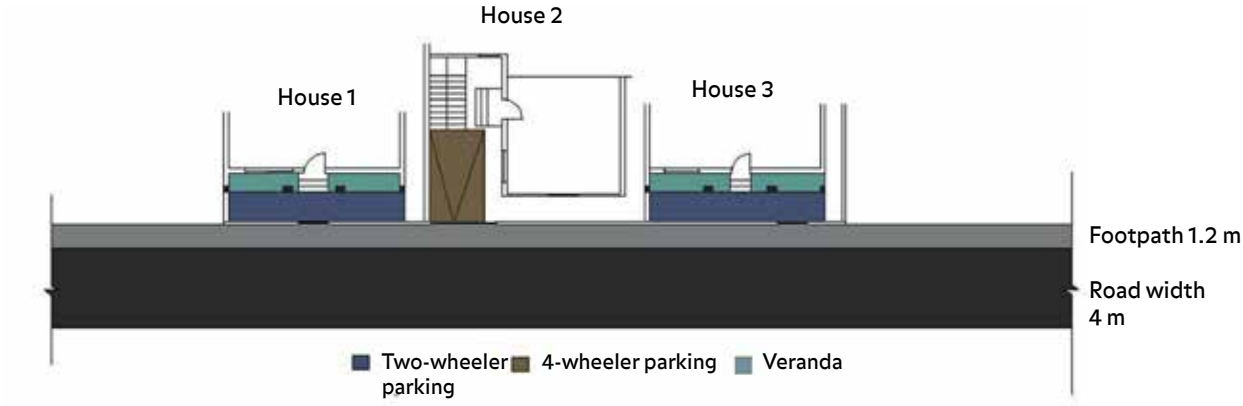

Figure 2: Edge condition- Malleswaram streetscape in the 1980s
(Source : Authors)

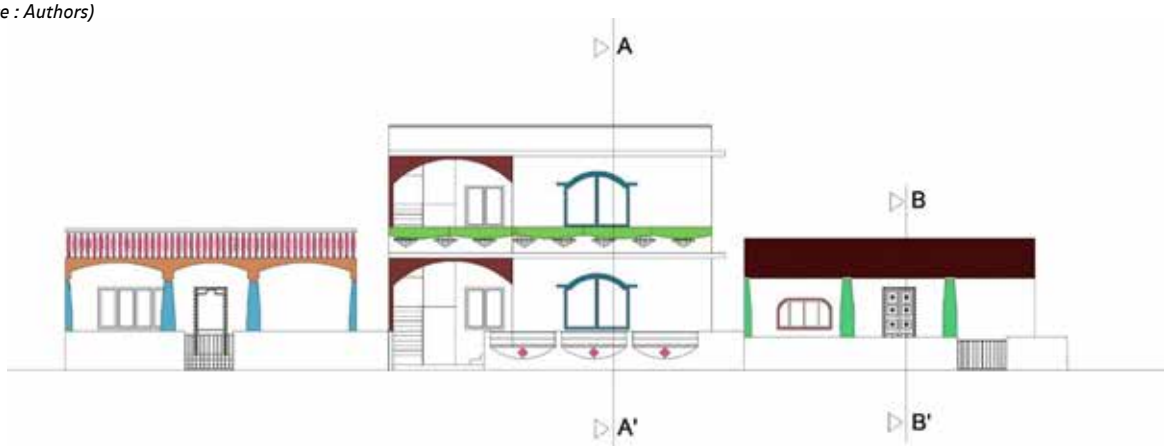

Figure 3: Typical elevation- Malleswaram streetscape in 1980s
(Source : Authors)

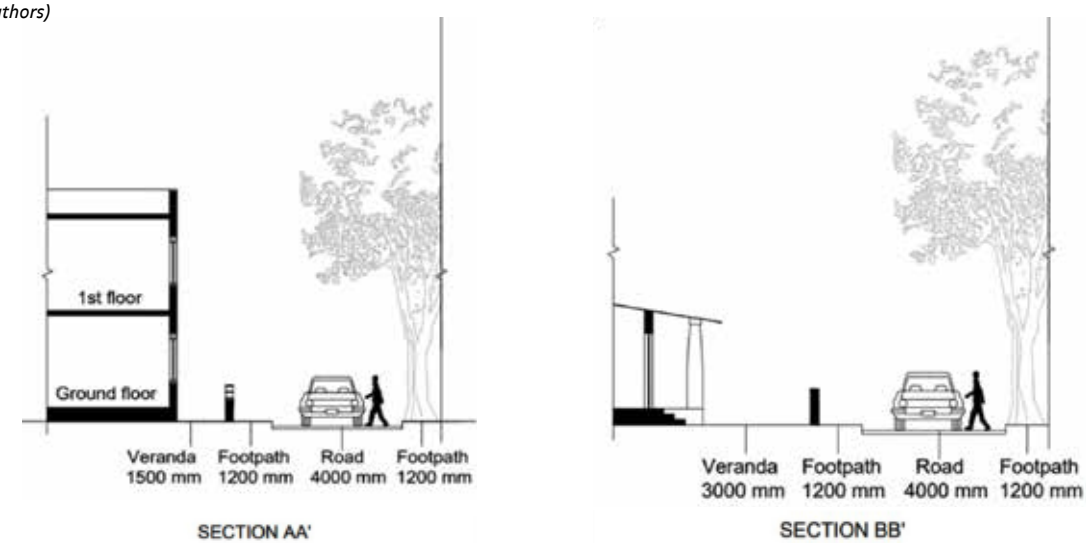

Figure 4: Typical street section- Malleswaram in 1980s
(Source : Authors)

4.2.1 RECOUNTING MALLESHWARAM STREETSCAPE IN THE 1980s

In the 1980s, Malleswaram was a neighbourhood with large bungalows built in Art Deco or Late Modernist styles, set on large plots. A combination of survey methods including interviews with residents and survey of old photographs was carried out to understand the streetscape that existed in the neighbourhood in the 1980s (See fig. 2).

Figure 3 shows a typical elevation of the houses of the 1980s and figure 4 shows the street section of the Malleswaram's houses. It has timber doors and windows with ornamented shutters and frames and various kinds of parapet walls. Mangalore tile roofing was extensively used. Buildings were usually only single-storeyed. The important features in the streetscape of the past have been noted in Table 1.

4.2.2 MALLESHWARAM IN 2021

A survey of selected streets in Malleswaram was carried out to understand the transformed streetscape in the neighbourhood. Stretch A (Sampige Rd.) consists of 15 houses, where each one is displaying a distinct style and timestamp through its facade (see figs. 5 & 6). This stretch has only two modern buildings constructed

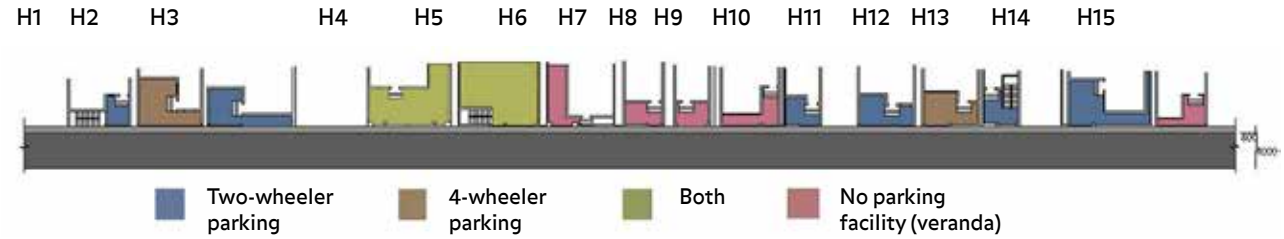

Figure 5: Edge condition- Sampige Road
(Source : Authors)

Figure 6: Street elevation- Sampige Road
(Source : Authors)

Figure 7: Section - Sampige Road
(Source : Authors)

recently (houses 5 & 10). Stretch B (15th Cross Road and 4th Temple Street) is a combination of commercial and mixed use buildings which were built with different age gap. Out of four buildings, two are commercial and the other two are mixed use buildings. This stretch has different heights of buildings ranging from G+2 to G+3.

Figure 7 shows the section through Samipge Road with levels of the street. While old buildings have normal casement windows, trapezoidal roof projection and RCC balcony railings, recently constructed buildings have corner windows, glass panel railings for balconies and box chajjas. Older buildings are characterized by arched porches and arched windows. Newly constructed buildings bear glass facades and often serve as backdrops for large advertisement panels (see fig 8 and 9).

The analysis of street sections shows that the building form and ground coverage have transformed to acknowledge the rising land value in the neighbourhood. Close to 100% ground coverage with little or no setbacks seems to have become the norm in direct violation of the bye-laws. Most of the buildings cater to mixed-use with commercial usage such as shops, restaurants and offices on the ground floor. Table 2 lists the characteristics of building facades along with the building age.

COMPARISION STUDY

Before the 1980s, Malleshwaram streets consisted of houses which were mostly single-storeyed with pitched roofs. Doors and windows were normally made of wood. Materials used for construction were mud bricks, stone, clay and other naturally available materials. Today, a variety of textured stones, brick, cement and glass are used for construction. As we walk through Malleshwaram's streets, we can see buildings with glass walls and stone-clad buildings. People started using the ground floors as parking spaces to accommodate their automobiles according to their needs. They also started to explore new construction techniques which reduced the construction time. The height of the building is also taller compared to older buildings.

REASONS FOR CHANGE

These changes have come about because of the increases in land prices and population. As the population grew, there was a shortage of land and also due to the increase in land prices, people started to share the land to reduce the cost. They started to build multi-storeyed buildings which solved problems like cost and increased population. As Malleshwaram is in the city's centre, malls and commercial buildings evolved with transportation facilities. As Malleshwaram got

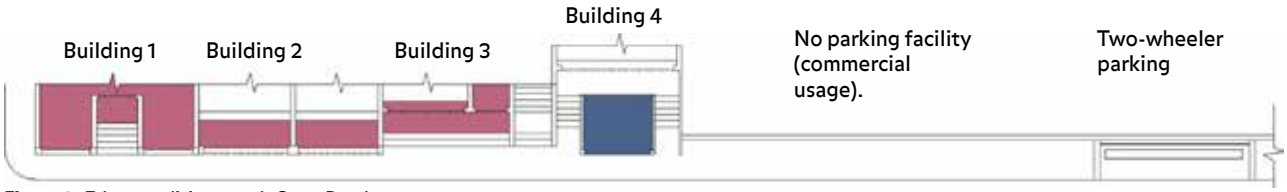

Figure 8: Edge condition-- 15th Cross Road
(Source : Authors)

Figure 9: Street elevation- 15th Cross Road
(Source : Authors)

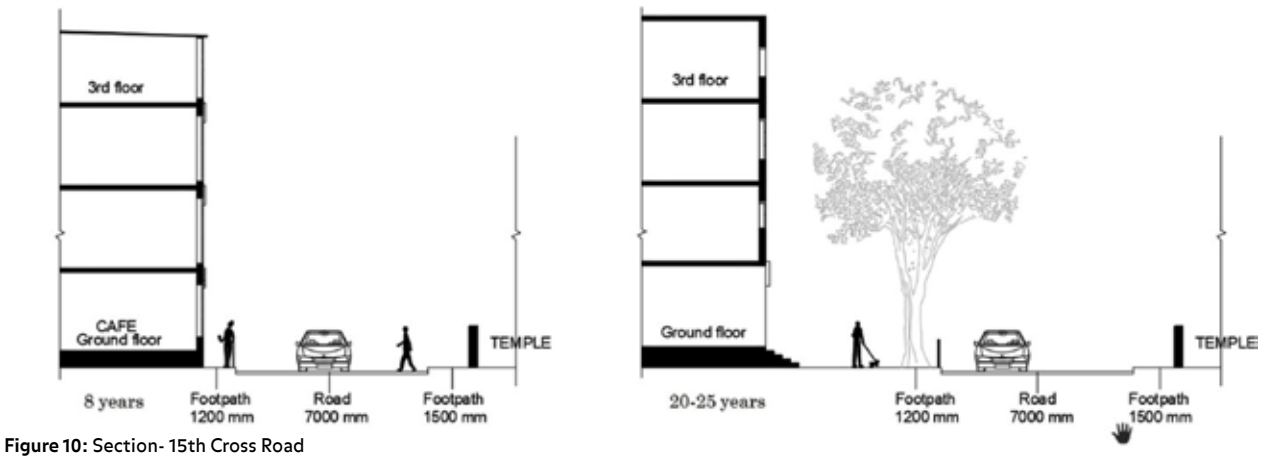

Figure 10: Section- 15th Cross Road
(Source : Authors)

reinvented with malls and restaurants, people started residing there and followed contemporary trends. Some people preferred selling their plots to developers, who started constructing apartments as the demand for land increased.

RECOMMENDATIONS

The guidelines contain the design considerations to avoid the cons of streetscape transformation and also how to improve or beautify the streetscape. Nowadays socializing spaces are barely seen in the residential front yards. In earlier houses, these had provided a space for interaction with the neighbourhood. Providing socializing spaces in the new buildings will be an interesting feature. Residences should consider landscaping areas in their designs. This makes the streetscape more interesting and appealing, along with which, it provides a natural canopy while walking on the sidewalks. Traditional parameters can be used in a modern way. For example: making the courtyard a multipurpose space for gardening and playing area. Also, a courtyard can be altered by creating decks and adding skylights on its roof, adding water features and creating a peaceful atmosphere using plants. To keep the essence of the traditional style, both traditional and contemporary styles can be blended to lend it uniqueness. For instance, this can be done through the use of columns in the interior spaces. An increase in building numbers has led to decrease in trees and plants. Hence, creating green facades, vertical gardening and roof gardens makes the exterior of the building more appealing. Designing wide roads in the future planning of the city can solve traffic problems and also allow the residents to have a comfortable life.

CONCLUSION

It is quite evident from the study that Malleshwaram has lost its identity by transforming from traditional to contemporary as reflected in its changing built forms, material usage, architectural elements and spaces. Streetscape transformation is a common phenomenon in most growing cities. However, in the stages of transformation, certain vital elements of the neighbourhood - such as socio-interactive spaces, greenery, traditional facades and neighbourhood identity are being lost. The onus for creating a contemporary yet lively streetscape for our neighbourhoods rests with present-day architects. Just as construction activity and neighbourhood development mark the progress of the city, sensitivity towards local architectural character and traditional streetscape can be one of the markers for developing our cities in the future.

Table 1: **Streetscape characteristics as recounted by residents in Malleswaram in the 1980s**
(Source: Authors)

No	House	Description
1	*House 1 (Grd. structure)*	Series of segmented arches used in verandahs support by columns and parapet. Floral patterns can be seen on doors.
2	*House 2 (G+1)*	Segmented arch entry, arched window and patterns on parapet and compound wall.
3	*House 3 (Grd. structure)*	Mangalore tile roofing with eaves hanging and floral patterns on door shutters, columns supporting the roof.
Building elements		
1	*Traditional Façade*	Doors: Timber-framed doors with floral patterns on door shutters Windows: Floral patterns on window frames Entry porch: Arched entry porches Material: Timber for doors and windows, concrete for arches, Mangalore clay tiles for roofing.
2	*Height*	Building height was restricted to G+2 structure.
3	*Typology*	Residential, mixed use
4	*Material*	Use of timber, concrete
5	*Roof and Form*	House form was mostly square with courtyard in the centre with pitched roof.

Table 2: **Streetscape characteristics as seen at present in Malleswaram**
(Source: Authors)

No	Building	Description	
1	*Building 1 (G+3)*	Glazing wall for facade and aluminum cladding at plinth level for each floor of the building.	8 years
2	*Building 2 (G+3)*	Projecting window façade for 2nd and 3rd floors. Aluminum cladding at plinth level for each floor of the building.	8 years
3	*Building 3 (G+2)*	Segmental arches; porch for entry of the building at the 3rd floor and segmental arches at the parapet wall; Casement window at second floor.	10-15 years
4	*Building 4 (G+3)*	Pseudo center arched window.	20-25years
Building Elements and Characteristics			
1	*Façade*	Window: casement window Chajja: trapezoidal chajja, rectangular chajja. Roof: flat roof, sloped roof projection.	
2	*Height*	Height of the building goes up to G+3 with flat roof.	
3	*Typology*	Residential, mixed use	
4	*Material*	Use of glass panels for balcony, RCC chajja,RCC-structure.	

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