

Bridging the Discord in Architectural Vocabulary: An Approach towards Urban Sustainability; The Case of Cossipore, Kolkata

Mayukh Sanyal¹, Dr. Deepashree Choudhury²

¹B.Arch. 4th year, PMCA, Odisha

Mail ID – mayukhsanyal2015@gmail.com, m:

²PMCA, Cuttack, Orissa.

Mail ID – ar.deepachoudhury@gmail.com, m:9050137634

BIOGRAPHY OF THE AUTHORS

Mayukh Sanyal is at present an undergraduate student in B.Arch, 4th year, at Piloo Mody College of Architecture, Cuttack, India. The candidate has been a participant in numerous competitions (National and International) and has successfully completed many professional trainings as an intern, which validate his interests over the subject.

Dr. Deepashree Choudhury is an architect, urban designer, educator, and researcher. With many original research publications to credit, her academic and research interests span the wide gamut of architectural and urban design domains; habitat design, urban dynamics, contemporary and past discourses on cities, disaster risk reduction, climate resilience, building, and environmental conservation are a few among them. She is at present a professor and academic head of the Master in Architecture program at Piloo Mody College of Architecture, Cuttack, India.

ABSTRACT

The sustainability discourse emphasizes preserving natural resources so that they can be handed over to future generations in abundance and unadulterated form. Maintenance of place identity generates and consolidates individual and community identity and thus can be considered an essential aspect of the sustainability agenda. Continuance of place identity ensures the complete experience of the heritage, legacy, and assets for future generations and thus acts as active agents for the community's inclusive growth. In contemporary times, where high mobility and virtualization are replacing physical interactions at a steady pace, such built environments which enhance citizens' connection to places act as life anchors for future generations and play a very important part in shaping their identity. But unless mandated by statutory dictates, the ideation of modern developments rarely incorporate the creation of place attachment and maintenance of place identity as one of their goals. The pressure of commercialization, the bias for trending building styles, and the denial of contextual obligations to various degrees in new developments create discord in the urban realm in terms of imagery and cognition, especially where remnants of historical layers are still forceful. But since the development pressures cannot be stalled but arresting the dilution of place identity due to addition, alteration, and modification of built environment stands as an important condition for our sustainable urban future, strategies to address the discord seeping in areas of historical importee in the cities must be formulated. Keeping the above context in view, this paper explores the relationship between place identity and sustainability

and then strives to analyse how the emerging discord in architectural vocabulary can be addressed to achieve a sustainable urban future. With the help of a case study; Cossipore street, a 200 years old street situated in the city of Kolkata, a metropolis in the Eastern state of India, establishes the discord in the built environment that has resulted due to the uninhibited evolution of architectural styles over the years where built forms have mostly emerged in response to the demand of time, not considering the contextual realities of surrounding space. It then suggests certain design-level and policy-level interventions to address this discord arising out of non-corresponding grains about the study area. This paper adopts an exploratory research strategy with multiple methodological approaches that encompass qualitative, as well as quantitative methods. This paper concludes with suggestions and recommendations which can be utilized to address discord arising in contemporary cities due to various reasons to achieve a coherent urban realm respectful towards the existing built heritage.

Keywords: Place Identity, Discord, Architectural Vocabulary, Urban Sustainability.

Introduction

According to the definition of sustainability coined in 1983 by the World Commission on Environment and Development (WCED), "Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Commission, 1987). The concept of sustainability is linked to the concepts of durability and permanence, of the human race and for that to happen continuity of cultural and social rootedness is as important as the preservation of environmental and energy resources. Every human being is intertwined with others and their surroundings by mutual relationship determined by physical resources as well as metaphysical aspects of their existence and from this relationship he /she draws his/her basic identity. According to Heidegger the full meaning of existence is to establish meaningful relationships with the world of 'things' or between 'heaven, earth, human and divine', in order to communicate with their surroundings' (Norberg-Schulz, 1979; Najafi & Shariff, 2011. Architecture is the primary element that gives identity to the physical urban landscape thus acting as a pivot that directs these relationships and thus enables their identification with the environment (Haddad, 2010). If it is true that the relationship with the place and its natural and cultural features is crucial for the structuring of human identity, then building sustainably means not only paying attention to energy and resource-saving but the concept of sustainability must be extended to the preservation of the characteristics that make every place and every city a unique cultural environment with specific architectural constructions and urban scape (Kim & Kwon, 2018).

In the past evolution of cities was gradual with incremental assimilation of need. This together with limited means of construction and types of building material, the deep rootedness of traditional construction practices, and loyalty to past imagery created an architecture that answered to the local context. But as the era of globalization dawned, architecture started to get uprooted from its place of existence and the formula-centric reproduction of building types created a soulless built environment. This discord in architectural vocabulary loosened people's attachment to places, community bonding, and democratic involvement of citizens in cities which in turn derailed the sustainability movement. But since the process of development cannot be stalled in modern cities, it is important to understand the reasons behind this discord and their different aspects. Only then urban design and planning policies can be strategized to mold this discord into a potential for urban growth. This research is the starting point of exploration in this direction.

Aim and objectives

This paper utilizes a literature study to understand the relationship between architectural vocabulary and identity and how this relationship can mold the urban sustainability goals of a city. The research then takes up Cossipore street, a 200 years old street situated in the city of Kolkata, India as a case study and investigates investigate the phenomenon of change in architectural vocabulary with time, with respect to the city of Kolkata. It then explores the discord brought about by the transformation of built forms over time in the study area to draw its conclusion.

Methodology

This research is primarily exploratory as it intends to study the discord generated by new typologies in a traditional context. It undertakes a multi-layered as well as a chronological study of the built forms in the selected site. Both primary and secondary data collected through literature study, analysis of secondary sources, a physical survey of the site, and interviews have been used to conduct this research.

Place and Place Identity

A physical environment starts with space, gets converted to place, and becomes an integral part of the user's life through different kinds of associations; the sense of place and place identity are chief among them. A human being's relationship with the built environment starts

from a place and continues to grow as he traverses many places through movement and temporal experiences (Canter, 1977; Manenti, 2011). Place identity is a versatile concept upon which many psychological theories of human–environment relations rest (Zimmerbaue, Suutari, & Saartenoja, 2012; Giesecking, Mangold, Katz, Low, & Sa, 2014). Place identity is understood differently in different disciplinary domains. An extensive study on the varied definition of places suggests that a multitude of subjective perceptions of geographical space places, modes of human actions, types of supported relations, and the meanings they convey are the most common criteria for understanding and evaluating them (Haartsen, Groote, & Hui, 2000). The initial definition of place identity is believed to have come from Proshansky, “those dimensions of self that define the individual’s identity with the physical environment using a complex pattern of conscious and unconscious ideas, feelings, values, goals, preferences, skills, and behavioral (Proshansky, 1976). Paasi, another authority on place research defines place identity concerning nature, culture, and people they support. Many other scholars have contributed a lot to enrich the meaning and theory of place identity (Relph, 1976; Tuan, 1977; Peterson, 1988). Place identity is the direct derivative of sense of place which is nothing but an overarching impression encompassing the general ways in which people feel about places, sense them, and assign concepts and values to them. The architectural vocabulary of physical environments is a crucial component of the sense of place. The creation or preservation of a sense of place is important in maintaining the quality of the environment as well as the integrity of human life within it.

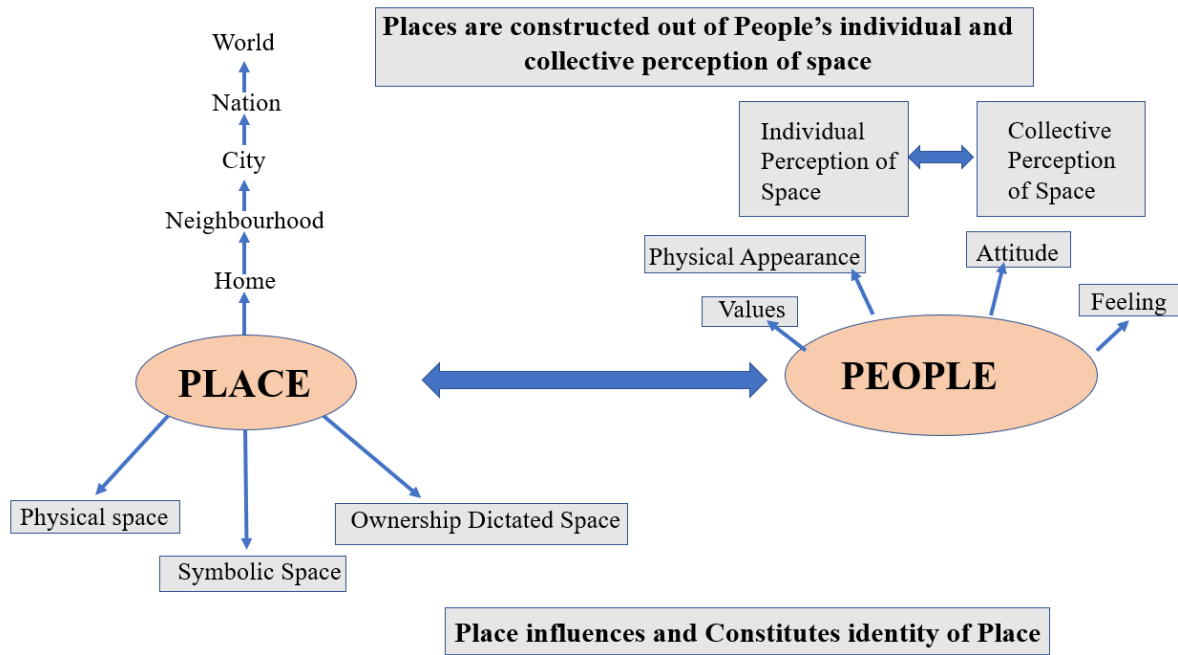


Figure 1 Relationship between people, place, and place identity. Source (Peng, Strijker, & Wu, 2020)

Components and Meanings of Place Identity

Table 1 Meaning of place created by different people factors (Peng, Strijker, & Wu, 2020)

	External Attributes	Internal attributes
People	Physical Appearance ; Values communicated (nature, behaviour, skill, culture)	Attitude; Feeling
Place	Physical space (territory, Landscape, building, Landuse); (Landmark, type of function, name, users; Ownership-based space (Government owned, privately owned, publicly owned)	Individual perception Collective perception (What the community thinks about the place)

Place identity can be understood in terms of four main components; location and topography e.g presence of hills, rivers, sea, etc., buildings and other physical components of streets like street furniture, signage, etc., a community engaged in distinct social and economic activities

and a set of meanings and symbols. These aspects though distinct, in real places, are closely interrelated but their balance can vary widely. Even if the appearance and activities of people in a place are mundane, meanings and symbols are always in some way distinctive, as mostly they are derived from local memory. Place identity originates out of the 'spirit of place' or 'genius loci'. In ancient civilizations spirit of place almost always derived from spiritual or religious belief but in contemporary cities 'spirit of place' refers to the immediately apparent yet rather elusive aesthetic quality of striking distinctiveness that makes particular places attractive and memorable and architectural vocabulary has a very prominent role in manifesting the spirit of place. (Williams, 2015). traditional architecture is always considered a part of the natural environment, interwoven with its lights, its materials, and construction, customs that have developed over the centuries; it has allowed the development of special edificatory procedures that have generated the local character of buildings. The independence of today compared to the local materials due to new construction techniques, no longer tied to a specific place allowed independence of the forms and the characters of the buildings compared to traditional architectures. However, a break away from the genius loci generates a loss of identity and a sense of loss in the urban environment, now, tending to uniformity.

Architecture Vocabulary, Place Identity, and Sustainability

Sustainable building means first of all restoring and maintaining the characteristics of a dialogue between the built environment and its users such that the traditional interpretation can be continued. For a long, in addition to construction methods, architecture has been a living testimony of uses, economies, and ways of the social life of a particular community and locale. But, in the contemporary world, the advent of new materials, technology, and inspirations has enabled architecture to create new modes of expression. Very often these expressions are splendid and iconic, but they fail to express the identity that evidences their place in the 'context'. The sidelining of the shared heritage of a culture of the community in this way leads to a break in the continuity of social connection thus breaking up the self-sustaining social ecosystem processes which at large demotes the higher goals related to community sustainability. In cities with a long history, sustainability has often been a fundamental part of the composition of both tangible and intangible cultural resources. Elements of sustainable design are integral to the vocabulary of traditional architecture that has evolved using local materials and technology emerging from ambient natural and cultural environments creating optimum relationships between people and their place. The increasing

emergence of uniform architectural styles, stereotype patterns, and unmindful transportation of elements from other contexts has engendered a major discord between the past and present of many cities including Kolkata, a metropolis in Eastern India, and are erasing the distinct advantages they had over others owing to their specific identity. This has raised an urgency to look into the reasons and nature of discord between past and present architectural vocabulary as only then an appropriate vocabulary based on the reconciliation of these two binaries can be worked out, which will propel the cities toward their desired goal of urban sustainability. But sustainability, that is the transmission of the architectural and cultural heritage of the area to new generations, can also be interpreted as conservation, restoration, and creation of places that are symbolic and representative of common life. If human experience is necessarily relational, the places of relationship in which you can interpret the values of coexistence can only be a legacy; preserved, improved, and transmitted. In the individualistic and atomized culture of today there is the need to find points of convergence that embody the elements that unite people in a given society and city name, that represent 'on' the agreement between people who live in a single territorial So have a sustainable approach in building the modern city, could also mean not forget to highlight those buildings that embody the agreement, both architectural and urban planning as available: But if the concept of sustainability is related to a sustainable over time, then we must also transmit it to the future generations, proper attention to those places more than others, materialize the concept of persistence related to the idea of eternal: the cultural space. As pointed out by Norbeg-Schultz, these places do not understand the special aspects of human society, but are the culmination of sense, and speak in general terms; the condition of the transience of human existence and the desire to continue beyond the boundaries of time makes the significant moments of everyday life. Sustainability in the full sense can also mean bringing attention to the relationship between 'heaven and earth, human and divine'; that is the deeper meaning of living space, being human on earth. Conservation of important characteristics of a building, and preservation of the signs that history has given in the territory, give importance to buildings that express in visible form the agreement between citizens. They are some key measures that should be proposed as vehicles of identity for the formation of future generations.

Kolkata: An Architectural vocabulary of Prulality

Kolkata, known as Calcutta till 2004, is the capital city of west Bengal, in India (Figure 1 2). Kolkata is located on the eastern bank of the Hooghly River and is the most important

urban center of eastern India. The origin of the city of Kolkata dates back to 1686 when Job Charnock, the administrator of East India Company (believed to be the Founder of Kolkata) chose Sutanati Village to establish a factory. It became the centre of trade and commerce on the eastern banks of River Hooghly. There was a total of three villages – Sutanati, Gobindapur, and Kalikata, which later formed into one after the aggressive colonial invasion. It is said that the Battle of Plassey was the turning point for the growth of Calcutta. In more than 350 years of its existence, Kolkata has been exposed to different cultures; from a colonial capital to a contemporary metropolitan city. The building typologies have evolved from time to time, which eventually resulted in a ‘discord in the architectural vocabulary’ of the city. Forms have been designed with the demand of the time, not keeping in mind the co-existence with its surrounding space. Thus, resulting in non-corresponding grains in the entire urban fabric of Kolkata. This discord is visible to the maximum extent in the Northern parts of the city, as being the oldest areas, they have undergone a maximum transformation during history.

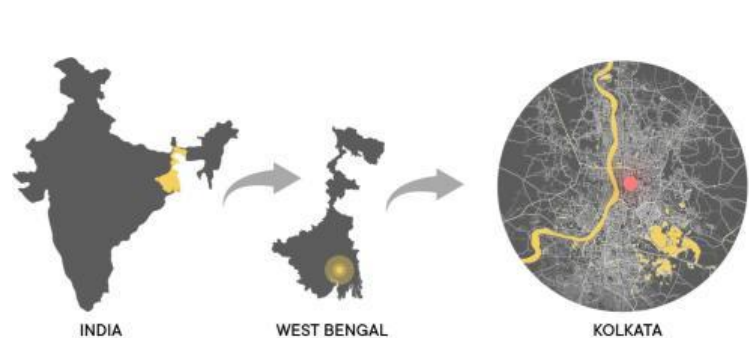
Kolkata neighborhoods: distinct but interwoven

The city of Kolkata can be broadly understood in terms of three territories, distinct from each other through history, socio-economic conditioning, and built environment characteristics. Though at present the characteristics have diluted up to a great extent, a sizeable number of powerful remnants of the past still exist which define the images of these parts distinctly. North Kolkata was the place where the British first landed for trade but later on, after the migration of most British establishments to central and south Kolkata, it emerged as a territory occupied by native Bengalis, both proletariats like craftsmen, artisans, and traders and elite Bengalis who built massive mansions. These massive mansions were the reason behind the christening of the city as the ‘city of palaces’, Central Kolkata was developed by the British as a business and administrative district and these palatial buildings with Victorian aesthetics were built there. With time, south Kolkata emerged as a neighborhood of upper-middle-class Bengalis with a mix of opulent and simple buildings. The urban structure of North Kolkata is characterized by high building density, with the most building being 2-4 storeyed in height, with maximum ground coverage, and minimal side setbacks. Roads within the neighborhoods are very narrow and there is a dearth of open spaces here. Roaks, street corners, and roadside tea stalls are mostly used as public spaces. Central Kolkata has wide straight roads with magnificent vistas, large open spaces, and a great water tank around which buildings of monumental scale built in victorian style can be found. This part of Kolkata

reflects western planning theories and guidelines. Road layouts were done keeping in mind the principles of vistas. Maidan, a very large open space built here is still considered the lung of the city. Southern parts of the city manifest uniformity in the urban form up to a certain extent. Here, buildings with proper setbacks on all four sides are in the majority though in some old areas buildings directly adjoin the street. Here, a mix of architectural styles from the classically inspired to modern art deco can be found and the land use is mostly residential with some large markets scattered in between. The streets in certain places are wide enough to support vehicular movements whereas in other places narrow lanes remind one of North Kolkata. South Kolkata has quite a few open spaces. Roadside tea stalls and street cones also act as active public spaces.

Kolkata's, diverse spatial form and ethnicities as manifested in its localities and neighborhoods evidence the exposure of the city to the various being exposed to different types of styles and foreign cultures from time to time. The influence of various foreign powers like the Armenians, Jews, Portuguese, British, French, etc. has been incorporated into the urban fabric of the city to various extents from time to time. As these cultures intruded into the land of Kolkata almost from its very origin, all these foreign elements have eventually become an inclusive part of the city's ethnicity and ambiance. During the pre-independence period, the styles of architecture that shaped Europe, like the Gothic, Renaissance, and Neo-classical were brought down to the city by the invaders whereas the post-independence era exposed the city to modernity and various strands of contemporary building styles accompanied by a different architectural vocabulary made inroads into the urban landscape. With time the city of Kolkata became a cacophony of architectural styles and idioms as the newer inclusions invaded the spatial domains without any adjustment for the existing and a discord appeared in the urban territory confusing the city's identity.

The Case Study: Shatchasi Para-Lane, Cossipore, Kolkata



According to historical records, in 1778, the East India Company purchased a large number of villages from the nababⁱ of Bengal after defeating his army,

Figure 2 Kolkata: Location. Source: Google Maps

which was known collectively as Dihi Panchannagram and Cossipore was one of them. It was considered to be a suburb beyond the limits of the Maratha Ditch. H. E. A. Cotton writes, "The Cossipore Reach was one of the finest on the river, and is lined by several villa residences." Also from the earliest days of British occupation, Cossipore was chosen by the British to establish several industrial units, sugar mills, and jute screw houses. The area of Cossipore was added to Kolkata Municipal Corporation in 1888.

Figure 2 shows the rise in urban density with respect to time in the Cossipore area. It is also visible how road networking has been expanded to provide an increase in residential access in the area.

Street Location and Characteristics

The Shatcashi Para lane is located in the northern part of the Cossipore area and stretches between Kashi Nath Dutta road and Gopal Chatterjee road. The street is approximately 28 feet wide with a 5 feet wide pedestrian walkway on one side of the lane. Major land uses around the street are residential, mixed-use, and religious, and it is lined by institutions like Noth Calcutta Polytechnic College and Cossipore Institute for Girls (Figure 3).

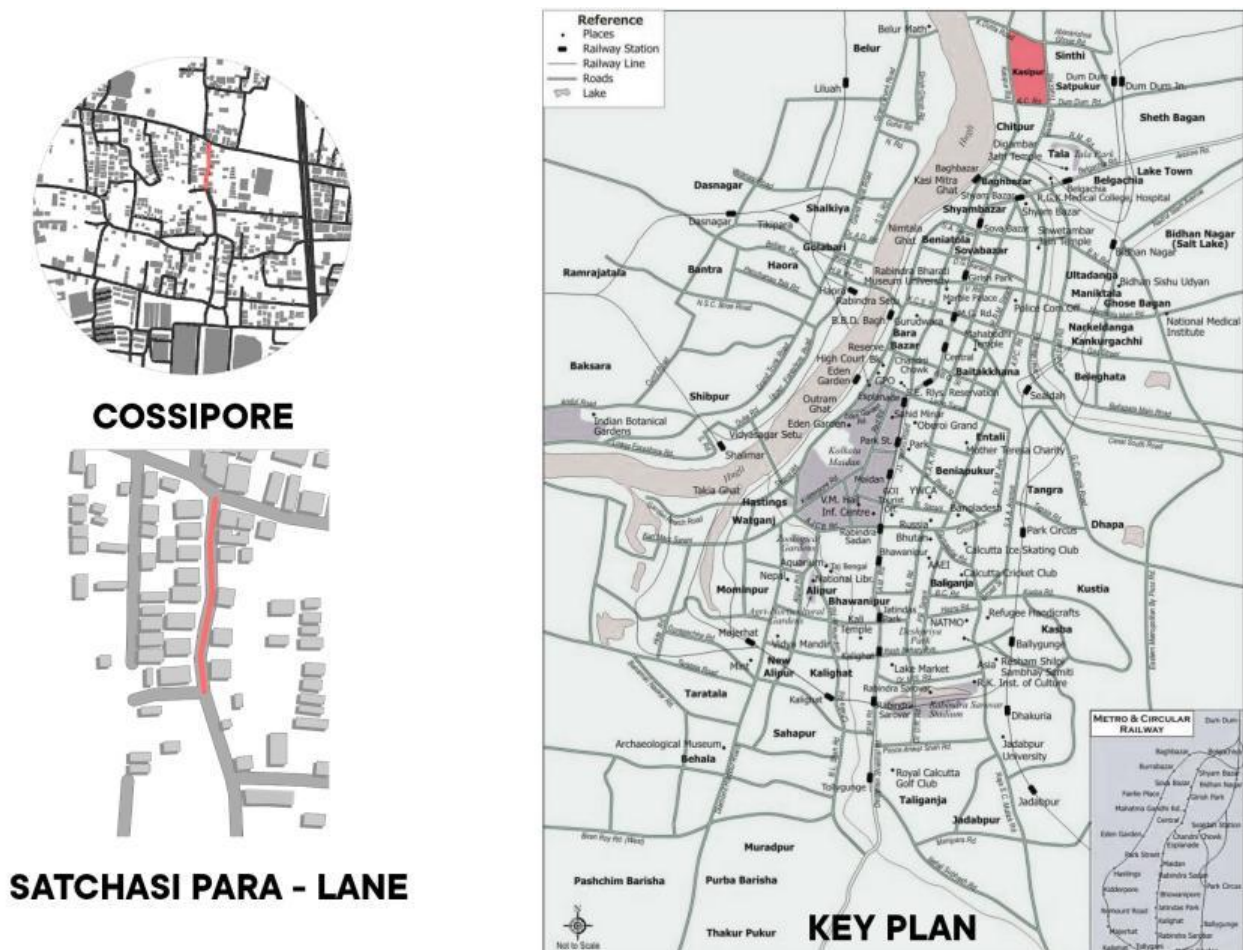


Figure 4 The Study Area: Satchasi Para -Lane. Source: Authors

‘Mudi’ plays a vital role in community interaction by acting as the chief space for informal chit-chats called adda which strengthens the emotional connection between the street and its residents. The street mostly has a two-storeyed structure with small commercial establishments like local grocery shops on the ground floor with residences above(Figures 5 and 6)



Figure 5 Local grocery shops on ground floors. Source: Authors



Figure 6 View of the street-Satchasi Para-Lane. Source: Authors



Figure 7 Open vs Built form
Source: Google maps and Authors



Figure 8 Road Network of the study area.
Source: Google Maps and Authors

Figure 7 shows that the area has a very fine urban grain and little green space as most of the plots are residentially occupied. Figure 8 confirms the presence of tertiary by-lanes that interconnects the neighbors of Cossipore.

The Streetscape



Figure 9 Elevation of the buildings on the right side of the street. Source: Authors



Figure 10 Elevation of the buildings on the left side of the street. Source: Authors

The street consists of buildings mostly built in the colonial era, mainly categorized under the style of Indo-Saracenic, gothic, and victorian architecture (Figure 9 and Figure 10). New urban replacements are constructed between the classical voids, which eventually result in discord. Due to these urban constructs, the vertical function of the street has been arbitrarily randomized as most of the new buildings are vertically elongated to provide maximum space utilization.

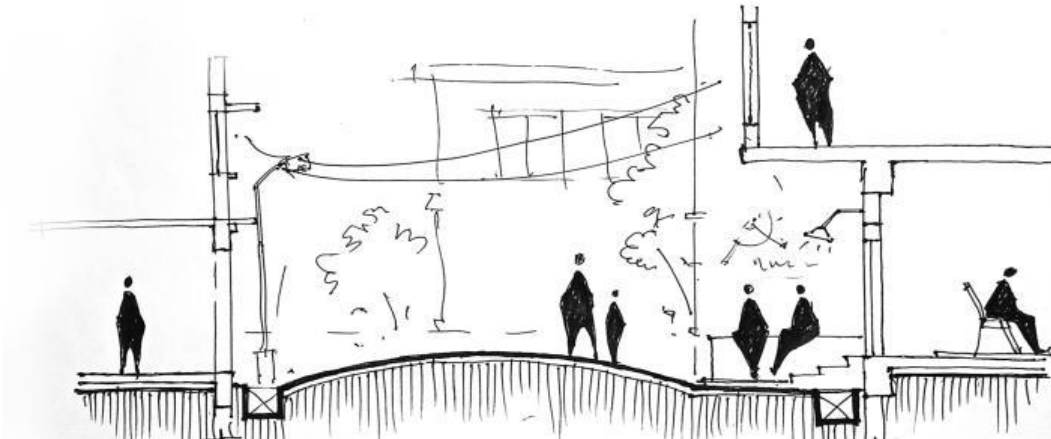


Figure 11 Typical cross-section of the Satchasi Pare-Lane. Source: Authors

Most of the old buildings in Satchasi Para lane are having an informal outdoor lounge – ‘**roak**’, a slip balcony in front of a house, or even on the steps to the house (Figures 11 and 12). But more often it is at a distance from the home, a neutral rendezvous away from both the perceived drudgery of the workplace and domesticity.



Figure 12 Presence of Roaks on either side of the entrance doorway in the street. Source: (Chatterjee, 2022)

Due to the presence of a religious public space (Shiv Mandir) at the street end, local vendors and hawkers get an enormous opportunity to sell their products. These tactical and temporary shops act as an encroachment or hindrance to the traffic flow in the street. The crowd is at its

height on Monday mornings, resulting in the creation of choke points at the nodal end of the Satchasi Para – Lane. The temporary structures are often put in front of the old buildings as there is no existing boundary wall for them. The inhabitants are not much concerned about the issues that might raise questions of security, as these have become a cohesive and integral part of the lane(Figure 13).



Figure 13 Encroachment on street.Source: Authors

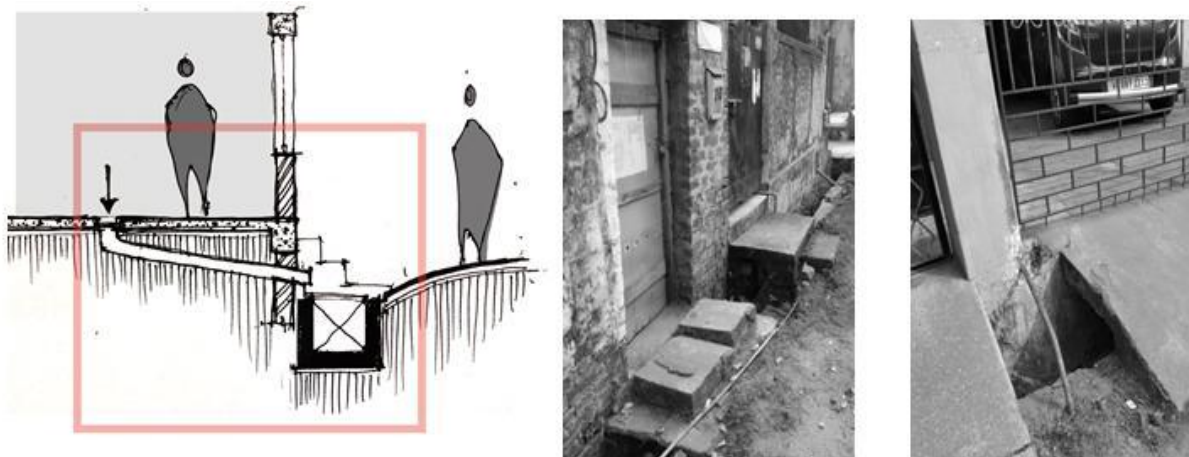


Figure 14 Details of Drainage Infrastructure in the street

18-inch wide high drains are present on both sides of the road. The entrances are connected to the road with either folded slabs or garage ramps(Figure 14). The internal pipelines of the houses are directly connected to the sewage drains outside which turn out to be a threat at times of monsoon. The absence of concealment of the drains also spoils the foremost impression of the built forms, due to persisting odor and visual garbage.

Discord in Architectural Vocabulary of the Street

(i) *Discord in Aesthetics*

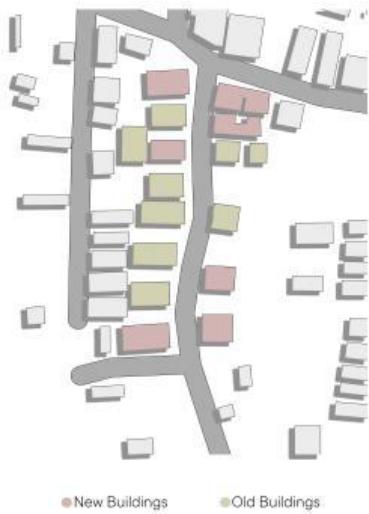


Figure 15 Age Mapping of Buildings. Source: Authors

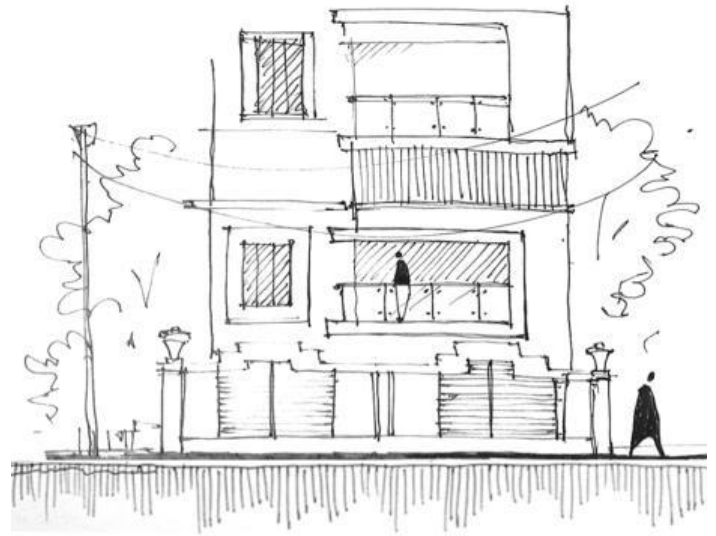


Figure 16 Modern building facades in the street. Source: Authors

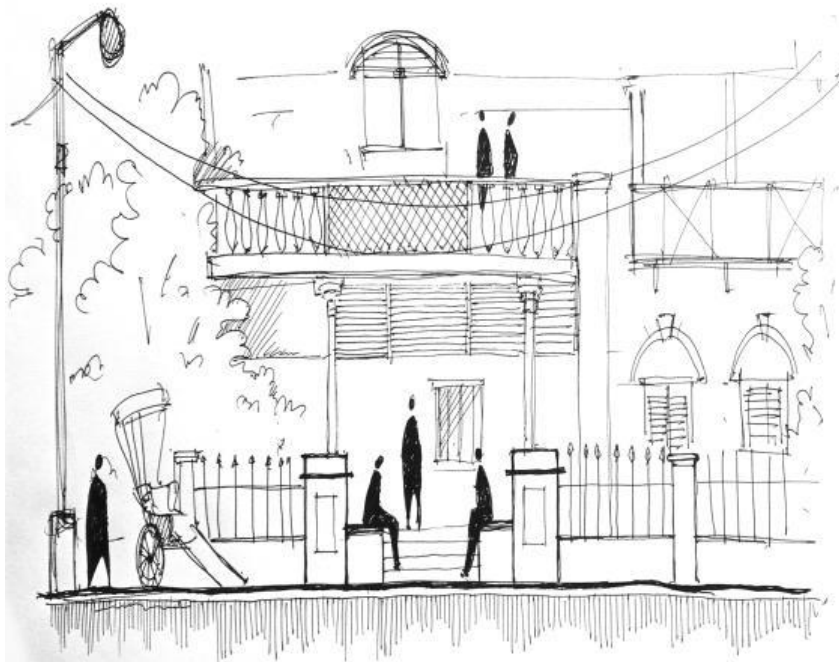


Figure 17 Old Building Facades on Street. Source: Authors

Within the last 20 years, the old buildings in the street have been rapidly demolished and reconstructed into multistoried flats, involuntarily creating a space with no aesthetic balance. Eventually losing the street's architectural identity (Figures 15,16,17).

(ii)Discord in Fenestration Typology

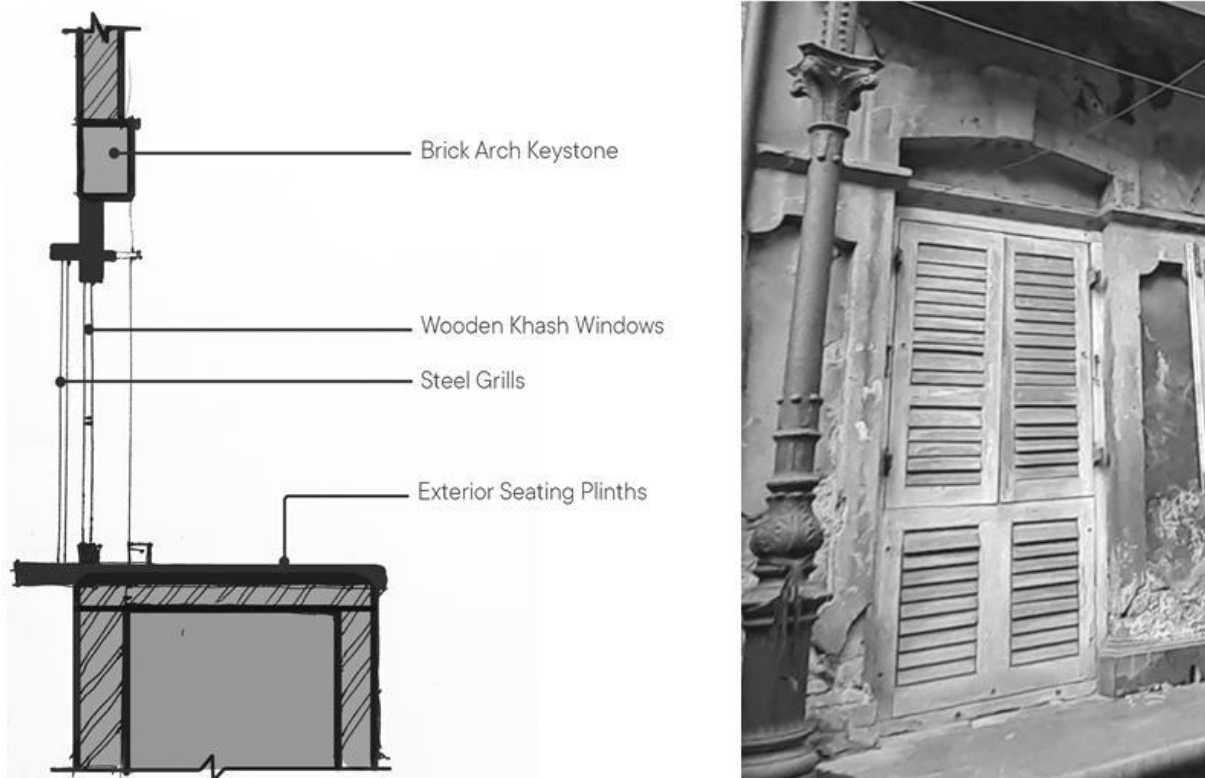


Figure 18 Fenestration in Old Buildings on the street. Source: Authors



Figure 19 Fenestration in New Buildings on the street. Source: Authors

The old buildings were designed in a style very similar to gothic and renaissance with plenty of ornamentation and corbelling on the peripheral edges of the fenestration. Whereas the new buildings are sharing the elements of modern contemporary designs with mostly box windows, with new age materials like glass, and aluminum(Figures 18 and19).

(iii)Discord in Boundary Wall Typology



Figure 20 Boundary walls of old buildings. Source: Authors



Figure 21 Boundary walls of old buildings. Source: Authors

A large number of old buildings in Cossipore is not having any boundary walls due to the proximity between two neighboring buildings. The rest is having a boundary wall with a much shorter height than that of new buildings. Copings are done to ornament the brick piers, and steel arrow-headed posts are used to cover the entire perimeter(Figures 20, 21, 22).



Figure 22 Boundary walls of new buildings. Source: Authors

(iv)Discord in Massing of Buildings

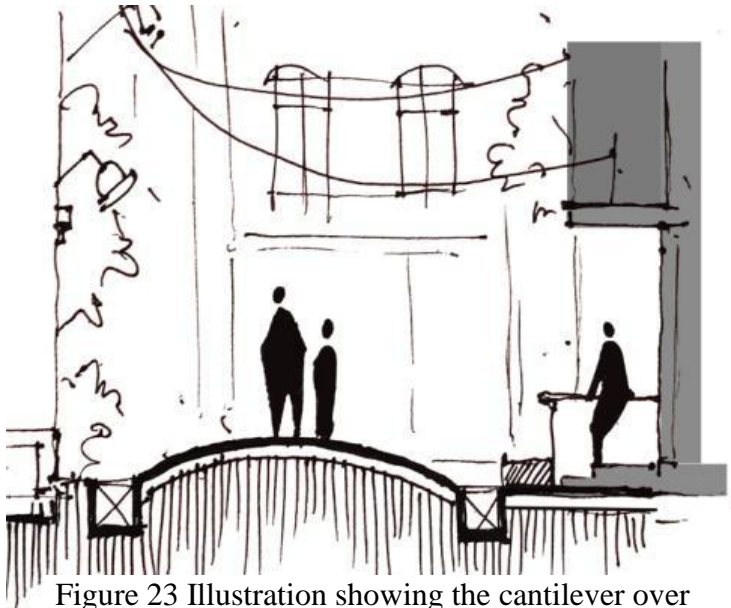


Figure 23 Illustration showing the cantilever over the ground floor entrance. Source: Authors

The old buildings in Cossipore are mostly having cantilevers ranging from 1 – 1.8 meters from the ground floor façade. These extrusions are often placed just over the recessed entrance area, mostly to shade the ‘roaks’ on both sides of the entrance door. Due to these additive forms, ground-floor windows are

deprived of Chhajjas, causing inconvenient monsoons for the inhabitants. On the other side, the new-age buildings are mostly having flat façade. The forms are post-designed by façade treatments and projections not exceeding half a meter (Figures 23 and 24).

depri



Figure 24 Examples of massing in old buildings of Cossipore. Source: Authors

(v)Discord in Typology of Bannisters

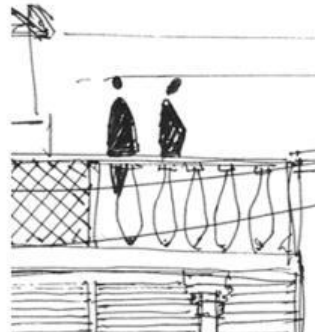


Figure 25 Banisters in old buildings of Cossipore. Source: Authors



Figure 26 Examples of banisters in new buildings of Cossipore. Source: Authors

Figures 25 and 26 Show the presence of Baluster (Commonly known as Ghati railings in Bengal) and ornated steel railings in most of the matured buildings of Cossipore, whereas the new buildings are mostly having

steel posts or glass railings at the perimeter of the balconies.

(v)Discord in street furniture

Two types of street lights are present in Satchasi Para – Lane; the first one is the conventional

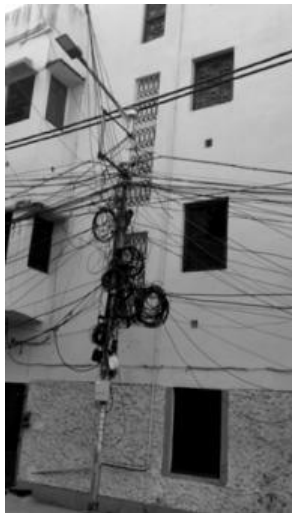


Figure 27 Photographs of the street – lamps. Source: Authors

yellow sodium vapor lamp, having a height of approximately 7 meters, whereas the second one is the new LED tri-light of height, approximately 3.5 meters. The second one though dates to recent times is reminiscent of the historical affiliation of the street. This mismatch in street lights stands out and dilutes the historical identity of the urbanscape which the new additions intended to consolidate (Figure 27).

Architectural Discords: The consequent problems

The above discussion depicts the discord in the architectural vocabulary of the selected case study. When extrapolated in the scale of the city, many parts of the city, particularly those with multi-layered chronological composition, manifest similar discords. These discords unless bridged can create several problems, as they can lead to a lack of cohesion and continuity in the built environment. This discord can manifest in many ways, including:

- Lack of consistency in building design: When there is discord in architectural vocabulary, different buildings in the same area can have vastly different styles and designs.

This can create a disjointed and disorienting visual experience for residents and visitors, as well as make it difficult for the city to establish a cohesive sense of identity.

- **The conflict between preservation and development:** When there is discord in architectural vocabulary, it can be difficult to reconcile the need to preserve historic buildings and neighborhoods with the need to accommodate new development. This can lead to a lack of harmony between the old and the new and can make it difficult to create a sense of continuity and connection between different parts of the city.
- **Difficulty in creating a sense of place:** When there is discord in architectural vocabulary, it can be difficult to establish a sense of place or character for different neighborhoods and areas of the city. This can make it difficult for residents to identify with and take pride in their community and can make it challenging for the city to establish a distinct and recognizable image.
- **Limited economic development:** When there is discord in architectural vocabulary, it can be difficult to create a sense of place or character for different neighborhoods and areas of the city. This can make it challenging for the city to attract new businesses and residents, as it can be difficult for investors to envision the potential for growth and development.
- **Limited Tourism:** A discord in architectural vocabulary in the city can make it difficult for tourists to understand the city's character and history, which can make it less attractive for them to visit. Moreover, it can also make it hard for the city to establish a unique and distinguishable identity that tourists can associate with and remember.

Ways to bridge the architectural Discord

In order to address these issues, the city of Kolkata needs to establish a clear and consistent architectural vocabulary that reflects its unique history and character. This can be achieved through a combination of zoning regulations, design guidelines, and community engagement. By working closely with architects, developers, and community leaders, the city can establish a shared vision for the built environment that promotes continuity and cohesion, while also preserving the city's historic character and cultural heritage. Architects and urban designers can help bridge the discord in architectural vocabulary that arises in a city over time by using a variety of techniques and approaches. These include:

- **Historical research:** Architects and urban designers can study the history of the city, including the evolution of its architecture, in order to gain a deeper understanding of the various architectural styles, elements, and influences that have shaped the city over time.
- **Collaboration and dialogue:** Architects and urban designers can engage in dialogue and collaboration with other stakeholders, such as historians, community members, and city officials, to develop a shared understanding of the city's architectural heritage and priorities for preservation and development.
- **Incorporation of traditional knowledge:** Architects and urban designers can incorporate traditional knowledge and design principles into their work in order to create buildings and spaces that are responsive to the unique cultural and historical context of the city.
- **Adaptive reuse:** Architects and urban designers can work to preserve and reuse existing buildings in the city, rather than tearing them down and building new structures. This can help to maintain the continuity of the city's architectural vocabulary.

Conclusions

A building's design is influenced by the local urban and natural surroundings. A building's components are understood concerning its surroundings. A building's context might include physical and natural elements (like the bend in a nearby river), socio-cultural elements (like the site's prior use), and more. These elements should be examined, modified, and incorporated to help the structure fit with its surroundings. The increasing demand for buildings has led to the destruction of neighborhood planning. The old heritage buildings are rapidly demolished to erect flats in order to provide multi-vertical spaces, giving away the identity of the city. Through urban design and planning, architects and urban designers can create plans for the city that are sensitive to the city's architectural heritage and seek to integrate new developments in a way that complements and enhances the existing architectural vocabulary. By using various strategies and techniques listed above architects and urban designers can help to bridge the discord in architectural vocabulary that arises in a city over time, and ensure that the city's unique architectural heritage is preserved and celebrated for future generations

Reference

- Canter, D. V. (1977). *The psychology of place*. London: Architectural Press.
- Chatterjee, P. (2022). The Rowak, for Adda and Midday Breaks in Kolkata. Retrieved Jan 10, 2023, from <https://www.joinpaperplanes.com/the-rowak-for-adda-and-midday-breaks-in-kolkata/>
- Chowdhury, S. (2019). *The Dilemma of Identity: Representing Contemporary Kolkata*. doi:10.13140/RG.2.2.32009.19048
- Commission, B. (1987). *Report of the World Commission on Environment and Development: Our Common Future*. World Commission on Environment and Development.
- EbenSaleh, M. A. (n.d.). Place identity: The visual image of Saudi Arabian cities. *Habitat International*, 22(2), 149-164. doi:[https://doi.org/10.1016/S0197-3975\(97\)00033-7](https://doi.org/10.1016/S0197-3975(97)00033-7)
- Gieseeking, J. J., Mangold, W., Katz, C., Low, S., & Sa, S. (Eds.). (2014). *The People, Place, and Space Reader*. New York: Routledge.
- Haartsen, T., Groote, P., & Hui, P. P. (2000). *Claiming Rural Identities: Dynamics, Contexts, Policies*. Assen: Van Gorcum.
- Haddad, E. (2010). Christian Norberg-Schulz's Phenomenological Project In Architecture. *Architectural theory review*, 15(1), 88-101.
- Kim, S., & Kwon, H.-a. (2018). Urban Sustainability through Public Architecture. *Sustainability*, 10(4), 1249. doi:<https://doi.org/10.3390/su10041249>
- Manenti, C. (2011). Sustainability and place identity. *Procedia Engineering*, 21, 1104-1109. doi:<https://doi.org/10.1016/j.proeng.2011.11.2117>
- Najafi, M., & Shariff, M. K. (2011). The Concept of Place and Sense of Place In. *World Academy of Science Engineering and Technology*, 56(1), 1100-1106. Retrieved Jan 10, 2023, from <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=1ad81eb86c480e62ddd216e707c467bf00873fa9>
- Nes, A. v. (2001). 11303 Architecture and Phenomenology, Autumn 2008, pp. 113-34. The Heaven, the Earth and the Optic Array: Norberg-Schulz's Place Phenomenology and its Degree of Operationability. *Footprint Delft Architecture Theory Journal*, 1(3), 113-134. doi:<https://doi.org/10.7480/footprint.2.2.690>
- Nes, A. v. (2008). Measuring the urban private-public interface. *Sustainable City*, 117. doi:10.2495/SC080371
- Norberg-Schulz, C. (1979). *Genius loci : towards a phenomenology of architecture*. New York: Rizzoli.
- Peng, J., Strijker, D., & Wu, Q. (2020). Place Identity: How Far Have We Come in Exploring Its Meanings? *Frontiers in Psychology*, 11. doi:<https://doi.org/10.3389/fpsyg.2020.00294>

- Peterson, G. (1988). Local symbols and place identity: Tucson and Albuquerque. *The Social Science Journal*, 25(4), 451-461. doi:[https://doi.org/10.1016/0362-3319\(88\)90024-9](https://doi.org/10.1016/0362-3319(88)90024-9)
- Proshansky, H. M. (1976). *Environmental Psychology: People and Their Physical Setting*. New York: Holt, Rinehart and Winston.
- Relph, E. (1976). *Place and Placelessness*. London: Pion.
- Tuan, Y.-F. (1977). *Tuan Y. F. (1977)*. . Minneapolis: University of Minnesota Press.
- Williams, A. (2015). Place in Geography. In J. Wright, *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)* (pp. 149-152). Elsevier.
- Zimmerbaue, K., Suutari, T., & Saartenoja, A. (2012). Resistance to the deinstitutionalization of a region: borders, identity and activism in a municipality merger. *Geoforum*, 43, 1065-1075. doi:10.1016/j.geoforum.2012.06.009

List of Figures and Tables

- Figure 5 Relationship between people, place, and place identity.Source (Peng, Strijker, & Wu, 2020)
- Figure 2 Kolkata: Location.Source: Google Maps
- Figure 3 Maps of Cossipore (Upper Chitpur) 1820, 1920, and 2020 AD respectively. Source: (Chowdhury, 2019)
- Figure 4 The Study Area: Satchasi Para -Lane
- Figure 5 Local grocery shops on ground floors. Source: Authors
- Figure 6 View of the street-Satchasi Para-Lane. Source: Authors
- Figure 7 Open Vs.Built Form. Source: Google Maps and Authors
- Figure 8 Road Network of the study area. Source: Google Maps and Authors
- Figure 9 Elevation of the buildings on the right side of the street.Source: Authors
- Figure 10 Elevation of the buildings on the left side of the street.Source: Authors
- Figure 11 Typical cross-section of the Satchasi Pare-Lane.Source: Authors
- Figure 12 Presence of Roaks on either side of the entrance doorway in the street.Source: (Chatterjee, 2022)
- Figure 13 Encroachment on street.Source: Authors
- Figure 14 Details of Drainage Infrastructure in the street.Source: Authors
- Figure 15 Age Mapping of Buildings.Source: Authors
- Figure 16 Modern building facades in the street.Source: Authors
- Figure 17 Old Building Facades on Street.Source: Authors
- Figure 18 Fenestration in Old Buildings on the street.Source: Authors
- Figure 19 Fenestration in New Buildings on the street.Source: Authors

- Figure 20 Boundary walls of old buildings.Source: Authors
- Figure 21 Boundary walls of old buildings.Source: Authors
- Figure 22 Boundary walls of new buildings.Source: Authors
- Figure 23 Illustration showing the cantilever over the ground floor entrance. Source: Authors
- Figure 24 Examples of massing in old buildings of Cossipore.Source: Authors
- Figure 25 Examples of banisters in old buildings of Cossipore. Source: Authors
- Figure 26 Examples of banisters in new buildings of Cossipore. Source: Authors
- Figure 27 Photographs of the street – lamps.Source: Authors
- Table 1 Meaning of place created by different people factors (Peng, Strijker, & Wu, 2020)

ⁱ Muslim Monarch during colonial times in India