



Pedestrian perception of façade aesthetics and architectural identity: A case study of New Road, Kathmandu

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Abstract

As a part of daily life, people must pass through and visually experience the city environments we live in. The visual appreciation of such urban environments is a product of our perception and cognition. An urban environment is a diverse setting of architecture elements such as buildings, spaces, humans and their inter relationships. A building facade acts as a visual interface between the building and its urban environment. This study aims to explore the pedestrians' perception of facades aesthetics and architectural identity along two distinct stretches of New Road, Kathmandu: Stretch I (New Road Gate to Juddha Salik) and Stretch II (Juddha Salik to Indrachowk). The research adopts a qualitative data collection method such as interviews and field observation, photo elicitation methods (PEI) and thematic analysis. The findings establish façade perception as a sequential perceptual process, where physical form generates sensory experience that constructs architectural identity. The study offers valuable insights for architects, urban planners, and academics for interpreting building facades.

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1. Introduction

The term “identity” has numerous definitions, meaning and contexts across fields generally referring to both the distinctiveness of a place and its relationship within a broader context. In architecture, it has been long linked with various urban issues, practices and trends [1]. Identity functions as a distinctive feature of a place, shaped by the arrangements of elements in the urban environment such as buildings, objects, and spaces, individual, events and their inter relationship which together form the visual image of a city [1][2]. Studies confirm that buildings are the most visible man-made components, with individual spending approximately 40% of their viewing time observing buildings with façades acting as the public face of architecture [3][4]. Beyond mere visual appearance, facades play a key role in shaping the visual and experiential character of a place, thereby contributing to its identity [1].


Architectural identity extends beyond form and materiality to include the meanings derived from the interaction between spatial qualities and human values. In this

context, façade aesthetics becomes the foundation of architectural identity in the urban environment [4].

In historic cores like the Kathmandu Valley, façades contribute significantly to visual character and identity. New Road, a major pedestrian route, is experienced at the human scale through continuous movement. Despite this, the existing evaluations of façades are based on technical and regulatory aspects, which often tends to overlook how they are perceived by everyday users. This gap risks the development of guidelines that opt towards technicality and largely disregarding the experiential aspects.

This study compares pedestrian perception of building façades along two stretches of New Road, Kathmandu—from New Road Gate to Juddha Salik and Juddha Salik to Indrachowk. One stretch has undergone renovations with improvements such as management of utility wires, uniform façade painting, and footpath widening, while the other stretch remains as it is. This difference creates an opportunity for examining how such interventions influence the perception of façade aesthetics and architectural identity. The study focuses solely on visual and aesthetic aspects, excluding structural or technological analysis.

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The main objective of this research is to examine how pedestrians' perception of building façade features influences their sense of architectural identity. The study aims to identify and analyze the parameters of visual aesthetics related to building façades. Furthermore, the study investigates pedestrians' visual experience of façades and explores the relationship between this visual experience and their perception of architectural identity.

2. Research methodology

The research adopts a qualitative case study approach to explore the pedestrian perception in the study area as illustrated in Figure 1. An initial set of parameters influencing façade aesthetics was derived through literature review, supported by field observation and photographic documentation to capture façade conditions for initial interpretation. To validate and refine these parameters, semi-structured interviews were conducted with six practicing architects, which provided context specific parameters.

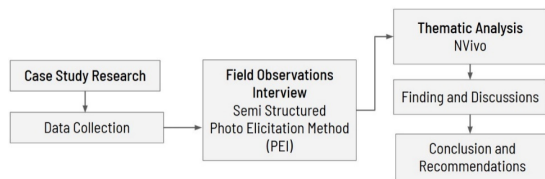


Figure 1: Research methods

Qualitative studies often have smaller sample sizes as its primary focus is on depth of meaning and interpretation rather than numerical generalization. According to Bertaux, a qualitative study can have as many as fifteen participants [5]. For this study, 36 pedestrians were interviewed, with 18 per stretch, exceeding the benchmark to ensure thematic saturation. A purposive sampling approach was adopted, where only pedestrians who were observed walking the full length of a stretch were selected for interviews. The six architects provided professional triangulation, not statistical representation.

The primary data collection focused on pedestrian perceptions along two stretches of New Road. Using semi-structured interviews integrated with photo-elicitation (PEI), respondents were interviewed on-site for 10–15 minutes each, with consent for audio recording. The PEI method helped evoke memories and shared experiences, enriching the perceptual data. Interviews were transcribed and prepared for thematic coding, aiming for depth of meaning as emphasized in qualitative research [5]. These methods provide the basis for analyzing how

building façade characteristics are perceived and interpreted across the two selected stretches.

3. Literature review

Visual perception, in basic is the information that reaches the eye, followed by brain's processing and organizing of that information [3]. Thus, perception is not just merely what we seek, it also how we interpret and adjust it to our collective memory and shared experiences [6]. The perception of facades is captured through sensory modalities such as vision, touch expressed through façade features like color, texture, forms, etc. [7]. Through visual perception, individuals can distinguish shapes, colors, movement, and spatial relationships, enabling them to understand their surroundings and interact meaningfully with the world around them.

In experience, discussing architecture with non-architects does not often begin with floor plan details. The most frequently mentioned topic, and what appears to grab the most attention, is what we first observe upon entering a building: the façade [3]. For pedestrians, buildings are not seen as static objects but as visual experiences that unfold with façade appearances [8]. Pedestrians do not experience architecture from a distance or as abstract forms—they experience it through close, continuous visual contact with building fronts, street edges, and urban details. Thus, the façade, which functions as an urban interface and arises as a socio-spatial assemblage, plays a crucial role in urban structure by forming identity and the quality of urban places. For this influence, it is also the most significant component of cities [2].

3.1. Parameters for visual aesthetics of facades

The façade aesthetics is a subjective matter to each individual, to understand it properly this research seeks to gather parameters from reviewing various articles, book sections to develop a synthesized set of parameters and concepts for the visual aesthetics of facades.

A research study based on architects' perspective in the Netherlands identified the parameters as intrinsic and extrinsic aspects with sub parameters as illustrated in Figure 2 [6]. The mentions of both intrinsic and extrinsic aspect shows the interlink of intrinsic aspects with each other shows that façade isn't just an element but a combination of various attributes together while the extrinsic aspect relates to how they relate to external agents such as human scale, context, cultural meaning, and design logic. Both aspects play a role in defining aesthetic preferences for façades, as they nurture the visual experience [6].

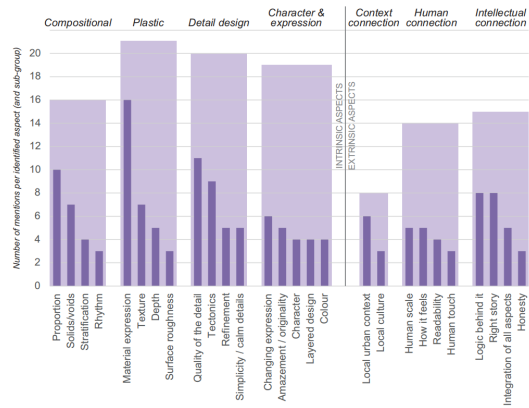


Figure 2: Number of mentions per identified aspects and their interlinks, Prieto & Oldenhave [6]

Carmona [9] further explains the above aspects by exploring how people perceive facades during movement, mentioning some parameters such as rhythm, order, unity, pattern, grouping of elements, balance, harmony, and sequences of façades rather than individual buildings. Parameters such as building-to-building associations, height-to-width ratios, skyline consistency, colors, textures, and architectural detailing influence pedestrians’ perception and their interpretation of the facades and identity [9]. Research exploring citizens’ visual preferences has evaluated façade on the basis of physical parameters such as (proportion, order, geometry, texture, balance, dynamics, contrast, diversity and creativity in form and details), meaningful parameters (identity, culture, spirituality, aesthetics and visual harmony), and environmental parameters (light, shading, skyline, environmental comfort, sustainable) [7]. Another study on façade design and visual pollution identifies three categories - individual, contextual and other facade consideration factors [10]. Individual and contextual façade considerations included parameters such as articulation, details, material and texture, style, character, color, doors and windows, balance, contrast, unity, scale, proportion, rhythm, variety, repetition, harmony and emphasis etc. Other façade considerations included maintenance, durability, quality of façade construction, changes in lighting, signage, billboards, wires and serviceability showed how contextual integration of façade considerations impacted the people’s perception. Among these, lack of cohesion, style, and proportion were the mentioned parameters that affected the façade design and its contextual integration [10].

From the reviewed articles, the research identifies parameters which are categorized into two main themes. The intrinsic aspect represented facade as an individual or an isolated object in disregard to its context. On the

other side, the extrinsic aspect is defined by the relations between these façades and the built environment. The intrinsic and extrinsic aspects and their parameters are further categorized as follows:

1. **Intrinsic aspect:** (Composition, Proportion, Rhythm, Order, Unity, Balance, Material, Color, Texture, Details, Signage & Graphics, Utilities & Add On)
2. **Extrinsic aspect:** (Context, Skyline, Floorscape, History, Human Connection, Character, Integrity, Harmony, Homogeneity, Style)

Facade aesthetics cannot be defined by a fixed set of parameters across all settings. Aesthetic preferences depend not only on a facade’s intrinsic qualities but also on extrinsic aspects—the relationship between the building and its surroundings, including human, cultural, and contextual connections [6]. To apply these ideas in practice, interviews with architects were conducted to shape and confirm a set of façade evaluation parameters that reflect the specific cultural, architectural, and contextual characteristics of the study area.

3.2. Architect’s perspective on visual façade aesthetics

A total of 6 architects with different level of expertise and experiences participated in in-depth semi structured interviews supported by photographic documentation. The discussions centered on visual aesthetics of façades and their characteristics, including what architects noticed first, elements shaping visual and street character, and features most impactful for street experience. A set of parameters was identified that were almost identical to those obtained by literatures. Some parameters that were identified by architects for the study area that differed from the literature included: Window placements, Maintenance, Repetition, Architectural elements, and Frontages. These parameters were integrated with the existing set from the literature to develop a refined set synthesizing all parameters. These additional parameters addressed site-specific conditions and ensured that the final framework was both theoretically grounded and contextually relevant.

The parameter of façade aesthetics isn’t a single term but an interrelationship they hold with each other shaping their individuality and its contributing collectively to the overall identity. The weight of these parameters differs with every context, conditions and even place, making them both universal in principle and local in expression.

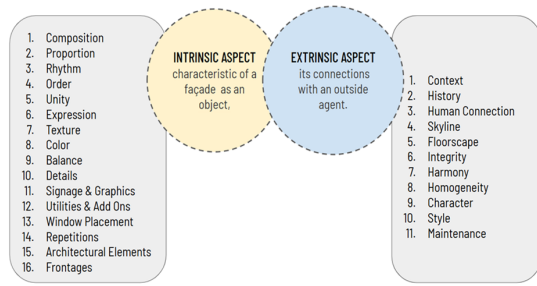


Figure 3: Synthesized parameters for façade aesthetics

3.3. Architecture identity and its parameters

Architectural identity is described as the distinctive character that allows a building or place to be recognized and remembered. It develops from the way physical form, spatial arrangement, materials, and cultural meaning together shapes how people experience and interpret architecture [4]. Rather than being defined by a single aspect, architectural identity is constructed through the interaction of several key parameters.

Identity is a dynamic phenomenon formed by both continuity and transformations, Similar to the nature of human life. As humans adjust to social, cultural, economic, and technological shifts, their identities transform over time. These transformations are reflected in architecture, which serves as a physical manifestation of changing values and ways of living. Rather than disappearing, architectural identity continuously evolves through modification, replacement, and reinterpretation. When a city transforms its built environment, it does not lose its identity, instead, it gradually constructs a new one. Thus, change within the immediate environment is a process through which architectural identity is redefined across time [11].

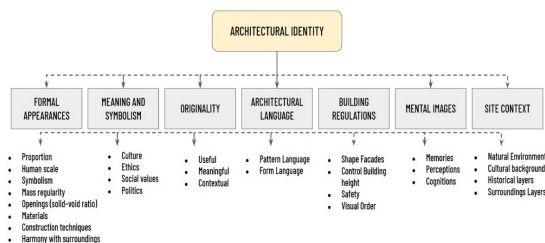


Figure 4: Parameters for architectural identity ,Baper [4]

The visible aspects of a building or a structure such as its façade, scale, material and proportions are described as formal appearances. Together they influence how the building fits into its immediate surroundings and contributes to the visual character of a place. Meaning

and symbolism arises from the way architecture communicates ideas and values allowing people to relate to a place both emotionally and intellectually. Originality is achieved when existing ideas are interpreted by designers to create new and meaningful expressions. It adds values and creative solutions which are both new and practical rather than completely different. Another parameter, architectural language can be described as the reflection of architectural ideas translated into forms, patterns and spatial compositions creating for each building as a distinctive identity beyond its physical structure. Building regulations such as building height consistency, form, and façade compositions also regulate buildings helping to maintain visual coherence within the urban environment. When architecture is visually clear and understandable, it becomes easier for people to recognize and connect with a place forming a mental image of both the building and the experience of it. When a building respects its context – including natural landscapes, surrounding structures and cultural background, it strengthens its relationship with the place and contributes to the overall identity. Altogether, these parameters shape buildings to express meaning and context through their designs, thereby influencing how people experience and interpret them [1][4][6][9].

Baper’s framework of parameters for architectural identity [4] and the synthesized parameters for façade aesthetics as intrinsic and extrinsic aspects [6][9], are not separate domains but rather complementary frameworks that explains how built environments can be understood and designed to shape the perception and identity of a place. The interlinks of formal appearances with intrinsic aspects such as scale, color, and materiality acts as a foundation for visual expression of facades. Likewise, the site context and extrinsic aspects explain the building and its connection with its physical and cultural environment. Perception is built through sensory experiences and perceptual interaction creating a mental image and meaning for visual forms. Originality and architectural language as parameter focus on balancing innovation with clear and consistent design language. Lastly, building regulation as a parameter functions as a driving force, setting guidelines that regularize the individual design contribution to a coordinated urban setting.

To summarize, a conceptual framework is established through literature reviews. Within this framework, pedestrians perceive and interpret the physical reality of the façade which shapes the construction of architectural identity. The interlinking of these fundamentals examines the meaning, memorability and authenticity of a place. This theoretical framework, grounded in extensive literature and validated through synthesized

parameters from multiple sources [4][6][7][9] provides the foundation for the empirical investigation examining how these parameters are perceived by pedestrians in the study area.

4. Study area

New Road is the core of the Kathmandu Valley connecting the Kathmandu Durbar Square with the rest of the city and serving as one of the busiest marketplaces. Being centrally located, it is an important commercial and cultural node in the city.

The research focuses on two major stretches of the New Road classified as Stretch - I and Stretch-II. Stretch – I extend from New Road gate to Juddha Salik is a primary entry sequence into New Road. While Stretch – II extends from Juddha Salik to Indrachowk. Both representing the historic commercial core of New Road, linking Juddha Salik, a symbolic central point to the culturally vibrant node of Indrachowk. Both stretch features dense commercial activity with multi- storey retail and mixed-use buildings lining both sides of the street.

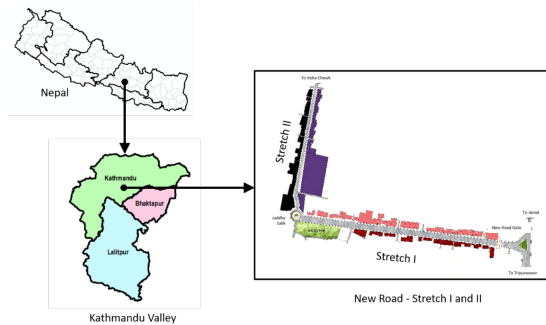


Figure 5: Location map and study area

4.1. History and evolution of facades characteristics

New Road represents an important phase in Kathmandu’s architectural development. Before the 1934 earthquake, the area consisted of traditional Newari settlements with narrow lanes and brick houses topped with tiled roofs [12]. The massive destruction caused by the earthquake allowed for major transformation initiated by Prime Minister Juddha Shumsher, resulting in the creation of Nepal’s first planned modern street, later named New Road [12].

The post-earthquake redevelopment followed strict Rana-era planning principles and introduced a Neoclassical–Victorian hybrid architectural style adapted to local materials to Stretch - II. The major design elements included:

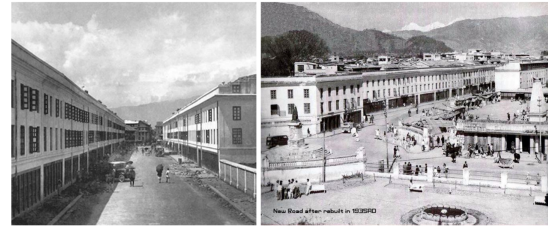


Figure 6: New Road after rebuilt in 1935- Stretch – II, Alina [12]

- Uniform building height, scale, and facade composition
- Standardized window dimensions (approximately 1m×1.7m on the ground floor, and 0.85m×1.3m on upper floors)
- Prominent cornices, parapet walls, and wooden shopfronts
- Mandatory uniformity for street-facing facades, while rear facades were flexible [12].

Over subsequent decades, shifts in technology, commercial expansion, regulatory lapses, and post-disaster reconstruction have extensively transformed facades [13][14][15]. Currently, two distinct visual conditions can be observed along the study area:



Figure 7: Evolution of facades of New Road Stretch -I Ancient Newa: Cities, Alina [12]

- **Stretch I (New Road Gate to Juddha Salik):** Significantly altered by commercial individuality [12].
- **Stretch II (Juddha Salik to Indrachowk):** Retains the restored white-and-green Rana-era facade treatment

This sharp contrast within a short walking distance provides a valuable opportunity to examine how the coexistence of transformed and restored façades influences

pedestrian perception of architectural identity and aesthetic quality in the selected two stretches.

5. Observation and analysis

As seen in Figure 8 and 9, field observations reveal that the façade and its condition in Stretch-I (New Road Gate–Juddha Salik) is fragmented. The buildings have irregular heights and inconsistent material, colors and shop fronts. A thick band of irregular signage boards and banners powers the building façade. Not just individual building but this inconsistency seems to be followed at different levels of same buildings. The overhead wires and extended AC units obstruct the view of upper levels, hiding windows and even architectural details. The faded paints, patch repairs reflect neglect and clutter.



Figure 8: Street elevation of Stretch – I



Figure 9: Photos of Stretch -I

While, Stretch II (Juddha Salik–Indrachowk), reflected visual coherence with facades at relatively consistent height, horizontal bands at different level and a restored white color wall and green windows creating a visual rhythm. Although commercial signage is still not regularized at ground floor, very few of them are visible at upper façades reflecting as a coherent frontage. The AC units at the front seemed to be more evident in consistent backdrop.

As illustrated in Figure 12, three interconnected themes provide the thematic and analytical frame-

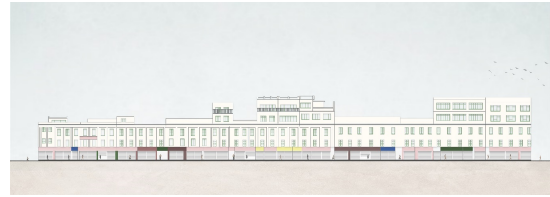


Figure 10: Street elevation of Stretch – II



Figure 11: Photos of Stretch -II

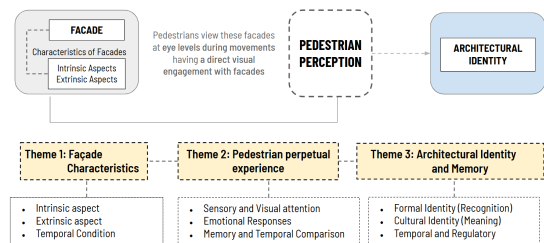


Figure 12: Conceptual framework of pedestrian perception and architectural identity

works for examining the perception of facades across the two stretches New Road. The 36 interviews of pedestrians were coded and analyzed through three themes and their subthemes as: **Façade Characteristics** (intrinsic aspects, extrinsic aspects, temporal condition), **Pedestrian Perceptual Experience** (sensory/visual attention, embodied/emotional response, memory/temporal comparison), and **Architectural Identity**(formal identity/memory, cultural identity/meaning, temporal/regulatory identity).

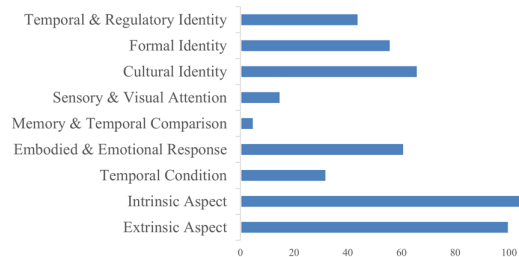


Figure 13: Total references

As shown in Figure 13, pedestrians interpreted the façade characteristics as a combination of both intrinsic

sic and extrinsic aspects, a finding often not reflected in technical façade assessments. The intrinsic aspects such as color and materiality, rhythm and openings, proportion and detailing were mentioned frequently and spontaneously, indicating that these aspects influence façade composition and strongly shapes the visual experience of streets. The extrinsic aspects such as wires, signage boards, maintenance and building to building associations were also mentioned suggesting that maintenance is core to street coherence and overall identity rather than isolated facades.

The NVivo results shows that both intrinsic and extrinsic aspects account for the largest proportion of total references, with intrinsic aspects slightly at higher end. Yet, the extrinsic aspects such as signage, wires, and AC units were almost equally cited as intrinsic aspects, validating the finding [6] that aesthetic preferences rely on both a 'façade's intrinsic qualities and extrinsic relationships.

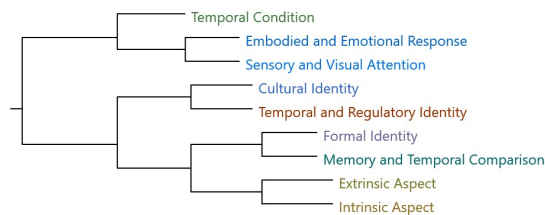


Figure 14: Items clustered by coding similarity

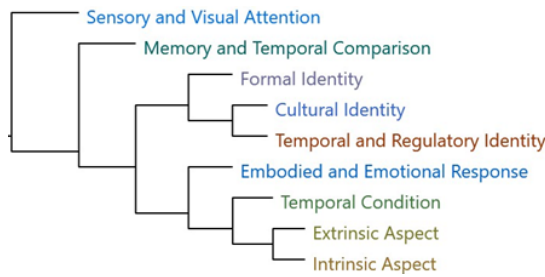


Figure 15: Items clustered by word similarity

Figure 14 and 15, the dendrograms of word similarity and coding similarity further reveal that sensory and visual attention, memory and temporal comparison, and identity-related codes cluster closely, indicating that perception, recollection, and evaluations of identity are tightly interwoven in pedestrian narratives.

Throughout Stretch I, the field observation, interviews analysis and photographs define the street as a visual clutter and fragmentation. Figure 16, illustrates a word cloud with terms such as “different,” “nothing,” “chaotic,” “messy,” “wires,” and “random,” while interviewees describe “every building” as looking “totally

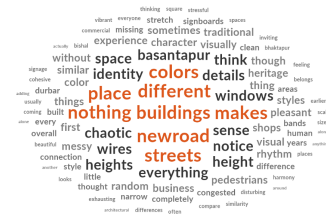


Figure 16: Word cloud for Stretch- I

different from the next one” and note that unmanaged wires and signboards “hide the buildings and sometimes even dominate them. “As a result, pedestrians describe lack of visual clarity and focus often describing the stretch as a stressful, exhausting one. Quite often just passed by, instead of experiencing it.

Figure 17, shows the frequency with which pedestrian mentioned each theme at Stretch I. Extrinsic aspects such as wires, signage, clutter had highest references followed by temporal condition such as poor maintenance, strengthening the field observations. Intrinsic aspects were not mentioned as much as extrinsic aspects overpowering the intrinsic qualities of facades.

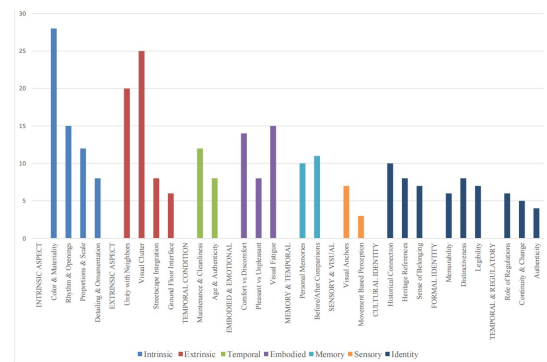


Figure 17: Number of mentions - Stretch I

In stretch II, the field observation, interviews analysis and photographs define it as legible, coherent streetscape influencing the identity. The renovated facades with white color walls and green windows create a repetitive rhythm across the street. As a result, pedestrian describe it as a united, ordered and comfortable section. As shown in Figure 18, pedestrians use words such as “consistent,” “organized,” “connected,” “heritage,” “belongs,” and “proud,” and link its character as image of New Road with lines expressed as “feels like ours”. Though mentions of clutter are also noted, but as secondary in perception. Visual attention is instead drawn to intrinsic aspects such as its details, color, rhythm and even cornice details which acts as visual anchors along the stretch.



Figure 18: Word cloud for Stretch - II

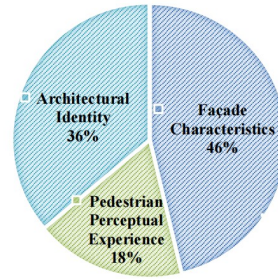


Figure 20: Distribution of references by theme

Figure 19 represents, the frequency with which pedestrians mentioned each theme at Stretch II, with highest for intrinsic aspects such as rhythm, proportions, colors, etc. and Identity aspects such as cultural and heritage meaning often linked with rana era uniformity as mentioned by pedestrians. Thus, the differences validates the Carmona argument that rhythm, order, and sequence of facades are importance for visual coherence rather than individual buildings governing pedestrian perception [9].

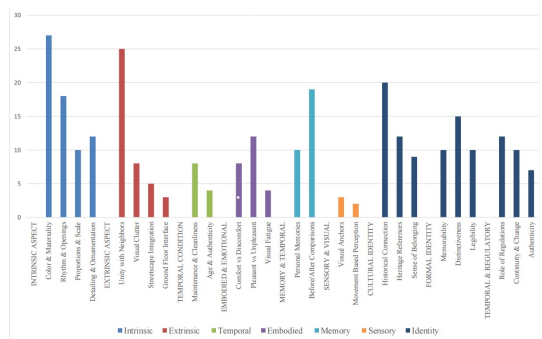


Figure 19: Number of mentions – Stretch II

Figure 20 represents, the distribution of references across the three primary themes. The façade characteristics with 46% confirms that pedestrians describe the physical characters at first in Stretch I and rhythm for Stretch II. Architectural identity with 36% describe the inherence of identity along the characteristic and experiential aspects. With 18%, the pedestrian perpetual experience, reflects emotional responses that arise in perpetual process. The distribution of themes indicates that pedestrians first respond to visible façade characteristics, which are then interpreted through experience and meaning, forming the basis for the construction of architectural identity.

6. Discussion

The field observations and analysis of interviews reveal a clear relationship between façade characteristics, pedestrian experience and construction of architectural identity. The intrinsic aspects such as color, rhythm,

proportion, detailing and openings aren't just limited to characteristics or components of façade but are basis for perceptual processes like visual clarity, attention, memorability and recognition. Where these aspects are coordinated like in Stretch II, the street becomes easy to navigate and legibility is achieved, consistent with Baper's framework [4]. In Stretch I, where these aspects are overlooked, the street loses its character and further identity. While, the extrinsic aspects profound the relationships. The visual clutter such as wires, signage and inconsistencies at ground floor and building heights indicated the lack of governance and regulatory visions often linked to identity fragmentation. Instead in stretch II, the regularized and restored facades with consistent color and heights and signage perceived as legible underpinned by clear intention and stewardship. The findings aligns with Qassem's study, that identified maintenance and contextual integration as key parameters for a visually coherent streetscape [10].

The findings indicate that perception isn't passive but an active phenomenon shaped by sensory experiences and memories. On stretch I, pedestrians noted that buildings "don't even register" confirming that the clutter dominates, the underling architecture makes it invisible to register or recall. While on Stretch II, sensory experience is captured through architecture itself [3], as pedestrians mentions the architectural details and even its impacts to the built environment. The memory and temporal comparison aspect in stretch I described as earlier conditions as better as "more maintained," while stretch II considered now as a "one of the nicest transformations," confirming that positive transformations can shape perception over the time [11].

Collectively, the findings reveal that architectural identity is constructed from the alignment of physical characteristics of facades, perceptual clarity and collective meanings. As Stretch I lack memorability, legibility and distinctive character it further diminishes the formal identity. A street must first be legible first to be meaningfully perceived for which elements must be

distinctive and well organized [4]. Similarly, cultural identity is absent as pedestrians refer it elsewhere. While in Stretch II, pedestrians connected the recent transformations to Rana era architecture verifying that meaning emerges when formal attributes link to common cultural references [4].

The study notes several limitations. The sample size of 36 pedestrians and 6 architects is for qualitative and context specific study which limits the statistical generalizability. The study focuses exclusively on visual perception, excluding other sensory experiences such as tactile and acoustics cues. Furthermore, the data are collected at one specific time, and a longitudinal method could more effectively illustrate how changes in façades influence perception over time. Future research could broaden by examining pedestrian perception across various streets types in Kathmandu valleys and by incorporating quantitative metrics like a visual clutter index to strengthen the qualitative findings.

7. Conclusions

This qualitative case study confirms that façade aesthetics and architectural identity along New Road are deeply interconnected yet differentiated experientially between the two stretches. Stretch I show how uncontrolled facade transformations, visual clutter and lack of regulations can influence both visual experience and perceptions of the street as generic, tiring and disconnected. While, Stretch II demonstrated that a coordinated composition of façade and its management can support heritage, belonging and a sense of pride.

The key insights from the study are: First, the extrinsic aspects such as signage, wires, AC units and maintenance rival the intrinsic design features in shaping architectural identity. Second, the pedestrian perception is a sequential process: Physical observations create sensory experience leading to construction of identity. Lastly, regulation plays a defining role in coordination and visual coherence, more than architectural style for preserving a historic character.

Thus, the research provides an empirical comparison between the two different stretches of Kathmandu's historic core, using pedestrian perception as a basis for façade policy. Without appropriate regulation and design intervention, ongoing transformations in Stretch I risk further weakening the visual coherence of New Road, ultimately diminishing its role within Kathmandu's collective memory and urban identity.

8. Recommendations

As a result of these findings, the following practical and policy-oriented recommendations are proposed for façade management along New Road:

1. **Context-specific façade guidelines** - Clear façade guidelines should be developed for Stretch I focusing on building height consistency, window alignment, continuous cornices or horizontal bands, and controlled color palettes. As the primary entry to Kathmandu Durbar Square and Basantapur, this stretch requires improved visual legibility and coherence.
2. **Visual clutter management as priority intervention** - Unmanaged overhead wires, signage boards, and service installations should be treated as priority elements. These significantly disrupt visual clarity and their regulation can immediately improve façade perception and streetscape quality.
3. **Incremental maintenance incentives** - Financial incentives, subsidies, or technical assistance programs should be introduced to encourage property owners to maintain, repair, and repaint façades in accordance with guidelines.
4. **Integration of perceptual criteria in planning** - Urban design regulations should incorporate pedestrian-oriented criteria such as legibility, visual comfort, and coherence, ensuring that planning decisions respond to human-scale perception.
5. **Strategic differentiation approach** - Rather than replicating Stretch II, a distinct strategy for Stretch I should be developed, that prioritizes clarity and organization while allowing controlled individuality, ensuring contextual relevance.

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