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Residential street and edges: Negotiating community space, a case example of film colony Vijayawada, A.P., IN.

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Abstract

Residential corridors are not only the movement corridors; they act as welcoming ground for everyday activity where residents share emotion, moment and domestic lives. The edges that formed by plinths, boundary wall, vegetation layer, shared space- play a crucial role in shaping how residents meet, rest and live. This residential street and edges are the primary layer of social engagement when the per capita green space is decreasing in the current scenario.

To support the study many literatures study has been reviewed where it reflects on residential liveability, comfort, visual connectivity, privacy, threshold, inclusivity etc, which are the key parameter in a residential neighbourhood, as they provide theoretical foundation. This makes a clear understanding of how the residential street and edge regulate social behaviour and community participation.

For a valid final finding a mixed qualitative-analytical methodology was used, which combine spatial documentation, behaviour mapping, residents' point of view and expert validation through an analytical hierarchy process (AHP).The findings reveal that ecological quality, inclusivity, belongings have the strongest influence on liveability. Building edge promoting better visual quality and recessed plinth foster more community participation, while the big opaque wall, less visual connection reduces the potential connection.

The study concludes that residential street and edges perform a root for collective lives, and better communication, shaping how people feel, use and share the street. Enhancing the street edge by greenery, visual permeability, shared micro spaces can transform the residential areas into inclusive, and more vibrant community environment.

Key word: Residential neighbourhood, inclusivity, ecology, microclimate, Vijayawada

1. Introduction

Residential streets and edges form one of the most active social layers of urban neighbourhoods. Beyond enabling movement, they serve as everyday community spaces where residents interact, rest, and share domestic routines. The character of the street edge—defined by plinths, boundary walls, vegetation, and small shared threshold areas plays a decisive role in shaping how people feel included, connected, and engaged within their neighbourhood.

In contemporary cities, where per-capita green space is steadily declining, these edges become essential micro-social landscapes that support liveability. Existing literature highlights that visual connectivity, comfort, privacy, inclusivity, and threshold conditions critically influence how residents negotiate community space. Together, they determine whether a street edge encourages participation or reinforces separation.

This study examines how residential streets and edges regulate social behaviour and community interaction. Using a mixed qualitative–analytical approach that includes spatial documentation, behaviour mapping, residents' perspectives, and expert evaluation through the Analytical Hierarchy Process (AHP).

Anchored in the works of Jacobs (1961), Low (2017), and Arefi & Meyers (2003), the research positions residential street edges as critical negotiating grounds of community life. Strengthening these edges through greenery, openness, and shared micro-spaces can transform everyday streets into more inclusive, vibrant, and socially responsive environments.

2. Aim:

- To study the role of urban residential street character and built edges fostering community space.

3. Research question

- How do different types of residential street edges (planting buffers, hedges, low walls, fences) influence the use of streets by residents and the community?
- In what ways do these edges create feelings of territoriality, inclusivity, or exclusivity in residential neighborhoods?
- Can residential streets, through their edge design, serve as active community spaces in areas where green space is limited?

4. Research objective

- To identify and document different edge conditions along residential streets.
- To study how these edge conditions, influence everyday activity.
- To analysis community use of residential streets as potential shared spaces.
- To suggest simple design guidelines for making residential street edges more inclusive and community-friendly

5. literature study

Table 1: Synthesis of reviewed literature study

Title & Year	Author	Focus / Parameters Explored	Key Findings	Interpretation for "Residential Street & Edge"	Design / Methodological Takeaways
Systematic Review of Vitality of Public Open Spaces (2023)	Zhang et al.	Physical, social, individual, and policy dimensions of vitality	Reveals vitality depends on interplay between design quality, social inclusion, and governance.	Emphasizes that community edges must balance social, spatial, and governance aspects.	Develop a multi-scalar evaluation (physical–social–perceptual–governance).
Uncovering Key Components of Semi-Public Spaces for Social Sustainability (2025)	Amirijan et al.	Social sustainability, belonging, accessibility, inclusivity, comfort, privacy	Uses Delphi and fuzzy mapping to identify 30+ indicators of social sustainability in shared residential environments. Comfort, accessibility, and inclusivity scored highest.	Highlights social sustainability dimensions applicable to residential edges—belonging, accessibility, safety, and privacy as social-environmental qualities.	Provides a measurable parameter framework to categorize street-edge indicators (physical, social, perceptual).
Can Play Streets Foster Less Gendered and More Inclusive Play? (2025)	Stephanie Alexander	Inclusivity, gender equity, safety, openness, community participation	Shows that flexible and open play streets support girls' participation and age diversity. Barriers (walls, parked cars) reduce inclusivity.	Demonstrates how openness and visibility make residential edges more inclusive and usable for women and children.	Integrate gender-sensitive observation in site analysis—who uses the edge, and when.

Street Patterns, Visual Permeability and Spatial Accessibility (2025)	Alsaffar & Alobaydi	Spatial permeability, legibility, connectivity, safety	Finds that higher visibility of façades and transparent frontages increase pedestrian comfort and social trust.	Strengthens your visual comfort parameter: visibility and access between building edges and streets are critical for safety and belonging.	Measure sightline continuity and façade openness along street edges.
Street View Sociability: Analysis Across 15 Cities (2025)	Eirod et al.	Sociability, greenery, visibility, attachment	AI-based analysis shows sociability increases where green view and sky openness are higher.	Connects ecological and visual comfort to edge sociability; landscape features strongly influence perceived livability.	Include green/sky view mapping as indicators in visual comfort and sociability evaluation.
The Role of Traditional Street Markets in Sociability-Based Publicness (2021)	Gökçe Uğurgen	Sociability, temporality, informality, community participation	Markets create temporal sociability — social life evolves through repeated, flexible, temporary use.	Suggests that temporal change and informality enhance social vitality — applicable to residential street edges used differently across time.	Record temporal rhythms of street life (morning–evening, weekday–weekend).
A Simulation Study of Urban Street Greening on Thermal Comfort (2023)	Liu et al.	Microclimate, shade, vegetation, materiality	Vegetation reduces surface temperature by 3–5°C, enhances pedestrian comfort.	Shows that ecological comfort contributes to longer social stays and better well-being.	Evaluate tree shade, material heat absorption, and user comfort in field observations.

The Impact of Vegetation Layouts on Thermal Comfort (2025)	Fan et al.	Aspect ratio, vegetation Density, ventilation	Balanced spacing (7–10 m) and mixed canopy height maximize ventilation and shade.	Refines your "comfort edge" parameter — dense but breathable green cover supports livability.	Guides vegetation typology mapping design framework.
Soft Edges in Residential Streets (1986)	Jan Gehl	Edge permeability, thresholds, social interaction, human scale, comfort	Introduces the concept of *soft edges* — verandas, doorsteps, and plinths as in-between zones where private and public overlap. Streets become vibrant when edges allow visual and social exchange.	Establishes the foundational logic of street edges as transitional zones between domestic and collective life.	Provides the qualitative base for evaluating "openness vs. privacy" and "inviting vs. closed" edges.

Table 2: Synthesis table of reviewed case studies

Case Study Title/ Year	Context	Focus Parameter	Key Finder	Analytical Interpretation	Design Takeaways for Community oriented streets.
Impact analysis of urban street edges of residential areas in Dhaka (2022)	Residential Streets, Dhaka (South Asia)	Edge Permeability, Privacy, Boundary Type, Visual Comfort.	Compares open (Transparent, Porous) Vs. Closed (Solid Wall) Edges; Finds permeable edges yield higher comfort, safety and visual connections.	Demonstrates how visual permeability residential edges into semipublic community interfaces.	This Asian Contextual Validation for porous edge typologies – applies to Vijayawada residential edges.
The Impact of Street	Urban Village,	Territorial Segments, Micro Vs.	Micro Scale "territorial Segments"	Reveals that bottom up, micro scale	Prioritise segmental and flexible edges

Edge Scales on Everyday activities in Wuhan's Urban Village Streets (2025)	Wuhan (China)	Macro Edge Scales, Necessary-Optional-Social activities.	(Small Personalised Units) strongly influence optional and social Activities; Large Uniform edges show weak activity Response.	personalization activates street life more than uniform design.	with verandas, alcoves, small shops to sustain everyday social use.

6. Parameter extraction

- Objective: To identify measurable and experimental parameter that shape liveability and community participation along residential street and built edges.
- Process: A detailed review of global and regional literature study was analysed, covering theories of urban edges (Gehl, 1986), publicness and inclusivity (Mehta, 2014, alexander, 2025), environmental comfort (Fan, 2025: Liu, 2023), and temporal adaptability (Uzgoren, 2021).
- After studying different potential parameter as study indicators 7 preliminary themes has been groups for field study.
    - Comfort (thermal, seating, shade)
    - Visual quality
    - Inclusivity and accessibility
    - Sociability and temporal use
    - Privacy and threshold
    - Ecological and aesthetic quality
    - Community belonging and identity

Table 3: Synthesis of parameter extracted from literature + case studies matrix

Parameter Theme	Synthesized Understanding from Literature	Analytical / Design Application
Comfort (Thermal, Seating, Shade)	A Simulation Study of Urban Street Greening on Thermal Comfort (Liu et al., 2023) The Impact of Vegetation Layouts on Thermal Comfort (Fan et al., 2025)	Map shaded areas, canopy cover, and heat-absorbing surfaces; evaluate seating comfort and microclimate zones.
Visual Connectivity & Openness	Street Patterns, Visual Permeability and Spatial Accessibility (Alsaffar & Alobaydi, 2025) Can Play Streets Foster Less Gendered and More Inclusive Play? (Alexander, 2025)	Assess edge permeability (open / semi-open / opaque), measure sightlines, and map façade transparency.

Inclusivity & Accessibility	Uncovering Key Components of Semi-Public Spaces for Social Sustainability (Amirjani et al., 2025) Can Play Streets Foster Less Gendered and More Inclusive Play? (Alexander, 2025)	Observe user groups (men, women, elders, children), track access barriers, and assess continuity of walkable plinths.
Sociability & Temporal Use	The Role of Traditional Street Markets in Sociability-Based Publicness (Üzgören, 2021) Street View Sociability: Analysis Across 15 Cities (Elrod et al., 2025)	Conduct time-based activity mapping (morning/evening, weekday/weekend) and identify social hotspots along edges.
Privacy & Thresholds	Soft Edges in Residential Streets (Jan Gehl, 1986) Uncovering Key Components of Semi-Public Spaces for Social Sustainability (Amirjani et al., 2025)	Analyze setbacks, verandas, steps, grills, or planters to understand transitional edge conditions and privacy gradients.
Ecological & Aesthetic Quality	Street View Sociability: Analysis Across 15 Cities (Elrod et al., 2025) The Impact of Vegetation Layouts on Thermal Comfort (Fan et al., 2025)	Evaluate planting density, sky openness, vegetation layout, and presence of biodiversity along the street edge.
Community Belonging & Identity	Uncovering Key Components of Semi-Public Spaces for Social Sustainability (Amirjani et al., 2025) Soft Edges in Residential Streets (Jan Gehl, 1986)	Document signs of personalization—plants, chairs, artwork, colors, names—and map culturally meaningful edge elements.

7. Contextual localisation

- Objective: To translate the globally derived parameters into socio cultural- climatic context of Vijayawada.
- Site context: Film colony is a mid-dense residential neighbourhood characterized by 6m wide streets, plinth-based threshold, shared street corridor, boundary wall typology, shared street edge etc. This area combines both traditional behaviour such as sharing emotions, evening gathering, and new introverted developments such as opaque boundary walls enclosed visuals.
- Study area -Film Colony (also referenced locally as Film Colony / Film Nagar,
- LIC Colony area), Latitude 16°30'44"N (≈ 16.5122° N), Longitude 80°39'33"E (≈ 80.6592° E).

Figure 1: Study area Map, Film colony, Vijayawada. Source- google earth

8. Methods: Residential interaction and perception mapping

To complement the spatial and analytical study, the resident's perception has been conducted in 4 different lanes of film colony, Vijayawada, in terms of how people feel, experience and share emotions. Informal conversation was held with shop owners, homemakers, elder people, children focusing their point of view and how they use and feel about specific parameter such as comfort, visibility, accessibility, sociability privacy and belonging. Observations were recoded through mobile phones, schematic sketches and short notes.

1. Comfort (Thermal, Seating, Shade):

Figure 1.1: Shaded street welcoming community gathering.

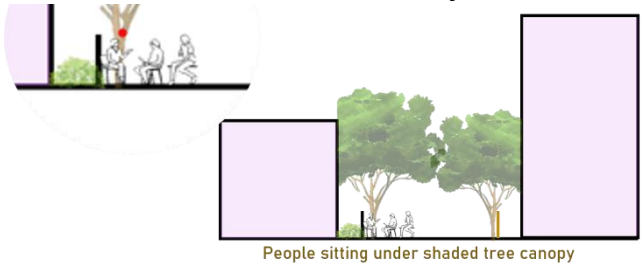
Figure 1.2: Street edge with less vegetation.

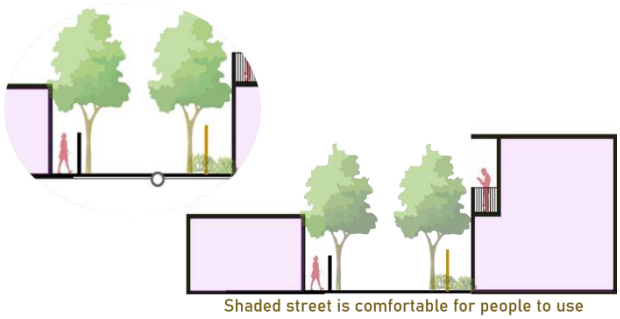
Figure 1.3: Street edge showing shared corridor

Edges with mature trees, recessed plinths, and verandas (Image 1.1 & 1.3) exhibit high thermal comfort, creating shaded, cooler microclimates that extend outdoor usability. Tree canopies and plinth edges serve as informal seating, encouraging people to pause, rest, and interact during hot hours. In contrast, exposed façades with little vegetation (Image 1.2) generate heat build-up and visual glare, reducing outdoor activity and dwell time.

Figure 1.4: location map for comfort-based microclimate study area. Source- google Earth

Figure 1.5: Section showing activities in comfort-based microclimate study area.





Study Outcome:

Streets with integrated shade, vegetation, and seating demonstrate greater climatic adaptability and social engagement, confirming that thermal comfort is a key enabler of active and liveable residential edges.

2. Visual quality and openness:

Figure 2.0: Boundary wall with no visual and physical permeability

Figure 2.1: Boundary wall with partial visual and no physical permeability

Figure 2.2: Boundary wall with fully visual and no physical permeability

Across Film Colony's residential edges, degrees of visual and physical permeability distinctly shape street livability. The first edge is visually and physically impermeable, defined by high compound walls and enclosed façades that create visual isolation and discourage social exchange.

The second edge is partially visually accessible but physically restricted, where vegetation and semi-transparent boundaries allow limited eye contact while maintaining personal privacy. The third edge demonstrates high visual openness but physical inaccessibility, where open forecourts and transparent gates encourage passive interaction and street surveillance without direct entry.

Figure 2.3: location Map showing visual based study area.

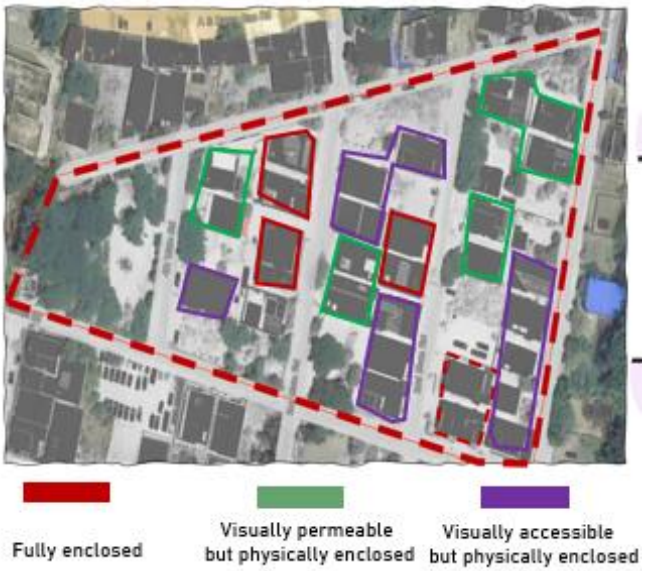
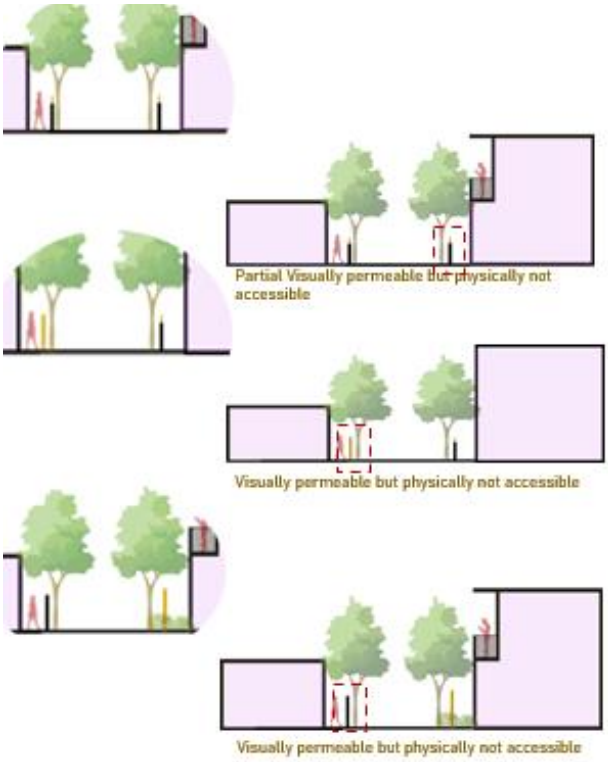


Figure 2.4: section showing activity in visual based study area.



Study Outcome:

Edges with balanced visual permeability offering openness without full access enhance trust, safety, and street familiarity, proving that visual connection is a critical layer of social livability even in physically enclosed environments.

3. Inclusivity and accessibility:

Figure 3.0: Recessed plinth fostering informal gathering.

Figure 3.1: Recessed plinth fostering informal gathering.

Figure 3.2: Shared street edge

Figure 3.3: Territoriality by community people

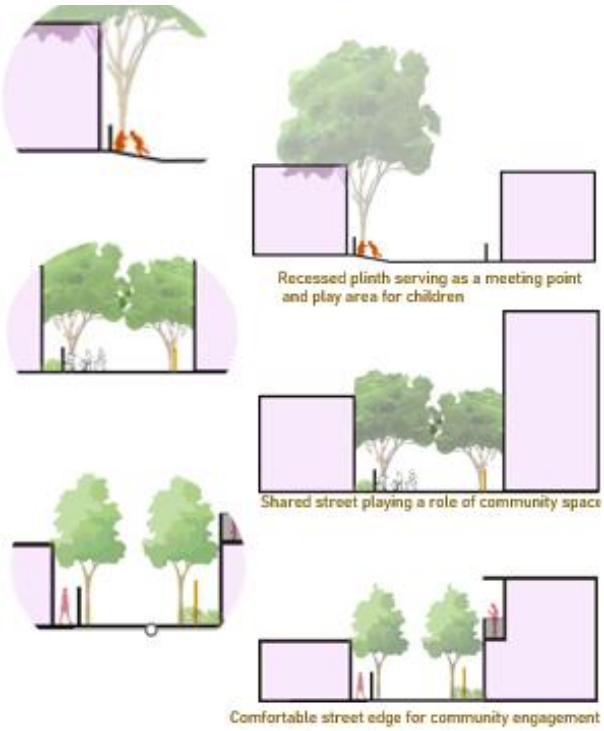
Figure 3.4: location map showing inclusive based study area

shaded space freely. The second edge, with narrow setbacks and continuous façades, limits pedestrian rest zones, yet provides partial accessibility through plinth steps where residents informally sit or interact. The third edge, marked by vegetated buffers and raised thresholds, visually softens the boundary but creates physical barriers that restrict spontaneous entry, reinforcing private use. The fourth edge, featuring tree shade and edge seating, enables multi-user comfort and demonstrates a balanced interface between private property and public realm.

Study Outcome:

The four edge conditions in Film Colony demonstrate varying degrees of physical and social accessibility that influence inclusivity in daily street use. The first edge with an open plinth and shaded forecourt supports unrestricted entry and informal gathering, allowing children, elderly people, and passersby to occupy the

Figure 3.5: Section showing activity in inclusive based study area.



Edges that combine shaded openness, gradual level transitions, and shared thresholds promote inclusive participation across age and gender groups, confirming that accessibility in both design and social behavior strengthens everyday community interaction along residential streets.

4. Sociability & Temporal Use:

Figure 4.0: Commercial front fostering informal gathering

Figure 4.1: Open shared street edge as seating space

Figure 4.2: Small vegetable vending space acting as meeting point for home makers

Figure 4.3: Temple as community belonging point

The observed edges in Film Colony reveal that micro-spaces such as shaded thresholds, temple fronts, and vendor zones strongly support temporal social interactions throughout the day. The first and second edges, shaded by large trees, transform into daytime resting and conversational nodes, used predominantly by elderly groups and neighbours.

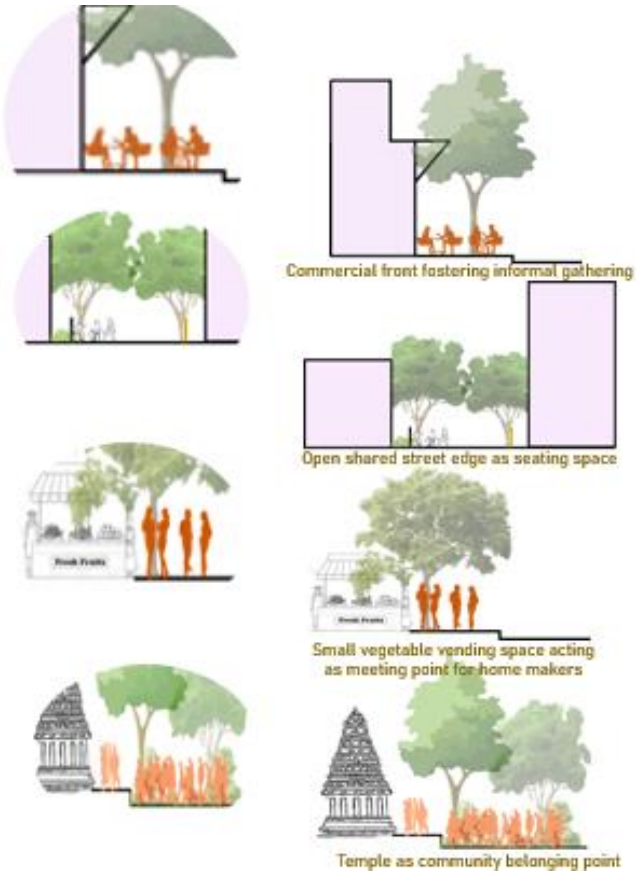
Figure 4.4: location Map showing social and temporal use-based study area

passersby. The fourth edge, near the local temple, becomes a social hotspot during evenings, accommodating group gatherings and festival-related conversations.

Study Outcome:
Edges offering flexible, shaded, and socially legible spaces encourage different user groups at varying times, proving that temporal adaptability of edges enhances sociability and strengthens community rhythms in residential streets.

The third edge, where informal vending occurs, attracts short-duration interactions, fostering spontaneous exchanges among women and

Figure 4.5: Section showing activity in sociability and temporal based study area



5. Privacy & Thresholds:

Figure 5.0: Fully enclosed

Figure5.1: Visually semi permeable but physically enclosed.

Figure 5.2: Visually permeable but physically enclosed

Figure 5.3: location Map showing privacy and threshold-based study area

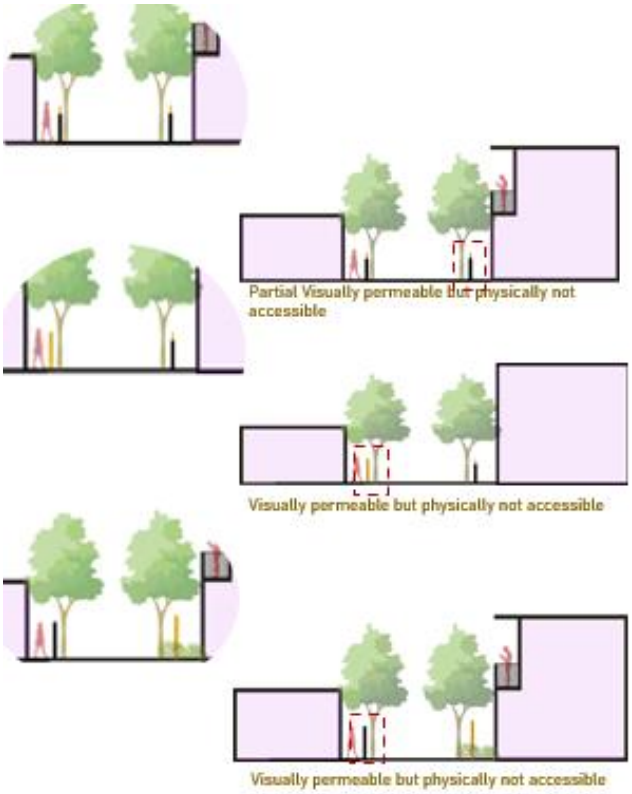
partial visual permeability, offering filtered visibility that maintains security while allowing occasional interaction. The third edge, with open parking forecourts and transparent grills, is highly visually permeable, fostering constant street surveillance and casual engagement, though at the cost of reduced personal seclusion.

Study Outcome:

A balanced level of permeability—through partial openness and layered thresholds—supports both privacy and interaction, demonstrating that privacy in residential streets is best achieved through visual filtering rather than complete enclosure.

The three edge types in Film Colony reveal how degrees of visual permeability shape privacy and social expression. The first edge, with solid compound walls and minimal openings, is visually impermeable, ensuring privacy but creating a detached and inactive street edge with negligible social presence. The second edge, defined by layered vegetation and semi-transparent gates, achieves

Figure 5.4: Section showing activity in privacy and threshold-based study area



6. Ecological & Aesthetic Quality:

Figure 6.0: Minimum vegetation with shrubs

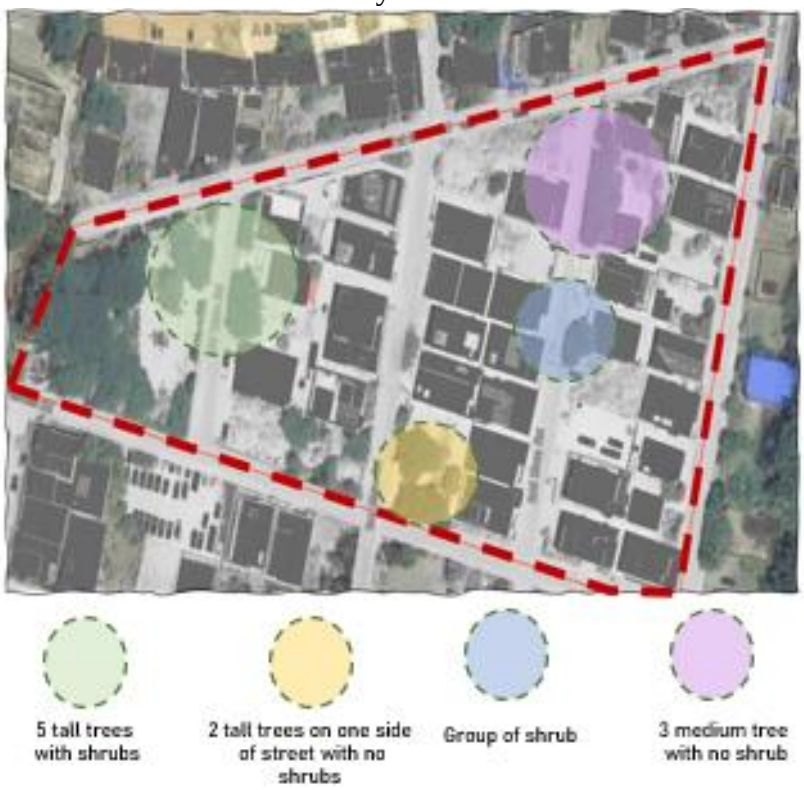
Figure 6.1: Minimum vegetation with shrubs

Figure 6.2: Medium trees with no shrubs

Figure 6.3: No vegetation maintained

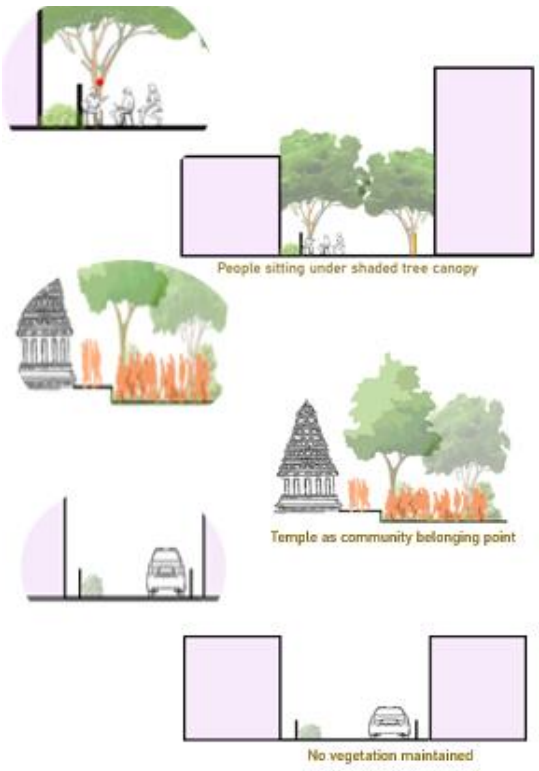
Figure 6.4: Small plants but no shade

Figure 3.5: location Map showing ecology and aesthetic-based study area



The observed street edges in Film Colony display a clear gradient of ecological expression and aesthetic livability. The first and second edges, with dense vegetation and mature canopy trees, exhibit enhanced microclimatic comfort, lower surface temperatures, and strong visual enclosure, encouraging pedestrian use and shaded rest points. The third and fourth edges show moderate vegetation, where smaller planting beds and intermittent trees contribute to partial cooling and spatial relief, though gaps in canopy continuity limit ecological performance. In contrast, the fifth and sixth edges, with minimal or absent greenery, present visually hard, heat-prone environments, reducing comfort and diminishing visual softness.

Figure 3.6: section showing activity in ecology and aesthetic-based study area



Study Outcome:

A continuous vegetated edge system significantly improves microclimatic regulation, visual quality, and ecological diversity, emphasizing that green

infrastructure is not merely ornamental but integral to the aesthetic and environmental resilience of residential streets.

7. Community Belonging & Identity:

Figure 7.0: Shaded space for community gathering

Figure 7.1: Shared street edge

Figure 7.2: Shared front yard

The observed edges in Film Colony display how everyday personalization and collective use shape a sense of belonging. The first edge, with benches under shade and informal sitting spaces, acts as a shared neighborhood spot, fostering casual conversations and social familiarity. The second edge, where children actively play and residents engage outdoors, reflects collective ownership of the street and an environment that sustains intergenerational participation. The third edge, with elderly groups gathering under tree shade, embodies routine social rituals that reinforce community continuity and memory.

Figure 7.3: location Map showing community belonging and identity-based study area

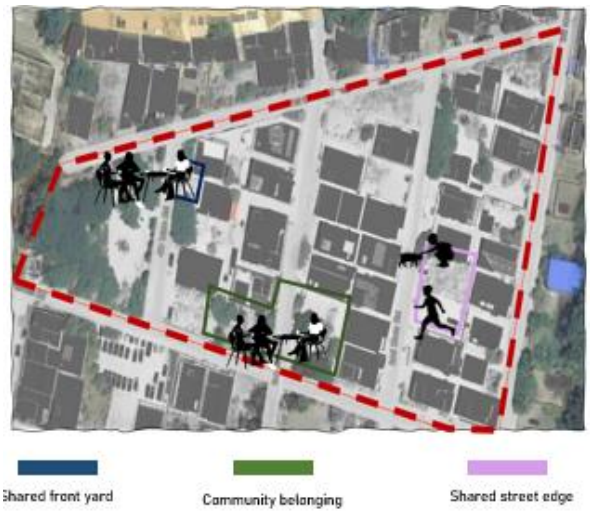
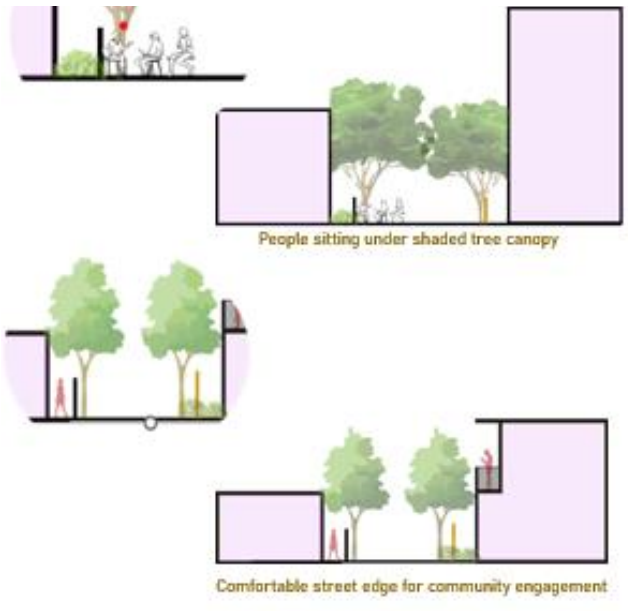


Figure 7.4: section showing activity in community belonging and identity-based study area



Study Outcome:
Edges that accommodate shared activities, personalized objects, and habitual gatherings generate a stronger sense of identity and emotional attachment, proving that community belonging in residential

streets emerges from the daily social use of edges rather than architectural form alone

9. Residents voice: perception of everyday street edges:

This section captures the lived experiences and personal reflections of residents from Film Colony, Vijayawada, as they describe how their everyday street edges shape comfort, safety, and social life. Through informal conversations, residents expressed how elements such as shade, openness, vegetation, and personalized thresholds influence their daily routines and neighborhood identity. Their voices reveal the human dimension behind livability, where space is not only used but felt, shared, and cared for.

- Comfort (Thermal, Seating, Shade): "This is the coolest spot; we all sit here in the afternoon because the breeze passes through." — an elderly man
- Visual Connectivity & Openness: "When we can see across the street, it feels safe and known." — a shop owner
- Inclusivity & Accessibility: "The step near our gate is for everyone — we sit, and children play." — an elderly woman
- Sociability & Temporal Use: "Evenings are our time; after work, we all stand here and talk." — a woman
- Privacy & Thresholds: "Plants near our wall give privacy, but we can still see people walking — it feels safe." — a house owner
- Ecological & Aesthetic Quality: "Trees make it cooler and peaceful; the street feels alive." — a homemaker
- Community Belonging & Identity: "We sweep and water plants every day — this is our lane." — a shopkeeper.

Table 4: Residents point of view

Parameter	Key Focus Points (Edge Condition)	Positive Impacts (Spatial Quality)	Everyday Activity (By Residents)	Resulting Social Outcomes
Comfort	Trees, shaded plinths, verandas	Cool microclimate, reduced glare	Sitting, chatting, resting outdoors	Longer dwell time, more everyday interaction
Visual Connectivity	Semi-open edges (low walls, grills, see-through vegetation)	Clear sightlines and mutual visibility	Greetings, watching children, passive surveillance	Trust, familiarity, sense of safety
Inclusivity	Shared thresholds, walkable plinth edge	Easy access and shared usability	Mixed age use (elders, women, children)	Inclusive community presence

Sociability	Temple fronts, vendor corners, shaded nodes	Flexible use across time of day	Morning walks, evening conversations, casual meets	Shared daily rhythm and social continuity
Privacy & Thresholds	Visual access, semi-open verandas	Privacy maintained without isolation	Residents sit comfortably at the edge	Balanced privacy and interaction
Ecological Quality	Tree canopy, shrub layering, maintained greenery	Cooler, softer, nature-rich street environment	Residents choose street as outdoor living space	Emotional attachment to place
Belonging & Identity	Personalized edges (plants, chairs, names, decorations)	Street reflects shared character and memory	Repeated gathering, play, cleaning, festivals	Strong shared community identity

Discussion:

Residents experience livable streets as comfortable, open, and shared spaces. Shaded plinths, verandas, and trees let people sit, talk, and rest comfortably. Streets with visual connection feel safer and more familiar, while high walls limit social contact. Planting cools the street, softens boundaries, and adds identity. Everyday activities—children playing, elders sitting, neighbors chatting—naturally occur where edges are semi-open.

Overall, a street feels livable when it supports comfort, visibility, sociability, and privacy.

Parameter	Weight
comfort	0.072
Visual connectivity	0.050
Inclusivity	0.168
Sociability	0.097
Privacy and threshold	0.035
Ecological quality	0.291
Belonging and identity	0.131

10. Expert's point of view:

rt point of view

				Sociability	Privacy and threshold	Ecological quality	Belonging and identity
				0.333	3.000	0.200	0.333
				0.333	3.000	0.200	0.333
				3.000	3.000	0.333	3.000
Sociability	3.000	3.000	0.333	1	3.000	0.200	0.333
Privacy and threshold	0.333	0.333	0.333	0.333	1	0.200	0.333
Ecological quality	5.000	5.000	3.000	5.000	5.000	1	3.000
Belonging and identity	3.000	3.000	0.333	3.000	3.000	0.333	1

1 = equal importance
3 = moderately more important
5 = strongly more important

The AHP matrix using inputs from 7 design experts — 6 architect and one urban designer. They compared each parameter in pairs and told us which one they felt was more important. Based on their judgement, we used only the appropriate Saaty values — 1, 3, 5 and their reciprocals (1/3, 1/5). The matrix did not use extreme values like 7 or 9 because the experts felt the parameters were never extremely different in importance.

Ecological quality ranked highest (0.291), followed by Inclusivity (0.168) and Belonging (0.131), while Privacy scored the lowest (0.035), indicating that environmental and social factors dominate user livability perceptions.

Table 6Comparative analysis

Parameter	Residents point of view	Expert point of view
Comfort	Shade, seating , cool climate	Basic requirement
Visual connectivity	Clear sightlines, safety	Supportive factor
Inclusivity	Usable by all ages	High priority, key determinant of liveability
Sociability	Spaces to meet, talk and rest	Moderately important
Privacy and threshold	Balanced privacy	Secondary factor
Ecological quality	Green cool environment	Highest priority
Belonging and identity	Cultural cues, familiar edges	High priority

Table 7: Ideal Parameters with its importance and design guidelines

PARAMETERS	DESIGN GUIDELINES	WHY IMPORTANT
Ecological Quality	Introduce continuous tree canopy (6–8 m spacing), layered vegetation (shrubs, groundcovers), rain gardens, and soft green buffers along edges. Use native plants for resilience and low upkeep.	Enhances thermal comfort, reduces heat, improves air quality, and strengthens ecological performance. Experts rank it highest; residents rely on greenery for comfort.
Inclusivity	Design universally accessible plinths and thresholds; integrate ramps, gentle slopes, tactile paths, adequate walkway widths, and barrier-free circulation. Provide shared edges that support mixed uses.	Ensures streets are usable by elders, women, children, and differently abled groups, promoting social equity and shared usability.
Belonging & Identity	Use locally familiar materials, spatial cues, edge personalisation (plants, seating, nameplates), community art, and culturally relevant street elements.	Builds emotional connection, reinforces neighborhood character, and supports social memory.
Sociability	Create small shaded nodes with plinth seating, verandas, and resting pockets near temples, shops, and intersections. Ensure flexible use from morning to evening.	Supports daily social rituals like chatting, pausing, watching children, and community bonding, enhancing social continuity.

Comfort	Add shaded seating, cool resting nooks, verandas, light-colored pavements, and microclimate improvements such as shade trees and breeze corridors.	Increases dwell time, enables resting, supports outdoor activity, and improves thermal comfort — a key resident priority.
Visual Connectivity	Maintain semi-open edges using low walls, grills, see-through vegetation; avoid tall opaque surfaces. Keep sightlines clear along walkways and at junctions.	Improves safety, familiarity, and passive surveillance; residents feel safer with open, visible edges.
Privacy & Threshold	Use soft buffers such as low shrubs, permeable fences, and semi-open verandas to define boundaries. Maintain partial openness to sustain social connection.	Provides a sense of privacy without isolating residents from street activity, supporting balanced social use.

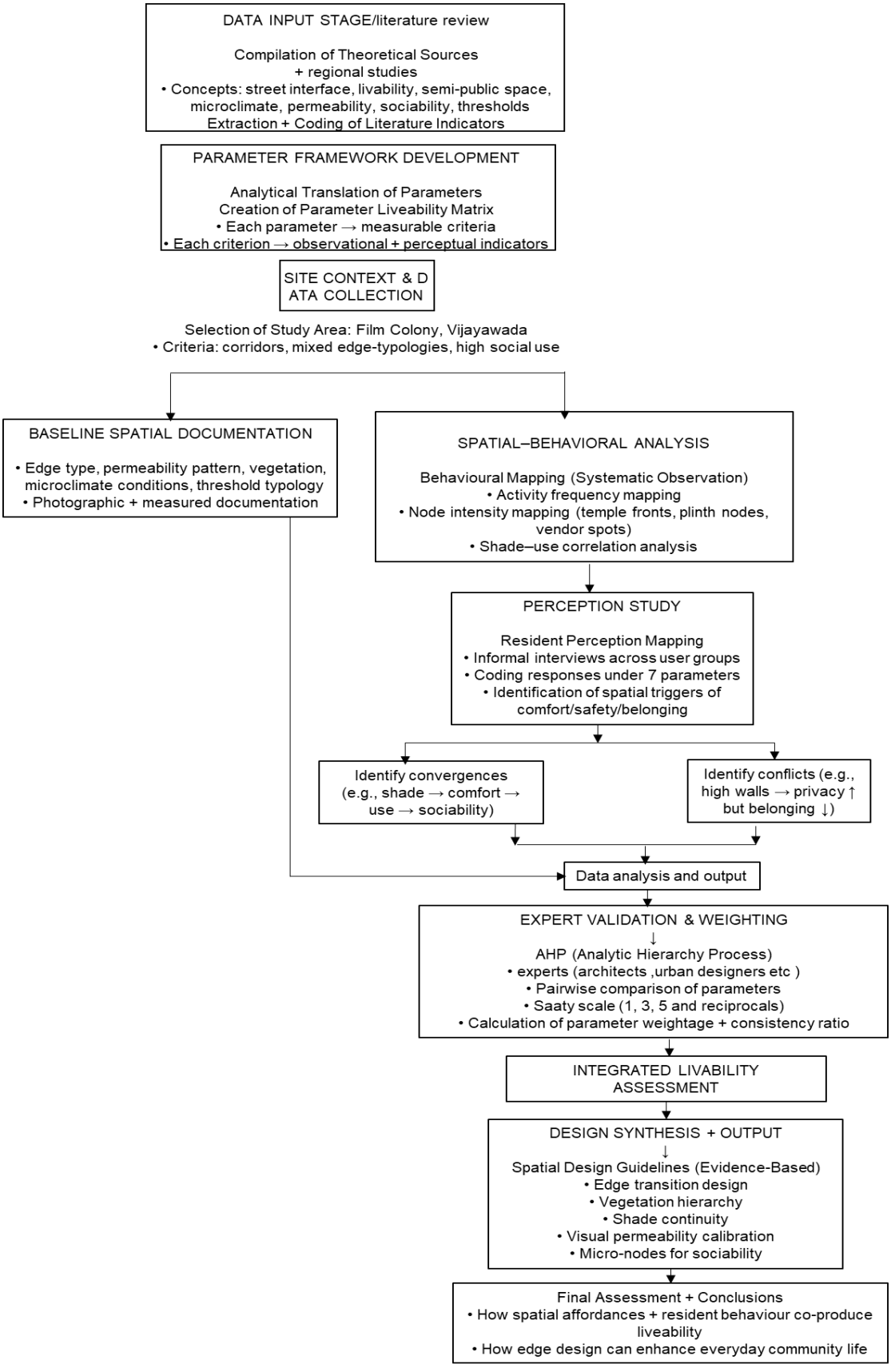
11. Conclusion

The study shows the liveability aspect in film colony Vijayawada, is shared by the street edge elements such as shared spaces, informal seating spaces, micro areas with proper shade and ventilation. The built edge such as verandas, recessed plinths, partially visual permeable boundary edge also gives a stronger grade of community participation chance. The AHP results confirms that ecology, sociability, inclusivity plays significant role which is closely align with resident's point of view and expert validation. Both the comparison highlights the greater bond of community liveability been a vital part in terms of built edge and street edge component. Overall, the dissertation concludes the ecological aspects brings several other vital sub components such as comfort, micro shared space and etc into broader parameter alignment such as fostering sociability, inclusivity.

12. Final reflection

This study shows that residential street edges act as negotiating spaces where private life and community life continually overlap. In Film Colony, these edges—through shade, visibility, shared plinths, and personalized thresholds—enable residents to shape how much openness, interaction, or privacy they want. The most active and welcoming streets were those where edges allowed this flexible negotiation, offering comfort and visibility without compromising individual boundaries. Ultimately, residential street edges become everyday social interfaces, where people sit, talk, watch, play, and care for their surroundings. They do not just mark property lines—they actively mediate belonging, trust, and community presence, making the street a lived and shared space rather than a mere circulation path.

13. Appendix- I: Methodology



14. Authors' Biography:

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