Personalization of House Entrances in Urban Low-Income Low-Rise Housing with Reference to Family Background: A case study in Swarna Place, Colombo

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Abstract

Entrances of low-income houses express families' social and cultural identities as well as their spatial preferences. Even within standardized government housing schemes, residents personalize their entrances to reflect individuality. However, limited research has examined how this personalisation is related to family background and socio-cultural context in urban low-income housing. Addressing this gap, the present study aims to investigate how entrance personalization in a government-provided low-rise housing scheme, located within a larger low-income settlement in Swarna Place, Colombo, corresponds to family background. Based on literature on low-income housing and family spatial behavior, the study identified spatial layout, volume, materials, roof form, and landscape elements as key physical parameters influencing entrance character. Family income and occupation were used to determine socio-economic background. Ten houses were analyzed through onsite measurements, observations, and photographic documentation, supported by semi-structured interviews and video recordings. Architectural and user analyses showed that families with higher income and occupational levels created more refined spatial connections and finishes, while those with lower levels showed abrupt, improvised adaptations. Across all cases, socio-cultural identity was expressed through religious and cultural symbols. The findings indicate that while entrance personalization reflects family background, shared cultural patterns persist across socio-economic groups, highlighting the need for design frameworks that support personalization while sustaining collective identity.

Keywords: *Urban Regeneration, Spatial Identity, Low-Income Housing, House Entrances*

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Introduction

Contextual Background and Problematic Framework

Urban low-income houses in Colombo typically develop gradually on marginal land, with high density and diverse social groups (Hirudini, 2020; SEVANATHA, 2023). These houses are more than just collections of housing units; they are dynamic environments shaped by residents' daily practices, adaptations, and spatial negotiations (Turner, 1976; Hasan, 2020). In this context, a house's entrance is more than just a doorway; it serves as a transitional space between the private and public domains, promoting social interaction, safety, and cultural display (Cooray, 2021; Warakapitiya et al., 2024). Families frequently change entrances by adding different materials, small gardens, verandas, or religious symbols, revealing both personal goals and cultural traditions (Hirudini, 2020; Dayaratne, 2018). These adaptations also demonstrate the concept of "housing as a process," in which residents gradually improve and personalise their homes rather than receiving a finished product (Turner, 1976; Patel and Mitlin, 2010). Such personalisation frequently reflects household composition, income level, and occupation, demonstrating how the built environment can reflect socioeconomic status (Warakapitiya et al., 2024; Kularatne et al., 2019).

In Sri Lanka, government housing programs have frequently prioritised physical structure upgrades and uniform designs over encouraging residents to express themselves creatively (Cooray, 2021; Sugathadasa et al., 2024). Nonetheless, families continue to modify their homes to meet functional needs while also displaying family identity, particularly at entrances that serve practical, social, and symbolic purposes (Hirudini, 2024; Coorey et al., 2019). This is consistent with Rapoport's (1969) theory that house form is mainly influenced by the culture of the residents.

Fig. 1: Government low-income housing program- Swarna place Colombo
Source: author

While many studies look at informal housing conditions, service provision, and spatial adaptation in low-income settlements (Hirudini, 2020; SEVANATHA, 2023; Warakapitiya et al., 2024), few examine how entrances specifically communicate family background and identity. Cooray (2021) examines how households adapt layouts to their economic circumstances, and Hirudini (2020) emphasizes the cultural significance of ornaments and roof forms. Although there is extensive research on Swarna Place and its settlements, little attention has been given to the government-built low-rise housing scheme within the area. Moreover, existing studies do not directly link entrance personalization to family income, occupation, and social status, a critical gap that the study addresses.

This study focuses on Swarna Place in Colombo, a large housing settlement that consists of both an organically developed predominantly low-income settlement and a government built, standardized low-rise housing scheme. Despite the rigid design of the government provided houses, residents have continuously modified and adapted entrances of these dwellings in response to their socioeconomic circumstances and cultural influences. It investigates the relationships between family background and entrance design by looking at layout, materials, landscaping, and symbolic decorations as well as household income and occupation.

This study promotes urban planning approaches that allow for personal expression while maintaining a cohesive building scape by emphasizing both diversity and shared traditions. Instead of imposing strict coherence, planners can create flexible guidelines that allow families to personalize their homes while promoting safety, inclusivity, and visual harmony (Cooray, 2021; Turner, 1976; Hasan, 2020).

Research gap

Although many studies have been conducted on Swarna Place settlement housing, informal housing conditions, the provision of services, and spatial adaptation in low-income settlements (Hirudini, 2020; SEVANATHA, 2023; Warakapitiya et al., 2024), only a few have focused on the government-built housing scheme in Swarna Place and how house entrances convey family background and identity. Existing research rarely associates entrance personalization with household income, occupation, or social status. This gap limits our understanding of how residents express socioeconomic and cultural values within uniform housing designs.

Aim

Even though the houses in the government-built low-rise housing scheme in Swarna Place have the same rigid, similar layout, this study investigates how the residents personalize their entrances to reflect their family background, cultural values, and socioeconomic circumstances.

Objectives

1. Document, examine and categorize the entrance modifications of the houses in the government-built low-rise housing scheme in Swarna Place.
2. Identify patterns in materials, layout, landscaping, and symbolic decoration for entrance personalization.

3. Document, examine and categorize the family backgrounds, with reference to income, occupation, and family status, of the residents of the government-built low-rise housing scheme in Swarna Place.
4. Examine the correlation between entrance design and the family background of the residents.
5. Make recommendations for urban planning and housing policies that promote personal expression while ensuring safe and cohesive housing designs.

Limitations

The study is limited to a comprehensive sample of ten houses in the Swarna Place government built low-rise housing scheme. The study does not cover the organically developed low-income horizontal settlement area. The limited number of case studies makes it possible to gain a detailed understanding of household practices, but it also restricts the findings' applicability to other organically developed settlement areas in Swarna Place, Colombo, and other Colombo settlements or Sri Lanka in general. Using a variety of techniques, such as focus groups, semi-structured interviews, and photographic surveys, the study attempted to minimize observer bias, which is in line with best practices in research on informal settlements (Hirudini, 2024; Warakapitiya et al., 2024).

However, the study does not fully represent the variety of entrance personalization across contexts because it only looks at one housing scheme. To gain a more comprehensive understanding of how entrance personalization reflects socioeconomic and cultural dynamics in low-income communities in Sri Lanka, future research could compare findings from other locations and settlement types (Hasan, 2020; Patel & Mitlin, 2010).

Literature Review

Everyday Urbanism provides the theoretical basis for this study by emphasizing how ordinary, lived experiences shape urban space. Instead of seeing residents as passive occupants, the theory shows how people actively transform their environments through small modifications- painting, extensions, shrines, decorated entrances- that express identity and respond to social and economic conditions. Scholars describe these actions as everyday “tactics” that challenge standardized, state-controlled spaces. In low-income housing, these personalized adaptations become strategies for asserting agency. The entrance, as both a physical and symbolic boundary, becomes a key place where residents negotiate identity and connect private life with the community.

Low-Income houses

In Sri Lanka, low-income housing areas are usually dense, incrementally constructed areas where people constantly modify their living arrangements to accommodate their evolving demands. Houses are built and modified in phases as funds permit, because these neighborhoods frequently lack proper infrastructure, legal tenure, and formal planning control. Due to the significant influence of physical constraints, uncertain occupancy, and a lack of amenities, home entrances are important sites for adaptation and expression.

In order to accommodate growth, families commonly extend roofs, alter façades, and rearrange layouts, as indicated by Hirudini (2020). This leads to a patchwork of house forms within the same town. According to Cooray (2021), government relocation housing projects frequently enforce

homogeneous designs that ignore socioeconomic variety, which leads locals to redesign semi-public spaces and entrances in an effort to regain a sense of identity. Coorey (2021) also emphasizes how citizens swiftly modify and customize entrances to reestablish cultural identity and exhibit uniqueness, even when governmental projects mandate standard façades.

Streets and house fronts serve as locations for informal childcare, social contact, and home-based labor, according to recent policy studies. Security, settlement identity, and social cohesion all depend on these common areas, particularly entrances (SEVANATHA, 2023; Warakapitiya et al., 2024).

Similar adaptive behaviors in informal housing throughout the Global South are demonstrated by international literature, supporting these findings. While Patel and Mitlin (2010) demonstrate how community-driven upgrading in Indian slums improves thresholds, courtyards, and shared routes to support both functionality and social life, Turner (1976) highlights that self-help housing in Latin America thrives on incrementalism.

According to Roy (2005), informality is a form of urbanization that is influenced by agreements between the government and citizens rather than the lack of planning. In African contexts, Kombe (2005) describes how resident-led development blurs the boundaries between public and private space in Dar es Salaam townships. Hasan (2020), writing more recently, emphasizes how low-income neighborhoods in Karachi transform home fronts into multifunctional spaces that support livelihoods, increase living space, and promote community cohesiveness.

All of these studies support the idea that low-income communities around the world develop through gradual construction and adaptation. In disenfranchised urban surroundings, personalizing entrances, façades, and shared semi-public places is a common tactic for negotiating identity, safety, and social belonging, despite of cultural differences.

Family Background

The literature published after 2015 continuously connects dwelling form to occupation, income, life cycle, and family structure. According to Hirudini (2020), households adjust layouts and boundaries to balance privacy, storage, and access over several generations as they go through important life phases such as marriage, parenthood, and elder care. Families with steady incomes and skilled trades make investments in long-lasting materials, fine finishing, and permanent entry improvements, while households with erratic incomes depend on inexpensive, transient changes that may be added or deleted as needed (Cooray, 2021).

Personalization is also influenced by occupation: wage-earner households place a higher priority on security and enclosure, whereas home-based workers frequently keep entrances open and visible for clients. According to Coorey et al. (2019), material permanence and occupational stability are correlated; skilled-trade households choose masonry finishes, whereas households with unpredictable incomes favor lightweight or detachable components. These studies collectively demonstrate how family background—including work, financial stability, and life stage—significantly influences the design, completion, and everyday use of entrances.

House, identity, and the family- house relationship

The house is increasingly being treated in research as a social symbol that conveys aspiration, cultural identity, and dignity. The most expressive aspect of this identity is the entrance, where families display their status and ideals to the public. Religious symbols, name boards, and ornamental plants are used to communicate ancestry, moral principles, and hospitality, according to Hirudini (2020).

According to Cooray (2021), even in modest interiors, personalizing techniques like gate designs, tiled plinths, and distinctive paint colors serve as inexpensive indicators of respectability. Although wealthier households utilize higher-quality materials and craftsmanship, comparative research conducted since 2019 demonstrates that families of all income classes routinely display cultural and religious symbols at entrances (Coorey et al., 2019; Warakapitiya et al., 2024). In general, entrances are influenced by family history and function as a platform for social identity expression, making them essential to conversations about settlement upgrading and design policy.

According to Hirudini (2020), inexpensive symbolic objects such as flags, plants, or shrines are frequently erected at gateways as symbols of hospitality and ancestry. According to Coorey (2021), in densely populated metropolitan settings, even modest dwellings convey social striving and dignity through distinctive gate patterns or vivid paint colors.

According to the examined research, incremental construction, unstable tenure, and a variety of household demands define low-income settlements in Sri Lanka, resulting in extremely expressive and adaptable dwelling forms (Coorey et al., 2019; Warakapitiya et al., 2024). The most noticeable and flexible spatial features are entrances, which serve as thresholds where social, cultural, and personal identities are negotiated as well as serving as places of access (Kularatne et al., 2019). The choice of materials, degree of durability, and degree of personalization at these entrances are significantly influenced by family background, which includes occupation, life cycle stages, and income stability (Warakapitiya et al., 2024).

In addition, symbolic components like plants, shrines, gate designs, and ornamental finishes reinforce the house-family bond by acting as symbols of respectability, dignity, and ambition. The study synthesizes these findings concluding that the main physical characteristics influencing the character of home entrances are volume, roof, material usage, ornamental details, and landscape features. Additionally, family income and occupation are identified as important markers of family background (Warakapitiya et al., 2024).

Across these studies, several points of alignment and divergence become clear. Sri Lankan literature by Hirudini, Cooray, Coorey, and Warakapitiya strongly echoes the global arguments made by Turner, Patel, and Mitlin, Kombe, Hasan, and Roy: households in low-income settlements consistently modify standardized or restrictive built forms to assert identity, improve functionality, and negotiate limited space. The similarity lies in the shared reliance on incremental construction and everyday adaptation as both necessity and cultural expression.

The main contrast emerges in the relationship between residents and the state. Sri Lankan relocation housing shows a sharper tension between imposed uniformity and resident-driven personalization compared with cases in Latin America or community-led upgrading in India, where negotiation tends to be more embedded within planning processes. Likewise, Roy's view of

informality as a state–citizen negotiation fits African and South Asian contexts more neatly than Sri Lanka's relocation schemes, which often reduce resident agency until post-occupation modifications occur.

Another point of divergence lies in how cultural symbolism manifests. While global studies note the use of home fronts for livelihood or social life, Sri Lankan work shows a particularly strong emphasis on religious markers, ancestry, and dignity expressed through entrance details. This creates a distinct cultural weight around the entrance as both a threshold and a social statement.

Taken together, these comparisons show that Sri Lanka participates in a global pattern of everyday spatial agency, but the intensity of state control, the cultural symbolism embedded in entrances, and the degree of post-occupancy adaptation give the local context its own profile. This comparison strengthens the theoretical basis of the study by showing where local experience aligns with, and departs from, international research, clarifying why the entrance becomes a critical site for understanding identity and adaptation.

Methodology

However, limited research has examined how this personalization relates to family background and socio-cultural context in urban low-income housing. Addressing this gap, the present study aims to investigate how entrance personalization in a government-provided low-rise housing scheme, located within a larger low-income settlement in Swarna Place, Colombo, corresponds to family background.

This methodology is designed to understand two things that are tightly linked using a mixed method approach: the physical form of house entrances, and the socio-economic and cultural factors that influence how and why families modify these entrances. The diagram splits these into two branches, but the research treats them as interconnected processes.

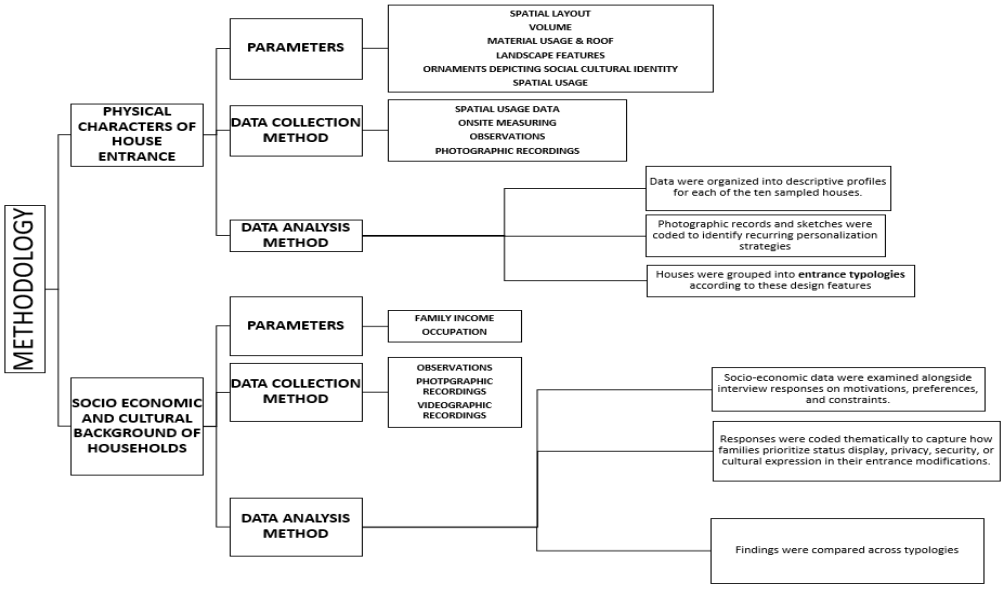


Fig. 5: Methodological Framework
Source: author

The first section examines the physical characteristics of house entrances. This involves looking closely at tangible features: the size and shape of the entrance space, the height and depth of the volume, the materials used, how the roof is arranged, landscape additions such as plants, and any decorative or symbolic elements like shrines or cultural markers. Everyday usage also matters, whether the entrance is used for sitting, working, gathering, or storage.

The second section focuses on the socio-economic and cultural background that shapes these physical choices. This includes factors such as family income level, occupational stability, and type of work. These determine what families can afford, how often they modify their homes, and what priorities they express in the entrance. Cultural background also shapes aesthetic preferences, religious symbols, and ideas of respectability or privacy.

Together, this methodology produces a layered understanding of entrances as both architectural forms and lived cultural expressions, showing how physical space and family background interact to produce distinct spatial identities.

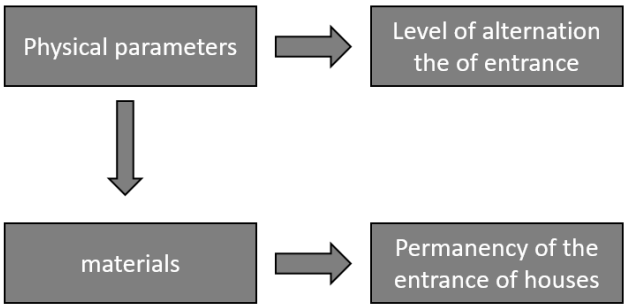


Fig. 6: The connection between Physical parameters
Source: author

Case Selection Justification: Swarna Place, Colombo

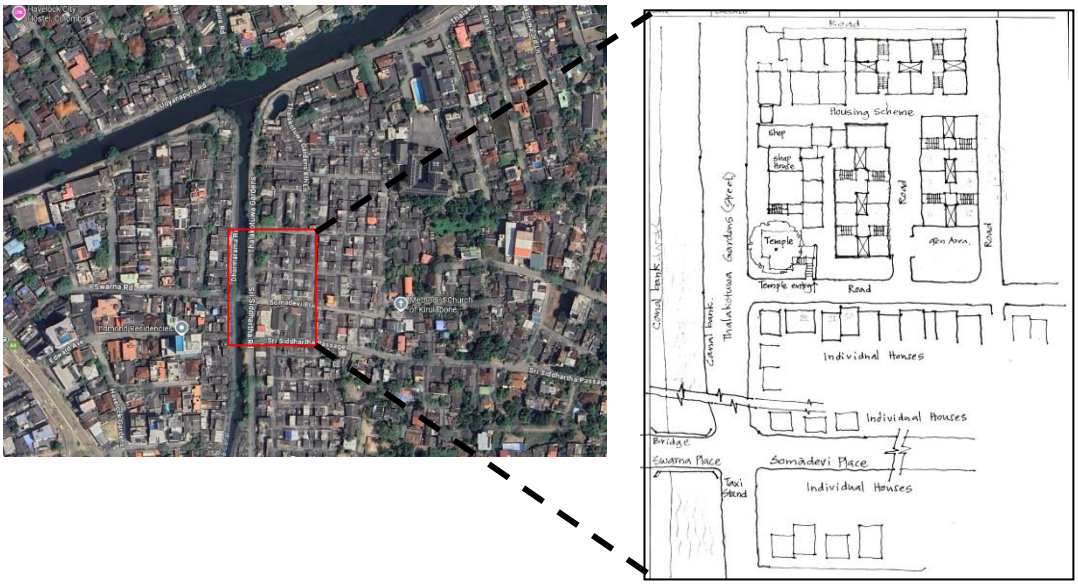


Fig. 6: Selected houses- Swarna place
Source: author

Swarna Place was selected as the study site because it contains a government-provided, low-income, low-rise housing scheme embedded within a larger, organically evolved settlement built on government-allocated two-perch plots that have transformed over several decades (Senaratna & Hettiarachchi, 2025). This combination of planned and organic development creates a setting where formal design intentions and informal household practices coexist, making the site well suited for examining spatial, functional, and social changes in state-built housing located within an organically grown low-income neighborhood.

The scheme is particularly appropriate for analyzing entrance personalization. Its house fronts remain highly visible, closely clustered, and oriented toward narrow internal streets, conditions that amplify the role of the entrance as a social threshold. These characteristics allow personalized elements, gates, shading devices, shrines, seating, workspaces, and decorative additions, to be clearly observed and compared. Unlike previous research that has focused on dwelling quality, service provision, or security of tenure (SEVANATHA, 2023), or studies by Coorey et al. (2019) and Warakapitiya et al. (2024) that examine behavioral adaptations and building modifications without isolating the entrance as a design locus, Swarna Place provides a rare opportunity to study entrances as both architectural forms and social interfaces.

The site also offers an ideal context for linking physical entrance modifications to socioeconomic and cultural variables. Its mix of occupational patterns, income variability, multigenerational households, and diverse cultural practices creates a range of motivations and constraints that shape entrance design. This diversity allows the study to trace how personalization reflects family background, occupational identity, cultural norms, and everyday practices.

Sample Designs and Sizes

A stratified purposive sample of ten households was randomly selected from the government-built housing scheme (as shown on the table 2 and 3) to analyze house entrance physical characteristics as well as households' socioeconomic and cultural backgrounds, ensuring that the sample covered the entire site area. Stratification took into account entrance typologies like fully enclosed thresholds, open porches, and symbolic ornamentation, as well as family background variables like income, occupation, religion, and headship. This approach ensures that diverse households and entrance types are represented in meaningful analysis.

Data Collection Methods

Data for this study were collected on weekdays and weekends from April to August 2025 to capture a variety of activity patterns and household routines. The study took an integrated qualitative-quantitative approach, collecting both physical and social data to gain a comprehensive understanding of house entrance personalization.

Physical data collection consisted of on-site measurements, systematic observations, photographic documentation, and architectural sketching of house entrances. These methods documented the spatial layout, material quality, vegetation, ornaments, and symbolic elements. Physical entrance data were then coded and classified into three entrance typologies: refined/permanent, semi-permanent, and informal/temporary, with percentages calculated to show their distribution across the ten sampled houses.

The social data collection centered on household background, the reasons for entrance personalization, and community norms. Semi-structured interviews with household users looked at occupation, income level, household size, and user preferences for entrance design. Focus group discussions were held to capture collective perceptions and community aesthetics, while on-site observations revealed usage patterns such as social display versus privacy.

The architectural and social data sets were then cross analyzed to determine the relationships between entrance typology and household background. This study linked material choices, spatial organization, and symbolic expression to user preferences and socioeconomic status. Swarna Place government housing scheme's site map was also created to mark the location of sampled houses and visually represent entrance typologies and household categories for spatial analysis

Table 8: Data type and collection method

Data type	**Collection method**
House entrance physical characteristics & spatial usage	Onsite measurements, observations, photographic recordings
Family background, personalization & user preference	Semi-structured interviews, observations

Analytical Framework

Data analysis involved coding qualitative interview transcripts and field notes to identify recurring themes of identity, aspiration, and material choices. Physical measurements and photographic records were compared to identify correlations between socioeconomic status and entrance personalization strategies. These were then cross-analyzed using a comparative matrix to reveal relationships between income, occupation, and design quality.

The combination of qualitative and quantitative tools provided a **methodological triangulation**, strengthening validity and ensuring that findings reflected both observed and narrated realities.

Swarna Place's analysis was conducted in two stages: architectural character analysis and user analysis, to investigate how house entrance personalization reflects family background and cultural identity.

Step 1: Analyzing architectural characteristics

During the first stage of architectural character analysis, all physical entrance data were collected systematically and organized into descriptive profiles for each of the ten sampled houses. This data set contained measurements and observations of the spatial layout, entrance volume, material usage, roof treatments, landscaping, and the presence of symbolic ornaments.
Photographic records and architectural drawings were subsequently analyzed to determine recurring personalization techniques such as the amount of enclosure or openness of thresholds, the level of workmanship and finishing, the addition of vegetation, name boards, or religious symbols, and the spatial connection between the entrance and the street in terms of visibility, privacy, and connectivity.

The ten houses were grouped into separate entrance typologies that revealed various types of design and personalization such as highly altered & permanent , moderately altered & semi-permanent and subtle/ low altered & temporary. Based on these coded attributes. These typologies included refined and permanent entrances with durable materials and coherent layouts, moderately altered and semi- permanent entrances that combined basic structures with selective personalization, and subtle/ low altered and temporary entrances, distinguished by improvised construction, recycled materials, and functional rather than decorative features.

This typological framework served as the foundation for contrasts between households based on income levels, job profiles, and expressions of culture, and it was used in later stages of analysis to connect architectural quality to socioeconomic background and symbolic significance.

Step 2: User analysis

Socioeconomic data, such as family income, occupation type, and composition of households, were analyzed alongside interview responses to better understand the motivations, preferences, and constraints of entrance personalization. Interview transcripts and field notes were thematically coded to identify priority areas, such as status display, privacy, security, and cultural expression. Household comparisons revealed clear differentiation: higher-income and skilled-trade households tended to invest in durable materials, consistent layouts, and clearly defined thresholds, whereas lower-income and irregular-wage households relied on spontaneous additions, unplanned spatial transitions, and recycled materials.

Regardless of economic or professional differences, all households had some form of cultural or religious marker, such as name boards, shrines, flags, or symbolic paintwork, demonstrating that expressions of identity and shared heritage are universal practices that cross income lines. These themes were combined in Table 2 to highlight patterns of motivation and material selection across various entrance typologies.

Step 3: Cross-Analysis

Entrance typologies were then mapped against household income and occupation to show how family background influences the physical personalisation of entrances. A comparative matrix was created that connects entrance type to material and spatial quality on the one hand, and family background to personalisation motivation and style on the other.

This cross-analysis revealed a strong relationship between socioeconomic status and the intensity, quality, and persistence of entrance modifications. Refined and permanent entrances consistently corresponded with higher-income or skilled-trade households; semi-permanent entrances with moderate-income, small-business households; and informal or temporary entrances with low-wage households. However, symbolic cultural display remained consistent across all groups, serving as a unifying visual and social element.

This matrix's convergent themes and contrasting patterns show how individual expression aligns with and differs from the character of collective settlements. This combined physical-social analysis not only clarifies the relationship between family background and entrance personalization, but also provides recommendations for design and policy interventions that encourage personal identity expression while maintaining a cohesive streetscape.

Limitations

This study is limited by its **small sample size (ten households)** and **lack of quantifiable socioeconomic data**, which restricts the generalizability of the results. The research is also **cross-sectional**, capturing conditions at a single point in time rather than long-term transformation. However, these constraints are balanced by detailed documentation, participant engagement, and multi-method cross-verification, which together provide a strong foundation for interpreting the relationship between social background and spatial personalization in low-income housing.

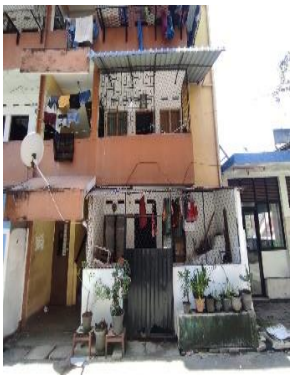
Research Findings

This study examined how entrance personalization in Swarna Place reflects the intersection of family background, professional profile, and shared cultural identity. Using a mixed-methods approach combining architectural character assessment and thematic user analysis, the research identified interrelated physical and socio-cultural patterns influencing entrance design within a government-provided, low-income housing scheme. The analysis draws on ideas from **spatial adaptation** and **incremental urbanism** (Turner, 1976; Patel & Mitlin, 2010) to understand how user-driven modifications embody both necessity and aspiration. Three entrance typologies were identified among the ten houses: *highly altered and permanent, moderately altered & semi-permanent,* and *subtle/low altered and temporary.*

Architectural characteristics analysis

Table 2: Selected houses and their architectural characteristics.

House	Spatial Layout & Volume (P1)	Material & Roof (P2)	Landscape Features (P3)	Entrance Features (P4)	Typology
H1 	Clearly defined entrance with a semi-enclosed verandah that separates public and private zones; proportionate volume that complements overall dwelling.	Masonry walls with smooth plaster finish; solid concrete slab roof with proper rain protection .	Potted plants arranged symmetrically to frame the doorway.	Durable materials, coherent threshold	Highly altered & permanent

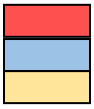
H2 	Porch with defined steps and sitting space, allowing controlled interaction with street; balanced façade composition.	Brickwork with painted finish; reinforced concrete slab with parapet detailing.	Flowerpots and small shrubs marking entry path.	Refined porch, secure gate	Highly altered & permanent
H3 	Semi-open verandah used as a welcoming zone; upper-storey volume articulated with well-planned windows.	High-quality masonry with tiled skirting; flat slab roof providing clean lines.	Low garden edge with ornamental plants.	Covered steps, plastered walls	Highly altered & permanent
H4 	Covered threshold with transitional steps; organized layout providing clear hierarchy from street to door.	Plastered blockwork walls with painted finish; solid slab roof with finished soffit.	Minimal but maintained greenery along entrance edge.	Gated threshold, quality finishes	Highly altered & permanent
H5 	Gated threshold leading to recessed entry; vertical proportion of façade suggests higher social aspiration.	Well-constructed masonry with rendered finish; tiled roof over porch area.	Paved entrance with potted flowering plants.	Covered steps, plastered walls	Highly altered & permanent

H6 	Open porch with railing; simple but precise geometric layout; upper floor projecting slightly over entrance.	Concrete structure with neat plaster finish; roof slab with small canopy extension.	Compact but tidy planting on either side of doorway.	Gated threshold, quality finishes	Highly altered & permanent
H7 	Partially enclosed threshold, irregular spatial alignment; informal seating near doorway.	Mixed construction: block walls with exposed patches; corrugated roof sheet extension.	Few improvised plant pots along wall edge.	Partial enclosure, mixed materials	Moderately altered & semi-permanent
H8 	Basic entrance porch without clear threshold hierarchy; uneven façade proportions.	Partly plastered blockwork with visible joints; light metal sheet canopy.	Small improvised garden in recycled containers.	Basic porch, semi-formal layout	Moderately altered & semi-permanent
H9 	Open entry without boundary or porch; direct access from street to living space.	Salvaged timber posts with low-cost sheet walling; asbestos/ metal sheet roof.	No formal landscaping, only a bare forecourt.	Open entry, abrupt threshold	Subtle / low altered & temporary

H10 	Abrupt open frontage, no threshold differentiation; single-storey low height.	Timber and metal sheet mix with exposed fixings; temporary patched roof.	No planting or decoration beyond functional use.	Temporary enclosure, recycled materials	Subtle / low altered & tempor ary

Color codes

1. Highly altered & permanent
2. Moderately altered & semi-permanent
3. Subtle/ low altered & temporary



1. Spatial Layout and Volume (P1)

Refined houses (H1–H6) display clear hierarchies between public and private zones, incorporating porches or verandahs as transitional thresholds, a quality often linked to permanence and higher social visibility. Mid-level homes adopt semi-open verandahs as welcoming zones, while low-altered houses (H9–H10) rely on functional thresholds with minimal spatial articulation. This gradation parallels Turner's (1976) notion of "dweller control," where autonomy over spatial modification reflects socioeconomic empowerment.

2. Material and Roof (P2)

Materiality clearly indexes income and occupational stability. Permanent houses feature plastered masonry and reinforced concrete roofs, while temporary ones use salvaged or lightweight materials. Such differentiation exemplifies *spatial reuse theory*, where residents repurpose available resources to extend functionality (Kellett & Tipple, 2000). Durability thus becomes both a socio-economic and symbolic statement.

3.Landscape Features (P3)

Landscaping acts as a soft boundary mediating public and private realms. Refined households use maintained gardens to reinforce hierarchy and status, while improvised greenery in temporary homes signifies aspiration within constraints. This reflects *incremental urbanism*, where minor aesthetic gestures signal upward mobility and belonging within dense urban fabric.

User characteristics of the selected houses

Table 2: family background character of the selected houses

House	Income Level (S-P1)	Occupation Type (S-P2)	Family Composition (S-P2)	Motivations & Priorities (S-P3)	Cultural / Religious Markers (S-P4)	Symbolic Ornaments(S-P5)
H1	High within low-income group	Skilled trade	Nuclear	Status display, privacy	Present – formal display	Prominent religious statue and polished name board at threshold.
H2	High within low-income group	Professional	Extended	Privacy, order	Present – polished	Decorative plaque displaying family name alongside a cultural emblem.
H3	High within low-income group	Skilled trade	Nuclear	Status display, security	Present – formal	Cultural flag, religious poster, and family name sign integrated neatly.
H4	High within low-income group	Professional	Nuclear	Aesthetic order, privacy	Present – formal	Small statue and framed religious print displayed on wall.
H5	High within low-income group	Skilled trade	Nuclear	Status display, security	Present – formal	Decorative tiles and a polished wooden name plate.
H6	High within low-income group	Professional	Nuclear	Aesthetic order, privacy	Present – formal	Religious symbol embedded in gate design.
H7	Medium within low-income group	Small business	Extended	Practical adaptation	Present – informal	Stickers and small framed deity image at eye level.
H8	Medium within low-income group	Small business	Extended	Security, low-cost personalization	Present – informal	Religious name plate above door; faded cultural sticker.

H9	Low within low-income group	Irregular wage	Extended	Function over form	Present – improvised	Small shrine or hanging ornament attached to doorway.
H10	Low within low-income group	Irregular wage	Extended	Security, cost minimization	Present – improvised	Painted religious symbol on door lintel or wall surface.

1. Income Level (S-P 1)

Within the low-income housing scheme, 60% of households are from relatively high-income groups. These families show stable economic conditions and a higher level of financial security. Around 20% of households are classified as medium-income, meaning they have a moderate and consistent income with limited flexibility. The remaining 20% of households are low-income, with fluctuating financial conditions and limited economic capacity.

2. Occupation Type (S-P 2)

Approximately 60% of households work in skilled trades and professional fields, indicating relatively stable employment and income sources. Approximately 20% of households own small businesses, indicating moderate economic stability and self-employment within limited local networks. The remaining 20% rely on irregular-wage labour, resulting in volatile and unpredictable income patterns with little job security.

3. Motivation and Priorities (S-P3)

Motivations shift from status and privacy among comparatively high-income households within the low-income housing scheme to security and cost-efficiency among low-income families. Higher-income groups aim to maintain respectability and social distinction, while lower-income households prioritize safety, affordability, and day-to-day practicality. These variations reflect differing social priorities shaped by economic stability and resource availability.

4. Cultural/religious markers (S-P4)

Religious and cultural emblems appear at all income levels, but their visibility and formality differ. High-income homes feature carefully curated, polished displays, statues, plaques, or embedded symbols that are frequently coordinated with the overall design. Stickers, painted signs, and small hanging shrines are examples of informal, improvised, or repurposed expressions found in middle and low-income homes. These elements serve as "everyday signifiers" of moral order and belonging, connecting domestic thresholds to more general cosmological beliefs.

5. Symbolic ornaments (P5)

Religious symbols and family name displays are common in all typologies, but their prominence and finishes vary according to house permanence. Highly altered and permanent houses have polished name boards, statues, and plaques that blend seamlessly with architectural elements. Semi-permanent houses use smaller framed images or stickers to demonstrate effort with limited resources. Subtle/ low altered and temporary houses frequently have minimal religious symbols or faded decorations attached to the doors or walls. Cultural emblems, flags, and posters are used

in refined homes to convey both identity and status. Ornamentation complements spatial hierarchy by identifying the threshold as a culturally significant zone. Decorative tiles or polished wood are reserved for highly altered and permanent houses, whereas functional or improvised materials predominate in informal settings. Overall, households use symbolic elements to communicate cultural values and social identity.

Cross analysis

Six of the houses (60%) had refined and permanent entrances, which were distinguished by long-lasting materials, consistent layouts, and carefully planned façades.

Moderately altered and semi-permanent entrances appeared in two houses (20%), combining basic structural elements with selective personalization, while the remaining two houses (20%) used recycled or low-cost materials, abrupt spatial transitions, and primarily functional changes. Although the intensity and quality of personalization varied, all entrance types featured symbolic or ornamental elements, demonstrating that physical differences did not eliminate shared cultural practices. The user analysis confirmed these typologies in terms of family background and income level.

Six households (60%) worked in skilled-trade or professional occupations with relatively stable incomes, and they preferred to invest in durable finishes and clearly defined thresholds.
Two households (20%) owned small businesses or had moderate incomes, resulting in mixed material use and partial personalization of entrances. The remaining two households (20%) earned irregular wages and valued security and affordability over aesthetics, resulting in more improvised additions and abrupt spatial transitions. Despite these differences, each household incorporated cultural or religious symbols into their entrance design, ranging from statues and name boards to flags and painted motifs, demonstrating that the desire to express collective values and identity transcends economic status.

At settlement scale, Swarna Place exhibits fragmented visual order**:** material variation and irregular façades produce patchwork aesthetics typical of self-built settlements. Yet shared symbols, shrines, name boards, and flags generate subtle unity. This coexistence of fragmentation and cohesion aligns with *urban regeneration frameworks* that value heterogeneity as a sign of lived adaptation rather than disorder (Patel & Mitlin, 2010; Hasan, 2020).

Cross analysis revealed a strong relationship between household background and entrance quality. Households with skilled trades or professional jobs consistently produced refined and permanent entrances, whereas moderate-income households developed semi-permanent forms and irregular-wage households used informal or temporary solutions. This pattern demonstrates how income and occupation have a direct impact on the quality of craftsmanship, material durability, and spatial coherence of entrances. Despite these differences, all households displayed religious or cultural markers, indicating that symbolic expression is a universal practice. The study also found that, while individual personalisation enriches household identity, it results in a fragmented and uneven streetscape due to differences in materials and enclosure types.

Overall, the findings show that the personalisation of entrances at Swarna Place reflects both family background and cultural identity. Wealthier and more stable households create refined, permanent thresholds, whereas low-income and irregular-wage households rely on improvisation and recycled materials. Across this spectrum, cultural and religious symbols serve as unifying

elements, providing continuity and dignity across income levels. This evidence emphasises the importance of policies and design guidelines that allow for individual expression while preserving a consistent streetscape and collective settlement identity.

Shared Cultural Identity despite Economic Differences

Despite significant differences in material quality and craftsmanship, all households included cultural or religious markers at their entrances. Whether in the form of statues, name boards, flags, or painted symbols, these elements express a common value system and collective identity. Wealthier families displayed these symbols more formally and incorporated them into architectural details, whereas lower-income families used improvised or temporary forms. This suggests that cultural expression is universal and crosses economic boundaries.

Typology-Background Correlation

When cross-referenced, entrance typology closely aligns with family history:

● Highly altered and permanent entrances (H1-6). Found in households with skilled trades or professional jobs, with long-lasting finishes, clear spatial transitions, and planned façades.

● Moderately altered and semi-permanent entrances (H7-H8) are associated with moderate-income small businesses that combine basic structure with selective personalisation.

● Subtle/ low altered and temporary entrances (H9-H10) are linked to irregular wage earners, using salvaged or low-cost materials. They have abrupt thresholds and functional rather than decorative changes.

This typology demonstrates that personalization intensity and quality are socioeconomically stratified.

Settlement-Level Visual Impact

Although individual households personalize entrances corresponding to their unique purposes, the entire street view at Swarna Place demonstrates both variety and visual fragmentation. Variations in material use, building types, and façade connection produce uneven landscapes and an uneven patchwork appearance characteristic of gradually developed settlements. Nonetheless, the constant presence of cultural markers, such as shrines, name boards, flags, and decorative plants, provides subtle cohesion and a sense of shared belonging, even when physical finishes differ. While this study captured settlement-level visual patterns, future research will focus on how these fragmented but cohesive streetscapes influence social interaction, perceived safety, and neighborhood identity.

Table 3: Summary

Category	Typical Income & Occupation	Motivations & Priorities	Cultural / Religious Markers	Symbolic Ornaments & Entrance Traits	Interpretation
Highly altered & permanent	High-income; professionals or skilled trades (H1–H6)	Status display, privacy, aesthetic order	Present – formal, curated	Polished materials, permanent fixtures, name boards, embedded symbols, statues	Entrances are deliberate architectural statements expressing stability, respectability, and long-term investment. The design merges cultural symbolism with aesthetic discipline to communicate social prestige.
Moderately altered & semi-permanent	Medium-income; small business owners (H7–H8)	Security, adaptation, modest personalization	Present – informal	Economical materials, small deity images, stickers, plaques, and repainting for upkeep	Entrances balance function and identity. Decorative gestures are adaptive, showing aspiration under material constraint. Symbolism is maintained but with pragmatic simplicity.
Subtle / low altered & temporary	Low-income; irregular wage labor (H9–H10)	Cost minimization, basic security	Present – improvised	Painted religious signs, hanging ornaments, reused materials, or makeshift shrines	Entrances are improvised yet expressive. Religious or cultural signs act as low-cost affirmations of belonging and moral order, revealing resilience under economic precarity.

Discussion and Implications

Conceptual Linkages

Findings reinforce how personalization operates as a spatial dialogue between material constraint and socio-cultural aspiration. Households reinterpret state-provided structures to express individuality and moral identity, aligning with Turner's (1976) view that user-driven modification is a critical indicator of housing satisfaction.

Policy and Design Implications

Rather than enforcing uniform government designs, policy frameworks should recognize personalization as an essential regenerative process. Technical support and participatory design can bridge quality disparities without erasing cultural identity.

Shared cultural identity emerges as a key unifying mechanism, and a potential design principle for settlement-level upgrades. Recognizing these symbols within planning frameworks could strengthen community cohesion while enhancing visual coherence.

Broader Relevance

The findings contribute to the regional discourse on self-built urbanism by evidencing how micro-level transformations collectively shape urban identity. At the policy level, such insights can inform inclusive regeneration strategies that integrate resident creativity with formal urban management.

Discussions and Recommendations

1. Create settlement-level design guidelines.

Create frameworks that encourage individualization while preserving overall visual coherence. Provide visual examples and modular approaches to thresholds, doorways, and façades that accommodate diverse socioeconomic profiles while maintaining street-level harmony (Turner, 1976; Patel & Mitlin, 2010).

2. Provide technical support to self-builders.

Provide training workshops, advisory services, or demonstration projects to help residents improve entrance quality without jeopardizing safety, accessibility, or environmental performance. Encourage knowledge sharing among residents so that low-income households can adopt the cost-effective strategies used by higher-income families. Encourage participatory design approaches in which residents collaborate with architects or community facilitators to create solutions that bridge the gap between professional guidance and lived experience (Hasan, 2020; Coorey et al., 2019).

3. Use shared cultural identity as a unifying element.

Recognize and formalize the role of religious and cultural markers as shared visual and symbolic threads throughout the settlement. Use these shared elements to support collective improvement initiatives, such as community-led façade enhancement programs or thematic public spaces that promote cohesion while preserving individuality. Encourage documentation and celebration of local cultural expressions through entrance personalization as part of heritage preservation and identity affirmation strategies (Hirudini, 2020; Warakapitiya et al., 2024).

4. Integrate personalization into housing policies.

Avoid overly uniform government designs that limit household identity, as these can harm resident satisfaction and social dignity. Incorporate participatory mechanisms into planning processes for upgrades or new housing schemes to ensure that residents' cultural and aspirational preferences are considered. Consider gradual policy approaches that offer both financial and technical assistance to people looking for improvements to entrances, while balancing flexibility with regulatory oversight to ensure settlement-wide unity (SEVANATHA, 2023).

5. Promote holistic street-level efforts to improve

Encourage the clustering of entrance upgrades along coherent stretches to avoid visual fragmentation. Minor urban design interventions, such as improved footpaths, lighting, and drainage, can complement entrance personalization efforts and improve overall quality of life. Foster partnerships between local authorities, NGOs, and community organizations to support both functional and symbolic enhancements in the settlement (Kombe, 2005; Hasan, 2020).

6. Implications for Design, Policy

The findings indicate that entrance personalization is unavoidable and significant in low-income settlements. Instead of imposing uniform designs that limit individuality, upgrading and housing policies should allow for personal expression, advise residents on long-lasting and low-cost finishing techniques, and provide visual design frameworks to balance personal identity with cohesive streetscape organization (Patel & Mitlin, 2010; Roy, 2005; Turner, 1976). This study reframes self-built housing as a dynamic architectural dialogue rather than a survival strategy by increasing understanding of how entrance personalization mediates the relationship between family backgrounds, socioeconomic status, and shared cultural identity.

Conclusion

The study demonstrates how entrance personalization in the government-built low-income housing scheme at Swarna Place reflects a complex intersection of socio-economic status, occupation, and cultural identity**.** Families with higher and more stable incomes produced refined, durable, and spatially coherent entrances, while those with limited or irregular incomes adopted improvised and temporary approaches. Yet, despite these material and aesthetic differences, cultural and religious expression remained universal**,** indicating that shared symbolic identity transcends class divisions.

By combining architectural character analysis with user-based thematic coding, this research moves beyond description to highlight personalization as a process of spatial negotiation**,** a way for residents to reclaim agency within rigid state-provided housing. Entrances, as thresholds between private and public life, become expressive instruments through which families articulate social aspiration, dignity, and belonging. This aligns with Turner's (1976) and Patel & Mitlin's (2010) theories of incremental urbanism**,** where adaptation reflects both necessity and identity.

A key contribution of this study is the identification of a continuum of personalization intensity that mirrors household background, ranging from planned and durable interventions to pragmatic, improvised solutions. This gradient underscores the social dimension of housing design, demonstrating that architectural transformation is not purely economic but embedded in everyday meaning-making. The study thereby contributes to regional and international discourse on self-built and user-driven urban regeneration**,** offering grounded evidence from Sri Lanka's low-income context.

Cultural and religious markers, statues, flags, shrines, and motifs, emerge as unifying visual and symbolic anchors within a fragmented built fabric. They reveal how spatial identity and moral order are maintained across economic strata, creating a form of "cultural continuity through difference." This finding underscores that, even in physically uneven settlements, symbolic order can stabilise social cohesion**.**

However, the study also highlights challenges. Uncoordinated modifications risk fragmenting the streetscape, affecting both environmental coherence and collective identity. Thus, design and policy frameworks must address individual creativity without undermining settlement-level order. The contribution of this research lies in evidencing how low-income communities negotiate this tension, offering insights relevant for participatory housing policy, urban design, and regeneration practice.

Future research directions

1. Compare government-built and organically developed settlements, to assess how varying degrees of design freedom influence personalization, cohesion, and identity expression.
2. Conduct longitudinal studies to track the evolution of entrance personalization over decades, revealing whether informal modifications stabilize into enduring architectural patterns.
3. Expand comparative analysis regionally, examining similar low-income housing schemes in Colombo and beyond to identify patterns of resident-led transformation in formal housing.

Such work would deepen understanding of how culture, economy, and space interact over time, informing future policies that see personalization not as deviation but as a legitimate form of urban regeneration.

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