

Betawi's Verandahs: exposing transformation of vernacular settlements in urban Jakarta

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Abstract

This study explores the correlation between physical forms and sociocultural practices constituting the 'interstitial' space of verandahs in Betawi vernacular architecture. The objective is to identify how physical forms and everyday activities on verandahs may inform us of Betawi intangible cultural practices. The research holds significance in vernacular architecture studies that recognize building knowledge as dynamic and transformative. However, discourses on the transformation and changes of Betawi architecture today 'assert' that they no longer represent Betawi cultural identity. This paper poses a central question: how might the concept of verandahs represent a form of inherited intangible knowledge that reflects spaces of adaptation in dynamic sociocultural, technological, and environmental contexts?

This paper investigates Betawi architecture due to the absence of studies in architecture that recognize Betawi cultural practices' adaptive nature, which further amplifies the tension between tradition and modernity in urban contexts. In response to the absence, this paper re-conceptualizes the significance of the threshold embodied in verandahs of 19th century Betawi houses to verandahs in Kampung Condet today. The study examines the correlation between forms, everyday activities, and cultural values by investigating Betawi verandahs, intangible cultural practices, and everyday activities in the 19th century and today using archival study and Google Street View (GSV). As part of an ongoing doctoral research project, this paper provides an alternative framework to analyze vernacular using spatial experiences for future vernacular study in urban contexts. Further research is required to test the framework to investigate how intangible cultural practices associated with verandahs are continued in the new or the absence of verandahs in urban contexts.

Keywords: Verandahs, Betawi Architecture, Atmospheres, Threshold

1. Introduction

Betawi, the ethnic group of Jakarta, Indonesia, faces challenges in preserving the traditional lifestyle amidst rapid urban development. Existing literature on Betawi architecture emphasizes the importance of preserving physical forms of traditional Betawi houses and settlements, denouncing modifications and transformations of traditional Betawi architecture to represent cultural identity (Hidayat, 2010; Nurizki *et al.*, 2020; Taryana *et al.*, 2022). However, studies investigating urban development in Jakarta conclude that spatial changes are the response to survive the city's rising living costs (Aryanti, 2011; Windarsih, 2013; Leonita & Khadiyanto, 2018; Dewi, 2018; Hermawan & Delvy, 2021; Herawati *et al.*, 2023). Contradicting findings between preserving Betawi architecture and the ongoing development and rising needs amplify the tension between tradition and modernity in urban Jakarta.

On the other hand, studies on cultural practices and performances, for example, *silat* (Traditional Betawi martial art), the Betawi language, and *Ondel-Ondel* (human-sized puppet in Betawi folk performances and the icon of Jakarta. The puppet was used to repel evil spirits during the harvest period and gradually considered as a cultural symbol and representation of Betawi) (Wahidiyat *et al.*, 2022), exhibit how Betawi culture is transformative and adaptable to current contexts in schools, everyday communication, and cultural icons (Fauzan & Kartikasari, 2021; Wahidiyat *et al.*, 2022; Elvianasti *et al.*, 2023; Siregar *et al.*, 2023). However, conversations about Betawi architecture are limited to its physical forms and shapes without providing insight into meanings and interpretations of the new materials (Tjahono, 2003). Instead, research continues dwelling on Betawi architectural forms and ornaments established in the 19th century without considering changes in a society's sociocultural, environmental, and technological (Hidayat, 2010; Wardana & Dwisusanto, 2019). The separation of built forms from the occupants' needs in the urban context insinuates that Betawi must be preserved in its traditions and cannot acculturate with modernization (Saputra *et al.*, 2014); this is a knowledge gap that continues separating Betawi architecture and its occupants if not discussed or brought up in a discussion.

This paper, therefore, aims to consider verandahs as sites of dynamic and transformative knowledge of Betawi cultural practices. The study investigates verandahs' physical forms and activities from the 19th century to today, analyzing the cultural meaning of thresholds and places for social interaction.

2. Vernacular architecture and verandahs as spatial experiences

This paper builds upon the notion of vernacular architecture as inherited knowledge that adapts and transforms to changing sociocultural, environmental, and technological contexts (Rapoport, 1969; Oliver, 2006). Vernacular architecture in this context, is considered process-focused rather than form-based. (Rapoport, 1969; 1990; Oliver, 2006; Fox (ed.), 2006). Vernacular architecture exists as the locus of everyday activities and the extension of human ideas, bodies and needs (Memmott & Davidson 2008). This paper positions vernacular architecture discourse around the people who built and inhabit the buildings, their patterns of use, and functional and philosophical requirements, rather than focusing on its physical form (Vellinga 2020).

The knowledge gap in vernacular discourse in Southeast Asia becomes apparent, especially when discussing houses for Austronesian societies. As the extension of the body, many houses represent a cosmological order and rituals associated with the physical embodiment of the ancestors (Fox (ed.), 2006; Tjahjono (ed.), 1998; Waterson, 1997). The house has symbolic spatial organization describing the spiritual connection between human, community, and their environment, such as “inside-outside”, “front-back”, “up-down”, “left-right”, or “east-west” (Tjahjono (ed.), 1998). Therefore, all movements between these realms (“inside-outside” and “front-back”, to name a few) represent kinships, intimacy, and relationships between the house’s inhabitants, the community, and higher powers (Waterson, 1997; Fox (ed.), 2006). In Austronesian settlements, houses never stand by themselves; they are part of macrocosms, designed and precisely positioned in response to other buildings around them (Fox (ed.) 2006). Therefore, verandahs or thresholds are essential in the meaning-making process of SEA vernacular architecture. Vernacular studies in Indonesian architecture revealed the verandah to preserve balance between celestial and terrestrial energies in Javanese architecture (Tjahjono, 1989) and as a social space to interact in Kenyah longhouses (Wiryomartono, 2014) and Balui longhouses (Alexander in Fox (ed.), 2006).

Studies in building construction and sustainability reflect on the functionality and practicality of traditional verandahs to provide cross-ventilation and natural light for houses in Iran (Khasheji, 2010), Greece (Tsiros & Hoffman, 2013), and Indonesia (Asriningpuri 2020; Pramesti *et al.*, 2021). In Indonesia, studies found verandahs’ values as social space and uniting people today through examples of traditional houses of the Kaili Ledo in Central Sulawesi (Arief *et al.*, 2023) and the Betawi in Tangerang (Kusumawardhani, 2012). However, sociocultural values in contemporary verandahs are overlooked. This research investigates how verandahs’ physical forms may accommodate social interaction in everyday urban contexts today for a better understanding of how vernacular architecture adapts to people’s needs and activities.

3. The case study: the Betawi

The Betawi are natives to Jakarta, the capital of Indonesia (Figure 1), which emerged from intermarriage between indigenous and foreign cultures (Shahab, 1994; Saputra, 2021). This paper explores two significant factors that further define the Betawi identity and distinguish it from other ethnic groups in the city, which are (1) the establishment of *Perkoempoelan Kaoem Betawi* (the Betawi Association) and (2) the popular Batavian Malay language as the *lingua franca* for local newspapers in the late 19th century to early 20th century (Castles, 1967; Shahab, 1994). Based on this definition, this paper focuses on Betawi cultural representations from the 19th century onwards and later findings for reference.

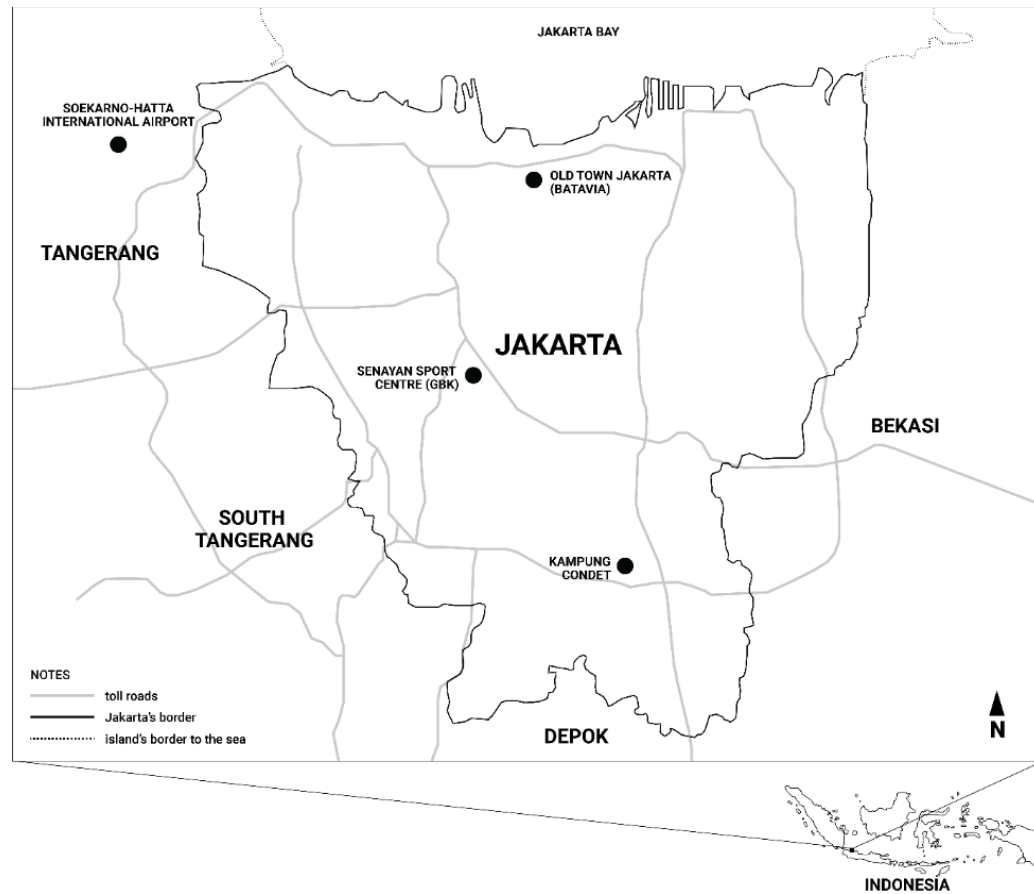


Figure 1: The map of Jakarta.

Source: Authors, 2023.

Despite being the ethnic group of Jakarta, the Betawi are marginalized. Marginalization and the clash with urban policymakers have been recurring issues since the colonial period (Abeyasekera, 1989). The founding of Batavia in 1619 began by destroying Sunda Kalapa and forcing all indigenous inhabitants to flee (Abeyasekera, 1989). Furthermore, indigenous people were banned from residing inside the Batavia wall until early 19th century, forcing their settlements outside the city (*ommelanden*) (Abeyasekera, 1989). In 2010, 6.8 million people were identified as Betawi (Na'im & Syaputra, 2010). However, only 2.7 million Betawi lived in Jakarta (Table 1). Even though the Betawi was among the top three largest ethnic groups in Jakarta (Javanese and Sundanese on first and third), their population was lower than 30 per cent of the entire population in Jakarta (9.7 million). The number might not be relevant today, considering the population in Jakarta itself has increased from 9.7 million in 2010 to 10.75 million in 2022 (Central Agency on Statistics, 2023). However, no census focusing on the population of ethnic groups and language users in Indonesia has been conducted since 2010.

Table 1: Population in Jakarta based on ethnic groups in 2010.

Source: Na'im & Syaputra, 2010

Ethnic group	Number	Ethnic group	Number	Ethnic group	Number
Acehnese	30,138	Sundanese	1,395,025	Makassan	29,444
Batak	326,645	Javanese	3,453,453	Bugis	68,227
Nias	4,572	Cirebon	5,825	Minahasa	36,913
Malay	92,088	Madura	79,925	Gorontalo	4,402
Minangkabau	272,018	Balinese	15,181	Other Sulawesi	32,276
Jambi	7,621	Sasak	2,628	Maluku	45,146
South Sumatra	71,987	NTT	22,356	Papuan	14,257
Lampung	45,215	NTB	29,108	Chinese	632,372
Other Sumatra	24,114	Dayak	18,984	Foreigners	17,074
Betawi	2,700,722	Banjar	8,572		
Banten	28,551	Other Kalimantan	32,522		

Marginalization of Betawi also occurred in the post-independence era as part of the government's plan to develop Jakarta as the capital city. Eviction and relocation of Betawi settlements were common between 1942 and the 1970s for mega projects such as elite housing complexes, sports arenas, and shopping centers (Lukmansyah *et al.*, 2016; Rizaldy, 2020; Hermawan & Delvy, 2021). In 1972, the Betawi settlement in Cileduk was removed with minimum compensation to construct a military base (Lukmansyah *et al.*, 2016). Ironically, the residents in that area were relocated from Senayan to Cileduk in the 1950s to construct the Senayan sports complex for the Asian Games (Lukmansyah *et al.*, 2016; Rizaldy, 2020). As a result, Betawi settlements have transformed from garden houses to highly dense neighborhoods. The eviction issue, however, was not purely the government's fault. Unlike other traditional settlements in Indonesia, there were no cultural or communal lands but only individually owned lands in Betawi traditional customs (Harun *et al.*, 1991) (Figure 2). Further analysis revealed that the Betawi rely on their land inheritance as financial assets, allowing them to build rent houses or sold their lands (Aryanti, 2011; Hermawan & Delvy, 2021).

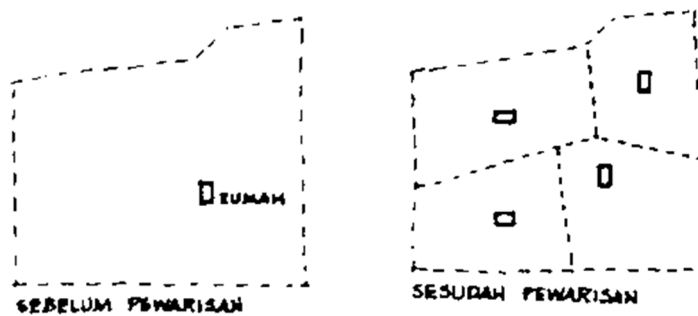


Figure 2: Land fragmentation in traditional Betawi settlements before inheritance (left) and after inheritance (right). The rectangular shape represents a house, in which, on the right image, appears more as the land is fragmented more.

Source: Harun *et al.*, 1991.

Migration, financial imbalance between immigrant and Betawi households, and urban planning decisions had pushed Betawi settlements to the outskirts of Jakarta. How do the Betawi adapt to the ever-changing and dynamic nature of urbanization in Jakarta but continue to preserve their culture in everyday activities?

This paper explores Kampung Condet (The modern Kampung Condet consists of three districts: Kelurahan Balekambang, Kelurahan Batuampar, and Kelurahan Kampung Tengah. This paper will refer to the three districts as Kampung Condet), East Jakarta, to understand the current condition of contemporary verandahs. Kampung Condet was known as the 'failed Betawi cultural village' due to its transformation from an agricultural-based settlement to a highly dense area with stores and contemporary houses (Hidayat, 2010). Current research criticized how Kampung Condet had abandoned the traditional settlement patterns and forms (Nurizki *et al.*, 2020; Taryana *et al.*, 2022) without acknowledging that the heritage status was a burden to the local community, limiting their financial growth to survive the city (AHM, 2006). The debate poses an urgent need to revisit the value and meaning of Betawi architecture from the perspective of the inhabitants' activities. Kampung Condet also plays a historical importance for the Betawi in Jakarta, as experts found *gigi geledak* or neolithic stone axes dated from 3000 to 4000 BC (Saidi, 2002). Furthermore, Kampung Condet was the capital of Salakanagara, the oldest Hindu kingdom in Java, from 1st to 3rd century (Saidi, 2002), further cemented the importance of Kampung Condet to the Betawi.

3.1 Betawi architecture and verandahs in the 19th century

Verandahs are spaces of interaction, intimacy, and relationship-building between the inhabitants and the community. In traditional Betawi houses, verandahs are places to welcome guests (Rahmadina & Lukito 2020). In their research, Rahmadina and Lukito (2020) explore the continuity and adaptation of verandahs from traditional Betawi houses to the current design. The study concludes that the verandahs' value as a social space have deteriorated; whereas entertaining guests in contemporary verandahs is conducted inside the house (Rahmadina, 2019; Rahmadina & Lukito, 2020). However, the research also expresses that the verandah in contemporary Betawi houses remains the space for occupants to greet neighbors from over their gates (Rahmadina, 2019). These findings contradict each other, indicating that further research on verandahs' sociocultural values for Betawi is required, especially on verandahs as a space of interaction and intimacy.

The design of Betawi houses and settlement patterns are not regulated by traditional customs. In the hinterland, traditional Betawi houses were clustered or scattered, facing the streets, and surrounded by gardens. In Figure 3, black rectangular shapes represent houses, and those located far away from the street indicate how large their garden was, which also used to plant crops for sale (Harun *et al.*, 1991). In the traditional settlements, Betawi houses used non-fruit trees to define boundaries between houses to avoid disputes among neighbors on agricultural products and obstruct strangers' gaze into the house (Harun *et al.*, 1991; Nas *et al.* in Schefold *et al.* (eds.), 2008).



Figure 3: Betawi settlements in the hinterland.
Source: Yuwono in Harun *et al.*, 1991.

Betawi houses in the 19th century have three major areas: front (verandahs), central (bedrooms), and back (kitchen and storage) (Harun *et al.*, 1991). Figure 4 illustrates three architectural typologies of traditional Betawi houses based on their roof shapes: Kebaya/Bapang, Gudang, and Joglo (from left to right). Verandahs exist in all types, implying that providing a threshold between inside and outside is essential. In the Betawi culture, male strangers are forbidden to enter the house. Therefore, couples interact through *Jendela Bujang* (The Bachelor's Window, also known as the Chinese Window, is a barred window connecting the interior to verandahs) that separating the main house and the verandahs: males sit at the verandah while females sit inside the house (Harun *et al.*, 1991; Nas *et al.* in Schefold *et al.* (eds.), 2008; Chaer, 2012). Palang Pintu procession also took place on verandahs to perform *silat*, symbolizing the groom's strength to protect the bride (Handayani *et al.*, 2021). In this sense, the verandah has a role in filtering interaction and intimacy between interior and exterior.

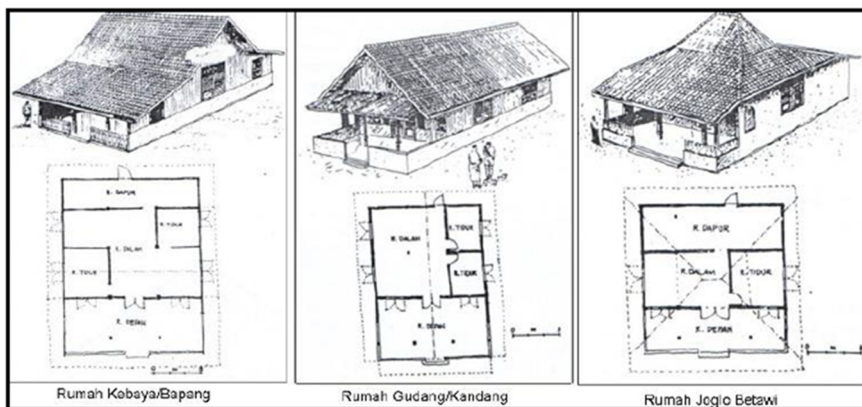


Figure 4: Traditional Betawi architectural typologies and plans.
Source: Harun *et al.*, 1991; Wardana & Dwisusanto, 2019.

No gate surrounded the traditional Betawi settlements; the public could walk freely through the garden, except *langkan* (Swardarma & Aryanto, 2013; Rahmadina & Lukito, 2020) or *pelangkan*, built around the verandah to define the boundary between inside (houses and verandahs) and outside (Figure 5). *Langkan*, also known as “sitting” in Chinese, was used to substitute chairs (Swardama & Aryanto 2013; Rahmadina & Lukito 2020). Without clear boundaries between interior and exterior, verandahs in the 19th century Betawi houses were visible from the street. Figure 5 captures activities on verandahs and at the front of the house. The photo shows how activities on verandahs and beyond were connected. In Figure 5, there are chairs and *bale* (Outdoor furniture, often made of bamboo, is shaped like a bench that can be used for sitting or sleeping. This furniture is often found in verandahs) facing the exterior where a man fed his horse. Verandahs as spaces of interaction are also exhibited after Betawi came home from Hajj, Islamic pilgrimage to Mecca and shared their experiences on the verandahs while the neighbors listened (Chaer, 2012).



Figure 5: Activities outside houses, showing various interactions and activities on verandahs.
Source: KITLV, around 1890 (<http://hdl.handle.net/1887.1/item:769729>)

In the traditional Betawi houses, a jug of fresh water was found in verandahs to wash faces and feet before entering the house (Saputra, 2021). The importance of water on verandahs is more than cleaning for Betawi: it also expresses their charity and openness to other people. Located on the verandah, anyone can drink the water, mainly if their houses are near the road (Chaer, 2012; Saputra, 2021). In Betawi culture, water is sacred and a reminder to preserve the balance between humans, nature, and the higher beings (Saputra, 2021). For example, during the traditional Betawi wedding ceremony, a crocodile-shaped offering (Saputra in Ksarasa, 2023, 4:25-9:37) is presented and nailed on the entrance of the newlyweds’ house. The offering reminds the newlyweds of the preservation of humankind and nature, especially the river (Saputra, 2021). In Figure 6, a jug of water (circled) was presented on a table. Based on this exploration, water vessels have a critical sociocultural symbolism in Betawi activities on verandahs alongside *bale*, *langkan*, and other sitting arrangements.



Figure 6: People (mostly men) socializing on the verandah, serving drinks in a water jug (circled).

Source: KITLV, photographed by D.J.L. van Wijngaarden between 1895 and 1905 (<http://hdl.handle.net/1887.1/item:769766>)

In summary, verandahs in the 19th century Betawi house have sociocultural values as a place to relax and socialize. The existence of water on verandahs also plays cultural importance in cleaning and charity, besides symbolizing the preservation of humankind and nature. The question is: do these sociocultural meanings resonate in today's contemporary verandahs?

4. Research Methods

This paper conducts qualitative research methods of literature review and case study analysis to investigate forms and activities in verandahs of Betawi houses. The study begins by reviewing primary resources of archives (photographs and maps) and secondary sources, including publications on Betawi architecture, history, and everyday activities up until the 19th century. During this stage, this study analyzes tangible (i.e., the architectural forms, materials, openings, surroundings, and objects) and intangible factors (i.e., activities, interactions, and cultural practices related to verandahs). In the literature review and archival analysis of built forms and activities of Betawi verandahs in the 19th century, this study finds two critical roles, which are:

1. Verandahs established boundaries between inside and outside to filter the level of intimacy and interactions between the inhabitants and strangers/others.
2. Verandahs provide water to clean and symbolize harmony between the inhabitants, nature, and helping people.

The case study analysis focuses on Kampung Condet. The data collection uses images from Google Street View (GSV) to understand verandahs' physical forms, objects, and activities in the area. Studies conclude that using GSV is cost and time-efficient for a holistic

interpretation of an area (Curtis et al., 2013; Vandeviver, 2014; Rzotkiewicz et al., 2018). Focusing on landed houses, the investigation at Kampung Condet collects around 1,000 screenshots, which are then analyzed through overlaying to find key similarities between physical forms, interactions, and surrounding areas. The analysis of activities on verandahs is conducted through sorting and grouping houses with similar objects and activities on verandahs. The case study analysis looks at how boundaries between inside and outside are established, and objects on verandahs. Then, the study compares findings on whether the verandah's sociocultural role to socialize and provide water continues from the 19th century to today.

4.1 Forms and activities on urban verandahs today

Boundaries, social interactions, and tension between inside and outside

Based on the analysis of house's facades in GSV, there are three types of boundaries between house-verandah-street, which are defined based on their proximity to the street: houses to main streets (H1), houses to neighborhood streets (H2), and houses to alley streets (H3). Each category has sub-groups that define the level of intimacy, interaction, and activities that occur on verandahs. In general, H1 has the highest level of boundary and separation using gates, trees, and distances to filter strangers' gaze inside. However, the level of density and transparency of H1 in their area is also based on how busy the main street is. For two lanes main streets, H1-houses (H.1A) utilize tall gates (taller than average Indonesian heights, >160 cm) with solid material (wood planks or a combination of iron gates with non-transparent corrugated plastic sheets) and tall trees (Figure 7). From 140 photos of H.1A sampled in GSV, around 80 per cent are shops, leaving only 20 per cent are houses, in which their verandahs are not visible from the street.

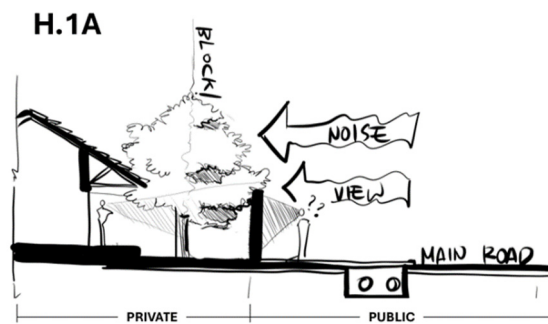


Figure 7: A section indicates how boundary and interaction is established (H.1A).

Source: Authors, 2023

In contrast, H.1B and H.1C are on less busy main streets with less massive boundaries between private and public, such as transparent plastic sheets or iron gates (Figure 8). The height of their gates is around average Indonesian heights (=160 cm). Vegetations are mostly bushes or other lower plants and potted plants. Using vegetation as unintrusive boundaries is common and has been done in the 19th century Betawi houses with *suplir* trees to prevent strangers' gaze into the house (Nas *et al.*, in Schefold *et al.*, 2008). Houses in H.1B use vegetation surrounding their gates to further prevent and filter views inside

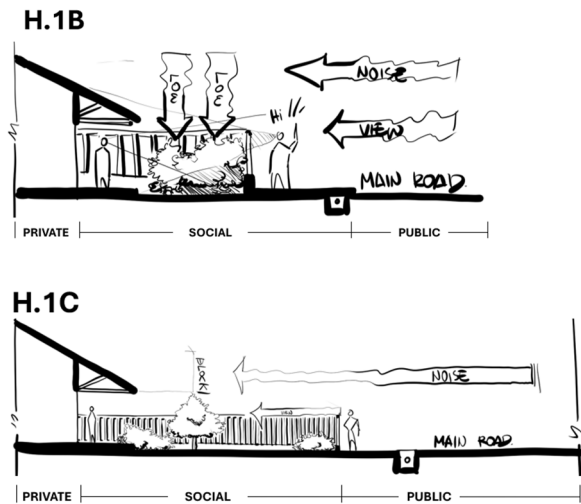


Figure 8: Sections of houses on the main street but with less massive or solid boundaries (H.1B and H.1C)

Source: Authors, 2023

The following categories are houses located in the neighborhood street (H2). Compared to H1, boundaries and interactions in H2 are more varied. Unlike main streets, neighborhood streets are less busy without public transportation access and minimum stores. As the extension of main streets into settlement areas, there are more private vehicles and pedestrians on the street. The boundary of H.2A shared similarities with H.1C, with low gates (=160 cm) made of barred irons or transparent plastic sheets. However, the similarity between H1 and H2 ends there; other types are unique to neighborhood streets. H.2B can be found in houses facing the river with lower gates (<160 cm), allowing people to directly interact through the top of the gate due to more pedestrians on the streets rather than trucks or other heavy vehicles (Figure 9).

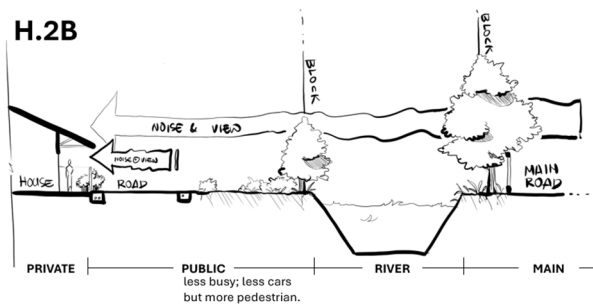


Figure 9: The illustration of a section for H.2B type.

Source: Authors, 2023

Despite being close to the street, H.2C has no gates or clear boundaries. As a result, their verandahs are blurred with public areas and often are multi-purpose to support everyday chores, such as drying clothes and parking private vehicles (Figure 10). Due to their proximity to the street, H.2C generally has closed doors and windows, minimizing social interaction between inhabitants and other people. H.2C establishes a boundary by elevating the verandah above the neighborhood street (<10 cm). In the 19th century, Betawi houses elevated their houses around 20 to 80 cm above the level of the surrounding area (Nas *et al.* in Schefold *et al.*, 2008) (see Figure 5).

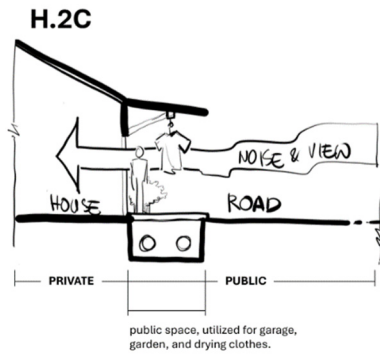


Figure 10: The illustration of boundary and interaction in H.2C.

Source: Author, 2023

H.2D has a compound-like layout from the street with several houses and a public building (i.e., mosque and public school) sharing a parking space and entrance (Figure 11). Houses in H.2D have no garden except for potted plants, and the entire open space is cemented to accommodate vehicles accessing public buildings. H.2D uses *langkan* to establish its boundaries between interior and exterior.

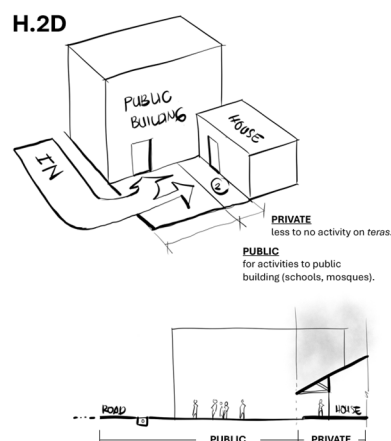


Figure 11: Illustrations of H.2D type of boundaries and interactions.

Source: Author, 2023

H.2E has a compound-like layout to define its boundaries. This type is also relevant for H.3A type located in alleys. In type H.2E and H.3A, several houses—individual standing houses or a house separated into several doors—share gates and communal space (Figure 12). This type may indicate that people in this compound are family members or have landlord-tenant relationships. The assumption is based on Betawi’s cultural view on land ownership, constructing houses for families or new settlers (Hermawan & Delvy, 2021; Herawati *et al.*, 2023).

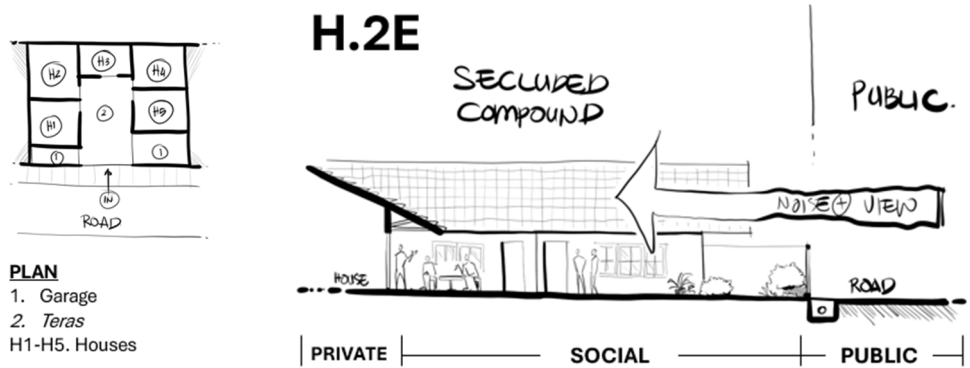


Figure 12: Illustrations of social interaction and boundaries of H.2E, also relevant for H.3A.
Source: Authors, 2023

Houses in alleys (H3) can be divided into five categories. Unlike main and neighborhood streets, alleys are narrow and accommodate only motorcycles and pedestrians to pass. H.3A has a similar layout to H.2E (Figure 12) but with narrower access roads. H.3B is another type of boundary and social interaction resembling “cul-de-sac” (Figure 13). In layout, H.3B shares similarities with H.2E and H.3A, but no gate surrounds these houses. Unlike H.2E and H.3A, H.3B does not share communal space. Instead, each house has a verandah, with some having short gates and others not. However, with a dead-end street, domestic activities spread to the street, i.e., hanging clothes and planting vegetation.

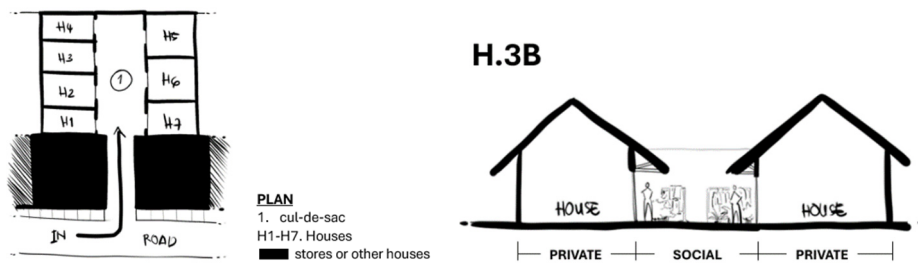


Figure 13: Illustrations of social interaction of H.3B.
Source: Authors, 2023

Activities and social interactions are more varied and intense, as seen in H.3C (Figure 14). Verandahs are multifunctional with no solid boundary. Despite how close they are to the street, H.3C continues to provide small verandahs as an intersection between inside and outside, usually to take off shoes.

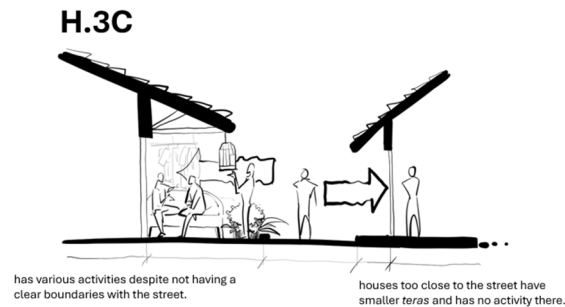


Figure 14: Illustrations of social interaction of H.3C.
Source: Authors, 2023

Type H.3D utilizes a half-gate (<1 m) to establish boundaries between inside and outside (Figure 15). The shape and function of their gates resemble *langkan*, where people can sit. In most cases, the inhabitants use *langkan* in H.3D as makeshift clothes hangers and display their plants.

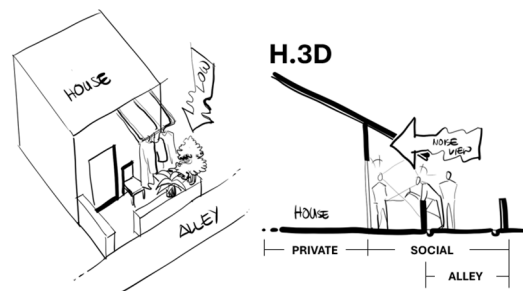


Figure 15: Illustrations of social interaction of H.3D.
Source: Authors, 2023

The last type is H.3E for houses with gates taller than average Indonesian heights (>160 cm). Unlike gates of houses in H1 and H2, H.3E does not have gardens. Instead, they have verandahs with several chairs and sometimes with a table. However, activities on verandahs of H.3E also varied, from relaxing, socializing, and doing household chores (drying clothes and cleaning their motorcycles). Although H.3E has gates to define their boundaries from the alley, there are two ways H.3E houses increase their privacy. First is by pushing back the entrance, allowing space for a garage (Figure 16a). The second one is established by changing the orientation to the side (Figure 16b). This way, the entrance and verandah are on the side of the house.

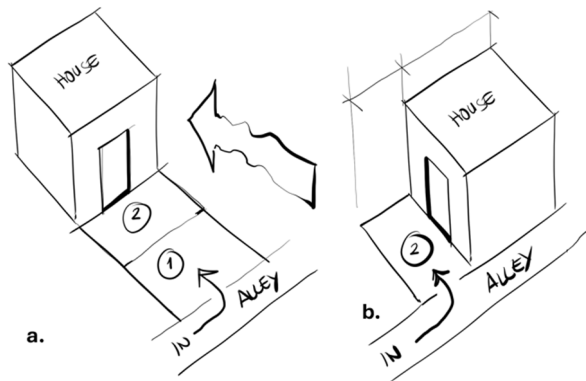


Figure 16: Illustrations of how boundaries are established by H.3E.

Source: Authors, 2023

Exploring Kampung Condet and collecting almost 1,000 samples, H2 and H3 show more varieties and interactions than H1. As a result, there are more types and variations in defining the boundary and intimacy between inhabitants and the public (streets and alleys). The tension between interior and exterior is blurred as the streets narrow, increasing interaction between people inside (house) and outside (streets and alleys). Verandahs as the threshold allow such interactions.

4.2 Objects and activities on verandahs

In the discussion about the sociocultural values of verandahs in the 19th century, water was essential on verandahs to clean hands and feet before entering the house and as drinks for passing travelers (Chaer, 2012; Saputra, 2021). Based on the observation through GSV, no water is visible on the verandah. However, there are categories of objects on verandahs. The first one is sitting arrangements, including chairs, sofas, and often tables (Figure 17). Sitting arrangements are the most common objects in H1, H2, and H3. Finding these objects on nearly all verandahs in Kampung Condet indicates that verandahs' functions and purposes as social space continue to be preserved today. There are four types of sitting arrangements found, which are (a) chairs and tables, (b) sofas and chairs only, (c) stackable chairs, and (d) *langkan*.

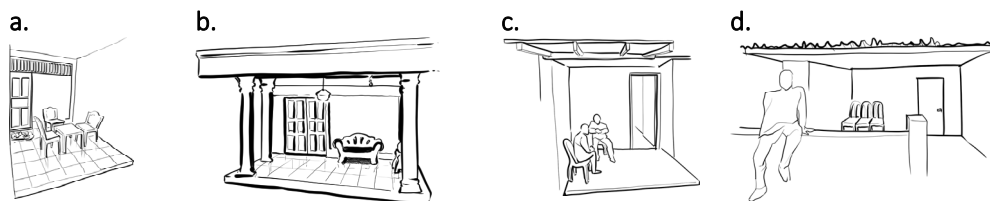


Figure 17: Sketches of sitting space on verandahs.

Source: Authors, 2023

Drying clothes are found in H2 and H3, especially in houses without or with small gardens and garages. Figure 18 shows three ways inhabitants adapt to the architectural forms of their verandahs to dry their clothes. Commonly found in H3, makeshift clothes hangers hooked to the verandah's roof structures (Figure 18a) or the gate (b). Foldable clothes hangers can be found in H2 and H3, where people put their hangers under the shades of their verandahs (Figure 18c). Heavy items, such as pillows, blankets, and foldable mattresses, were put over the gate rather than on hanging or foldable racks.

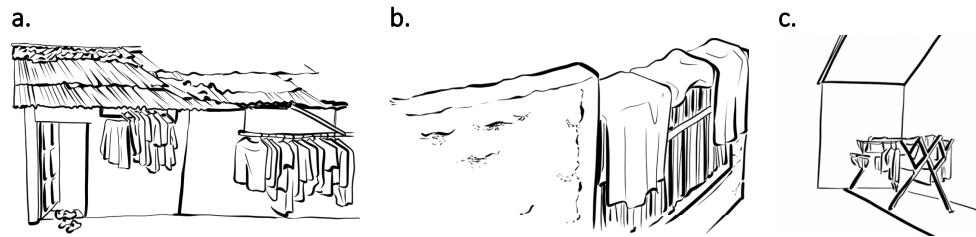


Figure 18: Illustrations of how verandahs are used to support daily house chores.
Source: Authors, 2023

In some cases, verandahs are also used as storage spaces. Figure 19 shows three common uses of verandahs to store household items (a), goods for sale (b), and shoe racks (c). For shoe racks, all verandahs accommodate space to take off shoes. This paper would like to argue and offer a hypothesis that the Betawi's habit of ensuring cleanliness inside their house by washing their feet and hands in the 19th century is preserved by providing shoe racks on verandahs. However, this assumption needs to be tested in future research.

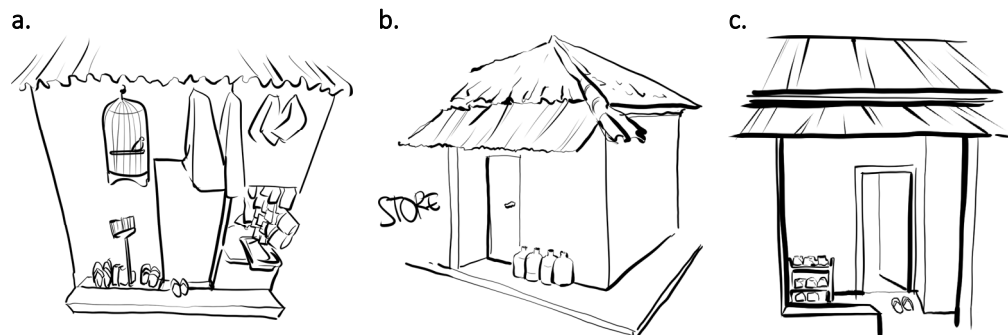


Figure 19: Sketches of how verandahs are also used as storage, both for household and vendor items.
Source: Authors, 2023

Verandahs as thresholds to relax and socialize are not only described by objects and furniture but also when there is nothing. Figure 20 captures that, even without furniture, inhabitants continue to sit on the floor, relaxing with family (a), socializing with people (b), and working on their vehicles (c). Examples shown in Figure 20 represent H1 (a), H2 (b), and H3 (c), indicating that sitting on the floor when there is no object to sit is common in verandahs.

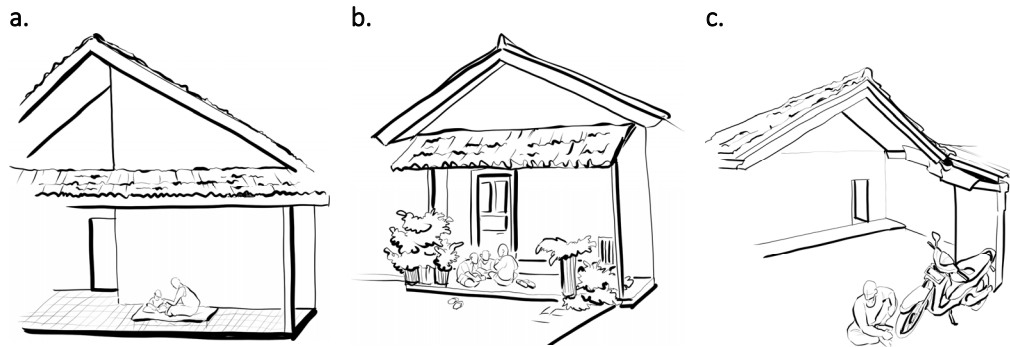


Figure 20: Illustrations of activities on verandahs that do not involve objects or furniture.
Source: Authors, 2023

The result of observing objects on verandahs shows that traces of sociocultural meanings and values are continuously being implemented in contemporary verandahs: traces of social interactions and ensuring cleanliness inside their houses (Figure 17, 19c, 20). However, there are new activities that appeared on today's verandahs: drying clothes (Figure 18) and storage (Figure 18a & b), which may be due to lack of space since these activities are often encountered at H3-type.

5. Conclusion

This study finds objects and patterns of use whereby houses at Kampung Condet define their boundaries to filter interaction between interior and exterior. However, the intimacy and intensity levels vary, depending on their proximity to the main streets. Betawi houses in the 19th century used *langkan* or trees to create a fine separation, allowing interactions between inside and outside. However, in the current Kampung Condet, some houses use solid and tall gates, creating clear boundaries. This type of separation is common in houses near main and neighborhood roads. Gates are less common in houses in the alley, where pedestrians are more common than vehicles. The observation also revealed that verandahs are multipurpose for storage, chores, and commerce. Based on archival photos from the 19th century, similar activities were also conducted at the front of the house, but more spacious, their activities expanded beyond verandahs. The multifunctionality of verandahs today may be due to a lack of space. The existence of water on verandahs, however, remains questionable and requires further investigation. However, this study argues that removing footwear might be the modern take of ensuring cleanliness in the house, replacing water.

This paper has limited findings as a preliminary study, especially in identifying which houses belong to Betawi occupants. Through GSV, some houses in Kampung Condet had ornaments or settlement layouts (H.2E and H.3A) that may indicate the occupants' connection to Betawi. However, it is uncertain and speculated. GSV provides a comprehensive overview but cannot determine the inhabitants' ethnic profiles. This paper recommends using GSV as a tool for a preliminary scanning process to identify and

categorize the site's characteristics. Then, based on findings in GSV, studies may conduct future on-site field observations and possible interviews with the inhabitants.

In conclusion, changes in verandahs and how people inhabit houses today are undeniable, whether for bad or good, as presented in this paper. There are traces of interactions and intimacy in today's verandahs, but also of seclusion, privacy, and new activities that do not relate to the verandah's role as threshold or interaction. These changes may be conscious or unconscious, and the study cannot take a conclusive remark. Based on the findings presented here, discussions with residents are required, focusing on people's spatial experience and perspective in Betawi. Then, we can finally conclude if the verandah's value and role as a threshold and a space to interact is still relevant today.

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