
URBAN DOMESTIC: WATER RESOURCES AS THE BASIS OF EVERYDAY LIFE IN URBAN KAMPONG SEKAYU SEMARANG

Veronica Kinanthi Cogan Timur

Department of Architecture
Faculty of Engineering
Universitas Diponegoro, Semarang
cogantimur@gmail.com

Arnis Rochma Harani

Department of Architecture
Faculty of Engineering
Universitas Diponegoro, Semarang
arnisrochmaharani@lecturer.undip.ac.id

Resza Riskiyanto

Department of Architecture
Faculty of Engineering
Universitas Diponegoro, Semarang
reszariskiyanto@lecturer.undip.ac.id

History of the manuscript:

Manuscript submitted August 27, 2025

Final manuscript accepted January 17, 2026

ABSTRACT

This paper explores limited spatial conditions and access to water influence domestic arrangements in low-income urban *kampung* houses. It investigates water related needs to drive creative spatial strategies, including the appropriation of front house areas, shared courtyards, and semi public spaces that associate domestic service areas with the rear sections of dwellings. Water resources play a fundamental role in shaping domestic life and spatial practices in urban *kampung* environments. In Kampung Sekayu, Semarang, water is not only a vital element for everyday domestic service activities such as cooking, washing, and bathing but also a core determinant in the spatial organization of dwellings. The study also considers the impact of communal water use and neighborhood social structures on household spatial adaptations. By exploring how space is organized through the perspective of water-dependent household activities, this study highlights the unique spatial and social characteristics of urban *kampung* life, where water becomes a major organizing force in the everyday household landscape.

KEYWORDS: everyday life, spatial arrangement, urban domestic, urban kampung

Tulisan ini mengeksplorasi bagaimana kondisi spasial yang terbatas dan akses terhadap air mempengaruhi pengaturan domestik di rumah-rumah kampung perkotaan berpenghasilan rendah. Penelitian ini menyelidiki kebutuhan terkait air yang mendorong strategi spasial yang kreatif, termasuk pemanfaatan area depan rumah, halaman bersama, dan ruang semi-publik yang menghubungkan area pelayanan domestik dengan bagian belakang hunian. Sumber daya air memainkan peran mendasar dalam membentuk kehidupan domestik dan praktik spasial di lingkungan kampung perkotaan. Di Kampung Sekayu, Semarang, air bukan hanya elemen penting untuk aktivitas pelayanan domestik sehari-hari seperti memasak, mencuci, dan mandi, tetapi juga menjadi penentu utama dalam organisasi spasial hunian. Studi ini juga mempertimbangkan dampak penggunaan air secara komunal dan struktur sosial lingkungan terhadap adaptasi spasial di tingkat rumah tangga. Dengan mengeksplorasi bagaimana ruang di organisasi dari perspektif aktivitas rumah tangga yang bergantung pada air, studi ini menyoroti karakteristik spasial dan sosial yang unik dari kehidupan kampung perkotaan, di mana air menjadi kekuatan utama dalam membentuk lanskap rumah tangga sehari-hari.

KATA KUNCI: kehidupan sehari-hari, penataan ruang, perkotaan domestik, kampung perkotaan

INTRODUCTION

Domestic activities such as cooking, washing, and bathing are inseparable from water use, making water a fundamental need in everyday life. In urban *kampung* settings like kampung Sekayu, Semarang, limited infrastructure often leads residents to adapt their spaces to ensure water access for daily tasks. In many architectural traditions, domestic space is typically organized through spatial dichotomies such as front/back, clean/dirty, day/night, or public/private (Goffman, 2021; Lawrence, 1982; Seo, 2006). Among these, the front-back division is particularly prevalent, where service areas such as kitchens, laundry rooms, or helper quarters are conventionally placed at the

rear of the house, separated from the main living areas that are meant to be served (Harani et al., 2021; Rosselló, 2018). This spatial logic is often observed in modern housing design. However, such clear cut zoning becomes difficult to implement in small scale, low-income dwellings, such as those found in kampung Sekayu. In these contexts, the distinction between 'front' and 'back' often collapses entirely due to extreme spatial limitations, resulting in overlapping and multifunctional use of space that defies traditional architectural zoning (Cromley, 2010; Hanson, 1999). Activities like washing, bathing, and cooking may take place in front yards, shared alleys, or transitional semi-public zones, demonstrating a fluid and adaptive approach to domestic service arrangements.

This study examines the spatial arrangement of domestic service spaces in urban *kampongs* in Indonesia, focusing on how water resources shape everyday life in these communities. Many urban *kampongs*, including kampong Sekayu in Semarang, consist of many small units occupied by low-income residents who must adapt limited spaces to meet their domestic needs, especially water related activities. Understanding how residents utilize and organize these spaces around essential water uses is crucial to understanding the realities of *kampong* life. Furthermore, strong social ties within urban *kampong* environments create distinctive public realms at the micro scale (Harjoko, 2009), where shared water access and collective domestic practices influence unique spatial arrangements and social interactions. This interplay of water dependency and social structure results in the unique spatial characteristics of urban *kampong* domestic life.

Numerous studies have explored the typology and spatial organization of dwelling spaces across diverse contexts, including those found in urban *kampong* houses (Funo et al., 2002; Hidayah & Shigemura, 2005). However, understanding these activities should be central to the study of housing (Seo, 2006; Rapoport, 1990). It is also important to recognize that everyday routines, though they may seem simple and familiar, are actually quite complex (Harris & Berke, 1997). Therefore, gaining insight into the spatial organization of domestic service activities requires a detailed understanding of how these activities are performed in practice. By focusing on water-dependent household activities, this study contributes to a more nuanced understanding of domestic space in urban *kampongs*, moving beyond mere classification of activity areas to encompass the lived realities and adaptive strategies of residents.

The objective of this study was to develop a spatial typology of urban *kampong* houses, specifically identifying how limited spatial conditions and access to water influence domestic arrangements in low-income settings, thereby offering a practical framework for understanding these unique living environments. Developing this type of typology allows the study of dwelling spaces to move beyond simply classifying activity areas; it acknowledges the daily routines of domestic service activities, how these activities are accommodated within the physical spaces, and how they are carried out in everyday life.

METHODS

This study took place in a neighborhood unit within the urban kampong of kampong Sekayu, located in Semarang Tengah District, Semarang. The area is a typical urban kampong, where most residents live in rented or boarding houses, and some operate small

home based businesses. The neighborhood is composed of compact housing units arranged along narrow alleys that serve as the primary pathways. A total of forty five house units were selected as samples to capture the diversity of spatial arrangements. Among the sampled units, 25 were rentals, while 20 were owner occupied.



Figure 1. Existing RW02 Kampong Sekayu
(Source: Author's Document, 2025)

Data were collected through direct observation of the physical layout of each dwelling unit, focusing on how spaces were used in daily life. Interviews with residents supported this to uncover spatial challenges and the strategies they employed. Figure 1 illustrates the basis of the analysis, showing how the houses were categorized according to their overall spatial organization and how domestic service activities were arranged in relation to available water resources. The study aimed to identify everyday spatial strategies independent of household size or dwelling dimensions, with particular attention to how these strategies emerged in organizing domestic activities around water use. To address the objectives of this research, architectural diagrams were used to explore the spatiality constructed by the presence of air as a resource. Furthermore, the investigation involved observing daily activities over a seven-day period. The data obtained was explained using architectural diagrams. Architectural diagrams allow us to answer how spatiality is used, especially in exploring everyday practices (Harani et al., 2021, 2023; Lucas, 2016).

RESULTS AND DISCUSSION

The Role of Water Sources in Urban Kampong Domestic Activities

Water sources provide essential access for domestic activities among residents in the study area. Most of the housing units have very limited living space, typically consisting of only one room that accommodates all daily activities. The owners of these units generally do not provide private bathrooms or toilets. Water needs for domestic tasks are met through water tank (municipal water utility) pipes located in front of the houses or through communal wells and shared toilets built for specific groups, usually one toilet facility is shared across one RW (neighborhood association unit).

The water tank water sources located in front of the houses significantly influence the local patterns of domestic activities. Because the water source is positioned at the front of the dwellings, many daily tasks, such as washing clothes and dishes, are performed on the house porches or along the road corridors.

This situation reflects the spatial limitations inside the dwellings, prompting residents to utilize outdoor spaces for household activities. Moreover, the presence of water sources in front of the homes fosters a unique form of social dynamics, as interactions among residents increase due to frequent encounters while using these shared water point.

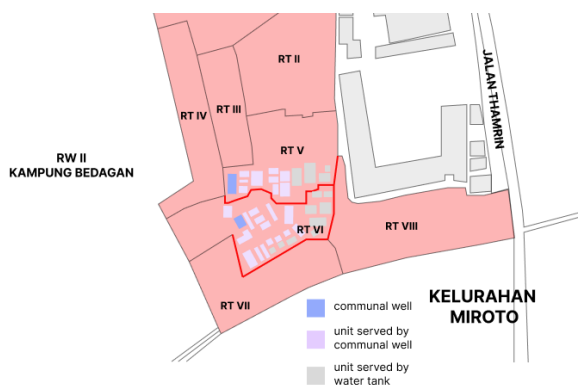


Figure 2. Communal well provides services for many units
(Source: Author's Document, 2025)

The communal wells were built by the local government. Initially, the well facilities were intended to serve only a few housing units. However, in everyday practice, these toilets and wells are also used by other residents, eventually becoming shared facilities accessible to the broader community. Figure 2 illustrates the types of housing units that typically rely on these communal wells. Their users include residents living close to the wells as well as those from more distant homes.

Types of spatial organization

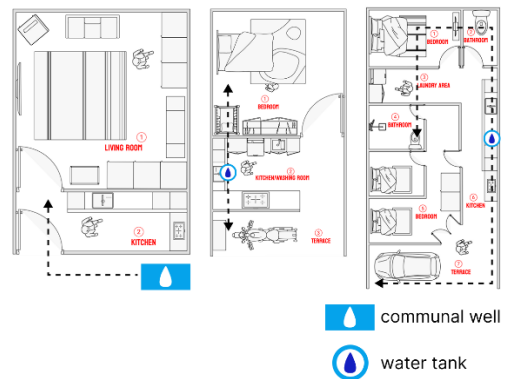


Figure 3. Types of spatial organization
(Source: Author's Document, 2025)

These communal wells serve no fewer than one RW, making them a critical facility in the area. Figure 3 shows the types of spatial organization as a response to the limitations of residential space and the lack of private sanitation infrastructure. This fact demonstrates that land scarcity has led the community to organize water provision for domestic needs in a collective manner.

Collective Patterns of Use in Water Resources

The communal toilet serves as a central space for a range of resident activities, including bathing, cooking, and doing laundry. Its proximity to a water source enhances its role as a key location for accessing water, not only for immediate use within the toilet facility but also for collecting water to be used in individual homes for other domestic purposes. As illustrated in Figure 4 and 5, the flow of activities around the communal toilet highlights the interconnectedness between the facility, the water source, and the daily routines of the residents.



Figure 4. Various activity flow
(Source: Author's Document, 2025)

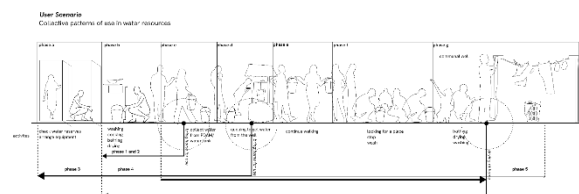


Figure 5. Various of user scenario
(Source: Author's Document, 2025)

General Spatial Organization of The Houses

Based on their general spatial arrangement, houses in the kampong Sekayu area can be classified into three main categories: separated domestic type, mixed domestic type, and balanced domestic type, as described below.

The separated domestic house is a type of dwelling that separates domestic areas, such as the kitchen and laundry, from other spaces used for the residents' primary needs, such as sleeping and resting. The mixed domestic house is similar to the separated type but features a layout that allows different spatial functions to blend. The second room in these houses may serve various purposes, such as an extra bedroom or a service area. Both types of houses typically lack private sanitation facilities, so residents rely on shared communal bathrooms and wells provided in the neighborhood. However, there are exceptions among the mixed domestic houses, where they have a terrace.



Figure 6. General Spatial of the houses
(Source: Author's Document, 2025)

The balanced domestic house consists of three or more rooms, with considerable variation within this category. The most common configuration includes four main spaces: a front room, a middle or back room, a kitchen, and a bathroom.

Figure 6 show differences among houses in this category lie in the number and function of rooms supporting daily living activities. In addition, some houses in this group are single story, while others have two floors. Compared to the previous two types, houses in this category are already equipped with private bathrooms or toilets, so residents no longer need to use communal sanitation facilities. Kitchens

are usually located adjacent to or near the bathroom, typically at the rear of the house.

Meanwhile, communal houses are essentially clusters of multiple housing units that form a complex with shared facilities. These commonly include communal bathrooms and wells, which are reserved solely for the residents of the complex and are not public amenities accessible to the general neighborhood. Within these housing complexes, the individual units are typically of the separated or mixed domestic type.

The diagram also presents another category that reflects how everyday domestic activities are accommodated within residential spaces. Based on the presence of domestic service areas, housing units can be categorized as follows:

1. Housing units of a separated domestic type, such as in the separated domestic type or the mixed domestic type, where the second room is used as a bedroom or workspace.
2. Housing units mixed domestic type, where the service space includes only a kitchen, as seen in some mixed domestic types.
3. Housing units balanced domestic type, either available within each individual unit (balanced domestic type) or shared collectively among multiple units (communal type), such as those found in areas using communal wells.

Spatial Organization of Domestic Service Areas

The following analysis will outline the various ways in which space is utilized for domestic service activities across different types of housing units. In general, four types of domestic service activities are examined in this context: cooking, dishwashing, laundry, and clothes drying.

1. Domestic Service Space in Separated Domestic Type Houses

In separated domestic type houses, there is typically no designated space specifically allocated for domestic service activities. Since these houses consist of only one primary living area, residents must adopt adaptive strategies to meet their daily needs within a limited space. Generally, two main spatial strategies are observed.

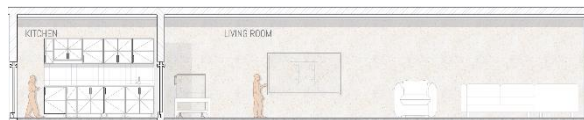


Figure 7. Section A of spatial organization
(Source: Author's Document, 2025)

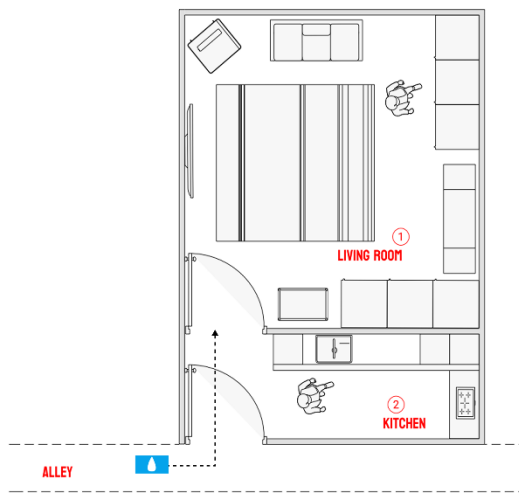


Figure 8. Types A of spatial organization
(Source: Author's Document, 2025)

Illustration 7 and 8 shows first strategy involves utilizing the outdoor area at the front of the house for most domestic service activities. This leaves the interior space reserved primarily for resting and sleeping. The second strategy involves a division of service activities between indoor and outdoor spaces; some tasks, like cooking, are performed indoors, while others, such as drying clothes, take place outdoors, especially on the front porch or in nearby communal areas.

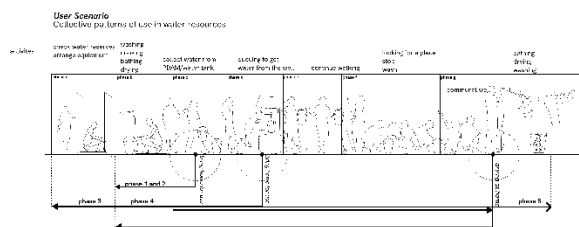


Figure 9. Various of user scenario
(Source: Author's Document, 2025)

Figure 9 shows in daily practice, cooking is often done inside the house, typically using simple stoves or portable cooking setups, due to the need for privacy and protection from the elements. Dishwashing and laundry activities may occur either in exterior spaces or at communal bathrooms, depending on the accessibility of water sources. The front porch frequently becomes a multi use space where clothes are dried, dishes are washed, or temporary storage is arranged.

The outdoor area in front of the house plays a crucial role in facilitating these domestic routines, especially due to its proximity to communal water sources such as shared wells or water taps. In many cases, this area becomes the primary space for multiple household activities. Sometimes, even public corridors or narrow alleys, which function as

circulation paths between houses, are appropriated for private domestic use.

Houses located at the end of a row benefit from having additional lateral space, which is often used more flexibly for domestic service tasks like cooking or washing. Moreover, the intensity of outdoor space usage appears to correlate with the number of occupants the more residents, the more spatial strategies are needed to accommodate all household needs efficiently.

Ultimately, separated domestic type houses are highly dependent on communal facilities, particularly shared wells and toilets, to fulfill basic domestic needs. This dependency not only shapes how space is used but also influences daily rhythms and social interactions among neighbors in the kampung environment.

2. Domestic Service Space in Mixed Domestic Type Houses

Types B/mixed domestic type houses that illustrates show two main spatial patterns shaped by limited space and access to water. The first pattern uses the second room for sleeping or working, with no dedicated service area, relying instead on outdoor spaces or communal water sources for domestic tasks. The second pattern assigns the second room as a kitchen, though other service functions like bathing or laundry still often occur outside or in shared areas.

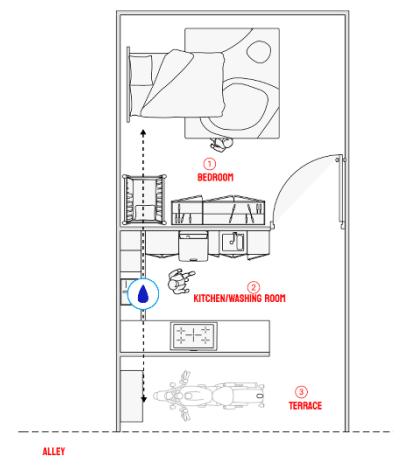


Figure 10. Types B of spatial organization
(Source: Author's Document, 2025)

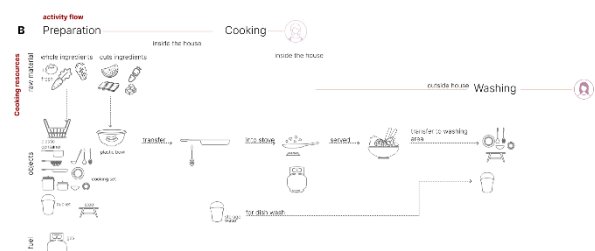


Figure 11. Activities B of spatial organization
(Source: Author's Document, 2025)

Outdoor spaces, such as front porches or side alleys, are crucial for daily activities, especially where water tank taps or communal wells are the main water sources. These shared facilities influence not only how residents use space but also foster social interactions.



Figure 12. Section B of spatial organization
(Source: Author's Document, 2025)

3. Domestic Service Space in Balanced Domestic Type Houses

Balanced type houses are dwellings that offer more complete spatial facilities compared to the previous two types. Although there is some variation within this category, a general pattern of spatial organization for domestic service activities can be identified. Overall, the residents of these houses tend to maximize the use of interior space for domestic tasks. Nearly all domestic service activities are carried out indoors, particularly in the kitchen and bathroom, which are typically located at the back of the house.

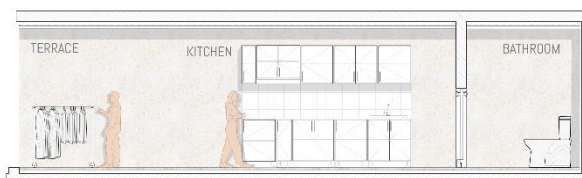


Figure 13. Section C of spatial organization
(Source: Author's Document, 2025)



Figure 14. Activities C of spatial organization
(Source: Author's Document, 2025)

Figure 13 and 14 shows that some service activities, such as drying and washing clothes, may still be performed outdoors. Clothes drying areas are usually found on terraces whether at the front, side, or rear of the house or on balconies in two story homes. Washing clothes can be done inside the bathroom, in adjacent areas, or outside near the drying space. In many cases, dishwashing and clothes washing are performed in the same area due to the shared need for water access. Cooking and Dishwashing is generally done in the indoor kitchen.

Compared to separated type and mixed type houses, multi room homes (balanced type) less frequently use the front outdoor space for service activities. This is likely because the interior space is sufficient to accommodate these functions, and there is typically an exterior area at the back of the house. As a result, residents tend to allocate service activities to the rear of the house, which is more enclosed and hidden from public view.

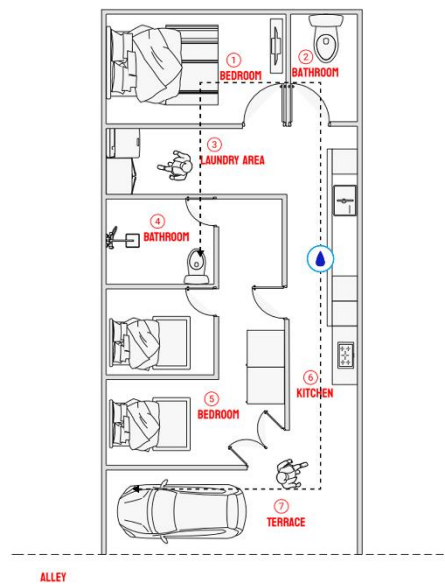


Figure 15. Types C of spatial organization
(Source: Author's Document, 2025)

The above analysis of various types of house layouts in carrying out several strategies to adjust the presence of water sources in domestic activities and utilize the limited space available in the house. The following discussion covers some important findings regarding water resources that influence domestic activity practices and spatial strategies to accommodate domestic service activities

The Use of "Front Zone" as Domestic Spaces

The conventional architectural understanding of domestic spaces often dictates a clear hierarchy, with service areas such as kitchens, laundries, and bathrooms being relegated to the rear of the dwelling. This arrangement is typically informed by principles of privacy, hygiene, and aesthetic separation, placing public facing functions at the front and more private or utilitarian ones at the back (Lawrence, 1982; Seo, 2006). However, in kampong Sekayu, the realities of limited space and communal water access significantly challenge this traditional spatial norm. Our findings reveal that water-dependent domestic activities, including washing, bathing, and even cooking, frequently occur in the "front zone" of houses, such as terraces, front yards, or directly in the narrow alleys.



Figure 16. Front zone as domestic spaces
(Source: Author's Document, 2025)

This appropriation of the front zone for service activities is a direct manifestation of the residents' adaptive strategies. When interior spaces are insufficient or lack direct water access, the exterior becomes an extension of the domestic realm, transforming traditionally semi-public areas into functional service zones. This practice contradicts conventional spatial norms, which typically place service areas at the back of the house (Lawrence, 1982; Seo, 2006), and instead demonstrates flexible and often front facing uses of space. For instance, the use of a portable bucket for laundry on a front porch or the temporary extension of a hose into a shared alley for washing dishes illustrates how residents creatively reconfigure their immediate surroundings to meet daily needs. This redefinition of the front zone highlights a profound spatial improvisation driven by necessity, blurring the established boundaries between private and public, and re-evaluating the traditional functional hierarchy of domestic spaces.

Presenting Outside Inside Connectivity

The adaptive use of space in kampong Sekayu, particularly concerning water related activities, reveals a strong "outside inside connectivity" within the domestic landscape. This concept goes beyond a simple functional extension of interior activities to the exterior; it signifies a fundamental porosity where the dwelling is not a hermetically sealed unit but deeply interconnected with and influenced by its surrounding urban environment. The fluid nature of spatial boundaries in kampong Sekayu aligns with observations made by (Harjoko, 2009) regarding socially cohesive kampong environments, where private life often spills into public view, and vice versa.

This phenomenon strongly aligns with (Hinkel, 2011) concept of a 'porous city,' where architectural boundaries are permeable, facilitating an atmospheric conversation between the urban interior and exterior. In kampong Sekayu, this porosity is concretized by the dependence on communal water points and the resulting overflow of domestic activities into shared public domains. The use of portable buckets, temporary hose connections, and the performance of activities like laundry or bathing in shared alleys or courtyards explicitly demonstrate this intermingling. These practices effectively challenge the rigid distinctions between inside and outside, a concept also explored by (Grosz, 2001), who argues for the fluidity of spatial boundaries and the dynamic interplay between the body and architecture. The house, in this context, is not just a container for activities but an active participant in a larger urban fabric, where the boundaries between private and public, or inside and outside, are constantly shifting based on daily needs and social interactions.

Furthermore, this "outside inside connectivity" resonates with (Edquist & Frichot, 2004) redefinition of the architecture and interior design relationship, emphasizing how the intimate details of interior life are often shaped by external conditions and vice versa, particularly in contexts where resources are shared. (Bachelard & Jolas, 1994) insights into the poetics of space, while not directly addressing the practicalities of water access, offer a metaphorical lens through which to understand how residents *dwell* in these porous spaces, finding meaning and creating a sense of home despite, or perhaps because of, the fluid boundaries. The ingenuity of residents in kampong Sekayu in adapting their physical environment to facilitate daily water needs, thereby creating functional zones that transcend traditional architectural norms, is a powerful example of this dynamic relationship between domestic space and its broader urban and social context. This is crucial for understanding how people in low-income areas make the most of their space, especially when water access and limited room force them to adapt creatively.

Collective Strategies for Washing Activities

The shared nature of water resources in Kampong Sekayu significantly influences the spatial organization of domestic activities, particularly washing. Our observations confirm that washing activities be it laundry or bathing often transcend the confines of individual private dwellings and extend into communal or semi-public spaces. This collective approach to water use and domestic tasks is a hallmark of *kampong* life and reflects a strong sense of community and mutual support (Harjoko, 2009).



Figure 17. Front zone as domestic spaces
(Source: Author's Document, 2025)

Residents frequently pool their efforts, sharing water spigots, temporary plumbing setups (e.g., using long hoses from a neighbor's tap), or even designated communal washing areas. This sharing is not merely a practical solution to water scarcity but also a social activity that reinforces neighborhood bonds. These findings are in line with (Harjoko, 2009) view of socially cohesive *kampong* life and (Grosz, 2001) notion of fluid spatial boundaries between inside and outside. The act of washing, which is conventionally a private domestic chore, becomes a more public and collective ritual, turning alleys or shared courtyards into temporary laundry rooms or bathing areas. This creative adaptation to limited space through sharing strategies not only addresses practical needs but also reinforces the strong social ties characteristic of urban *kampong* life. It highlights how the design of living spaces in urban informal settlements is often shaped by the need for resource sharing and communal activities, making the boundaries of the home permeable and responsive to collective needs.

CONCLUSION

This study investigated the spatial arrangements of domestic activities in urban *kampong* houses, specifically focusing on how limited spatial conditions and access to water influence everyday life in kampong Sekayu, Semarang. The research reveals that water-dependent domestic service activities, such as washing, bathing, and cooking, often extend beyond the conventional confines of the private dwelling. This expansion into front yards, shared alleys, and semi-public spaces demonstrates a remarkable adaptability and creativity in spatial use among low-income residents.

These practices challenge conventional spatial norms which typically place service areas at the back of the house, and instead demonstrate flexible and often front-facing uses of space. The study highlights a significant "outside inside connectivity" within these dwellings, aligning with concept of a 'porous city,' where architectural boundaries are permeable and there is a constant interplay between the domestic interior and the urban exterior. This porosity is evident in the fluid spatial boundaries and the collective nature of water-related activities that spill into communal areas, reinforcing strong social ties. These findings are in line with socially cohesive *kampong* life and notion of fluid spatial boundaries between inside and outside. Furthermore, the study contributes to understanding how the relationship between architecture and interior design is redefined in contexts of resource scarcity and how residents create a sense of home within these dynamically adapting spaces, echoing insights into the poetics of space.

The spatial typology developed through this research emphasizes the critical role of water resources as a primary organizing force in the everyday household landscape of urban *kampong*. It underscores that dwelling spaces in such environments are not merely static containers but are actively shaped by the practical needs of daily life, particularly water access, and the communal strategies adopted by residents. This understanding is crucial for developing more empathetic and effective urban planning and housing policies that acknowledge and support the unique spatial and social characteristics of urban *kampong* life, rather than imposing rigid.

REFERENCES

- Bachelard, G., & Jolas, M. (1994). *The poetics of space*. Beacon Press.
- Cromley, E. C. (2010). *The food axis: Cooking, eating, and the architecture of American houses*. University of Virginia Press.
- Edquist, H., & Frichot, H. (2004). *Limits: Proceedings from the 21st annual conference of the Society of Architectural Historians Australia & New Zealand, Melbourne 2004. Volume 02*. Society of Architectural Historians, Australia and New Zealand.
- Funo, S., Yamamoto, N., & Silas, J. (2002). Typology of Kampung Houses and Their Transformation Process—A Study on Urban Tissues of an Indonesian City. *Journal of Asian Architecture and Building Engineering*, 1(2), 193–200. https://doi.org/10.3130/jaabe.1.2_193
- Goffman, E. (2021). *The Presentation of Self in Everyday Life*. Knopf Doubleday Publishing Group.

- Grosz, E. (2001). *Architecture from the outside: Essays on virtual and real space*. MIT Press.
- Hanson, J. (1999). *Decoding Homes and Houses* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9780511518294>
- Harani, A. R., Atmodiwirjo, P., & Yatmo, Y. A. (2021). Interiorization: Spatial mechanism to generate interior condition in an urban kampung neighborhood. *Alam Cipta*, 14(2).
- Harani, A. R., Atmodiwirjo, P., & Yatmo, Y. A. (2023). Urban Kitchen: A Form Of Urban System Based On Collective Operation. *Journal of Architecture And Urbanism*, 47(2), 96–105. <https://doi.org/10.3846/jau.2023.17723>
- Harjoko, T. Y. (2009). *Urban Kampung: Its genesis and transformation into metropolis, with particular reference to Penggilingan in Jakarta*. VDM Verlag Dr. Müller.
- Harris, S., & Berke, D. (Eds.). (1997). *Architecture of the everyday*. Princeton Architectural Press.
- Hidayah, R., & Shigemura, T. (2005). Domestic Space Arrangement of the Private Rental Housing: A Case of Urban Village Housings of Yogyakarta, Indonesia. *Journal of Asian Architecture and Building Engineering*, 4(1), 137–142. <https://doi.org/10.3130/jaabe.4.137>
- Hinkel, R. U. (Ed.). (2011). *Urban interior: Informal explorations, interventions and occupations* (1. print). Spurbuchverlag.
- Lawrence, R. J. (1982). Domestic Space and Society: A Cross-Cultural Study. *Comparative Studies in Society and History*, 24(1), 104–130. <https://doi.org/10.1017/S0010417500009804>
- Lucas, R. (2016). *Research Methods for Architecture*. Laurence King Publishing.
- Rosselló, M. (2018). The kitchen in urban dwellings in Barcelona, 1920–1950: Out of step with modern architecture. *Frontiers of Architectural Research*, 7(3), 347–366. <https://doi.org/10.1016/j.foar.2018.05.001>
- Seo, K. W. (2006). The Law of Conservation of Activities in Domestic Space. *Journal of Asian Architecture and Building Engineering*, 5(1), 21–28. <https://doi.org/10.3130/jaabe.5.21>