

The Dynamics of the Sacred-Profane Forms and Meanings in the *Kalang* House Architecture, Yogyakarta, Indonesia

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Abstract

Kotagede is a cultural heritage area in Yogyakarta. The architectural identity of this vicinity arises from the *Kalang* house. Its unique identity comprises a blend of traditional Javanese and Indisch architecture and is reinforced by the sacred and profane forms and meanings in its layout.

This research reveals the dynamics of sacred-profane forms and meanings in the architecture of the *Kalang* house. The study employed a descriptive qualitative method to gather primary and secondary data through observations, documentation, and mapping. Out of the 12 *Kalang* houses present in Kotagede, four were taken as samples, with considerations that there were additions or changes in the functions of residence of the selected samples, both as a residence as well as a place of business (gallery, guest house, cafe), and from a residential to a non-residential apartment (museum).

The paper concludes that there is a high persistence of sacred-profane meanings at the front, middle, and back of the *Kalang* house, thus, forming a three-way pattern (front-middle-back). Moreover, the meaning was reinforced by the elevation of the floor, which forms a hierarchy of spatial characters.

Keywords: *kalang*, house, form, meaning, sacred-profane

Introduction

Kotagede is an ancient neighborhood located in the southeast region of the Yogyakarta city, a heritage site of the Islamic Mataram kingdom founded in 1532 AD (Rahmi, 2011). As the forerunner of the Surakarta Kasunanan Palace and the Yogyakarta Sultanate Palace, Kotagede is one of the cultural heritage areas in Yogyakarta (Fig. 1). Today, this area is developing into one of the economic centers in Java. Furthermore, as the former royal capital, Kotagede has a *catur gatra tunggal* hall concept (Junianto, 2017). Based on the architectural features, traditional houses in this area can be divided into two: the *Kalang* house, also called the *Sudagaran* house, and the Javanese traditional house (Adrisijanti, 2000). There are 12 *Kalang* houses in Kotagede (UNESCO, 2007). Architecture of these houses, built in the 19th century, depict a different standard of living of the residents of Kotagede at that time.

The architectural style of the *Kalang* house comprises a blend of traditional Javanese and European architecture, known as Indisch architecture. The buildings still use the layout of the traditional Javanese house, characterized by the presence of *senthong*, *gadri*, and *gandhok* spaces at the back. In the system of construction and final finishes, however, many adopt European architectural technologies and aesthetics.

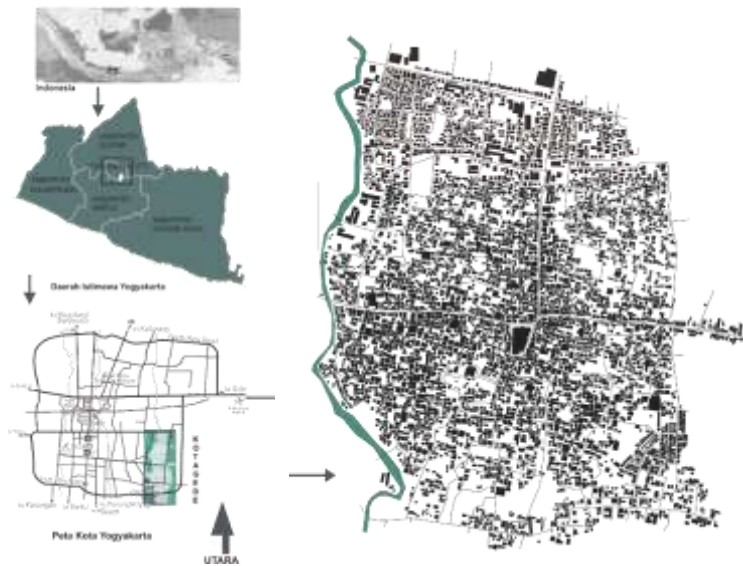


Fig. 1: Kotagede-Yogyakarta-Indonesia Location
Source: Rudwiarti, 2019

One of the factors influencing the changes in the residential architecture at Kotagede is the development of silver handicrafts. Economic factors, supported by the silver handicraft home industry have led to the transformation of residential architecture in the area. Furthermore, economic development and commercial activities, especially silver handicrafts, have so far encouraged changes in the architecture of residential buildings as well as commercial premises. Following this, at the end of the nineteenth century, three groups of traders played an important role in the economic dynamics of Kotagede, namely *Kalang*, *Muslim Santri*, and *Abangan Muslim* traders. The merchant group had a wide trading network and influences the architectural style of their residential buildings. At that time, buildings were found exhibiting a combination of European and traditional Javanese architectural styles. The merchants existence also marked the pinnacle of the vernacular architectural style in Kotagede as a high-quality building architecture. However, the political conditions in Indonesia between 1949 and 1965 halted the development of this type of building architecture in Kotagede.

The Research Problem

This research aims to determine the importance of preserving local identity arising from the new function of utilizing the residence as a place of business. This also encourages changes in the architecture of the *Kalang* house. As aforementioned, the problem observed in this research is related to the traditional residential architecture of the *Kalang* house, which comprises a combination of both traditional Javanese and European architectures (Indisch) adapting to the needs of its residents.

Literature Review

The dynamics of the form and meaning of space in buildings are determined by various factors, including economic, social, and cultural factors. Changes that occur also involve aspects of aesthetics and identity. In architecture, changes in forms and meanings often take place in buildings requiring adaptation to environmental developments, functions, and aesthetics. Furthermore, the transformation is also a momentum for the involvement of building owners or users to concretize their needs through a process of architectural change. It can create a dynamic architectural space to improve environmental quality and aesthetics (Asefi, 2012). Transformation encompasses economic, social, and cultural factors at different levels, but is fundamentally unique and cannot be generalized (Kurniati, 2022). The factors stated by

Kurniati are related to the added value of the building. Following this, the process of increasing the current value of cultural heritage buildings can be done through human and natural resource contributions, thus, making them part of the global economic network (Barrera, 2013).

Some factors that hinder the preservation of historical values include difficulties in combining tradition and modernity, and poor support from the local governments (Heldak, 2019). On the other hand, cultural heritage assets that are owned privately face difficulties in obtaining maintenance funding for the structures (Prasidha, 2020). This phenomenon prompted the Yogyakarta government to buy the *Kalang* house because apart from being a cultural heritage asset, it is also the identity of the Kotagede area. According to Heidegger (2001), "the essence of a building is to allow itself to be occupied. Only if we can live can we build." Heidegger's statement is in line with Wilkinson (2003) that "the uniqueness of man lies in his ability to be responsible to the Creator.". This statement emphasizes the importance of the architect's responsibility to maintain traditions in the context of modernity.

Furthermore, the transformation of vernacular architectural residential buildings is not spontaneous. Architectural transformations in housing can take place only gradually and in accordance with the needs and desires of the residents. Traditional houses can easily accommodate new functions because they are flexible enough to evolve according to the economic status and needs of the occupants (Hamid, 2014). The factor of economic status and the needs of the occupants by Sassateli (2007) is referred to as a consumptive society which is a new historical type because it's a way of life, a manner of contact, and a sense of social identity, all of which are driven by consumption, and have never been seen before.

The statements show that lifestyle and social interactions can encourage transformation. Indeed, the transformative power of architecture can help create a new identity for an entire region.

Vernacular architecture is always evolving to incorporate new features (Jagatramka, et al., 2021). In traditional societies and cultures, natural geographic space is perceived as a force that helps articulate existential places and footholds for identity and a sense of belonging (Dayaratne, 2020). The New Vernacular can be seen as an escape from old traditions. It revives traditional cultural traits, but not necessarily with their rigidity or control. Furthermore, it offers freedom, new ways of building and thinking, as well as new activities (Dayaratne, 2020). On the other hand, in the architecture of buildings, the style is often identified with regional symbols (Clarke, et al., 2000).

From this statement, it can be concluded that changes in traditional buildings occur because of the need for new functions. Changes in function and form if they are still in harmony with the character of the space will support the identity of the local architecture.

Research Methods

This research is descriptive qualitative with primary and secondary data (Leedy and Ormrod, 1997) collected through a) observation, documentation, and mapping, b) interviews with community leaders about history, culture, and community housing, and c) documentary surveys on history Kotagede. Based on the results obtained from observations, interviews, and document surveys, it is necessary to carry out further analysis to determine the dynamics of the function, form, and meaning of residential space in the architecture of the *Kalang* house, as the identity of the Kotagede area.

Evaluation

The layout of the *Kalang* house is similar to that of the traditional Javanese house. However, the walls, doors, windows, ventilation, ornaments, canopy materials, stained glass, tiles, walls, and pillars depict the influence of European (Indisch) architecture. Furthermore, the business activities carried out in the houses have made them function not only as a residence but also as a place of business. These commercial activities and trade in silver handicrafts are usually carried out at home alongside household activities. Currently, some new functions have been added, they include restaurant/cafe functions, galleries, guest houses, and museums. This has led to the evolvement of the original function of the building's front (originally a place to

receive guests/*pendhapa*) and rear (the *dalem* which was originally a place for household activities). Its original function, which is a place for household activities, has been changed because the building has to adapt to the needs of business activities as a source of family income. Based on the phenomena observed in the field, it was found that people's vision of residential houses developing and transforming into economic, productive, and multifunctional spaces was changing.

The *Kalang* house, like other residential houses in Kotagede, accommodates economic activities and is dominated by the mixed-used type, in which production, as well as buying and selling activities are carried out simultaneously with household activities. The most dominant space in the residence used for commercial activities are the front (*pendhapa*), middle (*pringgitan*), and back (*gandok*) (see Figure 2).

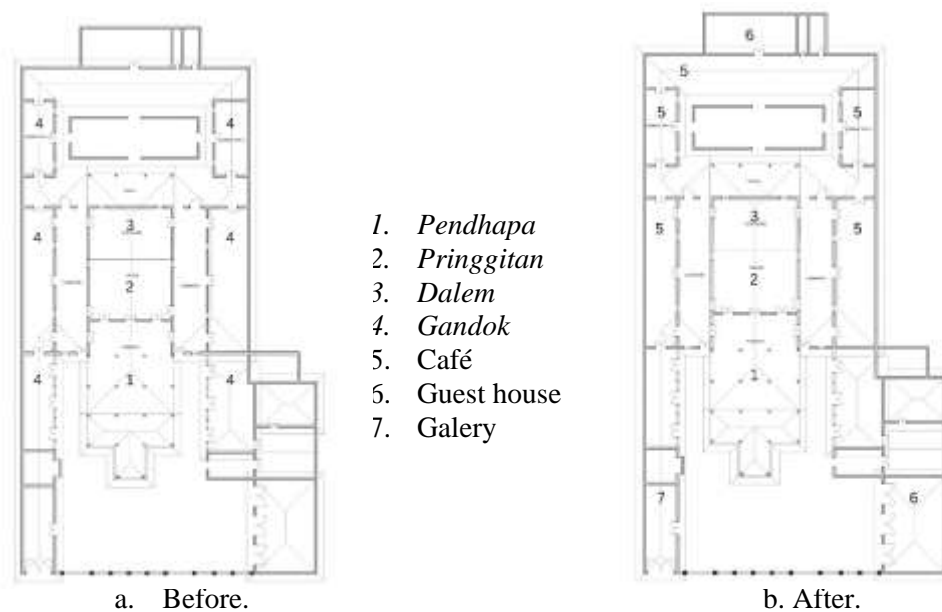


Fig. 2: Transformation of the function of space as a business space
Source: Analysis, 2022

The front (*pendhapa*) was originally a place where both private and communal guests were being received. This space is semi-open and serves as a receiving room at the front. While the middle part (*pringgitan*) in Javanese tradition is usually used to store traditional musical instruments (*gamelan*) and *wayang*. Besides functioning as a storage place for musical instruments (*gamelan*) and *wayang kulit* performances, it also acts as a barrier between the back (*dalem*) and front (*pendhapa*) of the building, hence, forming three patterns, namely: front - middle - back. (see Figure 3). The middle part (*pringgitan*) was originally a transitional space between the front (*pendhapa*) and back (*dalem*) of the house but it is currently used as a business space (gallery, cafe).

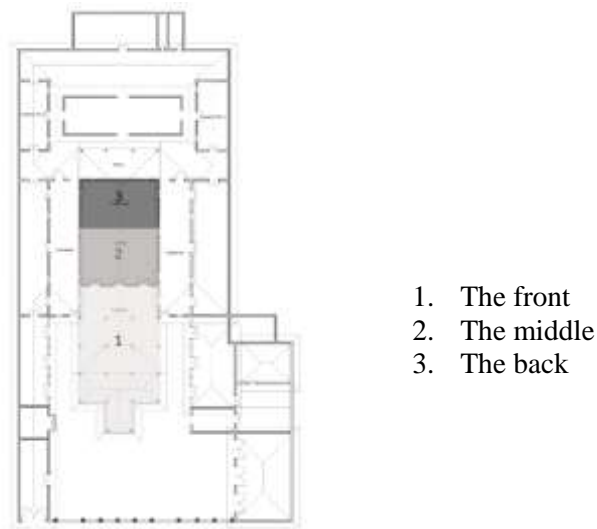


Fig. 3: Three patterns: the front, the middle & the back
Source: Analysis, 2022

Following this, the back (*dalem*) currently functions as a guesthouse. Thus changing the original character of the space from private to semi-private. These changes shape the spatial character arrangement from front to back as follows: public, semi-private, and private. The *dalem* consists of a *jogan* room and three *senhong* spaces (*senhong kiwa*, *senhong tengah*, and *senhong tengen*). Furthermore, the function and layout of the space are maintained when the floor plan is expanded. The *senhong* space is sacred and is called *pasren* which means prosperity or fertility. Currently, the *pendhapa* is used for various activities, particularly offerings and holding various traditional ceremonies. While the back (*dalem*) is a meeting place for residents, especially women with related guests. At the rear (*dalem*), there is only one main entrance in the middle and two smaller doors to the left and right of the main door. The presence of 3 doors strengthens the symmetrical building plan (see Figure 4). Also, the *senhong tengah* room or *pasren*, which is located at the rear and has a layout similar to that of a traditional Javanese house, occupies a hierarchy of private and sacred space characters. These characters are strengthened through the room's floor elevation, which is higher, compared to that of the other rooms (see Figure 5, 6).

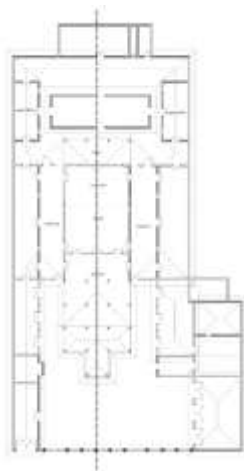
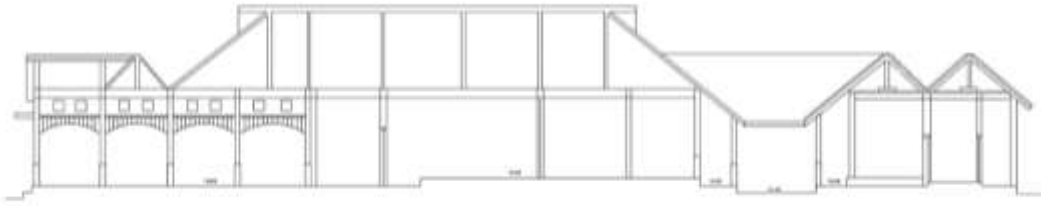
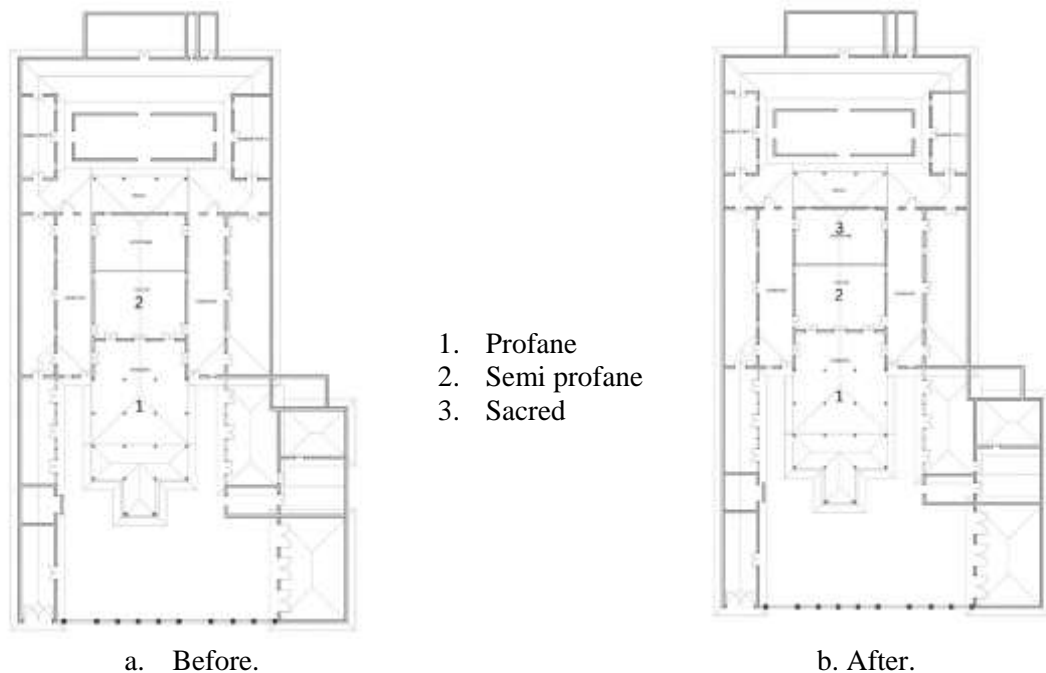


Fig. 4: Symmetrical spatial pattern
Source: Analysis, 2022

**Fig. 5:** The floor elevation hierarchy

Source: Analysis, 2022

The symmetrical space forms a triple pattern, consisting of the front, middle, and back. The center acts as a “boundary” reinforced by the difference in floor elevation. Subsequently, the spatial pattern and the hierarchy of floor elevations show a typical pattern often used in traditional Javanese buildings. Regardless of the change from the function of a residential building to a place of business (café and gallery) and guest houses, the spatial pattern and floor hierarchy of the building did not change.

**Fig. 6:** The hierarchy of characters in the layout

Source: Analysis, 2022

Based on the discussion above, the dynamics of changing the shape and meaning of the sacred-profane architecture of the *Kalang* house in Kotagede can be broadly grouped as follows:

- The sacred-profane concept is still used in its original meaning.
- Its concept is still known but used with a new function. and
- The concept is still known but is no longer used.

The sacred-profane meaning that is still used in the form of spatial planning according to its original meaning is a representation of the dynamics of change in form and meaning of the *Kalang* house space from the function, form, and meaning aspects (see table 1, 2 and 3).

Table 1: The dynamics of change in form and meaning of the sacred profane on the front
Source: Analysis, 2022

The Front	<i>Kalang</i> House 1	<i>Kalang</i> House 2	<i>Kalang</i> House 3	<i>Kalang</i> House 4
Functional Aspect	Still used but not in accordance with the original function.	Still used but not in accordance with the original function.	Still used but not in accordance with the original function.	Still used but not in accordance with the original function.
Form Aspect	Still retains its original shape.	There are additional elements supporting business activities.	There are additional elements supporting business activities.	Still retains its original shape.
Aspect Meaning	Still known even though there are new activities.	Still known even though there are new activities.	Still known even though there are new activities.	Still known even though there are new activities.

Table 2: The dynamics of change in form and meaning of the sacred profane in the middle
Source: Analysis, 2022

The Middle	<i>Kalang</i> House 1	<i>Kalang</i> House 2	<i>Kalang</i> House 3	<i>Kalang</i> House 4
Function Aspect	Still in use with additional functions.	Still used but not in accordance with the original function.	Still used but not in accordance with the original function.	Still used but not in accordance with the original function.
Form Aspect	Still retaining its original shape	Still maintains its original shape with the addition of supporting elements for business activities	Still maintains its original shape with the addition of supporting elements for business activities	Still maintaining its original shape without adding elements to support business activities
Meaning Aspect	Still known but there is a new character influence of activities.	Still known but there is a new character influence of activities.	Still known but there is a new character influence of activities.	Still known but there is a new character influence of activities.

Table 3: The dynamics of change in form and meaning of the sacred profane on the back
Source: Analysis, 2022

The Back	<i>Kalang</i> House 1	<i>Kalang</i> House 2	<i>Kalang</i> House 3	<i>Kalang</i> House 4
Function Aspect	Still in use but there are additional new functions.	Still used but not in accordance with the original function.	Still used but not in accordance with the original function.	Still used but not in accordance with the original function.
Form Aspect	Still retaining its original shape	Still maintains its original shape with the addition of supporting elements for business activities	Still maintains its original shape with the addition of supporting elements for business activities	Still maintaining its original shape without adding elements to support business activities
Meaning Aspect	Still known but there is a character influence from additional activities.	Still known but there is a new character influence of activities.	Still known but not used.	Still known but there is a new character influence of activities.

Based on the analysis, the dynamics of the form, function, and meaning of space are marked by changes in the function of the residence to become a guest house, café, gallery, and museum. These changes led to the division of space for business activities (commercial) and residential activities. The layout has changed with the demolition of the walls and the addition of new room partitions. The new function as a guest house requires supporting bedrooms, cafes, meeting rooms, and galleries. The original spaces, such as *pendhapa*, *pringgitan*, *dalem*, and *senhong*, did not change their shape, but their function changed. The back (*dalem*) becomes the management room and is rented out to the public. The gallery space is used as a batik showroom and workshop activities.

Based on tables 1, 2, and 3, it is concluded that there are spaces that have changed. These changes include changes in function. Changes in function change the character of the space which was originally public (front) and private (back) to become public (front), semi-public and private (back, side), and from profane (front) character, semi-profane (middle) and sacred (back). The change in the character of private space to semi-public occurs in the *gandok* (side). Changes in sacred character to semi-profane happen in the back (*senhong kiwa* and *senhong tengen*). Changes in semi-profane character to profane occur in the side (*gandok* and *gadri*), which turn into galleries and cafes. Changes in semi-profane character to profane also happened in the *gadri*, which turned into a painting exhibition room. The change in the character of the space was followed by a change in shape with the demolition of the walls, additional space partitions, and additional circulation paths. Vertical changes occurred in the *gadri*, which was converted into a 2-story building and functioned as a cafe, kitchen, and employee room.

Conclusions

In conclusion, the sacred-profane concept of the *Kalang* house architecture which still survives is the sacred meaning on the back (*dalem*), especially that of the *senhong* room. Although some new functions have added to the back (*dalem*), its sacred meaning is still maintained even though the character of space around the *senhong* which was changed from private to the semi-private. This is encouraged by the *senhong* room's floor elevation, which is higher than that of the other rooms in the building. Likewise, the front (*pendhapa*), whose new function is to act as a business location, nevertheless has a profane meaning. Thus, the sacred-profane meaning in the *Kalang* house architecture is maintained even though its interior changes functional aspects. The height of the floor is also maintained and this plays its part in strengthening the sacred-profane hierarchy.

Furthermore, the sacred-profane concept in the *Kalang* house architecture is still known through its three patterns (front-center-back and left-center-right side) where the back and center are considered sacred. The preservation of the difference in elevation of the floor is an indication of the preservation of the sacred character even though there are some changes in the function. The higher the elevation of the floor, the more sacred the character of the space while the lower the elevation of the floor is, the more profane it is, and *vice versa*.

Recommendations

Recommendations for Practitioners

1. The preservation of the *Kalang* house as one of the architectural characteristics in Kotagede contributes to the vicinity's status as a cultural heritage area.
2. New functions can be added and the building's role can be changed from a place of residence to a place of business while maintaining the sacred-profane form and meaning of the building's architectural layout.

Recommendations for Further Research

1. Modifications to the function of the *Kalang* house are strong indications of adaptation to the economic development of the area. Further study is necessary to determine how strongly this adaptation impacts the sustainability of the persistence of sacred-profane meanings.

2. The effect of business activities on the traditional dwellings is unavoidable and can occur in various countries. Therefore, preserving the form and meaning of traditional residential spatial layouts in the context of changing building functions requires further research.

References

- Adrisijanti, I. (2000) *Arkeologi Perkotaan Mataram Islam*, Yogyakarta: Jendela
- Ashadi, A. (2020) Pendhapa Natabratan: Symbolic Meaning of the Javanese House in Demak, Indonesia, *International Journal of Architecture, Arts and Applications*, 6 (3), pp. 39-46
- Asefi, M. (2012) Transformation and movement in architecture: the marriage among art, engineering, and technology. *Social and Behavioral Sciences*, 51, 1005 – 1010.
- Barrera, S. L. (2013) Representations of Spatial Transformations: Industrial Agriculture and Informal Settlements in Mercedes, Uruguay. *Spaces and Flows: An International Journal of Urban and Extra Urban Studies*, 2(4), pp. 163–182.
- Clarke, G. & Crossley, P., eds (2000) *Architecture and Language*, Cambridge and New York: Cambridge University Press, pp. 4.
- Dayaratne, R. (2020) Imagining Spatial Geographies: Architecture of poetic terrains in the artificial islands of Bahrain, *ISVS e-journal*, 7(2), pp. 59-69.
- Dayaratne, R. (2020), Re-inventing Culture and Place Searching for Roots, Identity and Sense of Belonging: Winter Camps of Bahrain. *ISVS e-journal*, 7(4), pp. 64-76.
- Hamid, G.M. & Eltahir, M.M. (2014) Transformation of Vernacular Housing by the Displaced: Greater Khartoum, Sudan. *ISVS e-journal*, 3(1), pp. 30-41.
- Heidegger, M. (2001) *Poetry, Language, Thought, Perennial Classics*. New York: HarperCollins
- Heldak, M. & Soroczynska, E.G. (2019) Historical Heritage and Space Transformation. *IOP Conference Series: Materials Science and Engineering*. 471, pp. 1-9.
- Idham, N.C., Numan, I. & Mohd, M. (2010) Changes of Quality in Javanese Houses, *Open House International Journal*. 35(3), pp. 15-26.
- Idham, N.C. (2018) Javanese vernacular architecture and environmental synchronization based on the regional diversity of Joglo and Limasan, *Journal Frontiers of Architectural Research*, 7(3), pp. 317-333.
- Jagatramka, R., Kumar, A. & Pipralia, S. (2021) Transformations of Vernacular Architecture of India: Problems and Prospects, *ISVS e-journal*, 8(1), pp. 23-32
- Jimenez, A.S., Padura, A.B., Huelva, M.M. (2018) Sustainable Building Renovation for an Ageing Population: Decision Support System Through an Integral Assessment Method of Architectural Interventions, *Journal of Sustainable Cities and Society*, 39, pp. 144-154.
- Ju, S.R., Kim, D.Y. & Santosa, R.B. (2018) Dualism in the Javanese House and Transformation With a focus on the houses of Kotagede, Yogyakarta, *Journal of Asian Architecture and Building Engineering*, 17(I), pp. 71-78.
- Junianto, H.W. (2019) Konsep Mancapat-Mancalima Dalam Struktur Kota Kerajaan Mataram Islam, *Jurnal Mintakat*. 20(2), pp. 107-131.
- Kurniawan, N. A. (2020) Resilience Thinking with Local Wisdom in Disruptive Era, *Proceedings of the 6th International Conference on Social and Political Sciences*, 510, pp. 627-631
- Kurniati, R., Ristianti, N. S., Dewi, S. P., & Prihestiwi, R. C. (2020) Transformation of Activities and Space in Malay Kampong as Heritage Kampong in Semarang City. *Jurnal Teknik Sipil & Perencanaan*, 22(1), pp. 20-27.
- Leedy, P. D. & Ormrod, J. E. (1997) *Practical Research: Planning and Design*. Indianapolis: Merrill.
- Gustafson, P. (2001) Meaning of Places: Everyday Experience and Theoretical Conceptualization, *Journal of Environmental Psychology*, 21(1), pp. 5-16.
- Prasidha, I. N., Martokusumo, W. & Lubis, B. U. (2016) Heritage Buildings and Architectural Transformation in Depok City. *Applying Local Knowledge for Livable Space*, pp. 114-122.

- Rahmi, Y. N. (2011) *Perencanaan Lansekap Wisata pada Kawasan Cagar Budaya Kotagede*, Yogyakarta., Bogor: Institut Pertanian Bogor.
- Rudwiarti, L.A., Pudianti, A. & Hadi, P. (2019) Sociocultural Capital and Its Roles in Traditional Heritage Housing Conservation Scheme: A Case Study of Brayut Tourism Village Yogyakarta, Indonesia, *Cultural Sustainable Tourism. Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development)*, pp. 131-137.
- Sassatelli, R. (2007) *Consumer Culture, History, Theory and Politics*, California: Sage Publications.
- UNESCO. (2007). *Home Owner's Conservation Manual Kotagede Heritage District*, Yogyakarta, Indonesia (Pedoman Pelestarian bagi Pemilik Rumah Kawasan Pusaka, Kotagede, Yogyakarta, Indonesia). Jogja Heritage Society, Jakarta: UNESCO.
- Wilkinson, L. (2003) *Earthkeeping in the Nineties: Stewardship of Creation*, Wipf & Stock Publishers.