



Identifying Habitat Selection Concept as Results of Place Attachment Phenomenon in Kampung Keputran, Surabaya

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ABSTRAK

Studi ini menyorot fenomena place attachment yang beragam dan perannya dalam membentuk konsep budaya bermukim di kampung Keputran. Lokasi studi terletak di kawasan pusat bisnis Surabaya, menghadapi tantangan unik seperti banjir tahunan dan risiko penggusuran akibat masalah kepemilikan tanah. Penelitian menggunakan metode deskriptif kualitatif, meliputi teknik character appraisal, wawancara, dan observasi pada kampung Keputran serta penghuninya. Disimpulkan bahwa terjadi tahap keterikatan pada tempat di kampung Keputran yang tercermin oleh perkembangan pesat kawasan dan kuatnya karakter kampung di tengah pertumbuhan tersebut. 6 faktor place attachment ditemukan terjadi di kampung Keputran. Hal ini tentu mempengaruhi konsep budaya bermukim dari sisi kultur, emosi, kognitif, dan perilaku masyarakatnya yang tercermin pada hunian dan lingkungan tempat tinggalnya.

ABSTRACT

This study investigates the complex phenomenon of place attachment and its impact on the formation and preservation of individual and communities' identities to its cultural environment. Keputran kampung, situated in Surabaya's central business district, faces unique challenges such as annual flooding and the risk of eviction due to land ownership issues. Using qualitative descriptive research, including character appraisal, interviews, and observations, this study examines the place attachment phenomenon and its implications for its habitat selection concepts. Findings reveal the rapid development and strong characteristics of Keputran Village, classified as a attachment to a place stage with six identified factors influencing habitat selection on the residents' cultural aspects, emotions, cognition, and behavior. This study sheds light on the multifaceted nature of place attachment and its role in shaping the habitat selection concepts of Keputran kampung.

I. INTRODUCTION

Place attachment is a complex phenomenon that encompasses various aspects, including affection, identity, dependence, social ties, integration, preference, restorative capacity, and quality of place [1]. It is closely related to the concept of sense of place, which involves the perception and meaning of a place [2]. The theory of place attachment emphasizes the emotional and functional bonds between people and their physical environments [3]. This attachment is influenced by individual perceptions of their living space, which in turn motivates community attachment and participation [4].

Meanwhile, habitat selection or popularly known as habitat adaptation in urban kampung is a complex and multifaceted process, influenced by a range of factors. [5] emphasizes the importance of considering the social and cultural meanings behind the physical structures of kampungs, while [6] highlights the role of communal spatial adaptation in responding to vulnerability, particularly in the provision of basic services. [7] further explores the resilience principles of urban kampung, focusing on the ability of these communities to survive and adapt in the face of challenges. The social traditions of a particular community in a physical environmental setting will create a comprehensive balance in their

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pattern of life and livelihood. This will ultimately give rise to an emotional bond/relationship (community attachment) between the human occupants and the place where they live in accordance with each individual's perception and cognition, which in turn will foster an identity as a symbol of the community's identity (self-identity).

Those kinds of phenomenon could be identified happening in Surabaya city, particularly in its urban villages or known as 'kampung' which compose most of the organic typo-morphological pattern of the city. Some of these urban spaces are experiencing a stage of psychological transformation in the form of territoriality and giving identity to the scope of research, in this case residents create a sense of ownership by creating their own boundaries. Looking at the urban 'kampung' pockets in Surabaya, the 'kampung' next to Jalan Urip Sumoharjo is located at a fairly strategic road in Central Surabaya. Initially, the 'kampung' access are far from the main road, it grew and spread so the entrance currently tangent with the road. The status of the land which is mostly is petok D which is non-certified means that at any time there may be a change in function.

In various ideal situations, each community group will leave or move around in order to adapt their choices to areas that express the group's identity, status and choices. Behind its strategic location with relatively easy access to public facilities, Urip Sumoharjo village has various shortcomings such as flooding, security problems and the threat of eviction. These things do not reduce residents' interest in continuing to live in the area. This area is experiencing a process of place attachment, an attachment to the place where the residents of Keputran Village live, despite the imperfect situation.

The phenomenon of place attachment in urban villages, or kampungs, has been explored in several studies. [8] identified physical, social, cultural, individual, experiential, and social facility factors as key components of place attachment in the Petemon settlement in Surabaya. [9] further expanded on this by discussing the impact of tourism kampung development on place attachment, emphasizing the importance of form, activity, and meaning. [10] added to this by highlighting the role of place creation, identity, and dependence in the development of place attachment in Kampung Batik Semarang. Lastly, [11] discussed the spatial identity of kampungs in Surabaya, noting the influence of both physical and social characteristics on place attachment. These studies collectively underscore the complex interplay of physical, social, and cultural factors in shaping place attachment in urban villages.

Place attachment as a complex phenomenon provides an opportunity to be described in various types with different aspects, origins and purposes. It contributes to the formation-maintenance-preservation of individual, group nor cultural identity. Many occurrences happening in kampung Keputran are the basis for this area chosen as a study location, it creates an interesting analysis regarding the correlation between place attachment as a trigger for the eventual habitat selection of communities living in the kampung. It would reveal the resident's culture and residential concept based on their perspective and behavior.

The aim of this research is to analyze transformation of psychological conditions as an aspect of place attachment in the Keputran 'kampung' area as well as to discover the habitat selection concept and typologies of the residential arise from the people who conform living there. In achieving this goal, several objectives must be appraised accordingly, such as: Identifying the phenomenon and possible causes of place attachment in the kampung Keputran, Surabaya. And discover whether there are habitat selection concept happening as a consequence of place attachment phenomenon and its resulting new typologies of residential arise

II. MATERIALS AND METHOD

The research location is located in the Keputran village area as seen as figure 1 below, which is part of the administrative area of Embong Kaliasin Village, Gubeng District, Surabaya City. With the territorial boundaries:

- North : BRI Tower Plaza
- East : Urip Sumoharjo streets – Keputran Market – Dharmala Losmen
- West : Kedondong Kidul I streets
- South : Urip Sumoharjo Flat



Figure 1. Location of the Study Area in Kampung Keputran, Surabaya City

The study employed a qualitative descriptive research method to investigate the elements of place attachment influencing habitat selection in kampung Keputran. The aim was to assess the extent of place attachment, the interconnection between individuals and their environment, and the dedication to the locality.

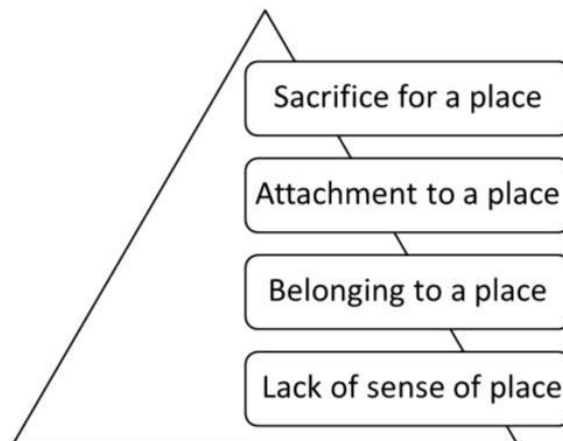


Figure 2. Phases of Place Attachment

The character appraisal analysis method is utilized to assess and categorize residential environments through methods such as interviews and observations to identify a range of factors. These factors include physical, social, cultural, individual, experiential, social amenities, and satisfaction with a location [12][13]. They are evaluated to ascertain the level of place attachment present in kampung Keputran and to outline the phases of attachment (see figure 2) to the area within kampung Keputran.

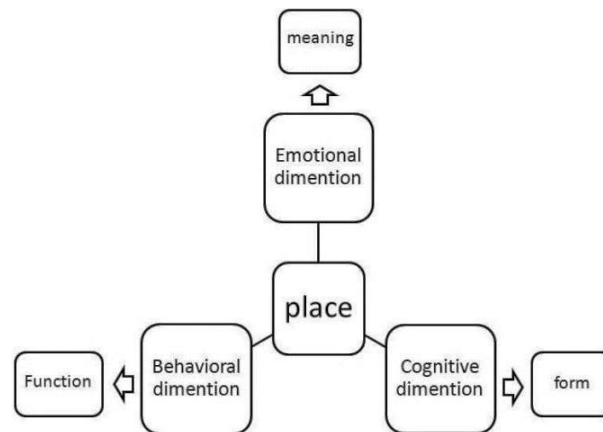


Figure 3. Sense of place dimension

Habitat selection is demonstrated through the adjustment of housing standards within a specific location. An examination of the latest housing standards in the region can serve as an indicator of the adaptation happened to developments in the area. According to [14], a location encompasses three dimensions (see figure 3 above), where individual and group sentiments towards the location represent the emotional dimension. Beliefs held about places constitute the cognitive dimension, while the purpose of the location serves as a manifestation or symbol of the behavioral dimension. Therefore, the cognitive, behavioral, and emotional aspects are among those scrutinized to enable a typology analysis of residential concepts evolving from a behavioral standpoint.

III.RESULT AND DISCUSSION



Figure 4. Urip Sumoharjo Street during 1970 (left) dan 2011 (right)

During the late 1800s, the construction of Jl. Raya Urip Sumoharjo led to the division of Keputran village into three parts: Keputran Megersari, Keputran Kejambon, and Keputran Panjunan. Presently, Keputran Megersari has evolved into the current Keputran location, situated to the east of Jl. Raya Urip Sumoharjo, while Keputran Panjunan and Keputran Kejambon are located on the western side of the road. Over time, Keputran Kampung developed into a densely populated residential area, which experienced a significant fire incident in the 1980s, prompting a reorganization of the area.

Numerous considerations led to a proposal for the construction of apartment buildings to house the victims of a fire incident. However, the population growth in Keputran Kampung has been steadily increasing until this year, resulting in eviction concerns due to its prime location in the city center. There were reports that the city government was collaborating with private sector to transform Urip Sumohardjo area into a commercial and office hub, sparking concerns among urban planning experts about the potential disappearance of urban kampung. This situation draws parallels to the previous loss of RW X, now the Bumi Hotel, and the subsequent road expansions (figure 4). Additionally, a decision was made to withhold identification cards for new residents and spouses marrying Keputran original

residents, a measure supported by the Legal Head of the District Population and Civil Service Department and Surabaya City Development Planning Board (Bappeko).

In the realm of settlement, Keputran kampung remains home to around 600 household heads residing within the administrative jurisdiction of RW 11. Established in the 1800s, this village continues to face speculation regarding potential evictions for land use alterations. Nevertheless, supported by robust historical evidence, the village is actually progressing positively, evident in advancements in cleanliness, security, and administrative organization. To investigate the residents' attachment to the locality, a study was conducted focusing on the duration of residency among villagers (see figure 5 below), revealing a notably lengthy average duration of residence, with many individuals having resided in the kampung for over 20-30 years. A significant proportion, amounting to 81% of the total population, comprises long-term residents, while the remaining individuals are newcomers who will reach the 20-year residency mark in the upcoming year.

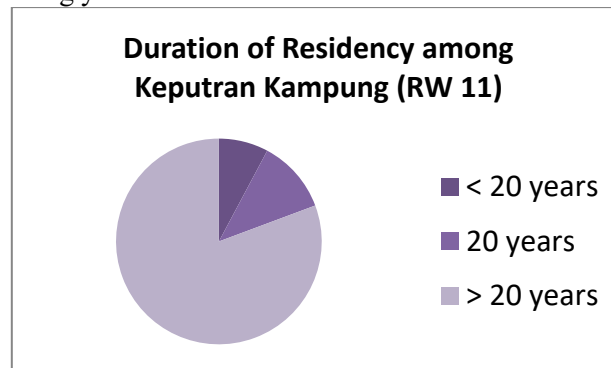


Figure 5. Residency allotted time in Keputran Kampung

The subsequent map series in figure 6 illustrates the population density growth of the inhabitants residing in Keputran kampung as recorded.



Figure 6. A map series illustrating the spatial distribution of housing density over time in Keputran Kampung

Before the flats underwent physical repairs in the early 2000s, density was already felt when seen from above Keputran kampung so that when viewed over a period of time, indicating its age. Changes were made by the Surabaya city government by improving the physical quality of the environment creating a food court in 2007-2008 as well as improvements to the flats. This also encourages several residents as outermost land owners to help improve the condition of the village by placing an

"imaginary" boundary on that side to participate in renting out the land as a place for food and providing other services.

Because of its advantageous position, the majority of the locals are employed in the service industry, with a significant number choosing to establish their own ventures within the kampung, such as selling snacks, cakes, and operating food stalls. Some individuals even manage more elaborate businesses like kebab production industries. The western part of the kampung adjacent to the road has food shops are rented to other people (not local residents), so to enter the residential kampung area, there are several small alleys that can be found easily. Upon entry, it is mandated that the engines of all motorized vehicles be turned off.

This kampung contains two narrow public roads measuring 160 cm in width, frequently utilized by residents, in addition to smaller roads less than 120 cm wide. It is intersected by several city canals, although the majority of houses are not oriented towards these waterways.

Determining Factors Contributes to The Development of Place Attachment.

In line with previous academic investigations, this study conducts a thorough analysis of different factors that influence place attachment. The primary objective is to determine the relationship between the location being studied and the theoretical framework being considered.

1) Physical Factors

Identifying physical factors entails acknowledging the particular circumstances in which an individual establishes a genuine connection with a place and comprehending the underlying reasons for its substantial personal significance to them.

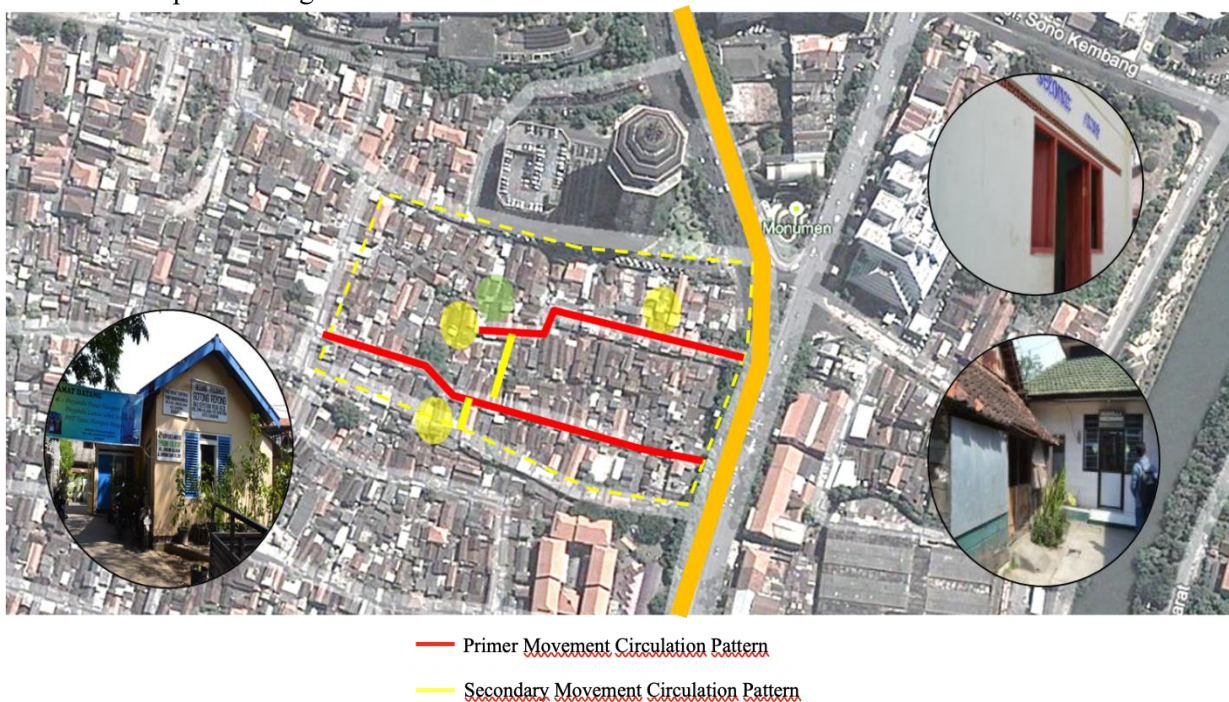


figure 7. The spatial dispersion of public facilities dan mobility patterns of citizens.

In Keputran kampung there are several physical factors that are recognized, including the **formation of social space, movement circulation patterns** in the kampung and improvements in its physical environment. These physical elements play a significant role in fostering place attachment among residents, as they contribute to residents' familiarity with the physical aspects of their kampung. This familiarity extends beyond their own dwellings to encompass a broad understanding of informal socialization spaces utilized regularly by residents. While a majority of socialization activities occur in front of residences, the Integrated Healthcare Center (posyandu) building emerges as a favored location for spontaneous gatherings, particularly due to its Chinese-style architecture resulting from a municipal grant, which is prominently situated facing the road.

According to [15], individuals who possess a strong connection to a particular location tend to attribute symbolic significance to various aspects of that place, including the arrangement of furniture, the positioning of public amenities, the urban design of a city, and its interactions with the surrounding environment and other elements. At the local community level, inhabitants possess a comprehensive understanding of the patterns of movement they engage in on a daily basis, including their routes within and outside the village, the whereabouts of other family members, and the locations for fulfilling both physical and non-physical requirements. This results in the establishment of a network of movement patterns within the kampung setting (figure 7). It can be seen there are two typological pattern, primary, and secondary. The primary movement pattern used as the main access and circulation in the area, and the secondaries are the shortcut known mostly only by locals.

In the realm of physical infrastructure, this assertion is further substantiated by the collaborative efforts of community members to enhance the physical landscape within the kampung. This initiative begins with the repair of individual residences and progresses to the enhancement of communal spaces, such as the drainage system in the study area (figure 8 below), which is regularly cleared of sediment buildup. The impetus for these repairs stems from the recurrent issue of annual flooding that affects the kampung. This phenomenon is attributed to the disparity in elevation between the Urip Sumoharjo road and the Keputran kampung area, with the former situated significantly higher than the latter.

One prevalent issue faced by inhabitants is the rapid filling of water channels and subsequent flooding of roads during prolonged periods of rainfall. In severe cases, water may infiltrate residences or emerge through floor cracks. Residents perceive this recurrent flooding as an inherent risk of residing in the area, considering its frequent occurrence as a normal phenomenon. One strategy applied by the residents in this area is to mitigate flooding by either elevating their homes or constructing barriers such as dams at the entrances to their houses.

Examining the extensive historical background of Keputran kampung reveals its susceptibility to displacement. Situated in a central urban area, the government had devised policies to convert the land into a commercial and service zone. However, due to the kampung's historical significance, this initiative remained stagnant and ultimately unsuccessful. The residents of the kampung possess only Petok D land certificates, a status that remains dubious under current legislation. Nevertheless, ongoing endeavors to maintain the cleanliness, safety, and overall livability of the kampung persist to date.



figure 8. drainage conditions and circulation access within Keputran Kampung RW.11

2) Social Factors

The psychic environment includes both the tangible characteristics of a place and its social aspects. The positive relationship between a location and an individual's happiness is closely linked to social interactions, as these communal experiences play a crucial role in shaping the personal perception and 'meaning' of a place for each person.

The emergence of communal activities within the kampung can be attributed to the close interpersonal relationships among residents, facilitated by physical proximity to neighboring houses and a shared desire to foster a sense of community. The central location of the drainage system within the circulation alley contributes to a vibrant atmosphere, with residents engaging in various activities such as washing, drying, parking, and social interactions (figure 9), thereby enhancing the vitality of the kampung environment. Place attachment is intricately linked to the residence, routine activities, and the duration of shared activities. The presence of individuals engaging in social networks and cultural exchanges within a location contributes to the establishment of its significance and value. Place attachment is intricately linked to the residence, routine activities, and the duration of shared activities.

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Figure 9. "Informal" social activities in Keputran kampung RW.11

3) Cultural Factors

[16] identified that shared culture among groups, families, and community members often leads to a strong sense of place attachment, influencing decisions about where to reside. This phenomenon underscores the significance of cultural factors in residential choices. For instance, in the case of Keputran, residents have formed residential clusters based on cultural and customary similarities. This pattern is evident in the Madurese ethnic settlements located at the outskirts of Keputran kampung, while further inward, one can find older settlements and a mix of immigrant populations.

4) Individual Factors and Satisfaction to a Place

Attachment to a place is different for each person. They will choose and be bound to that place based on their own awareness which is caused by the characteristics of personal factors. An important determinant in the selection of a location is the potential opportunities it offers, which typically outweigh any drawbacks. Place attachment is fostered by the anticipated benefits associated with a particular location. For instance, in the kampung under consideration, the majority of the population engages in trading activities, selling goods at different shopping centers in Surabaya. Additionally, there are temporary residents residing in boarding houses who are employed as retail workers in the Central Business District of the Surabaya vicinity. Conversely, a minority opt for trading activities to establish a market presence within the village.

The provision of PDAM water in the village has enabled residents to access water more conveniently, replacing the previous reliance on wells scattered throughout the community. Additionally, the introduction of PLN electricity services in the village has ensured regular electricity consumption, with payments being collectively managed through an appointed resident who has direct communication with PLN.

Despite facing frequent floods and deteriorating security conditions, the residents endeavored to establish perimeter fences around their homes to enhance their sense of safety. This initiative aimed to enhance the overall quality of the environment, thereby fostering physical, social, and emotional security for the residents.

5) Factors Related to Memory and Perception of Time.

According [17], a location imbued with place attachment is not merely perceived as a physical space associated with memories of habitation. Rather, it represents a nexus of recollections, personal experiences, and cherished adventures that transform it into a symbolic representation of one's formative years. The duration of one's residency is identified as a crucial element in delineating the development and manifestation of place attachment within a particular locale.

In RW 11, the population of family units has grown to approximately 600 individuals per family. While inter-ethnic gatherings were previously observed during historical periods or upon the arrival of new residents, the current trend among inhabitants is to actively engage in the formation of a cohesive community within the Keputran kampung. The establishment of residence in the kampung dates back to two decades ago, with subsequent generations opting to relocate to new dwellings, while earlier generations have chosen to remain in their original homes. Notably, the village serves as a focal point for familial reunions on specific occasions, such as national public holidays, enabling individuals to uphold cherished childhood memories upon revisiting the area.

6) Interaction and Activity Factors

The presence of place attachment can also be achieved by examining the interactions between individuals and their surroundings, as well as among individuals themselves. The utilization of roads not solely for transportation purposes, but also as a platform for social engagement that fosters a sense of community within the kampung, serves as an indication of vibrant community involvement and social connections. Place attachments are further linked to activities that are marked by distinct celebratory periods (figure 10). Within the realm of intercultural studies, festivals, celebrations, and purposeful communal events play a significant role in the preservation and dissemination of cultural practices within a given locale. Noteworthy occasions such as the commemoration of Independence Day on the seventeenth of August and communal gatherings serve as pivotal moments that intensify the bond with a place, evident through the active participation of all kampung Keputran inhabitants in these communal activities.



figure 10. Collective engagement within the community as a unified entity

Identifying Habitat Selection Concepts in Keputran Kampung

In examining the factors contributing to place attachment within the research area, the resulting outcomes of such attachment become apparent, notably the influence of the local culture. The examination of settlement culture involves an exploration of human engagement with the environment and its interconnectedness with the various elements present within a specific location. As outlined by [18], these elements are categorized into three main components.

1) Cognitive

The concept of cognitive meaning was incorporated into research on place attachment to elucidate the overall perception of a location for comprehending spatial dimensions and orientation. This perception entails a deep understanding of space stemming from a feeling of connection to the area. For inhabitants, the process of reasoning and evaluating places involves grasping the spatial characteristics of the village, encompassing its demarcations like structures or natural features such as waterways. Furthermore, this understanding extends to historical elements, thereby imbuing significance for the residents.





Figure 11 Buildings and physical conditions at the study location

The figure 11 above depicts the importance of symbols in helping individuals understand a specific area. It is seen there are various public facilities that supported the resident scattered around the outer perimeter of the Kampung, mainly connecting to its primary movement circulation. Cognitive functions are intertwined with tangible elements; thus, the development of place attachment is yet to reach its full potential.

2) Behaviour

Behavior formed in society describes the activities and functional relationships between humans and their environment, conditioning the environment so that it functions well for their needs[19]. People will always give special meaning to human activities and roads, so there are many discoveries that link road space as an intermediary for activities. The most obvious is that the use for informal interactions (figure 12) means that roads or outdoor spaces influence the formation of behavior through existing physical structures. Trades between it local residents and informal interaction happened at the pathways indicating Keputran Kampung actively utilize all part of the environment to provide their needs

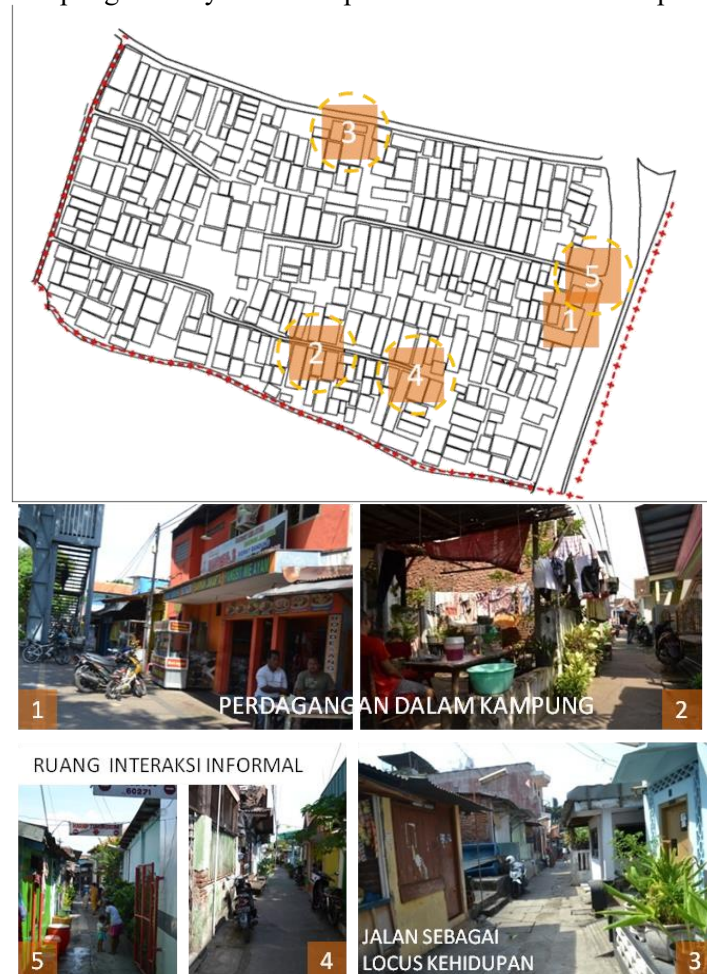


Figure 12. pathway as a 'locus' and the socio-economic activities of residents**3) Emotion**

[20] suggest, emotions serve as a crucial non-physical factor influencing the formation of place attachment. Emotional involvement with a place is essential for cultivating satisfaction with that specific location. This emotional bond is characterized by a sense of ownership that drives individuals to persist in residing in and associating themselves with the area, even in the face of obstacles like flooding (linked to low elevation from the road) and security issues (albeit of a minor nature). This dynamic contributes to the emergence of a distinct settlement culture, such as:

- Reside for an extended duration exceeding 20 years
- Experience a succession of generations that is systematically organized
- Independently undertake the maintenance and enhancement of infrastructure within the surroundings

In general, housing in Keputran kampung is classified into three distinct categories based on their architectural origins. The village features numerous original formal houses characterized by Dutch and Chinese architectural styles situated prominently at the forefront of the kampung facing the main road. This architectural feature has endured over an extended period, contributing significantly to the kampung's identity. Moving further into the kampung, these original formal houses transition into contemporary-style formal residences akin to other dwellings in the area. Additionally, there are informal houses within the village that have not undergone significant development but are utilized for commercial purposes, such as operating vegetable and snack stalls.

Figure 13 below provided the depiction of basic residential structures in the research area referred to as formal houses. Typically, expansion of living space is carried out towards the rear of these dwellings. However, given the high population density within the kampung, many inhabitants are opting for house renovations as a viable alternative.

**Figure 13. Formal Residential Development**

The refurbishment of colonial-style residences and other dwellings is tailored to environmental factors, particularly those susceptible to flooding, with a focus on elevating the structures. In response to potential water overflow, residents have heightened the elevation of their homes by an average of 20 to 30 centimeters. In some cases, homeowners opt to extensively renovate the interior of their residences, not only raising the front elevation but also adjusting the internal elevation of the house.

IV. CONCLUSION

If an individual harbors a negative bias towards a certain location, they are likely to display indifference or actively steer clear of that particular place. Conversely, a person who holds a favorable bias towards the same location will exhibit a desire to reside in and engage with it. As a result, this inclination will elevate the significance of the place and instill a sense of place and obligation to preserve it. Thus, when someone resides in a particular location for an extended period and engages in social interactions and activities, the level place attachment is likely to intensify. In accordance with this comparison, place attachment represents a favorable bias towards a location perceived as distinctive.

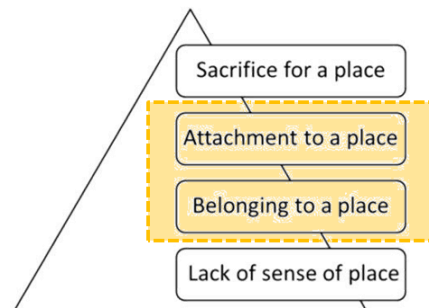


figure 14 level of place attachment identified at Keputran Kampung

During the process of identifying the level of place attachment, the kampung environment and the its people attachment level identified that they are already **attached to a place** (as seen in figure 14 above). [21] mentioned that a place being meaningful and important for each group because it has a unique identity and character. Keputran kampung encompasses various elements that contribute to place attachment, including physical aspects such as infrastructure enhancements and residential properties. Additionally, social, cultural, and individual factors play a crucial role, evident in the close interpersonal relationships among residents and the tendency to form groups based on shared ethnic backgrounds, particularly the Madurese ethnicity. Throughout its evolution over the past two decades, Keputran kampung has fostered a sense of memory and experience, reflecting a temporal dimension that has become ingrained in its identity. The continual integration of facilities and infrastructure tailored to the locality's character serves as indicators of enhanced interaction and satisfaction within the kampung setting.

In Keputran kampung, efforts to improve its physical environment are quite strong and residents' high satisfaction with the place has created a habitat selection concepts that is in accordance with behavior, cognition and emotion. The community was able to identify the purpose of the place, namely a kampung full of culture grew in the middle of the central business district in middle of Surabaya. This is also reflected in the **behavioral** aspects of the habitat selection where integration occurs, so that together the communities achieve their shared goals, such as, formation of informal interaction spaces, informal-formal trade within the village and the usage of road as a shared public space, consequently making the kampung a much livelier area. This progression embodies an **emotive** facet within the habitat selection, given that the kampung perseverance of its identity has transpired over two decades, spanning various generational shifts. From a **cognitive** perspective, residents of the kampung display adept spatial orientation. Delving into this aspect further, residents and Keputran kampung traverse the realm of **belonging to a place**, wherein the populace forms an emotional connection with the locale, acknowledges, and respects the symbolic representation present such as heritage building preservation amidst rapid development of the area. Hence, Keputran kampung cultivates a profound attachment to each of a place, symbolized in the habitat selection concept within its populace the residential culture embedded within its populace.

REFERENCES

- [1] M. C. Hidalgo, "Operationalization of place attachment: A consensus proposal," *Estud Psicol*, vol. 34, pp. 251–259, 2013, [Online]. Available: <https://api.semanticscholar.org/CorpusID:144617363>
- [2] H. Hashemnezhad, A. A. Heidari, and P. M. Hoseini, "'Sense of Place' and 'Place Attachment,'" *International Journal of Architecture and Urban Development*, vol. 3, pp. 5–12, 2013, [Online]. Available: <https://api.semanticscholar.org/CorpusID:147033455>

- [3] G. Inalhan, E. Yang, and C. Weber, "Place Attachment Theory," *A Handbook of Theories on Designing Alignment between People and the Office Environment*, 2021, [Online]. Available: <https://api.semanticscholar.org/CorpusID:210557736>
- [4] I. N. S. Wijaya, W. D. Purnamasari, and D. T. Sitaresmi, "Defining place attachment in community base development program for urban settlement – a theoretical review," *IOP Conf Ser Earth Environ Sci*, vol. 202, 2018, [Online]. Available: <https://api.semanticscholar.org/CorpusID:158314509>
- [5] R. Damayanti, F. Kossak, and E. A. Nurdiah, "Spatial reading of kampungs by using Gordon Cullen's theory: A contemporary perspective," in *IOP Conference Series: Earth and Environmental Science*, IOP Publishing, 2020, p. 012013.
- [6] N. S. Putri and H. Herlily, "Communal spatial adaptation in respond to urban Kampung vulnerability, study case: Public toilet of Kampung Muka, North Jakarta," in *AIP Conference Proceedings*, AIP Publishing, 2020.
- [7] I. I. Damanik, "Resilience Principle Aspects of Urban Kampung Ledok Timoho Yogyakarta.," in *IOP Conference Series: Earth and Environmental Science*, IOP Publishing, 2022, p. 012020.
- [8] A. B. Tribhuwaneswari, A. Ramadhani, and R. Darmadi, "Pengaruh Faktor Place Attachment Pada Proses Adaptasi Habitat Di Permukiman Petemon, Surabaya," *Jurnal Teknik WAKTU*, vol. 17, no. 01, pp. 56–71, 2019.
- [9] A. Ramadhani and A. B. Tribhuwaneswari, "Push And Pull Factor dalam Proses Habitat Selection Akibat Keberadaan Kegiatan Pendidikan Tinggi di Kawasan Perumahan Siwalankerto, Kota Surabaya, Jawa Timur (Habitat Selection Process Due to Existence of Higher Education Activities Siwalankerto Housing Area, Surabaya City, East Java)," *Seminar Nasional Kota Berkelanjutan*, pp. 141–159, May 2018, doi: 10.25105/psnkb.v1i1.2897.
- [10] C. Sonaesti, E. Purwanto, and W. W. Wijayanti, "Place Attachment Kampung Kota Semarang Studi Kasus Kampung Batik Semarang Timur," *ARSITEKTURA*, 2022, [Online]. Available: <https://api.semanticscholar.org/CorpusID:253828806>
- [11] R. Damayanti and F. Kossak, "Examining spatial identity of kampungs through young adults' perception in Surabaya – Indonesia," *Journal of Architecture and Urbanism*, vol. 40, pp. 18–28, 2016, [Online]. Available: <https://api.semanticscholar.org/CorpusID:54660429>
- [12] I. Altman and S. M. Low, *Place attachment*, vol. 12. Springer Science & Business Media, 2012.
- [13] H. Hashemnezhad, A. A. Heidari, and P. Mohammad Hoseini, "Sense of place" and "place attachment," *International Journal of Architecture and Urban Development*, vol. 3, no. 1, pp. 5–12, 2013.
- [14] B. S. Jorgensen and R. C. Stedman, "A comparative analysis of predictors of sense of place dimensions: Attachment to, dependence on, and identification with lakeshore properties," *J Environ Manage*, vol. 79, no. 3, pp. 316–327, 2006.
- [15] J. S. Smith and R. Aranha, "COGNITIVE MAPPING AS A METHOD TO ASSESS PEOPLES' ATTACHMENT TO PLACE," *Geogr Rev*, vol. 112, no. 1, pp. 6–26, Jan. 2022, doi: 10.1080/00167428.2020.1774880.
- [16] R. Newell and R. Canessa, "From sense of place to visualization of place: examining people-place relationships for insight on developing geovisualizations," *Heliyon*, vol. 4, no. 2, 2018.
- [17] A. P. Marcus, "Using 'Autogeography,' sense of place and place-based approaches in the pedagogy of geographic thought," *Journal of Geography in Higher Education*, vol. 47, no. 1, pp. 71–84, 2023.
- [18] B. S. Jorgensen and R. C. Stedman, "Measuring the spatial component of sense of place: A methodology for research on the spatial dynamics of psychological experiences of places," *Environ Plann B Plann Des*, vol. 38, no. 5, pp. 795–813, 2011.
- [19] D. Amedeo, R. G. Golledge, and R. J. Stimson, *Person-environment-behavior research: Investigating activities and experiences in spaces and environments*. Guilford Press, 2008.
- [20] I. Altman and S. M. Low, *Place attachment*, vol. 12. Springer Science & Business Media, 2012.
- [21] S. Shamai and Z. Ilatov, "Measuring sense of place: Methodological aspects," *Tijdschrift voor economische en sociale geografie*, vol. 96, no. 5, pp. 467–476, 2005.