

The Dynamics and Vulnerability Degrees of Kampung Kemlayan's Place Identity in Surakarta

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ABSTRACT

This study examines the development and vulnerability of the place identity of Kampung Kemlayan in Surakarta, a settlement of royal artist servants that holds significant historical, socio-cultural, and symbolic values. The research aims to analyze the dynamics of identity-forming elements over the past two decades (2002–2025) and to assess their vulnerability to physical, social, and economic changes. A qualitative descriptive approach was employed, combining field observations, interviews, FGD, and questionnaires with secondary data drawn from historical maps, satellite imagery, and official documents. The findings reveal that the physical identity of the area has deteriorated due to the conversion of historic residences into shops, warehouses, or boarding houses, compounded by weak preservation regulations. The socio-cultural identity has declined as a result of regeneration of royal artist servants, social fragmentation, and decreasing youth participation. Collective memory and symbolic meaning have become increasingly fragmented under the pressures of gentrification and modernization, despite revitalization efforts through art studios and the designation of the area as a tourism village. The vulnerability assessment indicates high exposure and sensitivity, while the community's adaptive capacity remains low to moderate. The study concludes that the identity of Kampung Kemlayan is highly vulnerable to the loss of historical and cultural integrity within the next 10–20 years unless policy interventions and stronger community participation are implemented. The implications highlight the urgency of designating historic residences as cultural heritage, revitalizing artistic traditions through youth engagement, and promoting participatory preservation strategies to ensure the sustainability of the area's identity.

Keywords: place identity, Kampung Kemlayan, Surakarta, vulnerability, urban heritage preservation, cultural sustainability.

ABSTRAK

Penelitian ini membahas perkembangan dan tingkat kerentanan identitas Kampung Kemlayan di Kota Surakarta sebagai kampung abdi dalem seniman yang memiliki nilai sejarah, sosial-budaya, dan simbolik penting. Tujuan penelitian adalah untuk mengidentifikasi dinamika unsur pembentuk identitas dalam dua dekade terakhir (2002–2025) serta menilai tingkat kerentanannya terhadap perubahan fisik, sosial, dan ekonomi. Metode penelitian menggunakan pendekatan deskriptif kualitatif melalui observasi lapangan, wawancara, FGD, dan kuesioner yang dipadukan dengan data sekunder berupa peta historis, citra satelit, serta dokumen resmi. Hasil penelitian menunjukkan bahwa identitas fisik mengalami degradasi akibat alih fungsi bangunan bersejarah menjadi ruko, gudang, atau kos, serta lemahnya regulasi pelestarian. Identitas sosial-budaya menurun karena melemahnya regenerasi seni, fragmentasi sosial, dan menurunnya partisipasi generasi muda. Ingatan kolektif dan makna simbolik kawasan semakin terfragmentasi akibat gentrifikasi dan modernisasi, meskipun terdapat upaya revitalisasi melalui sanggar seni dan penetapan kampung wisata. Identifikasi tingkat kerentanan menunjukkan paparan dan kepekaan kawasan tergolong tinggi, sementara kapasitas adaptif masyarakat masih rendah hingga sedang. Kesimpulan utama menyatakan bahwa identitas Kampung Kemlayan sangat rentan terhadap hilangnya integritas sejarah dan budaya dalam 10–20 tahun mendatang apabila tidak ada intervensi kebijakan pelestarian dan penguatan partisipasi warga. Implikasi penelitian ini menegaskan pentingnya penetapan bangunan cagar budaya, revitalisasi tradisi seni berbasis generasi muda, serta strategi pelestarian partisipatif agar identitas kawasan tetap lestari dan berkelanjutan.

Kata kunci: identitas tempat, Kampung Kemlayan, Surakarta, tingkat kerentanan, pelestarian warisan perkotaan, keberlanjutan budaya

1. INTRODUCTION

The City of Surakarta was officially established on 17 February 1745 as the administrative center of the Islamic Mataram Kingdom. Following the Giyanti Treaty of 1755, the Mataram territory was divided into the Surakarta Sunanate and the Yogyakarta Sultanate. Along with the growth of the Sunanate, several settlements with distinctive toponyms emerged, one of which was Kemlayan. This settlement became known during the reign of Pakubuwana IV around 1820 as the residence of royal artist servants (*abdi dalem seniman*) particularly gamelan musicians and dancers which had not been recorded in the Kartasura or early Mataram periods (Priyatmoko, 2018).

Kemlayan developed rapidly in the early twentieth century due to the growing housing needs of artists, especially during the reign of Pakubuwana X (1893–1939), who elevated karawitan to the status of the royal principal art form. From the 1930s until today, the neighborhood has been recognized as a center for artists and as the birthplace of prominent gamelan and dance masters. Its character is reinforced by the presence of *ndalem*, or traditional residences of royal artist servants, which are rarely found outside the Baluwarti palace compound (Priyatmoko, 2019). Physically, Kampung Kemlayan exhibits a distinctive and attractive character as a historic settlement. Behind its tall walls stand *ndalem* residences and other structures that retain a strong sense of authenticity, including *Ndalem* Roesradi, constructed in the 1800s, and *Ndalem* Prodjo Loekitan, established in 1838 (Dianingrum & Handayani, 2024). Between 1911 and the 1960s, the ethnic Chinese population was initially restricted to the outer layer of the settlement but was later permitted to reside further within (Hartawan, 2008). Significant physical changes have occurred along the edges of the neighborhood bordering the main roads, where houses have been converted into shops, offices, and restaurants (Aliyah, 2002).

In Surakarta's Spatial Plan (RTRW) 2021–2041, Kemlayan is designated as a trade and service area, and since 2023 it has been officially recognized as a tourism village through the Mayor's Decree No. 556/117 of 2023. The neighborhood's identity is shaped by tangible elements, such as ancestral tombs, traditional wells, *ndalem* residences, merchants' houses, and former batik factories, as well as intangible elements, notably dance and gamelan, which are currently undergoing revitalization. However, this identity is increasingly vulnerable due to the deterioration of historic residences, alley widening, and the conversion of houses to other functions. This vulnerability is evident in the damage sustained by *abdi dalem* residences (*Ndalem* Mlaya Widodo and *Ndalem* Driyo Martan), the planned sale of a historic house

(Ndalem Abdul Fatah), and physical transformations such as alley expansion and house conversion into warehouses.

Several studies have examined different aspects of Kemlayan: Aliyah (2002) identified physical and social transformations from the neighborhood's formation until 2000; Hartawan (2008) analyzed the typology of court artists' houses; Priyatmoko (2018) investigated historical and social developments; Kussudyarsana *et al.* (2023) discussed tourism branding and digitalization of attractions; Astuti *et al.* (2023) identified settlement characteristics to support thematic village programs; while Dianingrum & Handayani (2024) explored residents' emotional attachment to Kemlayan. Nonetheless, these studies have not comprehensively analyzed the evolution of identity over the past two decades nor assessed its vulnerability.

Unlike previous research, this study focuses on the period 2002–2025 through a vulnerability analysis of place identity. The objectives are: (1) to identify the dynamics of identity forming elements in Kemlayan, and (2) to assess the level of vulnerability of this identity to physical, social, and economic changes. The novelty of this study lies in its integration of identity evolution analysis with vulnerability assessment, based on the indicators of exposure, sensitivity, and adaptive capacity. Consequently, the findings not only strengthen academic understanding but also provide practical insights to enhance awareness of heritage preservation and contribute academically to the development of comprehensive and adaptive urban planning without losing local identity.

Recent international scholarship underscores a growing concern over urban heritage vulnerability across diverse regions. In Southeast Asia, D'Ayala *et al.* (2020) conducted flood vulnerability and risk assessments in Kuala Lumpur's historic timber-built district, demonstrating how climatic hazards disproportionately threaten vernacular urban heritage assets. In Europe, Ripp, Egusquiza, & Lückerrath (2024) have advanced operational definitions of urban heritage resilience, integrating resilience theory with urban planning and heritage management frameworks to enhance adaptability in heritage contexts. Moreover, Cacciotti, *et al.* (2024) proposed a validated methodology to assess vulnerability of built and natural heritage assets to hydrometeorological hazards across multiple Central European case studies, emphasizing methodological rigor and stakeholder engagement. In Latin America, UNESCO's Heritage Emergency Fund initiative has facilitated a multidimensional, participatory risk management self-assessment across ten historic Peruvian cities culminating in actionable DRM (Disaster Risk Management) plans for urban heritage resilience. A critical review of built heritage frameworks in Latin American urban contexts highlights dissonances between

planning instruments and heritage usage practices a gap persisting despite scholarly attention (Bassols i Gardella, Hiriart Pardo, Galán-Otero, & Lacarrieu, 2024).

Despite these significant contributions, most studies predominantly address disaster-related physical threats, climate adaptation, resilience, and hazard risk often emphasizing infrastructure and spatial planning interventions. Less attention has been paid to the vulnerability of place identity specifically, how socio-cultural, symbolic, and historical dimensions of identity evolve under complex socio-economic and governance conditions. In this global context, the present study addresses this gap by focusing on identity evolution vulnerability within a heritage-rich urban settlement Kampung Kemlayan thus contributing to filling a critical lacuna in international research: the combined assessment of identity transformation and vulnerability across multiple dimensions.

a. Place Identity

Place plays a crucial role in shaping individual identity and subjectivity by fostering emotional attachment, perception, and relationships with the physical environment (Strandberg & Styven, 2024). Place identity is understood as a socio-cultural construction that represents the meaning, image, and value of space for individuals and communities (Relph, 1976; Sepe, 2009). It is formed through several key elements. The physical dimension includes architectural forms, spatial layouts, landscapes, and distinctive visual characteristics (Lynch, 1960). The socio-cultural dimension encompasses community activities, interactions, traditions, customs, local symbols, and collective narratives (Altman & Low, 1992). The historical dimension involves historical trajectories, significant events, and collective memory that reinforce attachment (Hay, 1998). The symbolic and perceptual dimension relates to perception, imagination, and representation of place in both thought and media (Relph, 1976). Pusat Studi Urban Design (2021) explains that place identity comprises three main components: first, physical features manifested in architecture, nature, and local materials; second, ongoing social, economic, and cultural activities in the space; and third, symbolic meanings and cultural values that represent history and the qualities of public space, encouraging a sense of belonging. Thus, place identity emerges from the interplay of physical, socio-cultural, historical, and symbolic elements that shape its distinct character and differentiate it from other spaces.

Place identity is produced through social and spatial processes involving who interacts with a space, what they experience, how they interpret it, and the cultural values that accompany it (Dianingrum & Handayani, 2024). This process unfolds in stages. First, identity emerges from repeated interactions of individuals in everyday activities within the physical environment (Proshansky, Fabian, & Kaminoff, 1983). This process unfolds in stages. First, identity emerges

from repeated interactions of individuals in everyday activities within the physical environment (Relph, 1976). Third, individuals construct cognitive schemas about how they perceive the place, position themselves within it, and express their identity through continuity, uniqueness, and self-efficacy (Twigger-Ross & Uzzell, 1996). Fourth, social interaction and local cultural values enrich the bond between individuals and space through shared collective meaning (Lalli, 1992). Therefore, place identity is shaped by who is involved, what is experienced, where events occur, when interactions take place, why places are given special meaning, and how cultural values and experiences attach to space, thereby fostering emotional, symbolic, and existential attachment.

b. Vulnerability of Place Identity

Urban heritage vulnerability, according to Bandarin & van Oers (2012), involves the risk of losing the continuity of cultural identity and local values as reflected in spatial structures, architecture, social practices, and historic landscapes. Feilden & Jokilehto (1998) and UNESCO–ICCROM classify vulnerability levels into high, medium, and low, determined by three main components: exposure, sensitivity, and adaptive capacity. Fatoric & Seekamp (2017) emphasize that vulnerability measurement requires both quantitative and qualitative indicators, including the physical condition of heritage assets, their socio-cultural significance for local communities, the presence of protective policies, community participation in preservation, and external pressures such as development, tourism, and land-use changes. Meanwhile, Lewicka (2011) highlights that the vulnerability of place identity can be observed in declining social attachment to space, erosion of cultural and symbolic values due to weakening traditions and lifestyle shifts, and disrupted intergenerational transmission of knowledge, which results in the loss of collective memory and historical meaning. Thus, the vulnerability of urban heritage is determined by physical, socio-cultural, policy-related, participatory, and external factors that collectively shape the sustainability of identity, symbolic value, and collective community memory.

2. METHOD

The research employed a qualitative descriptive approach to identify the development of identity and the level of vulnerability in Kampung Kemlayan. The study focused on determining who is involved (residents of royal artist servant's houses, entrepreneurs, local inhabitants, and policymakers), what has changed (spatial functions and the character of the area), when and where the changes occurred (over the past two decades in Kampung Kemlayan), why it is

important to investigate (due to its impact on the area's identity), and how the degree of vulnerability manifests.

The research site covered RW I and RW II of Kemlayan Subdistrict, Surakarta, which is bordered by Slamet Riyadi Street, Yos Sudarso Street, Dr. Rajiman Street, and Gatot Subroto Street (see Figure 1). The objects of study included elements shaping the kampung's identity, such as *ndalem* of royal artist servants, batik merchants' houses, traditional wells, graves, as well as artistic practices and local traditions. The study was conducted from 2024 to 2025, with an analytical focus on the development of identity between 20202 and 2025.

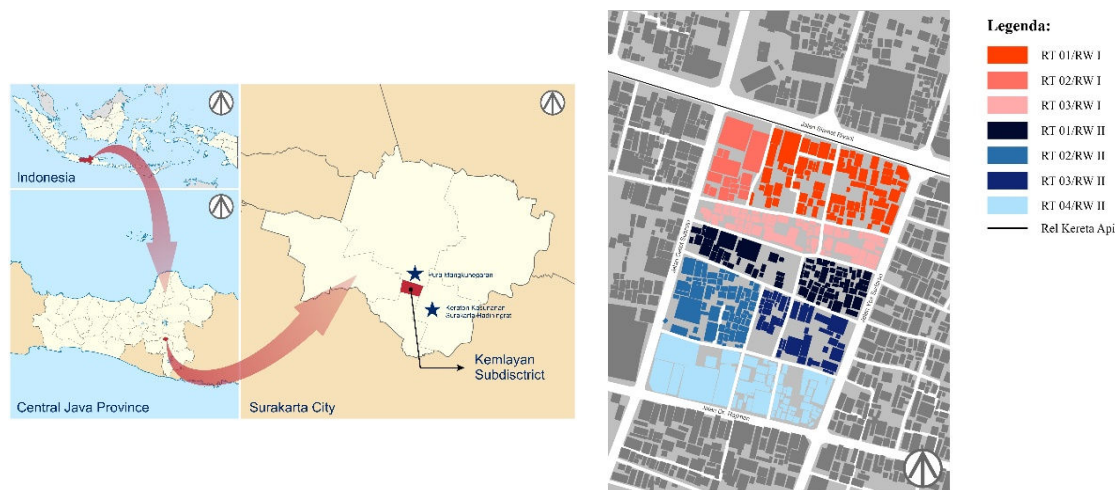


Figure 1. Location of Kemlayan Subdistrict (left), location of Kampung Kemlayan (right).
 Source: TUBS, *Mandamaruta*, processed by the author 2024; Department of Public Works and Spatial Planning (PUPR) of Surakarta City, processed by the author 2025

Primary data were collected through field observations, in-depth interviews, Focus Group Discussion (FGD), and questionnaires employing a Likert scale (0–10). The Likert scale was used to score the degree of vulnerability and categorized as follows: very low (0–2); low (3–4); neutral (5); high (6–7); and very high (8–10). Secondary data were obtained from literature studies, official documents, historical maps, and satellite imagery.

Sampling for the FGD participants, questionnaire respondents, and in-depth interviewees was conducted using purposive sampling, by selecting individuals with historical and cultural ties to Kampung Kemlayan. These included residents of Kampung Kemlayan, first-tier business owners, owners and heirs of *ndalem* houses, descendants of royal artist servants (*abdi dalem seniman*), and local community administrators, with a total of 34 participants.

The analytical process was implemented in two sequential stages. The first stage involved a comparative examination of the evolution of identity elements across four temporal

benchmarks, namely 2002, 2008, 2013, and 2025. The second stage entailed an assessment of identity vulnerability, which was measured through the established indicators of exposure, sensitivity, and adaptive capacity. In this regard, the analysis of qualitative data was conducted through narrative interpretation, while the results of the questionnaires were systematically processed using Likert-scale tabulation to categorize the degree of vulnerability into three levels: low, medium, and high.

The evaluation of identity development employed four principal indicators, there are physical, socio-cultural, historical, and symbolic elements, each operationalized through a set of specific parameters (see Table 1). In parallel, the assessment of identity vulnerability was also structured around indicators with corresponding parameters that served as the basis for measurement (see Table 2). Both stages of analysis were underpinned by the integration of qualitative data and quantitative survey results, with the latter processed through Likert-scale tabulation to ensure the consistency and reliability of vulnerability classification.

Table 1. Indicators and parameters of place identity elements' development.

Indicator	Parameter
Physical elements	Architecture within the settlement area.
	Spatial organization of the settlement.
	Landscape characteristics of the settlement.
	Infrastructure within the settlement.
Socio-cultural elements	Daily activities of Kampung Kemlayan residents.
	Local traditions practiced by the community.
	Patterns of social interaction among residents.
Historical dimension	Collective memory of residents regarding Kampung Kemlayan.
Symbolic and psychological	Historical meanings attributed to Kampung Kemlayan.
	Sense of belonging to Kampung Kemlayan.

Source: *Ashworth, 1994; Hague & Jenkins, 2004; Lynch, 1960; Tuan, 1977*

Table 2. Indicators and parameters of place identity's vulnerability.

Indicator	Parameter
Level of exposure	Inappropriate physical development.
	Natural disasters.
	Significant socio-economic transformation.
Level of sensitivity	Historical value.
	Symbolic value.
	Local culture and traditions.
Adaptive capacity	Community participation.
	Heritage preservation policy.
	Education related to preservation.
	Area management mechanisms.

Source: *Adger, 2006; Cutter et al., 2003; Smit & Wandel, 2006*

This study positions place identity as a physical, socio-cultural, historical, and symbolic construct that is vulnerable to external pressures. Accordingly, the findings are expected to

provide a comprehensive understanding of the dynamics of change as well as the risks to the sustainability of Kampung Kemlayan's identity.

3. RESULTS AND DISCUSSIONS

3.1 Development of Identity-Forming Elements of Kampung Kemlayan

The identity of Kampung Kemlayan is shaped by the integration of physical, socio-cultural, historical, and symbolic elements. Field observations and a Focus Group Discussion (FGD) held on May 18, 2025, revealed that the physical elements are reflected in the existence of historic buildings, including the residences of royal artist servants (*abdi dalem seniman*), houses and batik factories of batik merchants, old wells (Sumur Kamulyan, Sumur Bandung, and Sumur Ngampok), the tomb of Mbah Berak, and the network of narrow alleys characteristic of the settlement.

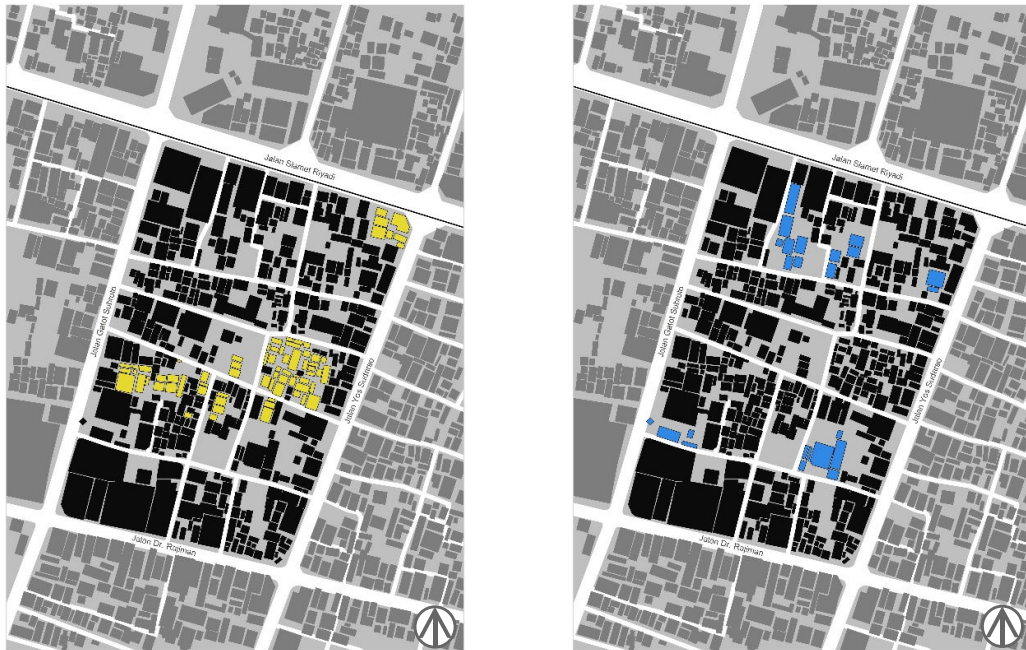


Figure 2. Residences of royal artists servants (left), houses of batik merchants (right).
Source: *Analysis result, 2025*

The residences of royal artist servants are located in the central area along Empu Sedah Street, while the houses and batik factories are dispersed in the northern and southern parts of the area (see Figure 2).

From a socio-cultural perspective, Kampung Kemlayan serves as a center of *karawitan* (traditional Javanese gamelan music), traditional dance, and cultural communities closely linked to the Surakarta Palace (Keraton Kasunanan Surakarta). This role is reinforced by

marriage traditions among artists intended to preserve artistic continuity. Such traditions have given rise to renowned masters such as Mlaya Widada, S. Ngaliman, and Sardono W. Kusuma, while also fostering the development of Surakarta-style mask dance and *karawitan* groups that frequently perform at royal ceremonies (see Figure 3). From historical and symbolic perspectives, the settlement represents the community of royal artists who passed down cultural values through the legacy of prominent figures.



Figure 3. Darmosoeka Kemlayan art group performing mask dance in 1924.

Source: *Satu Kampung Tiga Maestro*, 2020

3.1.1 Physical Development of the Settlement

The physical development of Kampung Kemlayan was analyzed through architecture, spatial patterns, landscape, and infrastructure during the periods 2002, 2008, 2013, and 2025 (see Figure 4). Since 2002, historic houses such as *ndalem* (residences of royal artist servants), batik merchant houses, and complementary buildings have undergone transformations due to transfer of ownership to outsiders, renovations disregarding historical values, and economic pressures. The FGD revealed that the area's physical identity has gradually faded as many houses were converted into shop-houses, warehouses, or left abandoned, for example *ndalem* of Mlaya Widodo, Driyo Martan, Abdul Fattah, and Concubine of Mangkunegara VII. These changes resulted in the loss of original façades, diminished consistency of traditional architecture, and weakened legibility of visual identity.



Figure 4. Physical changes in residential buildings in Kampung Kemlayan, 2002–2025.

Source: *Analysis result with Google Earth, 2025*

The traditional spatial structure remains visible in narrow alleys and Empu Sedah Street, yet the first layer of the main street has been increasingly commercialized, transforming houses into businesses, boarding houses, or shops. Between 2002 and 2025, the spatial pattern evolved into a mixed-use structure, with commercial activities dominating along the main street, while traditional residences concentrated in the village core.

The landscape and infrastructure have undergone beautification, including the addition of guiding blocks, royal-style street lamps, and canopies with local motifs. However, some traditional elements lost their symbolic meaning (see Figure 5). Overall, physical transformation has been influenced by changes in ownership, economic pressures, gentrification, and weak regulation, threatening the survival of physical identity in the absence of policy interventions or designation as cultural heritage buildings (*Bangunan Cagar Budaya*).



Figure 5. Addition of canopy and vegetation (red box) on the pedestrian lane of Gatot Subroto Street.
Source: *Analysis result with Google Street View, 2025*

3.1.2 Socio-Cultural Development

The socio-cultural aspects of Kampung Kemlayan have undergone significant changes between 2002 and 2025. In 2002, social life was still supported by descendants of *ndalem* residents and royal artist servants, with regular cultural activities such as *karawitan*, dance, night patrols, and traditional games. Traditions such as the use of sacred wells and pilgrimages remained strong, while public spaces facilitated intensive social interactions.

Since 2008, ownership transfers and economic pressures have repurposed *ndalem* into shops, warehouses, or boarding houses. Cultural activities declined, youth regeneration weakened, and social interactions became fragmented. By 2013, the repurposing process intensified, open spaces diminished, and social cohesion weakened.

In 2025, revitalization efforts emerged through dance and *karawitan* studios and the reuse of former *ndalem* as art centers (see Figure 6), although social fragmentation persisted in the first-layer areas dominated by commerce. The sense of belonging remains strong among original descendants but weak among younger generations and newcomers. Socio-cultural identity remains vulnerable due to economic pressures, weak regulation, and limited youth participation.



Figure 6. *Karawitan* rehearsal by Sri Laras Dharmosoeka at *ndalem ageng* Sasana Jumantera.
Source: *Author's photograph, 2025*

3.1.3 Historical Development

The collective memory of Kampung Kemlayan residents was initially strong, rooted in the history of royal artist servants, historic houses, and sacred sites such as Sumur Kamulyan, Sumur Bandung, and the Tomb of Mbah Berak. Practices of *karawitan*, dance, and inter-house interactions preserved this historical memory.

Since 2008, ownership transfers and economic pressures have begun disrupting historical continuity. Several *ndalem* changed functions or became endangered, especially along the first layer of Gatot Subroto Street. The 2008–2013 period marked intensified gentrification: *Ndalem* Mlaya Widodo was abandoned, *Ndalem* Driyo Martan demolished, part of *Ndalem* Abdul Fattah turned into a shop-house, and the former *ndalem* Selir Mangkunegara VII redeveloped into Mas Don Art.

By 2025, the area experienced an ambivalent phase: symbolic revitalization through arts and beautification was visible, yet repurposing and commercial activities threatened the continuity of collective memory. Without policy intervention, heritage designation, and strengthened community capacity, historical identity risks being lost within one to two decades.

3.1.4 Symbolic Development and Meaning of the Settlement

In 2002, historical meaning remained strong among original residents, with settlement symbols such as *ndalem*, sacred wells, and tombs well maintained, alongside regular traditional arts activities. By 2008, the functional transformation of *ndalem* began weakening historical perception, especially among youth and newcomers.

By 2013, physical degradation and building conversions became more pronounced, further diminishing symbolic meaning. In 2025, a paradox emerged: symbolic revitalization appeared through Mas Don Art, tourism programs, and preservation of some sacred symbols, yet gentrification and new ownership fragmented historical meaning. The sense of belonging remains high among original heirs but low among younger generations and newcomers.

Overall, symbolic meaning has declined due to internal factors (modern lifestyle, slow cultural regeneration) and external factors (economic pressures, gentrification, weak regulation). Preservation efforts remain partial and require an integrated strategy involving all stakeholders.

Table 3. Summary of the development of identity-forming elements in Kampung Kemlayan, 2002–2025.

Period	Physical	Socio-Cultural	Historical	Symbolic
2002	<i>Ndalem</i> functioned as residences.	Regular arts activities, strong traditions.	Strong collective memory.	Symbolic meaning preserved.

Period	Physical	Socio-Cultural	Historical	Symbolic
2008	Initial functional conversion (houses into shops/boarding houses).	Decline in cultural activities.	Ownership transfers began.	Historical perception weakened.
2013	Intensified gentrification, abandoned <i>ndalem</i> .	Decline in social interactions.	Several <i>ndalem</i> lost/demolished.	Decline in symbolic meaning.
2025	Dominant commercialization, limited beautification.	Revitalization of arts, but high social fragmentation.	Symbolic revitalization offset by repurposing.	Fragmented symbolic meaning.

Source: *Analysis result, 2025*

The identification of developments in the identity-forming elements of Kampung Kemlayan between 2002 and 2025 complements and updates the earlier studies by Aliyah (2002) and Hartawan (2008), which were limited to the initial conditions, by demonstrating the dynamics of place identity vulnerability up to 2025.

3.2 Levels of Place Identity Vulnerability of Kampung Kemlayan

The vulnerability of Kampung Kemlayan's place identity was assessed through three main indicators: exposure, sensitivity, and adaptive capacity, based on FGD and Likert-scale questionnaires (0–10).

3.2.1 Exposure Level

The exposure of Kampung Kemlayan's identity is considered high due to three factors: inappropriate physical development, natural disasters, and socio-economic changes. Between 2002 and 2025, at least 25 historic houses were repurposed into shop-houses, warehouses, hotels, or boarding houses, disrupting visual continuity and the traditional skyline. The absence of zoning regulations and cultural heritage designation exacerbated the risk of losing physical identity. Environmental threats such as flooding accelerated the deterioration of old wooden and brick buildings. Socio-economic changes, including external investors' dominance and gentrification, transformed the settlement into a commercial zone, reduced residents' cultural participation, and weakened the transmission of traditions. Without structured preservation measures, the historical and cultural integrity of the area risks being lost within the next 10–20 years.

3.2.2 Sensitivity Level

The sensitivity of Kampung Kemlayan's identity is very high, as every physical, symbolic, or social change directly affects its cultural heritage. The degradation of historic

buildings, loss of symbolic meanings of old wells, tombs, and houses of master artists, along with declining youth participation, threaten the continuity of traditions such as *karawitan* and Surakarta dance. Modernization and digital lifestyles further accelerate the erosion of symbolic values and cultural practices. Without preservation regulations and youth involvement, the settlement's historical identity risks vanishing, leaving only a name without living meaning.

3.2.3 Adaptive Capacity

The adaptive capacity of the settlement remains low to moderate. Community participation is sporadic, especially among the youth, while newcomers prioritize economic activities. Formal preservation policies are absent, historical education is limited to incidental events, and community management remains fragmented. These weaknesses increase the risk of identity degradation caused by gentrification, functional transformation of buildings, and shifts in cultural values within the next 10–20 years.

3.2.4 Assessment of Place Identity Vulnerability

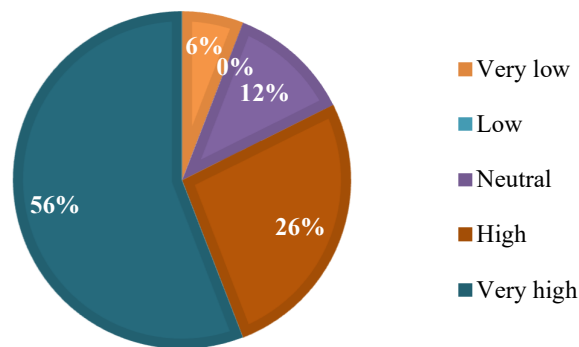


Figure 6. Pie chart of the result of place identity vulnerability of Kampung Kemlayan.
 Source: *Analysis result, 2025*

The results of the vulnerability assessment using the Likert scale, as shown in Figure 6, indicate that 56% of participants rated the place identity elements as very highly vulnerable, 26% as highly vulnerable, 12% as neutral, and 6% as very low. Very high vulnerability is mainly caused by inappropriate physical development, flood risks, and socio-economic transformation. High sensitivity results from the direct impacts of structural, symbolic, and cultural changes. Adaptive capacity remains limited; therefore, without policy intervention and strengthened youth engagement, the historical integrity and unique character of Kampung Kemlayan are at risk of disappearing.

4. CONCLUSION

This study demonstrates that the identity of Kampung Kemlayan has experienced substantial degradation across its physical, socio-cultural, historical, and symbolic dimensions between 2002 and 2025, driven by building conversion, gentrification, and weak regulatory frameworks. The assessment further reveals that the level of identity vulnerability is categorized as very high, due to significant exposure and sensitivity, while the community's adaptive capacity remains low to moderate. Beyond its empirical findings, the study makes a theoretical contribution by integrating identity evolution analysis with vulnerability assessment, thereby offering a comprehensive framework for understanding how historical and cultural identities of urban heritage sites are simultaneously shaped by long-term transformation processes and contemporary risk dynamics.

The practical implications highlight the urgency of heritage policies through the designation of *ndalem* houses as cultural heritage buildings, the revitalization of performing arts with the involvement of younger generations, and the development of participatory-based preservation strategies. Academically, this research contributes by integrating the analysis of place identity development with its vulnerability assessment, an approach that has not been explored in previous studies.

Without immediate policy intervention and strengthened community participation, Kampung Kemlayan's identity as the settlement of royal artist servants (*abdi dalem seniman*) is at risk of disappearing within the next 10–20 years. Therefore, this study recommends several actions: (1) recognizing place identity as a strategic asset encompassing physical, social, symbolic, and historical aspects; (2) designating selected *abdi dalem* houses as cultural heritage buildings; (3) actively involving local communities through focus group discussions (FGDs) in revitalization programs; (4) directing cultural tourism development toward tradition-based values rather than mere commercial performances; and (5) revitalizing *karawitan* and dance traditions through art education for younger generations.

Future research is recommended to conduct a more in-depth quantitative study on the economic impacts of cultural tourism on the preservation of place identity. Such an investigation is essential to assess the extent to which tourism activities contribute to cultural heritage sustainability while also identifying potential risks that may undermine the authenticity of the site. Furthermore, subsequent studies should undertake a comparative analysis between Kampung Kemlayan and other cultural villages in Indonesia. This comparison is expected to strengthen the development of a preservation model that is adaptive, contextual, and sustainable for Kampung Kemlayan.

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