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Mapping Cultural and Historical Areas: Exploration of Laweyan Surakarta Indonesia

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Abstract

This paper is about mapping the cultural and historical potential in the Laweyan area of Surakarta City, Indonesia, which is a cultural heritage area. Laweyan is the center for batik entrepreneurs in Surakarta. Laweyan was declared a Regional Cultural Heritage by Minister of Culture and Tourism Regulation No. PM.03/PW.007/MKP/2010, as a Provincial Cultural Heritage". The research problem is how to map the natural, cultural, social and economic, historical and religious potential and conditions in the Laweyan area so that it can become the basis for government considerations when making policy decisions in developing tourism in the area. This research method uses qualitative naturalistic methods with grounded research methods. The aim of this research is to map Laweyan as a cultural heritage area. The results of this research are in the form of mapping Laweyan's potential in the form of natural, historical, cultural, social and economic conditionse.

Keywords: Cultural Area, History, Laweyan, Mapping

Introduction

Laweyan is a very specific area in Surakarta. As the center for batik entrepreneurs in Surakarta, Laweyan has a huge influence on the economy of the city of Surakarta. The batik products are distributed throughout the cities around Surakarta. Until now, Laweyan batik is still in demand by the palace and is also sold in public places.

Apart from being physically an enclave like old cities in Europe, the Laweyan residential area is bordered by high walls and surrounded by small roads (alleys). Laweyan has three layers of roads, namely: big roads, neighborhood roads, and small alleys. Each area of the house is surrounded by massive brick walls about 6.5 meters high, equipped with a large main door (regol) (Widayati & Surya, 2021).

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Figure 1. Small roads (alleys) are a specific characteristic of Laweyan as an Old Village

(Source: Personal Data, 2023)

The resilience of a region to developments are related to sustainable growth. Laweyan was declared a Regional Cultural Heritage by Minister of Culture and Tourism Regulation No. PM.03/PW.007/MKP/2010, (Peraturan Menteri Kebudayaan dan Pariwisata, 2010) as a Provincial Cultural Heritage" also the Decree of the Mayor of Surakarta Number 646/1-R/1/2013 concerning the Determination of Historic Buildings and Ancient Areas in Surakarta (Keputusan Walikota Surakarta, 2013) Laweyan, apart from being famous for its beautiful merchant houses surrounded by high fences, also has many historical sites surrounding it. The status of Laweyan land was fief land from the time of the Pajang kingdom to the Mataram kingdom. Apart from that, Laweyan is known as the beginning of the batik industry in Surakarta, which to this day is still well maintained by the descendants of past merchants and immigrants (Widayati & Surya, 2021). History records that with its status as a center for batik entrepreneurs, Laweyan became famous. The origin of the name Laweyan is thought to come from something related to the community's business, namely "lawe" which means fiber or thread related to the cloth used for batik. The batik industry developed rapidly in Laweyan after the technique of making stamped batik was discovered in the mid-19th century and became widespread starting in 1870. This was marked by the existence of large batik businesses, socio-economically stronger and more independent. It was during this era that Laweyan merchants began competing to build beautiful houses in the Indisch style. This is because Laweyan merchants traded a lot with Europeans and Asians, who brought their culture and influenced the style and materials in building their houses (Widayati & Surya, 2021).

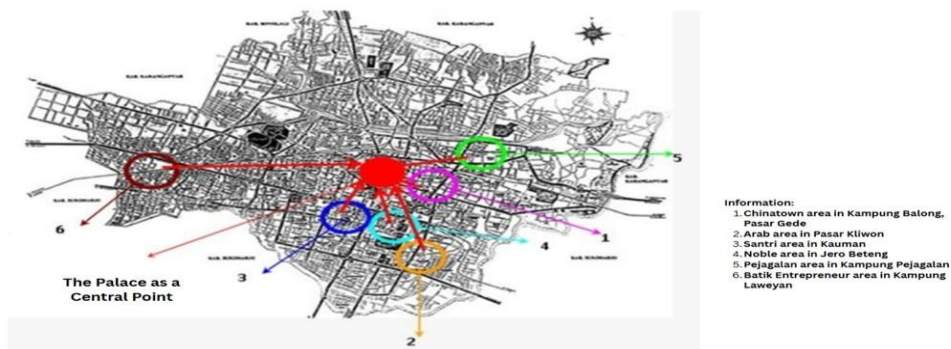


Figure 2. Position of Laweyan Area in relation to Surakarta City

Source: (Widayati, 2004)

Laweyan businessmen did not have a cultural position equal to that of the royal courtiers in the feudalistic Javanese society. They are equal to ordinary people, but what is different is that they have economic power and wealth that exceeds that of the nobles. The business space is in the same area as the house because the person who manages the batik business is the female employer (mbokmase) (Connell, 2009), while the head of the household is called masnganten (Widayati & Surya, 2021).

Mapping the cultural landscape of the Laweyan area is important, this is because the area is a cultural heritage. Apart from being a cultural heritage area, Laweyan was also designated as a Batik Village for batik and historical tourism purposes by the Surakarta City Government on September 25, 2004. Apart from that, Laweyan has cultural and aesthetic values including natural resources, culture and geographical position connected to history, actors and events (Pillai, 2020). The problem raised from this research is how to map the natural, cultural, social and economic, historical and religious potential and conditions in the Laweyan area, so that it can be a basis for consideration by the government when making policies in developing tourism in the area.



Figure 3. Tourism map in the Laweyan area

The aim of this research is to obtain comprehensive data on the historical, religious, social and economic aspects of the community, as well as architectural data in the form of mapping (Yang & Ham, 2020) the Laweyan area as a first step for the next step, namely digitizing the Laweyan cultural landscape. Sustainable growth related to digital transformation (Grishunin, et al., 2022) is a must. Likewise, Laweyan as a cultural heritage cannot avoid this digital transformation. Digitization is defined as the conversion of the physical format of material into an electronic format (Anike & C., 2017). Digitization challenges in implementing systems for digital communities due to differences in size, user needs, query functions, and information resolution of various communities (Ding & Huang, 2008). So far, the use of digital information for tourism in Laweyan has existed but has not been updated with the development of information technology, so a digitalization program is needed that is more in line with developments for graphical user interfaces (Alistair G. Sutcliffe, 2005), so GIS and WEB-GIS are needed for cultural heritage such as Laweyan (Rinaudo & Ardissonne, 2007; Ognjanovic, et al., 2019).

Methods

This research will use a qualitative-interpretative method, with a grounded theory research strategy (research that provides a strong basis for a theory) (Strauss & Graser, 1967) and (A Strauss, 1990) a natural approach in studying existing phenomena to be understood and interpreted (Denzin NK & Dariyatno, 2009). Data search was carried out using field observations, interviews with several informants who were actively or passively relevant to the research object. The results of the investigation in the form of data collected by "Investigation Focus" are compared with field observation data and documentation so that accurate findings are obtained. The data found in the form of historical data, walls that border residential areas as forming the character of the area, environmental characteristics, building values, in this case the houses of merchants, the houses of batik workers, and the houses of people who do not work as batik makers. Use of area names and their functions, relationships between areas, types of existing building styles. Meanwhile, observation, namely directed observation of the behavior of the Laweyan community, physical observation of objects and the environment at the location, the daily living conditions of the community and their relationship to the surrounding environment. Research in data collection involves carrying out documentation, namely collecting verbal data in the form of writing or recordings related to the research object, including data about the research location, geographical conditions, site planning, demographic conditions, physical data on buildings in Laweyan. After that, culture mapping was carried out using the Agile Development method. Agile Development Method is a group of software development methodologies that are based on the same principles or short-term system development that requires rapid adaptation from developers to changes (Hadjimitsis D, 2013).

Results and Discussion

Cultural Landscape: Tangible and intangible cultural heritage

Cultural heritage includes the diversity of a collection of tools/equipment which in the process of passing time is recognized as an introduction to a particular cultural tradition, this is said by Guerzoni in, (Hutter M, 1997). This is considered as reliable evidence of an acceptable identity and unites traces of past relics that are worthy of being preserved from acts of destruction, both by time and humans for the benefit of society in accordance with applicable rules and laws. Cultural capital specifically in the context of immovable heritage as capital value associated with a building, collection, monument, or place, which is additional to the value of land and buildings purely as physical entities or structures and which embodies society, evaluation of assets from a social perspective, historical or cultural dimensions by Throsby in (Hutter M, 1997). A city/region is a dynamic living environment. Meanwhile, conservation is linked to the entire range of human life according to Law no. 11 of 2010 (Republik Indonesia, UUN, 2010)

Conservation terminology is described as a process that seeks, maintains, maintains, repairs as far as possible buildings and areas that meet social, cultural, economic and psychological needs. The argument is that this renewal process (renewal/rejuvenation) little by little and on a small scale takes place continuously to renew itself constantly as an ongoing process of change and adjustment. Therefore, as a process, conservation is concerned with assessing the existing environment, determining what must be maintained, and determining the best use/benefits, including ensuring that a building/area meets the requirements of the current and future needs of its users (Hutter M, 1997).

Cultural landscapes can be interpreted in various perspectives. A cultural landscape is a unified

geographical area including natural and cultural resources that cannot be separated from the interconnectedness of historical activities, events and actors so that this unity has cultural and aesthetic value (Page RR, 1998). Another definition states that cultural landscape is a combination of natural landscape as a medium and culture as a tool so that it is said to be the result of human adaptation by Sauer in (Rosmalia D, 2015). Cultural landscape refers to aspects of the physical environment that relate to humans in realizing values, aspirations, conflicts, prejudices and aesthetics (Wardiningsih, 2014). Thus, a cultural landscape is a geographical area that displays the expression of a natural landscape by a certain cultural pattern by Tisler in (Nurisjah S; Prukanto Q, 2001). This landscape has a close relationship with human activities, cultural performance and values and aesthetic levels (Rapoport, 1983). Landscape elements are divided into three, namely macro, micro and man-made. Macro elements include climate and site quality. Micro elements include topography, type, soil character, vegetation, animals and hydrology. Meanwhile, built elements (man-made) include transportation networks, land use, settlement patterns and building structures (Gold, 1980). Thirteen components of cultural landscape characteristics are cultural traditions, natural systems and features, spatial organization, land use, cluster arrangement, topography, circulation, vegetation, buildings and structures, views and vistas, artificial water features, small-scale features and archaeological areas. Another view states that cultural landscape elements are divided into two, namely: (i) intangible elements of the cultural landscape formation process consisting of land-use and activities, spatial organization patterns, response to the natural environment and cultural traditions; and (ii) physical elements forming a cultural landscape which (Hutter M, 1997) are tangible in nature consisting of circulation networks, territorial boundaries, vegetation, buildings and structures, clusters, archaeological sites and small-scale elements by McClelland in (Awalia, 2017).

Laweyan Batik Village as a Cultural Landscape

Laweyan is an area where the majority of residents are batik entrepreneurs. The area of Laweyan Village is 21 Ha with territorial boundaries: North is Sondakan Village; South is Banaran Village, Grogol District, Sukoharjo Regency; West is Pajang Village, Laweyan District; East is Bumi Village, Laweyan District. The climate in Laweyan is the same as the city of Surakarta with rainfall of 9 mm/year, including the lowlands with an air temperature of 26 degrees Celsius.

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To make research easier, blocks or groups of buildings are created. Each block borders a street. In Laweyan there are 11 blocks, each block will be described based on existing potential.

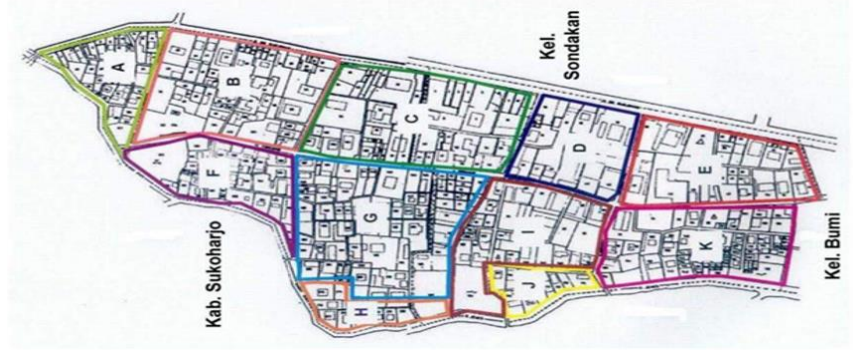


Figure 4. Block division in research implementation

Source: (Widayati, 2004)

If we examine the history and origins of the word Laweyan, there is an opinion that says that; The word "laweyan" itself comes from the word "lawe" or thread, or weaving as the basic material for cloth before it is spun into cloth. Laweyan is also said to come from Javanese, namely "Nglawiyani" which means someone who is excessive in terms of wealth. History records that its status as a center for batik entrepreneurs since royal times has been the center of the batik trade and the residence of Javanese hand-written batik entrepreneurs. The batik industry developed rapidly in Laweyan after the discovery of the technique of making stamped batik, namely around the middle of the 19th century (1870) (Widayati, 2004).

Judging from the urban scale of the Surakarta region, socially and economically, the Laweyan merchants controlled the batik trade. They are big, strong and independent entrepreneurs. This independence was then seen in the form of residential buildings in Laweyan, namely they created house designs surrounded by high walls and Indisch style houses. The influence of this Indisch style came from the large amount of trade they had with Europeans and Asians (Page RR, 1998).

Laweyan can be said to be a cultural heritage area with an emphasis on the cultural landscape. Cultural landscapes are an example of the interactions between humans and their social systems and the way they organize space. The cultural landscape here is a reflection of human adaptation and use of natural resources. Cultural landscapes are often expressed through organizational mechanisms and land placement, settlement patterns, land use, circulation systems and types of structures built. Here the cultural landscape includes natural and cultural resources that produce a sense of place and become part of the national heritage and part of human life. This type of landscape shows aspects of the origins and development of a nation or people in its form, appearance and history of use. Overall, it can be concluded that cultural landscapes contain invaluable information regarding the history of the people and their relationship with the surrounding landscape (Cosgrove, 1984). In the context of the Laweyan area, the Laweyan cultural landscape in Surakarta can be studied as a result of interactions between the Laweyan community (especially batik traders) and their industry with the natural environment where they are located which has historical value from the former ancient Mataram kingdom. Furthermore, the Laweyan cultural landscape reflects human adaptation as well as feelings and expressions in using and managing natural resources and the environment in the area. The whole forms the settlement pattern of batik merchants and the villages of the Laweyan community, land use patterns, circulation patterns, building architecture and other structures. As 'Laweyan Batik Village', you can trace the batik industry houses which are still operating as well as several Batik

boutique shops in the Laweyan area.

Laweyan Merchant House

Tourist attractions that can be visited in the form of batik merchants' houses can illustrate the culture of Laweyan batik merchants. This can be done through the residences of batik merchants in Laweyan, especially those that are still well maintained and still function for various activities. The house functions as a comfortable place to live, a foundation for building a family, and a representation of the dignity of its occupants, which is also an asset for its owner (Octavia, et al., 2024). The house functions as a comfortable place to live, a foundation for building a family, and a representation of the dignity of its occupants, which is also an asset for its owner (Octavia, et al., 2024). The Laweyan batik merchant's house, which previously functioned as a batik industrial site and is now no longer a batik industrial site and has the potential to be used as a tourist attraction because it has beautiful and distinctive architectural value in accordance with the character of the respective construction period, includes (Widayati & Surya, 2021):

1. Ndalem Mbokmase and Masnganten Mulyodihardjo (representing the first period 1800-1900)

Located on Jalan Parang Parung II no. 1 Sondakan. Being in the second street class, it was built in 1850 and has high, massive walls surrounding the entire building. This building still has a spatial pattern and building mass that follows the complete traditional Javanese building layout: it has a pavilion, pringgitan, dalem, sentong, right and left gandok. In addition, there are pavilions (lojen) on the right and left of the building which previously functioned as batik business operations.



Figure 5 The former house of batik entrepreneur Ndalem Mulyodihardjo.

Source: (Widayati & Surya, 2021)

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Figure 6 Former house building of batik entrepreneur Ndalem Djimatan

Source: (Widayati & Surya, 2021)

3. Ndalem Mbokmase and Masnganten Priyodarsono (representing the period 1945-2000)

It has a floor plan and space pattern that no longer contains traditional Javanese elements. From the entrance, you immediately receive a terrace, then enter the main room as a living room, then continue with the garden and on the side of the building consisting of bedrooms and other rooms. At the back of the row of rooms in front of it is an L-shaped terrace leading to the car garage. Above the garage there is an elongated upper floor building consisting of a terrace, living room and bedroom.

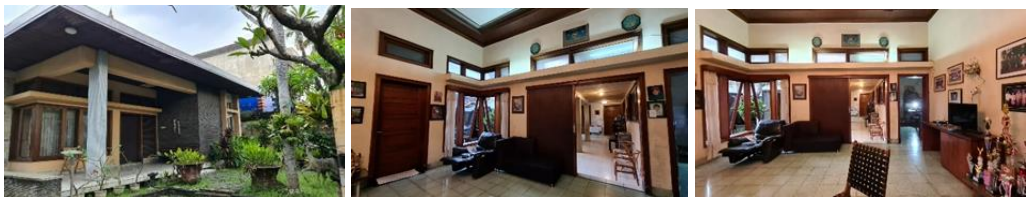


Figure 7 The former house of batik entrepreneurs Mbokmase and Masnganten Priyodarsono

Source: (Widayati & Surya, 2021)

The architectural style of the building is tropical in style with a gable roof shape equipped with a wide concrete plank from end to end which was very popular when modern architecture began to attract the attention of the Indonesian people. The architect is Mr Anding whose surname is Sungkar. At that time Mr Anding was a very popular architect in Solo. Many rich people's homes in Solo use his architectural services.

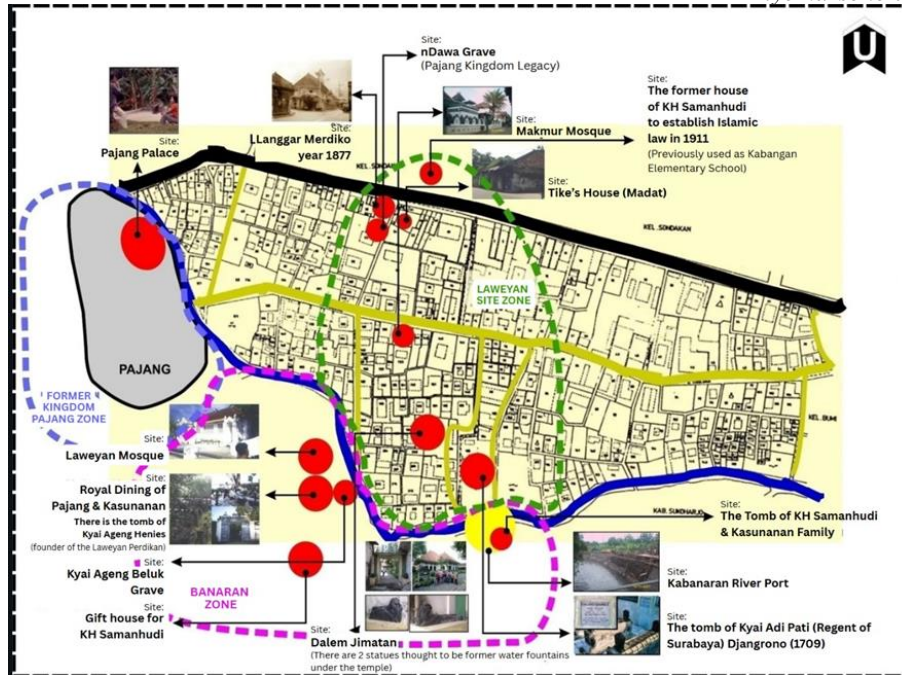


Figure 8 Distribution of Sites in Laweyan

Source: (Widayati, 2004)

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4. Views of the Pajang Palace

This petilasan is located on the border of Pajang sub-district, Surakarta city and Makamhaji Kartasura village, Sukoharjo. Physically, the Pajang Palace is no longer found. The only remains left now are the foundations. Through the cultural heritage of this site, tourists can learn more about Jaka Tingkir or Sultan Hadiwijaya who initiated the birth of the Pajang kingdom. The Pajang Kingdom was founded in 1568 after the collapse of the Demak Bintaro empire. With the collapse of the Pajang kingdom, the Islamic Mataram work was established in Kota Gede. The current glimpse of the Pajang Palace is dominated by new buildings as replicas to depict the work of Pajang in the past. The original remains of the Pajang kingdom are wooden getek (rafts), ancient statues and large boulders that were once a place for Jaka Tingkir meditation (Widayati & Surya, 2021).

5. Tomb of Kyai Ageng Beluk

This tomb is located to the west of the Laweyan tomb. Kyai Ageng Beluk was a Hindu religious leader when Kyai Ageng Henies had not yet been assigned to Laweyan by Sultan Pajang. After Kyai Ageng Henies settled in Laweyan and held Islamic religious broadcasts in Langgar which is now the site of the Laweyan Mosque, because it was close to his house (his former house is now Belukan village), every day he listened to broadcasts from Kyai Ageng Henies, he finally

converted to religion Islam. The tomb is cupola-shaped and inside is surrounded by a white mosquito net like the graves of powerful people in Java at that time. On 8th July 2021, when the photo was taken, the cupola was still there but the material had changed from a brick wall.

6. Laweyan Mosque and Kyai Ageng Henies' Tomb

This is a sacred area to this day. In the tomb complex, apart from the tomb of Kyai Ageng Henies, there are also the tombs of the sentana and soldiers of the Pajang kingdom. Apart from that, there is the tomb of Paku Buwana II before it was moved to Imogiri. Until now, this tomb is still used to bury the bodies of the Surakarta Kasunanan family.



Figure 9. Laweyan Mosque

7. Kabanaran River City

During the heyday of the Pajang kingdom, the main transportation was the Kabanaran river, and Laweyan was a large port city visited by many foreign traders from abroad and overseas. The big river city is called the Kabanaran river city. The official dealer was Sutawijaya, son of Kyai Ageng Pemanahan, who was taken as the son of Sultan Hadiwijaya, ruler of the Pajang kingdom.

As time went by after Daendels came to power, making a road from Anyer to Panarukan 1000 km long with forced labor, other regions followed suit. River transportation began to shift to land. The Kabanaran River is starting to be abandoned. Over time, it experienced sedimentation and was very poorly maintained.

In 2007, the Surakarta Regional Government provided assistance in the form of building a road on the river bank so that cars could pass through it. Apart from that, a place to store and filter batik waste was created so that the water entering the river becomes non-toxic and clean water. Behind the former Kabanaran river bank there is the grave of the national figure who founded the Islamic Trade Company, namely Kyai Haji Samanhudi.

8. Langgar Merdeka

Langgar Merdeka, this was founded in 1877, recorded on the langgar tower with the number 7 of the 7th month of 1877. Langgar still functions as a prayer place on the top floor. According to the story, the elders in Laweyan were formerly called Langgar Merdiko. If linked to the years listed, it is true that the Laweyan community is an independent community.



Figure 10. Langgar Merdiko which was founded in 1877

9. Ndowo's Grave

Located to the south of Langgar. Why is it called that because inside the tomb there is a grave that is 2 meters long, it is thought that the contents are not humans but spears. Now the tomb is very poorly maintained.

10. Tike House

Formerly a large house with a large yard used by Laweyan masnganten to meet with their friends to drink opium, the house was previously called Rumah Tike, a kind of club house today. There is something very interesting, the langgar for worship is close to the tike house for addicted drugs and next to it is the sacred grave. This strengthens the suspicion that the Laweyan community is very independent (Widayati, 2004).

Laweyan Village has become a 'living monument' which is quite interesting because their livelihood business as batik craftsmen was quite large at that time, causing them to become batik traders who also had large wealth. So they have a house with a batik business (industry) which has a distinctive character and special architecture as a combination of Javanese architecture and foreign (European) architecture. Many of the houses of Laweyan batik merchants, which are still well maintained and not well maintained, are an attraction for tourists who are interested in old buildings and their architectural characteristics, namely the Dalem Wiryodinolo batik merchant house, the Dalem Priyomarsono batik merchant house, Dalem Mbokmase and the Tjokrosumarto masnganten, Dalem Mbokmase and Masnganten Wiryomartono.

Uniqueness of the Regional Environment in Laweyan: Road patterns and accessibility in the Laweyan Area Based on thoughts from Small, K, 2010, there are several travel routes related to nodes or destination points and road maps based on groups of activities in the Laweyan batik village area (Small, 2010). Of the three routes described, namely; a) Linear Route, b) Circuit Route, c) Network Route.

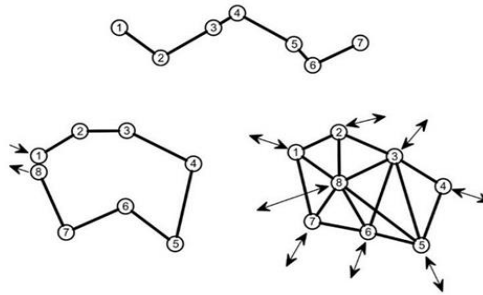


Figure 11. Tourist Destination Points and Roadmap per Tourist Activity Group.

Source: (Small, 2010)

- **Linear Route**

This circulation pattern is useful if the geographical condition of the object (location) is like a river or canal. This pattern is useful for controlling access if there is a sensitive environment or caution is needed for visitors. This pattern is also a controller so that visitors remain in the designated area. There needs to be a node as a point of information and position and as a point of departure to the next destination.

- **Circuit Route**

This pattern can be used for locations on nodes such as places with flowers, forests, farms, special buildings, factories, where the route is circular and between entry and exit through a certain point. This path pattern follows a pattern with logical interesting features. This pattern can be done if you want to a path that is actually long but made circular. This pattern can be started from the parking area then the entrance gate as access control from the area.

- **Network Route**

This pattern is suitable for city or village circulation patterns where visitors are free to determine the destination they want to visit. This pattern only requires markers at certain points so that visitors do not get lost. This pattern requires fixed markers at certain points that are easy for visitors to understand.

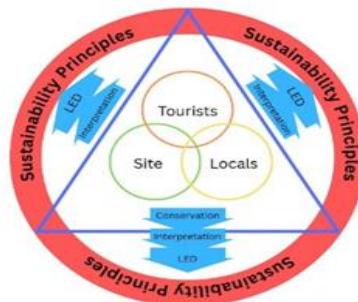


Figure 12 Heritage trail: conceptual framework. Heritage trails and different areas of interactions among key parties of cultural tourism in historical areas

Source: (Saha, et al., 2017)

The most appropriate network route choice is for the Laweyan batik village area because the area has been divided into 11 blocks. The potential of each block has been mapped. This makes it easier for tourists to visit one point (node) to the next. For the context of this network route, information nodes are numbered for identification purposes as markers equipped with permanent information boards to support cultural landscape mapping patterns.

Next, in the process of planning the heritage trail through a road map (travel route). First, choose the node location or the one that will be used as a tourist attraction because it has cultural and historical characteristics for Laweyan village. There are four main considerations that need to be taken into account when choosing destination points, including:

The location of the destination as a tourist destination that is reasonable in context;

- Cultural and social values of the community with its activities,
- Historical or historical values that have led to the Laweyan village area as a continuity or continuation of community life that has occurred from the beginning until now,
- The value of the natural environment or a group of buildings.

Convenience of location for easy navigation around the heritage trail. Number of dots destinations (nodes) and the distance between nodes as places of interest whether far apart or close by, Ease of tourist traces that can be gathered in groups to review a node information.

In the digital era, tourists are safe and secure at every node. Those who visit are guaranteed to be safe and comfortable. The tourist itinerary as a heritage trail will be determined as a place or location for tourist trips which must always be able to answer tourists' questions, among others the following questions; [1] Where, [2] Why [3] When (time), [4] How.

The tourism destination development framework consists of the following main tourism components (Sunaryo, 2013);

- Attraction (tourist attraction object)
- Accessibility (Easy accessibility for tourists)
- Amenities (facilities for accommodation, economic, health, security and other needs)
- Ancillary (Additional public services for facilities and services)

Accessibility is a problem of facilities and infrastructure, especially those related to roads and pedestrians as the main access routes at tourist locations. This accessibility plays an important role in making it easier for tourists to reach tourist attractions. Regarding the problem of vehicle roads, they are relatively adequate, there are only a few objects that are not easily accessible by four-wheeled vehicles because they are located on small roads (alleys/alleys). For pedestrian or pedestrian facilities on the main road, Dr. Radjiman, not all pedestrians are available that meet the security and safety requirements of their users. Moreover, facilities for disabled people are not available at all.

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Functions and Uses of Area Mapping in Information and Tourism Development

To increase the value and number of tourists according to their respective attractions, steps can be taken by compiling travel routes (travel maps). Several travel routes can be arranged according to tourists' individual interests and desires. With the heritage trail as a route that directs tourists to the desired tourist destinations, a heritage trail can be arranged based on themes according to the potential of Laweyan Village. Mapping the Laweyan area as a tourist destination is very important.

Maps are "graphic representations that facilitate spatial understanding of things, concepts, conditions, processes or events in human life". Maps are a way to describe spatial understanding of a regional environment. Through mapping and analysis, a place with activities and objects in it can be interconnected by time, space, distance so that it becomes metaphorical and functional information, especially in movement patterns, hierarchies and tourist patterns visiting the area. In the early 20th century, understanding cities as cultural entities required planning processes that explored identity and place. Geddes advises planners, including researchers, to use maps as a planning tool that is rooted in mapping as a fundamental assumption in planning for the future of society. Mapping is a way to broaden people's understanding of the relationship that occurs between the environment and society itself (Revianur, 2020) Architecture as a tangible cultural result is also related to intangible aspects, namely human activities. Cultural mapping can facilitate an integrated understanding of a site by considering various physical, social and economic dimensions of a populated area. UNESCO describes cultural mapping as an important tool and technique in documenting, preserving and managing intangible and tangible cultural heritage assets and providing recognition of cultural diversity (UNESCO, 2017).

In the Laweyan context, mapping is divided into 3 large groups, namely:

- a. Mapping Sites with Historical and Architectural Value
- b. Mapping of heritage sites with religious value
- c. Mapping the Laweyan Area in the social and economic sectors

The details are as follows:

Ad. a. Mapping with all around Laweyan

Ad. b. Mapping of heritage sites with religious value Laweyan Mosque, Makmur Mosque, Langgar Merdeka.

Ad. c. Mapping the Laweyan Area in the social and economic sectors.

Based on the mapping results in the Laweyan Area, the Laweyan area is divided into 11 (eleven) Blocks or building groups, which are referred to as Block A, Block B, Block C, Block D, Block E, Block F, Block G, Block H, Block I, Block J, and Block K.



Figure 13. Blocks in the Laweyan Area (1)

LAWEYAN VILLAGE

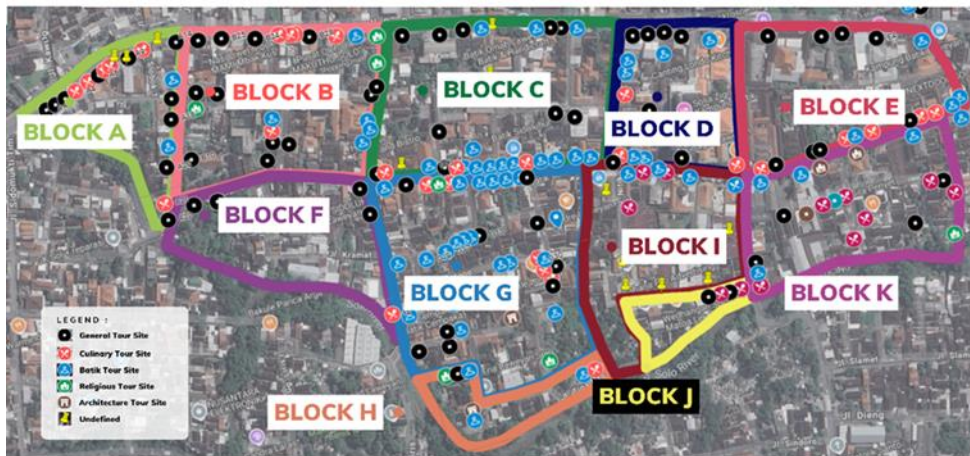


Figure 14. Blocks in the Laweyan Area (2)

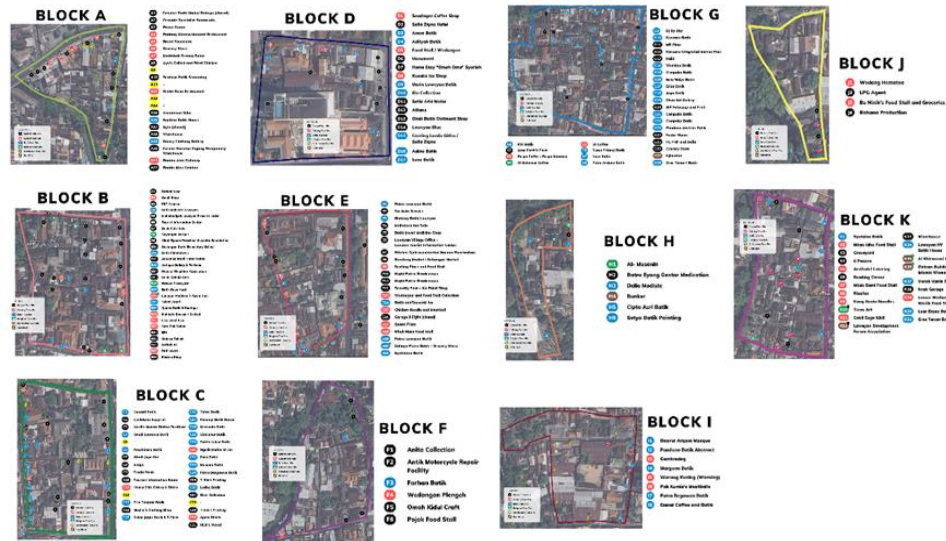


Figure 15. Potential and designation in the Laweyan area

Mapping of the Laweyan area is divided into 3 large groups of tourism potential, namely:

a. Mapping of Sites with Historical and Architectural Value

Mapping sites that have historical and architectural value, including sacred tombs; Ndowo Tomb, Kyai Ageng Beluk Tomb, Kyai Ageng Henis Tomb, the tomb of the Duke of Surabaya named Jangrono with his two followers. In addition, there is Dalem Djimatan which was formerly the residence of Kyai Ageng Henis. Several batik merchant houses that represent the construction period are the houses of Mbokmase and Masnganten Mulyodihardjo, Mbokmase and Masnganten Priyomarsono, Mbokmase and Masnganten Priyodarsono. These sites are spread across several blocks, for example, Ndowo Tomb is in Block B, Kyai Ageng Beluk Tomb is in Block B, and Kyai Ageng Henis Tomb is in Block H.

b. Mapping of Heritage Sites with Religious Value

Mapping sites that contain religious value, namely the Laweyan Mosque, Al-Makmoer Mosque, and Merdeka Mosque. These sites are spread across several blocks, namely the Al-Makmoer Mosque in Block G, Merdeka Mosque in Block B, and the Laweyan Mosque in Block H.

c. Mapping the Laweyan Area in the Social and Economic Sectors

Mapping sites that have social and economic value. In the mapping, this site consists of Batik Tourism, Culinary Tourism and General Tourism. Included in this category are batik factories that still exist today, typical Laweyan foods, a food market every Sunday morning made by local residents, several houses that are used as lodgings. These sites are spread across almost all blocks of the Laweyan area. In addition, tourism institutions are needed, which consist of all government institutions (central and regional government), private sector and society, human resources, operational mechanisms and regulations related to tourism that must be facilitated and intensified. By activating all tourism institutions, it is hoped that all components that support tourism success will be realized and can utilize technological and digital solutions to address urban challenges and continue to improve the quality of life of citizens.

Conclusions

Tourism mapping in Laweyan is done by mapping the Laweyan area into 11 (eleven) blocks. Each block is divided into 3 (three) large groups of tourism potential, namely Mapping Sites with Historical and Architectural Value, Mapping Heritage Sites with religious value, Mapping the Laweyan Area in the social and economic sectors. Architectural data in the form of a mapping of the Laweyan area is the initial step for the next step, namely the digitization of the Laweyan cultural landscape.

Tourism mapping in Laweyan actually explores more of the presentation material needed by the tourism world. Packaged into a long thread that has nodal points in several places. Each nodal point has its own uniqueness. The long thread that is stretched starting from one nodal point will return to the initial nodal point after wandering around the potential points in Laweyan.

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Conflicts of Interest

The authors declare no conflict of interest.

References

- A Strauss, C. J., 1990. *Basics of Qualitative Research: Grounded Theory Prosedues and Techniques*. - ed. Newbury Park, CA: Sage.
- Alistair G. Sutcliffe, B. G.-E. S., 2005. Presence, Memory and Interaction in Virtual Environments. *International Journal of Human-Computer Studies*, 62(3), pp. 307-327.
- Anike, L. O. & C., I., 2017. Digitization in Research for Cultural, Commercial and Scientific Development. *American Based Reseach Journal*, 6(2), pp. 1-5.
- Awalia, R., 2017. Kajian Karakter Pembentuk Lanskap Budaya Masyarakat Adat Kajang Di Sulaweai Selatan. (transl. Study of Character Formation of Cultural Landscape of Kajang Indigenous Community in South Sulawesi). *Jurnal Lanskap Indonesia*, 9(2), pp. 91-100.
- Connell, R., 2009. *Gender*. - ed. Cambridge: Polity Press.
- Cosgrove, D., 1984. *Social Formation and Symbolic Lanscape*. - ed. London: Croom Helm.
- Denzin NK, L. & Dariyatno, B., 2009. *Qualitative Research Handbook*. 1 ed. Yogyakarta: Pustaka Pelajar.
- Ding, Y. & Huang, C., 2008. The Establishment of Digital High Resolution Geodatabases for Webgis: From Digital Campus to Digital National Park. *The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences*, 38(Part B 6a), pp. 145-152.
- Gold, S., 1980. *Recreation Planning and Design*. - ed. Mishawaka: Mc Graw -Hill Companies.
- Grishunin, S. et al., 2022. The Impact of Sustainability Disclosures on Value of Companies

- Following Digital Transformation Strategies. *International Journal of Technology*, 13(7), pp. 1432-1441.
- Hadjimitsis D, A., 2013. Exploring Natural and Anthropogenic Risk for Cultural Heritage in Cyprus Using Remote Sensing and GIS. *International Journal of Digital Earth*, 6(2), pp. 115-142.
- Hutter M, I., 1997. *Economic Perspective on Cultural Heritage*. 1 ed. University of Catania, Italy: Mac Millan Press.
- J, S., 2015. Analisis Korelasi Antara Tipe Kepribadian dan Kinerja Tim Terhadap Kesuksesan Penerapan Agile Software Development (transl. Correlation Analysis Between Personality Type and Team Performance on the Success of Agile Software Development Implementation), *Sentika*, pp. 129-136.
- Krell, D. F., 1993. *Martin Heidegger Basic Writing: Ten Key Essays, plus the Introduction to Being and Time*. England: Routledge.
- K. W. S., 2013. *Keputusan Walikota Surakarta Nomor 646/1-R/1/2013 (transl. Decree of the Mayor of Surakarta Number 646/1-R/1/2013.)*. Surakarta: BAPPEDA Surakarta.
- Octavia, S., Madeali, H., Junus, N. & Sir, M. M., 2024. Architectural Analysis of Rumah Kancingan in Merauke. *International Journal of Technology*, 15(2), pp. 289-298.
- Ognjanovic, Z., Segan-Radonjic, M., Marinkovic, B. & Maslikovic, D., 2019. Cultural Heritage Digization in Serbia: Standards, Policies, Case Studies. *Sustainability*, 11(14), pp. 1-15.
- Page RR, G., 1998. *A Guide to Cultural Landscape Report: Contents, Process and Techniques*. 1 ed. Washington, DC: US Department of Interior, National Park Service, Cultural Resource.
- Pillai, J., 2020. *Cultural A guide to Understanding Place, Mapping Community and Continuity*. 1 ed. Petaling Jaya Malaysia: SIRD.
- P. M. K. d. P., 2010. *Peraturan Menteri Kebudayaan dan Pariwisata Nomor PM.03/PW.007/MKP/2010 (transl. Regulation of the Minister of Culture and Tourism Number PM.03/PW.007/MKP/2010.)* Jakarta: Kementerian Kebudayaan dan Pariwisata Indonesia.
- Rapoport, A., 1983. *The Meaning of The Environment: A Non Verbal Communication Approach*. - ed. Beverly Hills: Sage.
- Republik Indonesia, UUN, 2010. *Undang Undang no 11 tahun 2010 Tentang Cagar Budaya Lembaran Negara RI Tahun 2010 no 130. (transl. Law no. 11 of 2010 concerning Cultural Heritage, State Gazette of the Republic of Indonesia 2010 no. 130.)* Jakarta: Sekretariat Negara .
- Revianur, A., 2020. Digitalisasi Cagar Budaya di Indonesia: Sudut Pandang Baru Pelestarian Cagar Budaya Masa Hindu-Buddha di Kabupaten Semarang.(transl. Digitalization of Cultural Heritage in Indonesia: A New Perspective on the Preservation of Hindu-Buddhist Cultural Heritage in Semarang Regency.) *Bakti Budaya*, 3(1), pp. 90-101.
- Rinaudo, F. & Ardisson, P., 2007. *Gis and Web-Gis, Commercial and Open Source Platforms: General Rules Cultural Heritage Documentation*. Athens, Greece, XXI International CIPA Symposium.
- Rosmalia D, R., 2015. Identifikasi Elemen Fisik Kebudayaan Kraton Sebagai Pembentuk Ruang Lanskap Budaya Kota Cirebon.(transl. Identification of Physical Elements of Kraton Culture as a Form of the Cultural Landscape Space of Cirebon City.) *Media Matrasain*, 12(3), pp. 44-53.
- Saha, D., Ahmed, S., Md, A. T. & S, M. N. H. M., 2017. Journey Through The History: Introduction to Heritage Tourism and Tourist Trails for the Renewal of Old Dhaka. *American*

- Journal of Civil Engineering and Architecture*, 5(3), pp. 98-107.
- Small, K., 2010. *A Short Guide To Heritage Trail*. - ed. UK: Leicestershire County Council.
- Strauss, A. & Graser, B., 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. - ed. Chicago: Aldine.
- Sunaryo, B., 2013. *Kebijakan Pembangunan Destinasi Pariwisata: Konsep dan Aplikasinya di Indonesia (transl. Tourism Destination Development Policy: Concepts Applications in Indonesia)*. - ed. Yogyakarta: Gava Media.
- Trevor Bevins, K. W., 2025. *BBC News*. [Online] Available at: <https://www.bbc.com/news/articles/c1lp0n2jrp0o> [Accessed 29 March 2025].
- UNESCO, 2017. *UNESCO Bangkok Announces 2017 Asia-Pacific Awards for Cultural Heritage Conservation*. [Online] Available at: <https://www.unesco.org/en/articles/unesco-bangkok-announces-2017-asia-pacific-awards-cultural-heritage-conservation> [Accessed 19 March 2025].
- Wardiningsih, S., 2014. Lanskap Budaya Wisata Budaya Betawi.(transl. Cultural Landscape of Betawi Cultural Tourism.) *NALARs*, 13(2), pp. -.
- Widayati, N., 2004. *Settlement of Batik Entrepreneurs in Surakarta*. 1 ed. Yogyakarta: Gajah Mada Press.
- Widayati, N. & Surya, R., 2021. *Kawasan Permukiman Saudagar Batik Laweyan di Surakarta.(transl. The Laweyan Batik Merchants' Residential Area in Surakarta.)* Jakarta: CAC.
- WMD, 2025. *World Meteorological Day 2025*. [Online] Available at: <https://wmo.int/site/world-meteorological-day-2025> [Accessed 29 March 2025].
- Yang, C. & Ham, F., 2020. A Digital Information System for Cultural Landscape The Case of Slender West Lake Scenic Area in Yangzhou, China. *Built Heritage*, 4(3), pp. 1-14.