



## Rearrangement Heritage Peneleh Region

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**Abstract**—There are many heritage buildings from the colonial era in Surabaya. Heritage building want to be used tourism attraction. The problem now is the process of urban space design was not optimal. Settlement Building has not a been regulated. Density of population make air pollution and decrease green area. Pedestrian space is not feasible, even circulation and parking are not available. There are many streets vendor sellers above the highway to impede the traffics vehicle. The purpose of the existing problems will be revived in the heritage building's, produce a quality environment and create green area. Rearrangement of the Peneleh area will be made heritage tourism become worthy and can benefit to the next generation. Theory that will be used next is the circulation and parking, open space, pedestrian ways, activity support and signage there in urban design process by Hamid Shirvani. Method used in the research naturalistic paradigm. Qualitative strategy method because it can identify physical and non-physical aspects by observ and documentation exist activity and conditions. Using primary and secondary data tactics. Results this paper there is arrange and design Peneleh area, of the structured to revive existing potential to become heritage tourism.

**Keywords:** architecture; authenticity; custom home; sidatapa; tourist

### I. Introduction

The formation of a city in Indonesia is inseparable from the existing history due to the establishment of colonial buildings. Surabaya city have famous colonial building and heritage history, one of them is Peneleh area. Located east of the Kalimas River, close to the old city of Surabaya. Peneleh area is surrounded by Cemetery the north side and the east, Plampitan village south side and street Peneleh West side, which that located close to the Kalimas river.

Area a have uniq, cemetery locate in the middle of Surabaya City. There have historical building and Netherlands cemetery have different characteristics. Netherlands cemetery peneleh area is part the history in Indonesia during the Netherland and occupation. Peneleh cemetery has an area of about 4.5 ha and the cemetery was closed from funeral activities since 1955. Function as a settlement and commercial area of trade in services. This paper discusses the Peneleh region with the

theory approach of The Urban Design Process by [Hamid Shirvani \(1985\)](#). Which explains how the process of urban design is formed. Where the Peneleh area is a heritage area and settlements that are not regulated. This theory try to arrange see the potential of the Peneleh area to be developed. Have the potential to be developed, especially the historical heritage tourism sector.

Theory of the physical elements the city, it is needs to preserve the scope region of urban design. This case, urban design seen as part of the planning process the city related to the quality of the urban environment and architecture of the city by [Hamid Shirvani \(1985\)](#). [Mulyandari \(2010\)](#) from journal *characteristics of the old city from Manado the approach theory of Hamid Shirvani*. Journal of arrangement region planning the river Tondano at Manado the approach of theory by Hamid shirvani. The journal describes quality planning and designs city that related with quality of physical environment. Urban design primary aspects of physical quality, include of the visual quality. There are some physical elements in the urban design process.

Land use setting to determine the best option in the location certain functions area is function exactly right. Problems that happen related the implementation system land use in urban design (zoning). Building form and mass can form that must be considered the space formed be measured, has dynamic lines and avoid existence of missing space. Princip and techniq of urban design related to the form and mass of buildings, that is: Scale, related to the people perspective, circulation and dimensions of the surrounding buildings. Space of the city circulation formed by the boundary, and type space. Circulation and Parking is an element of urban design that can directly control the form and pattern of activity of the city. The existence of the public transport system of roads, pedestrian ways, and transit places are interconnected to form the movement (activity). Parking has a directly on the existing environment in commercial activities in urban and have a visual effect on some of the urban areas. The prepared of parking space at least serve visual effect which is a successful attempt in the urban design. Open space is always associated with the landscape. Landscape that is of hard elements and soft elements. Open space usually in the form fields, road, border river, green, park and at all (Jeivan, 2017). Elements of open space including landscape, street, pedestrian, park, and recreation.

Some potentials of the Peneleh region derived from tourism, riverbanks, and sidewalk, pathways which can be developed to be organized in an organized manner and to be reanimated (Billy, 2018). Some studies concluded historical heritage is the highest criterion that forms an identity in Surabaya. Thus, the potential of historical relics or remains an attraction and becomes the identity of the city especially Surabaya (Subhan Ramdlani, 2013). This study was expected to be able to organize and revive the potential of Peneleh region. This study aimed to identify and analyze all potentials and problems by using The Urban Design Process by Hamid Shirvani to structure and revive the Peneleh region. This study was carried out by observing, walkthrough analysis, and documentation.

## II. Method

This paper make qualitative method for identify the aspects physical and non-physical element, Observations, documentation activity and existing conditions. The terminology qualitative emphasis on different levels of techniques to collect, interpret evidence or data (Groat and Wang, 2013). Qualitative evaluation is applied to eliminate the subjectivity of analysis in understanding complex correlation. Qualitative approach allows to determine the perception of the subject about the fact and avoid the analysis that has been formed in advance (Bauer and Gaskell, 2008).

In the process between existing conditions object research and theory related process urban design, the results conformity analysis will be

obtained in accord with indicators theoretical object of research Peneleh region, Surabaya. Qualitative method considered more appropriate for evaluation. Learn the related objects, with the search and browser, newspapers and social media the information background Region Peneleh, Surabaya. After data is collected, the next analysis step, this is:

The obtained data including physical building data, community works, infrastructure, and sanitation and irrigation data in Peneleh Village, Surabaya were obtained to identify the Peneleh region in Surabaya.

The analysis conducted includes existing conditions, physical and non-physical aspects of the Peneleh region in Surabaya. The data analysis method used was descriptive qualitative.

The identification of problems in the Peneleh region in Surabaya was then linked to the theory of the urban design process (Hamid Shirvani).

Results in the form of data synthesis by concluding research findings in the form of description and assessment results of the research object on the theory of the urban design process (Hamid Shirvani) and solutions related to the shortcomings of the research theory.

## III. Result and Discussion

The population of Peneleh village is 2,943 with a density of 288 people per hectare. In Peneleh District, there are other old villages, namely Plampitan village, Lawang Seketeng village, Jagalan village and Pandean village. Residents who reside in the villages of origin come from urbanization from various cities in Indonesia with different cultural, ethnic and religious backgrounds. Reasons for staying in a village can vary. Some are related to closeness to work (23.5%), marital relations (40%), and others (23%). The number of families living in their own homes is 14%. The population of men and women is the same. Peneleh village consists of two neighborhoods, which are located next to the Netherlands cemetery.

The Urban Design Process by Hamid Shirvani (1985) mentions in the field of urban design that includes inter-building space, space created for the community is related to the physical quality of the Environment. The eight elements are: Land Use, Building Form and Massing, Circulation and parking, Open space, Pedestrian ways, Activity support, Signage, and Preservation (Heritage), but in this study only five elements of 8 elements are used, namely as follows; Land Use, Circulation and parking, Open space, Pedestrian ways, and Signage. This study tried to analyze the research area and look for problems and potential in the research area to be developed and maximized which all orientations for users and urban residents, especially Surabaya City.

### Land Use

Land Use is a two-dimensional design in the form of urban land allotment plans. Three-dimensional space (buildings) will be built in places according to the function of the building. Land use policies also shape the relationship between circulation/ parking and individual activity or density.

Figure 2 explains Surabaya Peneleh area, land use consisting of trade and services. Occupancy that is direct physical contact with roads, public facilities, open spaces. There are heritage area protected by the government in the peneleh area namely, Peneleh settlement, Plampitan settlement and Pandean settlement. Peneleh settlement has a heritage building, the house of HOS Cokroaminoto, where the house was a temporary shelter when the first president of the Republic of Indonesia, Mr. Soekarno, studied high school in Surabaya. Plampitan settlement has a house from Ruslan Abd. Ghani who is a hero from Surabaya in defending the independence of the Republic of Indonesia, and the last Pandean settlement is the birth house and childhood home of the Republic of Indonesia's first president, Ir. Soekarno. There Peneleh Mosque which is the second oldest mosque in Surabaya. Peneleh area is an old settlement located in the middle of Surabaya City.

In the Surabaya Peneleh region, land use consists of trade and services, especially in residential areas that have direct physical contacts with roads, public facilities, and some urban open spaces. The residential areas are dominated by dwellings. There are three heritage areas protected by the government in the Peneleh region namely Peneleh village, Plampitan Village, and Pandean Village. Peneleh village has a heritage building which is the house of HOS Cokroaminoto where the house was a temporary house where the first president of the Republic of Indonesia, Mr. Ir. Soekarno studied during high school in Surabaya. Plampitan village has a house of Roeslan Abd. Ghani was a hero from Surabaya in defending the independence of the Republic of Indonesia. At last, Plampitan Village has a birth house and the childhood home of the Republic of Indonesia's first president, Ir. Soekarno. Besides that, there is the Peneleh Mosque which is the second oldest mosque in Surabaya. Peneleh region is a settlement and is an old settlement located in the middle of Surabaya.

Peneleh village, Surabaya, is dominated by housing and still retains the shape of the original building as in the HOS Cokroaminoto house (Figure 3). Half of the housing in Peneleh settlement in Surabaya is used for historical tourism and used to learn about Surabaya's history by the community. There is a house of the first president of the Republic of Indonesia, Ir. Soekarno, in Pandean village where he spent his childhood. The house does not have many visitors for fewer people who know the existence of the house. The house has not been used as heritage tourism such as HOS Cokroaminoto house. However, the Surabaya government intends to do repairs and re-livelihood

of Pandean village in the future to make it a heritage tour to remember the services of heroes.

Even so with the house of Roeslan Abd Ghani which is located in Plampitan Village of Surabaya close to Peneleh Village has not had many visitors. It had not yet been developed and reanimated like the HOS Cokroaminoto house. However, similar to the house of Soekarno's childhood, the house of Roeslan Abd Ghani will be developed, improved, and reanimated to be heritage tourism.

In Peneleh village, there is also Peneleh Mosque which is the second oldest mosque in Surabaya. The mosque is in the same village as the house of HOS Cokroaminoto. It is often used as a tour package by the old building community because of its location adjacent to the HOS Cokroaminoto house.

The solution for research area to continue be used for historical tourism. Maintain the original form of the building, as well as the need for maintenance from the Surabaya government especially in villages and heritage areas that have not been repaired and restored, and to give attention to the cultural heritage. Solutions for the research area continue to be used for historical tourism. Maintain the original shape of the building, as well needs. Maintenance of the especially in settlement buildings and regional heritage that has not been repaired and restored. Give attention for cultural heritage

#### *Circulation and Parking*

Circulation is an element of urban design that can directly shape and control patterns of urban activities, as well as the existence of transportation systems from public roads, pedestrian pathways, and interconnected transit places that will form movements (an activity). Circulation in the city is one of the most powerful tools for structuring urban environments because it can shape, direct, and control patterns of activity in the city.

Figure 6 explain circulation problem in the area are on the right and left side are used for parking areas for visitors who go to shops and services, this causes congestion, especially at certain times, namely at noon, and late afternoon. In the search area not all roads are used for one direction, at the fork between the track and the road of the tomb, the change takes place in two directions, and this also causes congestion.

The solution of circulation and the parking area are to make circulation in one direction from the trails to the streets of Ahmad Jais. By making one direction the vehicle flow smoothly. And for the parking area, to create its own parking area, there are several vacant lots around the heritage area in the research area, which are close to the village of Peneleh (HOS Cokroaminoto house), Plampitan village (Roeslan Abd. Ghani's house), and Pandean village (House Sukarno's Childhood) which can accommodate vehicles or give parking marks on the

road near the Kalimas river, because the parking area is a continuation of commercial activities in figure 4.

The parking area is also not too far from the three heritage and commercial areas which are linear in shape and can be accessed on foot from the parking area, so that visitors can enjoy heritage tours and enjoy surrounding buildings that still maintain their original shape.

#### *Open Space*

Open space elements always involve landscaping. Landscape elements consist of hard elements (hardscape such as: roads, sidewalks, sculptures, stones and so on) and soft elements (soft scape) in the form of plants and water. Open space is usually in the form of fields, roads, borders, rivers, parks, graves, and so on. In open space planning, it will always be related to garden/street furniture (furniture roads) in the form of lights, trash cans, signboards, park benches, and so on.

The problem are based on land use the Peneleh area has been dominated by relics and, has only a small amount of open space, although open space is important in an area, one of which is for public interaction space and reducing stress for city residents, in fact the search area has large open spaces. the room is a Dutch cemetery. Peneleh cemetery is around 4.5 ha and was later closed from funeral activities since 1955.

Surabaya Government plans that in the future the Dutch cemetery will be replaced by an open space or garden with the heritage concept. Because the area has been dominated by heritage settlements and there is no place for open space, even though there is potential space to be replaced by open spaces, parks or plazas.

The solution to this problem is to replace all into open spaces, or make other concepts with open spaces. As with open spaces in the midst of the settlement of Peneleh village and the Area it provides more changes for the citizens of the city to enjoy the search area as heritage cultural tourism and open spaces for public interaction spaces but still maintain the original shape of the building. The concept of open space is in the form of ecological theme parks, namely the garden concept which is used to enjoy the scenery by highlighting elements and natural elements. As well as being able to be used by residents and the surrounding community for activities in figure 9.

#### *Pedestrian Ways*

Conditions of the pedestrian in the Peneleh Surabaya has deficient or is inadequate. Region Peneleh Surabaya affects the local circulation for pedestrians because of their area as recreation the heritage. There are areas of educational buildings and commercial.

(Figure 10) function as pedestrian circulation doesn't the design element of the city make the

environment dirty and not attractive. Its function pedestrian circulation creates a comfortable and protected from motor vehicles. Solutions to improve the quality of the environment with people, visible in (Figure 11).

(Figure 11) the design of the pedestrian which increases circulation and doesn't existing activities along the way. Path of pedestrian circulation there are elements such as trees, signage, trash can should be safe from vehicles. The route is easy and clearly can be adjusted density of pedestrians. There aren't barriers because pedestrian paths are defective. give it aesthetic design with the additional furniture bench, garden lights.

#### *Activity Support*

Conditions of the pedestrian in the Peneleh Surabaya has deficient or is inadequate. Peneleh Surabaya affects the local circulation for pedestrians because of their area as recreation the heritage. There are areas of educational buildings and commercial. Buildings around the Peneleh Surabaya consists of shop or trade and services, this is; textile shops, building materials store, food vendors (Restaurant), and mosques. But the most prominent in the region of the city is a shop and services because the location of the village is in the city center of Surabaya.

The form, location, and character of the heritage are dominated by shop and services trade. Supports activity that occurs to the presence of the trader shop, education and village heritage that made history (Figure 12). However, there isn't a location specifically set for street vendors that they sell on the street. Use some of the roads lead to disorders of the motor vehicle. Form area cleans, organized and safe, support activities are very important in order to strengthen the function of urban space. The solution in figure 10. Street Vendors are advised to sell on the sidewalk so wasn't interfere with the vehicle. Street Vendors selling from the afternoon until the evening so pedestrians in the morning and evening could function.

#### *Signage*

Installation of the sign of which is not uniform has length and width that are different so it is chaotic. Circulation of the vehicles has been comprehensive with some traffic signs so as to regulate the flow of vehicles. There at some point which can be clearly seen by the user of the vehicle but still interdict in the traffic signs are ignored by road users, (figure 14). (Figure 15) Solution of the signs region Melting Surabaya is easy to see and doesn't cause dazzled. With the placement of distance and size. Installation of signs in the region of Peneleh Surabaya, so pleasing to the eye. The use of signages should reflect characteristic of the area. Distance and size should be compatible with existing theory and are arranged to ensure visibility and avoid overcrowding. Should be in harmony with the building architecture. Limitation of the

signs is sized large which dominates the display location of the city.

#### IV. Conclusion

The Surabaya Peneleh area has several potentials to be developed, especially in land use, road corridors, green open spaces so that it can be used as a heritage tourist place. According to the theory of urban design process from (Hamid Shirvani) the Peneleh region in Surabaya is considered not to fulfill eight elements. Land use in Peneleh settlements, Surabaya is dominated by heritage housing and still retains the original form used for historical tourism, in addition to the community learning about the history of Surabaya. The application of the theory in Peneleh Region, Surabaya is considered to have not met the eight elements which were:

**Land Use;** The settlement in Peneleh, Surabaya was dominated by heritage housing. The original form of buildings is maintained for historical tourism for people to learn about Surabaya's history.

**Circulation and Parking Area;** for circulation and parking area is to make circulation one-way from Peneleh road to Ahmad Hais Road to make vehicle flow run well. Meanwhile, the solution for the parking area is to create a parking area near Peneleh road to accommodate the vehicle. Another solution is by giving a sign of parking area limits on the road near the Kalimas River because the parking area is a continuation of commercial activities.

**Open Space;** this issue is to replace all Dutch cemeteries into open spaces or to create another concept with open spaces to maintain Dutch cemeteries. Open space in the middle of the Peneleh settlement provides more changes for city residents to enjoy the area as a cultural heritage tour. Open spaces are made for public interaction by maintaining the original form of the building.

**Sidewalk;** offered is to improve environmental quality by prioritizing the community in the Peneleh region, Surabaya. The sidewalks compensate and increase flow which supports activities along the way.

**Support activities;** Establishing a clean, organized, and safe area for supporting activities is very important to strengthen the function of urban space. The solution for the street vendors is by recommending them to sell from afternoon to evening to enable the function of sidewalk from morning to afternoon.

**Signage;** signage is to design the signage to be easily seen with distance and size placement for viewers. Installation of signs in the Peneleh area, Surabaya was not pleasing to the eye. The use of billboards needs to reflect the character of the region. Distance and sizes are required to be closed and arranged in such a way as to ensure visibility and avoid density. Its use has to be in harmony with

the architectural buildings around the site. Large billboards can dominate the city display.

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## Apendix

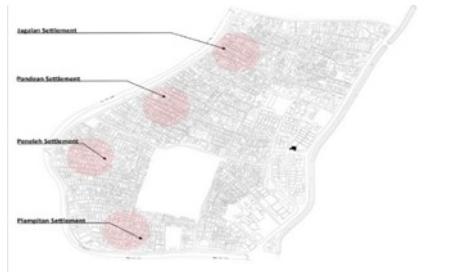


Figure 1. Map of settlement peneleh region surabaya



Figure. 2. Land Use of peneleh Region Surabaya



Figure 3. HOS Cokroaminoto's House in peneleh Region Surabaya



Figure 4. Soekarno's childhood House in Pandean Settlement Surabaya



Figure 5. Roeslan Abd. ghani House in Plampitan settlement Surabaya



Figure 6. Peneleh Mosque in Peneleh settlement Surabaya



Figure 7. Circulation and Parking area in Peneleh Region Surabaya



Figure 8. Circulation and Parking area in Peneleh Region Surabaya



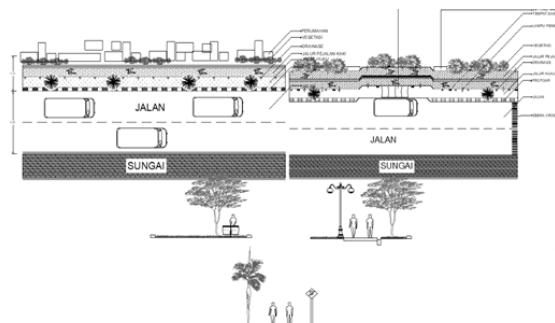
**Figure 9.** Netherlands cemetery in Peneleh Region Surabaya



**Figure 10.** Park concept for Peneleh Region Surabaya



**Figure 11.** A Pedestrian Ways Region Peneleh, Surabaya



**Figure 12.** Solution Pedestrian Ways for Region Peneleh, Surabaya improve the quality of the environment



Figure 13. Trade Shop, Streets Vendors in Region Peneleh Surabaya

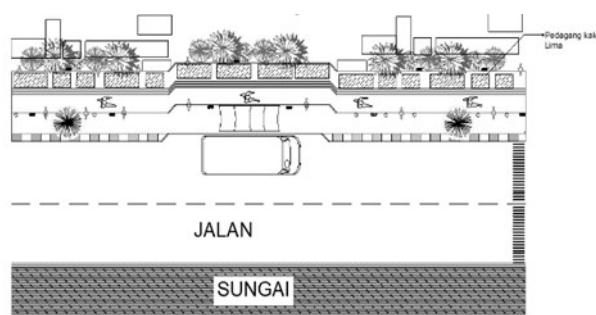


Figure 14. Solution Street Vendor in Region Peneleh surabaya



Figure 15. Signages in Region Peneleh, surabaya

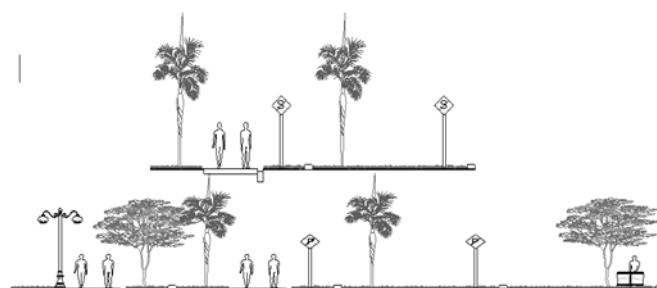


Figure 16. Solution signages in Region Peneleh, Surabaya