

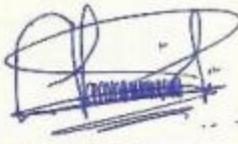
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IStanbul 2014

7 th international seminar on vernacular settlements

re-assessment of vernacular architecture:  
theory and practice

15-17 october 2014  
istanbul technical university, turkey

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**RE-ASSESSMENT OF VERNACULAR ARCHITECTURE: theory and practice**

**TRADITIONS, IDENTITIES AND GLOBALIZATION**

15th -17th October 2014: Istanbul Technical University, Turkey

Organized by

Architectural Design and Typology Working Group AD/TRG

Housing Research and Education Center ITU-HREC

Faculty of Architecture Istanbul Technical University, Istanbul, Turkey

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## RE-ASSESSMENT OF VERNACULAR ARCHITECTURE: theory and practice

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# STUDY OF SPATIAL PATTERN IN BALUWERTI VILLAGE, SURAKARTA CITY, CENTRAL JAVA PROVINCE, INDONESIA

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## Abstract

One area that has a traditional spatial pattern and influenced by spatial concept of the city of Mataram Kingdom is Baluwerti Village, Surakarta City, Central Java Province, Indonesia. Firstly (1745) Baluwerti is home area for family and courtiers of Kasunanan Kingdom to support the existence of the Kingdom, but now beginning to shift. This study aims to assess the development of spatial pattern in Baluwerti. This study using two methods: First is synchronic-diachronic through the development study of paths, nodes, edges, districts, and landmarks. Second, the Delphi methods to assess the factors that shift the region's identity. The findings of this study are: the path from the circulation pattern, the district from the settlement typology, nodes from the nodes activity, and landmarks from some buildings are experiencing shift physical and functional. While the edges from the fortress is not experiencing a physical shift, but function shift. Factors that shift the identity of the area are physical development, changes in function, economy, social, status of ownership, understanding from Baluwerti residents to preservation activity.

Keywords: Traditional spatial pattern; Baluwerti Village in Surakarta, Central Java Indonesia; shift of region's identity.

## INTRODUCTION

An area will have a unique identity if it has valuable spatial pattern, one of which is the traditional spatial pattern that in its development can change form and function.

## REGION'S IDENTITY

The identity of the region is a characteristic that owned a place and give a person the feeling of the place. The characters that form the region's identity is a shape's recognition and the quality of the environment called a *sense of place* (Gallion, 1992). Lynch (1960) also reveal some of the emphasis that is able to strengthen the sense of place of the region, namely: Sense of occasion, Spatial Structure, Legibility and semiotic, and Congruence.

Associated with spatial structure, abstracted from Lynch (1960) there are elements forming region's identity, including: paths, edges, districts, nodes, and landmarks. According to van Eyck (in Zahnd, 1999), *a city is a large house, and a house is a small town*. The phrase is interpreted by Zahnd (1999) that the size of the architecture in the city can be distinguished by its scale, the macro (city) and micro (home), while the architectural principles is same. Urban Image theory formulated by Lynch attention in macro-scale of the city. However, according to the view of Aldo van Eyck, the principles disclosed by Lynch theory also applies to the micro scale, is a region even a house or building (Zahnd, 1999).

In its development, the value of identity and spatial character of a region can experience a shift. Rossi (1982) reveal a loss of identity caused by region's planning that overlap, where the new plan does not pay attention to the existing plan. Meanwhile, according Trancik (1986), one of the causes of the loss of identity of the region is due to too much planning and zoning is applied.

## TRADITIONAL SPATIAL PATTERNS OF BALUWERTI IN SPATIAL PATTERNS OF SURAKARTA CITY, CENTRAL JAVA PROVINCE, INDONESIA

According to Nas (1986), the spatial pattern of cities in Indonesia is influenced by the formation and the stages of its development, including: The early Indonesian town, Indische Town, Colonial town, and the Modern City. In the case of the cities in Indonesia, the spatial pattern of the city is affected by the pattern that existed at the time of early Indonesian town, that is formation of the city pattern influenced by the value of the cosmological and community activities. One of the spatial patterns of cities in Indonesia is the concept of spatial planning in the city of Javanese Mataram Kingdom. Excerpted from Solikhah (2010), a characteristic forming spatial concepts of the city of Javanese Mataram Kingdom, namely: the system of the Javanese traditional symbolic classification and gradation pattern of sanctity, the defense area, and patterns of ritual movement.

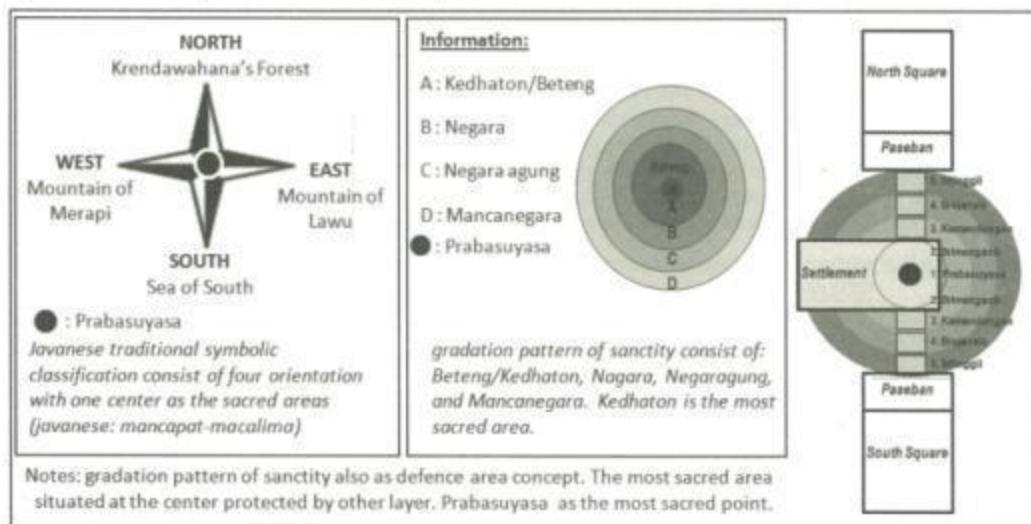


Figure 1: A characteristic forming spatial concepts the city of Javanese Mataram Kingdom (Source: Behrend, 1982; Santoso, 2008; Tanudjaya, 1982).

One of the city area in Indonesia which has a distinctive spatial pattern is Baluwerti village, city of Surakarta, Central Java Province. Surakarta city was founded in 1745 as the capital of the Mataram kingdom replace Kartasura Kingdom which was destroyed by the Chinese rebellion against Pakubuwono (PB) II in 1742. The background makes the city of Surakarta have urban typologies and typical architectural of the city. Based on the basic shape of the archipelago city by Nas (1986), the city of Surakarta including inland cities are identified from an agrarian community life, center of the city along the river, does not have a coastline, there is a fortress at the mouth of the river, the Dutch government in the North while the natives in the south, residential distinguished by communities, and the presence of sacred activities associated with the Kingdom. Excerpted from Qomarun (2007), development of Surakarta city can not be separated from the interference of the Dutch, so the Dutch and Mataram has the power to apply the concept of city planning. Dutch with the colony concept, the Kingdom with the cosmology concept and the pattern of the organic city that has long been prepared by indigenous communities overlap to form a spatial pattern of Surakarta city.

Spatial patterns of Surakarta as state of Javanese Mataram Kingdom consists of four regions. *Beteng* and *Negara* around the center of the Kingdom, while *Negarigung* and *Mancanegara* outside the central area of the kingdom, all of them arranged in concentric

cosmological. The division is also used in the placement pattern of settlement. *Beteng* and *Negara* inhabited by the royal family (nobles), courtier and high-level employees of the Kingdom. While *Negarigung* and *Mancanegara* inhabited by communities that do not have a direct kinship with the Kingdom (Soemardjan, 1962 in Santoso, 2008).

*Beteng* in Surakarta when become as state of Javanese Mataram Kingdom called Baluwerti village which comes from the Portuguese *Baluarte* (English: fortress). Based on studies conducted by Solikhah (2010), Baluwerti village originally is home to the royal family and courtiers of Kasunanan to support the existence and as defense area of the Kingdom. Naming the area based on the family's name, courtiers, and soldiers of the Kingdom who lived inside, such as: Tamtaman (warrior Tamtomo), Carangan (warrior Carangan), Wirengan (warrior Wirengan), Hordenasan (warrior Redinas), Mloyokusuman (Prince of Mloyokusuman).

Viewed by the macro scale of Surakarta city, Baluwerti region is a district. However, based on the expression of van Eyck has been stated at the beginning of this chapter, Baluwerti can be analogized as a city composed of the elements forming the region's identity. Configuration of Spatial pattern of Baluwerti formed by the elements forming the identity of the region influenced by the city concept of Javanese Mataram kingdom. That element are the circulation path as *path*, fortress of Baluwerti as *edges*, typology of residential as a *district*, regional node as *nodes*, and some buildings as *landmarks*.

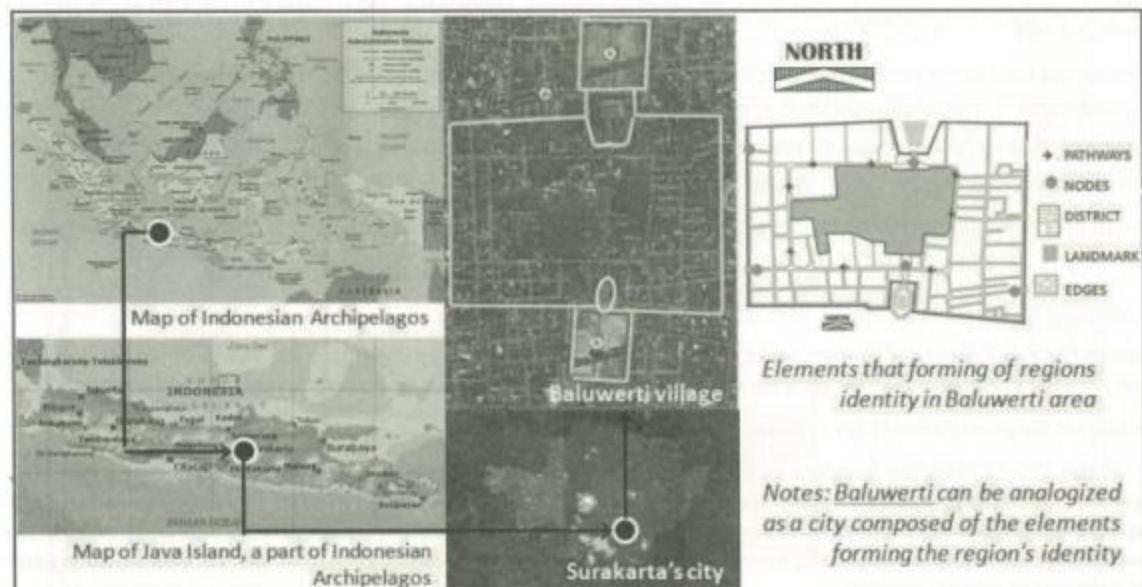


Figure 2: Region of Baluwerti in Indonesian archipelago (Source: Author, 2014).

Development phase of Surakarta city consists of several periods, each period marked by events that leads to changes in city planning. In a study conducted by Hardiyanti (2005) concluded that the development of Surakarta Kingdom area refers to the concept of spatial maintained. This is supported by empirical fact-finding by the author, which is based on early observations, there are several elements that to form region identity beginning to shift. Thus, this study aims to examine the development of spatial pattern in Baluwerti village who started to experience a shift and assess the factor that shift elements to form region's identity from the beginning to the present time (2014).

## METHODOLOGY

Type of this study is descriptive-evaluative study using two methods. First, synchronic- diachronic reading by the development study of elements that forming the region's identity in Baluwerti, including: paths, nodes, edges, districts, and landmarks that are assess with the spatial concept of the city of Javanese Mataram kingdom, namely: symbolic classification system of Javanese tradition and gradation pattern of sanctity, the area of defense, and movement patterns of ritual. Development study of the elements that forming the region's identity in Baluwerti is divided into three periods, namely:

- a. City of Mataram Kingdom Period (1745 – February 13, 1755)
- b. Colonization Period (February 13, 1755 - August 17, 1945)
- c. Post-Independence Period - Now (1945 - 2014)

Secondly, through analysis by Delphi technique to analyze the factors that shift the region's identity. Factors studied is obtained by exploring synchronic-diachronic reading and supported by a literature review of the theory and factors of similar studies that have been done. Factors that will be studied are: physical development, changes the function, ownership status, the Economy, social value, and cultural value. Respondents were selected based on Interest, Importance, and Influence to the shift in the spatial pattern of Baluwerti, namely:

- a. The owner (an heir) of the prince's house or Kasunanan family : Gunarto (owner of House of Atmosasanan)
- b. Conservationists: Ir. Rizon Pamardhi Utomo, MURP (Urban Designer and Heritage Expert - REKOMPAK)
- c. Management Agency of Kasunanan Kingdom Surakarta: Drs. GPH. Dipokusumo
- d. Community leaders in Baluwerti: HM. Thoha Ilyas; BA

The scope of the area study are Baluwerti Village, Sub-District Pasar Kliwon, Surakarta City, Central Java Province, Indonesia.

## RESULT AND DISCUSSION

To determine the development of elements that forming the regions identity, then conducted the search of history development of the spatial patterns in Baluwerti, where each period is marked by events that leads to changes in region's spatial pattern.

### City of Mataram Kingdom Period (1745 – February 13, 1755)

Periods of the City of Mataram kingdom begins with the establishment Surakarta Kingdom with the help of the VOC (*VOC= Vereenigde Oost Indische Compagnie, Dutch trade association to East-Indies commerce*) in 1745, replacing the Kartasura Kingdom that destroyed by Chinese uprising against Pakubuwono II in 1742. In Pakubuwana II's reign (1745-1749) and half of the reign of Pakubuwana III (1749-1788), Baluwerti experience some spatial patterns of development that can be viewed from each of the elements forming the region's identity.

At the beginning of the formation of Baluwerti (1745) circulation pattern in the form of a North-South straight line (Sacred-Profan) connecting North Square, Kingdom area, and South Square as well as the main path because the neighborhoods path has not been established. Path of neighborhoods begins to form because of the settlement for the courtiers and soldiers of the Kingdom in the east and south of the Kingdom in the middle of the reign of Pakubuwana III in 1755 (Pakubuwana III be power of in 1749-1788). Colonial influence is visible through the division of settlement and paths in a grid pattern. The main path shaped the imaginary axis and track the movement of the ritual, while the neighborhoods path is surrounds the Kingdom on the clockwise (*javanese: pradaksina*) as well as a transition area of sanctity's gradation and be movement track of people and goods that connects the region with the outside Baluwerti (Mancanegara). In this period there are restrictions on the types of vehicles allowed to enter the area.

When Pakubuwana II builds upon the first Kingdom, the walls of main building of Palace (*Kedhaton*) and Baluwerti area still use bamboo material. Boundaries of Baluwerti area as well as the transition zone between areas based on gradation of sanctity in Baluwerti (*Prabasuyasa*, *Kingdom*, *Negarigung*, *Negari*) with areas outside Baluwerti (*Mancanegara*). In 1755 (Pakubuwana III), the boundaries as well as the *Kedhaton* walls that originally using bamboo replaced with concrete walls. As a Dutch influence, the road pattern of the entrance to Baluwerti village made resemble with a horseshoe as a defense area. Fortress of Baluwerti predominantly with white colour, as the typology of the Dutch fortress as the influences. In this period, social ties between communities to Kingdom and between communities Baluwerti itself is still strong. It is associated with the formation of regions Baluwerti background, so that people who live in the Baluwerti area is considered to have a higher social strata.

At the beginning of the formation of Baluwerti (1745), Baluwerti only consist of *Kedhaton* as residence of the king and his family. Settlement began formed for courtiers and soldiers in the south and east of the Kingdom (Tamtaman, Carangan, Wirengan) at the time of the ruling Pakubuwana III (1749-1788). Baluwerti settlement are formed in a grid pattern and in the circle of *Negarigung*. Baluwerti neighborhoods only inhabited by the nobility (the royal family), courtiers, and soldiers of the Kingdom. Activity in the district associated with the profession of courtiers and soldiers Kingdom. There are several types of buildings ownership status in Baluwerti, namely the provision of the king to the courtiers and soldiers, and the king's giving the servants and soldiers that can be inherited. Ownership status is valid for house building, while the soil in Baluwerti remain the property of the Kingdom.

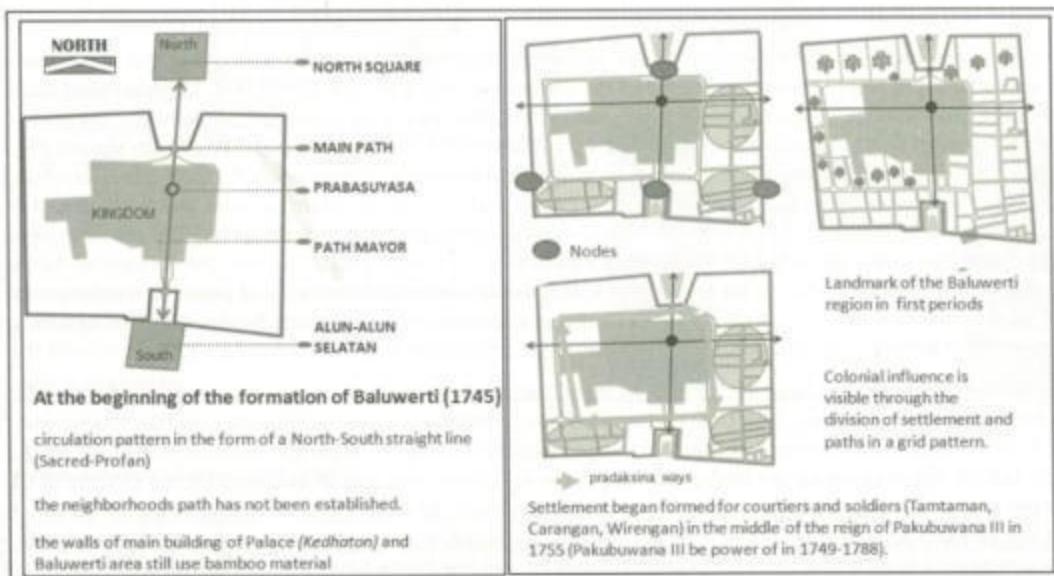


Figure 3: Baluwerti in the City of Mataram Kingdom Period (1745 – February 13, 1755) (Source: Analysis, 2014).

The form of main path is the North-South straight line (Sacred-Profan) that connecting North Square, Royal Kingdom, and South Square, thus regional nodes in this period are in the main courtyard of Kingdom (*javanese: Kamandungan*). Nodes of neighborhoods begin to form along with the establishment of settlements for courtiers and soldiers of the Kingdom in the south and east of the Kingdom (Tamtaman, Carangan, Wirengan) at the time of the ruling Pakubuwana III (1749-1788). In the main nodes wall built in the

concrete gate with large doors as access to the Baluwerti region (Prabasuyasa, Kingdom, Negarigung, Negari) with areas outside Baluwerti (Mancanegara) as well as a part of the Kingdom's defense concept.

In this period, the Kasunanan Palace became a major landmark and the element that is known by the public. Part of the Kasunanan Palace as a landmark is *Kori Kamandungan* and the Stage of Sanggaruwana. In the period as the capital of Javanese Mataram kingdom, the Palace courtyard (*Kamandungan*) is the venue for Sense of occasion of some ritual related with Kingdom, so the Kingdom as well as a binding of social value for the community.

#### Colonization Period (February 13, 1755 - August 17, 1945)

The development of spatial pattern of Baluwerti in the colonization period beginning with the *Giyanti Agreement* on February 13, 1755 which makes Surakarta became the center of government of Kasunanan Surakarta with Pakubuwana III as the King. While Yogyakarta as the center of government of Yogyakarta Sultanate with Mangkubumi as the King (Sultan Hamengkubuwono I). After Giyanti agreement, Dutch and Mataram has the power to apply the concept of city planning in Surakarta. Dutch town more freely with the concept of the colony, the Kingdom with the concept of cosmology. On March 17, 1757 signed an *Salatiga Agreement* that divides the city of Surakarta into two parts, namely: the south and east part for Kasunanan Surakarta, and the northern part was given to Mangkunegaran. In this period, the development of spatial pattern of Baluwerti is influenced by the power of King Incumbent (Pakubuwana III - Pakubuwana XI). In the period of Pakubuwana V (1820-1823), Pakubuwana VIII (1859-1861) and Pakubuwana XI (1939-1944), the spatial pattern of Baluwerti not have additional because rule the roost for a short time. While on the Pakubuwana VI (1823-1830) no additional physical because it coincides with the big war in Java (Diponegoro War: 1825-1830).

Neighborhood pathways begins to form because of the settlement for the courtiers and soldiers in the south and east of the Kingdom in the middle of the reign of Pakubuwana III in 1755 (Pakubuwana III power in 1749-1788). Neighborhood pathways follow a grid pattern of the environment, so it is no longer surrounds the Kingdom clockwise (*javanese: pradaksina*). The grid pattern is the Dutch influence to supervision the Kingdom and native's activity. The form of main path is connecting North Square, Royal Kingdom, and South Square and dividing residential areas based on gradation of sanctity. Pakubuwana X (1893-1939) extending Baluwerti region 30 meters to the east and west as well as the construction of arches in the Kingdom complex and the house of Prince with a large gate. Expansion the territorial of Baluwerti add main circulation paths pattern, whereas previously the main circulation path oriented North-South, but now there are East-West line is equipped with a main gate. Functions the fortress of Baluwerti for the Dutch is to control the Kingdom activity. As for the Kingdom, fortress as territorial boundaries of power and defenses area. Cultural activities take place around Baluwerti on the clockwise's track. Emotional bond the residents Baluwerti with Kingdom is still strong, but the emotional bond between people is withering because of the alternation of generations of people who inhabit the region.

The spatial-pattern of settlement has been designed using a grid pattern from the beginning, where Pakubuwana III (1749-1788) put the courtiers and soldiers in accordance with their respective duties, naming a place adapted to the courtiers name and the soldiers who live in it, such as: Tamtaman (warrior Tamtomo), Carangan (warrior Carangan), Wirengan (warrior Wirengan). At the end of the Pakubuwana IV (1820), began to set up the house of Prince in the north and west side of Baluwerti (in the sanctity of the circle is in the *Nagari* circle). Home of Prince built on large tracts of land and consists of several mass building. Every prince who has a family also provided the servants who also live in the area but the Prince's home in a separate mass. In its development servants started may reside by setting up a small house around the main building houses the Prince (*javanese: magersari*) which eventually will form compound house and make a visual degradation.

The development of spatial pattern of Baluwerti in the era of Pakubuwana VII (1830-1858) occurred through the addition of the Gambuhan village and the Hordenasan village on the west side of Baluwerti (note: in the Gambuhan mosque mihrab numbers written in 1832, so the region Gambuhan has entered into the era Pakubuwana Baluwerti VII). On the west side of Baluwerti there are the *Larangan* river, so access on the west side are pavement above a Larangan river that equipped with small door (*javanese: butulan*). In the era of Pakubuwana VII (1830-1858) established Brojonalan settlements on the west side for the soldiers who

guarded the gate of the west. During the Pakubuwana X (1893-1939), when the expansion of the area Baluwerti, rice storage areas Kingdom (now named the *Lumbung Wetan* village) put in Baluwerti area.

With the addition of the main gate on the west side and the east during the Pakubuwana X (1893-1939), then the main node of area increases. The development of regional nodes also occur because of the development of the district settlement patterns. At the end of the period, the function of the regional nodes evolved into a nodes of economic activity and regional transportation as well as a transition area of the Kingdom area (*Nagari*) with an area of settlement (*Nagarigung*).

In this period, the Palace buildings become landmarks of the area. At the end of the Pakubuwana IV (1820), began to set up the house of Prince with joglo forms and main gate that become a regional landmark. At the end of the period established public facilities Kingdom (Kasatryan School, School Pamardhi Putri, mosque, etc) which develops as a regional landmark.

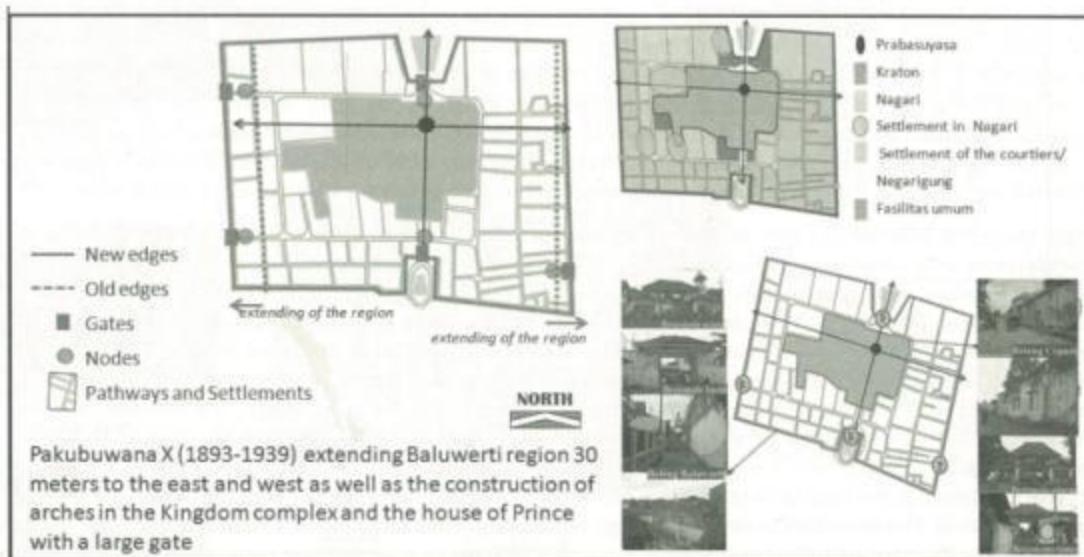


Figure 4: Baluwerti in the Colonization Period (February 13, 1755 - August 17, 1945) (Source: Analysis, 2014)

#### Post-Independence Period - Now (1945 - 2014)

After Independence of the Republic of Indonesia State on August 17, 1945, the two kings who ruled in the city of Surakarta (Pakubuwana XII as King of Kasunanan Kingdom and Mangkunagara VIII as King of Mangkunegaran) states that the region of Surakarta (Kasunanan and Mangkunegaran) is part of Indonesia as support of the government the republic of Indonesia. As a form of appreciation, then Ir. Sukarno as President of the Republic of Indonesia has set the establishment of the province of Special Region of Surakarta (DIS) where both the Kingdom has the right to autonomy in government territory.

In October 1945, formed an anti-monarchy movement (*javanese: swapraja*) opposing the monarchy system in Surakarta. Occur due to the resistance movement (demonstrations, riots, kidnapping, etc.), the date of June 16, 1946 the Indonesian government dissolve Special Region of Surakarta (DIS) and eliminate of Kasunanan and Mangkunegaran political power. So since June 16, 1946

Kasunanan and Mangkunegaran lose the right to autonomy so just be a normal family and changed a function as the developmental of art and culture of Java. Death of Pakubuwana XII in 2004 resulted in a power struggle from the offsprings of Pakubuwana XII. This is because there are no officially candidates who designated as the successor to the throne by Pakubuwana XII. Changes in the leadership role since Pakubuwana XII (1944-2004) and the internal conflict of Kasunanan Kingdom's family until now (2014) in public life of Baluwerti have considerable influence on the sustainability of regional spatial patterns of Baluwerti.

After the Kingdom does not have the right to autonomy, pathways began to shift the function and meaning. Circulation patterns began to grow in the direction of East-West orientation in addition to the North - South (*sacred and profane*). Pathways growing in the form of a grid pattern in residential areas and not in a clockwise direction. The circulation path of Baluwerti be integrated with the circulation path surrounding area through the main gate in the North, East, South, West, as well as additional access in the form of a small door (*javanese: butulan*) and into the separator between *Kedhaton* zones with settlements (villages and Prince's home).

Baluwerti area developed into a tourist destination so adding mobility types of vehicles entering the Baluwerti area. Kingdom does not have the authority to regulate what and who can pass. The role of traditional circulation path in Baluwerti still in use today during ritual activities carried out. Unevenness of the skyline that be characterize along the main circulation paths become increasingly apparent. In this period there are a shift in the concept of gate of the prince's home and some houses. The initial concept of the gate using pairs of brick wall and wooden door, but in this period using a rolling door to door car garage and economic activity of citizens, and the walls of gates began to function as an advertisement. Fortress that surrounding Baluwerti region now as the edges of Baluwerti area as well Administrations boundary of Baluwerti Village. Surakarta in 1966 experienced a flood that affected some parts of the fortress of Baluwerti, which is then carried some walls Baluwerti repair damage.

In this period, there are function changes of the settlement according to community activities. In the circle of *Nagari* start developing settlements which fills the empty space in the grid pocket with an orientation to the physical elements of environment (does not apply *mancalima mancapat*-pattern and sanctity's gradation). In 1966 some of the open areas in Baluwerti began to develop into a settlement, as Langensari that previously caring for horses. There is shift of new function does not associated with the Kingdom on the Prince's house and ordinary citizens. House of Prince function as the home residence as well as serves for a social activities, such as receiving guests, dance training, ritual processions, etc.. Homes of ordinary citizens began to develop into boarding houses, warehouses, stores, workshops, etc.. Although naming is still the same village, but residents who live not only courtiers and Kingdom soldiers. At this period anyone may reside in Baluwerti on a lease, contract, boarding, so that people living in Baluwerti not only the family, courtiers, and soldiers of Kasunanan Kingdom. Since the loss of the right to Kingdom autonomy, servant settlements evolved in the area in Prince's house into a compound house and growing, so the ownership status of the land and buildings are not clear. Houses began to develop through remodeling into a more modern form and no longer use the concept of a traditional house as Kingdom area. The development function is affected by economic and social activity of citizens.

Additional access in the form of a small door on the west side that also serves as a flood evacuation route in 1966 developed into a new activity nodes. Function nodes are dominated as supporting regional economic activity of Baluwerti residents with Klewer Market, Kliwon Market, Gading Markets, and Coyudan as a commercial area on the outer side of Baluwerti. The major Nodes in *Kamandungan* still be the center of occasion. Setting a curfew as a norm of social life still valid in the Baluwerti's region, of which four main gate in the North, East, South, and West closed at 22.00 pm until 04.00 am. Residents who will enter the Baluwerti area could only via the North gate by using a special permit. However, with the development of additional doors on the west side (butulan) that open 24 hours influenced the social rules such as curfew area.

Part of the Palace are Kori Kamandungan and Sanggarwana's stage still as a major landmark of Baluwerti area, where the appreciation of a occasion by ceremony and ritual of Kasunanan Kingdom is still be the main attraction of citizens. Landmark region increases with the development of the house of prince and the typology of the house that resembles the concept of house of prince in the Kingdom but on a small scale. In some house of Prince have additional not contextual element, such as the use of zinc in the

sun shading (previously using wood with certain ornaments). In this period, most of the landmarks in the area are not well maintained condition and changed into boarding, warehouses, stores, workshops, etc.. Emotional bond between citizens Baluwerti to the Kingdom began to decrease because the Kingdom is no longer a holder of government in Baluwerti region and the presence of families conflict who also have an impact on the loss of sympathy for the citizens of the cultural values of Kasunanan Kingdom. Emotional bond between people also began to fade with each passing generation of people who inhabit the area, so there is no longer a difference between the social strata who live in the complex and who living outside.

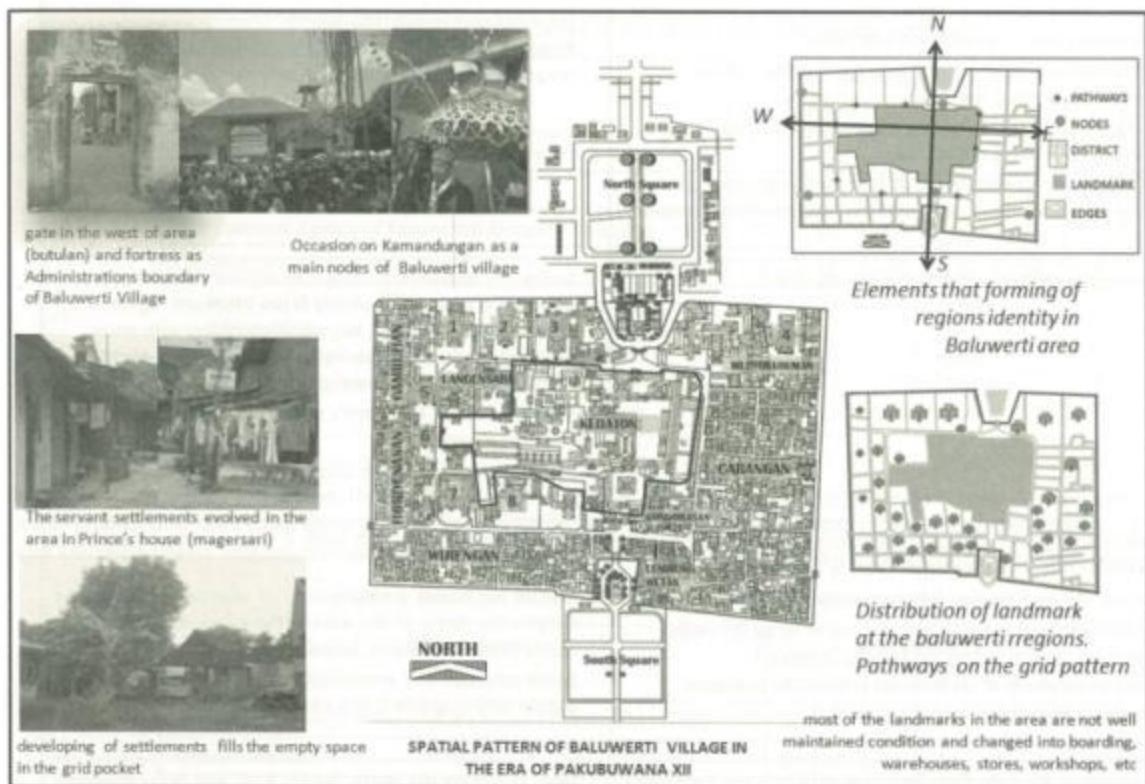


Figure 5: Post-Independence Period - Now (1945 - 2014) (Source: Analysis, 2014).

Based on the development analysis on elements to form the region's identity of Baluwerti using *synchronic-diachronic methods*, resulting identification of shifting that happen in each element that can see on the table below:

Table 1: Shift of element to form region's identity of Baluwerti, Source: Analysis, 2014.

	Physical Shift	Non-Physical Shift
PATH	<ul style="list-style-type: none"> <li>The main circulation patterns (Path) that connects North Square, Kingdom, South Square in the North-South orientation (<i>Sacred-Profan</i>) developed to clockwise pattern (<i>Javanese: pradaksina</i>) as well as environmental separator area between main kingdom area with settlement.</li> <li>Clockwise circulation pattern shifted with the addition of the entrance gate on the east and west sides.</li> <li>Circulation patterns develop into a grid pattern in the residential areas.</li> <li>Facade and skyline that form a hierarchy of outdoor space, develop into not in rhythm with.</li> <li>Development of elements that forming facade (roof, gates, colors, ornamentat) is not contextual with the initial concept</li> </ul>	<ul style="list-style-type: none"> <li>Function of pathways developing to adjust the activity of the community.</li> <li>Utilization of pathways for cultural activity only on certain corridors (<i>kamandungan area</i>).</li> <li>The pathways of cultural activity began to decrease, so that the <i>sense of occation</i> region is also reduced</li> <li>Kingdom does not have the authority to regulate what and who is allowed to pass through pathways in Baluwerti</li> </ul>
EDGES	At the edges elements does not physically shift	<ul style="list-style-type: none"> <li>Fortress of Baluwerti no longer be separated of the areas based on gradation of sanctity in the Baluwerti region (<i>Prabasuyasa, Kingdom, Negari, Negarigung</i>) with areas outside Baluwerti (<i>Mancanegara</i>). But be administrative boundaries of Baluwerti village.</li> <li>Emotion's ties of Baluwerti's resident with the Kingdom began to decrease.</li> <li>Emotion's bond between citizens began to decrease.</li> </ul>
DISTRICT	<ul style="list-style-type: none"> <li>Settlement grown without implementing a north - south (<i>Sacred - Profan</i>) and circle of sanctity's gradation.</li> <li>House of Prince evolved into compound houses.</li> <li>The development of settlements tend to fill up the empty space on the grid pocket organically (irregular).</li> <li>The development of settlements oriented to ecological elements of the physical environment.</li> </ul>	<ul style="list-style-type: none"> <li>Home stay start to shift with a new function that is no culturally.</li> <li>District not based on profession of courtiers and soldiers despite the name of the area is the same, outside may to reside (leases, contracts, boarding, etc.).</li> <li>Social cohesion and emotional's bond between people and people with Kingdom is reduced.</li> </ul>
NODES	<ul style="list-style-type: none"> <li>Addition of the gate (<i>butulan</i>) in west side is not consistent with the concept of <i>mancapat-mancalima</i></li> </ul>	<ul style="list-style-type: none"> <li>Main nodes on the North, South, East, and West influence the economic activity of Baluwerti's resident.</li> </ul>
LANDMARK	<ul style="list-style-type: none"> <li>Most of the landmarks in the area are not well maintained condition.</li> </ul>	<ul style="list-style-type: none"> <li>Landmark began to occur some changes in the function.</li> <li>Emotion's ties of Baluwerti's resident with the Kingdom began to decrease (appreciation of the sense of occation are low).</li> <li>Servant's settlement in the house of Prince (<i>Magersari</i>) reduce visual aesthetic (related to a sense of belonging).</li> </ul>

To determine the factors that shift the region's identity, then used the Delphi analysis technique that done through four phase, namely: Exploration of Factors Phase, First Iteration Phase, Second Iteration Phase, and third iterations Phase to obtained consensus/agreement from all respondents.

#### Phase I (Exploration of Factors)

Factors that studied is obtained by exploring synchronic-diachronic reading and supported by a literature review of the theory and factors of similar studies that have been done. Factors that studied are: physical development, changes the function, ownership status, the economy, social value, and cultural value. Results of exploratory factors can be seen in Table 2 below:

Table 2: Result of exploration of the factors that shift region's identity

Respondents	Indicators and A/DS					
	1	2	3	4	5	6
The owner (an heir) of the prince's house or Kasunanan family	A	A	A	A	A	DS
Conservationists	DS	DS	A	DS	A	DS
<i>Management Agency of Kasunanan Kingdom Surakarta</i>	DS	DS	DS	A	A	DS
Community leaders in Baluwerti	A	DS	DS	DS	DS	DS

Source: Analysis, 2010

#### Information:

1. Physical Development

2. Function Change

3. Economy

4. Social Value

5. Status of Ownership

6. Culture Value

A: Agree

DS: Disagree

#### Phase II (First Iteration)

Based on the results of first Phase, there is a reduction of factors from six factors by a literature review of the theory and factors of similar studies that have been done into five factors by exploring synchronic-diachronic reading. Then the addition of two 2 factors from the respondents opinion. So that the number of indicators as factors that shift the region's identity be seven factors.

Table 3: Result the first iteration of factors that shift region's identity

Respondents	Indicators and A/DS						
	1	2	4	5	3	6	7
The owner (an heir) of the prince's house or Kasunanan family	A	A	A	A	A	A	DS
Conservationists	DS	A	A	A	A	A	DS
<i>Management Agency of Kasunanan Kingdom Surakarta</i>	DS	A	A	A	A	DS	DS
Community leaders in Baluwerti	A	A	DS	DS	DS	DS	DS

Source: Analysis, 2010

#### Information:

1. Physical Development

2. Function Change

3. Economy

4. Social Value

5. Status of Ownership

6. Understanding of the Baluwerti Residents to the Preservation Activity

7. Policy of Government

- A: Agree

- DS: Disagree

### Phase III (Second Iteration)

In the second iteration there is a reduction in indicators from seven into five indicator because there is one factor that is not agreed upon, and one factors that have been agreed upon by the respondent.

Table 4: Result the second iteration of factors that shift region's identity.

Respondents	Indicators and A/DS				
	1	2	3	4	5
The owner (an heir) of the prince's house or Kasunanan family	A	A	A	A	A
Conservationists	A	A	A	A	A
<i>Management Agency of Kasunanan Kingdom Surakarta</i>	DS	A	A	A	A
Community leaders in Baluwerti	A	A	A	A	A

Source: Analysis, 2010

Information:

1. Physical Development

2. Economy

5. Understanding of the Baluwerti Residents to the Preservation Activity

3. Social Value

4. Status of Ownership

A: Agree

DS: Disagree

### Phase IV (Third Iteration)

In the third iteration there is a reduction in indicators from five indicator to one indicator because there is still one factor that have not been agreed and four factors that have been agreed upon by the respondent.

Table 5: Result the third iteration of factors that shift region's identity.

Respondents	Indicator and A/DS	
	1	
The owner (an heir) of the prince's house or Kasunanan family	A	
Conservationists	A	
<i>Management Agency of Kasunanan Kingdom Surakarta</i>	A	
Community leaders in Baluwerti	A	

Source: Analysis, 2010

Information:

1. Physical Development

A: Agree - DS: Disagree

From the results of Phase IV (the third iteration) of Delphi analysis, reached consensus/agreement of four respondents. So the factor that agreed shift the region's identity are: Physical Development, Function Change, Economy, Social Value, Status of Ownership, Understanding of the Baluwerti Residents to the Preservation Activity.

### CONCLUSION

The findings of the development study of spatial pattern in Baluwerti Village, Surakarta City, Central Java Province, Indonesia are: circulation path as a *paths* element, yard of Kasunanan Kingdom (kamandungan) and the four main gates as *nodes*, residential units

as a district, the Kingdom building and the house of Prince as landmarks shifting physical and functions. While the fortress as the edges do not experience physical changes but change the function. Factors that shift the region's identity are: Physical Development, Function Change, Economy, Social Value, Status of Ownership, Understanding of the Baluwerti Residents to the Preservation Activity. It can be concluded that the spatial pattern in the Baluwerti village influenced by the activities of people who live in it, socio-cultural, historical aspects, and the orientation of the development of the city.

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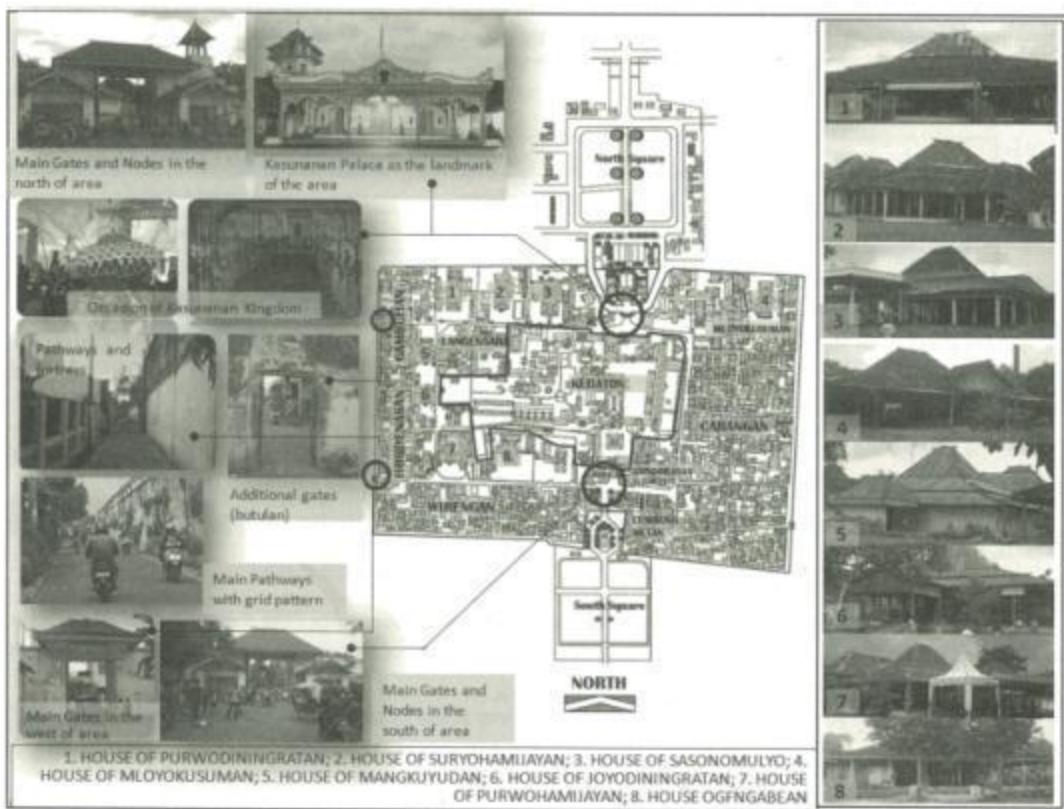
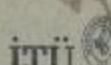


Figure 6: Elements that forming the region's identity of Baluwerti Village, Surakarta City, Central Java Province, Indonesia  
(Source: Author, 2014).



EMLAK KONUT

ÇUHADAROĞLU

YTONG

İMAYOL

DENİZ  
KILAÇUZLUK