



## ORIGINAL ARTICLES

### Determination of Potential Heritage Area Based on Typology in Surabaya

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#### ABSTRACT

Surabaya is known as city of heroes. Many historical and heritage buildings and sites are situated in this city. Based on field and literature survey, there are nine areas that can be categorized as heritage areas based on their characteristics. These areas have their own specific heritage values that are not similar one to another. However, the importance of each area and the valuable meaning to the society are required to be explored and analyzed through theoretical and empirical review. Moreover, the typology of each heritage area must be explored from the society in viewing the region. It is a kind of community behavior that becomes a basic consideration in the development of historical areas. From nine historical areas that have been observed and analyzed, it is determined that only five historical areas that have specific characteristic. Those areas are Ampel as a typology of religious region, Tunjungan as a typology of tourism and trade, Tugu Pahlawan as monumental area offices, Jembatan Merah as a regional center for trade and history, and Bubutan as a trade zone and special interests. In principle, the areas are expected to become heritage products that can grow in socio-cultural and economic sustainability.

**Key words:** Heritage area • Conservation • Public behavior • Typology.

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#### Introduction

Heritage is the contemporary usage of a past and is consciously shaped from history, its survivals and memories, in response to current needs for it (Ashworth, G.J. and J.E. Tunbridge, 1999). Historical area is one of historic heritage that plays a role in the development of a city (Kostof, S., 1991; Pacione, M., 2001). The existence of community in heritage area cannot be neglected in the development planning. Refusal from community to the development planning is mainly caused by the absence of socio-cultural approach to accommodate the truth community needs (Daldjoeni, N., 1997).

The study of historic areas in Surabaya was done by Van Ellen and Spijkerman (Van Ellen and Spijkerman, S.C., 1991). It was titled Urban Heritage of the Old City in Surabaya. The result of the study showed that the approach to spatial arrangement the heritage area shall be based on historical value of old buildings, the use or re-use of buildings and new building design guidelines of the area. However, the study has not touched or involved the people who live in the area or surrounding communities, who directly or indirectly, color the life of the region. As a result, the outcome of the study possibly does not match with the community expectation. Therefore it is recommended that heritage conservation should be explored from the phenomena of society in addressing the region.

Surabaya has legitimized its heritage buildings and sites based on Local Regulation No.5/2005. There are many heritage areas in Surabaya City, such as Ampel, Bubutan, Darmo, Genteng, Gubeng, Jembatan Merah, Dr. Soetomo and Tambaksari, Tugu Pahlawan and Tunjungan. These nine heritage areas have particular characteristics that are not similar. Furthermore, the level of community involvement in each area is different as well. The objective of this study is to determine the selected heritage areas that have cultural significance and particular characteristic in Surabaya City by taking into consideration the community involvement.

#### Literature Review:

Heritage is defined as the contemporary use of the past and the use of heritage is not only for economic purposes but also has cultural aims (Lowenthal, D., 1998). Heritage site is an area that has historical value which contain of underlying value and meaning, physically and non-physically (Supriharjo, R., 2004). Therefore, the cultural value of heritage, both abstract and monetary, is evaluated in the present situation (Graham, B. *et al.*, 2000). In the Burra Charter (Australia International Council on Monuments and Sites

(ICOMOS, 1999), cultural significance is defined as “aesthetic, historic, scientific or social value for past, present or future generations”. Cultural significance is a concept which helps in estimating the value of places. The places that are likely to be of significance are those which help an understanding of the past or enrich the present, and which will be of value to future generations.

Logan (2003) states that the community has right to maintain its culture, and it is regarded as part of the basic human rights and part of citizenship. The community should take all forms of the heritage into account by involving the communities concerned.

Lynch (1960) divides the “environmental image” into three separate components of “identity, structure and meaning”. In reality they always appear together. Image identity requires the recognition which can only be conveyed if the object has a clear distinction and difference from the presence of other elements. The structure must express a “spatial or pattern relation of the object to the observer and to other objects” around it. The structure must also have some sentimental value and “emotional” meaning to the viewer. He also signifies that “meaning” is also a “relation” to the object, however, “spatial or pattern relation” are much different from the “relation” of “meaning”.

In order to emphasize the character or site image in the heritage development context, the existence of linkage is required in cities, whereas it can be developed through three approaches, i.e. (Zahnd, M., 1999):

- a. Visual linkage, where two or more city fragments are connected into a single unit visually. There are five elements used, namely line, corridor, edge, axis and rhythm.
- b. Structural linkage, where two or more structure form are combined into one unit order. Three elements in achieving architectural connection are done through structural linkage, such as addition, connection and penetration.
- c. Collective form linkage, it relates to the environment as a whole. Elements that relates to this linkage are composition, mega form and group form.

## Material and Methods

The research adopts rationalistic and phenomenological approach. The research type is explorative, which uses combination of qualitative and quantitative methods. It adopts deductive and inductive approaches. The approaches are used to explore and record the phenomena that grow in the community.

The observation unit of this research is nine historical regions that are known as “old town” Surabaya. These regions are Ampel, Bubutan, Darmo, Genteng, Gubeng, Jembatan Merah, Dr. Soetomo and Tambaksari, Tugu Pahlawan and Tunjungan. They consist of individuals that exist in groups of community from various ethnic and culture as well as level of economic and education.

Unit of analysis is formed through integration of activity, mind and space in community in the form of information. Data and information are gathered from empirical facts. Interpretation of information should contain meaning so that it can be combined as a theme. The theme comprised linkages among: (i) communities, that consist of residents and user community with diverse/heterogeneous character, (ii) activities that consist of daily activities, lifestyle and mind of community that relates to preservation area, (iii) environment, that consist of elements such as place, space and other physical component as objects, and (iv) history, in the form of cultural developments, morphological changes and spatial patterns of the region as the objects of this research.

## Results and Discussion

As explained previously, there are nine heritage areas that have particular characteristics and would be selected as potential heritage areas in Surabaya based on typology. These areas are well-known as “old town” Surabaya.

From the field survey, it is found that each area has different characteristics, such as the function of the area, land use, buildings, spatial form and elements that become identity as well as characteristics of the area. Table 1 shows elements such as function, land use, building styles and identity that emphasize the site characteristics. The building style is dominated with colonial/Dutch style, while the land use is typically mixed among trades, services and offices.

**Table 1:** Elements that Emphasize the Site Characteristics.

No.	Sites	Function	Land Use	Building Style	Identity
1	Ampel	Religion	Mixed-used	Java, Chinese, Dutch	Mosque/Cemetery
2	Bubutan	Trades	Mixed-used	Dutch/Chinese	Ex. Hospital/ Shopping facilities
3	Darmo	Housing/services	Mixed-used	Dutch	Hospital/School/ Housing
4	Genteng	Trades/services	Mixed-used	Dutch, Chinese	Shopping facilities
5	Gubeng	Services/Housing	Mixed-used	Dutch	Housing
6	Jembatan Merah	Trades/Services	Mixed-used	Dutch, Chinese	Shopping facilities
7	Dr. Soetomo and Tambaksari	Trades/Services/Health Facilities/Education	Mixed-used	Dutch	Church/Housing

		Facilities			
8	Tugu Pahlawan	Trades/Services/Offices	Mixed-used	Dutch	Tugu Pahlawan Monument
9	Tunjungan	Trades/Services/Offices	Mixed-used	Dutch	Shopping facilities/ offices

Source: Field Survey, 2010.

The nine heritage areas were then evaluated by focusing on the spatial function in each geographical unit as well as the density of the heritage objects within the area. The description is explained as follows:

1. **Ampel:** The area that formed specific spatial sense is physically and visually bordered by KH. Mansyur Street and Pegirian Street. Archaeological sites that strongly support the site are Ampel Mosque, Sunan Ampel Cemetery and the existence of other historical buildings.
2. **Bubutan:** The space is specifically located between Pasar Besar Street and Kranggan Street. The dense archaeological sites are marked with historical buildings such as restaurant (formerly known as hospital), church, police office, Koblen Prisons, and several heritage sites such as Alun-Alun Contong, Kampung Kraton and Tumenggungan.
3. **Darmo:** The area that formed a strong spatial sense is located at Darmo Street. Archaeological site is characterized by Sunan Bungkul Cemetery and former Dutch housing complex.
4. **Genteng:** Archaeological sites cannot form a unity in the space. The heritage sites that strengthen the area are Kampung Peneleh and Lawang Seketeng. Therefore the area is less considered as heritage area with high historical value.
5. **Gubeng:** The spatial sense that can reflect a strong function is located at Gubernur Suryo Street, wherein Joko Dolog Statue existed. The density of heritage buildings is characterized by Grahadi, Balai Pemuda, Simpang Post Office and school. Another spatial sense can be found in Walikota Mustajab Street and Taman Surya Street, wherein Balai Kota as mayor's office and several housings with Colonial Style existed.
6. **Jembatan Merah:** The spatial sense in this area can be divided into two parts. First is the space located along Rajawali Street that is characterized by heritage buildings for offices. Second is the space located at Kembang Jepun Street, where historical buildings are used for shopping facilities.
7. **Dr. Soetomo and Tambaksari:** In this area, it is seen that the distribution and the density of heritage buildings and sites cannot form an integrated spatial sense. Therefore this area is also less considered as high value heritage area.
8. **Tugu Pahlawan:** This area formed a specific spatial sense, particularly around Tugu Pahlawan Monument and the surrounding buildings. The spatial sense in Tugu Pahlawan Monument reflects the heroic image. This area is bordered with Pasar Besar and Pahlawan Street. The second spatial sense can be found at Veteran Street, where the heritage buildings are characterized by offices buildings.
9. **Tunjungan:** Within this area, there existed the most dense heritage buildings and sites. The spatial sense is strengthened by the presence of heritage buildings for offices use and hotel (Majapahit Hotel).

Categorization of heritage area is determined through exploration of the determining variables. The most important step is to get the identity or special characteristics of these regions, that are explored from the values that grow in the region, function and land use that are supported by the community behavior who live in the region. The determining variables include:

- a. Value of heritage area, this variable is determined based on several indicators such as the area: (i) grows within the historical framework, (ii) grows in the communities that have commitment and in the same transcendental beliefs, (iii) grows and well develop socially, culturally and economically, and (iv) has space to accommodate self expression and community's role in anticipating the dynamic of social life.
- b. Identity of heritage area, which is formed by: (i) events (urban ritual) and activities that are exist, (ii) locality's history - linkages with past time sustainability, (iii) ability of communities to have orientation that relates to clarity of structure and harmonious relation among objects in the region.
- c. Aspects that form categorization of the region, which consist of these dimensions: (i) form of region, (ii) function of region, (iii) planning strategy and (iv) activity.

Scoring of nine heritage areas is done based on several indicators, such as:

- a. **Aesthetic Value of Objects:** Assessment of aesthetic value, originality, and level of object preservation.
- b. **Spatial Distribution:** Qualitative assessment of the distance density among objects that lead to the site potentiality
- c. **Social Organization and Ritual Pattern:** The existence of connection that form particular character. The character can be identified from one of these typologies: (i) typology of religion, (ii) typology of trades, (iii) typology of office, (iv) typology of special interest tourism.

Determination of selected sites is done through scoring, with the following rules:

- a. Aesthetic value is scored from 1 to 3:

- score 3 for historical buildings and site that have high historical value, originality or small renovation and well preserved.
  - score 2 for those which have moderate historical value, many changes from the original form and style, and fairly preserved.
  - score 1 for those which have low or no historical value, loss of original form and style, and not preserved.
- b. Spatial distribution/density is scored from 1 to 3:
- score 3 for the sites that have high number of heritage buildings and sites.
  - score 2 for those which have medium number of heritage buildings and sites.
  - score 1 for those which have small number of heritage buildings and sites.
- c. Social organization and ritual pattern are scored from 1 to 3:
- score 3 for the sites that already have social organization of community and have strong relation.
  - score 2 for those which have social organization but there is no relation among the organization.
  - score 1 for those which have no social organization as well as ritual pattern.

**Table 2:** Determination of Sites that Have Optimal Score based on Selected Indicators.

Site	Spatial Distribution/Density			Aesthetic Value of Objects				Social Organization and Ritual Pattern			Final Score
	Value	Weight (30)	Score (value x weight)	Weight			Score (sum of weights)	Value	Weight (40)	Score (value x weight)	
				Site Objects Value (10)	Originality (10)	Level of Preservation (10)					
Tunjungan	2	30	60	150	480	440	1070	2	40	80	1210
JMP	2	30	60	360	680	610	1650	2	40	80	1790
Darmo	1	30	30	30	320	350	700	0	40	0	730
Bubutan	1	30	30	130	250	320	700	0	40	0	730
Dr. Soetomo	0	30	0	30	110	110	250	0	40	0	250
Ampel	2	30	60	190	350	320	860	2	40	80	1000
Gubeng	1	30	30	150	240	260	650	0	40	0	680
Genteng	0	30	0	0	130	130	260	0	40	0	260
Pahlawan	2	30	60	290	230	250	770	1	40	40	870

Source: Scoring Analysis.

The site character with its typology is suited with the environment character and the human sensitivity in enjoying the place. A place does not have a meaning when space formed has no meaning. Therefore, formation of place is seen from three factors, namely:

- a. Orientation: the site can be seen, understood and reached as a visual series, i.e. observation process in motion.
- b. Position: meaning in feeling the position within the region.
- c. Content: meaning in feeling the activities exist in the region.

Formation of site image in typological heritage areas in Tunjungan, Jembatan Merah, Ampel, Tugu Pahlawan and Bubutan is described in Table 3.

**Table 3:** Formation of Site Image in Typological Heritage Areas.

Site	Form of Site Image (Orientation, Position, Content)
Tunjungan	Orientation: Tunjungan area has a corridor form, where the buildings in this area can be viewed sequentially. Center of the orientation is located in the key building, that is Majapahit Hotel (previously Orange Hotel), which has high historical value. The weakness of the orientation is the absence of sign that can direct the orientation.
	Position: The meaning of position expresses a wide and long space, so that it can be viewed as an arcade. The arcade is strengthened by the buildings style that has historical value. The site has not been arranged sequentially.
	Content: Contents revealed the presence of the daily activities. The meaning of activity in this site is informal, free and dynamic. The atmosphere of service activities forms a dynamic atmosphere. However, during the night, it is required to increase activities that reflect the daily activities in order not to convert into deadly area.
Jembatan Merah	Orientation: Jembatan Merah has a form of corridor, with combination of mall and strong historical symbol, i.e. Jembatan Merah (Red Bridge). The bridge serves as a monument for orientation. The buildings in the region have a particular characteristic or style as historical buildings. The spatial sense in this area is fragmentally enjoyed.
	Position: The spatial sense as well as the visual enjoyment is strengthened by the existing nodes that formed culdesac. However, the sense of climax cannot be felt yet.
	Content: The content of activities in this site shows a variety, i.e. trades and services. The building style expresses an ancient atmosphere. Small renovation such as repainted and landscape improvement is worthy to consider.
Ampel	Orientation: Ampel is an area shaped by the street outside the region. Heritage buildings that became the strongest orientation is the mosque and cemetery. The orientation focuses centrally.

Site	Form of Site Image (Orientation, Position, Content)
	<p><b>Position:</b> The meaning of position in this area forms a radial space, with the mosque and cemetery as the center. The radial form expresses the circular form the region.</p> <p><b>Content:</b> Activity in this site is strongly related to religion. As a consequence, this site is well-known as religious tourism. This nuance of Islamic religious activity makes the site lives. The situation at night needs to be optimized through similar existing activity.</p>
Tugu Pahlawan	<p><b>Orientation:</b> Tugu Pahlawan is an area that formed a corridor. The center of orientation focuses on the Monument of Tugu Pahlawan. The visual sense can be enjoyed in a rounded area.</p> <p><b>Position:</b> The meaning of position is strengthened by the visualization of Tugu Pahlawan Monument. The sense of formal, great and symmetric can be felt in the area. The strength of corridor does not need to be upgraded, so that the monumental impression does not disappear.</p> <p><b>Content:</b> The presence of monument and government offices with colonial style brings a formal and great sense. The special interest tourism is supported by the museum as historical evidence. However, the area is required to be arranged sequentially in order to strengthen the monumental sense.</p>
Bubutan	<p><b>Orientation:</b> Bubutan is located in a non-rigid corridor area. The corridor is divided into two segments, i.e. right and left. The main orientation focuses on the heritage buildings that existed along the corridor. The restaurant (previously known as Mardi Santosa Hospital) is one of heritage building that becomes point of interest in this area. However, there are several heritage sites that have not put as an orientation.</p> <p><b>Position:</b> The meaning of spatial sense is split into two parts, right and left side. There is a different sense in enjoying the right and left side. In this case, it is required to balance both sides.</p> <p><b>Content:</b> The sense of trade activities is not strongly felt, as there is a mixture of activities in both sides. The strength of heritage buildings in this site does not balance, so that it is required to emphasize rhythm and circulation in the area.</p>

Source: Analysis and Field Survey, 2010.

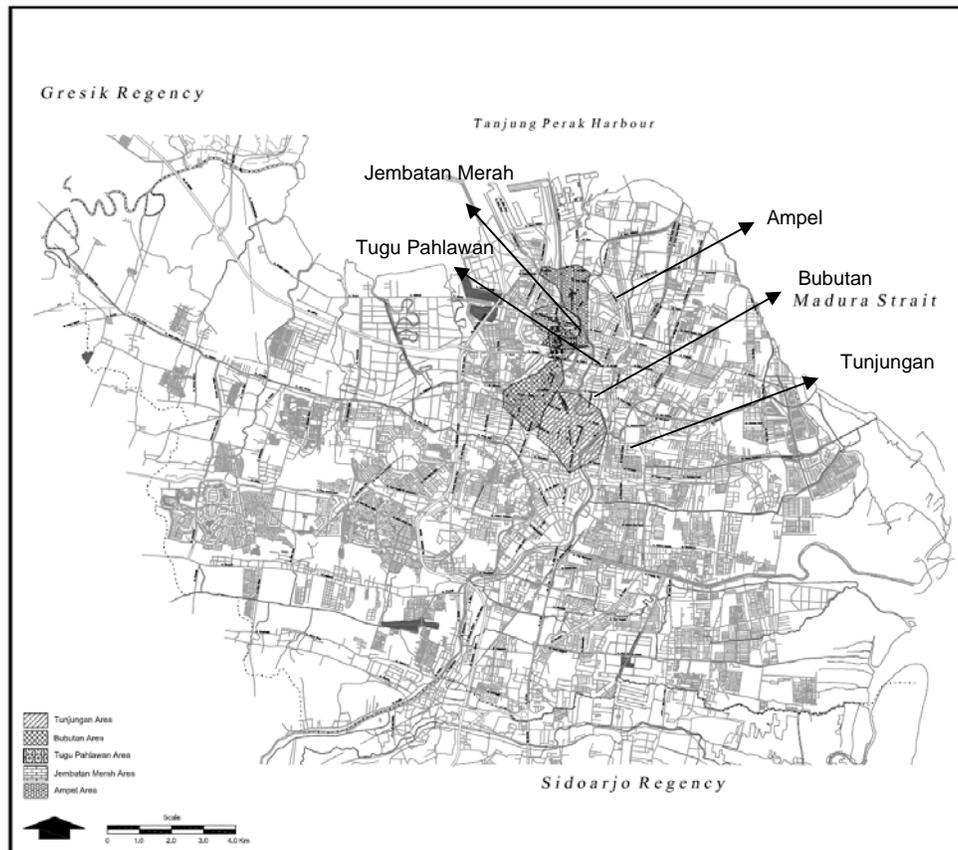


Fig. 1: Map of Selected Historical Sites that have Particular Typology.

### Conclusion:

The main findings of this research are the selected historical sites that have been scored based on several indicators, such as spatial distribution/density, aesthetic value of objects and social organization and ritual pattern. The five areas selected are *Ampel* as typology of religious tourism site, *Tunjungan* as typology of trades and services tourism site, *Tugu Pahlawan* as monumental offices site, *Jembatan Merah* as center of trades and historical tourism site, and *Bubutan* as trades and special interest tourism site.

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### References

- Ashworth, G.J. and J.E. Tunbridge, 1999. Old cities, new pasts: Heritage planning in selected cities of Central Europe. *GeoJournal*, 49(1): 105-116.
- Australia International Council on Monuments and Sites (ICOMOS), 1999. *The Burra Charter*. Australia ICOMOS Incorporated.
- Daldjoeni, N., 1997. *Seluk Beluk Masyarakat Kota*. Bandung: PT Alumni
- Ashworth, G.J., 1991. *Heritage Planning: Conservation as Management of Change*. Geo Press. The Netherlands.
- Graham, B., G. Ashworth and J. Tunbridge, 2000. *A Geography of Heritage: Power, Culture and Economy*. Hodder Arnold Publication.
- Kostof, S., 1991. *The City Shaped*. Urban Patterns and Meanings Through History. A Bulfinch Press Book, London.
- Logan, W., 2003. *Managing the Cultural Environment in Towns and Cities: New Ideas on Urban Conservation*. Paper presented in International Conference on Environment and Urban Management, Soegijapranata Catholic University, Semarang.
- Lowenthal, D., 1998. *The Heritage Crusade and the Spoils of History*. Cambridge University Press, Cambridge.
- Lynch, K., 1960. *The Image of the City*. MIT Press, Cambridge.
- Pacione, M., 2001. *Urban Geography. A Global Perspective*. Routledge, USA.
- Supriharjo, R., 2004. *Nilai Ruang di kawasan Ampel Surabaya*. Dissertation at Department of Architecture, FT-UGM, Yogyakarta.
- Van Ellen and Spijkerman, S.C., 1991. *Urban Heritage of Kota Lama in Surabaya, Indonesia*. TU Delft, The Netherland.
- Zahnd, M., 1999. *Perancangan Kota secara Terpadu*. Kanisius, Yogyakarta.