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Understanding the place attachment and place identity in public space through the ability of community mental map

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Understanding the place attachment and place identity in public space through the ability of community mental map

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Abstract. Nowadays, numerous large cities in Indonesia are intensively providing urban public spaces. One of the famous public open spaces in Semarang City is the Simpang Lima area that serves as not only a public interaction space, but also a landmark of the city. Its visitors who come from various ages carry out activities in the daily and weekly times as they sit, discuss and interact with others. In addition, this public space is also used as a media for expressing ideas or interests of a group of users, such as groups with certain hobbies. The tendency of preference towards the use of public space is strongly influenced by one's psychological attachment to space and place identity. This study aimed to examine the substance of place attachment and place identity through the ability of the community mental map. This study employed a phenomenological and functional approach, namely the disclosure of the ability of the community mental map through the technique of drawing sketches of areas that they understood and recognized and then supplemented by in-depth interviews. The results of the study illustrated that the attachment of places by users depended on their experience when visiting in this public space and the characteristics of the place identity of this public space.

Key words: place attachment, place identity, mental map, phenomenological and functional

1. Introduction

In general, a person's attachment to place (place attachment) is an integrated concept that encompasses the interaction between affection and emotion, knowledge and trust, behavior and actions related to the place. Meanwhile, the user's attachment to the place is a sense of pleasure in being somewhere and regret or sadness if they have to leave the place. These positive and negative emotions are related to how people interpret the nature of place quality, not only because the physical needs of the community are fulfilled from that place [1].

Place attachment is an emotional bond between people and places, [2] and is a major concept in environmental psychology. This is greatly influenced by individuals and their personal experiences. [3] A large amount of research is dedicated to define what makes a place "meaningful" enough for place attachment. Schroeder [3] mainly discusses the difference between "meaning" and "preference," defining meaning as "thoughts, feelings, memories and interpretations evoked by landscapes" and preferences as "the degree of liking for one landscape compared to another." [4]. Because place attachment is multi-dimensional [5], it cannot be explained only through a cause and effect relationship. Instead, it depends on the reciprocal relationship between behavior and experience. [6] Due to various opinions about the definition and component of place attachments, organizational

models are still scarce in recent years. When describing the attachment of places, experts distinguish between "roots" and "sense of place". Sense of place attachment arises as a result of planting meaning and artifacts related to places created [7]. Because of the constant migration over the past few centuries, Americans are considered to be the most common types of attachment places, because they do not stay in a place long enough to develop multilevel roots [7]. On the other hand, it is the attachment of unconscious places to a place because familiarity is achieved through continuous residence - perhaps that of the lineage of families who have known this place in the years before the current population [7].

Urban public space is one property that must be owned by a city for the interest of interaction between citizens and it applies to the public. Public spaces can serve the social needs of urban communities and provide knowledge to visitors. Communities use public space as a place to relax, play, walk and read [8]. Public space can be referred to be a group of many behavioral settings. However, it will be a problem if one behavior setting dominates and controls public space. To ensure that public spaces run well, the behavior setting should still be controlled. If there is a problem in public space, behavior settings can be controlled by looking at patterns of activity, milieu (social environment), synomorphic (the relationship between patterns of activity with milieu), temporal, and territory [9]. In understanding the sense of community attachment to urban public space, this study borrows an organizational framework consisting of three separate but overlapping dimensions called the tripartite model of place attachment [10]. This model consists of dimensions of people, processes and places (Figure 1).
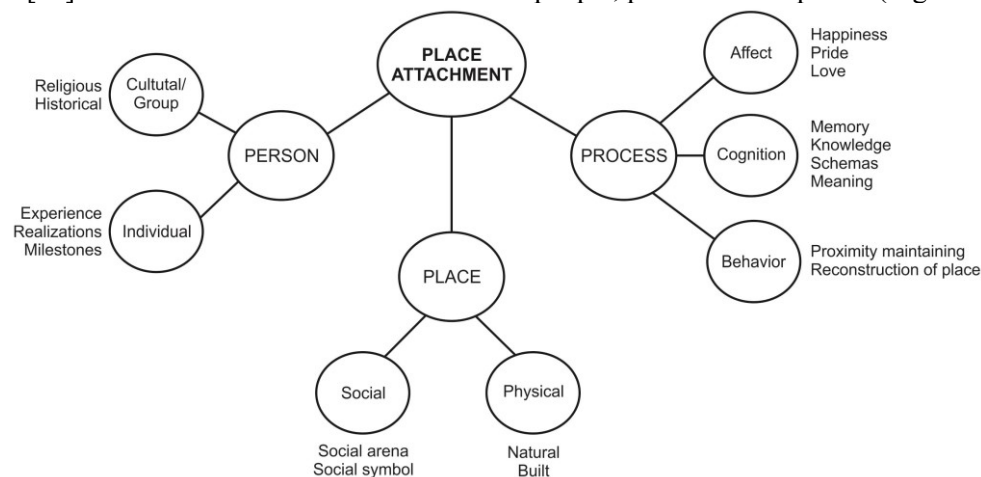
Figure 1. Tripartite model from place attachment
Source: Scannell and Gifford [10]

Figure 1 explains that the first dimension involving place attachment is the actor; who is attached to that place? Is the attachment based on the meaning obtained individually or collectively? Place attachments can operate at individual or collective levels. The symbolic meaning of a particular place is related to individual experience or collective experience. The second dimension is psychological processes. How are affections, cognitions and behaviours manifested in attachment? The psychological processes involved in place attachment consist of various combinations of emotions, cognitive and behaviours associated with a particular place, which appear in the form of feelings of sadness and longing when separated from a particular place. The third dimension is, to whom attachment is referring? What is the nature of the place that affects the process of attachment? The nature of a place can be divided into physical components (rootedness) and social components (bondedness) [10].

Along with the attachment of place, place identity is another important concept that refers to the bond between people and place. The word identity means two things [11]: similarity (continuity) and distinctiveness (uniqueness), and thus the term 'place identity' must combine both aspects. In this case, the concept of 'identity', when applied to a place, can carry two completely different meanings. In the

first sense ''identity' refers to the term' 'place' and means a set of features that guarantee the specificity and continuity of place in time. The concept of 'loc genius loci', is used to describe the unique character of a place that is difficult to penetrate but agreed in general [12], reflecting the meaning of 'place identity'.

One of the instruments to reveal the place attachment and place identity is the ability of the community mental map. Spatial cognition or mental map becomes an attempt to understand a place especially towards the city. The above terms adhere to the definitions and theories pioneered by David Stea and Roger Down [13]. They define one meaning: "A process that allows us to collect, organize, store in memory, call, and recount information about relative locations and signs about our geographical environment".

Mental map is basically an active process carried out by the observers. Therefore, their appreciation of the urban environment occurs spontaneously and directly. Spontaneity occurs because the observers always explore the environment and involve every object that exists in its environment. Each object accentuates its characteristics that are unique to the observers concerned [14].

[13] states that spatial cognition as a basic component in human adaptation to the urban environment. Besides, mental maps are seen as a requirement both for human survival and spatial behavior every day. Additionally, mental maps are individual representations arranged from several parts of their geographical environment. Lang [15], states that a person's behavior with regard to space and place cannot be understood without understanding the description of spatial cognition that is obtained and used.

2. Methods

The substance of place attachment and place identity of each individual is always different or subjective, because it depends on experience. Since it is subjective, the approaches employed were [16, 17]:

1). *Phenomenological approach*, a descriptive analysis of the experience of the observer in living an urban environment. is a qualitative approach;

2). *Functional Approach*, which is a laboratory measurement of observers given a stimulus, is a quantitative approach;

Craig (in [18]), formulates the typology of stimulus presentation methods presented to observers in revealing the substance of place attachment and place identity. One of them is the graphical method that is by sketching maps of the city area with little controlling the observer's interpretation of distance and form.

The group of respondents who were made as observers were students of the Department of Architecture of the Faculty of Engineering, Diponegoro University, at least in the sixth semester. As many as 120 students with those criteria were very familiar with the public space of the Simpang Lima Semarang area. The selection of observers from student groups is based on the opinion of Bechtel et.al [19] that groups of respondents/observers involved in researching perceptions of the built environment are called "research participants". The method of data analysis was conducted in two ways [16,17], namely:

1). Overlaying a sketch map drawn by 120 respondents. The results of the overlay would reveal which areas were easier for the respondents to comprehend. Mostly, the well-known areas would form a thicker line.

2). Categorizing field data, consisting of identity elements described by the observers/respondents. The same elements would be grouped according to their characteristics. Analysis of categorization was also used to analyse interview data. Similar results or the ones having the same substance answers would be grouped according to the needs.

3. Research Findings and Discussion

The public space of the Simpang Lima area in Semarang city as the object of research consists of the Simpang Lima field, connected by five main city streets where the most prominent one is the Pahlawan street. In addition to its relatively larger dimensions, this street also forms a fairly strong axis. With a length of approximately 1 kilometer, this road becomes the city's main road that connects the lower and upper part of Semarang city. Its existence is closely related to the Simpang Lima area as a center of trade and office activities in the city of Semarang (Figure 2). Simpang Lima Field became very famous because it had previously become a culinary center that starts from the afternoon until the morning. Aside from being a culinary center, this street also attracts residents to interact socially. Since the area underwent physical improvement in early 2012, there have been a growing number of visitors. Culinary activities are arranged with a more attractive appearance, as well as wider pavements.
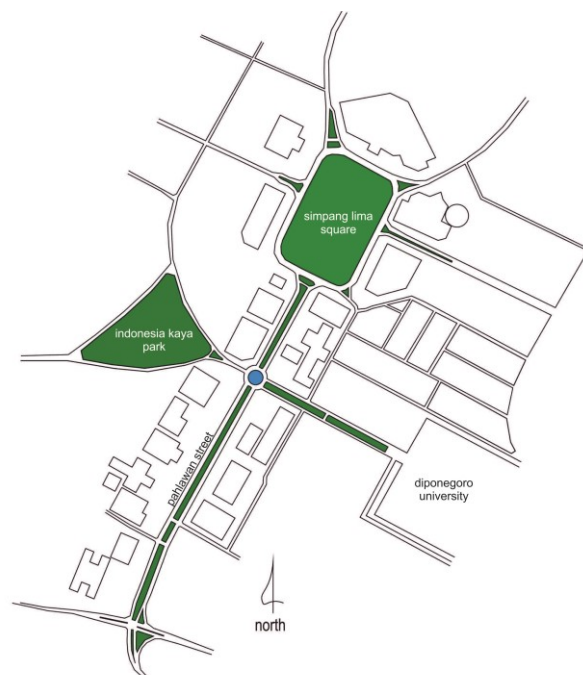

Figure 2. Simpang Lima Semarang Area Map
Source: Redrawn based on Google Map, 2019

The dominant activities in Pahlawan street are divided into two groups, namely formal activities that occur in the morning to evening and informal activities that occur during the afternoon until before the morning. More formal activities are due to office activities, especially government offices. While more informal activities are due to the gathering activities of citizens from various socio-economic stratum and ages. Activities that appear in this public space are also increasingly diverse, from merely gathering and recreation, socialisation, music performances, to as a gathering place for groups of bicycle, motorcycle and car enthusiasts of various shapes, types and brands. This public space is also used as a place to interact with residents, especially on Sunday mornings for sports, such as walking, cycling, gymnastics and so on. In particular, the Semarang city government made a policy that every Sunday in Pahlawan street becomes car free day. In certain conditions, this public space is also used by residents to perform creative activities in singing together, dancing and even become a carnival event named Semarang Night Carnival. Residents consider the existence of this public space, especially in Pahlawan street as the right place to demonstrate their aspirations. Since there is also a government office of the Governor's of Central Java Province, this road is always crowded with residents (Figure 3).

Figure 3. Various kinds of citizen creativity in the Simpang Lima Area
Source: taken from various sources

Based on data analysis carried out by overlaying a sketch image of the Simpang Lima area drawn by 120 observers as respondents, a sketch of the map of the area was produced with an understanding as shown in Figure 4. The picture shows that thick lines were more dominant areas recognized by the observers/respondents.

Figure 4. Sketch overlay of the Simpang Lima drawn by respondents
Source: results of data analysis

Based on the results of the disclosure of observer mental map to the level of understanding of the region, especially in terms of orientation, as many as 12 respondents (10.00%) said it was very easy to orient, as many as 56 respondents (46.67%) said it was easy to orient, 38 respondents (31, 67% said that it was quite easy to be oriented, as many as 11 respondents (9.17%) said it was difficult to orient, and as many as 3 respondents (2.50%) said it was very difficult to orient (see Figure 5).
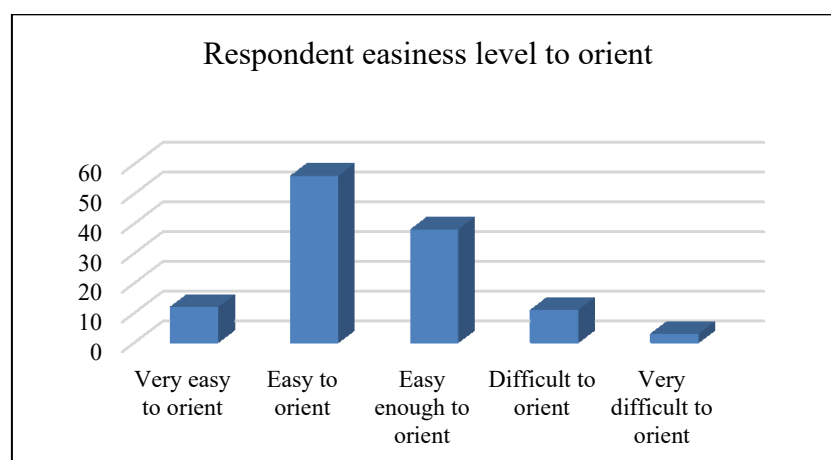

Figure 5. Respondents' easiness level to orient

In addition to map overlays, the observers in their drawn map described the number of urban elements that were recognizable. The introduction of the physical elements of a city was closely related to place identity. Respondents described and recognized 22 elements. Simpang Lima area, Ciputra hotel and mall, and Diponegoro University campus were the most recognized elements by respondents, 120 people (100%), then the Central Java Governor's Office and pavements on Pahlawan Road were recognized by 119 and 118 respondents, food vendors were recognized by 117 respondents, Central Java Representative's Office was recognized by 110 respondents, and the Telecommunication office was identified by 109 respondents. Meanwhile, the physical element that was least recognized by the respondents (39 observers) was the Prosecutor's office (see Figure 6).
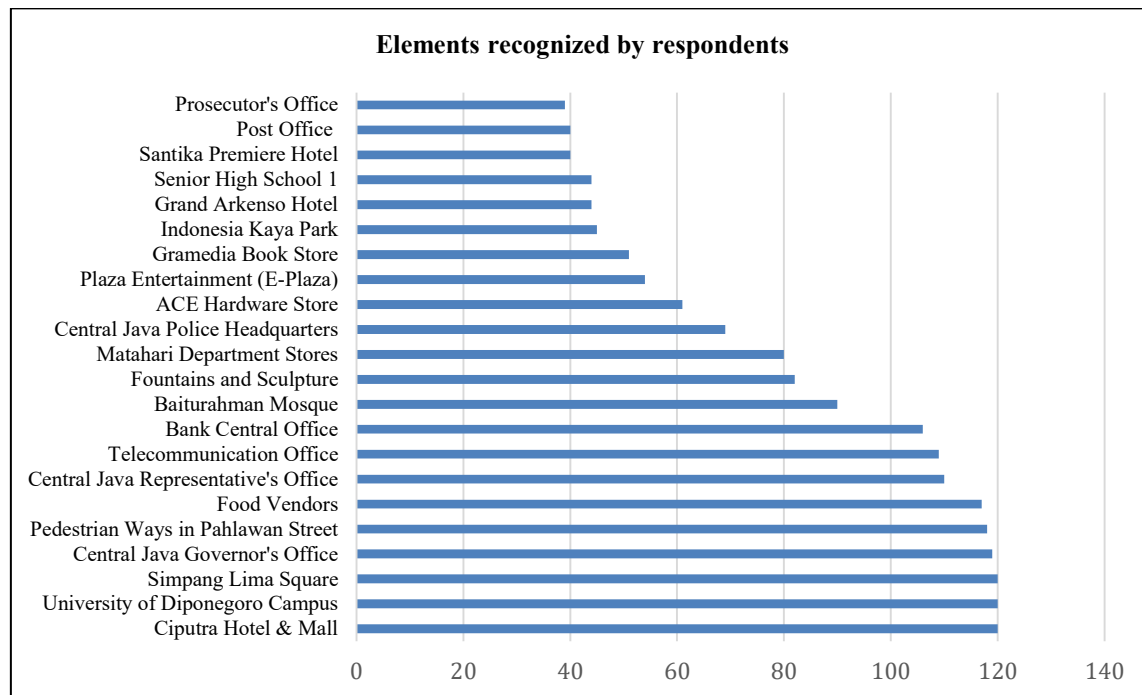
Figure 6. Level of elements recognition by the observers
Source: results of researcher analysis

The high or low ability of the observers/respondents in recognizing physical elements as an oriented tool was strongly influenced by the existence of physical elements. Of the 22 physical elements of the city recognized by the observers/respondents, the recognition of city elements carried out by observers had cognitive backgrounds, namely: [i] unique and distinctive shape, [ii] strategic location as a marker, [iii] past relationship, and [iv] as a meeting node for humans. Based on the tabulation of data 6 elements were fully recognized by respondents, namely: [i] Simpang Lima Square, [ii] Central Java Governor's Office, [iii] Pedestrian Ways in Pahlawan Street, [iv] Food Vendors (Table 1).

Table 1. Observers Understanding of Urban Elements

No.	Urban Elements	The shape is unique and distinctive (has place identity)	It is strategically located as a signifier	It has an emotional connection (having a place attachment)	It becomes a node for community activity meetings
1	Ciputra Hotel & Mall	√	√	-	√
2	University of Diponegoro Campus	-	√	√	√
3	Simpang Lima Square	√	√	√	√
4	Central Java Governor's Office	√	√	√	√
5	Pedestrian Ways in Pahlawan Street	√	√	√	√
6	Food Vendors	√	√	√	√
7	Central Java Representative's Office	√	√	-	√
8	Telecommunication Office	√	√	-	√
9	Bank Central Office	√	√	-	-
10	Baiturahman Mosque	√	√	-	√
11	Fountains and Sculpture	√	√	√	
12	Matahari Department Stores	-	√	-	√
13	Central Java Police Headquarters	-	-	√	√
14	ACE Hardware Store	-	√	-	√
15	Plaza Entertainment	-	√	-	√
16	Gramedia Book Store	-	-	-	√
17	Indonesia Kaya Park	√	√	-	√
18	Grand Arkenso Hotel	-	√	-	-
19	Senior High School 1	√	√	-	√
20	Santika Premiere Hotel	-	√	-	-
21	Post Office	√	√	-	-
22	Prosecutor's Office	-	√	-	-

Source: observer analysis results

The substance of place attachment and identity basically explains the reciprocal relationship between humans and the urban environment, which is referred to as a constructive two-way process, supported both by traits that can give an image of the environment, as well as by the characteristics of human activities and psyche [17]. Behaviour as a physical manifestation of place attachment can represent the cognitive and affective elements that an individual has in the place-person bond. Distance-keeping behaviour has been noted as a general behaviour among people who have a place attachment, similar to those who have interpersonal attachments [4].

Spatial cognition is basically the concept of internal representation of information on the characteristics of everyday environments in medium to large scales. Environmental information listed in the map can be categorized into three major groups. The first category is the element of the environment or place, which includes roads, crossroads, landmarks, buildings and others. Second is the spatial relationship between the units of the place, and the third is the travel plan, which is concluded from information that has a relationship with activities and movements. Thus, spatial cognition obtained by observers from daily interactions with the environment contains three elements of intent and travel. This is similar to Lynch's concept [11, 17], that cognitive images are influenced by three components, namely elements of identity, structures where elements of identity are located and

meaning as expressions of interrelations of elements of identity in the structure. This provides a description that when observers drew a map of the Simpang Lima area of Semarang city, by sketching the road and its intersection, they simultaneously remembered and recognized elements of identity that served as signifiers of orientation. The recognition of the physical elements of the city by the observers basically succeeded in formulating a concept of "recognition", which, by definition, is to be able to know where humans are, what is happening, and to recognize the general objects around them. In this context place identity basically starts to be built by respondents.

In understanding place attachment and place identity, aspects of the shape and structure of the city are very important, because with clear city shapes and structures it is easier for observers to imagine the shape of the city itself [17]. This has been proven in this study, that the ability of observers to describe areas of the Simpang Lima area cannot be carried out as a whole, meaning only parts of the area that they could express in their cognitive imagery. In addition, accessibility factors also became broadly important factors so that observers could explore more about the areas they wanted to recognize [11].

The clarity about the control of important areas by observers is inseparable from the factor of the Simpang Lima area itself, whether the area has clear character or not. Because specific area characters can create a place identity, which is recognition of the shape and quality of space in an urban area, generally called a sense of place. This is in line with Kevin Lynch's statement [17]. According to him, the identity of the city is not in the sense of the similarity of an object to another, but rather refers to the meaning of individuality that reflects its differences with other objects and its introduction as a separate entity. Thus, the physical elements of the city in the Simpang Lima area of Semarang city that have been identified by observers are not only intended as a medium to be oriented but also function as an element of city identity [20].

Smith [21] has identified the typology of the following places that consider their physical and social attributes. Safe places: places where people have the strongest identified bonds with them. This is a place with stability and continuity. Socialization: this is a place with a strong identified community. They can function as meeting rooms, such as the plaza. Transformative place: this is a place associated with autobiographical memories that are attached to memory as an important place. Recovery site: a place that triggers physiological reactions. This is often an area that is peaceful and natural with aesthetic beauty. Outside areas, such as national parks are often included in this category. Validating places: this is a place with cultural significance and shared meaning. Place disappears: this is a place that changes from a place normally associated with humans. This may be due to damage to nature or man-made, depletion of natural resources or features, encroachment where the incoming culture changes the meaning of the place, and restrictions where certain activities are limited.

4. Conclusion

Place attachment is an emotional bond between people and places, and is a major concept in environmental psychology. It is greatly influenced by an individual and the observer's personal experience. Place attachments are multi-dimensional and cannot be explained only through a cause and effect relationship. Instead, it depends on the reciprocal relationship between behaviour and experience. Place attachment develops from positive experiences and satisfying relationships between a person and a place, while place identity comes from beliefs, meanings, emotions, ideas, and attitudes assigned to a place.

Public space in the Simpang Lima area of Semarang has proven itself to have unique characteristics as a place where people have emotional attachments that are built repeatedly based on the context of events and time.

5. Acknowledgments

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