Space Livability of Street Vendors in Simpang Lima Public Space, Semarang

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Abstract. Street vendors in Semarang have been growing rapidly and uncontrolled. They always use public space such as public roads, sidewalks, parks and fields as trading locations. The street vendors’ activities in the public space are considered as the cause of declining on environmental quality and aesthetics of the city. All these years, the government often evicted the street vendors than organized and provides adequate space for them. As one of the actual urban activities, the street vendors’ activities should be accommodated by the government and the location for them is managed in the urban spatial plan. Street vendors need spaces which livable and suitable to their activities’ requirements, has a relationship with users (street vendors’ doers and consumers) and the activities of street vendors themselves. Research on the aspect of space for street vendors is still less in quantity, whereas space for them is an urgent matter for the government in managing their activities. This study aims to identify the livability of space based on the street vendors’ behavior in their location. This research used descriptive quantitative method with questionnaires and GIS as the mapping tool for street vendors’ location. The result of the research shows that the livability of street vendor space is based on the activity of street vendors (type of merchandise, trading places’ size, trade place assessment, space dimension, trading time, duration and period) and space conditions (access, natural elements, safety and parking space).

Keywords: Street vendor, Simpang lima, GIS

1. Introduction

The increasing urban population growth is often not matched by the expansion of employment. As a result the population of working age is greater than the existing employment opportunity [1]. The narrowness of employment in the formal sector encourages an increase in the population to enter the informal sector [2,3]. One form of informal sector in trading sector is the street vendors. They are able to provide primary and secondary goods at affordable prices for low-income communities. They also play a role in reducing unemployment, crime, and as potential tourism activities [4,5]. In addition to potentially positive, the street vendors who always use public space such as roadsides, sidewalks, parks, and fields often cause various problems.

Street vendors who occupy public space are considered to have degraded the quality of the environment and changed its function. Consequently, street vendors are often regarded as an annoying element or even as unplanned element [6–8]. One of the cities with the development of street vendors quite rapidly, namely the City of Semarang. The existence of street vendors in Semarang brought changes to the development of the city, especially in the area of Simpang Lima. The number of street
vendors in Simpang Lima is increasing and occupying public space. Their merchandises lined up causing a disturbance for covering the view to the building facade behind him. The mass of means of street vendors is mixed and unorganized so it looks chaotic and impressed slum. One of the activities of street vendors is the problem that is in the front of Baiturrahman Mosque because it caused a traffic jam.

So far, in overcoming the street vendors, the government more often displaced than to organize and provide adequate space for them. Relocation efforts by the government also always fail. The street vendors who are transferred to places that have been built by the government always return to their original place. The location of the relocation is considered not in accordance with the characteristics of its activities. Street vendors always choose places that approached consumers, but blocked the user's path of functional activities [9]. Often street vendors lose customers after relocation. Relocation places that do not consider the nature of street vendors only make the street vendors feel uncomfortable because it is far from the concentration of consumers.

In contrast to the handling of street vendors in other areas, the street vendors in Simpang Lima were overcome by stabilization, except for street vendors located in front of Baiturrahman Mosque and Ciputra Hotel and Mall. Stabilization is the re-arrangement of the informal sector to harmonize and not disturb the function of the city in the surrounding environment [10]. The street vendors in Simpang Lima remain in the public sphere, organized and controlled. The government builds street vendors in public spaces, builds infrastructure, and there are no evictions. As Shirvani [11] explains that activity always needs a place that matches the character of its activity. Street vendors who already feel comfortable with the place because it is in accordance with the characteristics of its activities, will be very difficult if moved to another place. Thus, the provision of space for street vendors should really consider the convenience of space for street vendors.

Research on livable space for street vendors is still rarely done, so far research has focused only on economic, social policy, trade characteristic and physical arrangement. Whereas space for street vendors is an urgent problem for the government in managing the activities of street vendors. Lefebvre [12] states the ideal city planning is that which can accommodate all real urban activity. As one of the real urban activities, the activities of street vendors should be accommodated by the Government by arranging the place and its location in the city spatial plan. Discussion about the livability of the space for street vendors becomes very important for street vendors’ activities are no longer considered as a problem and can be viewed as the potential of the urban economy.

2. Data and Methods

This research approach using quantitative methods. Research based on deductive thinking that is verification of the existing theory. Theories used in the study include the concept of street vendors, the theory of activity and space, the theory of production space and thirdspace and space behavior. After that's done data collection through questionnaires, interviews and observation. A sample of this research is determined by a random sampling method that is disproportionate stratified random sampling. Disproportionate stratified random sampling is a sampling technique for populations with stratified but less proportional members [13].

Respondents in the research are street vendors who occupy public spaces. The population of street vendors is a stratified but not proportional population, as the number of street vendors selling fast food is not the same as the number of street vendors selling locally processed food. Questionnaires are shared in the form of closed questions and there are also open questions. In addition to questionnaires, interviews were also conducted to find out the reasons for choosing the respondents' locations. Then the observation is done by looking at how much the level of consumer visits.
The analysis is undertaken by using cross tabulation by crossing the public space type variables on the behavior of space. Then, using an explanatory descriptive approach to get a comprehensive explanation about the convenience of street vendors to the place of activity or space livability based on the behavior of street vendors in the public space of Simpang Lima, Semarang.

3. Results and Discussion

This analysis is conducted to identify the space in accordance with the perception of street vendors to be used as a place of activity, in order to be livable, that is to move safely and comfortably, based on the consideration that is the main activities in Simpang area influencing and encouraging street vendors to utilize space for activities In the public space, thus providing a characteristic of street vendors in choosing a place to trade. Utilization of public space as a place of street vendor activity based on the characteristics of space will be discussed based on the activity of street vendors with place, shape of street vendors in public space, activity and time, suitability of activity with condition of place in public space.

The public spaces in the Simpang Lima area referred to in this discussion are public spaces used by street vendors to trade, such as on sidewalks based on statements of 100% street vendors who move around the Simpang Lima road.

3.1. Analysis of Street Activities with Street Places on Sidewalks Around Road Area in Simpang Lima Area

The Simpang Lima area is a downtown area with major activities such as trading activities and services, offices, trade, entertainment, recreation and sports. These diverse main activities resulted in the emergence of many trade and service activities around the road, arising from internal linkage activity within the area, as described. Meanwhile, the emergence of internal linkage activity is also influenced by the emergence of many people who come to visit in the region. This condition gives rise to the creation of street vendors to provide goods that are in accordance with the characteristics of these activities. The diversity of these activities relates to the types of merchandise sold by street vendors, leading to the dominance of food and beverages (as prepared food) and nonfood items (clothing, toys, grocery, cigarettes, magazines and newspapers). The types of merchandise, food and drinks, as well as nonfood items, affecting and relating to the trading activities of street vendors, namely mendisplay merchandise, serving customers and preparing and processing the merchandise, so that those activities which dominate trading activity street vendor.

The activity of street vendors with this type of goods is closely linked to the type of merchandise used by street vendors [9,14], resulting in space requirements as described by Shirvani [11], that activity requires a place or container and character from This container corresponds to the character of the activity it occupies. Trading activities of street vendors with the dominance of food and beverage products and nonfood items, the majority of street vendors stated that the type of merchandise used is tent carts and display cabinets with shelters, and requires a space of 12 m² and 6 m². This wide measure by street vendors is considered large enough to accommodate trade activities with the type of food and beverage merchandise as well as services with the type of shopping cart wares and display cabinets with shelter.

The findings of this study indicate that street vendors think that there is enough space available in the sidewalk, so the street vendors are interested in utilizing sidewalks around the Simpang Lima street as a place to trade. Street vendor considers the footprint on the sidewalk to accommodate any repetitive trading activities that start from arranging the merchandise, organizing, mendisplay, presenting and processing the merchandise, and can freely move to serve the buyer, as well as a place that is free for the consumer.
Thus, since this study shows that the activities of street vendors are related to the suitability of places related to their space needs, it can be said that the street vendors choose a place to trade on the sidewalk because it assumes that on the sidewalk there is enough space for trade (Figure 1).

3.2. Analysis of Spatial Values in Public Space (with Real and Unreal Boundaries) on Sidewalks Around Simpang Lima Roades.

In the Simpanglima area, the majority of street vendors stated that their food and beverage type (as prepared food), as well as nonfood items (clothing, toys, grocery, cigarettes, magazines and newspapers) that affect or closely related to the activities of street vendors is mendisplai merchandise - serve buyers and prepare and process merchandise. The street vendors with these types of merchandise and trading activities, assume on the pavement are available a large enough place in accordance with its activities, thus attracting street vendors to take advantage of the public space. On the other hand, the types of merchandise and trading activities of street vendors also affect the form of space needed. The shape of the space is a form of space with a real limit or form of space with unreal limits [15]. While this form of trading space is related to the availability of space in the public space as described by Marcella [15] and Lang [16], that the limitation of a place of activity is to show the extent to which a behavior stops, this boundary is a real boundary, or an unreal limit. The type of delimiter tailored to the needs and character of the activity. This form of space to adjust to the activities of street vendors, in addition to the assessment of the availability of places in the public space, the street vendors can take advantage of places in the public space with a form of space in accordance with its activities.
The majority of street vendors on the sidewalks around the streets in Simpang Lima stated that the form of trading (Figure 2) space is: a) the limit is not real (open, no massive or permanent limit) (52.2%), the space limit is the order of the merchandise, Consumer street vendors can enter easily, easily seen by consumers; And to enable street vendors to exchange and cooperate to sell merchandise with other street vendors; b) real limits (there are limits with other street vendors, transparent limits of fabric and tents) (47.8%) so that consumers are comfortable not disturbed by other activities around the street vendors and there is a clear boundary of selling places with other street vendors. In addition, street vendors also consider the availability of space in the sidewalk, the street vendors can take advantage of the place in the form of space in accordance with its activities, namely the form of space that the limit is not real (open, without a massive or permanent barrier).

![Figure 2. Spatial values in public space (with real and unreal boundaries) on sidewalks around Simpang Lima roadces](image)

**3.3. Analysis of The Activities and Time on The Sidewalks Around The Simpang Lima Road Section**

The majority of street vendors is on the sidewalk around the Simpang Lima road, because there are trade and service activities, entertainment, recreation, sports. So the opening and closing time of street vendors is diverse at 04:00 to 15:00, at 07:00 to 15:00, at 07:00 to 24:00, at 15:00 to 24:00, and 17:00 to 5:00 o'clock. The diversity of open and close trading time is to follow the activities of residents, schools, shops and offices around the street vendors. The opening and closing time of the street vendors is related to the provision of daily necessities for the surrounding community, explained by the reasons of street vendors, namely:

1) From 7 am to 3 pm; 07.00 -24.00; from 15:00 to 24:00; 5pm to 5pm
   a. Food and drink, the reason for providing breakfast until lunch, lunch until dinner, dinner community visitors' area.
   b. Non food items (clothing, toys, grocery, cigarettes, magazines, newspapers), to meet the needs of consumers whose time is uncertain.
2) In addition, the majority of street vendors, assumes that the trading time is 24 hours, in the afternoon and in the evening, and the period of trading activity is daily. This condition follows the activities of the community and visitors of Simpang Lima and its surroundings, due to Simpang Lima as the center of the city, and is one of the nodes in Semarang city, the life of the region goes on and on throughout the day.

Meanwhile, it is explained by McGee and Yeung [9] that the activity time of street vendor follows the rhythm and time or life characteristics of the residents and surrounding communities. So the time of street vendor activity on the sidewalk around the Simpang Lima road is following the times of community activities and visitors in the area (Figure 3).

![Figure 3. Activities and time on the sidewalks around the Simpang Lima road section](image)

3.4. Analysis of Conformity of Activities With Condition Place in Public Spaces on Sidewalks Around Simpang Lima Road Section

This analysis discusses the appropriateness of strain vendors’ activities to the element of space, comfort or livability of space, which consists of access aspect, natural element element, space security (activity place permit), parking space (Figure 4).

According to Shirvani [11], convenience measured by the quality of the place. On the other hand, McKay, Singh, Singh, Good, Osborne [17] and Lang [16] explained that the quality of the comfort of the place is tailored to the characteristics of the activity and user behavior.

The convenience measures of each aspect are based on:
1) Access, explaining to easily reach the object, then the object should be easy to see and easy to achieve [11]
2) Elements of natural elements, explaining the shade and brightness cause a sense of comfort for its users, and a comfortable place of shade and light attracts people to use it as a gathering/activity place [17].

3) Space security (permission), is the use of places permitted by government regulations, making sense of security and comfort for space use [11].

4) Parking space, Shirvani [11] explains the availability of parking spaces, allowing users to park their vehicles is a convenient element for space users.

The result of the research shows that the street vendors on the sidewalks around the Simpang Lima street segment stated that the food and beverage products, non food items nonfood items (clothing, toys, grocery, cigarettes, magazines and newspapers. The activities of street vendors display merchandise, serve buyers, prepare and process merchandise; display merchandise activity serving buyers [18].

In addition, the street vendors where they trade on the sidewalks state that:

1) Access, obtained that the street vendors declare the place: a) easily visible to visitors and consumers, and not hindered by other buildings or activities; b) It is easily accessible to visitors and consumers from the side of the road, and easily accessible from public and private ride and ride.

Street vendor is located because it is easily seen and reached from the side of the road and from up and down the vehicle, is giving explanations and illustrations that the street vendors consider this place convenient to the place of activity. This condition is related to the character of street vendors who cut or block consumer channels [9,19]. Street vendors interested and take advantage of places or sidewalks around the Simpang Lima street as a place to trade.

2) Elements of natural elements, street vendors declare that trading on the sidewalk because: a) the place is shaded with the reason, because there are shade trees, quite shady and cool so buyers are not hot and feel comfortable; b) place quite bright, the reason is because the place is quite open so For daylight enough bright lighting and for the night there are lights lighting.

The statements and reasons stated by the street vendors can illustrate that the majority of street vendors thinks the place they use is convenient for activities and gatherings.

3) Security of the space (permit), obtained a statement that the street vendors are located because the location permitted by the government, the reason for having received permission from the government, pay retribution and order as security guarantees, so there is never raid and control of the government [19].

With the reasons of the street vendors, it illustrates that the street vendors consider the place and sidewalk around the Simpang Lima road is safe to be used as a place of activity [11].

At the beginning of the growth and development of street vendors around the area of Simpang Lima carried out the action and control, but on the development and the determination that the area Simpang Lima developed for the culinary tourism center of Semarang city, the Government accommodates the needs of street vendors in the public space around the Simpang Lima road, So that street vendors are not dealt with curbed, but carried out stabilization structuring street vendors [11].

4) Parking space, from the results obtained by the majority of street vendors stated there is a place to stop the vehicle and parking lot, the reason is because there is space on the side of the road for a stop on the road, there is a parking lot in the yard of shops near or around street vendors, Which is enough to park at the ends of the sidewalk. Based on the explanations of street vendors, then illustrate that although parking on the side of the road and in the store yard that is nearby, street vendors consider there is space for parking lot visitors [20].
Related to Shirvani's [11] explanation that available space and parking lot to facilitate the user, as a measure of comfort. Street vendor thinks places on the sidewalk can be used as a place of trade, although there is no parking available. Street vendors can also be said that there is available parking or parking space is not available, street vendors will still move on the sidewalk in the public sphere.

Figure 4. Conformity of activities with condition place in public spaces on sidewalks around Simpang Lima road section

4. Conclusion

Based on the results of research where the activities of street vendors that fit their characteristics in the public space in Simpang Lima is utilizing sidewalks around the Simpang Lima road section. Specifically, it can be concluded that the street vendors in determining the livable place to trade are: (1) Activities and places, according to street vendors, (2) According to street vendors pavements as a place of trade, can be arranged in the form of space without a real barrier (no barrier of the massive or permanent), the barrier between traders can be an arrangement of merchandise. Relationships between traders can support each other and work together, and facilitate visitors. (3) When activities are in place, street vendors can take advantage of the public space in Simpang Lima which available space and parking lot to facilitate the user, as a measure of comfort. Street vendor thinks places on the sidewalk can be used as a place of trade, although there is no parking available. Street vendors can also be said that there is available parking or parking space is not available, street vendors will still move on the sidewalk in the public sphere.
b. Comfortable places: a) Shade because there are shade trees, quite shady and cool to make buyers are not hot and feel comfortable; b) The place is quite bright, because the place is quite open during the daytime lighting is quite bright and at night there are lights of illumination.

c. A safe place to trade, because the location is permitted.

d. Government, street vendors feel safe to move and never get raided and control by government.

e. Street vendor considers available parking space, consumers can park on the road.

f. On the sideline near and around the street vendors, at the ends of the sidewalk.

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