Perception and Utilization of Urban Corridor as Public Space in Medan, Indonesia

Wahyuni Zahrah¹, Achmad Delianur Nasution¹, and Novi Rahmadhani¹ ¹Department of Arcitecture, Faculty of Engineering, Universitas Sumatera Utara, Medan, Indonesia

Keywords: public space, urban corridor, perception, Medan, Indonesia

Abstract: The paper discuss the perception and utilization of street corridors as a public space. The study took place in three commercial corridors in Medan. They are Asia Corridor, Kapten Muslim Corridor, and Ring Road Corridor. The objective of the study is to explain and explore the planning and design process, the physical quality, the perception of the users, and the utilization of the corridors. The interview with the Government of Medan was carried out to get the information about the process of urban corridors planning and design. The physical quality of the corridor was mapped and recorded through a visual survey. The surveyors interviewed the users to collect the facts about the intensity of the activity and people perception of the corridors. The analysis used mix method that consisted of qualitative and quantitative data. The study found that the corridors were not planned in a detailed guideline by city government. The utilization was driven by user's initiatives, both the building owners and the street vendors. The corridors was not functioned optimally as public space due to the lack of facility and quality. In general, people thought that it is not allowed to use public space to meet their needs, so they use the urban public space individually.

1 INTRODUCTION

There are several types of public open space, such as parks, squares, space between buildings, and streets. In the past researches the authors have explored the public life of parks and squares in Medan and other towns in Sumatera Utara province. The investigation showed that the using of the public spaces was intensive, while the quality of the design was not so good (Nasution dan Zahrah, 2015). However, the parks and squares cannot be found easily, due to the lack of land-availability for public use. There is a kind of other public open space that always exist in the urban area: the street. The street is a linear-form public open space. The row of buildings along the street shape a corridor and accommodate people activities (Zahrah *et al*, 2016; Zahrah and Lie, 2016).

A corridor is more than just a circulation path. It can be a community space where people engaged (PPS, 2008). An urban corridor, which consists of front yard of buildings, pedestrian path, green path and streetscape, can be a melting point for community to interact each other. Some studies investigated the utilization of street corridor in Indonesia based on several point of views.

Widjajanti (2016) analyzed the characters of space occupied by street vendors in a corridor of an education area. Uniaty (2017), that reviewed a street in Northern Jakarta, highlighted the importance of considering the street users. Darmoyono and Tanan (2017)stressed their study to community participation in corridor planning and design. To the best knowledge of the authors, there is no study about how people view the corridor in relation with its actual quality and their needs, especially in Medan, Indonesia. It is necessary to explore how the urban space, shop houses corridor in this case, being planned, perceived and used by people. Thus, it can be understood the way people occupying the urban space. This study would be a reference to respond to local people needs in the urban planning and design process.

2 METHOD

The study was located in three shop houses corridors in Medan, Indonesia. The corridors were Jalan Asia, Jalan Kapten Muslim, and Ring Road. Jalan Asia

346

Zahrah, W., Nasution, A. and Rahmadhani, N.

Perception and Utilization of Urban Corridor as Public Space in Medan, Indonesia

DOI: 10.5220/0010095903460350

Copyright (C) 2020 by SCITEPRESS - Science and Technology Publications, Lda. All rights reserved

In Proceedings of the International Conference of Science, Technology, Engineering, Environmental and Ramification Researches (ICOSTEERR 2018) - Research in Industry 4.0, pages 346-350 ISBN: 978-989-758-449-7

was the oldest corridors, while Ring Road was the newest construction.

This research was a descriptive exploratory study since it means to explain and explore how the corridors planned, perceived and used. The data collected was qualitative and quantitative. The planning and design process of the corridors was investigated through the interview with Medan Government, as well as the interview with corridors' users and field observation. The physical quality of the urban space was collected by using the visual survey method. The surveyors mapped and recorded the related elements, such as site plan, pedestrian path, and street furniture. The intensity of utilization was identified through the questionnaire. There were 189 respondents that found in the corridors and agreed to participate in the survey. They were chosen randomly along the corridor by considering their activities, such as the pedestrians, the street vendors, the customers of shop house and street vendors, and the shop houses owners. The interview to users was carried out to explore how they perceived and used the space. The way they used the urban space was recorded through behavioural mapping, based on the photographs, observation, onsite sketching, and video recorder.

3 RESULT AND DISCUSSION

The results will be discussed based on variables that studied. They are the planning and design process of corridor, the physical quality, the users perception, and the way people use the corridor.

3.1 The Design and Planning Process of the Corridor

Based on the interview to the official of Dinas Perumahan Kawasan Pemukiman dan Penataan Ruang (Housing, Settlement and Urban Design Services) of Medan Municipality, it can be concluded that the City Government did not have and implement the detailed planning of the corridor that could guide the design and control the growth. The existing regulation was a general plan that regulates the urban space in two dimensions, such as building setback, and building coverage. There was no regulation to manage and determine the building frontage and mass, the pedestrian performance, the vegetation arrangement and the land function. As a consequence, the corridor grew spontaneously without control, following the individual needs. The field survey showed that the building owners did not

always obey the regulation of the setback and building coverage. In one area the buildings had a setback, while in the other area was adjacent to the sidewalk.



Figure 1. The quality of the corridor: pedestrian path obstruction by signage and parking

3.2 People's Perception to Corridor

Perception is one of the significant parts in the urban design. By recognizing the people perception, their needs can be identified well (Carmona, 2004; Nasution and Zahrah, 2014). The study tried to investigate people perception of the corridor by asking the users. Most of respondents were males, (63.49 %), productive age (18 - 45, 87.31 %), entrepreneur (35.98 %), married (50.26 %), owning private vehicles (84.13 %) and use their vehicles as the transportation mode (79.90 %) (Table 1).

Table 1. Respondents'	characteristics
-----------------------	-----------------

Gender				
a. Female	36.51%			
b. Male	63.49%			
Age				
a. 18 - 25	35.98%			
b. 26 - 35	26.46%			

c. 36 - 45	24.87%					
d. 46 - 55	9.52%					
e. 56 - 65	3.17%					
f. > 65	0%					
Job						
Entrepreneur	35.98%					
Government employee	15.87%					
Government-corporate employee	7.94%					
Private employee	8.47%					
Professional/self-employee	1.59%					
Others	30.16%					
Marital Status						
a. Married	50.26%					
b. Not married	49.74%					
Monthly expenses (million IDR)						
a. < 5	58.73%					
b. 5 - 10	29.63%					
c. 10 - 15	10.05%					
d. 15 - 20	1.59%					
e. 20 - 25	0%					
f. > 30	0%					
Do you have private	vehicles?					
a. Yes, motor cycle	59.26%					
b. Yes, automobile	24.87%					
c. nothing	15.87%					
What is the transportation mode you use?						
a. motor cycle	55.56%					
b. automobile	24.34%					
c. public transport	9.52%					
d. Online - public motorcycle	4.76%					
e. Online taxi	3.17%					
f. Trishaw	0.53%					
g. Walking	2.12%					

With the low physical quality of the corridors, particularly if compared to the good urban corridor standards (PPS, 2008), and the needs to public life rather than public space (Banerjee, 2001), the majority of respondents perceived the corridor as 'good' or 'very good', mainly at the aspects of security, cleanliness, night lighting, traffic, liveliness, and comfort. Meanwhile, the shade of trees and the attractiveness factors were perceived as 'not good' (Table 2). As the security and comfort became the crucial consideration they needed (Crewe K, 2001), the respondents used the space for their needs, though the quality of the corridor was not good enough. The conditions seemed relating to the activities occurred. In the study area, the optional or recreational activities were rarely found, which connected to the quality of the place (Gehl, 2002).

Table 2. People perception of the quality of corridors

Variables	very	good	Less	bad	Very
	good		good		bad
Security	4,8	38,2	38,2	2,4	0
Cleanline	0,9	54,6	35,3	8,7	0,5
SS					
Lighting	5,3	66,7	22,2	5,3	0,5
Shady	7,3	38,2	36,7	15,5	1,9
trees					
Beauty/at	1,5	27,5	49,3	19,3	2,4
tractivene					
SS					
Livelines	17,4	72,9	9,7	0	0
s					
Traffic	5,3	55,6	33,9	4,4	0,9
Comfort	3,0	62,6	30,3	3,5	0,5

3.3 The Way People using the Corridor

The land use in the shop houses corridor was mostly commercial function, such as retails, restaurants, or services purpose. 'Ruko' as the acronym of 'rumah' (house) and 'toko' (shop) did not always present in all corridor, except in the oldest Area of Jalan Asia. The new shop houses, such as in Ring Road Corridor, was only functioned as commercial uses, not as a house where the family stayed and lived. The owners or the tenants of the buildings, particularly in Kapten Muslim and Ring Road Corridors, lived in the other buildings, not in the 'shop houses'. In this area, we could find the largest portion of the empty shop house, the buildings without occupants. In contrast, most of the shop houses in Jalan Asia was functioned as a 'shop' and also as a 'house'. However, the newer the corridor, the larger activities occurred. Jalan Kapten Muslim Corridors was the liveliest zone compare to the two other corridors. In here, street vendors operated from morning until night. We could see that at the street

vendor spots along the corridors, the community activities took place. The condition related to the lack of communities' facility along the pedestrian path; there was no comfort spacious side walk or benches. Meanwhile, the informal traders provided sitting place and food. In this place people interacted each other, at least between customers and the tradesmen. In the other part of corridor, including the pedestrian way, it was very rarely people walked. It might correlate with the facts that the majority of people was the vehicles-dependence community, more than 80 % of them did not walk, but used their private vehicles, mostly motorcycles. Nevertheless, the interview with the pedestrians showed that they ever said greeting to the other people while walking. This fact indicated that walking could stimulate interaction and social contact. Since it was very rarely to find people walk, the interaction happened in the street vendor's points.

How the vendors used the space? There was no regulation or convention. They just came, chose a location, and the place became 'theirs'. The favourite place was the shady spot under the tree. In some cases, the vendors bargained with the building owners to use the space in front of the building, including the sidewalk and street, a part of public space that should be 'not for sale'. They put their equipment in the buildings' front yard, and or on the pedestrian path, and or on the street's boundary. They sold something, having repeated customers, and did not want to move from the place. The vendors also said that their activities did not injure the pedestrians, nor the traffic. This condition was different with customers' opinions. They said that they knew it is not allowed occupying pedestrian path for parking.

"... We place the stalls on the street, cashier, and benches for customers on the sidewalk... we use only as wide as one lot of a shop house.... " (R, street vendor in Jalan Asia)

"... We choose the shady place under the tree... it is safe and secure here, never happens a crime ... we don't want to move from here. It has been a long time we trade, it is the only our income resource... "(A, street vendor in Jalan Kapten Muslim)

The other utilization of the urban space in the corridor was the parking lot (Figure 3). Since the buildings had no setback, and the presence of the informal merchants on the sidewalk and or the edge of the street, there was no allocation lot for parking. As a result, the sidewalk – which was very rarely being used by the pedestrians – was occupied by

cars or motorcycle for parking. The fact was contrast with their most opinion that "agree that parking on the pedestrian path injures the pedestrians" and "agree that parking on the street bothers the traffic".



Figure 2. Activities in the corridors (i) Asia (ii) Kapten Muslim (iii) Ringroad



Figure 3. The occupation of the corridor: parking and street vendor

4 CONCLUSIONS

The study showed that there was a gap between the community's knowledge and their practical in using the urban space, the urban corridor in this case. They knew about how the space should be used as a public space, but there was no choices to fulfill their needs, mostly for the economic interest and the 'vehicle-dependence trap'. Furthermore, there was no proper plan and design to accommodate and anticipate the dynamics of the urban community. The urban corridor seemed to be 'a container of vehicles and stalls', rather than a public space, where people engage in a mutual interaction. The urban space was failed to provide the demand. These findings confirmed the other researches that the main problems in the urban corridor was the lack of appropriate pedestrian path and the 'attack' of vehicles and street vendors (Zahrah et al, 2016; Tanan, 2017) because of the absence of the good design, the weakness of regulation control, and the shortage of community's awareness. Since the respondents of the survey were the people found in the corridors, the study just describes the perception based on them. It is much recommended to continue this study by a household survey, so that it could be obtained a more comprehensive picture of people perception about the utilization of the corridor, particularly in Medan, Indonesia.

ACKNOWLEDGEMENTS

The authors would like to acknowledge that the present research is supported by Ministry of Research and Technology and Higher Education Republic of Indonesia. The support is under the research grant DRPM Kemenristekdikti of Year 2018 Contract Number 90/UN5.2.3.1/PPM/KP-DPRM/2018.

REFERENCES

- Banerjee T. 2001. The future of public space: Beyond invented streets and reinvented places. *Journal of the American Planning Association* vol 67 no. 1 : 9-24
- Carmona M, 2004 *Public Places Urban Spaces* Oxford: Elsevier and Architectural Press
- Crewe K , 2001. Linear parks and urban neighborhoods: A case study of the crime impact of the Boston Southwest corridor. *Journal of Urban Design* Vol 6 no. 3: 245 264
- Gehl J 2002 Public Space and Public Life City of Adelaide. City of Adelaide
- Nasution AD, Zahrah W, 2014. Community perception on public open space and quality of life in Medan. Indonesia. *Procedia - Social and Behavioral Sciences* 153: 585-594
- Nasution AD, Zahrah W 2015. Urban Design Guidelines for Shophouse: A Temperature Modification Approach. Procedia-Social and Behavioral Sciences 179: 308-317
- Tanan N, Darmoyono L. 2017. Achieving walkable city in Indonesia: Policy and responsive design through public participation. *AIP Conference Proceedings* 1903(1):080010 (2017) doi: 10.1063/1.5011598
- Uniaty Q. 2017. Pedestrian Space Characteristics Analysis on Kyai Tapa-KH Hasyim Ashari Street Corridor, West Jakarta. Aceh International Journal of Science and Technology 6 (3): 153-165
- Widjajanti, 2016. The Space Utilization by Street Vendors Based on the Location Characteristics in the Education Area of Tembalang, Semarang. *Procedia - Social and Behavioral Sciences* 227: 186–193
- Zahrah, W, Aulia, DN, Marpaung, Beny OY. 2016. Koridor Ruang Kota Layak Huni: Budaya "Merampas" Ruang Publik? *Prosiding Temu Ilmiah* 2016 IPLBI : E 081-088
- Zahrah, W, dan Lie, S., 2016, People and urban space in Medan: an environment behaviour approach. *Environment-Behaviour Proceedings Journal* Vol 1 Issue 1 368-374