

Study of The Spatial Footprint of Street Vendors During the Covid-19 Pandemic

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Abstract

This article examines the use of urban space by street vendors during the Covid-19 pandemic. To suppress the spread of Covid-19, adjustments are made to activities in urban spaces, especially in the economic and social sectors. The purpose of this study is to explore the existence of street vendors in the city's green lane in terms of their benefits, problems, and strategies in dealing with the Covid-19 pandemic. This study uses a qualitative method by looking at the research deductively as well as the application of the theory of the production of space by Lefebvre as well as daily studies to reveal the actual situation. Researchers conducted spatial mapping to describe the pattern of street vendors' activities through four typological aspects such as commodities and facilities, temporal, space, and movement. This article shows that spatial mapping also shows the movement and activity of users in space. Spatial practice between street vendors and the community in public spaces can form a strong social space and there is a need for space management during pandemic.

Keywords: *Covid-19 Pandemic; Social Interaction; Street Vendors; Urban Space*

Introduction

In 2020, the world was faced with the emergence of a pandemic, namely the Covid-19 pandemic. The spread of Covid-19 through the air (airborne) and sparks (droplets), causes rapid transmission which can accelerate humans to become infected and infect surrounding humans (WHO, 2020). Therefore, to suppress the spread of the Covid-19 pandemic, an adjustment was made to activities in urban spaces, especially in the economic and social sectors. In both formal and informal economic sectors, adjustments are made by reducing the number of workers and limiting production time (Allison et al., 2021). Meanwhile, in the social sector, adjustments were made by limiting the use of public space and transportation by staying at home and changing the system of working and schooling from home (work from me and study from home) (Sinha et al., 2020; Zeb et al., 2021).

The implementation of activities in urban spaces must also be accompanied by the implementation of health protocols by WHO recommendations such as washing hands, wearing masks, maintaining distance, staying away from crowds, and reducing mobility (WHO Indonesia, 2020). In addition, the local government also runs a program to impose restrictions on community activities and vaccination recommendations as a condition for outdoor activities (Gubernur DKI Jakarta, 2021).

When viewed from its history, the city has been shaped by pandemics and their consequences on people's lives (Osborne, 2008). Each of these critical times has presented an opportunity to shape and rethink urban planning to ensure public health and hygiene (Martínez & Short, 2021). Public health initiatives are needed as an effort to confront cities as unhealthy places and full of infectious diseases (Osborne, 2008; Zeb et al., 2021).

In addition to being formed by the pandemic, the growth and development of the city are also determined by the elements of city design and

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other supporting aspects such as the informal economic sector (Oriard Colín, 2015). The informal economic sector includes street vendors and city objects that can reflect the culture and uniqueness of the urban space compared to other urban spaces (Pusat Studi Urban Design, 2021).

Street vendors rely on social interaction between traders and buyers so that when the adjustment of activities in urban space is carried out they become part of the city that is affected and suffers large losses (Allison et al., 2021). Street vendors lost the infrastructure to trade, threatened job losses, and uncertainty in meeting economic needs (Honey-Rosés et al., 2020).

The set of activities, relationships, and interactions between members of society in urban spaces shape spatial practice (Fuchs, 2019). Spatial practice is a space that is material/physical that can be perceived with the five senses (perceived space) and perceived in everyday life (Lefebvre, 1991). Lefebvre said that spatial practice ensures the sustainability of society and social competence where every relationship between community members is guaranteed sustainability and is to the same degree in a social space (Christian & Desmiwati, 2018).

From the perspective of urban design, things to know about the relationship between street vendors and public spaces are the use of city elements as a means of trade, public spaces as trade infrastructure, level of movement, time of use, and place of residence (Dovey, 2016). Whatever the form of public space, street vendors will adapt to the way they cluster around urban spaces and the integrated flow of the city (Dovey, 2016; McGee & Yeung, 1977). Because street vendors are dynamic and mushrooming, they will continue to follow the flow in preference to a directed space (Dovey, 2016).

In his research Yatmo, (2008) argues that the presence of street vendors in urban space is often rejected because its presence is considered an element out of place, a theory that explores the extent to which the ownership status of the use of a city space belongs to an individual or group. Street vendors are considered to be an obstacle to comfort and order in urban spaces (Harjoko & Adianto,

2012). For this reason, in dealing with street vendors we should not view them only as an object but also have to pay attention to the interaction of street vendors with the surrounding environment (Yatmo, 2008).

Ojeda & Pino, (2019) argue that street vendors with local authorities or governments create four different relationships namely conformity, support, modification, and avoidance, as well as resistance. The implementation of policies by the local government regarding social communities and street vendors is adjusted to the circumstances in each city in various countries.

In another study, it was found that the strategy of street vendors in avoiding control by local authorities is to change the place of trade or trade around (Basu & Nagendra, 2020; Ojeda & Pino, 2019). In Harjoko & Adianto, (2012) the presence of street vendors in formal commercial activities such as markets and shops can be used as an alternative place to trade because it has a diverse concentration of buyers. Even so, studies revealing and analyzing the use of space by street vendors in urban public spaces are still lacking (Li et al., 2018).

The difficulty of providing space in supporting street vendors' activities is caused by a mismatch in views between the community and the local government regarding the importance of the existence of street vendors in urban public spaces (Basu & Nagendra, 2020). This is very alarming because street vendors are the main source of lower middle society in meeting their daily needs. The importance of the existence of street vendors as part of the urban element that is affordable for the community must be part of the city government's priority in suppressing the spread of the Covid-19 pandemic in urban spaces (Sinha et al., 2020). This became the basis for researchers to conduct studies on the use of space by street vendors and trade adjustments during the Covid-19 pandemic.

This study also aims to trace the existence of street vendors in the city green line in terms of their benefits, problems, and limitations in their activities during the Covid-19 pandemic. The benefit of this study is how to implement the use of public space by street vendors in the design of urban space. Researchers hope that in the future the existence of street vendors as urban elements can be more noticed and

more accepted by all groups of society as well as the government by providing street vendor centers so that order and cleanliness of the city environment can be maintained.

Methodology

The research method used is qualitative. According to Creswell et al., (2007) qualitative research is an approach to exploring and understanding the meaning of individuals or groups ascribed to the social problems of human life. This form of inquiry supports a way of looking at research deductively with Lefebvre's application of production of space theory as well as everyday studies to reveal what is already there (Lefebvre, 1991; Wigglesworth & Till, 1998). Space change can be seen as a social production that involves three main parameters, namely the physical characteristics of the place, humans as users, and utilization time (Damayanti & Redyantanu, 2022; Lefebvre, 1991).

Data collection is done by direct observation and documentation. Meanwhile, to analyze the data, the researcher used narrative analysis by telling personal experiences about the daily life of the research object. The process between data collection and data analysis in qualitative research can be done simultaneously (Creswell, 2015). The object of observation in this study is the *Kanal Banjir Timur* Green Line (KBT) with a focus on the use of public space by street vendors and the community. Observations were made from November to December 2021. The observation time adjusts to the period the street vendors are trading.

The documentation aims to collect secondary data in the form of official government regulations and previous studies related to public spaces, river border areas, street vendors, and the Covid-19 pandemic. Furthermore, the secondary data that has been obtained will be compared and adjusted to the observation data.

Result and Discussion

1. KBT Green Line Function

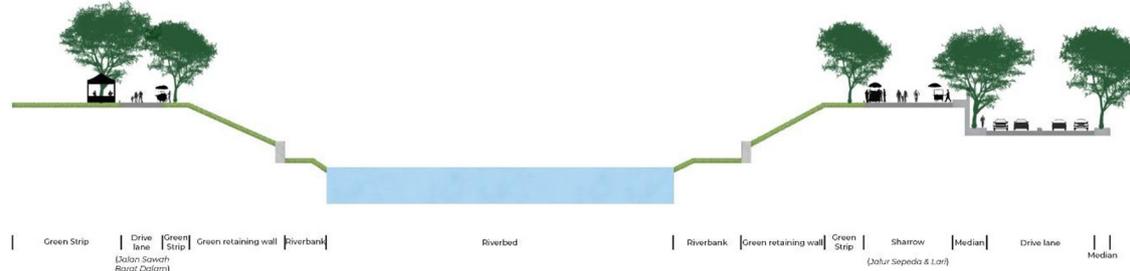
KBT is one part of The Jakarta Flood Canal strategy that serves to overcome the flood problem in DKI Jakarta by increasing green open

spaces built in the East Jakarta area. Referring to the DKI Jakarta Provincial Regulation No. 1 of 2012 concerning RTRW 2030, it is explained that the development of the KBT corridor area serves as a flood management infrastructure and can be used for transportation, water supply, recreation, and economic activities that do not adversely affect the environment (Pemerintah Provinsi DKI Jakarta, 2012). In addition, PUPR Government Regulation No. 28 of 2015 concerning the determination of the river boundary line aims to maintain and preserve the function of the river from various activities that develop in the surrounding area and also utilize and improve the utilization of River Resources (Menteri Pekerjaan Umum dan Perumahan Rakyat Republik Indonesia, 2015).

2. The Existence of Street Vendors on The KBT Green Line

The presence of street vendors in the KBT Green Line is known to have existed since 2014 and still survives today (Antonius, 2019). Every year their number continues to grow and there are currently around 597 street vendors registered with the KBT Street Vendor Association (Putra, 2020). The trading facility used is semi-permanent and occupies the bank side of KBT which stretches for 1 km (Antonius, 2019). There are two inspection roads on the KBT green line, namely the pedestrian and bicycle paths and *Jalan Sawah Barat Dalam* (Figure 1). The existence of these street vendors is more likely to occupy the side of the road in the West rice fields that serve as motor vehicle lanes. Now street vendors in the KBT Green Line area, East Jakarta have become one of the tourist and culinary destinations for residents of the capital (Rohmani, 2022).

Figure 1. Section of *Kanal Banjir Timur*
 Source: Author, 2022



3. KBT Green Line Characteristics

Based on DKI Jakarta Provincial Regulation No.1 the year 2012 about RTRW 2030 Article 99, explained that the corridor along the KBT can be used as green space and flood buffer. Green open space on KBT is in the form of a lane dominated by wide-titled trees that function as shade and microclimate regulators.

In research by Basu & Nagendra, (2020) it was explained that trees play an important role in the presence of street vendors in urban spaces. The existence of trees can provide benefits such as tree crowns to protect merchandise from sun exposure, tree trunks, and branches to hang merchandise, and provide shade from rain. Based on the observation of the use of trees by street vendors the KBT Green Line is used as a shelter, a place to rest, and also a place to eat by rolling out mats, tarps, or tents.

Figure 2. (a) Tree as a shelter, (b) Tree as a resting place, (c) Tree to protect merchandise
 Source: Author, 2022



4. Benefits and Problems of the Street Vendors Existence on KBT Green Line

Referring to the book *Urban Design Thinking: a Conceptual Toolkit* by Dovey it is stated that informal traders are very important for the economic livelihood of the lower middle class because they can provide employment and entrepreneurial opportunities (Dovey, 2016). Informal traders distribute goods and services at lower prices and have the flexibility to fill the smallest space in the market and can instantly adapt to changes in demand (McGee & Yeung, 1977). In other words, the existence of street vendors in the middle of urban life can provide many benefits. From the observation, the benefits of the existence of street vendors in the KBT Green Line include providing affordable needs, forming a socialization space, and forming a play space.

Figure 3. (a) Affordable needs provider, (b) Socialization space, (c) Playspace
 Source: Author, 2022



Based on the regulation of the Minister of Home Affairs of the Republic of Indonesia No. 41 of 2012 Article 32, it is explained that street vendors are prohibited from conducting business activities by disrupting and or changing the shape of pedestrian paths, public facilities, the surrounding environment and not to occupy the road for business premises, except for those specified for scheduled and controlled street vendors. The existence of street vendors must be neatly organized and not interfere with

the use of other public spaces (Menteri Dalam Negeri Republik Indonesia, 2012). However, based on the observations found that the presence of street vendors in the KBT Green Line causes problems such as misuse of the edge of the road and bicycle lanes as a parking lot and trade, bridge sidewalks as a place to trade, and garbage disposal in drainage.

Figure 4. (a) Misuse of road, (b) Trading space dimension, (c) Garbage disposal system
Source: Author, 2022



(a) (b) (c)

5. Restrictions On Street Vendor Activities During The Covid-19 Pandemic

In August 2020, the East Jakarta administration city government gave directions to relocate street vendors along KBT to prevent the spread of the pandemic (Pemerintah Kota Administrasi Jakarta Timur, 2020). But the street vendors refused and wanted to keep trading there. They are committed to continuing to implement health protocols by applicable regulations (Putra, 2020).

When conducting observations, researchers did not find any application of health protocols such as maintaining distance and avoiding crowds. The street vendors continue to trade as usual without any restrictions. Distance between adjacent street vendors, ordering food on the spot, and the unavailability of a place to wash hands. Restrictions that researchers found only at the time of trading that is only allowed between 17.00-21.00 WIB. In addition, there is also a blackout of street lights by local authorities at night which aims to limit crowds. However, the restrictions do not seem to affect the activity of street vendors in the *KBT Green*

Line. This occurs due to differences in views between local authorities and street vendors. The authorities want to suppress street vendors' activities because of the risk of the spread of Covid-19 while street vendors want to continue trading activities because KBT has been known as a tourist destination for street vendors. Their relationship can be categorized as avoidance and resistance (Ojeda & Pino, 2019).

Figure 5. (a) Street light blackout at night, (b) Merchant distance is too close
Source: Author, 2022



(a) (b)

6. Mapping The Existence Of Street Vendors

To understand the use of space by the informal sectors, especially street vendors in the *KBT Green Line*, the researcher conducted spatial mapping to describe the pattern of trading activities by looking at four aspects of street vendor typology such as commodities and facilities, temporal, space, and movement (McGee & Yeung, 1977). Physical facilities and types of merchandise (commodities) are influenced by the nature of street vendors' services such as selling drinks, food, clothing, accessories, and other needs (Yatmo, 2008). The determination of the period (temporal) of street vendors' activities is based on the daily peak when most of their sales are made (Damayanti & Redyantanu, 2022). The dimensions of the trading space are measured based on the needs of street vendors to place facilities and commodities (Widjajanti & Wahyono, 2018).

Figure 6. Research Site Context Map
Source: Author, 2022



The movement pattern of street vendors is divided into three types, namely traveling (dynamic), which is the use of physical means of trading that are easy to carry or move from one place to another. Half-settled (semi-static), is a street vendor who at a certain period settled in a location and then will move to find buyers in other locations. The last pattern of sedentary (static), is street vendors who sell settled in a certain location with physical means of trading (McGee & Yeung, 1977; Yatmo, 2008).

Spatial mapping is done by dividing the research site into three different areas based on the intensity of the presence of street vendors in the KBT Green Line. The three areas are the upper area (red), namely pedestrian and bicycle paths, the middle area (orange), namely bridge sidewalks, and the lower area (green), namely *Jalan Sawah Barat Dalam*. The division of areas can be seen in Figure 6.

Street vendors in the upper area (red) are divided into two based on the type of commodity being sold. Those who sell commodities such as food, drinks, and toys that move dynamically (move around).

Meanwhile, there are also street vendors who rent services such as horse riding, painting, and children's toys rental that move statically (settled). The means used are bicycles, carts,

bicycles, motorcycles, or pole yokes. The area of space needed to trade is between 2 - 9 m². Trading hours in the upper area are shorter, namely from 16.00 - 21.00 WIB. In addition, trading hours are also done in the morning when there are people who run or bike.

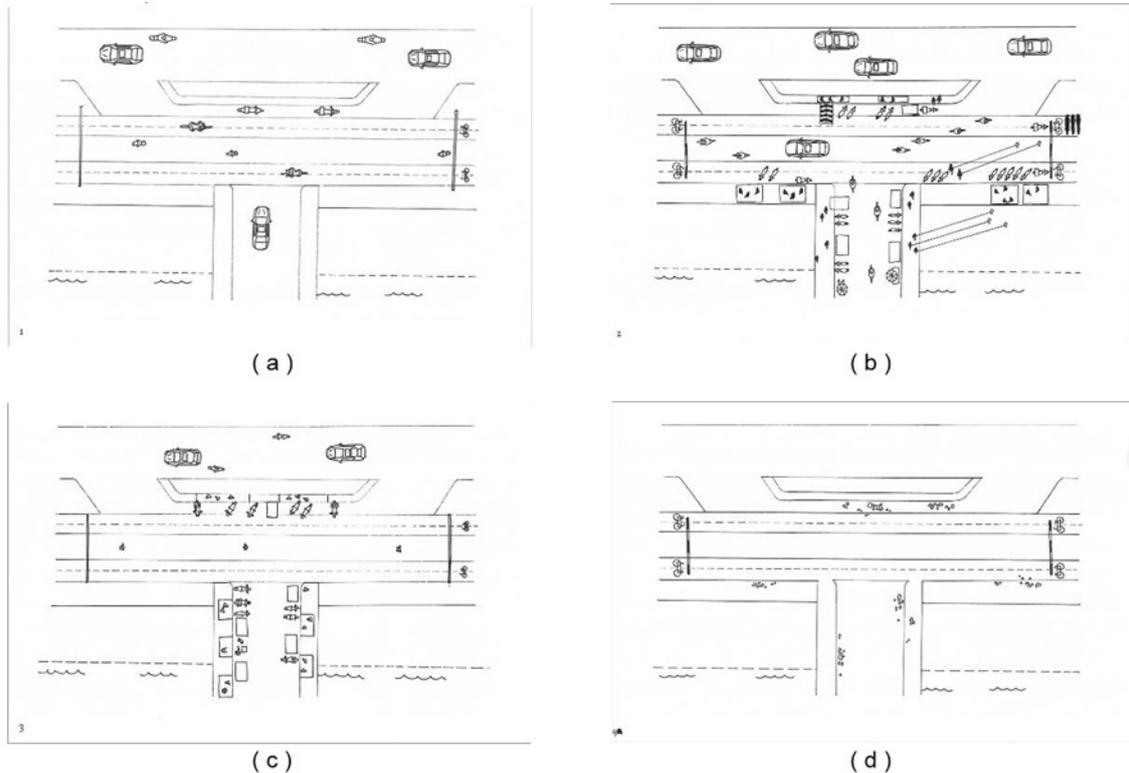
Street vendors in the central area (orange) sell commodities such as food, drinks, and toys. They move in a semi-static (half-settled) and at certain times will go around to other areas. The means used are carts, bicycles, motorcycles, or pole yokes. The area of space needed to trade is between 2 - 9 m². Trading hours in the central area are from 16.00 - 21.00 WIB.

Street vendors in the lower area (green) sell commodities such as clothing, food, drinks, accessories, and toys. They move statically (sedentary). The means used are tents, carts, motorbikes, mats, or stands. The area of space needed to trade is between 6 - 20 m². Trading hours in the lower area are also from 16.00 - 21.00 WIB.

In everyday urban space, there are traces of use that if we observe there are irregularities and regularities related to space and time (Wigglesworth & Till, 1998). Spatial mapping is done based on the results of observations that developed into a collection of images illustrating the use of everyday space.

7. Movement of Street Vendors in The Area of Running and Bicycle Paths

Figure 7. Illustration of Spatial Mapping Street Vendors on Bicycle & Jogging track
Source: Author, 2022

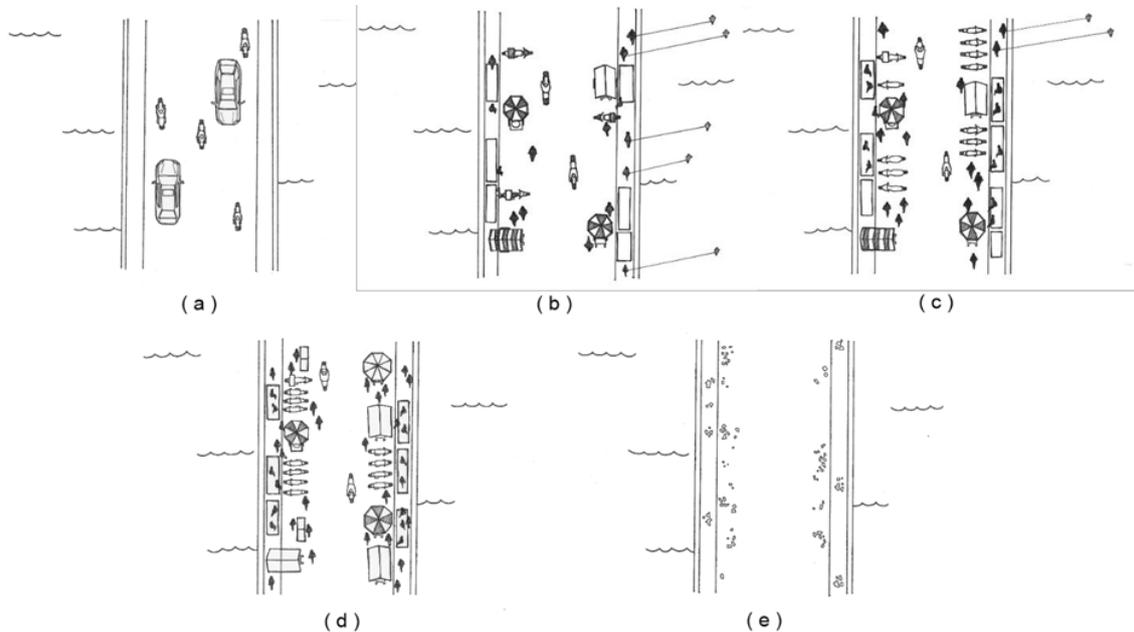


The illustration explanation of Figure 7 can be described as follows:

- a) From the morning until noon, the condition of the running and bicycle paths seems to be filled with people who exercise by cycling or running. Street vendors who trade in the morning seem to be few and trade on the side of the lane.
- b) Then in the afternoon, the running and bicycle paths began to function as a trading area for street vendors and the side of the road functioned as a parking lot for the community. On the canal, banks can also be seen people flying kites and picnicking under the trees. In addition, canal banks are also used by the community for urban farming.
- c) As the night approached, there was no presence of street vendors because some of them began to go around and also moved to the empty side of the bridge. People who fly kites and have picnics are also gone.
- d) Towards late at night, the condition of the bike and running paths seemed completely deserted and only left piles of garbage on the road and bridge sides. The pile of garbage will be picked up by city cleaners in the early hours of the morning.

8. Movement of Street Vendors on The Bridge Area

Figure 8. Illustration of Spatial Mapping Street Vendors on KBT Bridge
Source: Author, 2022



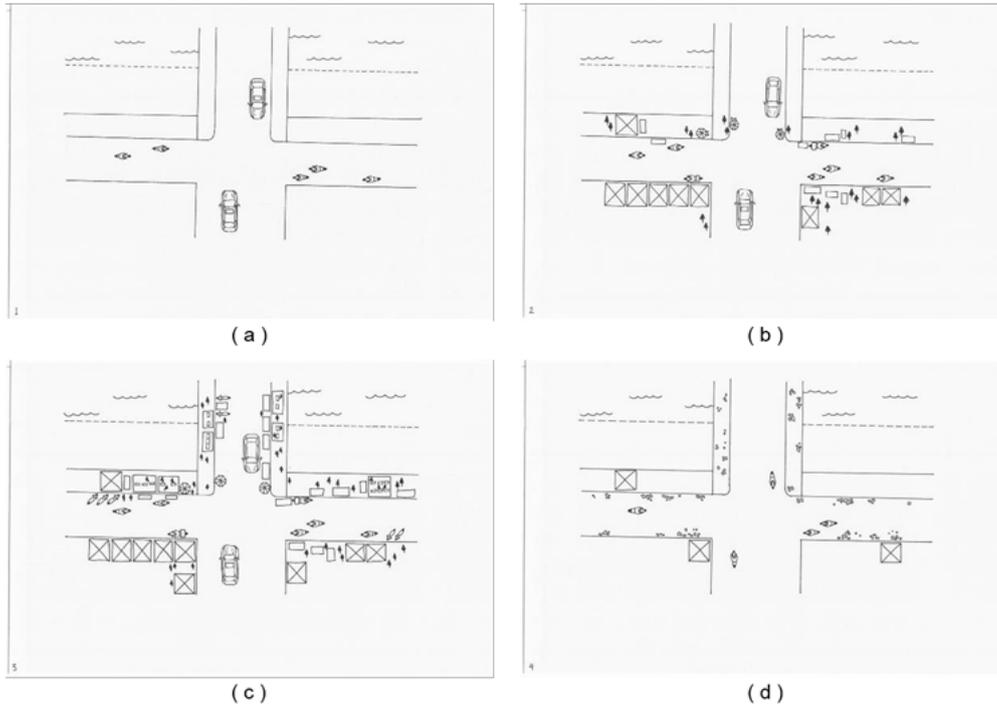
The illustration explanation of Figure 8 can be described as follows:

- From the morning until noon the condition of the bridge area looks crowded with cars and motorbikes but the presence of street vendors has not been seen.
- Then in the afternoon, the street vendors began to arrive and also people who fly kites. Street vendors began to prepare merchandise and roll out banners or tarps as a place to eat and sit on the bridge sidewalk.
- At dusk the bridge area has been crowded with street vendors and the roadside functioning as a parking lot for two-wheeled vehicles. The sidewalks are filled with buyers who are sitting and relaxing while enjoying snacks. Some people still fly kites but move to the empty side of the bridge.
- At night the condition of the bridge area is empty because some street vendors are traveling and selling merchandise. Street vendors who settled fill the empty side of the bridge and the people who fly kites have left. Some buyers have also left the sidewalk.

- Towards late at night the bridge area looks completely deserted by street vendors and buyers but there are piles of garbage collected on the bridge sides. The street vendors were already working with the city cleaners who will take the garbage in the early hours of the day.

9. Movement of Street Vendors in The Area of Sawah Barat Dalam Street

Figure 9. Illustration of Spatial Mapping on Sawah Barat Dalam Street
Source: Author, 2022



The illustration explanation of Figure 9 can be described as follows:

- a) From the morning until noon, the condition of *Sawah Barat Dalam* Street looks crowded with cars and motorbikes and the presence of street vendors has not been seen.
- b) In the afternoon, street vendors began to arrive to fill their stalls, tidy up merchandise, and assemble tents or stands on the roadsides. Some street vendors who sell with stalls on the canal banks also began to roll out banners or tarps as a place to eat and sit. It is also seen that some people pass by either just to look around or to buy snacks.
- c) At night the condition of *Sawah Barat Dalam* Street appears to be more crowded because of the presence of street vendors who travel from other areas and buyers who pass by using motorcycles or on foot. In addition, some buyers eat and sit on the canal banks while looking at the view of KBT. The road access is limited to two-wheeled vehicles and pedestrians with the functioning of the roadside as a parking lot.
- d) Towards late at night, the condition of *Sawah Barat Dalam* Street looked deserted, the traveling vendors and buyers had left and there were only a few street vendors who were dismantling their tents or tarps. The left street vendors also clean and collect garbage on the roadsides. The piles of garbage will be picked up by city cleaners in the early hours of the day.

Conclusion

The presence of street vendors in the KBT Green Line has formed a social space arising from the relationship and interaction between fellow street vendors, street vendors with the community, and also fellow members of the community as users of urban space. In addition, street vendors also play an important role in life viability, especially for the lower middle class because they provide cheap and affordable living needs and provide jobs. Nevertheless, the presence of street vendors in the city space is still considered disturbing and gives a bad impression on the image of the city so some members of the public reject their presence. This condition is further aggravated by the spread of the Covid-19 pandemic which has made them lose a place to trade due to restrictions on the use of public spaces.

The researcher found that the presence and interaction between street vendors and the community in the KBT Green Line can form a spatial identity that can transform the city green space into a new landmark that serves as a tourist and culinary destination by developing the potential of street vendors as the main attraction through empowerment and provision of street vendors centers so that trading activities can be better organized and environmental cleanliness can be maintained. Street vendors' views on health protocols in public spaces must also be changed and begin to be applied in trading activities so that they remain in line with the order of social life in the new normal era.

While spatial mapping shows that although located in the same area, each area such as running and bicycle paths, bridges, and Sawah Barat Dalam Street has different characteristics of both street vendors and community activities. There is an adjustment of typological aspects by street vendors with environmental conditions and user characteristics in each area. On the running and bicycle lanes, it is more common to find travel street vendors because they adapt to the limited number of users who exercise so that they can change places at any time. This limitation also affects the existence of street vendors who offer services because the empty lane can meet the need for a large trade space.

The bridge area is the central point of the

KBT Green Line where street vendors use the roadside as a parking lot and the sidewalk as a gathering and resting place. It aims to make it easier for users to explore each area and spend more time there. While in the Sawah Barat Dalam Street area there is a diverse stretch of street vendors able to meet the various needs of users ranging from food to clothing. However, the use of the roadside as an expansion of trade space by street vendors and parking lots by users narrows the road making it difficult for pedestrians and motorbike drivers to be able to access the road simultaneously.

From the results of the spatial mapping discussion, it was revealed that it was necessary to manage the use of public spaces through the implementation of the Covid-19 pandemic protocol. Management not only applies to street vendors but also to users to raise harmony in sharing the same space. Aspects that need to be managed by street vendors are the placement of trading facilities and adjustment of trading spaces. While the user aspects that need to be managed are road access and parking lots.

Due to limited research time, the researcher could not explain how the implementation in managing the use of public spaces for street vendors and users. It is hoped that this can be further developed in further research. In addition, aspects regarding public perception of the presence of street vendors and their role as users and case studies on the use of public spaces during the pandemic. Even so, the researcher hopes this research can show that the use of public space needs to be balanced with cleanliness and harmony to achieve a resilient and sustainable urban environment.

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