The uses of Peunayong culinary riverwalk for open space: an observation

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Abstract. The role of public open space as one of the city elements can give its own character, and in general has the function of social interaction for the community. Peunayong Culinary Riverwalk is one of the public open spaces that is used as a waterfront recreation area in Banda Aceh City. The location of the Peunayong Culinary Riverwalk is on the riverbank of the Krueng Aceh river which flows through the center of Banda Aceh City and is a strategic area of the city as the center of the Old City. Before transformed into a Culinary Peunayong Riverwalk, this area is abandoned and used as a slum empty space due to the impact of different orientations. Currently the river transportation orientation route is starting to be abandoned which causes increased access to circulation route on the land. The construction of Peunayong Culinary Riverwalk has shift the image of the city to be much better. However the government of the city is still yet optimally developed the Peunayong Culinary Riverwalk which can be seen from the availability of several facilities that have not been fulfilled, for instance is the lacking of parking lot which force the visitors to use the road as a parking lot and results in traffic jam. This is one of the causes of the poor quality of Peunayong Culinary Riverwalk as a public open space and will have an impact on the quality of urban space and the image of the city as a whole. With those problems at hands, this article will discuss further regarding the quality of Peunayong Culinary Riverwalk as a successful public open space based on four PPS criteria, namely uses & activities; access & linkages; comfort & image; and sociability [9]. This research is a qualitative descriptive study. The data from this research were obtained from the results of field observations and will be analysed by coding.

1. Introduction
A public open space (POS) is defined as an open parcel of land usually used to accommodate community meetings and activities [1]. There are several types of POS according to its characteristics, namely public park, special purpose park, sidewalk, parking lot, plaza, playground, atrium, community space, neighborhood space, and waterfront (riverfront, lakefront, and the pier) [2]. The latter typology, the urban waterfront, is considered as an exclusive part of the urban setting in many waterside cities, including in Banda Aceh, Indonesia.

Although considered as a sensitive area due to its ecological susceptibility [3], POS on the waterfronts has been seen as an acknowledgement of water as an appealing visual element [2]-[4]. One of the successful examples of riverfront city in Southeast Asia is Melaka, Malaysia. The
integration between the city and the water has improved visual and physical connection to the river, providing a successful POS for the community and contributing to social, health, environmental, and economic benefit [5]. Waterfront revitalization projects have, indeed, transformed many areas into lively zones of commerce, recreation, and housing, such as urban waterfront tourism in Makassar [6], waterfront regeneration in informal areas in Cairo [7], and waterfront as an expansion of CBD in Singapore [8]. All of them attempted to create POS as an interface between urban fabric and water.

Similarly, aiming to regenerate waterfront area as POS, since 2018 the government of Banda Aceh has begun to transform its most important market area, the Peunayong Market, into a new economic hub, specifically for culinary tourism. In particular along the riverbank of Krueng Aceh, which flows through the heart of Banda Aceh city, the so called Peunayong Culinary Riverwalk has been developed to improve the image of the city as well as to preserve the river environment. Before, it was an abandoned inelegance space, used by some vagrants, conveying slum impression to the area (Figure 1). The urban waterfront renewal project is hoped to contribute significantly in supporting urban activities and in providing a successful POS to the community.

![Figure 1. The condition of Krueng Aceh Riverbank in Peunayong. (a) Before the Peunayong Culinary Riverwalk was built (aceh.tribunnews.com); (b) After the construction of the Peunayong Culinary Riverwalk.](image)

Successful POS is often characterized by the attendance of people carrying out various activities comfortably, such as walking, standing, sitting, observing, talking, listening, and expressing themselves [2]. There are four aspects that must be considered; uses and activities, access and linkages, comfort and image, and sociability [9]. The first criteria demand POS to have a multifunctionality, providing diverse activities (active and passive) for users [2]. POS should also be user-friendly to various age category, ranging from children, adolescents, adults, and elderly [10]. In regards to the second criteria, a successful POS is a democratic one, which means that the space is accessible to all groups, physically and visually [2]. A good access is an access that can be easily and safely traversed without obstacles [10]. The third criteria call for a responsive POS that can provide comfort to the public [2]. Sense of comfort can be observed when people are able to relax, to slow down their pace, to smile, and to make eye contact to other users [9]. When the level of safety and comfort arise, the level of sociability, the fourth criteria, usually improves, too. Sociability in POS signifies the ability for people to be interested in a space that permits them to carry out social and leisure activities, alone or accompanied [11]. Overall, POS should contribute a significant part in improving public life, providing communities with social, health, environmental, and economic benefits. The presence of POS is expected to stimulate children’s play, active and passive recreation, educational opportunities, community and cultural focus [12], promoting social cohesion that linked to better health quality and well-being [13].

With these characteristics in mind, it is intriguing to observe whether the Peunayong Culinary Riverwalk can be classified as a successful waterfront POS. In general, the level of utilization is satisfactory, shown by a good number of visitors in the area especially during weekends. However, there are some indications that may degrade the quality of the Peunayong Culinary Riverwalk. For
example, one of the main problems observed in the area is the parking arrangement. Visitors place their vehicles on street as there is no dedicated space for parking, resulting in traffic delayed in surrounding street. It seems that this Riverwalk is also designed without much consideration for pedestrian traffic. People intending to enjoy the river scenery tend to be stationary, sitting in a place, rather than mobile, as cafes invade the spaces and disallow free movement. Therefore, it is important to discuss the quality of this newly developed POS in Banda Aceh, to prevent public space failure and to improve its features, thus creating a successful POS.

2. Materials and methods

This study uses a direct observational approach that collect evaluative information of the Peunayong Culinary Walk. An observational tool recommended by Gehl Institute to describe the four essential criteria of public space was used to record the number of visitors, the estimated age and gender of users, type of activities carried out, the gestures shown by users to indicate sense of comfort and sociability, the available infrastructure utilized, or unutilized, by visitors to access the space, and the number of transport modes accessible from and to the site (Table 1). In addition, observers photographed the various condition and situation of the site to support the observation list. In the span of one week (14 to 20 June 2021), the site was monitored, every day, from 0800 to 2100 hours, with three scheduled breaks.

Table 1. Criteria and variable.

| Criteria            | Variable                                      |
|---------------------|-----------------------------------------------|
| *Uses & Activities  | *Visit rate                                   |
|                     | *Availability of water activities             |
|                     | *Area use                                     |
|                     | **Availability of disabled access             |
|                     | *Availability of public transportation        |
| *Access & Linkages  | *Availability of bus stop                     |
|                     | *Availability of parking space                |
|                     | **Availability of pedestrian way              |
|                     | **Availability of visible and easy-access entrances |
|                     | *Cleanliness of the area                      |
|                     | *Availability of trash bin                    |
| *Comfort & image    | **Availability of adequate benches and tables |
|                     | **Availability of public toilets              |
|                     | **Availability of good lighting at night      |
| *Sociability        | **People gathering and interactions           |

Source: * Project Public Sapce (2008) & ** Gehl Institute [17]

The result from the field observation is organized into codes to get the right data presentation. This involves organizing pictures and checklist notes into four labels of successful public space criteria. The coding is then used to generate the description as well as to interconnect the findings. Description of themes is represented in the form of narrative passage, using the descriptive qualitative approach.

3. Results and discussion

The results in this study were found from field observations by looking at the 4 basic criteria of public open space according to PPS (2008) which is a summary of several theories of Gehl (1996). A more in-depth explanation in this study is the elaboration of the themes and codes for each criterion (Table 2). The codes are reviewed based on information of observation.

Table 2. Theme and observation code.

| Criteria   | Theme                               | Code                                         |
|------------|-------------------------------------|----------------------------------------------|
| Uses & Activities | Land use                         | Trade and service                            |
| Area activities  | Limited land’s activities (culinary, live music, leisure time) |
Based on the table above, the following is a more in-depth explanation regarding the four criteria for public open spaces.

3.1. Uses & activities
Peunayong Culinary Riverwalk is located near to riverside and the trade and services area, offered limited activities both land and water. Live music, culinary delights, hanging out, and enjoying the beauty of the river are the appearance of land activities provided by the café’s owner (Figure 2). Whereas the water activities only consisted of the fishermen’s boat transit and their activities bring the fish to the market. Those happened because of a lack of stakeholder’s initiative to provide various attractions. Public open space needs to be responsive for fulfilling the user’s needs in case both active and passive activities provided happiness for the user [2].

Figure 2. (a) Live music; (b) Fisherman activities

Peunayong Culinary Riverwalk has the potential to optimize the utilization by adding various activities both on land and river. This area can increase other land activities by providing a children's play area such as in Taman Alun-Alun Kapuas, Pontianak [14], considering the limited land on this area the children’s play could be provided like a corner for playing and reading. Besides the land activities, the attractions on the water that can be implemented at the Peunayong Culinary Riverwalk are rentals the rowing boat and rowing ducks, as at Boathouse Central Park New York [9]; River Cruise, that can take visitors along the Krueng Aceh river like in Malaka River [15] and providing boat culinary such as at Taman Alun-Alun Kapuas, Pontianak [16].

Cater to various activities, the tourism strategic plan plays an important role to increase the attractions in this area, but it does not declare specifically in the Tourism Strategic Plan of Banda Aceh 2017-2022. Due to the purpose, stakeholders need to be focussed on offering the right planning
of providing the tourism activities in waterfront areas. So, it will increase the intensity of the visit frequency from monthly to weekly.

Various age groups from 5-69 y.o visited Peunayong Culinary Riverwalk. The As stated by Gehl, where public open spaces can be used by various age categories, starting from children, teenagers, adults, and the elderly [10]. 15% visitors dominated by 21 y.o college students (Figure 3). Based on observations, no visitors visit the place at 8-10 am to do sports activities such as jogging and fun walking. The vibes start at 4-6 pm to enjoy culinary with friends or family dominated by families who bring children and elderly people and at 8-10 pm occupied by teenagers and adults. The current Covid-19 pandemic has caused a decreasing number of visitors since the enforcement of movement restrictions and operating hours controlled by the government.

![Visitor Age Category](image)

**Figure 3. Visitor Age Category**

### 3.2. Access & linkages

In term of access and linkages, Peunayong Culinary Riverwalk enclosed entrance, pedestrian pathway, parking, and public transport accessibility (Figure 4). First, Peunayong Culinary Riverwalk has 3 entrances located near Hotel Medan, on the middle shop lots, and at the Peunayong bridge abutment and there are no entrance signboards available. According to access criteria in PPS [9], public open spaces should have informative signage [9] that can ease the visitors to walk to Peunayong Culinary Riverwalk.

The pedestrian pathway is not connected to each other and difficult to walk side by side or passing by since the widths range only 80 to 100 cm especially for the disabled. This does not meet the requirement of the minimum widths 150 cm as stated in the regulation of the Ministry of PUPR Number 2/2018 [18]. However, the path for the disabled does not provide throughout the area, it is only found at the main entrance near Hotel Medan which is not fully occupied with visitors, and on the fully occupied area, the path for the disabled is unavailable. Besides that, the pathway does not cover with shading as a consideration to the tropical climate in Banda Aceh since the area faces to the west (sun exposure) thus less protection for pedestrians [19]. This existing condition has created inconvenience which caused the decreasing interest of the user to walk. Therefore, it is crucial for the government to set pedestrian pathways providing connectivity with shadings like roofs or greeneries.

In addition, the vendor’s activities by putting the café’s equipment like tables and chairs make obstacles on space utilization of the pedestrian pathway (Figure 4). This disrupts the pathway, reducing user comfort, and eliminating the impression of the POS. These need to control the space utilization to prevent misuse and restore the pedestrian zone through creating zoning regulations such as designing the facade of the building face to the river. So, it can create active frontage.

There is no designated parking area for Peunayong Culinary Riverwalk visitors have to share parking with the trade and service area on Jalan Jendral A. Yani. Insufficient parking space caused traffic disruption which some of the visitors have to park their car on the bridge and motorcycles on the pedestrian paths (Figure 5). The government neglected the impact of insufficient parking that causing the traffic crowd [20]. Thus, the government needs to take action to solve these problems in the planning of parking areas on limited land.
In terms of the accessibility of public transport, around Peunayong Culinary Riverwalk area has 2 closest bus stops whose Transkoetaradja corridor. Peunayong bus stop is closer within 72 meters than the Keudah bus stop with a distance of 291 meters. Both Riverwalk and Waterplace Park and Mississippi Riverpark in The United States have applied high accessibility which gives convenience, comfort, safety, allocated parking and, providing bicycle lanes and jogging tracks [21].

Figure 4. Access and lingkage maps.

Figure 5. Some of the visitors have to park their car on the bridge.

3.3. Comfort & image
Today, only 2 cafes operate at Peunayong Culinary Riverwalk out of 10 cafes. These 2 cafes on a strategic location because near the main entrance that attracts people interest to come while the others are not. The unoccupied sites cause some facilities to be damaged, such as broken tiles and holes, some un-working sinks, and the trash container is damaged as shown in Figures 5. In this matter, it is important to use the spaces in each area to secure the available facilities. Trash containers are not available in the whole area which makes the garbage scattered. Due to this condition, should be referred to SNI Number 19-2454-2002 “Operational Technical Procedures for Urban Waste Management” where the trash containers (barrel type, 30 – 40 liters) placed every 100 m, waterproof, durable, cheap, easy to get and, clean up [22]. On the other hand, this site does not provide park benches for visitors who just want to enjoy the waterfront. Another inadequate facility in this area is toilets there are 5 (five) toilets available at each distance of 2 (two) buildings, but those are not clean and well-maintained.

Figure 6. Unclean and neglected area.
In addition, the abandoned site is utilized by a squatter. They use the riverbank area as a place to wash clothes and bathing which reduces the quality of Peunayong Culinary Riverwalk as POS thus give a negative image of Banda Aceh City. A narrow entrance between shops and lack of lighting can trigger the crime. Then, the distance between fence bars is quite dangerous for children with a height up to 20 cm. Recommendations that can be suggested to overcome these problems are controlling the site usage that assigns only for riverside POS through law enforcement from related institutions, adding trash containers to ensure cleanliness, providing benches, maintaining the toilets regularly, modifying the fence bar for safety, and putting additional lighting to prevent crime. In the near future, Banda Aceh expects the park has a good image and comfort, clean, friendly, and beautiful like in the Mississippi River Park.

Figure 7. Home for the marginalized.

3.4. Sociability
Most visitors who come to Peunayong Culinary Riverwalk are for the meeting, gathering with family and friends in spending their free time and, enjoying the scenery served at POS and the river. These prove that none of the visitors come alone. Due to pandemic covid-19, visitors suggest implementing physical distancing at least 1 meter to each other through table set arrangements. Besides that, to increase the positive social activity, Peunayong Culinary Riverwalk can provide events related to current issues. For instance, organize a public talk show discussing up-to-date topics like covid-19 that educate the visitors and gain knowledge while refreshing.

4. Conclusions and recommendations
There are 4 criteria shown in assessing the Peunayong Culinary Riverwalk as a public open space. First, aspect of Uses and Activity shown this area is still very minimal in providing water and land activities. Then aspect access and linkage are shown pedestrian facilities to this area, the width of the path is not up to standard and is not connected and the pathway does not cover with shading as a consideration to the tropical climate in Banda Aceh since the area faces to the west (sun exposure) thus less protection for pedestrians. There are no entrance signboards available and the path for the disabled is unavailable. In addition, this area does not have a special parking area for visitors. In addition, the vendor’s activities by putting the café’s equipment like tables and chairs make obstacles on space utilization of the pedestrian pathway. The third aspect is Comfort and image, the unoccupied sites cause some facilities to be damaged, such as broken tiles and holes, some un-working sinks, and the trash container is damaged. In addition, the abandoned site is utilized by a squatter. They use the riverbank area as a place to wash clothes and bathing which reduces the quality of Peunayong Culinary Riverwalk as POS thus give a negative image of Banda Aceh City. A narrow entrance between shops and lack of lighting can trigger the crime. Then, the distance between fence bars is quite dangerous for children with a height up to 20 cm.

Recommendations that can be given are that the government can provide various activities that attract visitors such as providing water activities including rowing boats, rowing ducks, culinary boats, and River Cruises, while land activities such as providing playgrounds for children, including reading corners that provide books stories or comics and play corners. The government can also optimize the use of regional space so that it does not become a space and can manage the area optimally so that the area is more comfortable and cleaner. In addition, it is necessary to add a buffer between the Peunayong Culinary Riverwalk and the river so that this area remains safe for children and lighting throughout the area. To increase the convenience of accessibility to the area, the
The provision of pedestrian paths can be adjusted to the minimum number of pedestrian paths and there is shade. These need to control the space utilization to prevent misuse and restore the pedestrian zone through creating zoning regulations such as designing the facade of the building face to the river. So, it can create an active frontage. Peunayong Culinary Riverwalk also needs to provide a special parking space for visitors.

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