

THE ELEMENTS OF COASTAL PUBLIC OPEN SPACE

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ABSTRACT

Aspec of strategic value of coastal areas has the potential to be developed to the fullest The reality shows that public open spaces on the coast at the research site appear as they are and do not have strong characteristics in both social and physical aspects. The mixing of activities makes the elements of open space faint and difficult to recognize functionally. The purpose of the study was to find the constituent elements of public open space on the coast and identify the concept of coastal public open space arrangement. This type of research is descriptive qualitative so that it can explain in detail the phenomenon as well as physical data and activities through social interactions that occur at the research location. The results showed that coastal public spaces as spaces for social interaction and economic activity can be a driver of public activities freely by the community. The open space element adapts to the existence of coastal public spaces so that it becomes a concept in the arrangement of coastal public spaces. Natural elements as drivers of free interaction while artificial elements as drivers of economic activity

KEYWORDS Public open space, elements, coastals, activities, interactions



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INTRODUCTION

Public open space is part of open space that has a soul in terms of its function and use and its designation in an urban area (Mulyandari, 2010). Public open space is an open space that is always located outside the mass of buildings that can be used and used by everyone and provides opportunities to carry out various activities. Individuals and groups created in public spaces are a natural response in activities. In the public sphere issue what is relevant today is the conduciveness and accessibility after the world is confronted with the pandemi period. Increasing access and adjustment as well as the quality of space in coastal city areas is a new thing that requires positive collaboration between the physical area and socio-cultural values even in the context of distancing in interacting that has not been fully accustomed by the community due to the pandemic. Social space shifts to individual space (Egam, 2020). Public space in settlements is one of the spaces of community interaction

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even though it is realized that there are various changes in space due to the development of kota. Public space has become a significant key element of many development schemes to solve the problem of vitality (Hartati et al., 2019). R public in-trection money cannot be separated from community activities, including public spaces located on the coast. Over more than 300 years of development, coastal public spaces have been shaping up and creating a difference of value for coastal cities. Identity here is a harmonious synthesis of the values of nature, human beings and the built environment (Tran and Le., 2018). The characteristics of settlements are physically difficult to find although physical pathways can be traced due to changes in settlement settings from rural communities to urban communities (Egam et al., 2014). The existing reality shows that public open spaces appear as they are. The absence of individual traits or characteristics. Elements of open space become faint and difficult to recognize by signs, either naturally or artificially. Indeed, public spaces have so much potential including in the aspect of tourism. In improving the quality of public open spaces on the coast, more and more coastal cities have established large-scale urban commercial complexes, how to organically integrate many commercial functions has become the focus of design and research of public spaces of urban commercial complexes, which promotes the realization of the dynamic relationship between urban trade and each other (Su., 2020), presenting and accommodating a characteristic of belonging and personalization is needed in shaping the identity of a place (Lawson 2001). In addition to the quality of public open spaces, it is obtained by adding local cultural ornaments to the signboard, thereby increasing the image and identity of public spaces for tourists (Muhammad and Faradisa., 2021), especially coastal public spaces that have natural potential. Nevertheless rpublic open money in cities is often measured as a force to improve the sustainability of cities by contributing to three pillars: economic, social and environmental. Public open spaces for disaster resilience are poorly recognized and still poorly trained in the context of urban planning (Jayakody and Amaratunga., 2021). However, the coastal public open money as a natural potential becomes an important place in urban space so that it is expected to become a landmark or community orientation, although on the other hand, there is uncertainty in the use of public space based on its function as a cause of routine fishing activities (Egam, 2016), as occurs in coastal settlements . The purpose of the study was to find the constituent elements of public open space on the coast and identify the concept of coastal public open space arrangement.

Public Open Space Approach

In the past, the study of concepts about public open spaces focused on the spatial level, in particular visual and physical accessibility, shape and size and space limiters (Purnomo, et. all in Nathwutthikun, 2008). According to (Hakim and Gilbert, 2010 in Purnomo et all, 2014), Public open space is the basic form of open space outside buildings, such as nodes and landmarks that become a navigational tool within the city, can be used by everyone and provide opportunities for an assortment of activities. Public open spaces can function optimally for public activities for communities and individuals, and are located in busy or strategic locations, have good access visually and physically, spaces that are part of a circulation path, have seating and park benches (Pratama., et. All., 2020). There are three general criteria, namely: Meaningfull, responsive and democratic (Darmawan, 2010). Public spaces have the task of accommodating and giving place to all public interests (Ridlo and

Yuliani., 2018), including public spaces in coastal areas. The coastal area is a public open space so that the p esisir pantai can be enjoyed by everyone (Ugrasena et al., 2020). A comfortable and conducive environment is an inseparable part of the physical existence of public open spaces so that the conditions of interaction and social communication of the community can be met. The typology of public space includes: Roads, playgrounds, green lanes, indoor shopping, spontaneous spaces in residential environments, community open spaces, squares and plazas, markets, waterfront (Car et al 1992)

RESEARCH METHOD

Based on the research objectives, the hope carried out by this study is to maximize the aesthetics of the area and increase the role of public open space as a space for social interaction. This research is a type of qualitative research description that aims to describe situations or phenomena that exist in the field. The data was obtained through initial observation and continued by conducting a field survey to describe what phenomena were obtained based on the activity approach and elements that make up public open space. The approach of social reality that exists in society that is the object of research, and seeks to draw that reality to the surface as a trait, character, trait, model, sign, or picture of a certain condition, situation or phenomenon (Bungin, 2008). The locus of research is located in the area of Jalan Piere Tendean which is on the coast of Manado Bay, which is focused on 4 spots as shown in figure 1.

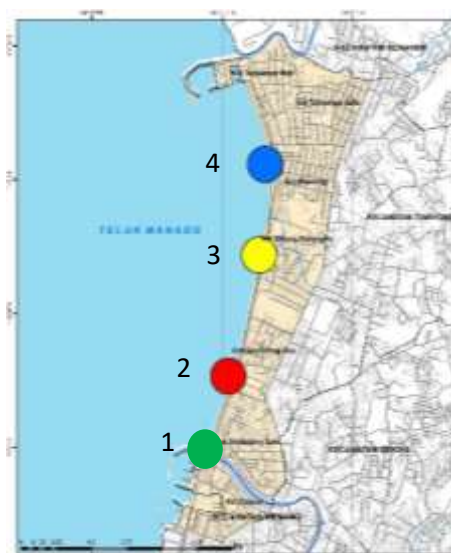


Figure 1 Research Location

The determination of the research location spot is based on the activities of both individuals and groups and the support of the activity support room. The focus of the research is the physical existence of public open spaces and community activities at the research site.

Data and Analytics

The data were obtained through preliminary observations and continued by conducting a field survey to describe what phenomena were obtained based on the activity approach and elements that make up public open space. The approach of social reality that exists in the society that is the object of research, and seeks to draw that reality to the surface as a trait, character, trait, model, sign, or picture of a certain condition, situation or phenomenon (Bungin, 2008). Types of data in the form of physical data include the existence of space and supporting elements as well as non-physical data in the form of various activities. The analysis carried out in stages includes analysis of the existence of space, analysis of activities, analysis of types of open space elements and identification of open space arrangement based on location characteristics, outdoor space elements and activities, as in table 1.

Table 1 Data and analysis

No	Goal	Data Type	Data Collection Methods			Types of Analysis
			Preliminary observations	Survey	Advanced surveys	
1	Physical data of the research site	Location research, Characteristics of the research site	✓	✓		Analysis of the existence of space
	Activity data	Community Activities Around the Coastline	□	□	□	Activity type analysis
2	Element (physical) data	Space utilization by function, open space zone	□	□		Analysis of the adaptation of activity to the characteristics of the location
4	Environmental response	Data supporting outdoor space: Natural and artificial	□	✓		Types of open space elements
					✓	The concept of hatching

Based on the data and types of analysis above, an analysis scenario is developed as shown in figure 2.

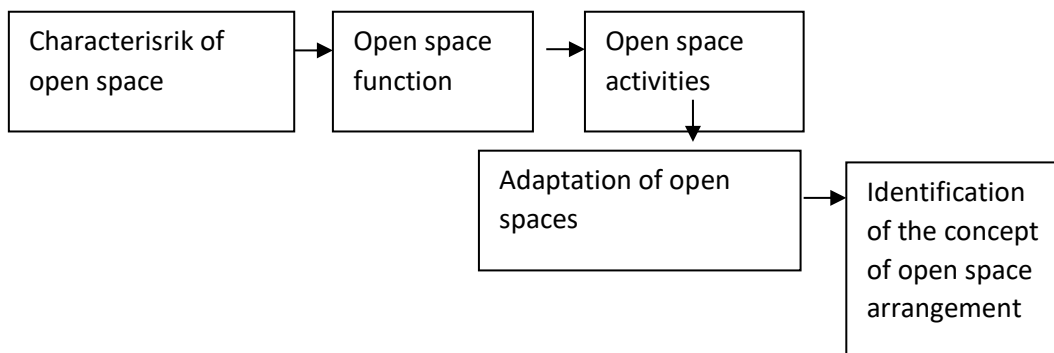






Figure 2 Frame analysis

RESULTS AND DISCUSSION

Characteristics of Public Open Spaces

There are several common space spots on the coastline. This shared space grows and occurs even with very limited space conditions. Common spaces, which are spaces for community interaction, are actually formed in two quite different categories, namely: 1. Common spaces that are used by settler communities around the research site. 2. Shared space that is used by the general public, especially people who pass through the research site. The specifications of the activities found are: Activities contained in public spaces carried out by the surrounding community, namely: 1. Swimming, 2. Mooring boats by fishermen. These boats are placed on the coastline, but there are also boats placed on the sidewalks of the road. 3. Fishing is done by people who have a hobby of fishing. This activity is carried out temporarily. 4. Sit around relaxing, and tell stories. This activity is carried out in the morning and the peak of this activity occurs in the afternoon, as shown in table 2.

Table 2: Characteristics of Public Open Spaces

No	Location	Characteristic	Activity	Analysis results
1	 Around Seokarno Bridge	Square-shaped public spaces Small rocky coastal conditions and can be accessed directly	Children's play, gathering and relaxing citizens	As a space for general interaction because it can be freely accessed by the public
2	 Around Kemang Cafe	The rear position of the settlement. Coastal conditions are relatively flat, with no rocks	Children's play, relax the residents, moor boats and unload fish in the morning	As a special social interaction space for settler communities, and a limited interaction space for the general public
3	 Around Sindulang	The existing public space is relatively narrow with fairly steep conditions.	Used as a place to sell fresh fish and moor boats.	Functioned as an economic space by several communities living around the location
4	 Around Ria Reef	This public space is a space deliberately provided by the government.	Relax and gather citizens and the general public	Asocialization space for the general public and surrounding residents

Social Interactions

Based on user analysis and activity patterns that occur in open spaces there are some similarities in terms of users, types of activities. Actors in open spaces are more dominated by adults in the economic space group, while in open space groups with social space functions and interactions there is mixing between various age categories, namely: Parents (fathers and mothers), youth-adolescents, and children. Activities in the space tend to be repetitive such as: Relaxing, telling stories, taking beach baths, and fishing. In open spaces with functions as economic spaces, the actors present in these spaces vary greatly. Activity within an economic approach is the activity that dominates the space. Economic space occurs in 3 parts, namely: 1. Coastal space directly adjacent to the sidewalk barrier, 2. Economic space which is carried out by switching the function of the sidewalk as a trading space 3. The economic space is carried out by taking over 1-1.5m of the road body.

Adaptation of Public Open Spaces

There are two types of adaptation, namely: 1. Adaptation by reaction, namely by changing people's behavior from relaxed behavior in social interaction to economic behavior 2. Adaptation by adjustment is done by changing the physical environment. Changes in the physical environment are carried out by intervening in the environment through the addition of artificial elements such as: Tables and chairs made of bamboo or plastic, tents made of iron and bamboo, and merchandise carts. Based on the adaptation of space and activities, there are elements of public space as shown in figure 3.



Figure 3 Space adaptation

Design Concept

The approach of combining social functions and economic functions is fundamental in finding design concepts. The merging of functions is characterized by the presence of physical elements that are categorized in two elements, namely fix and non fix elements as in table 3.

Table 3. Open Space Forming Elements					
No	Location	Open Space Shaper			Semi-fixed elements
		Fixed Elements (<i>fix-element</i>)	<i>Non-fixed elements</i>		
			Natural	Artificial	
1	Around Soekarno Bridge	Vegetation Rocks	Tidal area	Boat	

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2	Around Ke-mang Cafe	Vegetation, breakwaters	Tidal area	Seating, Boats
3	Around Sindulang	Vegetation, parapets, rocks	Tidal area	Plastic and wooden seating/tables, carts, handwashing stations
4	Around Ria Reef	Vegetation, parapets, rocks	Tidal area	Plastic and wooden seating/tables, carts, Handwashing stations

Based on table 1 of the characteristics of public open spaces at 4 points of study locations, it shows that there are similar characteristics as social intersection spaces as the main function. This is in line with (Cao and Tang., 2022) Public open space core has frequent interactions and strong relationships with certain types of public facilities rather than periphery. In its development the social interaction space developed into an economic space. This change was triggered by the development of the city with a close relationship between the coastal location and access as a circulation route, which was strengthened by the presence of sidewalks and concrete barriers. This is in line with (Nasution, & Zahrah, 2018) Masyarakat will view public open spaces well and continue to use them in an intensive way.

As a social force, social interaction builds naturally in correlation with community activities with the repetition of activities such as relaxing in enjoying the coastal atmosphere and the implementation of hobbies such as fishing and fishing activities as a continuation of coastal characteristics. This is in line with (Jayakody, and Amaratunga, 2021) Public open space in cities is often measured as a force to improve urban sustainability by contributing to three pillars: economic, social and environmental, (Egam, 2016) although Reality reveals that fishermen's activities intervene in the existence of public spaces as common property.

As a consequence of economic activity, adaptation is one of the strategies functionally, in line with (Addas and Maghrabi, 2021) Public open space services have proven to be strongly influenced by environmental changes. The results of the study in table 3 show that there are 3 categories of open space elements, namely fix elements, semi-fix elements and non-fix elements. The non-fix element is an interesting element because this element is a driver of increasing economic activity even though it is carried out temporarily even though the attributes of boats in the fishing profession are one of the characteristics of coastal open space which is also used as an economic space, in line with (Egam, 2016) Reality reveals that fishermen's activities intervene in the existence of public spaces as Characteristics of coastal areas with very viscous artificial elements. Social interaction is freely a reference for the concept of coastal open spatial planning which is strengthened by the addition of economic activity as an adaptation to the existence of the location, and fishing space as a characteristic.

CONCLUSION

Road barriers, rocks and vegetation are categorized as natural elements that form open spaces on the coast. Meanwhile, artificial elements in the form of supporting equipment for business space for settler communities around the coastline. The non-physical elements are in the form of free social activities by the general public and economic activities driven by settler communities around the coastline. Collaboration on coastal adaptation, fishermen's activities and economic space is a concept in the arrangement of public open space.

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