Study of city public open space elements as an urban tourism (case study of public open space in Yogyakarta City)

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Abstract. Alun-alun (javanese) or lawn square is one of public open spaces that serves as a forum for social activities. Apart from its social functions, Alun-alun also has other functions, an ecological and economical. The ecological function aims to maintain the quality of the environment. Meanwhile the economical functions aims to improve the economical aspect. Considering the important existence of Alun-alun in an urban area, a public open space must be designed by considering the elements of urban space in order to function properly. The existence of a Alun-alun in Yogyakarta becomes the center of social activities for its society. However, in reality, the social activities taking place in Alun-alun are still relatively low. This study aims to examine the elements forming urban space in Alun-alun Yogyakarta using descriptive qualitative methods. The results describe that the social activities occuring in Alun-alun Yogyakarta due to the elements which form the urban space in it.

1. Introduction
Open space is one of the elements forming the character and shape of a city. Public open spaces provide social life for urban communities as well as become the connecting space between buildings [1]. One of the public open spaces that exist almost in every city in Indonesia is Alun-alun. Since the Majapahit era, the existence of Alun-alun is an important element that forms urban space. Alun-Alun depicts the history of the city in the past. The influence of various cultures led to the establishment of buildings near the Alun-alun, such as markets, mosques and temples.

The Alun-alun is one of the city's public spaces which has been functioned for social activities by the community, especially in urban areas. The community often uses the Alun-alun to hold an events and a place for relaxation. In addition, the Alun-alun is also used to hold various performances, both local and modern art performances. Apart from its social functions, the Alun-alun also has other functions. Those are ecological function which aims to maintain the quality of the environment and the economical function. The green open space in the Alun-alun becomes a water infiltration. Those functions has similar characteristic with Alun-alun in Yogyakarta City.

There are two Alun-alun in the city of Yogyakarta. Those are Alun-alun Utara (the north lawn square) and Alun-alun Selatan (the south lawn square). As the name implies, the Alun-alun Utara is located in the north and Alun-alun Selatan is in south of the Yogyakarta Palace. This Alun-alun is a landmark showing importantas identity of the palace. Considering the important role of its existence, a public open
space must be designed by considering the elements that form urban space in order to function properly. The existence of Alun-alun become the city center and the center for social activities to its society. However, in reality, the social activities taking place in Alun-alun are still relatively low.

2. Description of area analysis and history
One of the characteristics that has also become an identity for old city centers in Java is the existence of an Alun-alun. The Alun-alun on Java Island is a large field surrounded by a banyan tree in the middle of it. One of them is the Alun-alun in Yogyakarta. According to Handinoto [2], the history of Alun-alun is divided into 3 period:

2.1. Pre-colonial
In pre-colonial era, Alun-alun was a space that could not be separated from the existence of the palace. In ancient times, the palace was the center of the royal government. The Majapahit Kingdom became a kingdom that initiated a typical Javanese landmark. In Negarakertagama described by Prapanca, in the northern part of the palace complex, there were two Alun-alun. The model almost had similarity with the Yogyakarta’s Alun-alun. It couldn’t be ignored that Yogyakarta was a former division of the Mataram kingdom in the past. There were two Alun-alun, namely Lor and Kidul. In the past, Alun-alun Lor meant to provide the conditions for the continuation of the king's power. Meanwhile, Alun-alun Kidul was to prepare a condition that supports the relationship between the palace and the universe. Alun-alun Kidul could also symbolize the unity of sacred power between the king and the nobles who lived around the square. The square was also used as a meeting place between ordinary people and royal family.

![Figure 1. Layout of the Yogyakarta Palace. Source: kratonjogja.id](image)

2.2. Colonial period
In colonial era, the existence of the Alun-alun was closely related to the government system. The Dutch government implemented indirect rule. Alun-alun was used as a place for the royal to have direct contact with the people. In the colonial era, a residency system was enforced. It was led by a resident who controlled several districts and chaired by the regent. In the center of the city, a building was built for the regent's house as a landmark of government. In front of the Regent's house, there was a lawn square (alun-alun) overgrowing by two or a banyan tree. In Yogyakarta, the palace was located in the south of the Alun-alun and the Agung Mosque was in the west. Then around the Alun-alun there were markets, stations, shops, and other government buildings.
2.3. Post-colonial
It’s occurred after the independence. The construction and development of the Alun-alun became unclear due to the government's hesitant policies. Therefore, the Alun-alun was used for various activities, including social activities, shows, sports, and city parks.

3. Method and analysis
The method used in this study is descriptive qualitative method. Collecting data using a secondary survey based on the results of a literature review. Literature studies are used to collect information from various books, journals, websites, articles, and study documents related to the research location. In addition, a secondary survey was also conducted using a street view at the research location.

![Figure 2. The elements of the Great Place.](source: Project for Public space [3].)

The unit of analysis studied uses the Placemaking theory which are having four main keys in developing public spaces:

a. Sociability, creates a memorable social environment, so that it makes people to revisit.
b. Uses Activities, creating an attraction so that it raises activities.
c. Comfort and Image, has a good and comfortable view and image.
d. Access and linkage, well connected and connected to important facilities in an area.

According to Project for Public Space [3], Placemaking inspires people to collectively re-imagine public space as the "heart of community". This can be done by strengthening the bonds between place and human. It can created a public space that maximizes shared value. Placemaking is not just an urban design, but a collaborative process of various forms based on cultural, social, and physical identity that determines a process of evolution in public space. According to Fortuzzi [4], the idea of placemaking is a revolutionary idea because the approach to urban issues comes from various perspectives. It opens up many possibilities for shaping the face of new public spaces. The formation of this public space cannot be separated from good management and maintenance. Placemaking is understood variously as a physical strategy for enhancing the image of a place (engine of local economic growth), a social agenda for mobilizing people behind a certain set of goals, and or a channel for political action. So when we talk about placemaking it is not only related to the concept of place but also to the concept of urban socio-cultural and political space. Warsilah [5] and Darmawan, Edy, [6].

According to Hamid Shirvani in his book “Urban Design Process” [7], there are several components of city-forming elements that need to be intervened:

a. Land use
   It divides and distributes land functions according to building functions
b. Building form and mass
It’s arranging of shape, building mass, and facades, building boundaries, number of floors, and building intensity which includes the quality and appearance of the building.

c. Circulation and park
   The elements of road circulation influence the movement of goods and people. It can development the economic activity.

d. Open space
   It is defined as a component of landscapes, hardscapes, parks and recreation spaces or public spaces in cities.

e. Pedestrian Ways
   Attractive and connected pedestrian paths will reduce dependence on the use of motorized vehicles thereby improving air quality and having a positive impact on the development of commercial activities.

f. Activity Support
   Activity Supports are the elements that support the creation of a public space. It will strengthen its image and create a more lively space

g. Signage
   Signage are signs direction and should be included in road furniture that functions as providing supporting information.

h. Preservation
   Preservation is the form of management and maintenance of areas in order to maintain cultural and economic values.

From the criteria of placemaking then it is included in the urban design elements and produces several criterias.

![Figure 3. Elaboration of the Placemaking concept with city-forming elements. Source: Author's analysis, 2020.](image)

From the results of the elaboration, it was concluded that land use indicates that each city-forming element has its own criteria for placemaking. The phenomenon related to placemaking can be found in Alun-alun Utara and Selatan Yogyakarta. Alun-alun should be placed in a strategic area so it can be accessed easily. The lack of open space in the city has made the lawn square (Alun-alun) as an alternative entertainment for local resident and tourists. The typicals of activities in Alun-alun Utara and Alun-alun Selatan were a little different. Alun-alun Selatan has more social activities compared to Alun-alun Utara because of its sacred function. In Alun-alun Utara, it is used as a place for events held by the Ngayogyakarta Hadiningrat Sultanate, such as the Garebeg and other processions. Meanwhile, in Alun-alun Selatan there are more social activities carried out by the community, especially at night. Various kinds of culinary tours and other entertainment such as bicycles and odong-odong are the main tourist attractions in the Alun-alun Selatan.

4. Description analysis of urban design elements Alun-Alun Utara and Selatan
   Detailed element analysis is carried out on each element consisting of land use, building layout, circulation and parking, open space, vegetation systems, signage, supporting activities and preservation.
Table 1. Description analysis of urban design elements Alun-Alun Utara and Selatan.

| Element | Alun-Alun Utara | Alun-Alun Selatan | Information |
|---------|-----------------|-------------------|-------------|
| Comfort and Image | ![Image](Figure 4. The front of the palace.) | ![Image](Figure 7. The southern part alun-alun selatan) | **Alun-alun Utara** <br> Almost all the buildings facing the street, 1 floor, and the condition of the building is well maintained. The scale of the buildings in this square is large because most of the land use is used for Keraton tours. |
| Building Form and Mass | ![Image](Figure 5. The western part of the palace.) | ![Image](Figure 8. The southern part alun-alun selatan) | **Alun-alun Utara** <br> The building is facing the street (there is a dividing wall), but there are several buildings facing the street such as the Sasana Hinggil Dwi Agung Building. It is poorly maintained especially building and wall conditions. The building mass is smaller than in alun-alun utara. |
| Uses Activity | ![Image](Figure 10. The map of the building functions (Alun-alun utara.)) | ![Image](Figure 11. The map of the building functions (Alun-alun selatan.)) | **ideal** <br> Building conditions and well-maintained imagery at a suitable scale increase the visual comfort of the area. |
| Land Use | ![Image](Figure 6. Map mass building of Alun-alun utara) | ![Image](Figure 9. Map Mass Building of Alun-alun Selatan) | **Alun-alun Utara** <br> The land use in the alun-alun area is varied and is dominated by commercial and tourism uses. <br> **Alun-alun Selatan** <br> The majority of land uses in the alun-alun area are dominated by settlements. <br> **Ideal** <br> Land use is better mix use to increase space optimization. |
| Comfort and Image | Access and Linkage |
|-------------------|--------------------|
| Figure 12. The center of the Alun-Alun Utara | Figure 14. Map of the pedestrian path of Alun-Alun Utara |
| Figure 15. Pedestrian in Alun-Alun Selatan | Figure 17. Pedestrian path map of Alun-Alun Selatan |

**Alun-alun Utara**
Around and in the center of the Alun-alun there are pedestrian paths with a standard width (> 1.2). Many vehicles parked carelessly and pedestrians lane covered by street vendors. There are 4 accesses to the Alun-alun.

**Alun-alun selatan**
Around the alun-alun there is a wide pedestrian lane and its use is shared with street vendors, but the use of street vendors does not prevent pedestrians from walking on the pedestrians. There are 5 accesses to the Alun-alun.

**Ideal**
Connected and prioritizing pedestrian comfort.

| Comfort and Image | Access and Linkage |
|-------------------|--------------------|
| Figure 16. Street vendors occupies a wide part of the pedestrian | Figure 18. Map of access points to Alun-alun Utara |

**Alun-alun Utara**
There are 4 accesses towards the Alun-alun and the road applies 2 directions. The parking pockets provided are around the Alun-alun. However, on street, parking is still committed.

**Alun-alun selatan**
There are 5 accesses to the Alun-alun and the road is enforced in one direction. Parking pockets are not provided, so many motorists choose to park on street by the sideline.
Table 1. Cont.

| Ideal | Parking availability due to minimum capacity. The road is well connected and close to public facilities. |
|--------|---------------------------------------------------------------------------------------------------|

**Figure 19.** Cross section of the road in *Alun-Alun Utara*

**Figure 20.** Map of parking area

**Figure 22.** Cross section of roads in *Alun-Alun Selatan*

**Figure 23.** Nuance of the *alun-alun utara*

**Figure 24.** Distribution map of vegetation in *alun-alun utara*

**Figure 25.** The nuance of the *alun-alun selatan*

**Figure 26.** Map of the distribution of the vegetation of *alun-alun selatan*

**Alun-alun Utara**

Area of the green space in the *alun-alun utara* was larger. The number of trees reaches 52 trees. Social activities are scattered on the outskirts of the *alun-alun*.

**Alun-alun Selatan**

The green space area in *alun-alun selatan* is smaller. The number of trees reach 37 trees. Social activities are centered on the outskirts of the square.

**Ideal**

Creates a comfortable social environment as well as giving an impression to the visitor.
Table 1. Cont.

| Signage | Access and Linkage | Access and Linkage | Alun-alun Utara |
|---------|--------------------|--------------------|-----------------|
| Figure 27. Signage for Kraton Mosque tourist attractions | Each place has signage that is large enough and clearly legible. There are many signs, especially signs directing tourists to the parking lot. |
| Figure 28. Signage for a place to eat near alun-alun utara | Figure 29. Signage in the street |
| Figure 30. Signage for angkringan of alun-alun kidul |

| Activity Support Tourism | Sociability & Uses Activity | Alun-alun Utara |
|-------------------------|-----------------------------|-----------------|
| Figure 31. The atmosphere of the angkringan in alun-alun utara | Figure 34. Grebeg Suro procession in Alun-alun utara |
| Figure 32. Grebeg Suro procession in Alun-alun utara | Figure 35. Odong-odong in Alun-alun selatan |
| Figure 33. Sekaten event in the afternoon. |

| Alun-alun selatan |
|-------------------|
| Each place has signage that is large enough and clearly legible. There are many signs, especially signs directing tourists to the parking lot. |

| Ideal |
|-------|
| There is an arrangement for installing signage, so that it looks more beautiful and reduces visual waste |

| Alun-alun Utara |
|-----------------|
| In the morning until noon, the Alun-alun Utara is less visible, but during the daytime, there is a crowd of angkringan and food courts around the square. (24 hours inactive activity). Usually this square is also used for big events such as Grebek Suro, Sekaten, and others. |

| Alun-alun selatan |
|-------------------|
| In the morning, the Alun-alun Selatan began to get crowded with people to hunt for breakfast. The tradition masangin makes the Alun-alun Selatan even crowded during the day. As the afternoon gets, the alun-alun will be more and more crowded because of the large number of angkringan and odong-odong. |

| Ideal |
|-------|
| Improve local economy and use of active space for 24 hours. |
5. Preservation

Alun-alun Utara and Selatan are fully managed by the Yogyakarta Palace and the Yogyakarta City Culture and Tourism Office. Alun-alun Utara and Selatan are part of a cultural heritage so it needs to be preserved and managed.

6. Conclusion

Alun-alun Utara and Selatan Yogyakarta are public space used for people to release fatigue and have recreation. The phenomenon related to placemaking can be found in Alun-alun Utara and Selatan, which is marked by social activities carried out by the community. However, based on the analysis that has been carried out, there are evaluations needed to be considered to improve the comfort of the Alun-alun, create a memorable space for space users and increase success in implementing the concept placemaking. The suggestions are following:

a. Building and Form Mass: Building maintenance needs to be done so that the view around the Alun-alun is better.

b. Land Use: Land use should be changed to mix use land to maximize land use.

c. Circulation and park: Parking arrangements need to be done so it’s not disturbing the pedestrian.

d. Open space: The use of open space for social activities is good. However, it is necessary to add some street furniture such as seating around the Alun-alun, the provision of free drinking water, and the installation of other street accessories (fountains, etc.)

e. Pedestrian ways: It’s needed for pedestrian care and shade to make it more comfortable to walk. In addition, the arrangement of street vendors is also needed so it does not cover pedestrian access.

f. Activity Support: Social activities and events held in the Alun-alun have been carried out properly

g. Signage: Signage arrangements need to be made in order to reduce the visual waste of the city. By adding local cultural ornaments to the signage, it will enhance the image and identity of the public space for tourist.

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