

# Layout, Configuration, and Interaction of Spaces on Malang City Square to Re-Construct the Concept of *Alun-alun*

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## ABSTRACT

Jami' Mosque is one of the elements of *catur tunggal* within the spatial order of Malang City Square (*Alun-alun* Malang). The changes in one or all of the elements that form the square will also affect its spatial order. Therefore, the interrelations between elements forming the *alun-alun* need to be understood as one of the Javanese city's identities. The existence of the Jami' Mosque with its functional complexity can be the initial foundation to explore the spatial configuration and interaction in *Alun-alun* Malang. The research is conducted through a behavior setting approach using space syntax to determine the relationship between the spaces in the mosque and the square. It was done by using the superimposition of spatial patterns that formed over time. By understanding *Alun-alun* Malang's spatial concept, the meaning of the space that has been formed can be maintained. Furthermore, the understanding can help to bring back its cultural values and information as a Javanese urban space identity.

**Keywords:** *Jami' Mosque, alun-alun, spatial, behavior setting, culture*

## 1. INTRODUCTION

### 1.1. Cosmology Concept of A City Square in Java

There are several versions of the etymology of *alun-alun*. The word "*halun-halun*" comes from Old Javanese (Kawi) language, not from Sanskrit. So it can be said that *alun-alun* is an original Javanese concept for open space in a city [1]. *Alun-alun* is an open space that serves as a place for community gatherings and celebrates ceremonies, usually located in front of the palace [2].

The etymological study provides a further perspective that the culture of Majapahit already recognizes the concept in a Kawi term. In the *Negarakertagama* manuscript from the mid-14<sup>th</sup> century, *alun-alun* means "field". Canto 9 stanza 2 of *Negarakertagama* record the use of the words "... *mungwin watanan Alun-alun tan ppat maganti ...*" ("... taking place at the guardhouse in *alun-alun*, [they] endlessly changing ..."). In *Kakawin Bharata Yudha* (canto 39 stanza 2), the context of the word *alun-alun* also means "field": "... *alaris tékéng alun-alun ...*" ("walking up to the *alun-alun*") [3]. The excerpt from the *Negarakertagama* above is also in the context of describing palace guards; therefore, it is assumed that the *alun-alun* was not far from the palace (*keraton*) [4]. In line with Stutterheim's notion [5], some researchers such as McLain Pont, Mundarjito, and others who had studied Majapahit, agreed to conclude that there was an *alun-alun* in front of the palace.

If previously *alun-alun* is mentioned as a compound word, then also in the Kawi language, "*alun*" as a single word means "flowing, wavy". However, in *Kakawin Maha Barata* from the late 14<sup>th</sup> century, *alun* (not *alun-alun*) had changed meaning into "terrain, field, open space" [3]. Thus, the concept of *alun-alun* had changed according to the times. Unfortunately, the early period of the Muslim empires left most notes of the spatial concept in a semiological form, not as an epigraphic heritage, nor recorded it in a detailed written explanation. The experts agree that those are the era when Java Island underwent a substantial cultural change. One of the many historians who concluded this was Lombard, stating that the "real resurrection" ("*véritable l'essor*") of Muslim empires started from the Sultanate of Demak [6]. When observing the changes in architectural typology, especially in the structure of the palace's mosques [7] or "conversion of Hindu ideology" to "Islamic ideology" in puppetry, there is a likelihood that in its semiotics, the word *alun* or *alun-alun* also had changed into other translation.

The transformation is also recorded from the information given by sources in *Keraton Surakarta* (KH. KRT Ki Mursyidi MS, among others), which said that "*alun-alun*" can be etymologically connected with the word "*alauna*" (coloring) or "*laun*" (color). Thus, *alun-alun*, according to the sources, is an open space with an environment that should be filled with a "beauty" of every individual of the community, which in this case, is pioneered by those who pray in the mosque (located on one side of *alun-alun*). Therefore, this is what was brought by the early Islam missionaries. They use the term "*gemah ripah*",

meaning the elevation of noble values as well as obedience to God, where each individual plays a role in social life, which is described harmoniously by *alun-alun* as a civic space. In short, *alun-alun* in this concept is a manifestation of cosmology (Muslim-Javanese) in social life. It means that social life should be the representation of the "vertical relationship" between the Human Kind and God.

## **1.2. Macapat as a Spatial Concept of Malang City Square (*Alun-alun*)**

In cosmological studies, Prijotomo [8], conceive that the concept of *alun-alun* in Majapahit palace is derived from the mindset of Javanese (Javanese-Hindu) society. It depicts the interaction between the forces of the underworld and the forces of nirvana, or the interaction between the religious axis and the earth axis, known as the concept of "*mancapat*", that is needed for neutralizing conflict. Indeed, it appears in people's lives, as mentioned in Negarakertagama, that in addition to dealing with places of worship, the square is also close to the Mahapatih Gajah Mada residential [5]. In other words, *alun-alun* is an inseparable part of social interaction activities in the Majapahit community, as well as between human-society and those deified in Hindu-Buddhist cosmology. Prijotomo does not seem to have adequately explained the connection and historical facts between what he called the concept of "*mancapat*" in *alun-alun*. The explanation is quite important because the concept of "*mancapat*" shows the existence of a center with four edges (*manca* = outer or edge, *pat* = four). Contrary to the fact that in the configuration of *alun-alun*, we often see a Banyan Tree as the center.

In the history of the Muslim Empire in Java, *alun-alun* is often associated with the power of the rulers. Every building owned by the ruler (palace or official residence of the officials), starting from the king, regent, the duke, *wedana*, to the lowest level in the power of hierarchy, was always placed in front of *alun-alun* [9]. So that the existence of the *alun-alun* in a city, at first glance, can be seen as part of the city's spatial structure, and usually located in the center of the city surrounded by government buildings or public facilities: the palace/ *keraton*, place of the regent/ *kabupaten*, places of assistant resident, among other.

When traced to its origin, actually *alun-alun* has nothing to do with part of the city, because *alun-alun* is part of the palace/ *keraton* [10]. Thus, from a historical aspect, not every city may have *alun-alun*. There is even a hint that *alun-alun* is a transition from social space, which is very common in people's settlements during the Majapahit period [7]. Negarakertagama provides a gap for previous researchers to suspect that the residence of high-ranking state officials and official/state places of worship during the Majapahit period was located around the square [5,11]. The use of the words "*alun-alun*" seems to have been

"misguided". Which means, there has been a shift in the function of *alun-alun* that increasingly complex, so that is in the future the idea of *alun-alun* is "adopted" to become the center of the city (civic center), surrounded by public buildings or other government buildings [12].

In the subsequent developments, the function and the meaning of *alun-alun* are difficult to be associated only with the "open space". In general, traditional urban spatial structures from the late fifteenth to nineteenth centuries consist of a large square with one or two Banyan Trees at the center, and the square is called *alun-alun*. The existence of *alun-alun* cannot be separated from the buildings around it, which makes *alun-alun* the axis among the city :

- The north side is usually reserved for profane areas
- The south side is used for areas that are sacred, for example, the palace (*Keraton*)
- The west side is used for the grand mosque (Jami' Mosque).

However, the division of this zone is not absolute because there are significant variations (Surabaya in the 16<sup>th</sup>-17<sup>th</sup> century or centers of government in the lower hierarchy, such as Sedayu and Gumeno in the 19<sup>th</sup> century). So it will be more moderate to note the character of *alun-alun* as a whole square, square, or almost square, although a square in the form of a parallelogram is also found in the city of Yogyakarta. Generally, *alun-alun* is surrounded by:

- Government buildings or buildings owned by the authorities, for example, palaces, place of the regent/ *kabupaten*, places of assistant resident, placed on one side.
- Market, placed at some distance but has direct access to the square.
- Mosque, on a different side from government buildings.

*Alun-alun* Malang has finally developed into an economic center that is starting to become dense and has a high economic value. It is indicated by the accumulation of trade, service, and informal sector activities followed by the accumulation of city transportation and movement. These developments will, in turn, shift the image of *alun-alun* as the city/government center into a trade center. This development is in line with the development of the direction of circulation oriented towards the downtown area with *alun-alun* as the main destination. Several factors caused the changes in land use functions in many cities in Java, such as:

- Narrowing of land, compounded by the development of cities that are not culturally sound [13]. It triggers narrowed socio-cultural interactions: people interact solely because of economic transactions, and urban space is enslaved to economic interests for the sake of multiplied results in a short time with compressed capital.
- Lack of cultural insight [14]. It reinforces the change in the function of land use because historical and cultural considerations are considered insignificant; in the city's economic growth, cultural factors are rarely considered.

### 1.3. Why was this research necessary?

The development of the city is needed, but policymakers must know that the direction of its development. In this very age, there are also causes that more fundamental than the two things mentioned above. That is, the rulers (at almost all levels) can be said to be negligent - if it is inappropriate to be called a failure - in implementing from its development policies, especially after the "development period" since the 1970s. In short, no element of cultural politics was given a place in the determination of spatial planning, even though a sustainable city has also take cultural potential as a capital. It can be said that cultural politics will determine the direction of the views of life, scientific outlook, and applied science that manifests in urban spatial planning.

In the future development, policymakers, especially in Malang City, need to know the values of the *alun-alun*'s philosophy, in order to elevate these values as a guide of the people's cultural movements. By knowing the values of the philosophy of *alun-alun*, the determination of spatial planning, especially for the area of *Alun-alun* Malang, will be more wise and integrated (multidisciplinary). No longer dominated and biased on the economic aspect, which from one side has a momentary impact as if realizing prosperity. But in the long run, "cultural diseases" which are more difficult to treat, inevitably threaten people's lives. That is, the loss of ethical values (lack of meanings), which becomes the director of all activities and people's life force towards a just direction in modest prosperity. For this reason, a study of *Alun-alun* Malang preservation is needed.

## 2. METHOD

This research uses a descriptive-comparative method, which is done by describing the development of the initial condition of the square to the latest changes. The description of these conditions is related to the basic concept of *alun-alun* as a social space of the city through the link between the Mosque and *Alun-alun* Malang as a sacred-profane bond in the concept of cultural space. Identification of the use and linkage of the space is made by using space syntax supported by mapping of spatial activity with superimposed spatial patterns to get the intensity of use and linkage of space.

## 3. RESULT AND DISCUSSION

### 3.1. Concept of Space on Alun-alun as a Symbolic Place

Since The Empire's era, *alun-alun* has always been a part of the sacred space associated with the palace (*Keraton*)

and religious rituals. Based on the cosmological concept of *alun-alun*, the leaders of "formal" or social roles (government officials, traders, scholars), merge into one and tested by the people in *alun-alun*. In social figuration, the *alun-alun* is the social area of inscriptions where informally, the components of society are intertwined with one another, even though formally, it is a social institution that seems to "stand-alone." In short, it can be said: *alun-alun* is the space of people's culture.

As a social inscription, *alun-alun* reflects the components of society by the symbol of the Banyan Tree (*Pohon Beringin/ Waringin*). The meaning of this Banyan Tree symbol can be raised as a part of a political culture that aims to unite the dynamics of community life in a direction that is righteous-good-beautiful: serenity and peacefulness. One of the meanings that implied by the phonetic-semiotic symbol of "*waringin*", so that humans do not fall into arbitrary actions both against their own self and against other living creatures outside themselves. It means that human beings are fair both to themselves and outside themselves. This is in line with the previous understanding of fair leaders. The harmony between the architecture symbolisms of the banyan tree and the palace as the residence of the leader is seen. That is why in the spatial configuration of *alun-alun*, there are two types of leadership symbolization:

1. Informal leadership :  
symbolized by two Banyan Trees (*waringin kurung*), as a symbol of the union of the leader with the people in consultations, which limits their power in two directions: from within (*wara'* nature, self-control) and from outside (people's consultation)
2. Formal leadership:  
symbolized by the palace (*Keraton*). In the history of the Islamic empires in Java, the leadership in terms of worship was not even a sultan, but a mosque imam (grand/ Jami"). Likewise, leadership in social and economic terms. In everyday life, *alun-alun* shows "informality" of a greater social role, and in its development, it does indeed become a social inscription that shows close social relations. An example is the use of *alun-alun* for a variety of folk festivals, as shown by Sekaten in Yogyakarta, or Apeman Tegal Rejo [15].

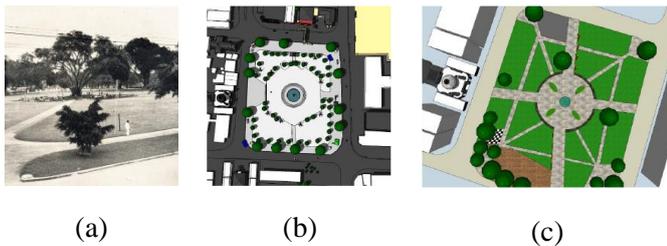
### 3.2. Growth of Spatial Pattern Between Jami'k Mosque and Alun-alun Periodically

The existence of the mosque (Jami' Mosque), as a part of the *mancapat* concept in *alun-alun*, has always placed in the west as a symbol of the sacred place. Together with *alun-alun* as a unity of the Javanese city order. The changes that occur over time slightly change the layout of *Alun-alun* Malang. This phenomenon also has an impact on the renovation of the Jami' Mosque, which follows the development of *Alun-alun* Malang.

**Table 1** The development of configuration pattern between Jami' Mosque and *Alun-alun* Malang

No	Year	Visualization	Description
1	Before 1982		The Jami' Mosque located on the west side and the other side of <i>alun-alun</i> was surrounded by government and commercial buildings. The centralized pattern strengthened the square existence. <i>Alun-alun</i> , as a public space, contains giant trees to shade some activities beneath it.
2	2007-2010		The same position and pattern of <i>alun-alun</i> , showing direct axis to the Jami' Mosque.
3	2010-2015		The same position and pattern of <i>alun-alun</i> , showing the center of <i>alun-alun</i> was strengthened by the axis that leads to Jami' Mosque
4	2015-2019		Another axis was created that shows to other direction, though the main axis that leads to Jami' Mosque is still dominant.

*Alun-alun* has already developed from the green open space in the pre-colonial age, colonial, to the Old Order (*Orde Lama*), becoming a form of public space after a massive renovation in 1982 and 2007. Pavement and facilities to attract visitors were built closer to the concept of public space. The Jami' Mosque, although undergoing renovations in 1903 and built a fence, still retains Javanese and Arabic architectural styles.



**Figure 1** *Alun-alun*: a) the origin, b) after renovated in 2007, c) the layout in 2015

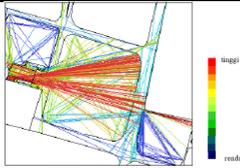
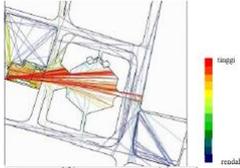
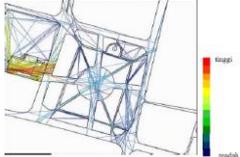
After the renovation in 2015, the *alun-alun* is increasingly upgraded into having new facilities that in line with the changing times and attract visitors to come, followed by a higher mosque fence. *Alun-alun* is increasingly shifting to public space as a place for people to do various activities. Changes in the shape and pattern of *alun-alun* physically look more organized and neat, but the type of activity becomes increasingly homogeneous and patterned.

### 3.3. Layout and Connections Between Jami' Mosque and *Alun-alun* from Time to Time

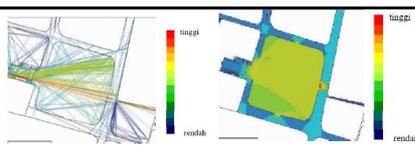
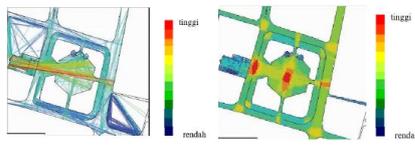
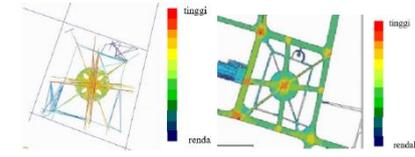
Mosques and *alun-alun* are connected spaces. Based on the concept of "*macapat*" as the basis for determining the space in *alun-alun*, the position of the mosque is the highest hierarchy of space. It greatly determines the orientation and position of *alun-alun* and other objects around it. It shows that connectivity between the Jami' Mosque and *alun-alun* is an inseparable unity of space. Therefore, changes in the shape of the current *Alun-alun* Malang will also affect its relationship with the Jami' Mosque as a determinant of the direction of spatial orientation.

This study analyses the pattern of change and the relationship of space in *Alun-alun* Malang and the Jami' Mosque (which should still be positioned in a sacred space as well as one of the orientations in the *macapat* concept). This spatial linkage study was conducted by observing phenomena that occur in the space between *alun-alun* and the Jami' Mosque using the space syntax system with a depthmapX program. Axial analysis of spatial connectivity will show the relationship between spaces from low (blue or green) to high (red).

**Table 2** Connection of space between *Alun-alun* Malang and Jami' Mosque

No	Year	Visualization	Description
1	1982 and before		The original form of <i>alun-alun</i> showed a high connection between Jami' Mosque and the square in front of it. The connections are found to almost all areas but mostly related to the area in the center of <i>alun-alun</i> . It also shows the orientation depends on the mosque on the west side.
2	2007-2015		After the renovation in 2007, still showing a high connection between Jami' Mosque and <i>alun-alun</i> , but they were only concentrated on a particular area.
3	2015 and after		Recent conditions after renovation in 2015 showed that connections between <i>Alun-alun</i> and Jami' mosque became significantly decreased, even said there was no connection at all.

**Table 3** Integration of space and activities between *Alun-alun* Malang and Jami' Mosque

No	Year	Visualization	Description
1	Before 1982		The original form of <i>alun-alun</i> showed that <i>alun-alun</i> was highly integrated with Jami' Mosque on the west side ( <i>left</i> ). There were some activities spread on <i>alun-alun</i> , which mostly happened in the west and east area ( <i>right</i> ).
2	2007-2015		After the renovation in 2007, the integration between <i>alun-alun</i> and Jami' Mosque on the west side still exists ( <i>left</i> ). Activities on <i>alun-alun</i> still happened on the west and east area, but mostly concentrate on the center ( <i>right</i> ).
3	After 2015		Recent conditions after renovation in 2015, integration between <i>alun-alun</i> and Jami' Mosque became significantly decreased, as if there were no connection between each other ( <i>left</i> ). Activities on <i>alun-alun</i> concentrate on the center area only ( <i>right</i> ).

After the last renovation in 2015, Jami' Mosque and *Alun-alun* Malang are no longer seen as a unity of a sacred space. This phenomenon is also supported by data analysis using the syntax space system with a depthmapX program that shows reduced connectivity between *alun-alun* in each of its new designs and the Jami' Mosque, especially after the presence of a barrier fence for the mosque.

Meanwhile, the information in Table 2 shows that the highest integration is in the west circulation area. It illustrates the existence of *alun-alun* and Jami' Mosque as a unity that cannot be separated, both in concept and function. Before the renovation, activity tends to be high in the western part of *alun-alun* opposite to the Jami' Mosque in Malang, despite *alun-alun* was only a large square without additional pavement as a clear sign of circulation to the mosque. That integration was slowly decreasing

with the change in the design of *alun-alun* following the current pattern.

#### 4. CONCLUSION

The existence of the Jami' Mosque in the architectural vocabulary represents the prototype of the Javanese Mosque that is present in the unity of the *macapat* concept in the spatial structure of the city. The existence of the mosque brings a positive impact on the development of Malang City, especially in the *alun-alun* area, because it can further strengthen the religious nuance in the *alun-alun* area. Thus, it can lift the image of this region in particular and the people of Malang in general. The diversity of the life of *alun-alun*, if successfully maintained its image as an area that reflects social life that

is: safe, peaceful, fair, and comfortable for all citizens of Malang, then a very positive assessment may appear. *Alun-alun* is a political display window for a regional government. Good or poor community life in *alun-alun* is an image of the quality of society in the area. By bringing back the architecture role of Jami' Mosque, the image will have a symbol. All that remains are to realize in the future steps without eliminating the values that are already in it. Technically, if the symbol is successfully raised, the community will not be automatically organized. However, the presence of a mosque with the right architectural symbol will facilitate the formation of the image of an area. One of the assets that already exist is that, in the perception of the Javanese people and by the history of the development of mosques and Islamic religions throughout the country, the Jami' Mosque is identical to *alun-alun*. Likewise, the Jami' Mosque of Malang has also been known as one of the mosques that historically been identical to the *Alun-alun* Malang.

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