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The historical and religious approach towards city park design in Banda Aceh, Indonesia

Case Study: Krueng Neng Park (Taman Krueng Neng)

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Abstract. Banda Aceh has a long history as a coastal city; it had ever been a cosmopolitan maritime city based on Islamic sharia. One of the physical traces of this history is located at the Krueng Neng River, a site which became a Turkish military training area to support the existence of the kingdom of Aceh in the 17th-19th century. Currently, the development of the Banda Aceh city has the goal of making the city as an Islamic tourism destination. One of the ways to achieve this goal is by the arrangement of Islamic open space in historical environments. Therefore, this paper intends to examine historical and religious approaches in the concept of open space arrangement in Krueng Neng, Lamjame Village, Banda Aceh. This is important with regards to the Banda Aceh’s designation as one of the eight heritage cities in Indonesia, as Banda Aceh’s city plan will be developed according to the goals of the heritage program. The study model is in the form of design research that will develop an activity program and pattern of the spatial arrangement based on history and religion, and supported by location-based approach (field condition) incorporating both geographical and socio-cultural contexts. The result of the study is a park design based on Islamic garden principles and incorporating historical aspects from 17th century Turkey in the form of replicas of a Turkish ship and cannon ‘Lada Sicupak’. In summary, one of the options to enhance the goal of Islamic tourism in Banda Aceh is arranging a local park based on its historical aspects and applying Islamic garden principles.

1. Introduction

The city of Banda Aceh is a coastal city on a bay, located at the northern tip of the island of Sumatra. The natural environment exhibits three temperate climates that tend to be hot with strong winds during the west wind season and relatively moderate rainfall [1]. Therefore, the character of the natural environment makes the weather of the city of Banda Aceh hot. During the tsunami, most of the coastal areas were destroyed, also relatively open, and becomes dry. Therefore, it needs to undergo greening as the penetration of negative condition above. The development of city parks in the coastal area is one of the possible solutions to the problem of geographical conditions in the city of Banda Aceh.
According to the Banda Aceh City Spatial Planning (RTWK Kota Banda Aceh Year 2009-2029), one type of green open space that will be developed in Banda Aceh is city parks. One of the new city parks built by the Banda Aceh city government is Krueng Neng Park, with an area of 1.85 ha.

The city parks in Banda Aceh were developed to meet the standards of 30% urban green open space [1]. However, the parks were all designed with the same character without applying specific themes and had no unique features, which can attract visitors. It is important for the government to provide as many unique tourist destinations as possible, especially as Banda Aceh has become a tsunami tourism destination and halal tourism destinations.

Thus, to provide an example of a unique park design based on the historical and religious characteristic, this paper takes Krueng Neng Park which is one of the existing parks in the northwest suburbs of Banda Aceh, located on the riverbank as far as 500 m from Ulee Lheu Beach. The potential of this location is unique because it contains much history of the glory of the city of Banda Aceh in the past [2]. The park was a center of Turkish military activity while assisting the Kingdom of Aceh in building a cosmopolitan maritime city [3, 4]. In addition, Taman Krueng Neng area is also one of the central locations of city’s religious activity, which is conducted every week in the mosque of the park. If the values of history and religious activity are incorporated as the themes in the design of Krueng Neng park, its role as a tourist destination will add significant value to Banda Aceh in the context of a tourism city. Therefore, it needs to display a replica object to revive historical memories, particularly of Aceh, but also of Indonesia in general. This is also a way to develop the character of the nation, as has been proclaimed by the government [5]. These religious values can also be elevated in the design of Islamic garden landscaping, so visitors will appreciate the greatness of God as the creator of nature.

2. Park design based on historical and Islamic principles

There are several aspects to be considered in designing an Islamic park intended to evoke the past. Below I elaborate the ways Islamic garden is designed. Firstly, I discuss what is city park and its Islamic principles, followed by the discussion of Krueng Neng’s historical aspects which are associated with the Turkish presence in Banda Aceh.

2.1 City Parks

“City Park according to the Regulation of Minister of Public Works No. 5 of 2008 is open space that serves social and aesthetics as a means of recreational activities, education or other activities at the city level” [6]. City parks have at least three functions: landscape, environmental and aesthetics. Also, there are three important elements in the landscape, i.e., hard elements, soft elements and supporting elements. In the design of landscape is known two major parts of landscape material, namely soft materials and hard materials [7].

2.2 Gardens According to Al Quran and Hadith

In the Qur'an the garden of heaven is described as having flowing rivers and fruits growing in it [8]. Types of plants contained in the garden are various fruits, cucumbers, nuts, onions, garlic, dates, grapes, pomegranates, olives, and fig. The main color mentioned in the Qur'an is green.

Traditionally, an Islamic garden is a cool place of rest and reflection and a reminder of paradise. The Qur'an has many references to gardens, and the garden is used as an earthly analog for life in paradise, which is promised to believers who carry out the command of God. The general themes of a traditional Islamic garden are water and shade, not surprisingly since Islam originated and spread in a hot and dry climate. Thoughts and ideas about Islamic gardens are derived from the beliefs of Muslims and their dreams of heaven. In some verses of the Qur'an, it is explained that believing Muslims will gain an appreciation on the Day of Judgment. In the Qur'an it is also said that believers will attain a very beautiful and magnificent paradise that is described as a paradise garden. Muslims believe that paradise gardens have pure water with flowing springs, fruit trees, and places sheltered under shady trees, as is written in the following verse [9].
"The righteous are indeed placed in the Garden of Heaven, with springs sprinkled on it." [9]

2.3 Islamic Parks as Landscape
As a landscaped gardens, which are designed with specific purposes, have to apply ideology and principles based on the Islamic religion and culture of Muslim society, and thus uses relatively special design elements [10]. The themes of traditional Islamic gardens are water and shade. Unlike English gardens, which are often created for recreation, Islamic gardens are meant for rest and reflection. Therefore, Islamic parks usually have seats for contemplation [11]. In Islamic parks, there are several vital aspects, i.e., water, shadows, color, and sound.

According to the ‘harfiyah’, there are four keys of Islamic values: peace, safety, submission, and cleanliness. Islamic values in architecture consist of zoning, space, hijab and privacy, centrally oriented, Islamic symbols and ornamental art [12]. The gardens are open spaces near a certain area of buildings in which planted a variety of plants to refresh the inner and outer space and to bring happiness. Due to the location of the Krueng Neng city park is in Banda Aceh which promotes Islamic sharia and has a long history, the park will be designed based on religious and historical concepts. It will incorporate the concept of viewing objects while walking so that visitors can experience the past as a reflection of the glory of Banda Aceh.

2.4 History of the Aceh-Turkey Relationship
The Sultanate of Aceh Darussalam was recorded to have had a close relationship with the Ottoman Empire. Turkey had provided military assistance in the form of ships, artillery, and troops, also other weapons that Aceh needed to attack the Portuguese. The evidence can be seen in two of the relics of the Sultanate of Aceh Darussalam, namely the Turkish ship and ‘Meriam Lada Secupak’ as proof of the history between Aceh and Turkey [13]. Therefore, to bring back the memory of the glorious Acehnese kingdom, the Turkish ship and cannon will be placed in Krueng Neng Park, which is located in a former Turkish military camp.

Figure 1. The cannon is known as ‘Lada Sicupak’ [19]

Figure 2. Ottoman fleet in the Indian Ocean in the 16th century [20]
2.5 A Semiotic Method for the replica object’s representation of Turkey-Aceh history in Aceh.

In everyday life, people experience the place and space. Both place and space have their signs and will remain in people’s memories [14]. Past experiences can be presented using semiotic methods [15]. The semiotic method is divided into two parts (dichotomy): signifier and signified. Signifiers, defined as physical forms, can be experienced through the form of architectural works, while signs can be seen as meaning revealed through the concepts, functions, and values contained in the work of architecture. The Saussure semiotics is the relation between the signifier and the marker by convention, commonly called the signification. Semiotics signification is a sign system that studies the relation of sign elements in a system based on certain rules or conventions. These social conventions are needed to be able to interpret the signs [16]. By using this theory, the author tries to bring nuance to the concept of Aceh glory in the 17th century, which is inseparable from the role of Turkey. Therefore, it is necessary to present a replica of a Turkish ship and a ‘Lada Sicupak’ canon as a signifier.

3. Methods

The study method includes two parts, namely:

i. Study of the aspects affecting the design problem (problem seeking), i.e., historical aspects, socio-cultural and religious aspects, and aspects of the natural environment.

ii. Study the aspects that guide the concept of design (problem-solving) related to the themes of environmental arrangement and the choice of specific historical and religious landscape objects in the context of socially/culturally, economically and environmentally sustainable development in urban park design.

The study was conducted descriptively and qualitatively, also presented the characteristics of signs (semiotics) of architectural objects that evoke historical meaning. The concept of design was developed using field surveys, especially in the context of the socio-cultural character of the community, and the spatial policy of the city of Banda Aceh such as disaster mitigation.

4. Results and Discussion

4.1 Existing conditions of Krueng Neng City Park

The design of the Krueng Neng park site was completed in 2015, however, the greenery is absent. The design of the park layout seems empty, which is very typical with other parks in the city of Banda Aceh, and also lacks of uniqueness. Therefore, it needs replica objects to develop a unique character. These replica objects will cause people to recall the history of the friendship between Aceh and Turkey as well as it would provide uniqueness for the place.

![Figure 3. Existing condition of Krueng Neng Park](image1)

![Figure 4. Proposed Design of Krueng Neng Park](image2)
4.2 Conceptual Design
4.2.1 Placement of the Replica Objects.

Based on the above picture, the space for greening area seems unplanned and remains empty. To improving the design of the potential space can be done by utilizing the empty space through the addition of recreational objects in the form of a replica of the 17th century. The historical values to be elevated in the design of this park are the placement of a replica of a Turkish ship and the placement of a replica of a ‘Lada Sicupak’ cannon. These two objects are the memorable objects to evoke memories of the past (interview with bu Azmah). The placement of the replica objects will occur in the north-center of the site:

- The ship replica will be placed on the north side of the Krueng Neng river.
- The replica of the cannon will be placed near the main gate of the park (the middle south) so that visitors can see the object immediately upon entering the garden yard.

The placement of the two objects is based on the principle of kinetic vision and visitors’ experience of spacing. Medium objects are displayed in a semiotic manner that highlights the replicas and evokes the atmosphere of the past. The concept of kinetic vision in the design is divided into three scales (Figure 5):

1. Macro scale: the object is viewed from outside of the park and can induce awe and cause curiosity. On a large scale, the object is a focal point.
2. Meso scale: visitors can feel the experience of casting towards the object. The focus will be on the circulation space and garden around the ship.
3. Micro scale: visitors can experience the interior of the ship and can see the exterior view: interior and exterior details on board/deck will be a focal point.

![Figure 5. Illustration of Replica’s placement (Turkish Ship)](image-url)
4.2.2. Conceptual Design of Islamic Gardens.

There are four important elements in designing an Islamic garden:

- **Water**
  The water element is very important in the design of Islamic gardens because the water can be as soothing and calming as the atmosphere of heaven, which is described in the Qur'an (Al Quran 1:25) [17]. It can also lower temperatures during hot weather [18]. The arrangement of this park will include a water fountain placed in the middle of the plaza to make visitors feel comfortable.

- **Shadows**
  Shadow effects are also needed in the design of Islamic parks. In the design of this garden, the shadow effect is generated from tree vegetation, a pergola, and a gazebo. The shadow is defined as shade or shelter for a place of ‘tafakkur’ (contemplation).

- **Color**
  The color in the arrangement of Islamic gardens is also very important. In the design of this garden, the color will be produced from colorful flowers. In addition to providing aesthetic value, these colored flowers will affect the psychological state of visitors at the time of their visit.

- **Sound**
  Sound elements in the design of this garden consist of the sound of water gurgling, which will make visitors feel comfortable and calm, in addition to can being relaxing. The other sounds will come from the calls of endemic birds placed in several locations in this park.

5. Conclusions

The Krueng Neng Park area is one of the green areas in Banda Aceh that has the potential to become a destination for local and national tourists, as well as for the international community. However, to give the spirit of design in this park needs a more comprehensive design concept using a historical and religious approach. The placement of historical objects such as replicas of ships and Turkish cannons will bring visitors back to the 17th century, the glorious age of the Sultanate of Aceh, and will evoke historical memories to preserve the glory of Aceh in the past. In addition, this park will be designed following the principles of Islamic garden design and will be able to support religious activities carried out regularly every week, thus reinforcing the character of Aceh's religious community. It is expected that the concepts of this design through this research can help the government develop Krueng Neng Park as a tourist attraction in the city of Banda Aceh.

The approach to the history of the triumph of the Sultanate of Aceh aims to make younger generations remember the identity of the city, which had ever been as a great and glorious kingdom in the city of Banda Aceh, and to evoke the spirit of its glory.

This research recommends that the local community is important. This community will play the role of tour guide and will be the main actor in implementing this activity to increase promotion and economic development.

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