The Islamic public space concept in the Southeast Asia region as a friendly urban design and planning enlightening

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Abstract. The Islamic public space concept discourses predominantly refer to Middle East Moslem perspectives, only a few kinds of literature discuss its implementation to the Non-middle East Moslem society, particularly in the Southeast Asia region. This paper explores the Islamic public space concept from Banda Aceh City standpoints. The approaches based on its historical and current context which entail a tamaddun character. Tamaddun means the application of Islamic personality in all sectors of urban life. Aceh also famous as Serambi Mekkah, the veranda of Mecca, because it has the similarity to Mecca, and mostly because it is the only province in Indonesia that applies Syariah law. This paper aims to formulate a conceptual framework of Islamic public space in non-middle East circumstances. The possible contributions of Islamic value on public space critically discussed through an intensive literature review. The proposed concept highlights many dynamic factors, and their friendly interactions in the context of Aceh-Moslem society in the South-eastern atmosphere of Asia in terms of typology, functions, and design criteria of public spaces. The implication of this paper gives an advantage in improving the understanding and appreciation of the Islamic conception toward public space, as well as the implementation of the notion in urban design and planning.

1. Introduction
At present, there is no precise theory that describes the definite principles of designing Islamic public spaces [1]. Most kinds of literature only focus on Islamic principles of planning and design in the framework of a city, but the discussion on how the design approach of public space in the Islamic perspective as a single topic is limited. Besides, various works of literature discussing it generally observe cases from cities in the Middle East and surrounding areas including North Africa, Central Asia, and India. Only a few works of literature discuss the cases in cities beyond that region, particularly in the Southeast Asia region [2]. This point is reasonable because Islam was born and developed in these Middle East regions during its early glory [3] [4], and the majority of Islamic settlements found in those places.

Additionally, many scholars believed that the planning of public space in contemporary Islamic cities mostly adopts urban design notion that western generated norms [2], which incompatible with Islamic customs and leads to social problems in Moslem Society [5]. Al Sayad argues that there is a need for an urban design approach worldwide that considers the history and socio-cultural coordination, which are more approachable to the needs of Muslims [3]. This argument is in line with the fact that Muslims not only live in the Middle East region but spread throughout the world that has unique ecological and cultural characteristics, which will influence their urban space pattern [6].
As one of Islamic city in Southeast Asia, Banda Aceh has developed as a magnificent city with the character of *Tamaddun*, applying the Islamic value in all sectors of urban life. [7]. This city has long regarded as a place where Islam has a manifest role in society. The city is on the tip of Sumatra Island, Indonesia, which developed as a royal city that embraced Islamic ideology since the 17th century. Banda Aceh has recognized 809 years ago. The age is as old as the imperium of Bani Umayah that established the city of Cordova in Spain [8]. Its population is the highest percentage of Muslims amongst Provinces in Indonesia. Islam is the dominant religion in Aceh Province at over 98% from about 4 million in 2010 [9].

Historically, Banda Aceh city was well-known as a cosmopolitan city for international routes in Southeast Asia and as one of the prosperous cities in Asia during the period of the sultanate. The historian Reid has argued that one of the earliest centers of Islam was in the Aceh region [7]. Banda Aceh is thought to have been the place where the spread of Islam in Indonesia began. Islam reached Aceh around 1250 AD. In the early 17th Century, the Sultanate of Aceh was the wealthiest, powerful, and urbanized state in the Malacca Straits region. In this area has been found the gravestone of Sultan Malik as-Salih, the first Muslim ruler of Samudra (1297) and other gravestones from the thirteenth-century. This finding shows that the region continued under Muslim rule and gave strong evidence of a Muslim dynasty in the Indonesia-Malay area [10]. During this heyday, elements of urban space were supported by all resources to strengthen the existence of the Aceh sultanate [11]. Furthermore, Banda Aceh has a planned city that applies Islamic values in the concept of the urban spatial structure with geometric spatial forms as a result of a combination of specific ecological characters connected with the local environment [6].

However, Islamic values during the heyday of the Sultanate were not visible in the design of the contemporary city of Banda Aceh. This loss was influenced by the colonial period in the 19th century and the post-colonial period of conflict in Aceh’s history. Even though in 1999, Aceh re-applied Islamic Sharia in carrying out its community life, the Islamic values in the physical form of urban space in Banda Aceh today still did not reflect essential Islamic norms. Furthermore, Albeit every designation of elements of the public space in Banda Aceh City claimed by Planners or urban designers uses Islamic conception, but they only take and imitate the styles and concepts that exist in the Middle East Countries [12]. The essence of Islamic values is not applicable in the city built environment. Most built setting elements in this city, particularly the public spaces, both external and internal, copy products from other Muslim cities. The city designers have not been able to notice the essence of the values of Islamic principles rooted in the context of Islam in Aceh society.

From the above discussion, this paper attempts to explore the extent to which the principles of designing Islamic public space from the context of Islamic City in Non-Middle east circumstances. It begins with a presentation on how the design principles of Islamic public space offered in discussions in Middle East Cities. Then, it discusses the Islamic public space principles that are employed by urban designers in the context of Banda Aceh City. And finally, the paper formulates an enlightening variation of designing Islamic public space in Southeast Asia Islamic City.

### 2. Method

This study is a qualitative work that deployed the document analysis method. The document analysis is a variety of qualitative research in which the documents interpreted concerning the reviewed issue. According to Mogalakwe [13], document analysis consists of two categories that are the interpretation of the primary and secondary documents. For this paper, it only used secondary sources. Pieces of literature took from research articles published in several journals accessed through online databases. The scope of the review was limited to articles published between 1980 and 2017.

Then, the review included literature in the fields of theory of Islamic city, Islamic urban design and planning, Islamic public spaces in Middle East Cities, and public spaces in Southeast Asia city. The types of explanations in this review covered the typologies, functions, and design criteria of public spaces concluded as the Middle East contextual perspective. Next, the study of the city of Banda Aceh which is located in Southeast Asia region was then carried out by studying the spatial character of the
city from a historical perspective through maps, city sketches and old photographs relating to the history of society, culture, economy, and the physical condition of the city in its era (Figure 1). The data obtained were then analysed by crossing and checking with one another, between typology, functions, and design criteria of public spaces in Middle East cities and those in the city of Banda Aceh. The purpose of this descriptive analysis was to develop an understanding of various discussions that explores the importance of the Islamic public space principles by recognizing the values of the essence of Islam that applied in Muslim communities not only in Middle Eastern realms but also in other regions Southeast Asia.

Figure 1. Documents Analysis.

The implication of this paper gives an advantage in improving the understanding and appreciation of the Islamic public space concept. This attitude also enhances the opportunity to implement the Islamic public space concept in the urban design and planning milieu as a friendly design model which helps the Muslim society to improve their public space quality which costumes their needs and way of living in their city.

Table 1. Research Structure.

| Aim: To understand the Islamic public space design in the context of Southeast Asia Islamic City (Case Study: Banda Aceh City) |
|---|---|---|---|
| **Objectives** | **Variables** | **Methodology** | **Outcomes** |
| To understand the Islamic public space concept. | Islamic public space | Reviewing the Islamic public space concept from the Middle East Cities perspective. | Findings gathered from the literature review. |
| To explore Islamic public | Islamic public space. | Reviewing the Islamic public space. | Formulating Conceptual Frameworks |
3. Results and Discussions
Understanding public space in a historical context can be interpreted as a space that accommodates social activities, trade, and expresses opinions to many people [14]. In the Greek era, there was Agora, and in the Roman period, there was a Forum which became the center of people's lives at that time. In general, Madanipour [15] defines public space as a gathering place for people, objects, and events. Those spaces then should have 3 (three) items for the public, namely responsive, democratic, and full of meaning [16]. First, the public space must be open and be able to accommodate various activities, interests, and desires of its users. Second, public space must be used democratically by the public citizen from social, economic, and cultural backgrounds without any prejudice. And finally, public space must warrant that there are no activities and interests that impede with each other.

In many cities, the typology of public space divides into squares and streets. The development of public space then influences many things, such as justice, security, and human influence in the form of cities [16][17][18][19]. This argument is also relevant to the Muslim community. Islamic public space infers as a public space found in Islamic cities. The typology of public space amongst Islamic cities is quite varied, depending on geographical location, the socio-cultural and political context of the Islamic city.

The subsequent discussion explores how the designs of public spaces in traditional Islamic cities supported Muslims in carrying out their daily routines and practicing Islam correctly in the heyday of Islam. The discussion begins with understanding how public space exists in cities around the Middle East, where Islam was initially born and developed. Then, the dispute continued by exploring how the planning and design of public space in the Southeast Asian region, a region that had a strong Islamic influence in the heyday of Islam particularly in the city of Banda Aceh, which did not widely discuss in international literature. The discussion ended with highlighting what can learn from the perspective of Islamic cities in Southeast Asia in terms of designing public spaces that are friendly to the needs of Muslims in various places, and which can be enlightened for planning and designing Islamic cities today.

3.1. Islamic public spaces in Middle East Cities
The discussion of public spaces in the cities of the Middle East is commonly found in the literature on Islamic cities. Based on the literature, typology, functions and principles of public space design are identified. In Cairo, North Africa, Al Sayyad also classifies Islamic public space into 2 (two) types, namely (1) The Maidans, public open space or courtyard in front of monumental buildings such as Mosques and schools, and (2) Circulation Spaces, in the form of narrow passageways, roads for vehicles and pedestrian paths [3]. The typology developed includes public gardens, pathways, streets, covered streets such as bazaars and markets/ suqs, and places of the society together with their urban contexts such as in-between spaces called al fina [20][21].

In terms of functions, Ardalan structures the public space in Islam into three groups namely places of education, places of leisure and recreation, and places of civic and commercial activities [20]. The traditional spaces of schooling in Islam have been the home, the craft guilds, the madrasah, the mosque, and the Khangah. For leisure and recreation places, Islamic cities promoted more to a private
garden in the form of an inner courtyard than a public garden such as a paradise garden in Persia. And the last function as places for civic and commercial activities has been seen in the form of a covered pathway in linear or grid systems which were creating networks amongst the main element of the city such as a Bazaar network connecting Medina and Casbah.

Concerning the design criteria of Islamic public spaces, there are design principles that arise into observation in the Middle East cities. The criteria include reference to the Koran and the Hadith; encourage the remembrance of Allah; facilitate ethics, aesthetics, and economic/political value; gendered segregation and visual privacy: having a sense of balance between material and spiritual cognition; and maintaining contact to community and nature [2] [19] [20]. The Islamic conception of designing public space mainly based on the use of people makes their express the Islamic way of life that refers to the Koran and the Hadith. Hence, any form-order principle might be applied in designing public space as long as the form of an urban environment encourages the remembrance of Allah. Additionally, there are Islamic principles that come into view in the Arab-Muslim society to facilitate ethics, aesthetics, and economic/political value as the principles in designing public space [22]. Abu Lughod identified that the creation of male and female areas may be an important element of the structure of the city contributed by Islam [2]. The rule regarding the separation is not only to distinguish between male and female areas physically, but the most significant thing is visual separation. These aim to prevent physical contact and also to protect visual privacy. So, the distance of the visual boundary is more important than the physical boundary. Moreover, Ardalan argues that urban professionals need to know something about social and philosophical structures of the past to restrain the chaos of the city [20]. In Islamic culture, human, family and community development is measured based on philosophical and material growth. Islam promotes a sense of balance between cognition and action of a phenomenon. Islam always advocates a practical way of life based on the concept of a pragmatic view of the phenomenal reality. However, since the industrial revolution in the western world, Islam emphasized material satisfaction and personal ego. The current development vision tends to reject or ignore this balanced estimate of reality.

3.2 Islamic public spaces in Banda Aceh City

The Kingdom of Aceh has an Islamic ideology affiliated with the Turkish kingdom [11]. Banda Aceh then developed into a tamaddun city, which means that it was a central city of civilization that taught Islam and applied Islamic values to the city's living system. Those beliefs reflected in the planning and design of the city's physical space [6]. The plan of the city of Banda Aceh at the end of the 17th century shows some of the main elements in the city center, namely open space which connects to palaces, mosques, and markets adjacent to the main river “Krueng Aceh” and area park called Bustanussalatin, dan pathway. The main character of the city center consists of 4 (four) elements, namely the palace, esplanade and river jetty, mosques, and trade centers designed along the Krueng Aceh River without a citadel (Figure 2).
Figure 2. Sketch of the Banda Aceh settings at the edge of Krueng Aceh River in 1600.
Source: Manuel Godinho de Eredia, PETA Achem (fol.18) (National Library of Rio de Janeiro)

Figure 2 shows that the plaza, as a public space located in the center of main elements of the city, namely the mosque and Krueng Aceh watershed, which is in harmony with the position of the holy mosque. Open fields close to the landing of the Krueng Aceh river pier will be very dirty, such as the plaza and the Stoic Greek era. The trading activity room was oriented north towards the city back to the mosque area. The character of the Banda Aceh city space looks very connected with the water element. If we look at the structure of space in the context of a city during the kingdom of Aceh, water elements such as the sea and rivers, functioned as a natural fortress defense. This character is very different from the ancient Islamic municipalities in the Middle East, where the city protected by a fort with walls [23] [13].

In terms of the typology of public spaces, the city of Banda Aceh historically displayed the typical characteristics of traditional towns in the region, with the mosque, the market placed near an open public space, and the water (river or sea) as the circulation system. In addition to the large mosques, meunasah were considered important buildings in Acehnese village life. A meunasah is a place where people came together for daily praying and social activities.

In the current circumstances, the growing areas of Banda Aceh city as a public space are on the coast of the Ulee Lheue beach. This condition corresponds with the Spatial Plan of Banda Aceh city in 2009-2029 clauses 58, which are: whereas explained that development of tourist and public spaces directed to the former area of normalization of Krueng Aceh (Pante Riek and Lambhuk) and Ulee Lheue [24]. Krueng Aceh River is an element of public spaces that can be a basis for the development of the waterfront city in Banda Aceh [25].

In terms of the function of public spaces in Banda Aceh city, historical maps and photographs show that the precinct in front of the mosque used as horse riding field, a place of swearing, where the King receives guests, and religious events such as the Eid Adha feast day [7]. The mosque is a public space...
that has central meaning for the people of Banda Aceh. It does not only function as a place of worship but also as a community meeting, an education place for all ages, a funeral, celebrations such as weddings and other religious events [26]. In small scale area, there was also meunasah that formerly used as a night gathering place for the men of the village, who often slept in the meunasah instead of in their home. This place was also used as a temporary shelter to camp visitors when no other accommodation was available in the village [27] (Figure 3).

**Figure 3.** Sketch of Islamic public space typology in Historic Banda Aceh City.

The design principle of forming public space in the city of Banda Aceh can be viewed from several public spaces that existed during the Sultanate of Aceh, including the Baiturrahman mosque and Bustanussalatin garden. The mosque arrangement as a place of worship for Muslims is positioned as a center of all urban community activities. The functions of other community activities such as markets, schools, meeting places, people's entertainment venues, and settlements develop around the mosque and along the Krueng Aceh River. The river functioned as the main public pathway at that time [6]. Then, at the Bustanussalatin Garden, Islamic values are enclosed in the elements of the design. The concept of heaven described in the Qur'an, that is the existence of a river that flows and is filled with various fruits, is interpreted in designing the garden. The King of Aceh changed the direction of the Krueng Daroy river to get into the park area of Bustanussalatin and also planted various kinds of fruits and medicinal plants in it to reach the concept of paradise [28].

### 3.3 Design variation of public space in Southeast Asia Islamic City

In general, the design principle of public spaces in Islamic cities both in the Middle East and in Southeast Asia have a fundamental similarity, which refers to the main life guidelines of Muslims, namely the Qur'an and Hadith. Islamic values such as obedience to Allah's commands and following what was taught by Prophet Muhammad become the basis of Muslims in creating public spaces. However, each city or region of Islam interpreted these basic values in slightly different forms according to local social-cultural conditions and geographical environment (Table 2).

| Islamic Public Space Typology | Function | Design Principles |
|------------------------------|----------|-------------------|
| Middle East Context          | Mosque   | Referring to Koran and Hadist |
|                              | Bazaar   | Encourages the remembrance |
|                              | Places of education | |

**Table 2.** Islamic public spaces variation principles.
In terms of social culture, there is a hierarchy of public spaces. The main mosque is in the city center to serve public activities in a rather large area. The mosque is the center of orientation for all city activities. So that, other activity functions develop nearby the mosque. Even the Sultan's palace is oriented to the mosque, so the position of the palace is close to the mosque. And political, social, and cultural activities at that time were carried out in the mosque room (education, marriage, funeral prayer) or in the open space between the mosque and the palace (Figure 3). Next, in the minor node, there is a meunasah to serve smaller settlements. The function of this public space is not limited to places of worship or community gatherings, but also as a place to sleep for young boys at night, and also as a temporary residence for guests who come to the area if they do not have accommodation.

Another variation influenced by the conditions of the local geographical environment is the function of the river as a public traffic lane that connects each of the main elements of the City. Natural conditions which are tropical forests and filled with shrubs and wild animals make the river as a public space that is very important for the people of the city in the past. Thus, the river in the past became a substitute for path networks such as cities in the Middle East.

From the variances in socio-cultural conditions and geographical environment, the design principles interpret the arrangement of public space by utilizing the water element in its artificial environment regardless of other principles that are almost the same as those in cities in the Middle East.

4. Conclusions
Historically, the characters of public space in an Islamic city were well organized and mutually supportive. It was ordered based on a hierarchy, starting with the main mosque as an element of the city center and continuing to other public facilities in the proximity. The exploration of Islamic public space in the Southeast Asia region gives a variation of the idea for developing public space, which is compatible with Muslim needs. The paper highlights that the principles of Islamic public space design in the Southeast Asia region tailor to the needs and conditions of the local social-cultural and geographical environment. Variations in typology in the city of Banda Aceh added with the presence of meunasah, a small mosque that functioned as a public space in the minor node of the area, and the river as the public pathway. Then, the function of public spaces also varies, not only as a congregation place but also as a temporary living space. And variations in design principles are inspired by verses
from the Qur'an that explain the image of heaven into the principles of design of public spaces, namely by using elements of flowing water and the beauty of fruit plants and medicinal plants.

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