

Plants, Landscape and Architecture: Stories from the Quran

Khalilah Hassan¹, Nur Huzeima Mohd Hussain¹, Norizan Mt Akhir¹, Mazlah Yaacob²

¹Department of Landscape Architecture, Universiti Teknologi MARA, 32610 Bandar Seri Iskandar, Perak, Malaysia

²Academy of Contemporary Islamic Studies, Universiti Teknologi MARA, 32610 Bandar Seri Iskandar, Perak, Malaysia

Received: December 22, 2016

Accepted: February 27, 2017

ABSTRACT

Traditionally, many researchers have highlighted plants to be one of the major components for beautification with regards to their aesthetic qualities. However, there are many other functions that plants has significantly proof to be effective elements in accomplishing the architectural and environmental design civilization. For example, the importance of plants, together with their special abilities and characteristics was adopted as the provision of 'ceilings,' 'walls' and 'canopy' in the architectural design. In fact, the reliability usage of plants has been mention in the Quran as early as the 'Paradise' being described to people. As Quran is the primary reference of human civilization (for the Muslim), this study foresees a possible justification of how plants could correlate between its architectural uses in landscape with the evidence and citation from the Quran. This paper is intended to identify, analyse and enhance the architectural value of plants in the landscape. In particular, this paper adopted the imagery evidence from the Quran to support the study analyses and discussions. Thus, the conclusion of this study would help to demonstrate the understanding and document the essential findings of the architectural use of plants from the Quran, in which will lead towards future resilient especially on the welfare of human communities throughout the world.

KEYWORDS: Plant, Architecture, Landscape Design, Quran.

INTRODUCTION

In general, the landscape can be explained as a reflection of the relationship between people and place. Landscape means more than just 'a physical tract of land' or 'a view or scene' [36]. According to [12, 41], a proper placement and arrangement of plants with their certain characteristics and personalities such as texture, size, form and mass createa functional, appealing and aesthetic quality of landscape design. This view is supported by [3, 7] who writes the functional use of plants as a significant contributor to solve practical landscape problems and enhance the user's life quality. In the Quran, hundreds of verses touched upon the plants in various contexts such as morphological principles, the production process of food stuff, environment equilibrium and landscape design [8, 10]. It is interesting to note that the importance of plants is more than providing food and shelter, but also the use of plants as figures of righteousness and stability. Plants also have the symbolic function in the Quran. As Allah tells us in the Quran [13] about a "good tree and bad tree" compared to a "good person and a bad person". Plant have been described with their firm roots, branches and production of fruit all the time by permission of its Lord. From the ayah, Allah presents examples for the people that perhaps they will be reminded. And the example of a bad word is like a bad tree, uprooted from the surface of the earth, not having any stability. With regards to this diversity and various contexts of plants as Allah SWT mentioned in the Al-Quran, it has been prominently discussed that there's clearly a connection between plant and landscape design. As Quran is the primary reference of human civilization (for the Muslim), this study explores and justifies on how plants have been correlating between its architectural uses in landscape with the evidence and stories from the Quran.

THE FUNCTION OF PLANTS

Trees and plants behold significant roles in the landscapes rather than just a decoration and decorative elements [2]. They can complement and reinforce the existing architecture of the house or structure, as well as create outdoor rooms [2, 22]. In [22] also added the architectural characters of plants are vital to working as the spatial envelope of a design or outdoor areas. On the other hand, the functions as structural could act as ceilings, walls and floors. Particularly, in landscape design, trees and plants help in defining and organizing space, affecting views and

influencing the direction of movement (Figure 1). Moreover, the size, form, solidity and opaqueness of plants are also important considerations when dealing with plants as structural elements [2].



Figure 1: Groups of trees and plants may be used architecturally to form walls, canopies or floors [41]

Therefore, besides establishing the visual quality of plants as its important role, this paper demonstrates the understanding of other relevant functions of plants to utilize their potential for the outdoor environment. This paper uses established references together with a citation from the Quran to support justifications. Based on the previous studies, this study categorizes plants into three primary functions for the outdoor environment consists of structural, environment and visual (refer Table 1).

Table 1: Three main functions of plants in the outdoor environment

Criteria/Functions	Structural	Environmental	Visual
Architectural	√		
Engineering		√	
Climate Control		√	
Aesthetic			√

The objectives of this paper are (i) to identify the functional use of plants as an architectural character in landscape design, followed by (ii) to describe the structural situation using the examples and stories mention in the Quran. The intention is to create interest and awareness towards evidence from the Quran as well to establish them as relevant references for future.

THE ARCHITECTURAL USES OF PLANTS

The Overhead Plane

Trees are the most useful plants in providing shade in a landscape. According to [40, 42], creating a shady area in the landscape requires a round or oval tree which from the outside they build mass; from within, they form a canopied space. In another major study [2, 41] explain that the overhead tree canopy with their spreading branches defines the ceiling of an outdoor area create a strong sense of shelter and enclosure to make an outdoor room like (Figure 2).

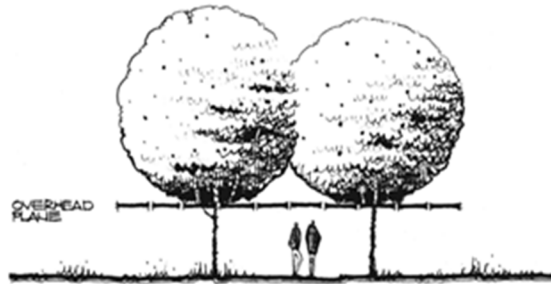


Figure 2: Overhead plane formed by bottom of tree canopy [41]

The Plants of Paradise

The plants of Paradise are abundant, gorgeous, with lush foliage and indescribable colours [14, 16-19]. As in [17] stated that the intensity of the colour is because of the density of the trees in Paradise. They are prominent in the Quran as Allah says that the plants of Paradise always offer shade and bear fruit continuously. The fruits will be ready to eat and in a manner that makes it easiest to pluck [15]. The appearance of some trees in paradise is so

amazingly huge. As Narrated by Anas bin Malik, the Prophet SAW conveyed an impression of its size and the characteristics of this tree when he was taken up until reached to Sidrat al-Muntaha. It was mention that the tree was so big and massive, and the shape of fruits looked like the clay jugs. The leaves shaped like an elephants' ear and so large that provides ample shade and show a strong sense of shelter for the ummah [37].

The Campaign of al-Hudaybiyah

The Treaty of Hudaybiyah is a turning point in Islamic history as called by the Quran a “clear victory” when the Prophet SAW established the precedent that is permissible to negotiate with an enemy in maintaining peace and stability. Allah mentioned in Quran [20] about the use of the tree as a place for the campaign of Al-Hudaybiyah when the Prophet SAW heard of the betrayal of the Mushrikin.

The Prophet Journey to Thaif

Ibn Ishaq stated in [9] that Quraysh treated the Prophet SAW worse after his uncle, Abu Talib died. The Prophet SAW decided to move to Thaif where he thought he would convey the message of Allah to the tribe of Thaqeef. As he entered Thaif and proclaimed his prophethood, people jeered at him; the Prophet SAW being tortured and humiliated by the people. He tethered his camel to a palm tree and hid beneath the shade of a vine. It has been shown that a ceiling can be achieved when shade trees are grouped close together to create a canopy; an overhead open wood structure covered with vines will create a similar effect.

The Vertical Plane

Plants are living building material and structure in a garden and used to establish spatial boundaries and creating the outdoor walls with the sense of enclosure [6, 39, 49]. In the aspect of artistic and visual control, plants are used to frame a good view or to screen a poor one. For psychological comfort, the function of plants are highlighted as physical or implied barriers which may serve as a backdrop for privacy and safety [5](Figure 3).

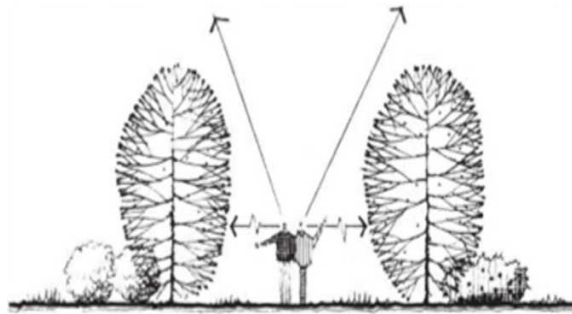


Figure 3: Vertical space, enclosed the vertical plane, open overhead [41]

Maryam and Date Palm

According to [4], the date palm is a major fruit crop in most Arab countries and considered a symbol of life in the desert. As [1] highlights that the date palm not only provided a concentrated energy food, but it also provides shade and protection from the desert winds. The plants hold the significant element to create a more habitat for the people to live. As mentioned in [21, 22], Allah helped Maryam with revelations while she was struggling with labor pains in the shade of a date palm and she wished to Allah that she might die.

The Man with Two Gardens

According to [40], when trees and plants are used in succession and repeated, rhythm is created. These repeated elements help to create a sense of movement, leading the eye moves to the next set of trees through the garden. Allah tells us in the Quran:

“And present to them an example of two men: We granted to one of them two gardens of grapevines, and We bordered them with palm trees and placed between them crops” [23]

“Each of the two gardens produced its fruit and did not fall short thereof in anything. And We caused to gush forth within them a river” [24]

The Tree That Obeys the Order

There is incident concerning trees leaving their places and following the orders of the Prophet SAW. It shows the function of plants as a physical element to provide a barrier which may serve as a backdrop for privacy. Narrated by Imam Muslim, from Jabir said; "... We stopped in a fragrant valley, and the Prophet SAW wanted to answer the call of nature, but he could not find anywhere where he could conceal himself" [38]. The two trees joined and formed a screen and create enclosed space.

Crying of Date-Palm Tree

Plants often define space and used as physical or implied barriers and serve as a backdrop for privacy. For example, it was stated in a Hadith narrated by Imam al-Bukhari from Jabir ibn 'Abdullah about the palm tree next to which the Prophet SAW used to preach on Fridays. One day, the tree cried like a small child, after they made a Minbar for Prophet SAW. Then, the Prophet SAW came down and hugged the crying tree until it calmed down. The palm tree was crying because of the Dhikr (remembrance of Allah) that it used to hear" [37].

The Death of Zakariya AS

With Allah's permission, a tree opened up its trunk and allowed Zakariya AS to hide inside it. However, Syaitan pulled a fragment of Zakariya's AS clothes through the cracks, thus exposing him. Then, the Jews began to saw that part of the tree in half, along with Zakariya AS in it. The Quran makes mention of the cruel acts of the Israelites in the [22].

The Horizontal Ground Plane

The lowest growing plant forms a foliage canopy very close to the ground and often not more than a few centimeters thick. Plants include grasses and turf species when mown or grazed, utterly prostrate shrubs and creeping herbaceous plants. Its primary spatial role is as 'floor' that allows both free vision and movement (Figure 4) [36, 40].



Figure 4: Open space created by small shrubs and ground cover [41]

The Grazing Land

Grass and other combinations of low growing plants, serve as floors. As one may be able to see, plants can be used in many ways to create various kinds of space and serve in different functions [42]. In numerous verses of the Quran [26, 27, 28] mention is made of the beautiful sceneries that the earth reveals. God draws our attention to this beauty, stimulating us to reflect and contemplate [29]. Narrated Abu Huraira: If I saw deer grazing in Medina, I would not chase them, for Allah's said, "(Medina) is a sanctuary between its two mountains." The pastures are the open areas of land which are not owned by anyone or land that is not being used for agriculture and has the natural vegetation for grazing cattle. Allah told us in the Quran in [25] and narrated by Abu Huraira "The Hour (of Resurrection) will not occur until the land of the Arabs returns to being pastures and rivers" [35].

The Plant Diversity

Groundcovers also serve an important visual function and dominant in the landscape scene. They form a significant component of the visual foundation in the composition with the spaces and are typically called upon to serve as a useful backdrop for the accents and features of the landscape. All Allah's creation is beneficial to humans including plants which are an essential component of the universe [11]. Allah has told us about the plant diversity in [30-33] each thing that Allah has created is a miraculous sign and full of meaning for those of intelligence [34].

The Plant Which Grows for Yunus AS for Food and Healing

The gourd or pumpkin is a spreading plant which Allah caused to grow over him to protect him from insects and provide shade. It was described that the plant has large, smooth leaves and grows quickly. The fruit provides

real nourishment which it can be eaten raw or cooked, and its skin may be eaten too. The Messenger of Allah liked this plant and used to look for it on the plate of food [9, 35]

CONCLUSION

The Quran, from the very beginning, has proclaimed and covered every aspect of life. Quran is generously full of wisdom through all needs in life and hereafter. The citations are vast but correctly carry its meanings and understanding. By reading the Quran and its meanings, there are various quotations related to plants and landscape. From a design perspective, plants have essential functions in the landscape. Architecturally, plants may be used as a form of architecture to create outdoor rooms. The plant is mentioned as a source in providing a "ceiling" effect in a landscape rather than "wall" and "floor." Some plants are referred to in the Quran and Hadith giving the role in providing shade in a landscape. Trees are prominent plant structure stated in the Quran than other plant classification which provides architectural form and organization to space. This paper had and documented the knowledge of the structural use of plants in the landscape to create awareness about the plants as mentioned in the Quran. This paper uses the storytelling style to deliver the important messages that plants brought to fulfil human needs in both life and hereafter. The understanding and awareness of these stories would encourage more research, in-depth citation and diversify knowledge in which would equip sufficient references for future generation.

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20. Quran: Surat Al-Fath (The Victory) (48:18).
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23. Quran: Surat Al-Kahf (The Cave) (18:32).
24. Quran: Surat Al-Kahf (The Cave) (18:33).
25. Quran: Surat 'Āli 'Imrān (Family of Imran) (3:21).
26. Quran: Surat An-Naḥl (The Bee) (16:5).
27. Quran: Surat An-Naḥl (The Bee) (16:6).
28. Quran: Surat An-Naḥl (The Bee) (16:10).
29. Quran: Surat Ash-Shu'arā' (The Poets) (26:131-135).
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