

The Elements of Landscape in Islamic Courtyard Design: Case Study of Bayt Al-Suhaymi Museum in Cairo, Egypt and Alhambra Granada, Spain

**Nik Muhamad Syafwan Bin Nik Man¹, Wan Kamal Nadzif Bin Wan
Jamil^{2*} and Muhammad Yusri bin Yusof @ Salleh³**

¹ Diploma in Landscape Architecture,

Universiti Teknologi MARA (Perak), 32610 Seri Iskandar, Perak, Malaysia

^{2,3} Academy of Contemporary Islamic Studies,

Universiti Teknologi MARA (Perak), 32610 Seri Iskandar, Perak, Malaysia

DOI: 10.6007/IJARBS/v7-i3/2766 URL: <http://dx.doi.org/10.6007/IJARBS/v7-i3/2766>

Abstract

This paper presents a review on the elements of landscape in Islamic Courtyard design. The aim of this paper is to study element of courtyard design with the comparison Bayt al- Suhaymi, Egypt and Alhambra Granada, Spain. The finding of this research will help to define the to identify the characteristics of Islamic courtyard design are include: quadripartite layout are the harmonies central unit of courtyard, use of water and vegetation and shade are reflection of heaven and environmental control, pavilion to protection and shelter and the walls and gates to privacy and human comfort. It is hoped that the paper can give the knowledge for the idea of Islamic courtyard design as a make the environment calmer at courtyard through the element of courtyard design and provide benefits to the user.

Keywords: Islamic Garden, Landscape design, Courtyard design

1.0 Introduction

Courtyard is a special space, there are two types of courtyard which are that can be built in the outside yet and almost inside (Reynolds, John: 1938). Courtyard is an area surrounded by buildings and is exposed to the sky. Courtyard is also an area to provide daily contact a human with nature and can make a beautiful area to the whole community. Usually surrounded by courtyard building will be summoned. The good courtyard is that applying the elements of landscape, be attention to people and also can create space for people to community.

Courtyard can be found in every country in the world, different in climate and culture of the country. For an example, Courtyard in ancient Sumerian widely used in the area surrounding the building in all ancient Mideast. Next, in china courtyard can be found in a residential area. Then, in the colder north, courtyard area is smaller than in other countries and aims to filter sunlight in the summer. Furthermore, in Japan, Africa and America courtyard

surrounded by a group of buildings. Despite what appears to be occurring with courtyard nowadays it is more often glass-roofed and air-conditioned "atrium".

2.0 Problem Statement

The issues regarding in the research of the study in the Islamic courtyard design from terms of their views of the world and in countries that have been identified from the literature. For an example the issue is Islamic courtyard has a design in terms of understanding and appreciation because the reference referred inadequate and physical evidence topic is not detail and specific. As the issues highlighted in this study are:

There are various Islamic courtyards of the earliest and popular, as for an example Generalife Alhambra, Spain (Wescoat, 1990; Delgado et al, 2007; Solmaz Mohammadzadeh Kive, 2012). In ancient times Islamic courtyard highly appreciated in the Islamic civilization and heritage has become as influential in the government of the Islamic era. However, essentially decreasing because the some lack of supporting the essence of Islam around the world. Islam is the second largest religion in the world; therefore the courtyard Islamic principles should be emphasized in the design. Although however, it makes strong evidence to show the issues inadequate guideline for people to refer and continue the idea of the Islamic courtyard design. Therefore, the study who wishes to maintain the basic Islamic courtyard at this time should be carried is as a reference for future.

3.0 Aim and Objectives

The overall aim of this research is to study of element of Islamic courtyard design with the comparison Alhambra Granada, Spain and Bayt al-Suhaymi, Egypt. How to achieve this aim is through the process from beginning to end of objective. The following study objective was formulated:

- To review the world's leading Islamic landscape design
- To identify the characteristics of Islamic courtyard design.

4.0 Literature Review

4.1. Type of courtyard

Courtyard is one of the main features the mosque of the prophet. Courtyard also intended a space that has walls, porticoes and varies by type of hypostyle mosque. There are also some activities that occurred in the courtyard without religious activities it is determined by reason and aim the courtyard was built.

Table 1: Type of courtyard and characteristics

TYPE OF COURTYARD	CHARACTERISTICS
Mosque	<ul style="list-style-type: none"> • Almost every historic or traditional mosque • The use of the sahn in Middle Eastern countries' mosques was carried on to most Islamic countries' mosque architecture. • Surrounded by the <i>Riwaq</i> arcade on all sides. • Contain water basins, such as <i>howz</i>, for ritual purification and performing of <i>wudu</i> (Islamic ablutions), and flowing fountains for drinking water. • The inner courtyard is not a religiously proscribed architectural feature, and some mosques, especially since the twentieth century, do not have a sahn
Residential design	<ul style="list-style-type: none"> • Part of courtyard house and are the most private • The scale and design details different : <ul style="list-style-type: none"> - Urban to rural locales - Regions and climates - Eras and cultures • Courtyard can be a private garden, a service yard and summer season outdoor living room for the family. • Surrounded by <i>colonnaded riwaq</i> and has a <i>howz</i> or pool

4.2. Element of Islamic Courtyard Design

The element of Islamic courtyard design has five characteristics. For an example quadripartite layout, use of water, vegetation and shade, pavilions, walls and gates. Next, the quadripartite layout is a feature that should be included in the Islamic courtyard design it mean in terms of geometric layout and it also often occurs in the form of symmetric. Usually it is described as a square or a rectangle known performance covered space and surrounded by buildings. Preparation of the quadripartite layout is through pedestrian and how it can be connected to an area where the focus in an area which is in the middle of the courtyard. In the al-Quran Surah Mohammed, verses 15 describes four rivers of paradise: "*in it are rivers of water unaltered, rivers of milk of which the taste never changes, rivers of wine, a joy to those who drink, and rivers of honey pure and clean.*" Next, in Surah al-Rahman verses 46-62 to give a longer and more detailed than four gardens. They are the gardens of the Soul and the Garden of the Heart, and the higher than the two is the Garden of the Spirit and substance Park. For an example that has survived to the present is urban courtyard gardens in Cairo, namely the preparation of Beit al-Places shows two courtyard designed from quadripartite form which connects through the walkways.

Moreover use of water, Most of the Muslim world in the world is located in the environment relatively dry and arid. Therefore, with the courtyard it can provide functionality to the environment. For an example, can provide an environment seem cooler and can give to the user. In fact, it can also reduce violence in a building. Because of this, water is the most important element in Islamic courtyard as it can provide benefits to consumers and make the climate better than before. Water also has aesthetic qualities funds mat appreciated and often used in Islamic courtyard. For example, the water began to drip slowly and continues to be a small waterfall, a jet of water fountain continues towards into the canal and finally the water is still in the pool. A combination that will not stop and can give a quiet area turned into a rather nice environment and can provide comfort. According to the al-Quran it refers to the calm water and a dynamic quality, *"Heaven flow in rivers"* is repeated thirty times in different Chapters. The righteous are promised to live in the midst of gardens and rivers, *"As for the righteous, they will be in Gardens and the River"* (Al-Qamar: 54). *"And in them (both) will be two springs pouring forth water in continuous"* (Al-Rahman: 50). A water tank corresponds to a quiet central basin (*hawd*) promised to the prophet Muhammad (peace is upon him) in Surat al-Kawthar. In the centre of the planting bed is directly connected to a well of water through the channel. The running water is not only to irrigate the plants to the region but it also can give beauty and cooling effects to the user.

Furthermore the vegetation of shade, Trees and shrubs are often grown in the quadrant adjacent Islamic courtyard in Islam. Plants grown used to provide pragmatic and aesthetic results. In the al-Quran at the Islamic courtyard often trees are planted at once, or convene a meeting in order to provide shade in the area and to provide an environment looks cooler. Trees were planted in the Islamic courtyard often provides the main attraction through the palette. For an example, in the al-Quran trees are often planted and are often called the pomegranate, grape and coconut. In addition, to go to the shelter, it is also often added to provide nourishment, scent, and colours. Therefore, Tall cypresses are planted to provide protection from the wind, even trees planted oaks and Willows to provide shade in the garden area out of the sun. For an example, weather in the summer. Description of the Quran is quite consistent in providing a portrait of the green light, lushness, colour, delicious fruits, and the beauty of fantasy, *"Branch, unfailing fruit, grape, and pomegranate"* and *"the fruit of many, the season is not limited, and not (supply) forbidden"* (al-Waqiah: 32-33) and *"In both are fruits, dates, pomegranates"* (Al-Rahman: 68). *"Spread the shade"* is an expression that is generated in the Quran as part of the reward that awaits the righteous *"And the colour of the (Garden) will close to them"* (Al-Insan: 14) and *"we will enter them into the shade; yet comfortable"* (Al-Nisa': 57).



Figure 1: Water fountains and vegetation that use within the palace courtyards of Alhambra, Granada, Spain. Water and vegetation is a very important element in Islamic landscape design. (Source: <http://www.ummah.co.ke/blog/2014/06/islamic-architecture>)

Next the pavilions, in the perception of the Muslim the environment around the area that has been built. For an example, there are two instances of earth and sky, which is ruled by Allah. In addition, the continuity of space in Islam is seen by Muslims found that it correlated with Islamic culture and solidarity. Thus, the unity that exists it can increase the feeling of a strong influence on Islamic courtyard of the quadripartite layout preferences. In the al-Quran, which is used as the main place where Muslims refer to the pavilion. As implied in the Quran and Hadith 21 pavilions is the cool structure, built in the gardens of paradise, over flowing water. Abu Ummamah narrated "Anyone who has a good temperament should have a house built for him in the apartment of the highest heaven". And al-Quran explains: "For those who fear their Lord, which houses a high one above the other, were built: Beneath them rivers flow" (Al-Zumar: 20). In the garden- garden, pavilion design or structure where Muslims enjoy the shade, coolness, and water, different architectures depending on the geographical location in the Islamic world.



Figure 2: Clocks Pavilion, covered by a dome, located west of the courtyard Mosque of Damascus. (Source: <http://architecturalmoleskine.blogspot.my/2013/09/the-great-mosque-of-damascus.html>)

Besides walls and gates, Islamic courtyard design should have its own wall and gates to give privacy as its own and to give the private to rest. Moreover, walls and gates purpose is to provide protection from a dusty environment, the noise, the glare of sunlight, a hot

environment and provide a fresh area for the convenience of the people through the provision of building walls and their environment. In the Qur'an, heaven is described as an enclosed garden, surrounded by a "wall" and can be accessed through the "door", "*And those who fear their Lord will be led to the Garden in troops, so that when they arrive: Its doors will open*" (Al-Zumar: 73), and "*Gardens of Eden that the doors will (ever) be open to them*" (Sad: 50). In comparison, in the courtyard garden of paradise Muslim: if allowed, the door will be opened.

4.3 Islamic Garden

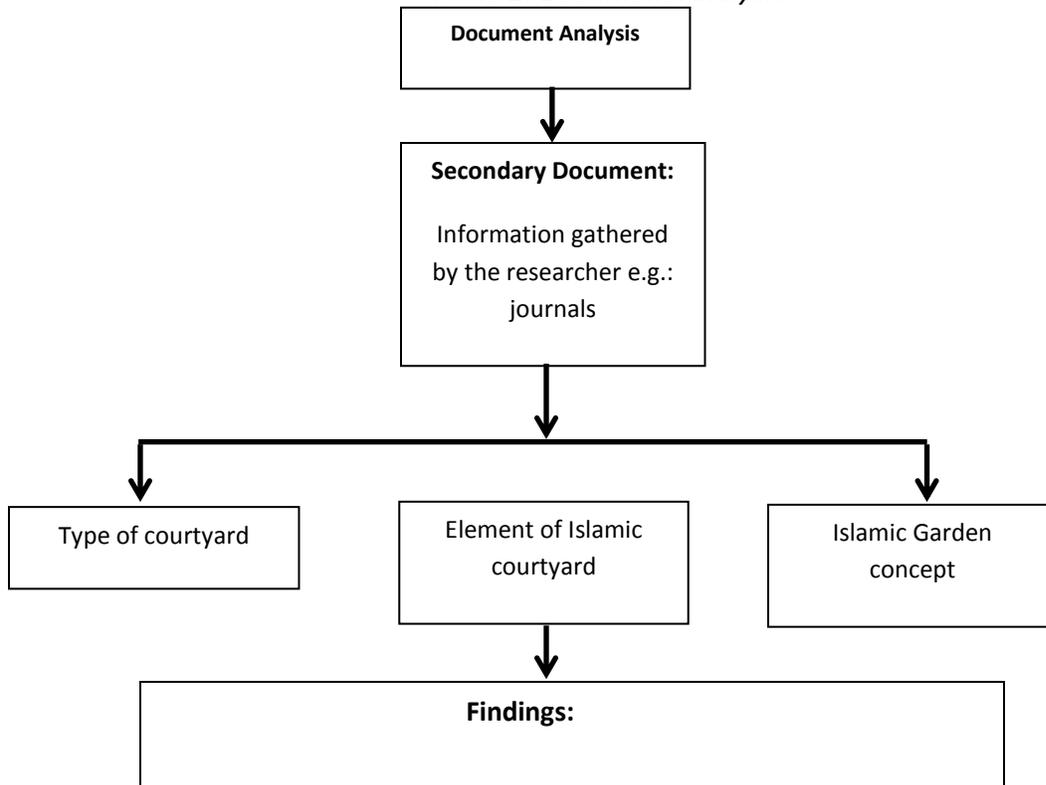
The main purpose of the Islamic garden is designed to show Islam in a paradise garden. History start of the first Islamic gardens has occurred at the time of the establishment of the Persian garden in the seventh century (Haaga, 2005). Proceeds from the Islamic garden, design are a reference to the Islamic garden, for instance Moghul gardens in Kashmir in India and the Alhambra, Generalife in southern Spain. Therefore, the effect of the garden Spain it began to grow around the world until to 20th century and the effect of evidence can be seen in the revival garden at California and Mexico. The concept of the Islamic garden is promoting the concept of simplicity; therefore recommending the Islamic garden growing in the modern world. According Petruccioli (1998), he said Islam has successfully raised park attraction of attention of European culture in the 17th century. In addition, the influence of Islamic gardens can also be seen through the results of garden design in Florence and the Royal Pavilion in Brighton England. In the 19th century the park Islam has once again increased growth due to the strong influence the design and selected as one of the architectural style of the official at the World Exhibition. The development of Islamic gardens continues to flourish in the 19th century and early 20th century and the slow decline due to the progress of the modern world.

The glory age of Islam garden began in the seventh century. The design concept of the garden first form more privacy in the design of the garden (Germeraad, 1993). Increasingly, the design of the Islamic garden has started to grow in the landscape design in the world. For an example, the famous Islamic gardens that grow under the establishment of the Islamic garden such as the Persian, Mughal Gardens of Kashmir and Al-Andalus, Spain. The main purpose of the garden was established as an open space that is produced to the public. Persian history before the creation of the park, the park is an area of the field. After the development of Islamic civilization, it has grown and some Islamic countries start upgrading government in the design concept of the Islamic design. For an example of the fourth Mughal Emperor Jahangir (1569-1627) had built a pavilion black in Kashmir (Sajjad Kausar, 2005). Moreover, according to Seyyed Hossein Nasr et al, (1993) have emphasized the concept of Islamic Garden by Gulzar Haider. However, the environment and the key elements that should be included in an Islamic garden is a garden that reflects elements of Islam. As for example, the embedded concept of monotheism, *Khalifah*, *khilqat* that means the environmental, *jihad* means obedience, justice, worship, knowledge and *Jamal* mean that beauty is emphasized in al-Quran. Therefore, any garden Islam that has the same values will be considered Islamic garden (Gulzar Haider, 1984).

5.0 Methodology

This study is based on research methods from secondary sources. Analysis of the documents adopted in this study is to identify in more detail about the study, and to increase understanding more clearly about this research. The document is a form of research that is highly reliable, because it is judged to documents obtained. Data collection used in this study is to secondary sources through information gathered by journals. The documents are divided into three sections namely; type of courtyard, Element of Islamic courtyard and the Islamic concept.

Table 2: Document Analysis



5.1 Case studies Bayt Al-Suhaymi, Egypt

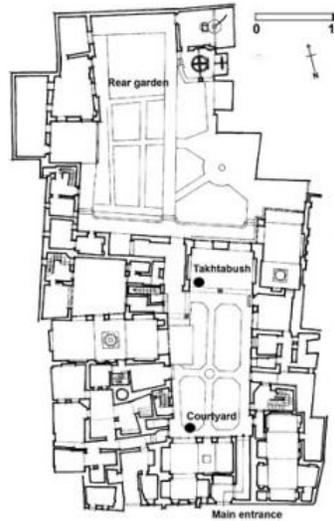


Figure 4: Al-Suhaymi house ground floor plan. Shaddy Attia: (2006)

Bayt Al-Suhaymi is one example that we can be seen to reflect the Islamic courtyard and it was built in the 16th century and 17th century. The house is located in the hallway El Darb El Asfar is located near the famous Fatimid street or road known as El Moez. The house has several building phases before attaining final design that covers 2000 square meters and is divided into five stages. This house is a popular place with the environment and contains elements of traditional Korean architecture of the house. Access road is likely to continue to its destination, it can also guarantee the privacy of the home, it can also lead us to the interior courtyard surrounded by rooms and can be tasted at the *maqaad* (roofed balcony overlooking the cool breeze north) and *takhtaboosh* (a space attached by the court to receive male visitors during the summer).

Next, the quadripartite layout at the bayt Al-Suhaymi is design quadripartite often referred to in al-Quran more than once. Therefore, courtyard is encouraged to use quadripartite layout it are not always in the form of geometry but also can be seen in the form of that symmetric.. The layout quadripartite assured through a combination of elements of plants, water and pavement section of the site. Quadripartite design can give designers to manipulate the site and get to create a relationship through the water, plants and distance the walkway.

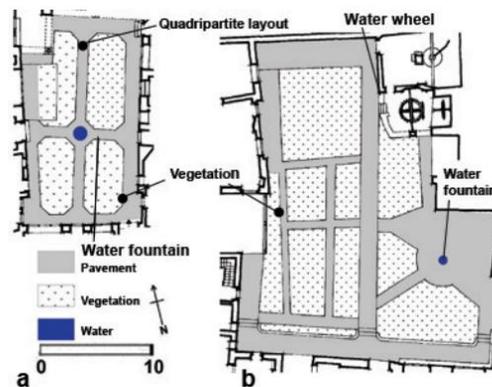


Figure 5: Landscape design elements in Al Suhaymi courtyard gardens (a) courtyard, (b) rear garden. Shaddy Attia: (2006)

Furthermore, use of water one of the element Islamic courtyard design. Bayt Al-Suhaymi has a fountain became the focus of people in the courtyard and fountain are located in part in the hall. Next, the fountains in Bayt Al-Suhaymi also share amenities to sprinkles residents in the area. With the use of a fountain in the home it can be a reservoir of cool air. In addition, it also can provide dry air humidification in Cairo. However, the fountain can also help to relieve the climate in the hall and shows the importance of the elements of that natural environment such as water element in the house.

Besides, vegetation and shade at Bayt-Al-Suhaymi in the rear courtyard and planted them also to provide functionality to users, it can also provide amenities on an open space and a hot place. For example, in the courtyard behind the street using tar element. Therefore, to avoid becoming a hot area make decisions to plant herbs, flowers and palm at the venue. In addition, in the main courtyard it more focus to plant ground cover, evergreen and trees that can become as a protective wall in the area that are in the courtyard. Greenery plants at the rear and in the courtyard can absorb dust and dirt in the atmosphere and can reduce the glare of sunlight.

Moreover, walls and pavilions one of the elements in Islamic courtyard design. In the al-Quran is described as paradise garden enclosed and surrounded by walls and can be accessed through door. Next, at the Bayt Al-Suhaymi courtyard surrounded by high wall thick and can provide protection from hot environments, dusty, noisy and to generate cool air and fresh for human comfort. Moreover, the rear garden at the Bayt Al-Suhaymi surrounded by a low wall and intended to reduce shade of trees. In addition, the walls are built at the Bayt Al-Suhaymi considered as elements related to the environment and Islamic design.

5.2 Case studies of Alhambra Granada, Spain (Alhambra Palace Layout)

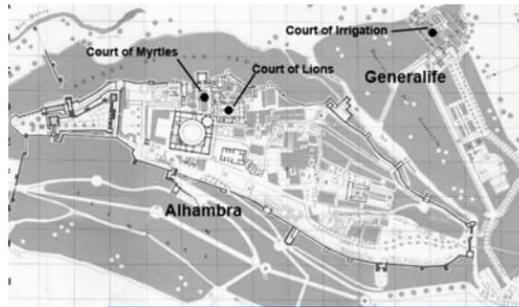


Figure 6: Alhambra Palatial Complex and Generalife. Shaddy Attia: (2006)

Alhambra Palace is often praised through that balanced composition by architecture, vegetation and water. Moreover, the hierarchy and pattern symmetry can also control the structure and organization of space in the palace as if it could have been using the fountains and the channels. In addition, The Most courtyards are rectangular are this with a rectangular pools of arranged the middle. Next, the courtyard also sorted by quadripartite but it is more focused on the long allow due to an excess width provides exposure to move freely in anticipation. Among the two courtyards that can be analysed at Alhambra complex Palatial is, such as Court of Myrtles and Court of lions.

Court of myrtles, in the middle there is a large pool located in the walkway using marble material with myrtles growing along its banks. In addition, it also considered and incorporated in the design of Islamic courtyard. Secondly, the court of lion's there are fountains and four axial channels could form the nucleus of the Alhambra Palace.



Figure 7: The court of Myrtles, Alhambra. Alhambra.

Photo taken by (Miroso: 2011)



Figure 8: The Court of Lions,

Shaddy Attia: (2006)

The quadripartite layout in court of Myrtles, This area does not have quadripartite layout elements but it still follows the layout of geometric symmetry. The architecture of the courtyard is the most widely axis that aims to cool apartment in the summer environment. Although, the quadripartite layout at Court of Lions is a regular quadripartite layout. For an

example, court of Lions has rectangle court bisected by both longitude and the horizontal axis. Emphasized by the long axis of the pavilion and placed at both ends of the area.

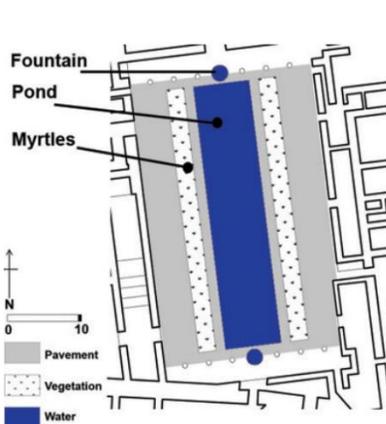


Figure 9: Landscape design elements in the Court of Myrtles, Alhambra. Shaddy Attia: (2006)

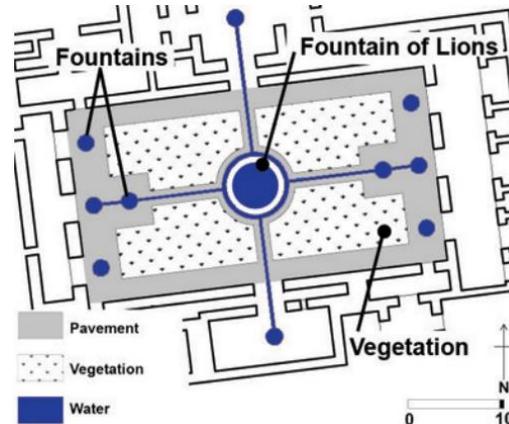


Figure 10: Landscape design elements in the Court of Lions, Alhambra. Shaddy Attia: (2006)

Furthermore, use of water at the Court of the Myrtles it being at the rectangular pool. Large central pool makes large courtyard area can illustrate porticos Comares Tower. This situation has created a sound continuously without interruption in the courtyard and the water that flows continue to move to the surface of the pond that was once the place to see gold fish. Even so, use of water element at the court of lions is a fountain that can be viewed at the end of both the courtyard. The Lions fountain located in the middle of the courtyard that provides animation in the courtyard. The Fountain of Lions is an alabaster basin supported by twelve lions made of marble material. The fountains started out fountains of the small side and the water continues to fall into the bowl. Then, it began to walk through the central fountain in the channel that has been carved in the walkway and then running down the stairs entrance hall, has formed a small cascade and have been spilled in the lion dodecagonal basin area.

Besides, the vegetation and shade at Court of Mytles a plants grown in only have four orange trees at the four corners of the courtyard and it was planted when the restoration at the 19th century. Then, there are also have a shrubs and fragrant flowering trees at the courtyard surrounding. However, the vegetation and shade at court of lion's show don't have plants in the court of lions, but there is a large shell fountain and there will be no plants in it because it will seem so short if they are in pots or in beds though it is separate and it is located far away with the journey route. Today, the babble that surrounds the pool on may not be the original because maybe it will produce clay tiles and decorated with designs on ceramics. Thus, the garden will remain with beds that are used for climbing plants, for example jasmine and myrtle plant fence at the border even though the space located in pool.

Finally, walls and pavilions at the court of Mytles. For an example, Alhambra is a city walled and surrounded by large walls. Moreover, in the north and south there are the gallery of its own. Gallery in the south is 9 meters high and decorated by that compact marble material. In addition, there is also the right of that main door and above it there are elegant windows with small arches and pillars. Instead, walls and pavilions at court of lions using white marble tiles in the area around the courtyard, decorated with a row of marble columns in the courtyard, covered with walls 1.5 meters high rated and at every gate there is a large rectangular arabesques.

5.2 Case studies of Alhambra Granada, Spain (Generalife Palace Layout)

The Generalife was built during the reign of Muhammad III, starting from 1302-1309 and used as a summer holiday Nasrid. The area is separated by Alhambra through the gorge and it was in front of the palace Nasrid. Generalife also comprises a terrace arranged hillside, and there is a lush garden and pavilion overlooking the courtyard. According to Selle: (n.d) said Generalife Gardens in the park might be the best as it tries to convey a true desire and the Islamic garden in paradise almost unmatched compared to other western parks.

Court of irrigation also knew Patio de la Acequai an oval arena with 49 meters long and 12 meters wide. Court of irrigation is the water from the irrigation ditch that continues in the duct Alhambra in the water channel divides it lengthwise. The quadripartite layout at court of irrigation formed through creeks split center water through beds flanking a portrait of medieval layout. The court is in Acequia lowest terrace area and consists of a rectangular courtyard of the four quadrants of the old water channel and basin in the central courtyard.



Figure 11: Court of Irrigation (Source: <https://gardeningjules.wordpress.com/2015/06/15/the-gardens-of-the-alhambra-and-generalife-granada-spain-part-two-partial-and-generalife/>)

Next, use of water at court of irrigation through the water supply to the Generalife, it began to be channelled through the top of the wall and then move to the bluffs and then channelled to feed and jet canal in patio gardens. The uniqueness of the water element here is stairs water that has not been seen in the design of Islam before. Domestic water is between the two towers and continues to flow to flow above and in the middle. Moreover, vegetation

and shade at court of irrigation in painting Patio de la Acequia by (Ludwig Hans Fischer: 1885), which means tall cypresses and aromatic Mediterranean herbs will no longer exist today, court of irrigation no longer maintain the genuine cultivation but we find annuals are still flowering in summer.

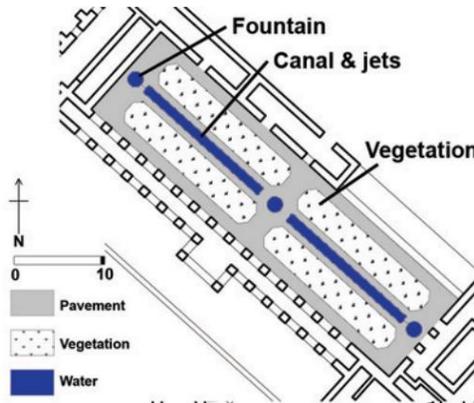


Figure 12: Landscape design elements in the court of irrigation. Shaddy Attia: (2006)

Furthermore, walls and pavilions at court of irrigation in Acequia court there is a gallery with a balcony located on the west side of the courtyard can provide dramatic views of the landscape and the Alhambra. Pavilion of court irrigation located at the north end and in front of the Albaicin quarter. Pavilion there is a history of its own and is used as a residence and two pavilions open to the apex courts through an arcade Acequia.

6.0 Findings

These findings were divided into two main sections based on literature review and comparison of case study of Bayt Al-Suhaymi, Egypt and the Alhambra, Granada, Spain. Firstly, through a literature review of Elements of Islamic courtyard of the reference design based on the Quran and the hadith show the quadripartite layout harmonies are the central unit of the courtyard, use of water and vegetation and shade are reflection of heaven and environmental control, pavilion to protection and shelter and the walls and gates to privacy and human comfort. Next, through a comparison of case study of Bayt Al-Suhaymi, Egypt and the Alhambra, Granada, Spain it was shown:

Table 3: Comparison between case study

Element of Islamic courtyard design	Case Study			
	Bayt Al-Suhaymi	Court of Myrtles	Court of Lion	Court of Irrigation
Quadripartite layout	Quadripartite layout it is not always in the form of geometry but also can be seen in	Does not have quadripartite layout elements but it still follows the layout of	Quadripartite layout at Court of Lions is a regular quadripartite	The quadripartite layout at court of irrigation formed through creeks split center water

	the form of that symmetric.	geometric symmetry.	layout.	through beds flanking a portrait of medieval layout
Use of water	Fountain became the focus of people in the courtyard and fountain is located in part in the hall.	Use of water at the Court of the Myrtles it being at the rectangular pool.	The Lions fountain in the middle of the courtyard that provides animation in the courtyard	The uniqueness of the water element here is stairs water that has not been seen in the design of Islam before
Vegetation and shade	Behind the street using tar element. Therefore, to avoid becoming a hot area make decisions to plant herbs, flowers and palm at the venue.	Vegetation and shade at Court of Myrtles a plants grown in only have four orange trees at the four corners of the courtyard and it was planted when the restoration at the 19th century.	The vegetation and shade at court of lion's show don't have plants in the court of lions.	Tall cypresses and aromatic Mediterranean herbs will no longer exist today, court of irrigation no longer maintain the genuine cultivation but we find annuals are still flowering in summer.
Walls and pavilion	Courtyard surrounded by high wall thick and can provide protection from hot environments, dusty, noisy and to generate cool air and fresh for human comfort.	In the north and south there is the gallery of its own and Gallery in the south is 9 meters high and decorated by that compact marble material.	Using white marble tiles in the area around the courtyard, decorated with a row of marble columns in the courtyard, covered with walls	Pavilion there is a history of its own and is used as a residence and two pavilions open to the apex courts through an arcade Acequia.

7.0 Summary

Courtyard considered as a daily human contact with nature. Courtyards create a space for the community and it should be increased in terms of understanding and appreciation. In addition, to review the design of Islamic landscape design we must identify the historical development, types of Islamic landscape design and characteristics of Islamic landscape design based on the Al- Quran and Hadith.

Through a case study comparison between different age and time, I found that the quadripartite layout is shaped symmetric in Bayt Al-Suhaymi and court of Myrtles at Alhambra. Next, use of water often in close fountain and it is used as one of the attractions to the public in the courtyard. For an example, the unique element in the court of irrigation is the water stepped and has not been seen in the design of Islam over the years. Moreover, vegetation and shade between the two places a case study plant in the courtyard of the Alhambra did not play its role compared to the Bayt Al-Suhaymi. For an example, in the street Bayt Al-Suhaymi using tar element. How to avoid becoming a hot area, it decided to plant herbs and flowers of oil in the area. Furthermore, walls and pavilions in both case study creating walls and pavilions assume the role of privacy in the area and can also make a shelter from the weather and human comfort.

Corresponding Author:

Wan Kamal Nadzif Bin Wan Jamil
Academy of Contemporary Islamic Studies,
Universiti Teknologi MARA (Perak),
32610 Seri Iskandar, Perak, Malaysia
Email: wanka238@perak.uitm.edu.my

References

- Carlos, Z. (2013.). My architectural moleskine®: The great mosque of damascus
- H. W., & S. A. (2005). "Islamic design in Western world" VS "Western design in Islamic world".
- Julie (2015). The Gardens of the Alhambra and Generalife, Granada, Spain –Part two Partal and Generalife.
- Md Jani, H. H., Harun, N. Z., M. M., & I. Z. (2015). Exploring the Islamic Garden Concept as Inspirational Landscape Design
- Reynolds, J. (1938). Courtyard: Aesthetic, Social and Thermal Light
- Salama (2006). A typological perspective: The impact of cultural paradigmatic Shifts on the evolution of courtyard houses in Cairo
- Shaddy, A. (2006). The role of landscape design in improving the microclimate in traditional courtyard-buildings in hot arid climates.