



UNIVERSITI PUTRA MALAYSIA

***PHYSICAL AND EXPERT INVESTIGATION OF THE ISLAMIC GARDEN
DESIGN AND PRINCIPLES FOR MALAYSIA***

ZAINAB BINTI ABDUL LATIFF

FRSB 2017 16



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By

ZAINAB BINTI ABDUL LATIFF

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia, in Fulfilment of the Requirements for the Degree of
Doctor of Philosophy**

July 2017

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the degree of Doctor of Philosophy

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July 2017

Chair: LAr. Osman bin Mohd Tahir, PhD
Faculty: Design and Architecture

There is a long tradition within the Muslim community of creating gardens. The gardens, from its starting period, had always functioned to provide shade, serenity and the feel of relaxation from the stresses of daily life. Even though Islamic gardens have fascinated designers, landscape architects, architects and historians since the fourteenth century, their evolution throughout time has gone through a continuous phase of numerous definitions, interpretations, descriptions and representations that led to uncertainty more than clarity. The continuous phase of numerous interpretations of Islamic garden by the Western and Muslim scholars makes its definition remained unclear. Without a detailed understanding of its true definition a framework for Islamic garden design cannot be established. This framework is pertinent to guide designers and professionals in developing an Islamic garden that suits the current society's needs in particular and the future community as a whole. The objective of this study is to establish a framework of Islamic garden design for Malaysia. This research uses a qualitative approach for its data collection through library search, Interactive Focus Group (IFG) discussion and semi-structured interviews. The framework of Islamic garden design for Malaysia is inspired primarily by Islam, permeated with the theory of Islamic arts and principles, and stands for the embodiment of Islamic values. It emphasizes the Islamic principles of Oneness of God, beauty, peaceful co-existence with nature, the purpose of man's creation on earth, balance of creation, embellishment of faith, dynamism of 'ibadah (subservience), temporality of creation and being charitable. These principles are to be translated into its design elements of contextual setting, layout, built structures, water, vegetation, materials, ornaments and fauna thus to be an ethically-disciplined vision through intelligent contemplation by its designers and the users.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KAJIAN FIZIKAL DAN PAKAR TENTANG REKABENTUK DAN PRINSIP TAMAN ISLAMIK UNTUK MALAYSIA

Oleh

ZAINAB BINTI ABDUL LATIFF

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Fakulti: Rekabentuk dan Senibina

Telah menjadi tradisi dalam kalangan masyarakat Islam sejak dahulu lagi untuk membina taman. Taman-taman ini dari awal lagi telah menjadi tempat berteduh, sumber ketenangan dan tempat berehat dari tekanan kehidupan seharian. Walaupun taman-taman Islam dahulu kala telah membuat para pereka taman, arkitek lanskap, arkitek dan ahli sejarah merasa takjub akannya sejak abad keempat belas lagi, akan tetapi evolusi mereka yang telah melalui fasa yang berterusan yang didokong oleh pelbagai definisi, tafsiran, penerangan dan interpretasi telah membawa kepada ketidakpastian lebih daripada kejelasan. Fasa yang berterusan mengenai interpretasi yang pelbagai tentang Taman Islamik oleh sarjana Barat dan Muslim menyebabkan definisinya masih kekal tidak jelas. Tanpa pemahaman yang terperinci tentang definisi sebenar Taman Islamik, satu framework untuk reka bentuk Taman Islamik tidak dapat dihasilkan. Framework ini adalah penting untuk memberi panduan kepada pereka dan profesional dalam membangunkan Taman Islam yang sesuai dengan keperluan masyarakat semasa khususnya dan masyarakat akan datang secara keseluruhannya. Objektif kajian ini adalah untuk mewujudkan satu framework reka bentuk Taman Islamik untuk Malaysia. Kajian ini menggunakan pendekatan kualitatif untuk pengumpulan data melalui kajian perpustakaan, Perbincangan Kumpulan Berfokus secara Interaktif (IFG) dan temu bual separa berstruktur muka-ke-muka. Rangka kerja tentang reka bentuk Taman Islamik untuk Malaysia adalah diilhamkan secara khusus berpandukan agama Islam, yang bertunjangkan teori seni Islamik, prinsip-prinsip Islam dan dibina untuk mengembangkan nilai-nilai Islam. Ia menekankan prinsip-prinsip Islam seperti keEsaan Tuhan, kecantikan, hubungan yang sihat dengan alam sekitar, tujuan penciptaan manusia di muka bumi, keseimbangan dalam penciptaan, perhiasan dalam agama, kepelbagaian cara ber'ibadah, penciptaan yang sementara dan beramal soleh. Prinsip-prinsip ini adalah untuk diterjemahkan ke dalam elemen reka bentuknya seperti konteks persekitaran, susun atur, binaan struktur, elemen air, elemen tumbuh-tumbuhan, bahan binaan, hiasan dan fauna yang bertujuan

untuk menjadi suatu realiti yang akan menghasilkan nilai etika dan disiplin yang tinggi melalui kebijaksanaan pereka dan penggunaanya.



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I certify that a Thesis Examination Committee has met on 7 July 2017 to conduct the final examination of Zainab binti Abdul Latiff on her thesis entitled "Physical and Expert Investigation of the Islamic Garden Design and Principles for Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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THE MOSQUE OF CORDOBA

*The succession of day and night is the architect of events.
The succession of day and night is the fountain-head of life and death.
The succession of day and night, is a two-tone silken twine,
With which the Divine Essence, prepares its apparel of Attributes.
The succession of day and night is the reverberation of the symphony of
Creation.
Through its modulations,
the Infinite demonstrates the parameters of possibilities.
Now sitting in judgment on you, now setting a value on me.
The succession of day and night is the touchstone of the universe;
But what if you are found wanting, What if I am found wanting.
Death is your ultimate destiny, Death is my ultimate destiny.
What else is the reality of your days and nights?
Besides a surge in the river of time, sans day, sans night.
Frail and evanescent, all miracles of ingenuity,
Transient, all temporal attainments; Ephemeral, all worldly accomplishments.
Annihilation is the end of all beginnings; Annihilation is the end of all ends.
Extinction, the fate of everything; Hidden or manifest, old or new.
Yet in this very scenario indelible is the stamp of permanence
On the deeds of the good and godly, Deeds of the godly radiate with Love,
The essence of life, which death is forbidden to touch.
Fast and free flows the tide of time, but Love itself is a tide that stems all tides.
In the chronicle of Love there are times other than the past,
The present and the future;
Times for which no names have yet been coined.
Love is the breath of Gabriel. Love is the heart of Holy Prophet (PBUH).
Love is the messenger of God. Love is the Word of God.
Love is ecstasy lends luster to earthly forms, love is the heady wine,
Love is the grand goblet.
Love is the commander of marching troops,
Love is a wayfarer with many a way-side abode.
Love is the plectrum that brings Music to the string of life,
Love is the light of life; love is the fire of life.
To Love, you owe your being, O, Harem of Cordoba,
To Love, that is eternal; never waning, never fading.
Just the media these pigments, bricks and stones; this harp,
These words and sounds, just the media.
The miracle of art springs from the lifeblood of the artist!
A droplet of the lifeblood transforms a piece of dead rock into a living heart;
An impressive sound, into a song of solicitude,
A refrain of rapture or a melody of mirth.
The aura you exude, illumines the heart. My plaint kindles the soul.
You draw the hearts to the Presence Divine;
I inspire them to bloom and blossom.
No less exalted than the Exalted Throne,
Is the throne of the heart, the human breast!
Despite the limit of azure skies, Ordained for this handful of dust.*

Celestial beings, born of light, do have the privilege of supplication,
 But unknown to them are the verve and warmth of prostration.
 An Indian infidel, perchance, am I; But look at my fervour, my ardour.
 'Blessings and peace upon the Prophet,' sings my heart.
 'Blessings and peace upon the Prophet,' echo my lips.
 My song is the song of aspiration. My lute is the serenade of longing.
 Every fibre of my being Resonates with the refrains of Allah hoo!
 Your beauty, your majesty, Personify the graces of the man of faith.
 You are beautiful and majestic. He too is beautiful and majestic.
 Your foundations are lasting, your columns countless,
 Like the profusion of palms in the plains of Syria.
 Your arches, your terraces,
 Shimmer with the light that once flashed in the valley of Aiman
 Your soaring minaret, all aglow in the resplendence of Gabriel's glory.
 The Muslim is destined to last as his Azan holds the key to the mysteries of the
 perennial message of Abraham and Moses.
 His world knows no boundaries, His horizon, and no frontiers.
 Tigris, Danube and Nile: Billows of his oceanic expanse.
 Fabulous, have been his times! Fascinating, the accounts of his achievements!
 He it was, who made the final adieu To the outworn order.
 A cup-bearer is he, With the purest wine for the connoisseur;
 A cavalier in the path of Love with a sword of the finest steel.
 A combatant, with 'La Ilah' as his coat of mail.
 Under the shadow of flashing scimitars, 'La Ilah' is his protection.
 Your edifice unravels the mystery of the faithful;
 The fire of his fervent days, the bliss of his tender nights.
 Your grandeur calls to mind the loftiness of his station,
 The sweep of his vision, His rapture, his ardour, his pride, his humility.
 The might of the man of faith is the might of the Almighty:
 Dominant, creative, resourceful, consummate.
 He is terrestrial with celestial aspect; A being with the qualities of the Creator.
 His contented self has no demands on this world or the other.
 His desires are modest; his aims exalted,
 His manner charming; his ways winsome.
 Soft in social exposure, Tough in the line of pursuit.
 But whether in fray or in social gathering, ever chaste at heart,
 Ever clean in conduct.
 In the celestial order of the macrocosm,
 His immutable faith is the centre of the Divine Compass.
 All else: illusion, sorcery, fallacy, He is the journey's end for reason;
 He is the *raison d'être* of Love.
 An inspiration in the cosmic communion, O, Mecca of art lovers,
 You are the majesty of the true tenet.
 You have elevated Andalusia to the eminence of the holy Harem.
 Your equal in beauty, If any under the skies,
 Is the heart of the Muslim and no one else?
 Ah, those men of truth, those proud cavaliers of Arabia;
 Endowed with a sublime character, Imbued with candour and conviction.
 Their reign gave the world an unfamiliar concept;
 That the authority of the brave and spirited lay in modesty and simplicity,
 Rather than pomp and reality.

*Their sagacity guided the East and the West.
In the dark ages of Europe, It was the light of their vision that lit up the tracks.
A tribute to their blood it is, that the Andalusian, even today,
Are effable and warm-hearted, Ingenuous and bright of countenance.
Even today in this land, Eyes like those of gazelles are a common sight.
And darts shooting out of those eyes, Even today, are on target.
Its breeze, even today, Is laden with the fragrance of Yemen.
Its music, even today, Carries strains of melodies from Hijaz.
Stars look upon your precincts as a piece of heaven.
But for centuries, alas!
Your porticoes have not resonated with the call of the muezzin.
What distant valley, what way-side abode is holding back
That valiant caravan of rampant Love,
Germany witnessed the upheaval of religious reforms
That left no trace of the old perspective.
Infallibility of the church sage began to ring false.
Reason, once more, unfurled its sails, France too went through its revolution
That changed the entire orientation of Western life.
Followers of Rome, feeling antiquated worshipping the anciently,
Also rejuvenated them with the relish of novelty.
The same storm is raging today in the soul of the Muslim.
A Divine secret it is, not for the lips to utter,
Let us see what surfaces from the depths of the deep.
Let us see what color, the blue sky changes into.
Clouds in the yonder valley are drenched in roseate twilight.
The parting sun has left behind mounds and mounds of rubies,
The best from Badakhshan.
Simple and doleful is the song of the peasant's daughter:
Tender feelings adrift in the tide of youth,
O, the ever-flowing waters of Guadalquivir,
Someone on your banks is seeing a vision of some other period of time.
Tomorrow is still in the curtain of intention,
But its dawn is flashing before my mind's eye.
Were I to lift the veil from the profile of my reflections,
The West would be dazzled by its brilliance, life without change is death.
The tumult and turmoil of revolution, Keep the soul of a nation alive.
Keen, as a sword in the hands of Destiny,
Is the nation that evaluates its actions at each step.
Incomplete are all creations without the lifeblood of the creator.
Soulless is the melody without the lifeblood of the maestro.*

~A poem by Iqbal~

CHAPTER 1

BACKGROUND OF THE STUDY

1.1 Introduction

This chapter provides an overview of the study and outlines its structure. It is divided into twelve sections. First, it introduces the chapter followed by a narration of the concept of garden in the Muslim community that underlies the issues in Islamic garden research, as being the major reference used to form a framework of Islamic garden design for Malaysia. Also, the research problem, problem statement, research questions, and research objectives are postulated accordingly. Next, the operational definitions of key terms used, the significance of the study and its contribution to knowledge, as well as limitations of the study are described. Finally, the chapter concludes with a description of the chapters in this study.

1.2 The concept of garden in the Muslim community

There is a long tradition within the Muslim community of creating gardens, since the advent of Islam in the seventh century (Baarah, 2010; Dickie, 1976). The gardens, from its starting period, had always functioned to provide shade, serenity and the feel of relaxation from the stresses of daily life. It has been a place of retreat from daily tasks and worries.

The Arabic words *hadiqah*, *riyad*, *janna* and *raudah* refer to the garden in its classical sense, with different nuances. Meanwhile, the words *bustan*, *munia*, *ruzafa*, *buhaira* and *'ars* refer to the large agricultural or leisure estates generally located on the periphery of towns (Hafteh, 2012). These terms and others show the diversity of meaning in the concept of garden in the Muslim culture (Jah, 2016, para 1).

Gardens in the Muslim world were not limited to a specific region, Muslim period or a particular geographical area; where later they influenced different societies and dynasties in various levels of evolution with rich architectural elements and motifs of one society to another and from one period to another (Baarah, 2010). So much so, a number of attempts worldwide to build gardens with an "Islamic garden" idea evolved, such as HRH The Prince of Wales' Carpet garden, Highgrove, built in 1980 (Clark, 2004); Diplomatic Quarter,

Riyadh, Saudi Arabia¹ completed in the late 1980s; Islamic Garden, Al Sahraa Park, Sharjah, UAE² built in 2014; the garden in Moscow's Grand Mosque, Moscow, Russia³ built in 2015; the Aga Khan Park, Toronto, Canada⁴ built in 2016; and the Qur'anic Botanic Garden, Doha, Qatar⁵.

Meanwhile, in Malaysia, there have also been a number of attempts to build gardens with the "Islamic garden" idea such as the Raja Haji Fisabilillah Mosque, Cyberjaya⁶, National Mosque, Kuala Lumpur⁷; Federal Territory Mosque, Jalan Duta, Kuala Lumpur⁸; Bukhari Mosque, Alor Setar, Kedah⁹; Taman Tamadun Islam (Islamic Heritage Park), Pulau Wan Man, Terengganu¹⁰; Kiblat Walk, Putrajaya¹¹; Masjid Sultan Mizan, Putrajaya¹² and the Moroccan Pavilion, Putrajaya¹³.

Today's gardens in the Islamic countries have developed into earthly Paradises of a very different kind. On the one hand, they are both of art-historical significance and technically impressive in terms of the water technology they portray. They also have become destinations for national and international tourists and commercial enterprises. One of the most beautiful and most famous examples of all are the gardens and water features of the Alhambra in Granada with its artful combinations of buildings with filigree decorations, vegetation and water features of all kinds. The other gardens are the gardens of Moroccan royal cities, the Persian gardens, Mughal and Syrian gardens (Ehlers, 2013; Ruggles, 2008; Lehrman, 1980).

¹ Fairchild, R.D. and Taboroff, J. "*Gardens and Landscaping*." In *The Oxford Encyclopaedia of the Modern Islamic World*. Ed. John L. Esposito. Oxford Islamic Studies Online retrieved from <http://www.oxfordislamicstudies.com/article/opr/t236MIW/e0263> on 7th September 2016.

² Sharjah Ruler Opens Islamic Garden at Al Sahraa Park retrieved from http://www.uaeinteract.com/docs/Sharjah_Ruler_opens_Islamic_Garden_at_Al_Sahraa_Park/60859.htm on 4th June 2016

³ Putin opens Moscow's largest mosque, warns against extremists retrieved from <https://www.youtube.com/watch?v=DJak3bC0c7I> on 4th June 2016

⁴ Toronto's Aga Khan Park: Inspired by Islamic gardens around the world retrieved from <http://www.thenational.ae/arts-lifestyle/outdoors/torontos-aga-khan-park-inspired-by-islamic-gardens-around-the-world> on 4th June 2016

⁵ The Qur'anic Botanic Gardens retrieved from http://www.west8.nl/projects/gardens/the_Qur'anic_botanic_gardens/ on 4th June 2016

⁶ Cyberjaya Mosque retrieved from http://www.theplan.it/project_shortlist/190 on 11th September 2016

⁷ National Mosque retrieved from <http://www.malaysiasite.nl/nationalmosqueeng.htm> on 11th September 2016

⁸ Masjid Wilayah Persekutuan (Federal Territory Mosque), Kuala Lumpur retrieved from <http://www.boundfortwo.com/2013/07/masjid-wilayah-persekutuan-federal.html> on 11th September 2016

⁹ Al Bukhary Mosque in Kedah – Malaysia retrieved from <http://www.beautifulmosque.com/al-bukhary-mosque-in-kedah-malaysia> on 11th September 2016

¹⁰ Islamic Civilization Park Taman Tamadun Islam retrieved from <http://www.malaysia-traveller.com/islamic-civilization-park.html> on 11th September 2016

¹¹ Masjid Tuanku Mizan Zainal Abidin retrieved from <http://www.itc.gov.my/mosque/masjid-tuanku-mizan-zainal-abidin/> on 11th September 2016

¹² Great Mosques of Putrajaya – When Beauty Meets Serenity retrieved from <http://www.floriaputrajaya.com.my/great-mosques-putrajaya-beauty-meets-serenity> on 11th September 2016

¹³ Romancing Morocco retrieved from <http://gentlecreation.blogspot.my/2006/01/romancing-morocco.html#!> on 11th September 2016

1.3 Research problem

Even though Islamic gardens have fascinated designers, landscape architects, architects and historians since the fifteenth century, their evolution throughout time has gone through a continuous phase of numerous interpretations, descriptions, representations, and definitions that have led to uncertainty more than clarity.

The Islamic garden's definitions apparently relied on translations by Western scholars since the original sources exist in a range of languages as diverse as Arabic, Turkish, Persian, French, German and Spanish, making most readers dependent upon translations by the Western scholars. In many cases, key sources have been translated poorly or not at all.

This includes the issue of its physical features that causes confusion as to whether the cross-axial plan belongs to the Islamic garden. Other than that, with more excavation of specific sites and examination of landscapes in their entirety, scholars had continued to make assertions with little confirming evidence. One such assertion was the widespread notion that all Islamic gardens are the foretaste of the Paradise of the Hereafter.

Notably, the problematic association of the Chāhār Bāgh concept (fourfold garden) as an Islamic garden tradition is unreasonable. In fact, by a logical mind, the justification for its construction must not come after it had been built but before it. Secondly, there is no proof in written or in any other type of documentation stating that these gardens were built based on the Paradise description. As Rabbat (1985) asserts in his paper entitled "*The palace of the lions, Alhambra and the role of water in its conception*" regarding the Andalusian gardens; "the epigraphic evidence, nowhere in the inscriptions is the word Paradise mentioned". Thirdly, the cross-axial plan cannot possibly represent the Islamic garden tradition or be a representation of the Paradise because the Qur'an was revealed after the construction of the Chāhār Bāgh (fourfold garden), or in other words, the concept of the fourfold garden had existed long before Islam. As Tabbaa (1987) highlights, "The paradisiacal connotation of the quadripartite ancient Persian garden divided by water channels (Chahār-Bāgh) is known from Xenophon's descriptions of the Paradise gardens of the Achaemenid kings Darius and Cyrus". Fourthly, true Muslims had and will always be living for Paradise; they do not create one on earth. Even if the verses describing Paradise (*Jannah*) in the Qur'an are interpreted in different ways—literally or even not literally—they will remain unacceptable to pious Muslims (Rabbat, 1985). Therefore, confusion arises as to whether the gardens that have been called Islamic gardens all this while are appropriate; suits the name given and serves its purpose.

It is evident from the arguments presented here, that even today in the 21st century; the Islamic garden is regarded as representing the Qur'anic Paradise.

This implies that this notion is widespread in all references on Islamic garden; hence the first step into Islamic garden research will end with this particular phrase, found as being the core idea of what an Islamic garden is.

It is also evident that only a few Muslim scholars point out the paradoxes in the widespread literature by disputing the representation of Islamic garden to Qur'anic Paradise and the cross-axial plan. In addition, these arguments are mostly outdated, unlike the dominant literature by Western scholars, which are more recent and easily accessible to contemporary garden designers.

Despite the Westerns' definition of the term 'Islamic garden', however, there exist a few Muslim scholars who defined it in a much holistic way. Indeed, they highlight on the intangible aspects as to be the primary concern besides focusing on the tangible part alone. By having a workable definition of the 'Islamic garden', it will help the garden designers and professionals in Malaysia in developing an Islamic garden in the country that suits the current society's needs in particular and the future community as a whole.

Moreover, by having a framework of Islamic garden design, the tendency of Malaysian garden designers to imitate the gardens in the Muslim world would decrease in number as the framework would provide a clear vision of what an Islamic garden is how it is designed and for what purpose. Also, by bringing the concept of Islamic garden back onto its genuine track, hopefully, the true message of Islam will reach the community who have been indoctrinated into the western notion of an Islamic garden. As such, Malaysia should reaffirm its commitment to establishing an Islamic garden design framework that emphasizes the intangible part since the essence of the paradisiacal idea can still be found in "modern Paradise garden...from Malaysia to Morocco" (Souter-Brown, 2014, p. 22).

In addition, the commitment to establish a definition of Islamic garden is significant through the formulation of Islamic principles so that the community, especially Muslim garden designers is aware of their responsibility in revisiting the origin of the Islamic garden traditions to ensure that the eschatological role of the garden is achieved. Besides that, revealing the true meaning of an Islamic garden is crucial to the Muslim generation now and in the future so that the correct way of designing a garden is established and no misconceptions occur. This would enable the country to leverage on the true form of an Islamic garden design as a catalyst that would enhance its reputation as a Muslim country with contemporary garden designs in the present age.

1.4 Research questions

Based on the research problem outlined in previous sections, three research questions were developed to ensure the exploration process can be conducted as comprehensively as possible, covering as many viewpoints and perspectives under the subject. The research questions are as follows:

1. What are the principles of Islam that need to be incorporated into the design of an Islamic garden?
2. What are the physical elements that can be derived from the physical context of the gardens in the Muslim world?
3. How to establish a framework of "Islamic garden design" that can suit the Malaysian context?

1.5 Research objectives

Meanwhile, the research objectives are:

1. To identify the principles of Islam that needs to be incorporated into the design of an Islamic garden.
2. To investigate the physical elements that can be derived from the physical context of the gardens in the Muslim world.
3. To propose a framework of Islamic garden design that can suit the Malaysian context.

1.6 Scope of study

Gardens in the Muslim world

The study covers only the research on the five gardens in the Muslim world i.e. the Syrian, Andalusian, Moroccan, Persian and the Mughal garden and how it will help to formulate a framework of Islamic garden design for Malaysia. Other gardens found in the world are not being taken into consideration even those gardens found in Malaysia itself.

Physical elements

This study investigates only the physical elements found in the physical settings of the gardens in the Muslim world. The gardens selected are those that exist since the beginning of Islam marked by the birth of the beloved Prophet Muhammad (s.a.w) followed by the reign of the rightly guided caliphs, the Umayyad Empire (661-750), the Abbasid Empire (752-1260) through to the peak of the Ottoman Empire (1243-1863).

Limiting the scope of the study to the earliest known Islamic gardens requires some explanation. The reasons are; any attempt to discern meaning in such a descriptive study of the Islamic garden faces the danger of falling into the confusion of overgeneralization unless it is focused in some way. The problems of interpreting the Islamic garden have been discussed in Section 1.3 on pages 2-3. Therefore, exploring the references on Islamic garden to the earliest known period (old references) allows for accurate information about its traditions while reducing exaggerations and over-interpretation by later scholars.

Experts' viewpoints

This study is entirely focused on the viewpoints from Malaysian experts in the urban planning, architecture and landscape architecture field in order to develop a framework of Islamic garden design for Malaysia.

Principles of Islam on Built Environment

This study covers the related principles of Islam on built environment that complement the Islamic garden design. These principles guide the research in developing a framework of Islamic garden design for Malaysia.

Usage of terms

The study refers 'Islamic garden' as 'gardens in the Muslim world' wherever applicable throughout the study until the end since there are arguments about the term 'Islamic garden' raised by scholars and experts as mentioned above and in Chapter 5. Meanwhile, the study aims to provide a framework of 'Islamic garden design for Malaysia' as it does not intend to define what is a Malaysian garden or Malay garden.

Urban planning perspective

This study is conducted with a stance of viewing the entire research from the urban planning perspective. It aims to provide a framework of Islamic garden design for Malaysia based on that perspective however it regards garden in a big scale as how it is found in the gardens in the Muslim world specifically and internationally as a whole. This study will be a directory from a planner's point of view to the landscape architects, architects and designers to design an Islamic garden for Malaysia.

1.7 Significance of the study and contribution to knowledge

The following outlines the impact of the study on the gardens in the Muslim world and the production of an Islamic garden design framework for Malaysia:

Firstly, this study provides a framework of the Islamic garden design for Malaysia that makes a major reference to the physical elements of gardens in the Muslim world.

Secondly, this study provides a framework for national governments, local authorities, and individuals to undertake continuous improvement over open space; parks and garden in support of a distinct garden identity in the nation.

Thirdly, this study presents a helpful reference in filling the gap in the existing literature, whether published or unpublished, concerning Islamic garden research in Malaysia. It gives information for future researchers to expound on the subject to enhance the result as has been outlined in Chapter 7 on the directions for future research.

Fourthly, the study also provides a general parameter of designing an Islamic garden in Malaysia by acknowledging the gardens in the Muslim world that aim to benefit landscape architects, designers, researchers, academicians, students, other professional bodies and individuals to have an actual understanding about Islamic garden that eventually aims to be one of the magnificent tourism products of the country.

Moreover, research on gardens in the Muslim world seems great to be applied in designing a garden in Malaysia, as an undeniable part of the journey in the direction of achieving acknowledged and sustainable development goals based on truly examined experiences. This is so that even modern development would utilize earlier forms in a recent format; by means of following the light of past experiences to illuminate the future path towards prosperity. Ancient history and civilizations in different ages would always be a source of inspiration for designing an Islamic garden in Malaysia and act as a good guide from which there is a representation of human attention to creation and character.

Finally, this study has officially documented nearly all available references on the Islamic garden research which are limited in numbers especially those written by renowned Muslim scholars that are hardly found in any high ranking journal articles. It has also successfully opened up a discourse on the Islamic garden, not studied before in Malaysia especially from urban planning point of view. Suggestions for further studies outlined in Chapter 7 would pave the way towards expanding the research to other fields by future researchers.

1.8 Operational definitions

The major terms used in this study are defined as follows:

Garden - According to the Town and Country Planning Act 1976 (Act 172), a garden is "...to be enjoyed together with a building attached to the land..." (p. 8). It is "...one type of open space, open to the public, enclosed" (p. 12) and "prohibited for entry" (p. 73).

"One of the commonest life-symbols; its role is eschatological" (Dickie, 1976). It also means "Relatively a small space of ground, usually out of doors, distinguished from the surrounding terrain by some boundary or by its internal organization or by both" (The Oxford Encyclopedia of the Modern Islamic World, Oxford Islamic Studies Online).

Garden is "...a site of leisure production and consumption, an excess of form, imaginative, immovable feature of people's art that was created to provide pleasure, beauty, respite, reflection and engaging the imagination, delighting the emotions and feelings so much so the personality of the person who created it is conveyed (Stephenson, 2008; Olonetzky, 2007; Connell, 2004; Escobar, 2001; Bhatti & Church, 2000; Ross, 1998; Miller, 1993).

However, this study regards 'garden' as an open space, outdoor, open to public, not totally enclosed, used for both passive and active activities and can be found in both small or big scale except those patches provided by the local authority in house compounds.

Muslim world - refers to the geographical regions that are dominated by Muslim population; higher numbers of young Muslims, the rulers are Muslims and shariah is practiced in every aspect of human life (Jayyusi, Holod, Petruccioli & Raymond, 2008; Ahmed, 1998). It also refers to a region in an era when its people "remain faithful to the form and spirit of the Qur'an and Sunnah of the Prophet Muhammad (s.a.w) including the intellectual, spiritual, ethical and artistic principles and heritage of Islam...that do not resemble Islam in name alone" (Nasr, 2010).

1.9 Limitations of the study

In any study, there are limitations due to various reasons. For this study, several limitations have been identified as concentration was given intensely and the best of all efforts could be put in order to conduct this research. It is also to ensure the smoothness of the flow of conducting research. The limitations are as follows:

Duration of the study

This research is subjected totally to the duration of study that has been fixed. The data collection process had been carried out in a stipulated time according to the study plan. There may be insufficient source, or information presented since the comprehensiveness of the result is entirely depends on the view of the experts.

Less cooperation from the participants

Since the researcher is from the urban planning background, the primary data collection process did not run as smooth as planned especially during the semi-structured interviews with landscape architects and academicians in the landscape architecture field as they seem to match themselves to the planning knowledge rather than purely giving information from the landscape architecture point of view about designing an Islamic garden, which had affected the comprehensiveness, clarity and conciseness of data analysis thus the final result of forming the framework of Islamic garden design for Malaysia perceived to be too general.

1.10 Research methodology

This study is conducted in six stages. **The first stage** involves a general overview of the gardens in the Muslim world; their brief history, significance and how the interpretation of the subject has evolved throughout time until today. Gardens to be studied in terms of their relevance to the scope mentioned in Section 1.6 in this chapter have also been selected at this stage.

The second stage involves the reading and understanding of the Islamic principles of built environment. Many studies by renowned scholars are collected and reviewed to get the gist of their philosophies. This is done by matching their views to the current need of designing an Islamic garden in Malaysia, hence to incorporate them into the framework as the most fundamental part of it, as well as to light up the way towards a strong, reliable and imputable research.

The third stage involves the compilation of references from five selected "Islamic gardens" that are well-known for the establishment of gardens as cited by most scholars in the field. This descriptive study by qualitative approach adopts methods of grounded theory with pre-determined aspects to look into the literature of "Islamic garden". In other words, this research had already has a focus in mind which is to derive only the physical elements from the physical settings of the gardens in the Muslim world. The content analysis method using constant comparison analysis has been employed to categorize the literature into core themes and subthemes.

At this juncture, it is appropriate to provide a rationale for the selection of gardens to be studied. The gardens that were selected are based on the allegations made by most scholars as being the foretaste of the Qur'anic paradise which has resulted into five gardens namely the Andalusian garden, Persian garden, Moroccan garden, Syrian and Mughal garden. The second reason is to narrow down the focus of the study to be within the Islamic period (since the advent of Islam) which indirectly, the gardens discussed by the majority of scholars lay within this time frame.

The fourth stage is the development of a conceptual framework of physical elements of Islamic garden that consists of the physical features of gardens. The results from constant comparison analysis in the previous stage are used to form the framework which then will be verified by experts in the pre-selected fields.

The fifth stage is the transferability (validity) phase that will be carried out through an Interactive Focus Group (IFG) discussion. The inputs from the (IFG) will be used to finalize the conceptual framework of physical elements of Islamic garden. Comments from the experts would be used to further refine the definition of Islamic garden thus enabling the production of a framework of Islamic garden design.

The final stage involves a semi-structured interview with experts. The interview data will be transcribed and coded using constant comparison analysis based on the core themes and principles designed at the second; third, fourth and fifth stages before the full write up of the study. These last two steps are chosen to be the main method of the data collection and analysis for this study due to its nature of much specialised area which ordinary people would not be able to respond to.

1.11 Organisation of the thesis

The thesis is organized into seven chapters. Each chapter's content is summarized as follows:

Chapter One (this chapter) provides an overview of the study and outlines the structure of the overall thesis. It starts with the identification of the research interest, development of the statement of the problem, formulation of research questions and research objectives, the scope of the study, significance and benefits of the study and ends with the limitations of the study. This general structure of the study will guide the researcher in the subsequent chapters.

Chapter Two describes the fundamental of Islamic art, the related principles in Islam to design an Islamic garden, reviews the great gardens in the Muslim world as well as a general overview on gardens in Malaysia. This chapter acts as a strong foundation that shapes the research paradigm for framework formulation, data collection, and analysis, discussion, and recommendations in the following chapters.

Chapter Three outlines the research method used to address the research objectives and research questions. It also discusses briefly on research design, which is qualitative, literature analysis and selection of gardens. Other than that, the structure of research is also emphasized including the techniques that are required to perform the tasks. All in all, this chapter describes the processes that are needed to be done in order to complete the study.

Chapter Four presents the results of the analysis of the Interactive Focus Group (IFG) carried out in order to finalize the framework of physical elements of Islamic Garden as presented in Chapter Two.

Chapter Five presents the results from the analysis of semi-structured interview with experts carried out in order to refine the finalized framework of the physical features of the Islamic Garden and thus to gather their views about what an Islamic garden is and how to design an Islamic garden based on the principles of Islam and the physical features of the Islamic Garden.

Chapter Six puts forward the rich description on the definition of the Islamic garden and a holistic write-up on the Islamic garden design framework based on the research paradigm postulated in Chapter Two and the analyses in Chapter Four and Five.

Chapter Seven features a summary of the study, direction for further research and presents the conclusion of the study.

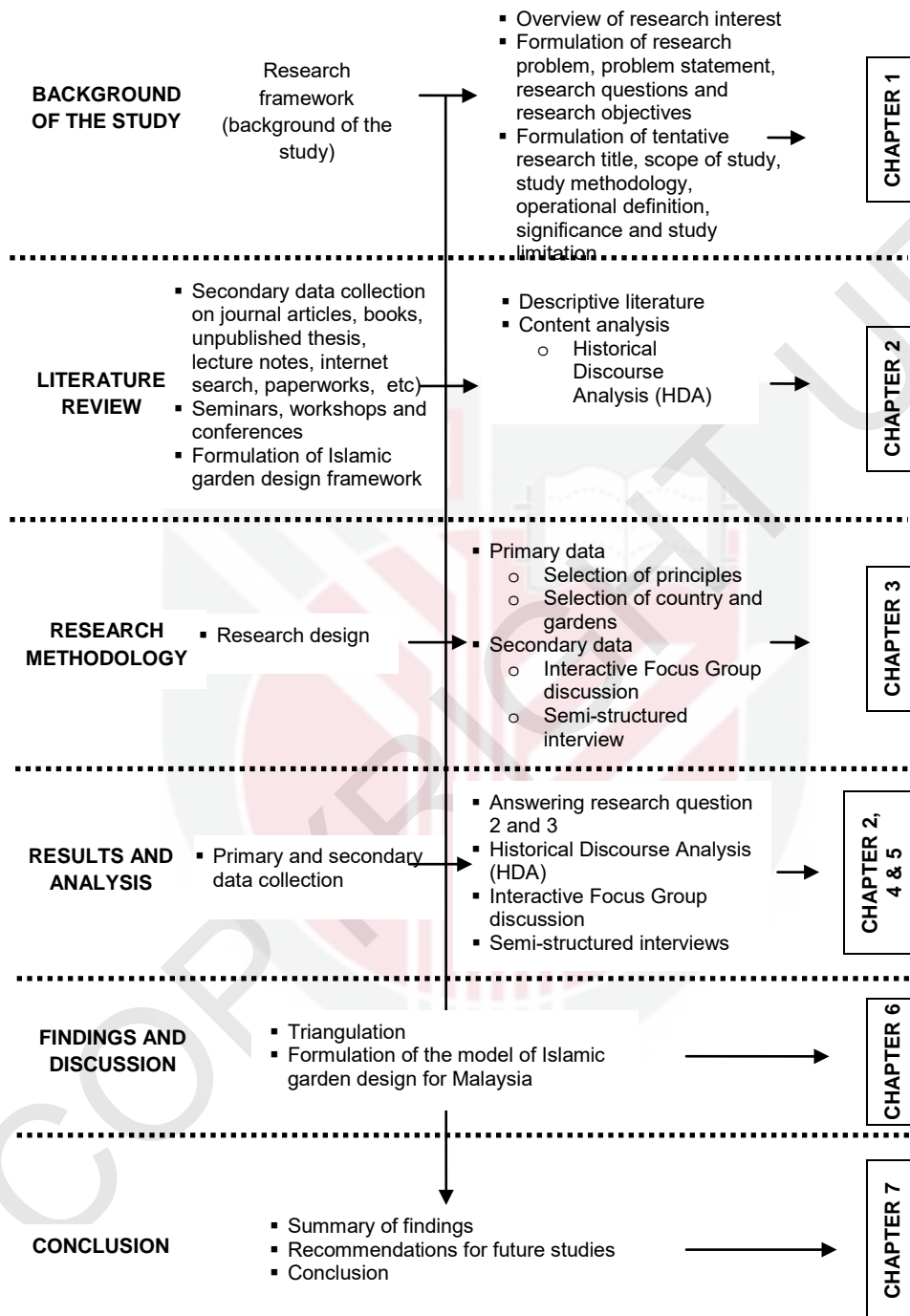


Figure 1.1: Organisation of the study

REFERENCES

- Abdalati, H., (1977). *Islam in Focus*. Retrieved from http://www.muslim-library.com/dl/books/English_Islam_In_Focus.pdf
- Abdine, A. E. (1986). *The Islamic Garden in Andalucía, Spain*. Environmental Design: Journal of the Islamic Environmental Design Research Centre, (1), 76-77.
- Abdul Rahman Al-Ahmadi (2003). *Tamadun Rumpun Budaya Melayu*. Kuala Lumpur: Kementerian Kebudayaan, Kesenian dan Pelancongan Malaysia.
- Abubeker, H. A. (2016). Environmental Preservation in Islam: A Case Study of Hyderabad. *International Journal of Engineering Science and Computing*, 6, 4798-4805. doi: 10.4010/2016.1092
- Ágoston, G., & Masters, B. A. (2009). *Encyclopaedia of the Ottoman Empire. Facts on File library of World History*. New York: Infobase Publishing.
- Ahmad Zamil Zakaria, Ismail Hafiz Salleh & Mohd Sabri Abd Rashid (2013). Landscape Furniture Present in the Ancient Malay Garden According to Old Manuscripts and their Effects on the Formation of Malay Garden Design Concept Model in Malaysia. *Procedia - Social and Behavioral Sciences*, 91, 28–35. doi: <http://doi.org/10.1016/j.sbspro.2013.08.397>
- Ahmad, I. (2004). *The Bride Unveiled: Influences on and Interpretations of the Alhambra*. Tucson, Arizona. Retrieved June 17th, 2016 from <http://ahmadiya.net/library/articles/Alhambra-20080402MN.pdf>
- Ahmed, A. S. (1998). *Islam today: A short introduction to the Muslim world*. IB Tauris.
- Akkach, S. (2010). Leisure gardens, secular habits: the culture of recreation in Ottoman Damascus. *METU JFA*, 1, 67-80. doi: 10.4305/METU.JFA.2010.1.4
- Al-Abidin. M. Z. (2006). The courtyard houses of Syria. In E. Brian (Eds.), *Courtyard housing: Past, Present and Future*. United Kingdom: Taylor & Francis.
- Al-Faruqi. I. R. (1986). The Cultural Atlas of Islam. *American Journal of Islamic Social Sciences*, 3(1), 169.
- Al-Faruqi. I. R. (1992). *Al Tawhid: Its Implications on Thought and Life* (Vol. 4). USA: The International Institute of Islamic Thought.
- Al-Faruqi. I. R. (2014). The Arts of Islamic civilisations. In A. S. Shaikh-Ali (Eds.), *Occasional paper series 24*. London: The International Institute of Islamic Thought.

- Alemi, M. (1986). Chahār-Bāgh. *Environmental Design: Journal of the Islamic Environmental Design Research Centre 1*, edited by Attilo Petruccioli, 38-45. Rome: Carucci Editions.
- Alemi, M. (1997). The royal gardens of the Safavid period. In Petruccioli A. (Eds.), *Gardens in the Time of Great Muslim Empires* (pp. 72-96). Leiden, New York: Brill.
- Alemi, M. (2007). *A Catalogue of Known Gardens in Safavid Iran*. Retrieved October 18, 2015 from <http://www.doaks.org/resources/middle-east-garden-traditions/safavid-gardens/original-introduction-to-safavid-gardens>
- Ali, A. Y., & Aziz, Z. (2004). *English translation of the holy Qur'an*. South Africa: Islamic Propagation Centre International.
- Ali, A. Y., (2000). *The Holy Qur'an: Original Arabic Text with English Translation & Commentary*. Kuala Lumpur: Saba Islamic Media.
- Almagro, A., & Ramón-Laca, L. (2007). *Introduction to the Catalogue of Andalusian Gardens*. Retrieved July 16, 2015 from <http://www.doaks.org/resources/middle-east-garden-traditions/andalusian-gardens/introduction-to-andalusian-gardens>.
- Almagro, A., & Ruggles, D. F. (2007). *Early Islamic Gardens in Syria, Jordan, and Iraq*. Retrieved January 2, 2016, from <http://www.doaks.org/resources/middle-east-garden-traditions/early-islamic-gardens-of-greater-syria/introduction>
- Alshenqeeti, H. (2014). *Interviewing as a Data Collection Method: A Critical Review*. *English Linguistics Research*, 3(1), 39. doi:10.5430/elr.v3n1p39
- Ammar, N. (2005). Islam and Eco-Justice. In Taylor, B (Eds.), *Encyclopaedia of Religion and Nature* (pp. 862-866). Bristol, England: Thoemmes Continuum.
- Ansari, N. (2011). *The Islamic Garden* (Master's seminar, CEPT University, Ahmedabad, India). Retrieved from https://www.academia.edu/1861364/Origin_of_Islamic_Gardens
- Ashtiani, F. (2015). *Principles for Designing a Modern Islamic Garden: How Can New Design Contain the Memory of the Past?* (Masters' thesis, University of Illinois, Urbana-Champaign, United States). Retrieved from <https://www.ideals.illinois.edu/bitstream/.../MIRAEIASHTIANI-THESIS-2015.pdf?>
- Attia, S. (2006). The role of landscape design in improving the microclimate in traditional courtyard buildings in hot arid climates. *Proceedings of 23rd International Conference on Passive and Low Energy Architecture- PLEA 2006* (pp. 22-24).

- Baarah, S. A. (2010). *Gardens in Islamic Architecture: An Analytical Study* (Master's thesis, An-Najah National University, Nablus, Palestine). Retrieved from https://scholar.najah.edu/sites/default/files/all-thesis/garden_in_islamic_architecture_an_analytical_study.pdf
- Ball, L. (2011). Analysing interview data for clusters and themes. University of Melbourne. *Mathematics: Traditions and [New] Practices*, 1-9.
- Balvanera, P., Pfisterer, A. B., Buchmann, N., He, J. S., Nakashizuka, T., Raffaelli, D., & Schmid, B. (2006). Quantifying the evidence for biodiversity effects on ecosystem functioning and services. *Ecology letters*, 9(10), 1146-1156.
- Barbour, R. (2013). *Introducing qualitative research: a student's guide*. Thousand Oaks, CA: Sage Publications.
- Behbahani, H. I., & Khosravi, F. (2006). Iranian: Garden Place of Coexistence: Case study: Tehran Gardens in 19th Century. *Environmental Sciences* 1(2), 79–88.
- Berg, B. L. (2007). *Qualitative research methods for the social sciences*. California State University: Allyn and Bacon.
- Bhattacharjee, J. (2015). Constructivist Approach to Learning—An Effective Approach of Teaching Learning. *International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS)*, 1(6), 65-74.
- Bhatti, M., & Church, A. (2000). 'I never promised you a rose garden': Gender, leisure and home-making. *Leisure Studies*, 19(3), 183-197. doi: <http://dx.doi.org/10.1080/02614360050023071>
- Blair, S., & Bloom, J. M. (2009). *Rivers of paradise: water in Islamic art and culture*. Yale Univ Press.
- Bloomberg, L.D. & Volpe, M. (2008). Presenting Methodology and Research Approach. In *Completing Your Qualitative Dissertation: A Roadmap from Beginning to End* (pp. 65-94). Thousand Oaks, CA: Sage Publications.
- Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and quantity*, 36(4), 391-409.
- Brookshaw, D. P. (2003). Palaces, Pavilions and Pleasure-gardens: the context and setting of the medieval majlis. *Middle Eastern Literatures*, 6(2), 199-223.
- Brotherson, M. J. (1994). Interactive focus group interviewing a qualitative research method in early intervention. *Topics in early childhood special education*, 14(1), 101-118.

- Burckhardt, T. (1971). Arab or Islamic Art? The impact of the Arabic language on the visual arts. *Studies in Comparative Religion*, 5(1). Retrieved December 31, 2016 from http://www.studiesincomparativereligion.com/public/articles/Arab_or_Islamic_Art-by_Titus_Burckhardt.aspx
- Burckhardt, T. (2009). *Art of Islam: language and meaning*. Canada: World Wisdom, Inc.
- Carey, M. (2012). *An Illustrated History of Islamic Art & Design: An Expert Introduction to Islamic Art, from Calligraphy, Tiles, Costumes and Carpets to Pottery, Woodcarvings and Metalwork*. England: Southwater.
- Carroll, M. (2003). *Earthly paradises: ancient gardens in history and archaeology*. Spain: Getty Publications.
- Chardin, J. (1335). *Journeys of Sir. Chardin*, Translated by Mohammad Abbasi. AUT Institute Press.
- Clark, E. (2004). *The art of the Islamic garden*. United Kingdom: Crowood Press.
- Conan, M. (2007). *Middle East garden traditions: unity and diversity: questions, methods and resources in a multicultural perspective (Vol. 31)*. Washington DC: Dumbarton Oaks.
- Connell, J. (2004). The purest of human pleasures: the characteristics and motivations of garden visitors in Great Britain. *Tourism management*, 25(2), 229-247.
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative sociology*, 13(1), 3-21. doi: 10.1007/BF00988593
- Creswell, J. W. (2009). *Research design: Qualitative and mixed methods approaches*. London and Thousand Oaks: Sage Publications.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. London and Thousand Oaks: Sage Publications.
- Cropley, A.J. (2002). *Qualitative Research Methods: An Introduction for students of psychology and education*. Zinatne: University of Latvia.
- Crowe, S., Haywood, S., Jellicoe, S. and Patterson, G. (1972). *The gardens of Mughal India*. London: Thames and Hudson.
- Dale, S. F. (2004). *The Garden of the Eight Paradises: Bābur and the culture of empire in Central Asia, Afghanistan and India (1483-1530) (Vol. 10)*. The Netherlands: Brill.

- Damgaard, B., & Sørensen, E. (2007). Interactive Focus Group Interviewing in Studies of Network Governance. In *Methods in Democratic Network Governance* (pp. 179-206). United Kingdom: Palgrave Macmillan.
- Daneshdoust. (1986). *Islamic Gardens in Iran*. ICOMOS. Retrieved August 10, 2015 from www.icomos.org/.../93garden4.pdf
- Davis, C. S., & Ellis, C. (2008). Interactive Focus Groups. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 443). Los Angeles: Sage Publications.
- de Araujo, I. A. (1993). The origin of the Patios and gardens of the Islamic period in Spain and Portugal. *Historic Gardens and Sites. ICOMOS 10th General Assembly, Sri Lanka, 1993*. Central Cultural Fund Publication. Sri Lanka National Committee of ICOMOS.
- Deng, S., Jivan, S., & Hassan, M. L. (1994). Advertising in Malaysia—A Cultural Perspective. *International Journal of Advertising*, 13(2), 153-166.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical education*, 40(4), 314-321. doi:10.1111/j.1365-2929.2006.02418.x
- Dickie, J. (Yaqub Z). (1968) 'The Hispano-Arab garden its philosophy and function', *Bulletin of the School of Oriental and African Studies*, 31(2), pp. 237–248. doi: 10.1017/S0041977X0014649X.
- Dickie, J. (Yaqub Z). (1976). The Islamic Garden in Spain. In E. B. Macdougall & R. Ettinghausen (Eds.), *The Islamic garden* (pp. 70–85). Washington DC: Dumbarton Oaks Trustees for Harvard University.
- Dickie, J. (Yaqub Z). (1985). The Mughal Garden: Gateway to Paradise. *Muqarnas*, 3(1985), 128–137. doi:10.1163/22118993-90000201
- Dickie, J. (Yaqub Z). (1992). The Palaces of the Alhambra in J. D. Jerrilynn (Eds.), *Al-Andalus: The Art of Islamic Spain* (pp. 135-147). New York: The Metropolitan Museum of Art.
- Dodds, J. D. (1992). The great mosque of Cordoba. In J. D. Dodds (Eds.), *Al-Andalus: The Art of Islamic Spain*, (pp 163-171). New York: The Metropolitan Museum of Art.
- Economic Planning Unit. (2015). *Eleventh Malaysia Plan 2016-2020. Anchoring growth on people*. Kuala Lumpur: Prime Minister's Department.
- Eggleton, L. E. (2011). *Re-envisioning the Alhambra: Readings of architecture and ornament from medieval to modern* (Doctorate thesis, University of Leeds, United Kingdom). Retrieved from etheses.whiterose.ac.uk/1736/1/LEEggleton_Thesis_2011.pdf

- Ehlers, E. (2013). *Gardens in Islam: A Metaphor for Heavenly Paradise*. Retrieved October 13, 2016, from <https://en.qantara.de/content/gardens-in-islam-a-metaphor-for-heavenly-paradise>
- Elsargany, R. (2010). *Islamic gardens...characteristics and qualities*. Retrieved November 5, 2015, from <http://islamstory.com/en/node/27410>
- Escobar, A. (2001). Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography*, 20, 141-174.
- Fanani, A. F. (2013). The Ottoman Empire: Its Rise, Decline and Collapse. *Jurnal Salam*, 14(1), 93-109.
- Farahani, L. M., Motamed, B., & Jamei, E. (2016). Persian Gardens: Meanings, Symbolism, and Design. *Landscape Online*, 46. doi 10.3097/LO.201646
- Fontana, A., & Frey, J. H. (2000). The Interview. From Structured Questions to Negotiated Text. In N. K. Denzin & Y. S. Lincoln, (Eds.), *Handbook of qualitative research* (2nd edition, pp. 645-672). Thousand Oaks, CA: Sage Publications.
- Foret, A. (2009). *Reflections on Pleasure: The Fourteenth-Century Alhambra* (Masters' thesis, Louisiana State University, Louisiana). Retrieved from http://etd.lsu.edu/docs/available/etd-04142009-221615/unrestricted/Foret_thesis.pdf
- Fram, S. M. (2013). The constant comparative analysis method outside of grounded theory. *The Qualitative Report*, 18(1), 1.
- Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology and Health*, 25(10), 1229-1245. doi: 10.1080/08870440903194015
- Ghaffarianhoseini, A., Berardi, U., Dahlan, N. D., & Ghaffarianhoseini, A. (2014). What can we learn from Malay vernacular houses? *Sustainable Cities and Society*, 13, 157-170. doi: <http://doi.org/10.1016/j.scs.2014.04.008>
- Gharipour, M. (2013). *Persian gardens and pavilions: reflections in history, poetry and the arts*. New York: IB Tauris.
- Gilliat-Ray, S. & Bryant, M. (2010). *Islamic gardens in the UK: dynamics of conservation, culture and communities*. Retrieved February 7, 2016, from https://www.bgci.org/files/Worldwide/Education/Islamic_report/islamic_report.pdf

- Glaser, B. G. (1999). The future of grounded theory. *Qualitative health research*, 9, 836-845. doi: 10.1177/104973299129122199
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. USA: Aldine Transaction.
- Grabar, O. (1978). *The Alhambra*. Cambridge, Massachusetts: Harvard University Press.
- Grabar, O. (1987). *The formation of Islamic art*. New Haven and London: Yale University Press.
- Grabar, O. (1990). From Dome of Heaven to Pleasure Dome. *Journal of the Society of Architectural Historians*, 49(1), 15-21. doi: 10.2307/990496
- Grant, J. (1999). Rethinking the Ottoman "decline": Military technology diffusion in the Ottoman Empire, fifteenth to eighteenth centuries. *Journal of World History*, 10(1), 179-201.
- Grube, E. J. (1978). What is Islamic Architecture. In G. Michell (Eds.), *Architecture of the Islamic World: Its History and Social Meaning with a Complete Survey of Key Monuments*. London: Thames and Hudson.
- Haaga, E. (2005). *Paradise in the Garden: the influence of the Islamic Garden, Today, West Looks East: the Influence of Traditional Arab Design on contemporary Western, Designers*. Retrieved from http://www.mosaicfound.org/sc/cultural_media/wle_Haaga_bio
- Hafteh, G. (2012). The Garden Culture of Damascus: New Observations Based on the Accounts of Abd Allāh al -Badrī (d. 894/1489) and Ibn Kannān al-Şālihī (d. 1135/1740). *Bulletin d'études orientales*, 61(2), 297-325. doi: 10.4000/beo.967
- Haider G.S. (1984). Habitat and values in Islam: a conceptual formulation of an Islamic city. In Z. Sardar (Eds.), *The Touch of Midas: Knowledge, Values and Environment in Islam and the West* (pp. 170-208). India: Manchester University Press.
- Haleem, M. A. (1998). Water in the Qur'an. In Haleem, H. A. (Eds.), *Islam and the Environment* (pp. 103–17). London: Ta-Ha Publishers.
- Halsted, L. (2014). *The Perso-Islamic Garden: A Reclassification of Iranian Garden Design after the Arab Invasion* (Senior thesis, Davidson College, North Carolina). Retrieved from file:///C:/Users/HP/Downloads/2014_Perso_Halsted.pdf
- Hamed. S. E. D. (1994). Paradise on earth: historical gardens of the arid Middle East. *Arid Lands Newsletter*, 36, 5-11.
- Hammersley, M. (1981). *Using qualitative methods*. *Social Science Information Studies*, 1(4), 209-220. doi: 10.1016/0143-6236(81)90012-0

- Hanaway Jr, W. L. (1976). Persian Literature. *The Study of the Middle East*, 453-478.
- Hancock, B., Ockleford, E., & Windridge, K. (1998). *An introduction to qualitative research*. Nottingham: Trent focus group.
- Hart, M.H., Hobohm, H., & Holt, A., (n.d.) *Islam in concept*. Retrieved from https://d1.islamhouse.com/data/en/ih_books/single/en_Islam_in_Concept.pdf
- Harvey, L. P. (1990). *Islamic Spain, 1250 to 1500*. USA: University of Chicago Press.
- Hernández-Bermejo, J. E., Navarro-Burgos, M., & García-Sánchez, E. (2013). The Huertas of the Generalife in the Alhambra, an approach to the evolution of this landscape based on travellers' accounts. *Studies in the History of Gardens & Designed Landscapes*, 33(1), 52-70.
- Hewitt-Taylor, J. (2001). Use of constant comparative analysis in qualitative research. *Nursing Standard*, 15(42), 39-42.
doi:<http://dx.doi.org/10.7748/ns2001.07.15.42.39.c3052>
- Higginbottom, G. M. A. (2004). Sampling issues in qualitative research: *Nurse Researcher*, 12(1), 7-19.
doi: <http://dx.doi.org/10.7748/nr2004.07.12.1.7.c5927>
- Hitti, P. K. (1959). *Syria, a short history: being a condensation of the authors' History of Syria, including Lebanon and Palestine*. London: MacMillan.
- Hoag, J. D. (1977). *Islamic architecture*. New York: Harry N Abrams Incorporated.
- Hobhouse, P. (2004). *Garden of Persian*. Nazar: Tehran Publishers.
- Hobhouse, P., Hunningher, E., & Harpur, J. (2004). *The Gardens of Persia*. CA: Kales Press.
- Hocine, M., & Chemrouk, N. C. (2015). Reuse of Djenane Abd-El-Tif, An Emblematic Islamic Garden In Algiers. *Journal of Islamic Architecture*, 3(3), 135-142.
- Irwin, R. (2005). *The Alhambra*. Great Britain: Profile Books.
- Ismawi Zen. (2008). Visions of an Islamic city. In Azila Ahmad Sarkawi and Alias Abdullah (Eds.), *Urban Planning: An Islamic perspective* (pp 1-6). Selangor: Arah Publications.
- Izutsu, T. (2003). Creation according to Ibn 'Arabi. In B. McDonald, (Eds.), *Seeing god everywhere: Essays on nature and the sacred* (pp. 37-159). Canada: World Wisdom.

- Jah, C. A. (2016). *Concept of Garden in Islamic Culture*. Retrieved October 11, 2016 from <http://www.ecomena.org/gardenislamicculture/>
- Jah, C. A. (n.d.). *Water and fragrances in Islamic gardens, getting close to the spiritual*. Retrieved August 10, 2016 from <://medomed.org/.../uploads/2014/11/The-Spiritual-Garden.pdf>
- Jamil Abu Bakar. (2002). *A design guide of public parks in Malaysia*. Johor Bahru: Penerbit UTM Press.
- Jamil Abu Bakar. (2012). *Taman Malaysia Ke Arah Identiti Nasional*. Johor Bahru: Penerbit UTM Press.
- Jayyusi, S. K., Holod, R., Petruccioli, A., & Raymond, A. (Eds.). (2008). *The City in the Islamic World*, Volume 94/1 & 94/2 (Vol. 94). Leiden: Brill.
- Jelani Harun. (2004). Bustan Al-Salatin, 'the garden of kings': a universal history and ADAB work from seventeenth-century ACEH 1. *Indonesia and the Malay World*, 32(92), 21-52. doi: 10.1080/1363981042000263444
- Jellicoe, S. (1976). The development of the Mughal garden. . In E. B. Macdougall & R. Ettinghausen (Eds.). *The Islamic garden* (pp 107–130). Washington DC: Dumbarton Oaks Trustees for Harvard University.
- Julien, H. (2008). Content Analysis. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 120-121). Los Angeles: Sage Publications.
- Kamali, M. H. (2008). *Maqasid al-Shariah made simple*. (Vol. 13). International Institute of Islamic Thought.
- Kanani, N., & Kanani, S., (2014). The reflection of concepts arisen from Islamic ideology in design of Persian garden. *International Journal of Current Life Sciences*. 4(9). 6367-6373.
- Katouzian, S. (1986). The Sense of Place in Persian Gardens. In *Environmental Design: Journal of the Islamic Environmental Design Research Centre 2*, edited by A.Petruccioli, 42-47. Rome: Carucci Editions.
- Kausar, S., Brand, M., & Wescoat, J. L. (1990). *Shalamar Garden Lahore: Landscape Form and Meaning, Karachi*. Pakistan: Dept. of Archaeology and Museums, Ministry of Culture.
- Khademi, E., Embi, M. R. B., & Khademi, P. (2014). Scrutinizing Different Generations of Public Green Spaces in Iran in Terms of Sustainability. *Journal of Clean Energy Technologies*, 2(4). doi: 10.7763/JOCET.2014.V2.142

- Khademi, E., Kabiri, F., & Khan, T. H. (2013). Iranian garden, the manifestation of sustainable green space. *International Journal of Humanities and Management Sciences*, 1(1), 63-68.
- Khalid, F. M. (2002). Islam and the Environment. In P. Timmerman (Eds.), *Social and economic dimensions of global environmental change in the Encyclopaedia of Global Environmental Change*, 5, 332-339, USA: John Wiley & Sons.
- Khosravi, H. (2014). Geopolitics of tabula rasa: Persian garden and the idea of city. *Journal of Architecture and Urbanism*, 38(1), 39–53. doi:10.3846/20297955.2014.897017
- Kive, S. M. (2012). The other space of the Persian garden. *Polymath. An Interdisciplinary Arts and Sciences Journal*, 2(3).
- Koch, E. (2009). *Mughal Palace Gardens from Babur to Shah Jahan (1526-1648)* (Muqarnas Vol. 14). Massachusetts Institute of Technology: Brill.
- Kohi, S. (2012). Interpretation of Ecological Design Principal in the Creation of a Persian Garden. *Bulletin of Environment, Pharmacology and Life Sciences*, 3(6), 244-248.
- Kuzel A. (1999). Sampling in qualitative inquiry. In B. F. Crabtree & W. L. Miller, (Eds.). *Doing qualitative research*. USA: Sage Publications.
- Kvale, S. (2008). *Doing interviews*. USA: Sage Publications.
- Labuschagne, A. (2003). Qualitative research-airy fairy or fundamental? *The qualitative report*, 8(1), 100-103.
- Laffah, M. (2006). The Courtyard Garden in the Traditional Arab House. In E. Brian (Eds.), *Courtyard housing: Past, Present and Future*. United Kingdom: Taylor & Francis.
- Lehrman, J. B. (1980). *Earthly paradise: garden and courtyard in Islam*. USA: University of California Press.
- Lim, J. Y. (1987). *The Malay house*. Pulau Pinang: Institut Masyarakat.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75). London: Sage Publications.
- Mack, N., Woodson, C., MacQueen, K. M., Guest, G., & Namey, E. (2005). *Qualitative research methods: a data collector's field guide*. USA: Family Health International.
- Mahdizadeh, S. (2015). Persian Gardens and Pavilions: Reflections in History, Poetry and the Arts. *Landscape Research*, 40, 515-516. doi: <http://dx.doi.org/10.1080/01426397.2015.1023513>
- MARDI (Malaysian Agricultural Research and Development Institute). (2005). *Landscape Gardens of Malaysia*. Kuala Lumpur: MARDI.

- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum qualitative Sozialforschung/Forum: qualitative social research*, 11(3).
- McCracken, G. (1988). *The long interview (Vol. 13)*. London: Sage Publications.
- Menocal, M. R., Scheindlin, R. P., & Sells, M. (2006). *The Literature of al-Andalus*. Spain: Cambridge University Press.
- Millennium Ecosystem Assessment (2005). *Ecosystems and Human Well-being: Biodiversity Synthesis*. World Resources Institute, Washington, DC.
- Miller, M., (1993). *The Garden as an Art*. Albany: State of University of New York Press.
- Mirza, M. (2014). *Paradise on Earth: Designing a Socially Sustainable Landscape In Northwest Pakistan* (Masters' dissertation, University of Manitoba, Winnipeg). Retrieved from <http://mspace.lib.umanitoba.ca/handle/1993/30097>
- Morgan, D. L. & Guevara, H. (2008). Interview guide. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 469). Los Angeles: Sage Publications.
- Morgan, D.L. (2008). Focus Group. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 352-354). Los Angeles: Sage Publications.
- Mouton, J. (1996). *Understanding social research*. South Africa: Van Schaik Publisher.
- Moynihan, E. B. (1979). *Paradise as a garden: in Persia and Mughal India*. London: Scholar Press.
- Mubin, S., Gilani, I. A., & Hasan, W. (2013). Mughal Gardens in the city of Lahore—A case study of Shalimar Garden. *Pakistan Journal of Science*, 65(4).
- Mustafa Kamal Mohd Shariff & Raja Ahmad Tajuddin Shah (1999). *Landscape of the mind*. Serdang: Universiti Putra Malaysia.
- Muzaffar, C. (1987). *Islamic resurgence in Malaysia*. Petaling Jaya: Penerbit Fajar Bakti Sdn Bhd.
- Naeem, S., & Li, S. (1997). Biodiversity enhances ecosystem reliability. *Nature*, 390(6659), 507-509.
- Naeemah Yusof & Shahida Sharuddin. (2013). *Mencari identiti taman Malaysia*. Kolej Komuniti Jempol. Kementerian Pendidikan Malaysia.

- Nasr. S. H. (1998). Sacred science and the environmental crisis: An Islāmic perspective. In H. Haleem, (Eds.), *Islam and the environment* (pp.118-137). London: Ta-Ha.
- Nasr. S. H. (2003). The spiritual and religious dimensions of the environmental crisis. In B. McDonald, (Eds.), *Seeing god everywhere: Essays on nature and the sacred* (pp. 73-100). Canada: World Wisdom.
- Nasr. S. H. (2010). *Islam in the modern world: Challenged by the west, threatened by fundamentalism, keeping faith with tradition*. New York: HarperOne.
- National Landscape Department. (2011). *National Landscape Policy: Malaysia beautiful garden nation*. Kuala Lumpur: Ministry of Housing and Local Government. Retrieved January 20, 2016 from http://jln.kpkt.gov.my/resources/index/user_1/Text%20Documents/Dokumen%20Penerbitan/Dasar%20Landskap%20Negara/dln_bi.pdf
- Newbold, T. J. (1839). *Political and statistical account of the British settlements in the Straits of Malacca*. Kuala Lumpur: Oxford University Press.
- Noor Fazamimah Mohd Arifin (2007). *Role of Cultural Landscape in Improving the Identity of the Kuala Terengganu Town Centre as a Malay Historic Town* (Master's thesis, Universiti Teknologi Malaysia, Skudai).
- Nor Zarifah Maliki. (2008). *Kampung/Landscape: Rural-urban migrants' interpretations of their home landscape. The case of Alor Setar and Kuala Lumpur*. (PhD thesis, Lincoln University, New Zealand).
- Normiadilah Adnan & Noriah Othman. (2012). The relationship between plants and the Malay culture. *Procedia-Social and Behavioral Sciences*, 42, 231-241. doi: 10.1016/j.sbspro.2012.04.186
- Nursi, B. Z. (1995). "On Nature." In *The Flashes Collection*. Trans. Sukran Vahide. Istanbul: Sözlür Nashriyat.
- O'Hara C, E. (2012). *Moorish to Modern: Ancient Lessons for Contemporary Gardens*. Retrieved May 31, 2015 from <http://www.pacifichorticulture.org/articles/moorish-to-modern-ancient-lessons-for-contemporary-gardens/>
- Oliver, T. H., Heard, M. S., Isaac, N. J., Roy, D. B., Procter, D., Eigenbrod, Freckleton, F., Hector, A., Orme, C. D. L., Petchey, O. L., Proença, V., Raffaelli, D., Suttle, K. B., & Mace, G. M. (2015). Biodiversity and resilience of ecosystem functions. *Trends in ecology & evolution*, 30(11), 673-684.
- Olonetzky, N., (2007). *Sensations, a time travel through garden history*. Basel: Birkhäuser.
- Omer, S. (2008). *The Origins and Functions of Islamic Domestic Courtyards*. Kuala Lumpur: IIUM Press.

- Omer, S. (2009). *Islam, Architecture & Urban Planning*. Selangor: Arah Pendidikan Sdn. Bhd.
- Omer, S. (2010). A conceptual framework for sustainability in Islamic architecture: The significance of the Islamic concepts of man and the environment. *International Conference on Technology & Sustainability in the Built Environment*, Riyadh, Saudi Arabia, 111-130.
- Özdemir, I. (1998). Bediuzzaman Said Nursi's Approach to the Environment. In *The Fourth International Symposium on Bediuzzaman Said Nursi: A Contemporary Approach towards Understanding the Qur'an: the Example of Risale-I Nur*. 20-22 September, 1998, Istanbul.
- Özdemir, I. (2003). Towards An Understanding of Environmental Ethics from a Qur'anic Perspective. *Islam and ecology: A bestowed trust*, 3-37.
- Palys, T. (2008). Purposive sampling. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 697-698). Los Angeles: Sage Publications.
- Park, Y. (2008). Historical discourse analysis. In L. M. Given, (Eds.), *The Sage encyclopaedia of qualitative research methods* (pp. 393-395). Los Angeles: Sage Publications.
- Parvezmanzoor, S. (1984). Environment and values: the Islamic perspective. In S. Ziauddin (Eds.), *The Touch of Midas* (pp. 150-169). India: Manchester University Press.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. USA: Sage Publications.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Thousand Oaks, CA: Sage Publications.
- Petruccioli, A. (1998). Rethinking the Islamic Garden. In J. Coppock & J. A. Miller (Eds.), *Transformation of Middle Eastern Natural Environment: Legacies and Lessons* (pp. 349-363). New Haven: Yale University Press.
- Phillips, D. A., & Gritzner, C. F. (2010). *Syria*. North America: Infobase Publishing.
- Pinder-Wilson, R. (1976). The Persian garden: Bāgh and Chahār-Bāgh. In E. B. Macdougall & R. Ettinghausen (Eds.). *The Islamic garden* (pp. 70–85). Washington DC: Dumbarton Oaks Trustees for Harvard University.
- Pirani, K. K. (2002). Discovering concepts from faith. In A. Petruccioli, & K. K. Pirani, (Eds.), *Understanding Islamic architecture* (pp 31-37). London: Routledge.
- Post, G. E. (1869). The flora of Palestine and Syria. *The American Naturalist* 3, 121-124.

- Pour, H. N., Rad, M. M. & Pische, S. M. (2012). Persian gardens are sustainable gardens: scrutinize the sustainability features in Persian gardens. *Proceeding of 2nd International Conference, Mukogawa Women's University, Nishinomiya, Japan*, 280-285.
- Pourjafar, M. R., Mahdavinejad, M., Shamshirband, M., Farahani, S. F., & Hoorshenas, R. (2012). The Cross-Cultural Interaction Between the Art of Garden Design of Old Cities of Iran and India Along the Silk Road. *Proceeding of 2nd International Conference, Mukogawa Women's University, Nishinomiya, Japan*, 57-62.
- Rabbat, N. O. (1985). The Palace of the Lions, Alhambra and the Role of Water in its Conception. In A. Petruccioli (Eds.), *Environmental Design: Journal of the Islamic Environmental Design Research Centre 2* (pp. 64-73), Rome: Carucci Editions.
- Rafique. M. M. (2005) Impact of Urbanization on Ancient Gardenscape of Lahore and the World Monument of Shalamar Garden (Pakistan). 1–6. Print. In *The 15th ICOMOS General Assembly and International Symposium: 'Monuments and sites in their setting – conserving cultural heritage in changing townscapes and landscapes'*, 17 – 21 October, 2005, Xi'an, China.
- Raziah Ahmad. (2013). *Cultural landscapes as heritage in Malaysia: Potentials, threats, and current practices* (PhD thesis, Utrecht University, the Netherlands).
- Rehman, A., & Akhtar, M. (2007). *The Mughal Gardens along the Grand Trunk Road in Pakistan and Afghanistan*. Retrieved January 1, 2016, from www.middleeastgarden.com.
- Reisigl, M., & Wodak, R. (2009). The discourse-historical approach (DHA). In R. Wodak, & M. Meyer (Eds.), *Methods for Critical Discourse Analysis*. (2nd ed pp. 87-121). London: Sage.
- Richardson, T. (Eds.). (2000). *The Garden Book*. United Kingdom: Phaidon Press.
- Riley, J. (1990). *Getting the Most Out of Your Data*. Bristol, England: Technical and Educational Services.
- Rogerson, B. (2000). *Marrakesh, Fez, Rabat*. Cape Town, South Africa: New Holland.
- Ross, S. (1998). *What Gardens Mean*. USA: University of Chicago Press.
- Rostami, R., Hasanuddin Lamit, Khoshnava, S. M., & Rostami, R. (2014). The Role of Historical Persian Gardens on the Health Status of Contemporary Urban Residents. *EcoHealth*, 11(3), 308–321. doi:10.1007/s10393-014-0939-6

- Rubin, H. J. & Rubin, I. S. (2005). *Qualitative Interviewing* (2nd ed.): The Art of Hearing Data. USA: Sage Publications.
- Ruggles, D. F. (1991). Historiography and the Rediscovery of Madīnat Al-Zahrā'. *Islamic Studies*, 30(1/2), 129-140.
- Ruggles, D. F. (1992). "The Gardens of the Alhambra and the Concept of the Garden in Islamic Spain," in J. D. Dodds (Eds.), *Al-Andalus: The Art of Islamic Spain*, (pp 163-171). New York: The Metropolitan Museum of Art.
- Ruggles, D. F. (2000) *Gardens, Landscape, and Vision in the Palaces of Islamic Spain*. University Park: Pennsylvania State University Press.
- Ruggles, D. F. (2008). *Islamic gardens and landscapes*. Philadelphia, Pennsylvania: University of Pennsylvania Press.
- Ruggles, D. F., & Taboroff, J. (n.d.). *Gardens and Landscaping from Oxford Islamic Studies Online*. Retrieved January 20, 2016, from <http://bridgingcultures.neh.gov/muslimjourneys/items/show/264>
- Saeed, A. (2006). *Islamic Thought: An Introduction*. New York: Taylor & Francis Routledge.
- Salama, A. (2010). Gardens beneath which rivers flow. *Faith and form: the Interfaith Journal on Religion, Art and Architecture*, 43, 30-35. ISSN 00147001.
- Saloojee, O. S., (2003). Abraham as Bridge and Mediator: A Metaphoric Reflection on the Alhambra. *Meeting Alhambra, Isama-Bridges Conference Proceedings* (pp. 347-352).
- Sandelowski, M. (2008). Member check. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 501-502). Los Angeles: Sage Publications.
- Saoud, R. (2002). A review on architecture in Muslim Spain and North Africa (756-1500AD). *Foundations for science, technology and civilisations*. Retrieved February 5, 2016 from <http://www.muslimheritage.com/uploads/ACF25C2.pdf>
- Saumure, K. & Given L. M. (2008). Nonprobability sampling. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 562-563). Los Angeles: Sage Publications.
- Schimmel, A. (1976). The celestial garden in Islam. In E. B. Macdougall & R. Ettinghausen (Eds.), *The Islamic garden* (pp. 11-39). Washington DC: Dumbarton Oaks Trustees for Harvard University.

- Science for Environment Policy (2015). *Ecosystem Services and the Environment*. In-depth Report 11 produced for the European Commission, DG Environment by the Science Communication Unit, UWE, Bristol. Retrieved December 8, 2016 from <http://ec.europa.eu/science-environment-policy>
- Seddigh, M., Karimiazari, A., & Ghanaati, M. (2014). Analyses of Iranian Garden Design Art from Geometrical Structure View Case Study Shahzade Mahan Kerman in Iran. *Sylwan*, 158, 137–146.
- Shakiba, P. & Kamali, F. P. (2012), Iranian Garden, a Forgotten Sustainability, *Journal of Basic and Applied*, pp. 2896-2900.
- Shaw, S. J., & Çetinsaya. G. (n.d.). Ottoman Empire. *The Oxford Encyclopaedia of the Islamic World*. *Oxford Islamic Studies Online*. Retrieved October 29, 2016 from <http://www.oxfordislamicstudies.com/article/opr/t236/e0611>.
- Siddiqi, M.N. (1979). "Tawhid: The Concept and Process". In K. Ahmad and Z. I. Ansari (Eds.), *Islamic Perspectives: Studies in Honour of Mawlana S. A. A. Mawdudi*. Leicester.
- Souter-Brown, G. (2014). *Landscape and Urban Design for Health and Well-Being: Using Healing, Sensory and Therapeutic Gardens*. Routledge.
- Stein, A. B. (2007). *Morocco: Courtyards and Gardens*. NY: Monacelli Press.
- Stephenson, J. (2008). The Cultural Values Model: An integrated approach to values in landscapes. *Landscape and Urban Planning*, 84: 127-139.
- Stern, P. N. (2008). Constant comparison. In L. M. Given, (Eds.), *The Sage Encyclopaedia of Qualitative Research Methods* (pp. 114-115) Los Angeles: Sage Publications.
- Strauss, A., & Corbin, J. (1994). Grounded theory methodology. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273-285). Thousand Oaks, CA: Sage Publications.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Stronach, D. (1990). The royal garden at Pasargadae: evolution and legacy. *Archaeologia Iranica et Orientalis*, 1, 475-502.
- Stronach, D. (1994). Parterres and stone watercourses at Pasargadae: notes on the Achaemenid contribution to garden design. *Journal of Garden History*, 14, 3-12. doi: 10.1080/01445170.1994.10412493

- Subtelny, M. E. (1997). Agriculture and the Timurid Chaharbagh: The Evidence from a Medieval Persian Agricultural Manual. In Petruccioli A. (Eds.), *Gardens in the Time of Great Muslim Empires* (pp. 110-128). Leiden, New York: Brill.
- Tabbaa, Y. (1986). The "Salsabil" and "Shadirwan" in Medieval Islamic Courtyards. *AARPed*, 1, 34-37.
- Tabbaa, Y. (1987). Towards an interpretation of the use of water in Islamic courtyards and courtyard gardens. *The Journal of Garden History*, 7(3), 197-220.
- Tajaddini, L. (2011). Review of the characteristics of Mahan garden: one type of Persian gardens. *Journal of Engineering and Technology*, 5, 1363-1366.
- The Board of the Persian Garden of Geneva. (2010). *Persian Garden of Geneva*. Retrieved October 29, 2015 from <http://www.payvand.com/news/10/mar/1032.html>
- The Oxford Encyclopaedia of the Modern Islamic World, Oxford Islamic Studies Online*. Retrieved July 20, 2016 from http://www.oxfordislamicstudies.com/Public/book_oeiw.html
- Titley, N. M. (1979). *Plants and gardens in Persian, Mughal and Turkish Art*. British Library.
- Torres B. L. (1952). *The Alhambra and the Generalife*. Madrid: Editorial Plus-Ultra.
- Town And Country Planning Act 1976 (Act 172)*. (2006). Percetakan Nasional Malaysia Bhd.
- Tuckett, A. G. (2004). Qualitative research sampling: the very real complexities: *Nurse researcher*, 12(1), 47-61.
- Turner III, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The qualitative report*, 15(3), 754. 54-760. Retrieved July 4, 2016 from <http://nsuworks.nova.edu/tqr/vol15/iss3/19>
- Turner, T. (2005). *Garden history: Philosophy and design 2000 BC–2000 AD*. London: Routledge.
- Umar, M. B., Ismail, S., & Abdullahi, M. S. (2015). Sustainable Economic Development through the View of Said Nursi: The Challenge of the West. *Proceedings of International Conference on Empowering Islamic Civilization in 21st century, 6-7 September 2015*, Universiti Sultan Zainal Abidin, Malaysia, 115-122.

- Vagias, W. M. (2006). *Likert-type scale response anchors*. Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management. Clemson University.
- Villiers-Stuart, C. M. (1913). *Gardens of the great Mughals*. London: Adam and Charles SOHO Square.
- von Hantelmann, C., & Zoern, D. (2001). *Gardens of delight: the great Islamic gardens*. Germany: Dumont Monte.
- Warren, W. (1991). *The tropical garden*. London: Thames and Hudson Ltd.
- Wescoat, Jr. J. L., Brand, M., & Mir, N. (1991). Gardens, roads and legendary tunnels: The underground memory of Mughal Lahore. *Journal of Historical Geography*, 17(1), 1-17.
- Wescoat, Jr. J. L. (1989). Picturing an early Mughal garden. *Asian art* 2, 59-79.
- Wescoat, Jr. J. L. (1990). Gardens of invention and exile: The precarious context of Mughal garden design during the reign of Humayun (1530-1556). *Journal of Garden History*, 10(2), 106-116.
- Wescoat, Jr. J. L. (1991). Managing the Indus River basin in light of climate change: Four conceptual approaches. *Global Environmental Change*, 1(5), 381-395.
- Wescoat, Jr. J. L. (1999). The Islamic Garden: Issues for Landscape Research. In A. Petruccioli (Eds.), *Environmental Design: Journal of the Islamic Environmental Design Research Centre 1*, 10-19. Rome: Carucci Editions.
- Wescoat, Jr. J. L. (2007). The Indo-Islamic garden: conflict, conservation, and conciliation in Gujarat, India. In D. F. Ruggles (Eds.), *Cultural heritage and human rights* (pp. 53-77). New York: Springer.
- Wescoat, Jr. J. L. (2011): *The Changing Cultural Space of Mughal Gardens. A Companion to Asian Art and Architecture*, 201.
- Wiggins, S., & Potter, J. (2008). Discursive psychology. In C. Willig & W. Stainton-Rogers (Eds.), *The Sage handbook of qualitative research in psychology* (pp. 73-90) London: Sage Publications.
- Wilbaux, Q., Lebrun, M., & McElhearn, K. (2008). *Marrakesh: The Secret of Courtyard Houses*. Paris: www. acr-edition. com.
- Wright, R. (2000). Iran's new revolution. *Foreign Affairs*, 79(1), 133-145.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Zaimeche, S. (2004). Granada-The Last Refuge of Muslims in Spain. *Foundation for Science, Technology and Civilization*.