PUBLIC PERCEPTIONS AND PREFERENCES OF HISTORICAL
PERSIAN GARDENS IN CONTEMPORARY URBAN CONTEXT

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Dedicated to My Beloved Ones:
My precious parents, My soul mate Meysam, and My dear brother
For their continuous supports and encouragements
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ABSTRACT

Historical Persian gardens are the first examples of Iranian green spaces that have established a complex relation with the cities and become one part of public spaces from 11th century until now which still being actively used by urban dwellers. This study is aimed at a better understanding of these gardens and their contributions in contemporary Iranian society. It examines four selected gardens based on residents’ view in well-known historical cities of Iran namely: Tabriz, Isfahan, Shiraz, and Kerman. The study examined public’ preferences based on their perception of visual and scenery effects in relation to the characteristics of gardens. The study adopted mixed method approaches. Data were collected through questionnaires (n=464), semi-structured interview (n=40), and visual observation techniques. Descriptive statistic and content analysis were used to analyze the data and triangulation underpinned the examination of the relationships. The findings suggested that naturalness, diversity and gardens’ historical background and coherent motivate residents’ frequent visits which lead in affording their social, psychological and physical needs. In this regards, natural features especially trees, (shady and tall matured ones) and water in streaming form as well as historical buildings that exist in the gardens not only create the gardens’ beauty and attractiveness, they also contribute in constitution of gardens as a restorative place. Recreation is the frequent experience of users and followed by activities like family picnics and being with others that denote social contributions of the gardens as well. Current experiences also engaged users emotionally to the gardens, so that feelings such as calmness and tranquility, happiness, comfort, safety, freedom and even healthier were frequently mentioned by respondents while experiencing gardens. Also, residents involvements in the gardens and the multiplicity of experiences leads to creation of deeper meanings and values in distinguishing gardens and one that leads to a kind of functional and emotional attachment which evoke a sense of place and identity. In sum, fulfilment of social functions and psychological needs of users make these gardens valuable municipal resources for improvement of planning and designing of contemporary urban green spaces of Iran. Hence, gardens could be considered as bridging previous garden works with future green spaces designs to create a place for the self-discovery and relation of humankind with each other. It can be a place for being and living together in order to enhance people's physical, social, and cognitive functions and sense of attachment towards their towns and society which ensure society’s’ health status and wellbeing.
ABSTRAK

Taman Parsi yang bersejarah adalah antara ruang terbuka hijau terawal di Iran yang telah membentuk perkaitan yang kompleks dengan pelbagai bandaraya. Ia adalah sebahagian dari ruang awam semenjak abad ke11 dan sehingga kini masih digunakan oleh pengguna bandaran secara aktif. Kajian ini bertujuan untuk mengkaji taman-taman ini dengan lebih mendalam serta sumbangannya dalam masyarakat kontemporari Iran. Kajian merangkumi empat taman terpilih yang terdapat dalam empat bandaraya bersejarah yang terkenal seperti Tabriz, Isfahan, Shiraz dan Kerman. Kajian ini telah meneliti pilihan penduduk berdasarkan persepsi visual dan kesan pandangan yang berkaitan dengan ciri-ciri taman. Kajian telah menggunakan pendekatan gabungan. Data telah diambil melalui borang soalselidik (n=464), temuduga separa-struktur (n=40) dan teknik pemerhatian. Statistik deskriptif dan analisis kandungan telah digunakan untuk menganalisis data dan analisis perkaitan adalah berasaskan triangulasi. Penemuan mencadangkan kesemulajadian, kepelbagaian dan latarbelakang sejarah taman serta kejelasan merupakan motivasi lawatan berkala oleh pengguna yang dapat memenuhi kehendak sosial, psikologi dan fizikal. Sehubungan ini, elemen semulajadi seperti pokok (teduhan yang tinggi dan matang) dan air mengalir serta bangunan bersejarah yang terdapat dalam taman bukan sahaja membentuk kecantikan taman tetapi juga menyumbang kepada perisian taman sebagai tempat pemulihan. Rekreasi merupakan pengalaman berkala dan aktiviti berkeluarga seperti berkelah serta bersama yang lain ia itu merupakan sumbangan sosial dalam taman tersebut. Pengalaman semasa yang dikenalpasti oleh pelawat juga merangkumi nilai emosi terhadap taman yang mejurus kepada perasaan tenang, ceria, selesa, selamat, kebebasan dan kebahagiaan. Penglibatan penduduk dalam taman serta kepelbagaian pengalaman telah menjurus kepada pembentukan makna yang mendalam dan nilai yang membezakan taman serta perkaitan fungsi dan emosi yang juga membentuk deria setempat serta identiti. Secara keseluruhan, memenuhi keperluan fungsi sosial dan kehendak psikologi pengguna boleh dijadikan sumber untuk pihak majlis tempatan menambahbaikkan perancangan dan rekabentuk ruang terbuka kontemporari di Iran. Taman juga boleh menjadi penghubung antara taman terdahulu dengan ruang terbuka masa depan dalam pembentukan ruang untuk pencarian-diri dan perhubungan antara insan. Taman juga boleh menjadi tempat untuk bersama pengguna yang lain dalam menguatkan fungsi fizikal, sosial dan fungsi kognitif serta rasa keakraban terhadap bandar dan masyarakat yang dapat menjamin kesejahteraan hidup.
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CHAPTER 1

INTRODUCTION

1.1 Preamble

The dream of Garden is very ancient. Gardens were made to represent a perfect place or symbolize the garden of God or Paradise. This imagination resulted in creating historical beautiful gardens. Ancient scripts indicate that most part of Iran plateau were under cultivation by 3000 BC. “Chahar Bagh”, the most stable innovation of Achaemenian turned to the most fundamental element of Persian Gardens. This scheme followed successively in different era and affect extensively on various parts of Iranian life and arts. In 11th century gardens established a complex relation with the city and became one part of public places. The pattern of Garden city was proposed in Isfahan in 16th century. Also this pattern was seen in other cities like Shiraz, Tabriz, and Tehran. After that the usage of this scheme has diminished in Iran and imitation of European gardens chiefly the French ones were established; whereas, this patterns are not appropriate with Iranian culture and climate consequently the relation between these areas and urban inhabitant have been diminished. While, various researchers emphasized that the existence of compatible urban green spaces can influence the quality of life (Bonaiuto et al., 2003; Chiesura, 2004) and enhance the residents' every day well-being (St Leger, 2003; Miller, 2005; Filho and Salomone, 2006).
This study examines the perceptions and preferences of laypublic about historical Persian Gardens to find useful information that could be applicable for improvement of contemporary urban spaces. In this study, historical Persian Gardens were chosen due to their historical background as first sample of Iranian urban green spaces and their affects in various aspects of Iranian life. Public as largest consumer of urban spaces can provide a positive affects towards the improvement of the urban spaces. This study deals with public’s preferences of Persian Gardens based on their perceptions of the visual and scenery effects in relation to the characteristics of these gardens. Accordingly, public experiences in the gardens are considered. Experiences are the most crucial part of how people perceive, utilize or live in their green area (Relph, 1976). Tyrväinen et al. (2003) underlined personal meanings as the characteristics of a place for local people based on aesthetic, social and cultural values. Thus meanings and social values need to be examined through behavioral responses of urban residents using preferences in the environment. Therefore, this study would reveal the predominant characteristics and visual attributes of Persian Gardens through residents to help the improvement of the planning and designing of urban green spaces in Iran society.

1.2 Background of the Study

There is a growing awareness that progress in understanding and managing the built environment can be aided by the integration of expertise and knowledge from different disciplines and from different cultures (Whitehand and Larkham, 1992). On the other hands, researches (i.e., Groat, 1982; Rapoport, 1982; Devlin and Nasar, 1987; Nasar, 1988; Devlin, 1990; Pennartz and Elsinga, 1990; Groat, 1994; Nasar, 1994; Nasar, 1998; Gifford et al., 2002; Karmanov and Hamel, 2009) indicated on the differences between designer preferences and what lay public like. Groat (1979, 1982), Purcell (1986) and Devlin and Nasar (1987) have revealed that professionals have consistently differed from the lay public in their appraisal or perception of the built environment. Designers mostly guess, make judgments on public perceptions,
or appear to be aware of the differences between their aesthetic taste and those of lay public (Hubbard, 1996), but still researchers emphasize on the role of people as actors and making of landscape (Zube et al., 1982; Golledge and Stimson, 1987). Recent studies which exclusively relied on people’s responses, demonstrate that there is a potential for more effective incorporation of individuals’ perceptual aspects into planning and management. In other words, development of landscape research is seen in the understanding of how people perceive landscape and what sense they make of it. In this regards, Kaplan (1987) emphasized that perception, cognition, and evaluation are integrated.

Therefore, various researchers attempt to investigate perception of people and attributes that can influence it. Aesthetic attributes and extensive domain of it have been examined by different researchers. As a result, researchers revealed the relation between aesthetics attributes and preferences (Nasar, 1982; Lothian, 1999; Kaltenborn and Bjerk, 2002; Parsons and Daniel, 2002; Hidalgo, Berto, Galindo, and Getren, 2006). Also, some researchers (i.e., Kaplan and Kaplan, 1989; Kaplan, 1995; Hernandez, Hidalgo, Berto, and Peron, 2001; Staats, Kievet, and Hartig, 2003; Van den Berg et al., 2003; Galindo and Hidalgo, 2005) revealed that aesthetics attributes can affect the place's restorativeness and it is the place's restorativeness that can affects the categorization of the place as attractive or unattractive. Based on these results, aesthetic taste of place is variable and affected by some attributes.

1990; Litt, 1995; Tweed and Sutherland, 2007), “style” (Yang and Brown, 1992), and other attributes like “focality, ground surface and texture” (Ulrich, 1979), “visual scale and disturbance” (Coeterier et al., 2006) as the most prominent aesthetic variables which affect preferences. Also, researchers emphasized on meditation of these variable by human factors such as of “age” (Balling and Falk, 1982; Abello and Bernaldez, 1986; Zube et al., 1983), “gender” (Maia, 1979; Abello and Bernaldez, 1986; Gifford et al., 2000; Tindall, 2003), “education” (Yabiku et al., 2008), “familiarity with the scene” (Purcell, 1992) and “environmental culture and values” (Yu, 1995; Van Den Berg et al., 1998).

Furthermore, researchers emphasized the relation between experience of landscape and preferences (Helson, 1964; Lowenthal and Prince, 1965; Lowenthal, 1968; Zajonc, 1968; Hammitt, 1979; Uusitalo and Rassi, 2007; Falk and Balling, 2009). According to these results, personal meanings are the important characteristics of place and for local people either it is based on aesthetic, social and cultural values (Tyrväinen et al., 2007). In other words, cultural meanings are hidden in environmental issues and place aspects (Porteous, 1986; Jackson, 1989; Urry, 1992; Lash and Urry, 1994; Scott, 2002). And, both natural and cultural made the landscape create strong visual image for the observer, and made landscape distinguishable and memorable (Tveit et al., 2006).

On the other side, researchers (Korpela, 1989, Manzo, 2005) emphasized on the historical significant of a place on peoples’ emotions and meanings. The picturesque theory indicates that the most aesthetic urban spaces belong to the traditional spaces. In this regards, recent researchers (Hidalgo et al., 2006) indicated that the most attractive places in the city belong to the historical-cultural or recreational places, and emphasized on importance and contribution of historical values for human health status and well-being (Lynch, 1972; Lowenthal, 1985; Schama, 1995). Accordingly, several contemporary urban designers by using the components of traditional urban spaces have tried to re-establish both aesthetic experience and symbolic meaning in urban environment. Consistent with this belief, now a day historical sites of Persian Gardens are concerned of most landscape
architects in different ways. Researchers about historical Persian Gardens are limited and most of them, explore the history and evolution of these gardens. British institute of Persian studies, and The Circle of Ancient Iranian Studies (CAIS) in London attempted to study historical sites of Iran specially Achaemenian sites. It brought together all forms of research about Persepolis and related subjects: excavations, restorations, maintenance, and publications of scholarly works. It collected a rich library specialized in ancient Iranian studies with particular attention to Achaemenid subjects, from which many students and scholars benefitted substantially. Among these contributions we may instance David Storonach's book “Pasargadae” (Oxford 1978), and Donald Wilber's “Persian Gardens and its pavilion” (1979). In the meantime, the Iranian Organization of Cultural Heritage (literally: Sazeman-e Mirath-e Farhangi) has endeavored to prepare the way for the establishment of a research center for every major archaeological site. It has gathered scientific data and used the finest and most recent geophysical and photographic methods to investigate and map the sites and collect relevant data on them. Besides, some scholars attempt to explore gardens belonging to a specific era, and some of them explore the philosophy of Persian Gardens and its components. However, today Persian Gardens are concerned through landscape architects, but nobody attempts to explore the perception and preferences of people about these gardens. This study attempts to investigate public perceptions and preferences of Persian Gardens to reveal predominant physical, spatial and functional characteristics of these gardens in order to reach some criteria that hope to be beneficial for contemporary urban context.

1.3 Problem Statement

Iranian garden and garden making are the subjects that considered by people through history and it is one of the principle themes of Iran society that apparently and widely influence on Iranian art and artistic aspects such as architecture and flower ornamentation as well as ornamental arts. It has had positive impacts on other skills such as pottery, carving, depiction, carpeting, music and chiefly on extensive
domain of Persian poetry and literature. Furthermore, Iranian gardens during the history were one of transcendent place which considered by people as promenade or outdoor room to relax and recreation. These clues have been forgotten during recent decades and replaced with European gardens and parks which are not suitable with Iranian culture and Iran climate.

In the last few hundred years, industrialization and civilization separated human from the natural environment. The modern society has isolated people from outdoor environmental stimuli (Stilgoe, 2001) and regular contact with nature (Katcher and Beck, 1987). There is an extraordinary disengagement of humans from the natural environment. In this way, obstacles like: economy, land price, sprawl of cities and population growth diminish urban residents regular contact with nature. Furthermore, in these times of unsustainable world, more work and less quality time available for personal and family pleasure; so, local people consider urban nature as daily outdoor recreation opportunities to enhance their every day wellbeing (Eronen et al., 1997). There are evidences which suggest that green spaces can influence the quality of life of people in urban area (Bonaiuto et al., 2003; Chiesura, 2004). The importance of nature for human mental, physical and social health has been proved by scientists. View of natural scenes or elements foster stress recovered by evoking positive feelings, reducing negative emotions, effectively attention or interest and blocking or reducing stressful thoughts. Based on this realization, efforts were made to stress on the importance of parks and green spaces for health functioning of urban inhabitants. For instance health justification was used for provision of parks and other natural areas.

The primary purpose of most modernist gardens was to be used as relaxed outdoor living with well suited to climate, culture, and individual wealth. In the 19th century, parks were designed in strong belief of its possible health advantages (Hamilton-Smith and Mercer, 1991) which were hoped to reduce disease, crime and social unrest and provide green lungs for city, and areas for recreation (Rohde and Kendle, 1997). Even now, urban spaces are expected to function as a vital part of urban landscape with its own specific set of functions. So, modern garden and parks
have been recognized as a single 20th century phenomenon with clearly defined characteristics in Europe and America and has been used as outdoor room to relax and enjoy the urban experiences, a venue for different activities such as outdoor eating, meeting and sports, a venue for civic or political functions and most importantly a place for walking and sitting out (Thompson, 2002). But, unfortunately Iranian society as innovator of a predominant scheme of garden making throughout Islamic realm doesn't have a new style for urban design that could be suitable with today's life. Imitation of European gardens resulted places that are not suitable with Iranian culture and climate. Consequently, the relations between these areas and urban residents have been reduced; whereas, protective factors of nature for physical, psychological, and social health of people and community have been emphasized by various researchers (Takano et al., 2002; St Leger, 2003; Maller et al., 2005). Besides, local people consider urban nature and daily outdoor recreation opportunities to be the main factors enhancing their every day well-being (Eronen et al., 1997).

Both natural and cultural making the landscape create strong visual images in the observer, and making landscape distinguished and memorable (Tveit et al., 2006). Thus, meanings and social values needs to be examined through behavioral responses of urban residents using preferences in their environment to reveal criteria of environmental compatibility and results the sense of attachment to the place and towards their towns and consequently enhance society health status. This research would reach these results through people's perception and preferences of historical Persian Gardens to improve the planning and designing of contemporary urban spaces. It seems that these gardens can be used as crossing preserving the previous works for the future people, letting the art of ancient period be judged by others and create transcendent people who have another type of look towards life and environment. A place for the self-discovery and relation of humankind with each other, a place for being together and living together and with such an attitude we can enjoy the past techniques and concepts in modern design.
1.4 Research Aim

The aim of this research is to determine the dominant characteristics of Persian gardens in terms of spatial and physical attributes through public perception and preferences. This would reveal the preferred qualities based on aesthetic, social and cultural, values, and historical fixation. Also, this study would offer suggestions that hope to be applicable in improvement the planning and designing of contemporary urban green spaces of Iran society to enhance people's physical, social, and cognitive functions and sense of attachment towards their towns and society and raise society health status and wellbeing.

1.5 Research Objectives

i. To evaluate public perceptions about historical Persian Gardens.

ii. To identify significant social-cultural values of Persian Gardens through publics.

iii. To investigate predominant characteristics of Persian Gardens in term of spatial and physical attributes that people prefer.

iv. To offer some suggestions that could be applicable in improvement the planning and designing of contemporary urban green spaces.

1.6 Research Questions

Questions are related to the Persian Gardens' components and people responses to these gardens and its social effects.
**Persian Garden components and physical attributes:**
. What characteristics in terms of form, structure or physical components are important in these gardens and why those features are significant?
. What are the physical changes that need to be considered by authorities?

**Behavioral responses of People towards Persian Gardens and its components:**
. What are the feelings of urban resident toward these places?
. How are these gardens used by urban residents and what are the outcomes after experiencing the gardens in terms of health status and self-reported?

**Social effects and benefits of Persian Gardens:**
. What are the social and cultural significance of Persian Gardens?
. What roles do physical elements play in relation to place attachment and sense of belonging?

### 1.7 Research Hypothesis

The hypothesis forwarded in this study is that, historical and cultural features will influence judgments and have an important role in people's preferences. Also naturalness and physical attributes of Persian Gardens determine people's positive responses and results to the health status and wellbeing as well as enhancing environmental compatibility and sense of attachment and belonging to the society.
1.8 Scope of Study

This study will explore public's perceptions and preferences of historical Persian Gardens to identify significant social-cultural values of these gardens and reveal its salient characteristics in term of physical and spatial attributes. Hence, the study will use observation, interviews and questionnaires to investigate urban resident's perception and preferences. The unit of analysis is urban residents from various age groups in historical cities of Iran where existing Persian Gardens are actively used.

1.9 Significance of Research

This research will reveal some criteria in aspects of designing and planning of Iran urban green spaces through evaluation and appreciation of users. Urban residents' preferences will reveal their experiences and responses to historical Persian Gardens and will result in preferred qualities based on aesthetic, social and cultural values and historical fixation. It is hoped that these findings could be applicable for the betterment of Iranian contemporary urban spaces that could improve physical, social and cognitive functions of residents and enhance sense of attachment and belonging to their towns and raise society health status.

1.10 Outline of Research Methodology

The design concept for the evaluation is an interrelated series of decisions; although, some decisions precede others, but each decision would influence others.
Success or failure of an evaluation often depends in the skill with which an evaluator selects and uses information-gathering techniques. These methods should be simple, clear, straightforward, and should efficiently gather information needed. This study tried to examine laypublic perception and preferences of historical Persian gardens as first sample of Iranian urban green spaces which still being actively used by urban residents in order to understand these gardens’ success and significance in contemporary urban context. Accordingly, the following stages considered in this study:

1.10.1 Literature Review

This stage gathered information on the theory and development of gardens in general and perception and preferences and its related attitudes in particular. The reviews in this stage allows researcher to identify the salient properties and attributes and shape the theoretical framework of the study.

1.10.2 Data Collection and Evaluation

Two factors affect the choice of research methods: first the nature of research, research questions and objectives; second, the methodology adopted by previous researches. Rreviewing methodologies that applied in the study of human-environment relationship revealed previous studies’ theories, philosophies, issues and linkage of those assumptions, appropriateness and relevance to the aims and objectives of this particular study (See Table 1.1).
Table 1.1: Summaries of other Researches’ Methodological Approach

The choice of Presentation (onsite or photo), Methods, and Participants

<table>
<thead>
<tr>
<th>Researcher(s)</th>
<th>Year</th>
<th>Site</th>
<th>Theme</th>
<th>Research Setting</th>
<th>Methods</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimitri Karmanov, Ronald Hamel</td>
<td>2009</td>
<td>Public Gardens</td>
<td>Evaluation of Similarities and Differences of 120 Gardens</td>
<td>Onsite, Photo</td>
<td></td>
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</tr>
<tr>
<td>Christopher Lottie, Corinne Sperling</td>
<td>2008</td>
<td>Residential Urban Garden</td>
<td>Assessment of a Management of Biological Diversity</td>
<td>Onsite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yabiku, S. T, Casagrande, D. G, Mtager, E. E</td>
<td>2008</td>
<td>Residential Landscape</td>
<td>Preference for Landscape</td>
<td>Onsite, Photo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marja Rass, Lucia Unstralossi</td>
<td>2007</td>
<td>Cultural Landscape</td>
<td>Evaluation</td>
<td>Onsite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hidalgo, Galindo, Berto, Getrevi</td>
<td>2006</td>
<td>Urban Places</td>
<td>Evaluation</td>
<td>Onsite</td>
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According to what demonstrated in the table 1.1, researchers in the field of human-environment relationship mostly choose onsite mood of the presentation compare to photo due to this reality that environmental simulation do not provide the same multi sensorial richness of experience as actual survey on sites. And in this way, questionnaire survey followed by observation and interview considered as most common methods. Also, laypublic compare to experts considered as main participants of the research studies. Hence, lay public's wishes and the fact that their views differ from those of expert, make them a party in their own right and introduce a form of participate designing based on a dialogue between residents and experts.

Therefore, the study applied multiple information-gathering methods. This strategy of using converging techniques allows the weakness of one method to be partially compensated by the strength of another. And in this regards, the research employs three strategies of inquiry which are surveys questionnaire, semi-structured interview and unobtrusive behavioural observation. Accordingly, spatial functions
were examined through observation (behavioral mapping), social-cultural values and preferred spatial and physical attributes obtained through interviews and questionnaires. In his regard, written questionnaires in different constructions were used to link the research questions and the data collected. Semantic differential, and structured questionnaires including focused or fixed-response questions and, free or open-ended response questions were employed. The way the questionnaires were structured for the purpose of minimizing any possible confusion or ambiguity, which can later help to develop a clearer idea and pattern of answers. The questionnaires addressed a broad range of issues, ranging from motives for respondents to visit garden, their activities during visit periods and their feelings towards the gardens.

The primary sources are residents in the four sample case studies who visit gardens. Respondents were randomly selected among visitors of garden from various age groups. Also, personal attributes like gender, occupation, and educational background were considered. Respondents were asked to fill the questionnaire during their stay in garden, so the answers would reflect their immediate experiences. Questionnaires were distributed on weekdays and weekends, in different hours of the day, and in different parts of the gardens.

1.10.3 Data Analyses

Both descriptive and inferential techniques have been used to analyze and interpret the answers. In this regards, quantitative statistics and qualitative content analysis were applied to identify and examine the responses of residents towards the experiential contacts with properties and attributes of gardens, and their importance. The main findings are presented in frequency and percentage distributions, Chi-square test and ANOVA were applied to examine association of parameters and strength of relationships between parameters. Qualitative content analysis was used in analysis of the interviews. Triangulation of surveys and behavioral observations with interviews sources recognized whether types of activities and length of stay were structural phenomenon and related to
14

the physical-spatial characteristics of gardens. In addition, the sources from literature reviews assist in the discussion of findings for this study.

1.11 Thesis Organization

The thesis is organized in seven chapters as detailed below:

**Chapter 1** introduces the overall structure of the study include an overview of research background in terms of subject area, problem statement, research aim, objectives, questions, hypothesis as well as scope and significant of study and a brief about methodology which adopted for this study.

**Chapter 2** analyses the literatures relevant to study of perception, preference and evaluation, their relation and contribution in landscape assessment and urban design. In this regard, perceptual and preference theories, landscape assessment paradigms and aspects that affect the evaluation is considered and discussed.

**Chapter 3** reviews information such as records about the history, the structure plan, regulation, policies, issues, and the trends of development of the historical gardens.

**Chapter 4** explains research methodology. It justifies the adaptation of mixed methods that include quantitative and qualitative methods of data collection and analysis. It outlines data collection methodology by several techniques including questionnaire, semi structured interview and visual survey. Also, data sampling and
four selected historical Persian gardens as case studies were analyzed and described in terms of environmental context and physical characteristics.

**Chapter 5** presents data analysis and findings from the survey, semi-structured interview, and evaluation of personal observation of historical Persian gardens. Accordingly, the chapter begins with understanding about the user’s characteristics such as Age, Gender, Academic qualification, occupation and academic qualification, and their residency details. It is followed by examination of gardens’ attractiveness and their engagement with users, through reviewing attributes like respondents’ frequency of visit and their experiential contact with the gardens, length and group size of visitation and the effects of seasonal and daily changes on their presence. The chapter also examines respondents’ motive of visitations in terms of their activities and feelings about gardens and attributes that evoke feelings and mood changes. Meanings (innovative and connotative), values and symbolical aspects of the gardens also will be discussed and examined in the chapter.

**Chapter 6** examines the findings from survey followed by detain discussion on the results with a short summary.

**Chapter 7** concludes the study with discussion on the overall findings and proposes some recommendations that could be applicable in planning and designing of contemporary urban green spaces. Figure 1.1 illustrates and summarizes the thesis organizations.
Figure 1.1: Summary of Thesis Organizations
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