



Iranian Garden: A Place of Coexistence: City-Nature-Landscape Case study: Tehran Gardens in 19th Century

Homa Irani Behbahani, Ph. D.

Assistant Professor, Faculty of Environment, University of Tehran

Fakhri Khosravi, M. Sc.

Faculty of Environment, University of Tehran

Abstract

This paper studies Tehran gardens in the time span from Qajar dynasty up to Pahlavi period. A brief glance at Tehran's old map reveals that the situation and location of the birth of old gardens, having been affected by the environmental potentiality of the background, on the one hand, have first led to the introverted growth of the city and the fortification of the central citadel and, on the other hand, have led to the extroverted growth of the city, i.e. the development of Tehran as the time went by. At the present, most of these gardens have been demolished in the interest of developing Tehran and only a couple of them have survived. In view of this, identifying the structural elements and the system governing therein, the ratio of difference between this pattern and the Iranian pattern of constructing gardens and their role in extending the city mountain ward are among the objectives of this study. In this study with pay attention the signification of political, economical and sociality affairs in development of Tehran city, the prevalent system of the gardens of Tehran and the role played by them in the orientation of the city are examined through a study of Niavaran Garden.

Keywords: Qajar Garden, natural context, urban context, Niavaran Garden, Tehran.

باغ ایرانی - مکان همبستگی؛ شهر - طبیعت - منظر مورد مطالعاتی: تهران و باغ‌هایش

هما ایرانی بهبهانی

دکترای معماری، استادیار دانشکده محیط زیست، دانشگاه تهران

فخری خسروی

کارشناسارشد مهندسی طراحی محیط، دانشکده محیط زیست، دانشگاه تهران

چکیده

این مقاله به مطالعه باغ‌های تهران از دوره پادشاهی قاجار تا پهلوی می‌پردازد. که با نگاهی اجمالی به نقشه قدیم تهران مشاهده می‌شود، با توجه به موقعیت و مکان‌یابی پیدایش باغ‌های قدیمی که متأثر از توان محیطی بستر بوده است؛ در گذر زمان، از یک سو ابتدا موجب رشد درون‌گرایی شهر و تقویت ارک مرکزی و از سوی دیگر رشد برون‌گرایی یعنی توسعه شهر تهران گردیده‌اند. در عین حال در دوران اخیر اکثر این باغات به علت توسعه شهر تهران، تخریب شده و فقط تعداد کمی از آنها باقی مانده‌اند. به همین خاطر شناسایی عناصر ساختاری و نظام حاکم در آن، نسبت تمایز این الگو به الگوی باغ‌سازی ایرانی و نقش آنها در توسعه شهر تهران به طرف کوهپایه، از جمله اهداف این مقاله است. در این مطالعه با توجه به اهمیت مسائل سیاسی، اقتصادی و اجتماعی در توسعه شهر تهران، نظام رایج باغ‌های تهران و نقش آنها در جهت دهی شهر از طریق بررسی باغ‌نیاوران مورد ارزیابی قرار می‌گیرد.

کلیدواژه‌ها: باغ‌های قاجار، بستر طبیعی، بستر شهری، باغ‌های نیاوران، تهران.

Introduction

The Iranian garden, as a perfect structure, demonstrates a close relationship between cultural and natural backgrounds and indicates an adaptation and alignment between man's needs and the nature. In the past, the Iranian garden would help reveal latent potentiality of the environment and perceive its intricacies. The creator of the garden would rely upon his own experimental knowledge to create a place, which brought about the survival and dynamism of the natural background.

Due to their perceptual values which involve the five senses, historical gardens- among monumental remnants of the past in the manifold of environment, usefulness, and beauty of Iran- must be identified and registered as a national heritage as well as a priceless document of historical and cultural identity and be dynamically and constantly maintained. This way, the garden, this domesticated nature, possesses aesthetic, exalted, and fruitful values. The art and tradition of constructing gardens in Iran has a long history and is one of the main gardening schools in the world. From the antiquity up until the 19th century, relying upon their empirical knowledge, garden constructors would perceive the latent capacity of the environment and create a perfect structure, which in addition to creating beauty and being useful, plays a great role in the stability of the natural cycle of the background and regulates a rich ecosystem. The Qajar dynasty, who ruled over Iran until 1925, chose Tehran as their capital. If we take a look at Old Tehran maps in the era of the Qajar dynasty, we can identify numerous gardens within the enclosure, outside it, along river-valleys, and the Alborz mountainside. In this era, in parallel with establishment of garden-villas in the mountainside area, intra-town development tends towards orientation along river-valleys outside the town and mountain wards. Therefore, the present paper aims at identifying the typical characteristics of gardens of this era and studying the way they were settled in the background, the reasons why they were moved from the inside of the town towards the

mountainside, and the effects this transferal had upon the physical anatomy of the city and its future axes of development. Owing to the fact that garden, contrary to architecture or other artistic works, is quite perishable and the remnants of gardens of past times are very slight, the information required for this study has been compiled on the basis of a historical-analytical method and via close examination of documents, papers, historical scripts, and itineraries, as well as detailed investigation of pictorial sources in the archives of valid libraries.

Natural Context and Garden

In the Iranian culture and tradition of constructing gardens, the initiation of a garden bears a direct relationship with its natural background and physical as well as biological elements. In Tehran river-valleys are correlative ecological systems which connect the three general ecosystems of mountain (the Alborz), mountainside (southern mountainsides of the Alborz), and the plain (the center of the city at the time of the Qajar dynasty). At the time of the Qajar dynasty, in the inferior ecosystem in the plain area, specific morphological characteristics, flat background, consistent irrigation facilities, and farmable lands all have helped pave the ground for the formation of the original nucleus of Tehran.

At the time of the Qajar dynasty in the early 19th century, the original nucleus of Tehran, which was located in the plain, was connected to the countryside and mountainside villages through paths. The city and its development were in this area surrounded by the walls. In view of this, in parallel with the increase in constructing garden-villas in the mountainside area, green vestibules have gradually begun to form, which have always played a key role in providing environmental values and services of the city to date (Sotodeh, 1995). In the era of Pahlavi I, i.e. the early 20th century, these green vestibules would orient the axes of future ordering and orientation of the city. Since this era on, urban orientation mountain wards have increased while disregarding gardens and green

vestibules, and at present, with the perishing of these valuable natural structures, numerous problems have arisen. In this period of time, while gardens inside the city were being converted into public buildings, garden-villas outside the enclosure played a great role as indicators in developing the city mountain ward (Figure 1) (Kariman, 1971).

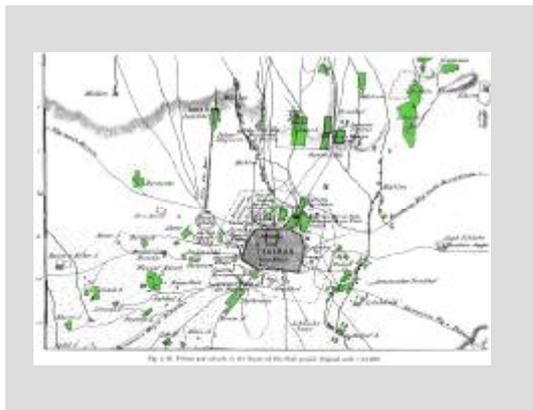


Figure1- The enclosure borders of old Tehran and the gardens outside it (1880)

The Roles of Mountain Villa-Gardens on Urban Development Orientation

In the second half of the 18th century, Aqa Muhammed Khan, the founder of the Qajar dynasty, selected Tehran as the capital. It was from this period on that the construction of palace-gardens, lanes, and streets gave a new shape to the city. During FathAli Shah's reign, the development of the city was accelerated and much importance was given to neatness. During the forty years of his reign in the first half of the 19th century, numerous buildings were constructed. No doubt, the first developer of Tehran was FathAli Shah Qajar. The city outside the enclosure began to develop little by little northwards, where flowing waters emanated from Shemiran and Touchal mountainsides. Karla Serena, who visited Tehran in the late 19th century, describes this garden as saying: "The Qajar palace has been constructed like an amphitheatre where the nearby scenes can be seen. The surface of the terraces had been covered with roses and jasmines" (Serena, 1883).

FathAli Shah constructed some other gardens like Negarestan and Nezamiyeh Garden outside Tehran enclosure and transferred his residence from Golestan Palace which was inside the city to these gardens outside the city. In parallel with the gradual cultural hegemony of the West, the representations of western civilization came to influence all the affairs of the Court. In general, the influence of this culture can be seen in the city in the form of constructing streets and squares, in architecture in the form of building facets after the fashion of western architectural decorations, and in constructing gardens as building vast garden-palaces outside the city and in the Alborz mountainsides. In the late years of the second half of the 19th century, Nasser Al-din Shah, who intended to create an imposing capital, decided to demolish the enclosure around the old Tehran, thereby to expand his capital. In this period of time, royal family members and patricians constructed new gardens and mansions in the farming and arid land belonging to the nearby rural areas particularly in the Alborz mountainside, among which we may mention Saltanat Abad Garden, Shahrestanak Garden, Farmanieh Garden, Kamranieh Garden, and Saheqaranieh Garden, to name but a few.

In this age, there was such an extravagant infatuation about constructing and decorating gardens that the Qajar nobility would compete in planting and decorating plants and flowers and would do their best to transfer any new plant they found (Jawaher kalam, 1947 and Pechere, 1973).

The Elements and Spatial Composition

In Qajar era, the general structure of gardens was based upon a geometrical regularity, the most distinctive feature of which was the axis. Since ancient times, the simplest geometrical shape of the garden has been rectangle or square, formed by intersecting vertical axes into a quadrant garden or a main axis parallel with the length of the garden. As usual, man's understanding of the natural background (landform, water resources, and vegetation) and self-orientation are crystallized through the garden and its geometric

form. In gardens of this age, generally, when there was a horizontal axis, the garden would be divided into two sections and the visual and anatomical relationship between the entrance portals and the main building was realized via this axis. Along this axis, water would run on the both sides and or in the middle. The axis was regarded as the main element of the garden structure and the major parameter in landscaping the garden; while in the inside section of the garden, the buildings were linked through the courtyard (Figure 2) (Willber,1692).

Gertrude Bell, who resided in Iran in the years 1891-94, describes a garden in Shemiran as saying, “We stood in front of a reveted wall in the foot of the mountainside. After two doors were opened, we entered arched gateways and saw a flight of stairs before us. We went up the stairs, came across a splendid and unlooked-for scene and stood transfixed” (Gertrude, 1928). All the gardens of this age had been designed for the private use of the owners. That is why all the gardens had been surrounded by high walls.

Since there was a crying need for shadow, plantation of plane trees and trees with prickly leaves like *Pinus elderica* and *Cupressus sempervirens* was prevalent along the main axis towards north and south. In the Iranian garden, plant, water and architecture are three outstanding elements, the unique combination of which infuses a particular meaning and concept to the garden. In the Qajar era, with the introduction of new species of plants to Iran, plantation showed variety. As a whole, the rate of growing plants was higher than that of floriculture. Various species of ornamental trees (deciduous and evergreen) and fruit trees, whose blossoms added to the beauty of the garden in the spring, were planted. Most of the ornamental trees were planted near the paths in a linear way and in close vicinity. Furthermore, along each path, just one specific plant was planted (Sackville-west, 1952).

In addition, plantation of flowers in pots was prevalent due to Tehran climatic conditions. In this stage, nearby open compounds were developed to provide open areas to appreciate the far views. As new

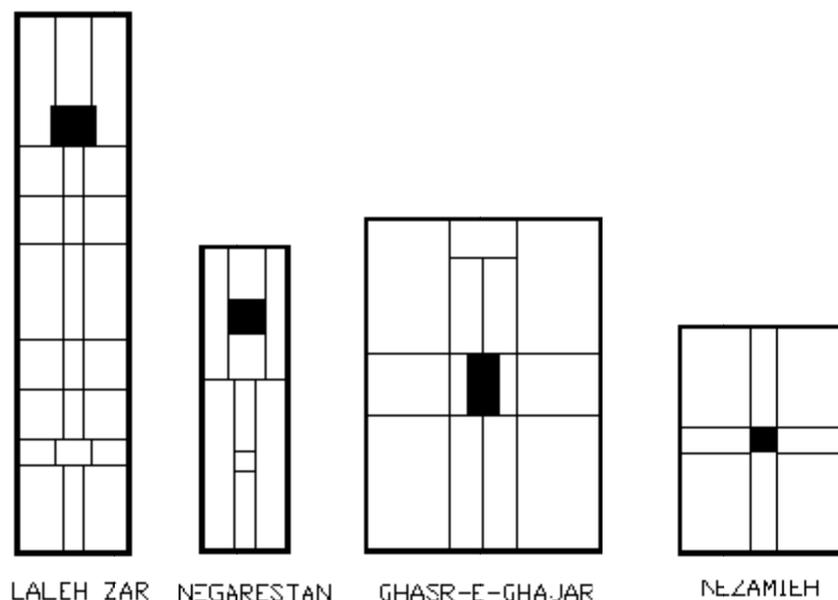


Figure 2-Geometric structure of Iranian Garden-(Behbahni, 2003)

ornamental plants were introduced, these patches, bear of any trees, were sowed with grass. Then these ornamental plants replaced the common plants which had been planted under the shade of trees before. The flow of water, aside from its functional role, plays a key role in providing coolness, reflecting the glare of sun and pleasant sounds. To add more lusters, fountains, from which water was bubbling mildly in the middle of the pool or along with the course, were used. In gardens which were situated in the hillsides, the course of the flow of water was indicated by the forming of some cascades. With regard to the displaying of water in these gardens, Gertrude Bell says, "between two parallel strings of way and stairs, a steep channel of blue tiles had been shaped in which water was running and along the course, water had turned into cascades that became wider in flat surfaces and turned into pools in which water was springing from fountains with a pleasant sound and then was being repressed, and, with the scattering of small drops of water, made the air bracing" (Gertrude, 1928).

Gardens, City and Landscape

With the beginning of Renaissance in the 15th century, human being stepped into the spotlight and, as an observer, started to change and interpret the nature and organize its multifarious aspects into a logical and rational whole. Human being demonstrated his authority over the nature through building a strong visual relationship between the man-made environment and the far framed sceneries of the nature. Therefore, axis, as a distinctive element of the garden, would lead the view from villas to the far sceneries and horizons. In Iran, visual relationship with far sceneries took on a huge importance and repeated attempts were made to provide the garden with best sceneries and views. Great attempts were also made to situate the axis of the garden or villa in a way that it was possible to enjoy the sceneries inside and outside the garden. In view of this, it seems that the visual relationship between garden and far sceneries (distinctive features of the city, farmland and

mountain landscape) replaced the visual relationship of the interior scenery of the garden along the axis between the structure and the portal, as compared to the introspective tradition of the famous gardens of past eras (like Safavid and Zandiyeh). It seems that constructing gardens in mountainsides to enjoy the far sceneries was prevalent in this era. Now by conducting a case study on Niavaran Garden, one of the famous gardens at the time of Qajar, all the structural elements of the garden and the course of changes it has gone through from the very time of its creation up to the present are shed light on (Irani Behbahani, 2003).

The Case Study: Niavaran Palace-Garden

In this section, through the investigation of historical texts and direct understanding and through the review of changes processing the Niavaran village the synthesis and the constant elements of Niavaran Palace-Garden and any changes in the tradition of Iranian garden cultivation in this garden are studied from the early 19th century up to the first half of the 20th century. Niavaran Village which always had a favorable condition for courtiers and government authorities always drew a lot of attention. Due to an appropriate background, the natural conditions and the particular attention of the officials to Shemiranat district and because of the Niavaran Garden, Niavaran Village received much more attention, and the Qajar Courtiers made some decisions about and took measures for the improvement of this oasis and even some nearby villages. Due to the appropriate condition of Niavaran villages and other villages all around, because of their being surrounded among gardens and because of their being situated near the mountainside and their easy access to water resources and their cool weather, they received a lot of attention. Niavaran Garden was set up as a summer residence at Niavaran oasis in the mountainside in the early 19th century by FatAli Shah. To set up this garden, some villages, orchards, and farmlands were demolished. The royal palace of Saheqaranieh, which fully commanded southern arena of Mt Touchal, was built in the first

half of the 19th century by Nasser-al-Din Shah (Etemad-elsaltaneh, 1988).

Rectangular plan of the garden, like traditional gardens, was surrounded and with a main axis from north to south, had a relatively symmetric regularity and due to the slope of the ground, the axis was shaped terrace-like and stair-like and progressed southwards. In the age of Pahlavi, two central axes for the future development of the city toward the mountainside linked the city to the countryside district in the north of the city (i.e. the southern side of Alborz) through the present Vali Asr Street. Then urban districts were created in this rout (Figure 3). In the early 20th century, coinciding with the reign of Reza Shah Pahlavi, the garden was regularly used as a summer residence, and during the reign of Mohammad Reza Shah Pahlavi, it was used as a permanent residence. In this era with developing Niavarn village the space of fruit gardens was reduced by replacing residential zone and the gardens faced the most changes, with its southern part and its eastern side being converted into a public park and a private training centre for the royal children respectively. So the extent of the garden was limited as compared to the former era and the urban construction comprised around gardens. Here we follow the features of the garden and the changes it has gone through with the passage of time (Afshar, 1991).

Qajar Era-During the reign of Nasser-al-Din Shah, aside from the summer residence as a royal palace, an interior structure in the eastern side, a seraglio in the north side and a structure for the sentinels and guards near the western entrance gate were built. So, unlike the other traditional gardens, the garden entrance did not lie along the main axis. In the late 19th century, another structure, called Ahmad Shah's summerhouse, was built in the northern side of the main palace of the garden. With peripheral structures having been ruined, the dominance of the main axis of the garden in the same line came to the fore more and more (Figure 4). After the fashion of traditional Iranian gardens, the garden had been

surrounded by a wall along with a row of tall poplars. The wall and the poplars had separated the garden from the surrounding farmlands and nearby gardens. Water entered the garden from the north and flowed southwards to irrigate all over the garden. On the other hand, to add more beauty and flamboyance, water was directed to the outside of the palace. In the main, shadowy trees had been planted along the axis and minor paths in a row. These shadowy trees, planted in a row, accentuated the geometric form of the garden and produced shadow all day long. In addition, with the palace being set up in the mountainside, this row of trees drew the attention of the viewers' eyes to the far landscapes. Niavaran Garden, unlike the other traditional Iranian gardens, was devoid of fruit trees. Various flower pots were among other ornaments of the garden in this era too (Pollack, 1865; Benjamin, 1887).

After irrigation and display in the garden, water would be directed to the outside of the garden to irrigate the arable fields and the rows of trees along the streets, linking the mountainside and the city, and the axes of the city. Also, along the water axes, the trees provide shade and through the routes linking the garden to the city would have a leading role in the urban orientation while plants and water, having been affected by the axel system, inside the garden, were the organizing elements of the inside of the garden. Therefore, the view led up the city landscape and southern plains along the main axis and it also led up Mt Damavand eastwards (Figure 5).

Pahlavi Eras- In this era after stabilization and avail of monetary power by Reza Shah Pahlavi started a new physical expanding and development that made used up traditional economic system gradually and replaced new economical system in Tehran. As novelties measure such demolish the enclosure, II world war and negative effects of them made so much new opportunity for economic contracture and development planning in Tehran city. By The concentration of central power in core of city and operation of uncultivated lands in around of Tehran



Figure 3-The linking axes of city and surrounding gardens on the mountain foot outside the city enclosure (Map Museum-2001). (The most important Gardens):

- | | | |
|------------------|----------------|----------------|
| 1-Dar Abad | 2-Niavaran | 3- Farmanieh |
| 4- Saltanat Abad | 5- Majidieh | 6-Qajar Palace |
| 7- Farah Abad | 8-Doshan Tapch | 9- Eshrat Abad |

the connection started between them. The choice of Niavaran Garden as a temporary and ceremonial residence by Reza Shah Pahlavi, in the late second half of the 19th century, served a key role in developing the city towards the mountainside and converting the country paths into streets and orientating the city axes as well and one of the access routes to Niavaran Village became a developing axis of the city. In this period, the garden and its system and structure remained intact with no additions. In this era, the garden sustained its order and structure with no further changes. At the time of Mohammad Reza Shah Pahlavi, in the early second half of the 20th century, western modern culture swayed not only architecture but royal lifestyle and garden constructing. In this era, new recreational needs and a completely different way of thinking than that of Qajar era changed the structure



Figure 4-Niavaran Palace in Qajar period (Golestan Palace Archive, 2000)

of the garden (Kariman, 1971 and Nami, 1985) (Figure6).

In this era, the residential palace of the royal family was built at the north side of the Qajar palace. As this palace was built, another axis was formed along the east and west. This new axis brought about a change in the geometric regularity of the garden. The portal of the garden entrance was relocated from the south-west to the north-west and along the new axis. With the relocation of the axis to the east-west, the main role of the north-south axis took a backseat. With the destruction of the north-south axis and the display of water, new waterfronts in different dimensions and new statues and fountains were placed at the south side of the Pahlavi palace, across from the west entrance gate, at the south area of Ahmad Shah's summerhouse and also at the north area of the palace. In the early second half of the 20th century, with the introduction of various ornamental plants and trees from the West the order of tree plantation, which was



Figure 6- An aerial photograph of Niavaran Palace in Pahlavi period-1969(Golestan Palace archive)



Figure 5- view of development main axis of Tehran toward Shemiran in Pahlavi era-2005

in a row in the Qajar garden, changed so that ornamental trees were planted with a natural order on turfs to create various scenes. Due to the vast area of turfs, open and sunshiny spaces replaced the shadowy spaces of the old trees. In addition, different spaces including relaxing spaces (like bowers), sports fields (like tennis courts), spaces for royal celebrations as well as green houses for growing special plants were added to the garden.

Concluding Remarks

In short, the features of the Qajar garden and the changes it went through in the late days of Qajar era and during Pahlavi era can be summed up as follows.

-Natural background turned out, consciously or accidentally, to be a means of adjusting the structure with scenes. Here the question of combining the geometric system of the garden with the scenic features and the surrounding environment was taken up. Therefore, the far landscape replaced the enclosed landscape of the traditional gardens and went even further to organize open spaces.

- The geometric system and the axis of the garden, as a distinctive feature, were still in line with the tradition of garden constructing prior to Qajar era.

- Gardens (i.e. mountainside gardens) played a major role in forming the centre of the city within an enclosure, with their role first in organizing the central elements and an interior structure and then in developing the city toward the north.

- In the early days of Qajar, the axis still lay in the external part of the garden between the main structure and the portal. In fact this was not a fundamental principle in the late days of Qajar era, in particular, when the setting up of gardens in mountainsides became prevalent. In this stage, the axis originated from the main structure and served the role of drawing the attention of visual relationship to far landscapes.

- Different species of plants, especially shadowy plants, were planted along the main and minor axes in large numbers and in the late days of Qajar era, the open space of the front structure was decorated with ornamental plants by degrees and made open sight toward mountain and city.

- As any natural phenomenon inevitably has an intrinsic anti-phenomenon, Tehran gardens, having been primarily created as natural factors in making human centers gravitate to them and in developing

the city, was ruined as a result of the influx of these human masses.

- In Qajar era, with the orientation of the gardens in the foot of Mt Alborz, the possibility of viewing far landscapes was regarded as a renovation, as compared to the introspective view of the traditional gardens. Due to the slope of the ground, this renovation was featured and was given a prominence in this era.

References

- Afshar, I. (1991). *Treasure of Iran Pictures*. Tehran: Culture of Iran Publication.
- Benjamin, S. G.W. (1887). *Persia and Persian*. Boston: Ticknor and Co.
- Etemad-elsaltaneh, M. (1988). *Systematic History of Naseri*. Iran: World Book Publication.
- Gertrude Lowthian, B. (1928). *Persian Pictures*. Bub Anonymously as Safar Nameh -1894.
- Irani Behbahani, H. (2003). The major indices and characteristics of garden in Tehran during the Qajar period. *Journal of environment, special issue*, 81-99.
- Jawaher Kalam, A. (1947). *Tehran History*. Tehran: Manochehri.
- Kariman, H. (1971). *Tehran at present and past*. Tehran: Iran National University.
- Najmi, N. (1985). *Tehran in Naseri's Period*. Tehran: Attar Publication.
- Pechere, R. (1973). Etudes Sur Les Jardins Iranians in Les Jardins De L'Islam 2eme Colleque International Des Jardins Historiques, Granada, L'ICOMOC et L'IFLA.
- Pollack, J. E. (1865). *Persian: das Land und Serne Bewohner*. Leipzig.
- Sackville-West, V. (1952). *The Persian Garden in Arberry*. Oxford: A.J, Legacy of Persia Clarendon Press.
- Serena, C. (1883). *Hommes et Choses en Perse*. Paris: Charpetier et Cie.
- Sotodeh, M. (1995). *Historic geography of Shemiran*. Tehran: Culture Studies and Humanity Sciences Center.
- Wilber, D. (1692). *Persian Garden and Garden Pavilions*. Tokyo: Charles, Tuttle Co.



