

Planting Maintenance (Restorative Pruning) for Preservation and Repair of Cultural-Property Gardens

-- Taking Conservation and Repair Project of Isuien Garden, a Place of Scenic Beauty, as an Example--

YOSHIMURA Ryuji

Managing Director,
Environmental Dynamics Architect

Introduction

For cultural-property gardens, in addition to routine maintenance/management work to protect garden scenery, repair work for structures including shore protection work against water leak is usually implemented once each 30 – 50 years. In other words, time-honoured gardens have been repaired repeatedly to date. This type of repair work, referred to as “periodical conservation and repair,” is carried out nowadays for many gardens using subsidies from the Agency for Cultural Affairs and other organisations. In the past, within the periodical conservation and repair work, planting maintenance was not regarded as a part of routine maintenance management. In recent years, however, such planting maintenance has come to be regarded as an integral part of the conservation-and-repair concept. This is because: (i) planting management is closely connected with the original motif of garden creation as well as intrinsic value of each garden; and, (ii) ordinary maintenance work cannot deal with planting management, in practice. Under these circumstances, aiming at the position of conservation and repair project, we have defined planting maintenance as “restorative pruning” that reinstates the original appearance and spatial character of a garden, and commercialised it. Fortunately, I had an opportunity to take charge of the design and supervision for “the Conservation and Repair Project for Isuien Garden, a Place of Scenic Beauty” which marked the start of restorative pruning. Taking Isuien Garden, a Place of Scenic Beauty, as an example, I would like to report on the viewpoint about and the process of restorative pruning below.

Outline of Isuien Garden, a Place of Scenic Beauty

On 10 December, 1975, Isuien Garden, a site of 13,481 sq. meters, was designated as a Place of Scenic Beauty. The designation description is quite lucid and accurate in the outline of this garden as follows:

“Description of the designation as a place of scenic beauty: The garden is located to the west of the Nandaimon Gate of Todai-ji Temple, and to the north of Yoshiki River. This garden is composed of two gardens, the front and the rear gardens, each of which were constructed in different time periods. These two gardens, each with a pond and *tsukiyama**¹ hills, are connected via a water stream, and are referred to as the Isuien Garden as a whole. The front garden was rebuilt from the remains of the structure of the *Sansyu-tei* house built in about 1673 – 1681 as a villa of the Kiyosumi family, a large-scale cloth bleacher of 17th century Nara. On the other hand, the rear garden was constructed in 1899 by Tojiro SEKI, a wealthy merchant of Nara. This garden is well-known especially as a *shakkei*-type garden that makes use of the surrounding landscape. Specifically, the garden uses the view which expands from the *Hyoshin-tei* house, the main building within the garden, to the three mountains (Mt.

*¹ An artificial small hill in a garden

Wakakusa, Mt. Kasuga, and Mt. Mikasa) across the pond of the garden, and through the Nandaimon Gate of Tōdai-ji Temple. Furthermore, the rear garden uses *Garan-ishi* stones*² and *Hikiusu-ishi* stones*³ etc. as stepping-stones and water-crossing stones, while trimmed plants, including dwarf azaleas and Ruscus-leaved bamboo (*Shibataea kumasaca*), are arranged in places. In other aspects too, Isuien is an admirable garden representing well the distinctive features unique to the Meiji era”.

Progress to the present conservation and repair projects

The conservation and repair projects for Isuien Garden undertaken prior to 2003 had centred on conservation and repair of the structures, which are important components of a Place of Scenic Beauty. In addition, such projects had included rethatching of roofs including zebra grass, miscanthus, cedar bark, etc. that are necessarily undertaken periodically, as well as improvement of fire-prevention equipment such as fire alarms and water cannons. With regard to the garden itself, a large-scale modification was made in 1977 that stopped water intake from the Yoshiki River due to deterioration of water quality, and the water flow system of the garden converted to a recirculation filtration system. Other than that, however, the garden had been treated as daily management as before, not adopted as a subsidised project. In the meantime, the number of visitors to the garden decreased by half, after passing its peak at the Nara Silk Road Exposition in 1988. Through the review of the operation and management of Isuien Garden, Kikuko NAKAMURA (director of the Neiraku Museum) consulted with the late Mitsuhiro KATO (Chief Senior Specialist for Cultural Properties, Monuments and Sites Division, the Agency for Cultural Affairs), and their discussion created an opportunity to begin a conservation and repair project resolutely facing the whole garden.

Commencement of conservation and repair project

In recent years, for conservation and repair work for gardens designated as a place of scenic beauty, a conservation and repair committee is established to examine the direction and appropriateness of repairs. Such committees composed of experts in a range of related fields adopt a council system through which problems are deliberated. The conservation and repair committee for Isuien Garden, a Place of Scenic Beauty (hereinafter, “Committee”), was composed of four members; Tatsunosuke TAKEI, chairman, representative director of Tatsui Garden Institute (garden history), Hiromasa AMASAKI, vice chairman, former vice president of Kyoto University of Art and Design (garden history: incumbent professor of Kyoto University of Art and Design), Michitaka KAMATA, member, former president of Nara University (history; left his position in 2010), Shigeatsu SHIMIZU, member, former researcher of Architectural History Section, Nara National Research Institute for Cultural Properties (architectural history: incumbent associate professor of Kyoto Institute of Technology). Since 2008, Yoshiko TASHIRO (history of fine arts), vice director of the Neiraku Museum has joined the committee as a member. This committee recognised the issues to be addressed for the Isuien Garden, and decided a policy to create a garden-survey map to form the backbone of repair work. Furthermore, it was decided that the committee would formulate the Isuien Garden, a Place of Scenic Beauty, Improvement Basic Plan (hereinafter, “Basic Plan”) to show the direction of repair work. The basic plan indicated three issues, noted below:

The first issue was related to planting such as: (i) generation of closed space characteristics and weakening of forest floor plants caused by overgrown trees and/or dense growth of such trees as seedling trees; and, (ii) obscuration of zoning caused by overgrowth and complementary planting of

*² Foundation stones of ancient temple buildings reused as stepping-stones or path junction stones.

*³ lit. millstones used as path junction stones or water-crossing stones in the garden.

flowering shrubs including azaleas.

The second issue was related to the drainage system of the garden such as: (i) stabilisation of the water circulation equipment and make-up water for the pond; and, puddles and outflow of garden path/trail caused by poor drainage.

The final issue was related to structures and facilities such as: (i) measures against aging of cultural property buildings/structures; and, (ii) expansion/improvement of facilities for management and opening to the public.

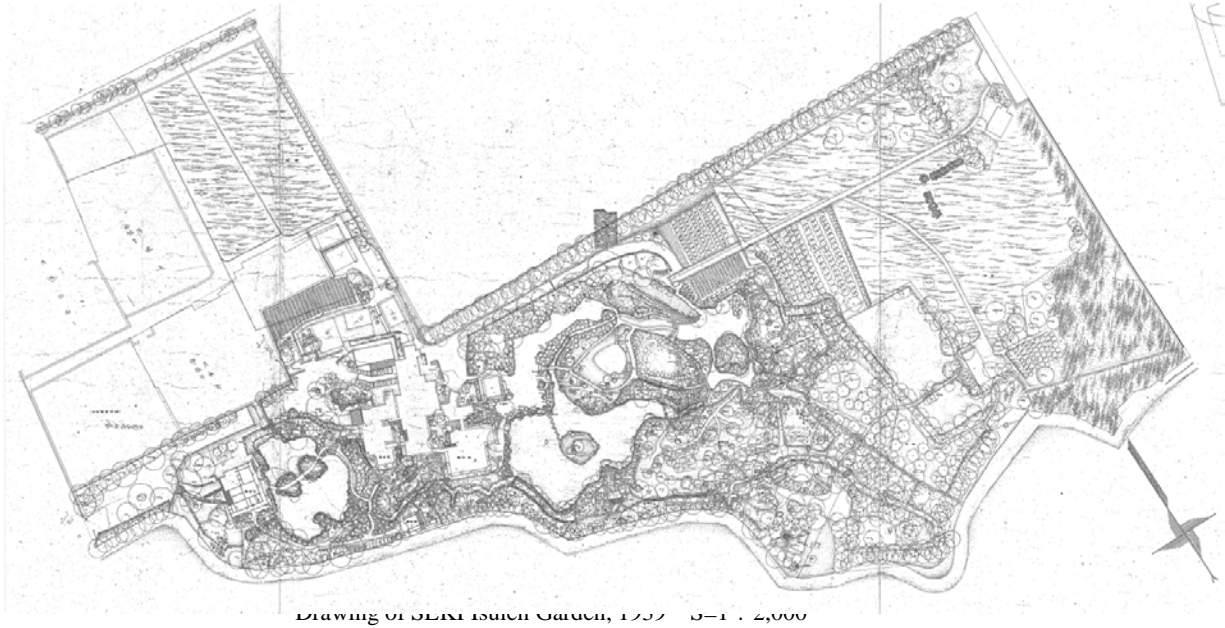
Commencement of conservation and repair work

To address the three issues above, we undertook surveys/research to understand the situation with respect to those issues. Subsequently, with the subsidies of the Agency for Cultural Affairs, Nara Prefecture, and Nara City, we implemented the conservation and repair projects during the 10 years to 2014. Notwithstanding that the issue related to the drainage system has not been fundamentally solved, significant progress has been made in the issues related to buildings/structures, such as reroofing of the main building, restoration of the gate and its peripheral portion, and new construction of management building, as well as that of planting. The details of the repair works related to the planting are described below:

Setting of restoration index and target appearance

Recent conservation and repair work of cultural-property gardens is undertaken not simply by conserving and repairing broken/deteriorated portions but by determining a restoration index based on the time period of the heyday of the cultural-property garden, through excavation surveys and research of historical materials/documents in order to understand the precise history and structure of the target gardens. For the Isuien Garden, the index of heyday, adopted was 1939 when Tojiro SEKI took a long time to construct the buildings and gardens, prior to the ownership transfer from him to Junsaku NAKAMURA. Luckily, there is a “Drawing of SEKI Isuien Garden” (scale 1:100) created in 1939 that shows the condition of the garden at that time, as well as some photos taken in the early Showa era (about 1926 – 1936). Based on this evidence, a restoration plan was devised. However, in many other cases besides the Isuien Garden, determination of a precise time period to be set and indexed proved difficult; because, some buildings were destroyed by fire, some were modified, fixtures/fittings related to the garden were additionally installed, or premises were reduced, etc.

Accordingly, in implementing practical repair/restoration work, demands often arise to take practical measures considering such conditions as above. In addition, with regard to planting, the trees planted at the time of construction are often reduced due to weakening, etc.; meanwhile, the scenery/appearance of many gardens has drastically changed due to seedling trees and complementary planting. For all that, excessively focusing such deviations may result in situations such that trees undescribed in drawings of the time period to be indexed being removed, complementary plantings made, and, consequently almost all trees could disappear from the present gardens, resulting in the deterioration of scenery. Accordingly, as fundamental policy, we try to use the present tree composition that appears to match the original motif of garden creation as much as possible.



Appearance of the front garden (Mirei SHIGEMORI, "Illustrated Guide to Japanese Garden History, Vol. 21 – Meiji, Taisho, Showa Era (3)", 1936)



Appearance of the rear garden (Mirei SHIGEMORI, "Illustrated Guide to Japanese Garden History, Vol. 21 – Meiji, Taisho, Showa Era (3)", 1936)

Planting scenery of Isuien Garden in the time period to be indexed

Through old photos of the Isuien Garden, we examined how the planting scenery of the three major spatial components of the garden (entrance structure, front garden, and rear garden) was in each time period to be indexed, as well as its motif.

The entrance structure can be described as backing against spatial Nara Three Mountains (Mt. Wakakusa, Mt. Kasuga, and Mt. Mikasa), a gravel path running from the western edge of the premises to the garden entrance between an earthen wall and a row of Japanese red pine trees, creating an orderly approach space. When the garden was constructed, there was originally a *Yakui-mon* gate^{*4} at the half-way point of the approach path. This gate not only divided the inside and outside of the park but also condensed the space/atmosphere, and induced in visitors the feeling that there is a garden over the earthen wall.

^{*4} A gate where one roof covers both the main front pillars and the rear support pillars

In the front garden constructed in the Edo era, a circular path is centred around a rather small pond, in which there are two islands connected to each other via three bridges. This front garden also benefits from the vistas of *Sansyu-tei* house to the west and *Seishu-an* house, the main building of the Isuien Garden, to the east.

There are two major viewpoint fields in this garden; one is a *zakan*⁵ viewpoint from the *Sansyu-tei* house towards the east. Visitors can, from a detached tatami room, enjoy the view across the pond surface, and beyond red pine and maple trees, of many slim and elegant *sukiya*⁶-style buildings standing on the ground of the rear garden which, by design, has been constructed lower to human stature than the front garden. Further beyond, there are free and easy spatial characteristics created by subtle signs of the existence of the three mountains.

The other viewpoint field is the high-angle view from the opposite bank of the pond, with the distant view of the *Sansyu-tei* house to the west of the garden path passing through a garden gate situated beside the entrance. Visitors can overlook the pond, into the south side of which a peninsula-shaped shore is projected. A bridge spans across water to an island in the pond, and the course leads to the *Sansyu-tei* house, the thatched roof of which is reflected on the surface of the pond. There are few trees in the central area in order to ensure visibility; meanwhile, primarily moss has been grown on the edge of the pond in order to keep garden zoning clear. In addition, small shrubs are planted to add colour to the scenery.

The rear garden constructed in the Meiji era occupies the majority of the premises of the Isuien Garden. There are seven tea ceremony spaces in it, each of which is organically connected with one another while creating scenery sustaining overall harmony. After following a stone-paved path stretching from a garden gate situated beside the entrance, the *roji*⁷ space constructed under the instructions of Soshitsu (Yumyosai) SEN, the 12th tea ceremony master of the *Urasenke*⁸ school opens up. Beyond the moss-covered ground on which stepping-stones have been laid, there are a tea-ceremony space copied from the famous *Yuin* house (an important cultural property) and an *amigasa* gate⁹; then, further beyond a stream, there is the *Teishuken* house, a waiting/resting shelter. An elaborately designed *roji* extends with the trees such as red pine, maple, cleyera (Japanese ternstroemia), nagi, and China fir which have been tidied up modestly, creating enchanting *roji* scenery.

Moving further towards the east, there was a low-built wisteria trellis (currently, it has been removed). After that, the course reaches the *Hyoshin-tei* house, which has a thatched roof. Passing along a narrow path running to the south of the *Hyoshin-tei* house, a magnificent vista suddenly appears like an amazing set change of a play. Specifically, from the viewpoint in front of the *Hyoshin-tei* house, Nara's Three Mountains can be viewed as "borrowed scenery", and the Nandaimon Gate of the Tōdai-ji Temple can be seen as "*Tenkei*"¹⁰. The edge of the *tsukiyama* hill with lawn, that with white enkianthus, and red pine trees corresponds to that of the Nara Three Mountains. The line of sight of visitors is drawn deeper into space, and all of the Nara Three Mountains appear to become a part of the

*⁵ A fixed point to view and enjoy a rather smaller garden best while sitting in a detached tatami room

*⁶ Style of a tea-ceremony arbour

*⁷ Lit. uncovered ground. Commonly known as: (i) a tea garden, and (ii) a path through which guests pass on the way to the tea ceremony house.

*⁸ One of the main schools of Japanese tea ceremony, and one of the three Sen families

*⁹ Lit. wattle-hood gate. A simple gate to be used as a middle gate in the *roji* of a garden

*¹⁰ Small-sized human figures or things added as secondary elements to a scene in order to enliven it

garden. The trees and scenery of the garden create a well-lit and open vista, centred around the trees such as red pine and maple trees. It may be considered that such scenery shows the features of the gardens of modern naturalism.

Going further towards the east side of the garden along Yoshiki River, the scenery becomes deep and thickly covered with trees including oak. Subsequently, the inner gate (which no longer exists) and the *yoritsuiki* (tea room foyer), which serves as a waiting/resting shelter for “the tea room in the mountain” (which has already been donated to *Konbu-in* temple) can be found. From this tea room measuring about 3.3 sq. meters in area, the Hall of the Great Buddha of the Tōdai-ji Temple can be seen across the pond as a *tenkei*. Going further towards the east, crossing two streams, and climbing a *tsukiyama* hill leading to a waterfall, visitors will see a stone monument of the Isuien Garden. Looking towards the west from the water-crossing stones laid in front of the waterfall, visitors can, view across the pond, the *Hyoshin-tei* house blending with the garden and reflected in water. (Currently, due to the reduction of the premises, a water mill has been relocated to the south side of the waterfall, where it creates the feeling of a village). Crossing water-crossing stones, then, going towards the east, there is an open space with grass once used for open-air tea ceremonies, etc. around which red pine trees and winter-flowering cherry stand. From there to the west, a small stream flowing along the foot of a *tsukiyama* hill, where white enkianthus are planted, widens along a lawn *tsukiyama* hill, and runs into the garden pond. A stone-paved path also widens as it approaches the *Yagyudo* hall, which has a cypress bark roof; and the *Hyoshin-tei* house follows in the V formation of flying geese towards the depth of the garden. As a matter of fact, the Isuien Garden has much more charm such as sukiya-style buildings and tea-ceremony houses; and, it is probably safe in concluding that the garden is a modern *sukiya* space representative of Nara.

Planting scenery of Isuien Garden before commencing repair work

Despite its attractions during its heyday, described above, planting and scenery of the Isuien Garden were left uncared for at the time immediately before the Seki family disposed of it. Due probably to the lower frequency of care, plants had become overgrown, and zoning was becoming unclear. After that, the garden was transferred to the Nakamura family. However, after the end of World War II, the garden was seized by the occupation army, and the garden was used as a military quarters. Trees became extremely overgrown. After derequisition of the garden, the buildings modified by, for example, painting soot-coloured bamboo, etc. were repaired and restored to their former state. However, the garden had become overcrowded with exuberant seedling trees and tall trees as well as the pine trees that had been planted on a *tsukiyama* hill of grass. Consequently, since sufficient sunshine was unable to reach the forest floor, groundcover plants including moss were weakened, and topsoil had eroded. Furthermore, shrubs on the shore of the pond including dwarf azaleas were overgrown, and obstructed the view of the water surface like a green partitioning screen. Thus, the free and easy expansiveness of the garden was lost, and it was difficult for visitors to feel the garden's charm.

Restorative pruning as planting maintenance

The situation mentioned above is not unique to the Isuien Garden. Even today, many gardens are being faced with the same situation. Historically, the post-war reform policies including the emancipation of farming land and the dissolution of *zaibatsu* groups (family-run conglomerates) made drastic changes in the Japanese economic situation as well as the financial state of the traditional wealthy class. This unavoidably resulted in the decrease in the frequency of care frequency of gardens, and caused

excessive growth and overcrowding of trees. As a result of that, the original creation motif of each garden has become, and remains, obscure at many gardens. And yet, since pruning and improvement cutting of trees constitutes a large expense due to reasons such as bad working conditions, there was a limit to the implementation of pruning/cutting work on the budget of routine management. Among them, pruning to be continuously implemented was mostly treated as maintenance work. Against this, we insisted upon the importance of regaining the spatial characteristics, through which visitors can understand the original creation motif of a garden. In consequence, pruning work has been redefined as being “restorative pruning in planting maintenance” which is now treated as a conservation and repair project.

Meanwhile, the actual work of restorative pruning varies depending on the target trees. For example, for overcrowded medium-sized and tall trees, it will be enough for a certain period to implement one-time pruning and felling as a treatment. However, for the major trees like red pine trees composing the scenery of the garden, it will be indispensable to track the growth of and trim them for several years. Otherwise, those pine trees could possibly wither away. Furthermore, for shortening shrubs including dwarf azaleas, it may become necessary to thin out the volume of branches, to take sunlight into the inside of the shrubs, to facilitate the growth of the limbs coming out from trunks, and thereby to lower the shrubs in stages over several years, while changing treatment such as carrying out complementary planting, as the situation demands.

Implementation of restorative pruning

Restorative pruning for the Isuien Garden had, under the guidance of the committee, been continuously implemented since 2004 by Kazuo MAKIOKA (representative director of Teisha Makioka), a technical expert, who employs restoration techniques for cultural-property gardens that is one of the Selected Conservation Techniques. The major contents of the restorative pruning made by MAKIOKA include: (i) pruning and felling of overcrowded trees as a whole; (ii) shortening of shrubs such as dwarf azaleas growing on the shore of a pond; and, (iii) pruning and improvement cutting of the pine trees planted on the *tsukiyama* hill with grass in the rear garden. The details of the restorative pruning are shown below with related photos and drawings:

(i) Pruning and felling of trees overcrowded as a whole

By pruning and felling the trees, expanse and depth of the pond has been recovered. In addition, it has become possible to glimpse the appearance of the opposite bank including a resting place and path.



(ii) Appearance of the rear garden (before project) 2004 Appearance of the rear garden (after project) 2015
Shortening of shrubs such as dwarf azaleas growing on the shore of a pond

After shortening shrubs, scenery seen from the garden gate to the *Sansyu-tei* House has been improved. A framework composed of a path, an island in the pond, bank of the pond, etc. has become clear, and the appearance of the *Sansyu-tei* house viewed in recess has also become distinct.

The scenery around the stream flowing into the pond of the rear garden has been improved as well. After shortening shrubs, it has become possible to sense from the stone-paved path, the rippling waves and subtle movement of the water in the pond as well as the expanse towards the *tsukiyama* hill.



Appearance of the front garden (before project) 2004



Appearance of the front garden (after project) 2015



Appearance of the rear garden (before project), 2004

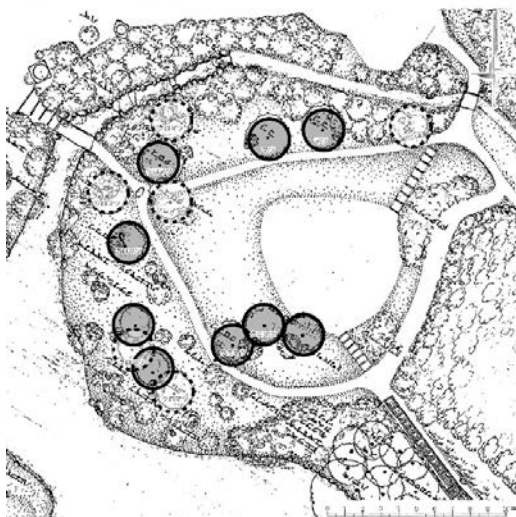


Appearance of the rear garden (after project), 2015

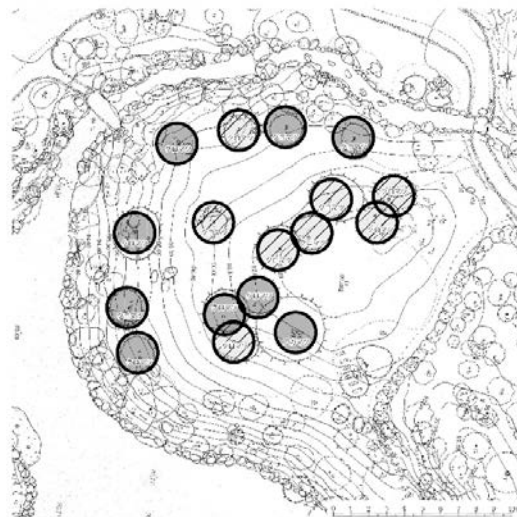
(iii) Pruning and improvement cutting of the pine trees planted on the *tsukiyama* hill with grass in the rear garden

In the rear garden, by comparing the “Map of the Seki Isuien Garden” created in 1939 and the survey map created in 2004, we have carried out: (i) improvement cutting of the pine trees that are thought to have been complementary plantings after 1939; and (ii) pruning of the pine trees that are thought to have survived since 1939 till today. Owing to this, the ridgelines of the *tsukiyama* hills within the garden and the Nara Three Mountains outside the garden now correspond to each other, giving depth and expanse to the scenery viewed from the *Hyoshin-tei*.

Map of the Seki Isuien Garden, 1939



Survey map, 2004



- 凡 例
- 昭和 14 年の図に見られるマツ
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 - ◐ 平成 16 年の図に見られるマツ

Comparison between the pine trees on *tsukiyama* hill in the rear garden



Pine trees on the *tsukiyama* hill in the rear garden, 1953.
The photo above is owned by the Neiraku Museum,
Isuien Garden (Public Interest Incorporated Foundation)



Pine trees on the *tsukiyama* hill in the rear garden
(before project) 2004



Pine trees on the *tsukiyama* hill in the rear garden (after project), 2015

Closing remarks

The Conservation and Repair Project for the Isuien Garden, a Place of Scenic Beauty commenced full scale from 2003 in order to conserve/repair the gardens. Originally, this project was targeted to reach completion by 2010, the year of the 1300th anniversary of the Nara capital. However, as it is said that “A garden is a living structural remains”, various unpredictable events including torrential downpours and depletion of a water source repeatedly occurred, and resulted in the expansion of the project period. However, we have rowed hard and have almost arrived at the completion of the project within 2016. This completion is entirely thanks to deep understanding of the owner of the garden and endeavours of the parties concerned, to which I would like to express my deepest gratitude.

【Reference】

- Mirei SHIGEMORI, “Illustrated Guide to Japanese Garden History, Vol. 21 – Meiji, Taisho, Showa eras (3)”, 1936) Yukosha Publishing
- Mirei SHIGEMORI, Kanto SHIGEMORI, “Frameworks of Japanese Garden History Vol. 27, Modern Gardens (1)”, 1978, Shakai-Shisosha Publishing
- Osamu MORI, “Compact Encyclopedia of Japanese History - Gardens”, 1984, Kondo Publishing
- Hiromasa AMASAKI, Chuichi SAITO, Kanji NOMURA, “Touring Around Japanese Gardens”, 2006, Shogakkan Publishing