

# SITE CHARACTERISTICS OF THE JAPANESE MEISHO GARDENS IN THE CITY OF KYOTO AND ITS CHANGE IN AQUATIC ENVIRONMENT

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## 1. Introduction

The unique topography of Kyoto Basin had allowed high retention of water and as a result, it was often considered as the suitable location for the pond style gardens. On the micro scale, existing researches have shown the significant relationship between pond style gardens and the location of its water source. However, none of the studies have looked at the landscape of the Japanese gardens on a macro scale to comprehend its topographical characteristics spatially.

## 2. Objective and Methods

Based on the City Planning Maps of Kyoto City, in this thesis, the following four objectives were studied: first, to determine the site characteristics of the Japanese *meisho* garden; second, to determine and compare the differences between the topographical features of the dry landscape gardens and pond style gardens; three, to determine how this landscape has changed since the Taisho era; four, to come up with possible reasons that influenced the site characteristics of the dry landscape and pond style gardens.

As of March 31<sup>st</sup> 2006, 69 Japanese gardens had been identified as *meisho* within the City of Kyoto. 36 gardens were identified as “pond style garden” and 33 as “dry landscape garden.” “Dry landscape gardens,” in this research, identified gardens that did not use large quantities of water; these included tea gardens as well. “Pond style gardens,” on the other hand, identified gardens that took in large quantities of water from nearby water source.

Analysis methods included the following: 1) GIS analysis was done in order to understand the topographical characteristics (elevation, incline, direction of slope, distance to the mountain and waterways) of the Japanese *meisho* gardens, 2) statistical analysis was done in Microsoft Excel and SPSS to determine whether the numbers calculated on the GIS zonal statistical analysis showed correlation to the hypothesis.

## 3. Results and Discussion

A significant relationship between the site location of the Japanese *meisho* Gardens and topography was found. Much disappearance was observed in terms of the waterways over time as well (figure 1). GIS statistical data, SPSS analyses supported that one, the most site characteristic difference was found with the aquatic factor between pond style gardens and dry landscape gardens; two, more pond style gardens were found closer to the waterway than the dry landscape gardens; three, significant difference was found for pond style gardens than those of dry landscape gardens in terms of its distance to the waterways for both Taisho and Heisei era.

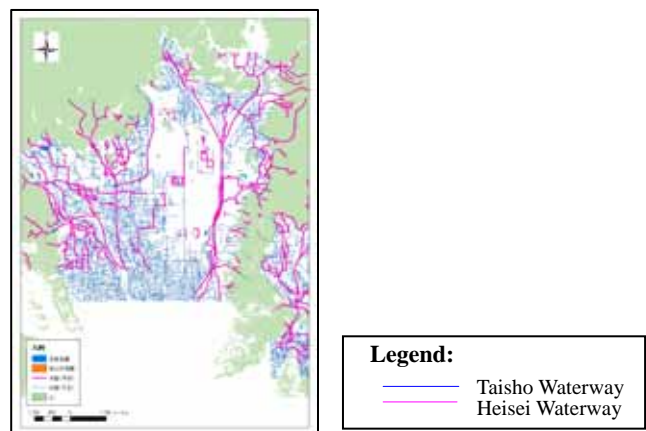


Figure 1. Waterways of Taisho and Heisei Era

In conclusion, site locations of the dry landscape gardens were not chosen based on topographical factors, instead were influenced by human factors (e.g. cultural and religious). The site locations of the pond style gardens and topography had a significant relationship especially in terms of its aquatic environment. The site locations of the pond style gardens represented a rich aquatic environment and therefore, these could be an indicator to understand how the landscape has changed over time.